File No. 250700 **Committee Item No.** 6
Board Item No. 12

COMMITTEE/BOARD OF SUPERVISORS

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Committee: Land Use and Transportation **Date:** Dec. 1, 2025
Board of Supervisors Meeting: **Date:** Dec. 9, 2025

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Prepared by: John Carroll **Date:** Nov. 26, 2025
Prepared by: Erica Major **Date:** Dec. 2, 2025
Prepared by: John Carroll **Date:** Dec. 5, 2025

[Zoning Map - Family Zoning Plan]

Ordinance amending the Zoning Map to implement the Family Zoning Plan by: amending the Zoning Use District Maps to: 1) reclassify certain properties currently zoned as various types of Residential to Residential Transit Oriented - Commercial (RTO-C); 2) reclassify properties currently zoned Residential Transit Oriented (RTO) to Residential Transit Oriented - 1 (RTO-1); 3) reclassify certain properties from Residential districts other than RTO to RTO-1; 4) reclassify certain properties currently zoned Neighborhood Commercial (NC) or Public (P) to Community Business (C-2); and 5) reclassify certain properties from Public to Mixed-Use or Neighborhood Commercial Districts; amending the Height and Bulk Map to: 1) reclassify properties in the Family Zoning Plan to R-4 Height and Bulk District, except for properties with structures designated as landmarks or contributors to historic districts pursuant to Article 10; 2) change the height limits on certain lots in the R-4 Height and Bulk District; and 3) designating various parcels to be included in the Non-Contiguous San Francisco Municipal Transportation Agency Sites Special Use District (SFMTA SUD); amending the Local Coastal Program to: 1) reclassify all properties in the Coastal Zone to R-4 Height and Bulk District; 2) reclassify certain properties to RTO-C and Neighborhood Commercial District; 3) designate one parcel as part of the SFMTA SUD; and 4) directing the Planning Director to transmit the Ordinance to the Coastal Commission upon enactment; affirming the Planning Department's determination under the California Environmental Quality Act; making findings of public necessity, convenience, and welfare under Planning Code, Section 302; making findings of consistency with the General Plan, and the eight priority policies of Planning Code, Section 101.1; and making findings under the City's Local Coastal Program and the

California Coastal Act of 1976.

NOTE: **Unchanged Code text and uncodified text** are in plain Arial font.
Additions to Codes are in *single-underline italics Times New Roman font*.
Deletions to Codes are in ~~*strikethrough italics Times New Roman font*~~.
Board amendment additions are in double-underlined Arial font.
Board amendment deletions are in ~~strikethrough Arial font~~.
Asterisks (* * * *) indicate the omission of unchanged Code subsections or parts of tables.

Be it ordained by the People of the City and County of San Francisco:

Section 1. Land Use and Environmental Findings.

(a) On November 17, 2022, the Planning Commission, in Motion No. M-21206 certified the Final Environmental Impact Report (EIR) for the 2022 Housing Element of the San Francisco General Plan (Housing Element EIR), as in compliance with the California Environmental Quality Act (CEQA) (California Public Resources Code Section 21000, et seq.), the CEQA Guidelines (14 Cal. Code Regs. Section 15000, et seq.), and Chapter 31 of the San Francisco Administrative Code. Copies of Planning Commission Motion No. M-21206 and the Housing Element EIR are on file with the Clerk of the Board of Supervisors in File No. 230001.

(b) On December 15, 2022, at a duly noticed public hearing, the Planning Commission adopted findings under CEQA regarding the 2022 Housing Element's environmental impacts, the disposition of mitigation measures, and project alternatives, as well as a statement of overriding considerations (CEQA Findings) and adopted a mitigation monitoring reporting program (MMRP), by Resolution No. 21220.

(c) The Planning Commission then adopted the proposed 2022 Housing Element in Resolution No. 21221, finding in accordance with Planning Code Section 340 that the public necessity, convenience, and general welfare required the proposed amendments to the

General Plan.

(d) On January 31, 2023, in Ordinance No. 010-23, the Board of Supervisors, adopted the 2022 Housing Element. That ordinance confirmed the certification of the Housing Element EIR and made certain environmental findings, including adoption of the MMRP and a Statement of Overriding Considerations.

(e) On September 3, 2025, the Planning Department published an addendum to the Housing Element EIR, which concluded that no supplemental or subsequent environmental review is required for the Family Housing Rezoning Program, because the environmental impacts of these amendments were adequately identified and analyzed under CEQA in the Housing Element EIR, and the proposed amendments would not result in any new or more severe environmental impacts than were identified previously.

(f) The Board of Supervisors has reviewed and considered the Housing Element EIR and the Addendum, and concurs with the Planning Department's analysis and conclusions, finding that the addendum adequately identified and analyzed the environmental impacts of the Family Housing Rezoning Program, and that no additional environmental review is required under CEQA Section 21166 and CEQA Guideline Sections 15162-15164 for the following reasons:

(1) the Family Housing Rezoning Program would not involve new significant environmental effects or a substantial increase in the severity of significant effects previously identified in the Housing Element EIR;

(2) no substantial changes have occurred that would require major revisions to the Final EIR due to the involvement of new environmental effects or a substantial increase in the severity of effects identified in the Housing Element EIR; and

(3) no new information of substantial importance has become available which indicates that (i) the Family Housing Rezoning Program will have significant effects not

discussed in the Final EIR; (ii) significant environmental effects will be substantially more severe; (iii) mitigation measures or alternatives found not feasible that would reduce one or more significant effects have become feasible, or (iv) mitigation measures or alternatives that are considerably different from those in the Housing Element EIR would substantially reduce one or more significant effects on the environment. The Addendum is on file with the Clerk of the Board of Supervisors in File No. 250700.

(g) The Planning Department has determined that the amendments to the Local Coastal Program are exempt from CEQA review under Public Resources Code Sections 21080.5 and 21080.9, and CEQA Guidelines Section 15265. Said determination is on file with the Clerk of the Board of Supervisors in File No. 250700 and is incorporated herein by reference.

(h) On September 11, 2025, the Planning Commission, in Resolution No. 21809, adopted findings that the actions contemplated in this ordinance are consistent, on balance, with the City's General Plan and eight priority policies of Planning Code Section 101.1. The Board adopts these findings as its own. A copy of said Resolution is on file with the Clerk of the Board of Supervisors in File No. 250700, and is incorporated herein by reference.

(i) Pursuant to Planning Code Section 302, this Board finds that these Planning Code amendments will serve the public necessity, convenience, and welfare for the reasons set forth in Planning Commission Resolution No. 21809, and the Board adopts such reasons as its own. A copy of said resolution is on file with the Clerk of the Board of Supervisors in File No. 250700 and is incorporated herein by reference.

Section 2. Additional Findings.

(a) This ordinance amends several of the Zoning Maps of the San Francisco Planning Code to implement the height, bulk, and zoning district changes in the Family Zoning Plan.

The Family Zoning Plan consists of three parts: San Francisco General Plan amendments, found in the ordinance in Board file No. 250701, Planning Code amendments, found in the ordinance in Board file No. 250701, and these Zoning Map Amendments. Together, the Family Zoning Plan Planning Code, Zoning Map, and General Plan amendments implement commitments made in San Francisco's 2022 Housing Element Update, approved in Ordinance No. 10-23 on January 31, 2023. The Family Zoning Plan modifies zoning requirements primarily in well-resourced neighborhoods in San Francisco's west and north sides, and aims to increase capacity for multi-family housing. The Family Zoning Plan ordinances satisfy San Francisco's Regional Housing Needs Allocation (RHNA) shortfall of approximately 36,200 housing units.

(b) Because the number of parcels to be rezoned in this Zoning Map amendment is extensive, this ordinance does not include a table indicating the Assessor's Block and Lot numbers, Use or Height and Bulk Districts to be Superseded, and Use or Height and Bulk Districts Approved, except for the Zoning Map amendments required to implement the Non-Contiguous San Francisco Municipal Transportation Agency Sites Special Use District. Zoning Map amendments implementing the Non-Contiguous San Francisco Municipal Transportation Agency Sites Special Use District, which is established in Section 249.11 of the Planning Code, as proposed by the ordinance in Board File No. 250701, are included in Section 5 of this ordinance, below.

(c) Instead of including a table with the parcels included in the Zoning Map amendments in the body of this ordinance, <u>and except as modified by paragraph (d) below,</u> the proposed changes to each parcel are included in the Family Zoning Plan Map Ordinance Parcel Tables (hereinafter, "Zoning Tables"), which is a spreadsheet included in Board File No. 250700, and is incorporated by reference as though fully set forth herein. The Zoning Tables are based on San Francisco Assessor's Office information as of January 1, 2022, and

any changes made to any lot after January 1, 2022 may not appear in the Zoning Tables. In the event a parcel was subdivided and/or merged, or vice versa, after January 1, 2022 (each a Modified Parcel), it is the intent of the Board of Supervisors that the zoning changes shown in the Zoning Tables shall apply to each of the Modified Parcels. The text of this ordinance includes descriptions of the changes to the Zoning Maps, and the general locations of those changes.

(d) Notwithstanding paragraph (c) and the proposed changes shown in the Zoning Tables, the Zoning Maps for the following parcels shall be amended as shown in the tables below. Table 1 shows parcels that shall be removed from the Zoning Tables, which are generally parcels where there is a structure that has been designated as a landmark or a contributor to a historic district pursuant to Article 10. Table 1 deletes parcels with those types of historic resources from the Zoning Tables, except for any such parcels that are being redesignated from RTO to RTO-1 in the Zoning Table. Table 2 shows parcels that shall be modified in the Zoning Tables, including parcels where there is a structure that has been designated as a landmark or a contributor to a historic district pursuant to Article 10 that are being redesignated from RTO to RTO-1 but not otherwise modified, and parcels along the Geary and Van Ness corridors where base and local program heights were modified, and other adjustments to certain large sites. Section 3(b) of this Ordinance further describes the reclassification of RTO parcels to RTO-1. These changes will be incorporated into the approved Zoning Table in Board File No. 250700.

Table 1. Parcels To Be Deleted From Zoning Tables.

Description of Parcels (Block/Lot, Boundaries, other)		**Action**
Block	**Lot**	
0010	002	Delete from Zoning Tables
0049	001	Delete from Zoning Tables
0079	005	Delete from Zoning Tables
0085	012	Delete from Zoning Tables
0085	014	Delete from Zoning Tables
0085	026B	Delete from Zoning Tables
0085	026D	Delete from Zoning Tables
0085	026E	Delete from Zoning Tables
0085	027	Delete from Zoning Tables
0085	033	Delete from Zoning Tables
0085	038	Delete from Zoning Tables
0085	046	Delete from Zoning Tables
0085	073	Delete from Zoning Tables
0085	006	Delete from Zoning Tables
0085	007	Delete from Zoning Tables
0085	007A	Delete from Zoning Tables
0085	009	Delete from Zoning Tables
0085	010	Delete from Zoning Tables
0085	011	Delete from Zoning Tables
0085	013	Delete from Zoning Tables

Description of Parcels (Block/Lot, Boundaries, other)		**Action**
Block	**Lot**	
0085	017	Delete from Zoning Tables
0085	018	Delete from Zoning Tables
0085	026A	Delete from Zoning Tables
0085	026C	Delete from Zoning Tables
0085	026H	Delete from Zoning Tables
0085	028	Delete from Zoning Tables
0085	029	Delete from Zoning Tables
0085	030	Delete from Zoning Tables
0085	039	Delete from Zoning Tables
0085	047	Delete from Zoning Tables
0085	049	Delete from Zoning Tables
0085	051	Delete from Zoning Tables
0085	057	Delete from Zoning Tables
0085	059	Delete from Zoning Tables
0085	060	Delete from Zoning Tables
0085	066	Delete from Zoning Tables
0085	070	Delete from Zoning Tables
0105	048	Delete from Zoning Tables
0105	009	Delete from Zoning Tables
0105	010	Delete from Zoning Tables

Description of Parcels (Block/Lot, Boundaries, other)		**Action**
Block	**Lot**	
0105	011	Delete from Zoning Tables
0105	013	Delete from Zoning Tables
0105	014	Delete from Zoning Tables
0106	006	Delete from Zoning Tables
0106	014	Delete from Zoning Tables
0106	015	Delete from Zoning Tables
0106	016A	Delete from Zoning Tables
0106	017	Delete from Zoning Tables
0106	017A	Delete from Zoning Tables
0106	017D	Delete from Zoning Tables
0106	019	Delete from Zoning Tables
0106	020	Delete from Zoning Tables
0106	022	Delete from Zoning Tables
0106	025	Delete from Zoning Tables
0106	026	Delete from Zoning Tables
0106	031	Delete from Zoning Tables
0106	033	Delete from Zoning Tables
0106	034	Delete from Zoning Tables
0106	034E	Delete from Zoning Tables
0106	038	Delete from Zoning Tables

Description of Parcels (Block/Lot, Boundaries, other)		**Action**
Block	**Lot**	
0106	043	Delete from Zoning Tables
0106	046	Delete from Zoning Tables
0106	059	Delete from Zoning Tables
0106	060	Delete from Zoning Tables
0106	066	Delete from Zoning Tables
0106	070	Delete from Zoning Tables
0106	016	Delete from Zoning Tables
0106	017C	Delete from Zoning Tables
0106	017E	Delete from Zoning Tables
0106	018	Delete from Zoning Tables
0106	021	Delete from Zoning Tables
0106	023	Delete from Zoning Tables
0106	024	Delete from Zoning Tables
0106	032	Delete from Zoning Tables
0106	034A	Delete from Zoning Tables
0106	034D	Delete from Zoning Tables
0106	036	Delete from Zoning Tables
0106	040	Delete from Zoning Tables
0106	041	Delete from Zoning Tables
0106	045	Delete from Zoning Tables

Description of Parcels (Block/Lot, Boundaries, other)		**Action**
Block	**Lot**	
0106	063	Delete from Zoning Tables
0113	020	Delete from Zoning Tables
0113	021	Delete from Zoning Tables
0113	023	Delete from Zoning Tables
0113	026	Delete from Zoning Tables
0113	034	Delete from Zoning Tables
0113	056	Delete from Zoning Tables
0113	011	Delete from Zoning Tables
0113	029	Delete from Zoning Tables
0113	042	Delete from Zoning Tables
0113	044	Delete from Zoning Tables
0113	062	Delete from Zoning Tables
0113	064	Delete from Zoning Tables
0113	040	Delete from Zoning Tables
0121	010	Delete from Zoning Tables
0221	125	Delete from Zoning Tables
0222	018	Delete from Zoning Tables
0245	001	Delete from Zoning Tables
0246	001	Delete from Zoning Tables
0452	002	Delete from Zoning Tables

Description of Parcels (Block/Lot, Boundaries, other)		**Action**
Block	**Lot**	
0459	003	Delete from Zoning Tables
0471	003	Delete from Zoning Tables
0504	003	Delete from Zoning Tables
0504	003H	Delete from Zoning Tables
0504	019	Delete from Zoning Tables
0513	015	Delete from Zoning Tables
0524	031	Delete from Zoning Tables
0540	030	Delete from Zoning Tables
0541	018	Delete from Zoning Tables
0544	001C	Delete from Zoning Tables
0548	022	Delete from Zoning Tables
0552	029	Delete from Zoning Tables
0554	001	Delete from Zoning Tables
0560	005	Delete from Zoning Tables
0572	003	Delete from Zoning Tables
0574	011	Delete from Zoning Tables
0575	010	Delete from Zoning Tables
0575	015	Delete from Zoning Tables
0580	013	Delete from Zoning Tables
0585	008	Delete from Zoning Tables

Description of Parcels (Block/Lot, Boundaries, other)		Action
Block	**Lot**	
0587	027	Delete from Zoning Tables
0587	018	Delete from Zoning Tables
0591	007	Delete from Zoning Tables
0600	002	Delete from Zoning Tables
0601	005	Delete from Zoning Tables
0605	001	Delete from Zoning Tables
0605	002	Delete from Zoning Tables
0605	003	Delete from Zoning Tables
0605	006	Delete from Zoning Tables
0605	004	Delete from Zoning Tables
0605	005	Delete from Zoning Tables
0605	007	Delete from Zoning Tables
0605	008	Delete from Zoning Tables
0612	001	Delete from Zoning Tables
0612	001B	Delete from Zoning Tables
0612	001D	Delete from Zoning Tables
0612	003	Delete from Zoning Tables
0612	004	Delete from Zoning Tables
0612	005	Delete from Zoning Tables
0612	007	Delete from Zoning Tables

Description of Parcels (Block/Lot, Boundaries, other)		**Action**
Block	**Lot**	
0612	001A	Delete from Zoning Tables
0612	001C	Delete from Zoning Tables
0612	006	Delete from Zoning Tables
0612	032	Delete from Zoning Tables
0612	049	Delete from Zoning Tables
0613	016	Delete from Zoning Tables
0613	017	Delete from Zoning Tables
0613	018	Delete from Zoning Tables
0613	015	Delete from Zoning Tables
0613	019	Delete from Zoning Tables
0627	054	Delete from Zoning Tables
0627	004	Delete from Zoning Tables
0630	002	Delete from Zoning Tables
0637	016	Delete from Zoning Tables
0637	040	Delete from Zoning Tables
0640	010	Delete from Zoning Tables
0641	004	Delete from Zoning Tables
0641	014	Delete from Zoning Tables
0641	005	Delete from Zoning Tables
0682	006	Delete from Zoning Tables

Description of Parcels (Block/Lot, Boundaries, other)		**Action**
Block	**Lot**	
0713	034	Delete from Zoning Tables
0714	018	Delete from Zoning Tables
0715	014	Delete from Zoning Tables
0719	002	Delete from Zoning Tables
0743	015	Delete from Zoning Tables
0777	002	Delete from Zoning Tables
0777	061	Delete from Zoning Tables
0777	003	Delete from Zoning Tables
0777	005	Delete from Zoning Tables
0777	076	Delete from Zoning Tables
0777	009	Delete from Zoning Tables
0777	010	Delete from Zoning Tables
0777	012	Delete from Zoning Tables
0777	014	Delete from Zoning Tables
0777	015	Delete from Zoning Tables
0777	018	Delete from Zoning Tables
0777	027	Delete from Zoning Tables
0777	028	Delete from Zoning Tables
0777	029	Delete from Zoning Tables
0777	035	Delete from Zoning Tables

Description of Parcels (Block/Lot, Boundaries, other)		**Action**
Block	**Lot**	
0777	037	Delete from Zoning Tables
0777	041	Delete from Zoning Tables
0777	044	Delete from Zoning Tables
0777	054	Delete from Zoning Tables
0777	070	Delete from Zoning Tables
0777	008	Delete from Zoning Tables
0777	011	Delete from Zoning Tables
0777	013	Delete from Zoning Tables
0777	016	Delete from Zoning Tables
0777	024	Delete from Zoning Tables
0777	030	Delete from Zoning Tables
0777	039	Delete from Zoning Tables
0777	048	Delete from Zoning Tables
0777	052	Delete from Zoning Tables
0777	057	Delete from Zoning Tables
0777	059	Delete from Zoning Tables
0777	074	Delete from Zoning Tables
0778	012B	Delete from Zoning Tables
0778	014	Delete from Zoning Tables
0778	016	Delete from Zoning Tables

Description of Parcels (Block/Lot, Boundaries, other)		**Action**
Block	**Lot**	
0778	018	Delete from Zoning Tables
0778	001	Delete from Zoning Tables
0778	013	Delete from Zoning Tables
0778	015	Delete from Zoning Tables
0778	017	Delete from Zoning Tables
0778	019	Delete from Zoning Tables
0778	021	Delete from Zoning Tables
0778	004	Delete from Zoning Tables
0778	006	Delete from Zoning Tables
0778	007	Delete from Zoning Tables
0778	012	Delete from Zoning Tables
0778	012A	Delete from Zoning Tables
0778	024	Delete from Zoning Tables
0778	002	Delete from Zoning Tables
0778	005	Delete from Zoning Tables
0778	005A	Delete from Zoning Tables
0778	008	Delete from Zoning Tables
0778	009	Delete from Zoning Tables
0778	010	Delete from Zoning Tables
0778	011	Delete from Zoning Tables

Description of Parcels (Block/Lot, Boundaries, other)		**Action**
Block	**Lot**	
0797	002	Delete from Zoning Tables
0797	005	Delete from Zoning Tables
0797	007	Delete from Zoning Tables
0797	009	Delete from Zoning Tables
0797	010	Delete from Zoning Tables
0797	011	Delete from Zoning Tables
0797	012	Delete from Zoning Tables
0797	014	Delete from Zoning Tables
0797	015	Delete from Zoning Tables
0797	018	Delete from Zoning Tables
0797	021	Delete from Zoning Tables
0797	028	Delete from Zoning Tables
0797	031	Delete from Zoning Tables
0797	001	Delete from Zoning Tables
0797	003	Delete from Zoning Tables
0797	004	Delete from Zoning Tables
0797	006	Delete from Zoning Tables
0797	013	Delete from Zoning Tables
0797	016	Delete from Zoning Tables
0797	017	Delete from Zoning Tables

Description of Parcels (Block/Lot, Boundaries, other)		**Action**
Block	**Lot**	
0797	017A	Delete from Zoning Tables
0797	019	Delete from Zoning Tables
0797	022	Delete from Zoning Tables
0797	023	Delete from Zoning Tables
0797	024	Delete from Zoning Tables
0797	027	Delete from Zoning Tables
0797	029	Delete from Zoning Tables
0797	030	Delete from Zoning Tables
0797	032	Delete from Zoning Tables
0797	033	Delete from Zoning Tables
0797	034	Delete from Zoning Tables
0797	051	Delete from Zoning Tables
0798	007	Delete from Zoning Tables
0798	005	Delete from Zoning Tables
0798	004	Delete from Zoning Tables
0798	008	Delete from Zoning Tables
0798	011	Delete from Zoning Tables
0798	012	Delete from Zoning Tables
0798	013	Delete from Zoning Tables
0798	017	Delete from Zoning Tables

Description of Parcels (Block/Lot, Boundaries, other)		**Action**
Block	**Lot**	
0798	018	Delete from Zoning Tables
0798	020	Delete from Zoning Tables
0798	023	Delete from Zoning Tables
0798	028	Delete from Zoning Tables
0798	031	Delete from Zoning Tables
0798	033	Delete from Zoning Tables
0798	051	Delete from Zoning Tables
0798	055	Delete from Zoning Tables
0798	058	Delete from Zoning Tables
0798	002	Delete from Zoning Tables
0798	003	Delete from Zoning Tables
0798	016	Delete from Zoning Tables
0798	021	Delete from Zoning Tables
0798	022	Delete from Zoning Tables
0798	026	Delete from Zoning Tables
0798	053	Delete from Zoning Tables
0798	056	Delete from Zoning Tables
0798	057	Delete from Zoning Tables
0803	015	Delete from Zoning Tables
0803	033	Delete from Zoning Tables

Description of Parcels (Block/Lot, Boundaries, other)		**Action**
Block	**Lot**	
0803	017	Delete from Zoning Tables
0803	018	Delete from Zoning Tables
0803	020	Delete from Zoning Tables
0803	021	Delete from Zoning Tables
0803	022	Delete from Zoning Tables
0803	027	Delete from Zoning Tables
0803	029	Delete from Zoning Tables
0803	030	Delete from Zoning Tables
0803	036	Delete from Zoning Tables
0803	038	Delete from Zoning Tables
0803	001A	Delete from Zoning Tables
0803	001C	Delete from Zoning Tables
0803	019	Delete from Zoning Tables
0803	023	Delete from Zoning Tables
0803	024	Delete from Zoning Tables
0803	025	Delete from Zoning Tables
0803	028	Delete from Zoning Tables
0803	031	Delete from Zoning Tables
0804	001B	Delete from Zoning Tables
0804	014	Delete from Zoning Tables

Description of Parcels (Block/Lot, Boundaries, other)		**Action**
Block	**Lot**	
0804	017	Delete from Zoning Tables
0804	020	Delete from Zoning Tables
0804	024	Delete from Zoning Tables
0804	024A	Delete from Zoning Tables
0804	025	Delete from Zoning Tables
0804	026	Delete from Zoning Tables
0804	028	Delete from Zoning Tables
0804	018	Delete from Zoning Tables
0804	019	Delete from Zoning Tables
0804	022	Delete from Zoning Tables
0804	023	Delete from Zoning Tables
0804	040	Delete from Zoning Tables
0804	046	Delete from Zoning Tables
0822	037	Delete from Zoning Tables
0822	022	Delete from Zoning Tables
0822	023	Delete from Zoning Tables
0822	021	Delete from Zoning Tables
0822	056	Delete from Zoning Tables
0822	051	Delete from Zoning Tables
0822	058	Delete from Zoning Tables

Description of Parcels (Block/Lot, Boundaries, other)		**Action**
Block	**Lot**	
0823	005	Delete from Zoning Tables
0823	009	Delete from Zoning Tables
0823	017	Delete from Zoning Tables
0823	008	Delete from Zoning Tables
0823	004	Delete from Zoning Tables
0823	002	Delete from Zoning Tables
0823	003	Delete from Zoning Tables
0823	013	Delete from Zoning Tables
0823	015	Delete from Zoning Tables
0823	001	Delete from Zoning Tables
0823	012	Delete from Zoning Tables
0823	014	Delete from Zoning Tables
0823	016	Delete from Zoning Tables
0823	011	Delete from Zoning Tables
0824	002D	Delete from Zoning Tables
0824	006C	Delete from Zoning Tables
0824	007	Delete from Zoning Tables
0824	009	Delete from Zoning Tables
0824	010	Delete from Zoning Tables
0824	001	Delete from Zoning Tables

Description of Parcels (Block/Lot, Boundaries, other)		**Action**
Block	**Lot**	
0824	001H	Delete from Zoning Tables
0824	008	Delete from Zoning Tables
0824	009A	Delete from Zoning Tables
0824	012	Delete from Zoning Tables
0824	002	Delete from Zoning Tables
0828	022A	Delete from Zoning Tables
0828	021	Delete from Zoning Tables
0828	022	Delete from Zoning Tables
0828	012	Delete from Zoning Tables
0836	010	Delete from Zoning Tables
0854	004	Delete from Zoning Tables
0854	005	Delete from Zoning Tables
0857	002	Delete from Zoning Tables
0863	003	Delete from Zoning Tables
0863	005	Delete from Zoning Tables
0863	018	Delete from Zoning Tables
0863	004	Delete from Zoning Tables
0863	006	Delete from Zoning Tables
0863	007	Delete from Zoning Tables
0863	008	Delete from Zoning Tables

Description of Parcels (Block/Lot, Boundaries, other)		**Action**
Block	**Lot**	
0863	009	Delete from Zoning Tables
0864	004	Delete from Zoning Tables
0864	005	Delete from Zoning Tables
0864	006	Delete from Zoning Tables
0864	008	Delete from Zoning Tables
0864	009	Delete from Zoning Tables
0864	011	Delete from Zoning Tables
0864	012	Delete from Zoning Tables
0864	013	Delete from Zoning Tables
0864	017	Delete from Zoning Tables
0864	002	Delete from Zoning Tables
0864	003	Delete from Zoning Tables
0864	007	Delete from Zoning Tables
0864	010	Delete from Zoning Tables
0864	014	Delete from Zoning Tables
0864	015	Delete from Zoning Tables
0864	016	Delete from Zoning Tables
0864	018	Delete from Zoning Tables
0865	004	Delete from Zoning Tables
0865	005	Delete from Zoning Tables

Description of Parcels (Block/Lot, Boundaries, other)		**Action**
Block	**Lot**	
0865	011	Delete from Zoning Tables
0865	013	Delete from Zoning Tables
0865	014	Delete from Zoning Tables
0865	018	Delete from Zoning Tables
0865	029	Delete from Zoning Tables
0865	003	Delete from Zoning Tables
0865	006	Delete from Zoning Tables
0865	007	Delete from Zoning Tables
0865	008	Delete from Zoning Tables
0865	009	Delete from Zoning Tables
0865	012	Delete from Zoning Tables
0865	015	Delete from Zoning Tables
0865	016	Delete from Zoning Tables
0865	017	Delete from Zoning Tables
0865	019	Delete from Zoning Tables
0865	026	Delete from Zoning Tables
0866	012	Delete from Zoning Tables
0866	015	Delete from Zoning Tables
0866	016	Delete from Zoning Tables
0866	017	Delete from Zoning Tables

Description of Parcels (Block/Lot, Boundaries, other)		**Action**
Block	**Lot**	
0866	018	Delete from Zoning Tables
0866	010	Delete from Zoning Tables
0866	011	Delete from Zoning Tables
0866	013	Delete from Zoning Tables
0866	014	Delete from Zoning Tables
0871	014	Delete from Zoning Tables
0970	002	Delete from Zoning Tables
0978	010	Delete from Zoning Tables
0989	028	Delete from Zoning Tables
1027	003	Delete from Zoning Tables
1061	049	Delete from Zoning Tables
1084	002	Delete from Zoning Tables
1127	007A	Delete from Zoning Tables
1155	005	Delete from Zoning Tables
1180	001	Delete from Zoning Tables
1180	002	Delete from Zoning Tables
1180	004	Delete from Zoning Tables
1180	039	Delete from Zoning Tables
1180	005	Delete from Zoning Tables
1180	054	Delete from Zoning Tables

Description of Parcels (Block/Lot, Boundaries, other)		Action
Block	**Lot**	
1180	011	Delete from Zoning Tables
1180	012	Delete from Zoning Tables
1180	013B	Delete from Zoning Tables
1180	006	Delete from Zoning Tables
1180	008	Delete from Zoning Tables
1180	009	Delete from Zoning Tables
1180	010	Delete from Zoning Tables
1181	004	Delete from Zoning Tables
1181	006	Delete from Zoning Tables
1181	008	Delete from Zoning Tables
1181	009	Delete from Zoning Tables
1181	021	Delete from Zoning Tables
1181	022	Delete from Zoning Tables
1181	025	Delete from Zoning Tables
1181	037	Delete from Zoning Tables
1181	003	Delete from Zoning Tables
1181	005	Delete from Zoning Tables
1181	007	Delete from Zoning Tables
1181	020	Delete from Zoning Tables
1181	023	Delete from Zoning Tables

Description of Parcels (Block/Lot, Boundaries, other)		**Action**
Block	**Lot**	
1181	024	Delete from Zoning Tables
1181	038	Delete from Zoning Tables
1181	039	Delete from Zoning Tables
1202	001	Delete from Zoning Tables
1202	001B	Delete from Zoning Tables
1202	001E	Delete from Zoning Tables
1202	001A	Delete from Zoning Tables
1202	001D	Delete from Zoning Tables
1202	004	Delete from Zoning Tables
1203	001	Delete from Zoning Tables
1203	017A	Delete from Zoning Tables
1206	003	Delete from Zoning Tables
1207	008	Delete from Zoning Tables
1215	010	Delete from Zoning Tables
1218	029	Delete from Zoning Tables
1218	050	Delete from Zoning Tables
1231	009	Delete from Zoning Tables
1238	023	Delete from Zoning Tables
1332	049	Delete from Zoning Tables
1361	001	Delete from Zoning Tables

Description of Parcels (Block/Lot, Boundaries, other)		**Action**
Block	**Lot**	
1432	003	Delete from Zoning Tables
1441	007	Delete from Zoning Tables
1726	004	Delete from Zoning Tables
1763	020	Delete from Zoning Tables
1764	031	Delete from Zoning Tables
1773	001	Delete from Zoning Tables
1924	004	Delete from Zoning Tables
2115	037	Delete from Zoning Tables
2623	012	Delete from Zoning Tables
2700	001	Delete from Zoning Tables
2704	040	Delete from Zoning Tables
2804	040	Delete from Zoning Tables
2882	035	Delete from Zoning Tables
3280	018	Delete from Zoning Tables
3504	038	Delete from Zoning Tables
3504	040	Delete from Zoning Tables
3504	046	Delete from Zoning Tables
3504	001	Delete from Zoning Tables
3513	207	Delete from Zoning Tables
3522	014	Delete from Zoning Tables

Description of Parcels (Block/Lot, Boundaries, other)		**Action**
Block	**Lot**	
3537	010	Delete from Zoning Tables
3542	062	Delete from Zoning Tables
3543	012	Delete from Zoning Tables
3561	060	Delete from Zoning Tables
3562	011	Delete from Zoning Tables
3566	001	Delete from Zoning Tables
3579	006	Delete from Zoning Tables
3582	071	Delete from Zoning Tables
3582	085	Delete from Zoning Tables
3583	061	Delete from Zoning Tables
6538	048	Delete from Zoning Tables
6539	034	Delete from Zoning Tables
6604	036	Delete from Zoning Tables
6770	057	Delete from Zoning Tables
6908	016	Delete from Zoning Tables
6942	050	Delete from Zoning Tables

Table 2. Parcels To Be Modified In The Zoning Tables.

Block	Lot	Use Districts to be Superseded	Use Districts Hereby Approved	* * * *	Height and Bulk Districts to be Superseded	Height and Bulk Districts Hereby Approved	Additional Information for Split Lots	* * * *
0866	024	RTO	RTO-1		40-X	40//40-R-4 No change		
0866	033	RTO	RTO-1		40-X	40//40-R-4 No change		
0866	048	RTO	RTO-1		40-X	40//40-R-4 No change		
0839	017	RTO	RTO-1		40-X	40//40-R-4 No change		
0863	011	RTO	RTO-1		40-X	40//40-R-4 No change		
0863	013	RTO	RTO-1		40-X	40//40-R-4 No change		

Block	Lot	Use Districts to be Superseded	Use Districts Hereby Approved	* * * *	Height and Bulk Districts to be Superseded	Height and Bulk Districts Hereby Approved	Additional Information for Split Lots	* * * *
0864	020	RTO	RTO-1		40-X	40//40-R-4 No change		
0864	022	RTO	RTO-1		40-X	40//40-R-4 No change		
0864	025	RTO	RTO-1		40-X	40//40-R-4 No change		
0864	026	RTO	RTO-1		40-X	40//40-R-4 No change		
0864	029	RTO	RTO-1		40-X	40//40-R-4 No change		
0865	001	RTO	RTO-1		40-X	40//40-R-4 No change		

Block	Lot	Use Districts to be Superseded	Use Districts Hereby Approved	* * * *	Height and Bulk Districts to be Superseded	Height and Bulk Districts Hereby Approved	Additional Information for Split Lots	* * * *
0865	020	RTO	RTO-1		40-X	40//40-R-4 No change		
0865	021	RTO	RTO-1		40-X	40//40-R-4 No change		
0865	023	RTO	RTO-1		40-X	40//40-R-4 No change		
0865	033	RTO	RTO-1		40-X	40//40-R-4 No change		
0866	001	RTO	RTO-1		40-X	40//40-R-4 No change		
0866	007	RTO	RTO-1		40-X	40//40-R-4 No change		

Block	Lot	Use Districts to be Superseded	Use Districts Hereby Approved	* * * *	Height and Bulk Districts to be Superseded	Height and Bulk Districts Hereby Approved	Additional Information for Split Lots	* * * *
0866	008	RTO	RTO-1		40-X	40//40-R-4 No change		
0866	009	RTO	RTO-1		40-X	40//40-R-4 No change		
0866	020	RTO	RTO-1		40-X	40//40-R-4 No change		
0866	020A	RTO	RTO-1		40-X	40//40-R-4 No change		
0866	022	RTO	RTO-1		40-X	40//40-R-4 No change		
0866	023	RTO	RTO-1		40-X	40//40-R-4 No change		

Block	Lot	Use Districts to be Super-seded	Use Districts Hereby Approved	* * * *	Height and Bulk Districts to be Super-seded	Height and Bulk Districts Hereby Approved	Additio-nal Infor-mation for Split Lots	* * * *
0866	025	RTO	RTO-1		40-X	40//40-R-4 No change		
0866	028	RTO	RTO-1		40-X	40//40-R-4 No change		
0866	030	RTO	RTO-1		40-X	40//40-R-4 No change		
0866	036	RTO	RTO-1		40-X	40//40-R-4 No change		
0858	002	RTO	RTO-1		40-X	40//40-R-4 No change		
0852	034	RTO	RTO-1		40-X	40//40-R-4 No change		

Block	Lot	Use Districts to be Superseded	Use Districts Hereby Approved	* * * *	Height and Bulk Districts to be Superseded	Height and Bulk Districts Hereby Approved	Additional Information for Split Lots	* * * *
0863	012	RTO	RTO-1		40-X	40//40-R-4 No change		
0863	016	RTO	RTO-1		40-X	40//40-R-4 No change		
0864	019	RTO	RTO-1		40-X	40//40-R-4 No change		
0864	023	RTO	RTO-1		40-X	40//40-R-4 No change		
0864	024	RTO	RTO-1		40-X	40//40-R-4 No change		
0865	022	RTO	RTO-1		40-X	40//40-R-4 No change		

Block	Lot	Use Districts to be Superseded	Use Districts Hereby Approved	* * * *	Height and Bulk Districts to be Superseded	Height and Bulk Districts Hereby Approved	Additional Information for Split Lots	* * * *
0865	045	RTO	RTO-1		40-X	40//40-R-4 No change		
0866	003	RTO	RTO-1		40-X	40//40-R-4 No change		
3545	003	RTO	RTO-1		40-X	No change		
3557	003	RTO	RTO-1		40-X	40//50-R-4 No change		
3557	003A	RTO	RTO-1		40-X	40//50-R-4 No change		
1070	001A	NCD - GEARY BOULEVARD	No change		40-A	40//65-R-4; ~~70//140-R-4~~	~~70//140-R-4~~ 50//85-R-4 from Geary	

Block	Lot	Use Districts to be Superseded	Use Districts Hereby Approved	* * * *	Height and Bulk Districts to be Superseded	Height and Bulk Districts Hereby Approved	Additional Information for Split Lots	* * * *
						50//85-R-4	Boulevard to 100 feet from Geary Boulevard; 40//65-R-4 rest of lot	
1070	002	RH-2	~~NCD - GEARY BOULEVARD~~ No change		40-X	40//65-R-4		
1070	003	NCD - GEARY BOULEVARD	No change		40-X	~~70//140-R-4~~ 50//85-R-4		
0446	002	NC-S	No change		40-X	~~40//65-R-4~~ 40//40-R-4		

Block	Lot	Use Districts to be Superseded	Use Districts Hereby Approved	* * * *	Height and Bulk Districts to be Superseded	Height and Bulk Districts Hereby Approved	Additional Information for Split Lots	* * * *
0446	003	NC-S	No change		40-X	~~40//65-R-4~~ 40//40-R-4		
0452	002	C-2	No change		40-X	~~40//65-R-4~~ 40//40-R-4		
0738	045	RC-4	No change		130-V	~~130//300-R-4~~ 140//350-R-4		
0738	019	RC-4	No change		130-V	~~130//300-R-4~~ 140//350-R-4		
0738	022	RC-4	No change		130-V	~~130//300-R-4~~ 140//350-R-4		

Block	Lot	Use Districts to be Superseded	Use Districts Hereby Approved	* * * *	Height and Bulk Districts to be Superseded	Height and Bulk Districts Hereby Approved	Additional Information for Split Lots	* * * *
0738	005	RC-4	No change		130-V	~~130//300-R-4~~ 140//350-R-4		
0738	018	RC-4	No change		130-V	~~130//300-R-4~~ 140//350-R-4		
0738	007	RC-4	No change		130-V	~~130//300-R-4~~ 140//350-R-4		
0743	001	RC-4	No change		130-V	~~130//300-R-4~~ 140//350-R-4		
0743	204	RC-4	No change		130-V	~~130//300-R-4~~		

Block	Lot	Use Districts to be Superseded	Use Districts Hereby Approved	* * * *	Height and Bulk Districts to be Superseded	Height and Bulk Districts Hereby Approved	Additional Information for Split Lots	* * * *
						140//350-R-4		
0743	015	RC-4	No change		130-V	~~130//300-R-4~~ 140//350-R-4		
0743	002	RC-4	No change		130-V	~~130//300-R-4~~ 140//350-R-4		
0743	203	RC-4	No change		130-V	~~130//300-R-4~~ 140//350-R-4		
0250	009	NCD - POLK	No change		80-A	~~80//120-R-4~~ 80//140-R-4		

Block	Lot	Use Districts to be Superseded	Use Districts Hereby Approved	* * * *	Height and Bulk Districts to be Superseded	Height and Bulk Districts Hereby Approved	Additional Information for Split Lots	* * * *
0250	008	RC-4	RTO-C		65-A	~~65//120-R-4~~ 80//140-R-4		
0250	007	RC-4	RTO-C		65-A	~~65//120-R-4~~ 80//140-R-4		
0250	006	RC-4	RTO-C		65-A	~~65//120-R-4~~ 80//140-R-4		
0250	005	RC-4	RTO-C		65-A	~~65//120-R-4~~ 80//140-R-4		
0250	004	RC-4	RTO-C		65-A	~~65//120-R-4~~		

Block	Lot	Use Districts to be Superseded	Use Districts Hereby Approved	* * * *	Height and Bulk Districts to be Superseded	Height and Bulk Districts Hereby Approved	Additional Information for Split Lots	* * * *
						80//140-R-4		
0250	003E	RC-4	RTO-C		65-A	~~65//120-R-4~~ 80//140-R-4		
0250	003D	RC-4	RTO-C		65-A	~~65//120-R-4~~ 80//140-R-4		
0251	015	RC-4	RTO-C		65-A	~~65//120-R-4~~ 80//140-R-4		
0251	014	RC-4	RTO-C		65-A	~~65//120-R-4~~ 80//140-R-4		

Block	Lot	Use Districts to be Superseded	Use Districts Hereby Approved	* * * *	Height and Bulk Districts to be Superseded	Height and Bulk Districts Hereby Approved	Additional Information for Split Lots	* * * *
0251	013	RC-4	RTO-C		65-A	~~65//120-R-4~~ 80//140-R-4		
0251	012	RC-4	RTO-C		65-A	~~65//120-R-4~~ 80//140-R-4		
0251	011	RC-4	RTO-C		65-A	~~65//120-R-4~~ 80//140-R-4		
0251	010	RC-4	RTO-C		65-A	~~65//120-R-4~~ 80//140-R-4		
0251	009	RC-4	RTO-C		65-A	~~65//120-R-4~~		

Block	Lot	Use Districts to be Superseded	Use Districts Hereby Approved	* * * *	Height and Bulk Districts to be Superseded	Height and Bulk Districts Hereby Approved	Additional Information for Split Lots	* * * *
						80//140-R-4		
0251	008	RC-4	RTO-C		65-A	~~65//120-R-4~~ 80//140-R-4		
0251	007	RC-4	RTO-C		65-A	~~65//120-R-4~~ 80//140-R-4		
0278	012	NCD - POLK	No change		80-A	~~80//120-R-4~~ 80//140-R-4		
0278	019	RC-4	RTO-C		80-A	~~80//120-R-4~~ 80//140-R-4		

Block	Lot	Use Districts to be Superseded	Use Districts Hereby Approved	* * * *	Height and Bulk Districts to be Superseded	Height and Bulk Districts Hereby Approved	Additional Information for Split Lots	* * * *
0278	016	RC-4	RTO-C		80-A	~~80//120-R-4~~ 80//140-R-4		
0278	020	RC-4	RTO-C		80-A	~~80//120-R-4~~ 80//140-R-4		
0278	001	RC-4	RTO-C		80-A	~~80//120-R-4~~ 80//140-R-4		
0277	025	RC-4	RTO-C		80-A	~~65//120-R-4~~ 80//140-R-4		
0277	021	RC-4	RTO-C		65-A	~~65//120-R-4~~		

Block	Lot	Use Districts to be Superseded	Use Districts Hereby Approved	* * * *	Height and Bulk Districts to be Superseded	Height and Bulk Districts Hereby Approved	Additional Information for Split Lots	* * * *
						80//140-R-4		
0277	022	RC-4	RTO-C		65-A	~~65//120-R-4~~ 80//140-R-4		
0277	023	RC-4	RTO-C		65-A	~~65//120-R-4~~ 80//140-R-4		
0277	001	RC-4	RTO-C		65-A	~~65//120-R-4~~ 80//140-R-4		
0025	004A	NC-1	No change		40-X	~~40//65-R-4~~ 40//40-R-4		

Block	Lot	Use Districts to be Superseded	Use Districts Hereby Approved	* * * *	Height and Bulk Districts to be Superseded	Height and Bulk Districts Hereby Approved	Additional Information for Split Lots	* * * *
0025	004B	NC-1	No change			~~40//65-R-4~~ 40//40-R-4		
0025	004C	RH-3	RTO-C		40-X	~~40//65-R-4~~ 40//40-R-4		
0025	004D	NC-1	No change		40-X	~~40//65-R-4~~ 40//40-R-4		
0025	004E	RH-3	RTO-C		40-X	~~40//65-R-4~~ 40//40-R-4		
0025	004F	RH-3	RTO-C		40-X	~~40//65-R-4~~ 40//40-R-4		
0025	008	C-2	No change		40-X	~~40//65-R-4~~ 40//40-R-4		

Block	Lot	Use Districts to be Superseded	Use Districts Hereby Approved	* * * *	Height and Bulk Districts to be Superseded	Height and Bulk Districts Hereby Approved	Additional Information for Split Lots	* * * *
0025	023	C-2	No change		40-X	~~40//65-R-4~~ 40//40-R-4		
0025	024	C-2	No change		40-X	~~40//65-R-4~~ 40//40-R-4		
0025	028	RH-3	RTO-C		40-X	~~40//65-R-4~~ 40//40-R-4		
0025	029	RH-3	RTO-C		40-X	~~40//65-R-4~~ 40//40-R-4		
0025	032	C-2	No change		40-X	~~40//65-R-4~~ 40//40-R-4		
0025	039	RH-3	RTO-C		40-X	~~40//65-R-4~~ 40//40-R-4		

Block	Lot	Use Districts to be Superseded	Use Districts Hereby Approved	* * * *	Height and Bulk Districts to be Superseded	Height and Bulk Districts Hereby Approved	Additional Information for Split Lots	* * * *
0025	042	RH-3	RTO-C		40-X	~~40//65-R-4~~ 40//40-R-4		
0025	045	RH-3	RTO-C		40-X	~~40//65-R-4~~ 40//40-R-4		

(e) While most Assessor's Parcel Blocks (also referred to as Assessor's Blocks and identified by the first four digits of any Assessor's Parcel Number in this ordinance) are subdivided horizontally, in some instances, property owners may have subdivided the Assessor's Parcel Block into vertical subdivision lots or through the creation of condominiums units. All Assessor's lots, including vertical lots and condominium units, located in the same Assessor's Parcel Block are subject to the same Planning Code provisions applicable to the Assessor's Parcel Block. Individual Assessor lots are identified by the last three digits of the Assessor's Parcel Number in the Zoning Table. To the extent the Zoning Table identifies a vertical subdivision lot or condominium unit that is created in the same Assessor Parcel Block as another vertical subdivision lot or condominium unit not identified in the Zoning Table (each a "Related Lot"), the proposed changes apply to all Related Lots.

(f~~e~~) Section 3 of this Ordinance describes generally the amendments to the Zoning Use District Maps. The amendments to the Zoning Use District maps include: (i) reclassifying certain properties currently zoned as various Residential districts to a new zoning district called Residential Transit Oriented – Commercial (RTO-C), which is established in Section 209.4 of the Planning Code, as proposed by the ordinance in Board File No. 250701; (ii) reclassifying properties currently zoned RTO to a new zoning district called Residential Transit Oriented – 1 (RTO-1), established in Section 209.4 of the Planning Code, as proposed by the ordinance in Board File No. 250701; (iii) reclassifying certain properties from various Residential districts other than RTO to RTO-1; (iv) reclassifying certain properties currently zoned Neighborhood Commercial (NC) or Public (P) to C-2; and (v) reclassifying certain properties from Public to other mixed-use or Neighborhood Commercial district designations.

(g~~f~~) Section 4 of this Ordinance describes generally the amendments to the Height and Bulk Maps. Changes to the Height and Bulk District map include (i) reclassifying properties in the Family Housing Zoning Plan to Height and Bulk District R-4 (as established in Section 270 of the Planning Code proposed in the ordinance found in Board File No. 250701); and, (ii) increasing the height limits on certain lots. The height limit increases include, on some properties, the establishment of a height limit applicable only to projects that use the Housing Choice – San Francisco Program, established in Section 206.10 and 263.19 of the Planning Code, as proposed by the ordinance found in Board File No. 250701.

(h~~g~~) Section 5 of this Ordinance adopts the Non-Contiguous San Francisco Municipal Transportation Agency Sites Special Use District. The Non-Contiguous San Francisco Municipal Transportation Agency Sites Special Use District is included in the Family Zoning Plan – Planning Code amendments, new Planning Code Section 249.11, as proposed by the ordinance found in Board File No. 250701.

(i~~h~~) Section 6 of this Ordinance amends the Local Coastal Program to designate all

parcels in the Coastal Zone as part of the Height and Bulk District R-4 and rezone certain parcels to RTO-C, Neighborhood Commercial, and the Non-Contiguous San Francisco Municipal Transportation Agency Sites Special Use District.

(j~~i~~) The Board of Supervisors finds that the Planning Code amendments in this ordinance constitute amendments to the City's Local Coastal Program ("LCP"). The Board of Supervisors finds that the LCP amendment conforms with the applicable provisions of the Coastal Act of 1976, and that the amendments are consistent with and adequate to carry out the provisions of the City's certified LCP Land Use Plan—the Western Shoreline Area Plan. The Board further finds that the amendments will be implemented in full conformance with the Coastal Act's provisions and acknowledges that the amendments in the Western Shoreline Area Plan are consistent with San Francisco's Housing Element's housing goals.

(k~~j~~) As noted above, the text of this ordinance includes descriptions of the changes to the Zoning Maps, and the general locations of those changes. The specific amendments to individual parcels are noted in the Zoning Tables which can be found in Board File No. 250700. Maps showing a visual image of the proposed amendments to the Zoning Maps are also included in Board File No. 250700. Sections 3, 4, and 6 of this Ordinance _____, and the maps in Board File No. 250700, are general descriptions only; to the extent the text of this ordinance or the maps differ from the amendments shown in the Zoning Tables, the Zoning Tables shall control.

Section 3. The Zoning Map of the San Francisco Planning Code is hereby revised by amending Zoning Use District Maps ZN01, ZN02, ZN03, ZN04, ZN05, ZN06, ZN07, ZN11, ZN12, and ZN13 of the Zoning Map of the City and County of San Francisco as set forth in the Zoning Tables in Board File No. 250700, which is incorporated by reference as though fully set forth herein. The following paragraphs generally describe the revisions to the Zoning Use

district maps.

(a) The Family Zoning Plan – Map Amendment implements the changes identified in the Housing Element by reclassifying certain properties in certain commercial districts and along transit corridors from Residential to Residential Transit Oriented - Commercial (RTO-C). These commercial districts and transit corridors include, or are adjacent to, the following streets: Franklin Street between O'Farrell Street and Francisco Street; Gough Street between O'Farrell Street and Francisco Street; Van Ness Avenue between Union Street and Beach Street; certain parcels north of Francisco Street and east of Van Ness Avenue; Chestnut Street between Polk Street and Baker Street; Lombard Street between Broderick Street and Lyon Street; California Street between Van Ness Avenue and 27th Avenue; the areas between Geary Boulevard, Steiner Street, California Street, and Broderick Street; Geary Boulevard between Franklin Street and 48th Avenue; Point Lobos Avenue between 42nd Avenue and 48th Avenue; Balboa Street between Arguello Boulevard and Point Lobos Avenue; Fulton Street between Central Avenue and La Playa Street; Stanyan Street between Grattan Street and McAllister Street; Carl Street between Cole Street and Willard Street; Parnassus Avenue between Clayton Street and Willard Street; Shrader Street between Grattan Street and McAllister Street; Haight Street between Steiner Street and Clayton Street; Duboce Avenue between Church Street and Steiner Street; Church Street between 29th Street and Hermann Street; Lincoln Way between Arguello Boulevard and 48th Avenue; Irving Street between Arguello Boulevard and 48th Avenue; Judah Street between 6th Avenue and 48th Avenue; 7th Avenue between Lawton Street and Lake Street; 19th Avenue between Winston Drive and Lake Street; Funston Avenue between Vicente Street and Lake Street; 14th Avenue between Vicente Street to Lake Street; 15th Avenue between Portola Drive and Lake Street; 17th Avenue through 21st Avenue between Winston Drive to Lake Street; Noriega Street between 16th Avenue and 48th Avenue; Taraval Street between 12th Avenue

and 46th Avenue; Ulloa Street between West Portal Avenue and 22nd Avenue; Vicente Street between 18th Avenue and 47th Avenue; Sloat Boulevard between Portola Drive and 44th Avenue; Eucalyptus Drive between Ocean Avenue and 23rd Avenue; West Portal Avenue between Sloat Boulevard and 15th Avenue; Ocean Avenue between San Jose Avenue and 20th Avenue; Winston Drive between Junipero Serra Boulevard and Lake Merced Boulevard; Brotherhood Way between Junipero Serra Boulevard and Lake Merced Boulevard; Chenery Street between Natick Street and Lippard Avenue; Brompton Avenue between Joost Avenue and Chenery Street; Wilder Street between Natick Street and Diamond Street; Joost Avenue between Monterey Boulevard and Lippard Avenue; Laguna Honda Boulevard between Merced Avenue and Clarendon Avenue; Dewey Boulevard between Pacheco Street and Laguna Honda Boulevard; Woodside Avenue between Portola Drive and Laguna Honda Boulevard; and Portola Drive between Woodside Avenue and Sloat Boulevard; the areas bound by Riverton Drive, Ocean Avenue, 20th Avenue, and Eucalyptus Drive; the area bounded by 19th Avenue, Rossmoor Drive, Junipero Serra Boulevard, and Ocean Avenue; the area bounded by Geneva Avenue, Howth Street, Mount Vernon Avenue, San Miguel Street, and Interstate 280; the area bounded by Delano Avenue, Oneida Avenue, San Jose Avenue, and Mount Vernon Avenue; the area bounded by 7th Avenue, Kirkham Street, 3rd Avenue, and Irving Street; the area bounded by Arguello Boulevard, Frederick Street, Stanyan Street, Farnsworth Lane, Hill Point Avenue, and Hillway Avenue; the area bounded by Stanyan Street, Anza Street, Masonic Avenue, and Geary Boulevard; the area bounded by Fillmore Street, Washington Street, Van Ness Avenue, and Greenwich Street; the area bounded by Golden Gate Avenue, Gough Street, Market Street, and Diamond Street; and the area bounded by Market Street, Valencia Street, Castro Street, and 18th Street.

(b) The Rezoning Program reclassifies all properties currently zoned RTO located in the Market & Octavia Area Plan area, which is generally bounded by 16th Street, Noe Street,

Waller Street, Webster Street, Oak Street, Buchannan Street, Grove Street, Laguna Street, Golden Gate Avenue, Gough Street, Fulton Street, Octavia Street, 14th Street, and Guerrero Street, to RTO-1. This reclassification includes some properties that have structures that have been designated as a landmark or a contributor to a historic district pursuant to Article 10.

(c) The Family Zoning Plan – Map Amendment reclassifies certain properties currently zoned Neighborhood Commercial or Public to Community Business (C-2). Properties being reclassified to C-2 include are the entirety of Assessor's Block 0019 at Stockton Street and North Point Street; Block 1072 at Geary Boulevard and Presidio Avenue, and Block 1094 at Geary Boulevard and Masonic Avenue.

(d) The Family Zoning Plan – Map Amendment reclassifies other properties under the jurisdiction of the San Francisco Municipal Transit Agency (SFMTA) from P (Public) or R (Residential) to various Neighborhood Commercial Districts. These properties, most of which operate as parking lots, include properties at La Playa Street and Cabrillo Street; on 19th Avenue near Geary Boulevard; on 8th Avenue and 9th Avenue south of Clement Street; on 18th Street and Castro Street within the Castro Street NCD; on Noe Street within the 24th and Noe Valley NCD; on 19th Avenue and Ocean Avenue adjacent to the Lakeside Village NCD; at San Jose Avenue and Geneva Avenue; and on the west side of Laguna Honda Boulevard north of Dewey Boulevard.

(e) The Family Zoning Plan – Map Amendment also reclassifies some parcels in various locations that are currently classified under two zoning districts ("split" zoning). The amendments reclassify each property to one zoning district. In most instances, "split" zoned parcels are partially zoned RH or RM and will be reclassified to either the RH or RM district.

(f) The Board of Supervisors finds that the Zoning Map amendments in this ordinance constitute an amendment to the City's Local Coastal Program ("LCP"). The Board of

Supervisors finds that the LCP amendment conforms with the applicable provisions of the California Coastal Act of 1976 (Public Resources Code Section 30000 et seq.), and that the amendment is consistent with and adequate to carry out the provisions of the City's certified LCP Land Use Plan—the Western Shoreline Area Plan. The Board further finds that the amendment will be implemented in full conformance with the Coastal Act's provisions.

Section 4. The Zoning Map of the San Francisco Planning Code is hereby revised by amending Height Maps HT01, HT02, HT03, HT04, HT05, HT06, HT07, HT11, HT12, and HT13 of the Zoning Map of the City and County of San Francisco as set forth in the Zoning Tables found in Board of Supervisors File No. 250700, which is incorporated by reference as though fully set forth herein. The following paragraphs generally describe the revisions to the Height District maps; for specific amendments to specific parcels, refer to the Zoning Tables.

(a) The Family Zoning Plan – Map Amendment rezones properties to the Height and Bulk District R-4 that are generally located in the Well-Resourced areas, as described in the Housing Element. Properties with structures that have been designated as a landmark or a contributor to a historic district pursuant to Article 10 are excluded from the R-4 Height and Bulk District. Properties located in the area north of Haight Street, west of Octavia Street, east of Fillmore Street, and south of Fulton Street will also be rezoned to the Height and Bulk District R-4. The R-4 District is established in Section 270 of the Planning Code proposed in the ordinance found in Board File No. 250701. The Zoning Map also increases the height limits on certain lots. The height limit increases include, on some properties, the establishment of a height limit applicable only to projects that use the Housing Choice – San Francisco Program, established in Section 206.10 and 263.19 of the Planning Code, as proposed by the ordinance found in Board File No. 250701. Where height districts are noted with a double slash ("//") separating two numbers or sets of numbers (e.g. 55-R-4//85-R-4, or

120/400-R-4//120/650-R-4), the number or set of numbers preceding the double slash is the permitted height limit for projects not using the HC-SF program (Base Height), and the number or set of numbers after the double slash is the permitted height limit for projects using the HC-SF Program. Where numbers are separated by a single slash ("/"), the first number is the maximum height for podium buildings and the number following the slash is the maximum tower height.

(b) In the Family Zoning Plan area, all height districts less than 40 feet are increased to 40 feet. These areas include, but are not limited to, the following areas, and/or along or adjacent to the following streets: the area between Junipero Serra Boulevard and 19th Avenue south of Eucalyptus Drive; the Westwood Park area north of Ocean Avenue, south of Monterey Boulevard, east of Faxon Avenue, and west of Frida Kahlo Way; Monterey Boulevard between Edna Street and Northgate Drive; and the area north of Turk Street, west of Saint Joseph's Street, south of O'Farrell Street, and east of Nido Avenue.

(c) Properties being reclassified to a "HC-SF Program" height of 50 feet, but typically maintaining a Base Height limit of 40 feet, include certain properties along or within approximately one block of certain Neighborhood Commercial districts and major transit corridors, and certain other areas, including but not limited to: Church Street between 30th Street and Hermann Street; 24th Street between Dolores Street and Diamond Street; Market Street between Octavia Boulevard and Eureka Street; Castro Street between 19th Street and Clay Street; Haight Street between Webster Street and Stanyan Street; Parnassus Avenue between Clayton Street and Hillway Avenue; the area between Clayton Street and Stanyan Street south of Haight Street and north of Parnassus Avenue; Divisadero Street between Duboce Avenue and Clay Street; Sacramento Street between Fillmore Street and Arguello Boulevard; Columbus Avenue between Green Street and Bay Street; certain areas north of Broadway, west of Leavenworth, south of Chestnut and west of Van Ness Avenue; certain

areas within approximately one-quarter mile from the Glen Park BART station and north of San Jose Avenue, generally bounded by Monterey Boulevard, Acadia Street, the parcels on the west site of Chilton Avenue, Surrey Street, Sussex Street, Roanoke Street, and Arlington Street.

(d) Properties being reclassified to a “HC-SF” height of 65 feet, where the Base Height limit typically remains at 40 feet or will be reclassified to 40 feet, include properties in all Neighborhood Commercial districts not otherwise being reclassified to a Local Program height greater than 65 feet, as well as certain major transit corridors, major arterials, portions of streets that extend from commercial or mixed use districts, and certain other areas adjacent to major institutional or commercial activity, including portions or all of the following streets or areas: Ocean Avenue between Victoria Street and Clearfield Drive; Sloat Boulevard between 19th Avenue and 44th Avenue; Vicente Street between 22nd Avenue and 47th Avenue; Taraval Street between 12th Avenue and 21st Avenue; Ulloa Street between Claremont Boulevard and 21st Avenue; 15th Avenue between Vicente Street to Lake Street; 17th Avenue between Vicente Street to Lake Street; 18th Avenue between Vicente Street and Lake Street; 20th Avenue between Buckingham Way and Lake Street; 21st Avenue between Buckingham Way and Lake Street; Noriega Street between Sunset Boulevard and 48th Avenue; Lawton Street between Lockley Avenue and 43rd Avenue; Judah Street between 5th Avenue and 8th Avenue; Parnassus Avenue between Clayton Street and 21st Avenue; Irving Street between 6th Avenue and 48th Avenue; Lincoln Way between Arguello Boulevard and 48th Avenue; 7th Avenue between Lawton Street and Cornwall Street; Frederick Street between Clayton Street and Arguello Boulevard; Carl Street between Clayton Street and Arguello Boulevard; Willard Street between Woodland Avenue and Frederick Street; Stanyan Street between Grattan Street and Geary Boulevard; Shrader Street between Grattan Street and Page Street; Cole Street between Grattan Street and Page

Street; Haight Street between Webster Street and Stanyan Street; Balboa Street between Arguello Boulevard and La Playa Street; Clement Street between Arguello Boulevard and El Camino Del Mar; California Street between Park Presidio Boulevard and 27th Avenue; Arguello Boulevard between Irving Street and Cornwall Street; the area bounded by Geary Boulevard, Stanyan Street, Anza Street, and Masonic Avenue; Masonic Avenue between Waller Street and California Street; Presidio Avenue between Geary Boulevard and Clay Street; Sacramento Street between Webster Street and Maple Street; Fillmore Street between Waller Street and Bay Street; Broadway between Laguna Street and Fillmore Street; Union Street between Leavenworth Street and Pierce Street; Lombard Street between Pierce Street and Lyon Street; Chestnut Street between Mason Street and Baker Street; Van Ness Avenue between Lombard Street and Beach Street; Jefferson Street between Powell Street and Hyde Street; Beach Street between Leavenworth Street and Van Ness Avenue; North Point Street between Leavenworth Street and Hyde Street; North Point Street between Polk Street and Van Ness Avenue; Bay Street between Columbus Avenue and Franklin Street; Columbus Avenue between Lombard Street and Beach Street; Leavenworth Street between Pacific Avenue and Jefferson Street; Hyde Street between Jackson Street and Jefferson Street; Larkin Street between Jackson Street and Beach Street; Filbert Street between Leavenworth Street and Pierce Street; Green Street between Leavenworth Street and Polk Street; Vallejo Street between Leavenworth Street and Octavia Street; Pacific Avenue between Leavenworth Street and Polk Street; Church Street between 30th Street and 15th Street; 24th Street between Chattanooga Street and Douglass Street; Chenery Street between Castro Street and Lippard Avenue; Natick Street between Wilder Street and Chenery Street; Wilder Street between Natick Street and Carrie Street; and Diamond Street between Bosworth Street and Elizabeth Street.

(e) Properties being reclassified to a “HC-SF” height of 85 feet, where the Base Height

will typically be reclassified to 50 feet except in some locations where the existing height limit is greater than 50 feet, include properties in several Neighborhood Commercial districts, as well as certain major transit corridors, major arterials, and certain other areas adjacent to major institutional or commercial activity, including portions or all of the following streets or areas: the area generally bounded by Delano Avenue to the east, Mount Vernon Avenue to the south, Nahua Avenue and San Jose Avenue to the west, and Oneida Avenue to the north; the area generally bounded by Mount Vernon Avenue to the south, Howth Street to the west, Ocean Avenue to the north and Interstate 280 and San Miguel Street to the east; Ocean Avenue between Howth Street and Manor Drive; Ocean Avenue between Paloma Avenue and 19th Avenue; Sloat Boulevard between Junipero Serra Boulevard and 20th Avenue; the south side of Belle Avenue opposite Chester Avenue; Monterey Boulevard between Foerster Street and Gennessee Street; the south side of Brotherhood Way between Junipero Serra Boulevard and Lake Merced Boulevard; 19th Avenue between Sargent Street and Banbury Drive; the northern and southern corners of Buckingham Way and Winston Drive; Eucalyptus Drive between Junipero Serra Boulevard and 20th Avenue; Sloat Boulevard between Everglade Drive and Clearfield Drive; West Portal Avenue between Sloat Boulevard and Dorchester Way; Ulloa Street between Dorchester Way and Wawona Street; Claremont Boulevard between Ulloa Street and Portola Drive; the area generally bounded by Sloat Boulevard to the south, 19th Avenue to the west, Wawona Street to the north and 15th Avenue to the east; 19th Avenue between Eucalyptus Drive and Lincoln Way; Taraval Street between 14th Avenue and 47th Avenue; Noriega Street between 16th Avenue and Sunset Boulevard; Judah Street between 7th Avenue and 48th Avenue; Irving Street between Arguello Boulevard and 27th Avenue; Lincoln Way between 8th Avenue and 21st Avenue; 9th Avenue between Kirkham Street and Lincoln Way; 7th Avenue between Judah Street and Hugo Street; Woodside Avenue between Portola Drive and Laguna Honda Boulevard; Laguna

Honda Boulevard between Woodside Avenue and Clarendon Avenue; Dewey Boulevard between Pacheco Street and Laguna Honda Boulevard; Merced Avenue between Pacheco Street and Laguna Honda Boulevard; the area bounded by 7th Avenue to the west, Lawton Street to the north and Locksley Avenue to the east; Portola Drive between Evelyn Way and Woodside Avenue and O'Shaughnessy Boulevard; Fulton Street from Central Avenue to 48th Avenue; O'Farrell Street between Lyon Street and Masonic Avenue; Geary Boulevard between 14th Avenue and 43rd Avenue; California Street between Leavenworth Street and Funston Avenue; Lake Street between 2nd Avenue and 5th Avenue; Divisadero Street between Waller Street and Sacramento Street; the area generally bounded by Bush Street on the south, Larkin Street on the west, California Street on the north and Leavenworth Street on the east; Post Street between Steiner Street and Scott Street; Bush Street between Steiner Street and Broderick Street; Sutter Street between Steiner Street and Broderick Street; Scott Street between Post Street and Pine Street; Pierce Street between Post Street and Pine Street; Steiner Street between Post Street and Pine Street; Vallejo Street between Larkin Street and Gough Street; Pacific Avenue between Larkin Street and Octavia Street; Green Street between Larkin Street and Franklin Street; Gough Street between Pacific Avenue and Greenwich Street; Franklin Street between Pacific Avenue and Greenwich Street; Lombard Street between Pierce Street and Laguna Street; Filbert Street between Hyde Street and Gough Street; the area generally bounded by Larkin Street to the east, California Street to the south, Polk Street to the west and Greenwich Street to the north; the area generally comprised of the eastern half of the blocks bounded by Polk Street to the east, California Street to the south, Van Ness Avenue to the west and Greenwich Street to the north; Greenwich Street between Polk Street and Gough Street; Church Street between 15th Street and Herman Street; Duboce Avenue between Church Street and Castro Street; Castro Street between 19th Street and 16th Street; 16th Street between Market Street and Flint Street;

miscellaneous parcels within the area bounded by 14th Street to the south, Dolores Street to the west, Market Street to the north and Guerrero Street to the east; 14th Street between Landers Street and Market Street; 17th Street between Noe Street and Castro Street; Chenery Street between Carrie Street and Brompton Avenue; Wilder Street between Carrie Street and Diamond Street; Diamond Street between Monterey Boulevard and Chenery Street; Bosworth Street between Diamond Street and Brompton Avenue; Brompton Avenue between Joost Avenue and Chenery Street; and Joost Avenue between Monterey Boulevard and Lippard Avenue. The area generally bounded by Francisco Street to the south, Columbus Avenue to the west, Beach Street to the north, and Grant Street on the east would be reclassified to a "HC-SF" height of 85 feet with a Base Height of 40 feet.

(f) Properties being reclassified to a general height limit of 85 feet include parcels along 11th Street between Mission Street and Folsom Street; 12th Street between Harrison Street and Howard Street; 13th Street between Harrison Street and Folsom Street; Harrison Street between 13th Street and Norfolk Street; Folsom Street between13th Street and 11th Street; and Howard Street between 13th Street and 11th Street.

(g) Properties being reclassified to "HC-SF" heights ranging from 120 feet to 180 feet, where the Base Height will be reclassified to heights ranging from 60 feet to 80 feet, include properties in several Neighborhood Commercial districts, as well as certain major transit corridors, major arterials, intersections of major corridors, and certain other areas adjacent to major institutional or commercial activity, including portions or all of the following streets or areas: Cambon Drive; the intersections of Eucalyptus Drive with Junipero Serra Boulevard and with 19th Avenue; the intersections of 19th Avenue with Taraval Street, Noriega Street, Judah Street, and Irving Street; Geary Boulevard between 2nd Avenue and Divisidero Street; the west side of Presidio Avenue between Euclid Avenue and Post Street; Masonic Avenue between Geary Boulevard and Anza Street; the north side of O'Farrell Street between Wood

Street and Anzavista Avenue; Lombard Street between Laguna Street and Van Ness Avenue; Broadway between Laguna Street and Van Ness Avenue; Gough Street between Vallejo Street and Washington Street; Franklin Street between California Street and Vallejo Street; Van Ness Avenue between Lombard Street and Broadway; Polk Street between Clay and California; California between Polk and Hyde; the area generally bounded by Larkin, California, Leavenworth, and Bush Streets; Market Street between South Van Ness Avenue and Diamond Street; South Van Ness Avenue between 12th Street and 13th Street; Otis Street between Duboce Avenue and South Van Ness Avenue; and Mission Street between 13th Street and South Van Ness Avenue.

(h) Properties being reclassified to "HC-SF" heights of between 240 feet to 350 feet, where the Base Height will be reclassified to between 100 feet and 140 feet, include parcels and portions of the following areas or locations: Church Street at Market Street; Gough Street at McCoppin Street; Mission Street at South Van Ness Avenue; Geary Boulevard between Lyon Street and Wood Street; Masonic Avenue between Euclid Avenue and Anza Street; the area bounded by Geary Boulevard, Scott Street, Sutter Street, and Broderick Street; Franklin Street between Broadway and California Street; Van Ness Avenue between Sutter Street and Green Street; Van Ness Avenue between Redwood Street and Ellis Street; and Polk Street between California Street and Geary Street.

(i) Properties being reclassified to a "HC-SF" height of 450 feet, where the Base Height will be increased to 140 feet, include parcels, groups of parcels, and portions of the following area or location: Oak Street at Van Ness Avenue.

(j) Properties being reclassified to "HC-SF" heights of between 490 feet to 650 feet, where the Base Heights will be increased to between 195 feet and 260 feet, include parcels, groups of parcels, and portions of the following areas or locations: Van Ness Avenue and Market Street; the area generally bounded by Polk Street, Ellis Street, Gough Street and

Sutter Street, and parcels near Geary Boulevard and Masonic Avenue.

Section 5. Zoning Map. The Planning Code is hereby amended by revising Special Use District Maps SU01, SU02, SU03, SU04 and SU05, SU06, SU07, SU11, and SU12 of the Zoning Map of the City and County of San Francisco as follows:

Description of Property (Assessor's Block/Lot)	**Special Use District Hereby Approved**
0019/001; 1596/044; 1596/045; 1453/020; 1526/028A; 1526/028; 1526/002; 1440/028; 1440/029; 1440/030; 1439/045; 1439/048; 1439/049; 1439/036; 1439/035; 1072/001; 0490/013; 0490/012; 0490/011; 0490/010; 0490/009; 06350/09A; 0635/009; 1730/050; 1763/044; 2647/017; 2647/034; 3582/087; 6507/023; 7226/016; 7225/013; 2988A/007; 2979A/034; 2979A/002; 0669/012; 2864/050; 6972/036	Non-Contiguous SFMTA Sites Special Use District

Section 6. Local Coastal Program. This ordinance constitutes an amendment to the Implementation Plan ("IP") of the City's Local Coastal Program. In the event of an

inconsistency between this ordinance and previously certified sections of the IP, this ordinance shall prevail. The Local Coastal Program is hereby amended to reflect the following changes to Zoning Use District Map ZN13, Height and Bulk District Map HT13, and Special Use District Map SU13, as set forth in the Zoning Tables in Board File No. 250700, which is incorporated by reference as though fully set forth herein. The following paragraphs generally describe the revisions to the Zoning Use, Height and Bulk, and Special Use District maps.

(a) RTO Changes: The Family Zoning Plan – Map Amendment implements the changes identified in the Housing Element by reclassifying certain properties along or adjacent to certain commercial districts and transit corridors from various Residential Districts (including RH-1(D), RH-2, RH-3 and RM-1) to Residential Transit Oriented - Commercial (RTO-C) District. These corridors include, or are adjacent to, the following streets: Brotherhood Way between Thomas More Way and Lake Merced Boulevard; Judah Street between 47th Avenue and 48th Avenue; 47th Avenue and 48th Avenue between Kirkham Street and Judah Street; Irving Street between 47th Avenue and 48th Avenue; 47th Avenue and 48th Avenue between Judah Street and Irving Street; Lincoln Way between 47th Avenue and 48th Avenue; 47th Avenue and 48th Avenue between Irving Street and Lincoln Way; Fulton Street between 46th Avenue and 48th Avenue; 46th Avenue, 47th Avenue, and 48th Avenue between Fulton Street and Cabrillo Street; Balboa Street between 46th Avenue and La Playa Street; 46th Avenue, 47th Avenue, and 48th Avenue between Cabrillo Street and Sutro Heights Avenue; and El Camino Del Mar between Point Lobos Avenue and Seal Rock Drive.

(b) NC-2 Changes: The Rezoning Program reclassifies certain properties currently zoned Residential-Mixed Low Density (RM-1) or Neighborhood Commercial-Shopping Center (NC-S) to Small-Scale Neighborhood Commercial (NC-2). Properties being reclassified to NC-2 include certain parcels on Assessor's Block 1596 on La Playa Street between Cabrillo

Street and Balboa Street, and Block 1691 between La Playa Street, 48th Avenue, Fulton Street, and Cabrillo Street.

(c) Height and Bulk District R-4. The Rezoning Program implements changes to the Height and Bulk District maps. All properties in the Coastal Zone are in the new Height and Bulk District R-4. The Rezoning Program also increases the height limits on certain lots. All lots in the R-4 will have their height limits mapped with a general height limit and a height limit applicable to eligible projects that utilize the Housing Choice – San Francisco Program ("HC-SF," or "Local Program") established in Section 263.19 and 206.10 of the Planning Code, found in Board of Supervisors file No. 250701. In some cases, the two height limits are the same and may or may not represent an increase from the existing height limits. Height districts in the R-4 are noted with a double slash ("//") separating two numbers or sets of numbers (e.g. 55//85-R-4, or 120/400//120/650-R-4); the number or set of numbers preceding the double slash is the generally prevailing height limit, and the number or set of numbers after the double slash is the "Local Program" height limit. Where numbers are separated by a single slash ("/"), whether before or after a double slash, the first number is the podium height limit and the second number is the tower height limit, as set forth in Planning Code Section 263.19.

Properties within the R-4 whose general height limits are not being reclassified and where the Local Program height will be the same as the existing height limit include all areas north of Sloat Boulevard that are not otherwise described below, and all areas that are east of the Great Highway, Point Lobos Avenue and El Camino del Mar, and that are not currently zoned with a height limit of OS. Properties being reclassified to a "Local Program" height of 65', where the general height limit typically remains at 40 feet or will be reclassified to 40 feet, include properties in all Neighborhood Commercial Districts not otherwise being reclassified to a Local Program height greater than 65 feet, as well as certain major transit

corridors, major arterials, portions of streets that extend from commercial or mixed use districts, and certain other areas adjacent to major institutional or commercial activity, including portions or all of the following streets or areas: Irving Street between 47th Avenue and 48th Avenue; 47th Avenue and 48th Avenue between Judah Street and Irving Street; 47th Avenue and 48th Avenue between Irving Street and Lincoln Way; Lincoln Way between 47th Avenue and 48th Avenue; the area north of Fulton Street, west of 48th Avenue, east of La Playa Street and south of Cabrillo Street; Balboa Street between 46th Avenue and La Playa Street; 46th Avenue, 47th Avenue, and 48th Avenue between Cabrillo Street and Sutro Heights Avenue; and El Camino Del Mar between Point Lobos Avenue and Seal Rock Drive.

Properties being reclassified to a “HC-SF” height of 85’, where the general height will typically be reclassified to 50 feet except in some locations where the existing height limit is greater than 50 feet, include properties in several Neighborhood Commercial districts, as well as certain major transit corridors, major arterials, and certain other areas adjacent to major institutional or commercial activity, including portions or all of the following streets or areas: Brotherhood Way between Thomas More Way and Lake Merced Boulevard; Judah Street between 47th Avenue and 48th Avenue; 47th Avenue and 48th Avenue between Kirkham Street and Judah Street; Fulton Street between 46th Avenue and 48th Avenue; 46th Avenue, 47th Avenue, and 48th Avenue between Fulton Street and Cabrillo Street; and Cabrillo Street between 48th Avenue and La Playa Street.

Properties being reclassified to a “HC-SF” height of 100 feet, with a typical base height of 55 feet, include properties in Neighborhood Commercial districts, including portions or all of the following streets or areas: Sloat Boulevard between 44th Avenue and Great Highway.

(d) Special Use District. The Family Zoning Plan – Map Amendment reclassifies certain properties under the jurisdiction of the SFMTA at La Playa and Cabrillo Streets to the

Non-Contiguous SFMTA Sites Special Use District.

Section 7. Effective Date and Operative Dates Outside the Coastal Zone.

(a) In the portions of the City that are not located in the Coastal Zone Permit Area, as that permit area is designated on Section Maps CZ4, CZ5, and CZ13 of the Zoning Map, this ordinance shall become effective 30 days after enactment. Enactment occurs when the Mayor signs the ordinance, the Mayor returns the ordinance unsigned or does not sign the ordinance within ten days of receiving it, or the Board of Supervisors overrides the Mayor's veto of the ordinance.

(b) In the portions of the City that are not located in the Coastal Zone Permit Area, this ordinance shall become operative upon its effective date.

Section 8. Effective and Operative Dates in the Coastal Zone.

(a) In the portions of the City that are located in the Coastal Zone Permit Area, as that permit area is designated on Section Maps CZ4, CZ5, and CZ13 of the Zoning Map, this ordinance shall become effective 30 days after enactment. Enactment occurs when the Mayor signs the ordinance, the Mayor returns the ordinance unsigned or does not sign the ordinance within ten days of receiving it, or the Board of Supervisors overrides the Mayor's veto of the ordinance.

(b) Upon enactment, the Director of the Planning Department shall submit this ordinance to the California Coastal Commission for certification as a Local Coastal Program Amendment. This ordinance shall become operative in the Coastal Zone Permit Area upon final certification by the California Coastal Commission. If the California Coastal Commission certifies this ordinance subject to modifications, this ordinance, as so modified, shall become operative in the Coastal Zone Permit Area 30 days after enactment of the modifications.

(c) This ordinance satisfies the City's obligations pursuant to Government Code Section 65583(c). Any consideration of the Ordinance by the California Coastal Commission after the City's enactment is consistent with the Coastal Act, and permissible pursuant to Government Code Section 65583(f)(1). Certification of the Local Coastal Program Amendment shall proceed pursuant to the California Coastal Commissions regulations and procedures, including any public participation and scheduling requirements.

Section 9. Transmittal of Ordinance. To facilitate the Coastal Commission's review of the Local Coastal Program Amendment, the Director of the Planning Department is authorized to submit the amendment for certification in the form desired by the Coastal Commission, including making any necessary non-substantive changes (e.g., formatting or redlining), to show the changes to the text of the Local Coastal Program. Upon certification by the California Coastal Commission, the Director of the Planning Department shall transmit a copy of the certified Local Coastal Program Amendment to the Clerk of the Board for inclusion in File No. 250700. The Planning Department shall also retain a copy of the certified Local Coastal Program Amendment in its Local Coastal Program files.

APPROVED AS TO FORM:
DAVID CHIU, City Attorney

By: /s/
AUSTIN M. YANG
Deputy City Attorney

4936-1318-1819, v. 1

FILE NO. 250700

LEGISLATIVE DIGEST

(Amended in Committee – November 17 2025)

[Zoning Map - Family Zoning Plan]

Ordinance amending the Zoning Map to implement the Family Zoning Plan by: amending the Zoning Use District Maps to: 1) reclassify certain properties currently zoned as various types of Residential to Residential Transit Oriented - Commercial (RTO-C); 2) reclassify properties currently zoned Residential Transit Oriented (RTO) to Residential Transit Oriented - 1 (RTO-1); 3) reclassify certain properties from Residential districts other than RTO to RTO-1; 4) reclassify certain properties currently zoned Neighborhood Commercial (NC) or Public (P) to Community Business (C-2); and 5) reclassify certain properties from Public to Mixed-Use or Neighborhood Commercial Districts; amending the Height and Bulk Map to: 1) reclassify properties in the Family Zoning Plan to R-4 Height and Bulk District, except for properties with structures designated as landmarks or contributors to historic districts pursuant to Article 10; 2) change the height limits on certain lots in the R-4 Height and Bulk District; and 3) designating various parcels to be included in the Non-Contiguous San Francisco Municipal Transportation Agency Sites Special Use District (SFMTA SUD); amending the Local Coastal Program to: 1) reclassify all properties in the Coastal Zone to R-4 Height and Bulk District; 2) reclassify certain properties to RTO-C and Neighborhood Commercial District; 3) designate one parcel as part of the SFMTA SUD; and 4) directing the Planning Director to transmit the Ordinance to the Coastal Commission upon enactment; affirming the Planning Department's determination under the California Environmental Quality Act; making findings of public necessity, convenience, and welfare under Planning Code, Section 302; making findings of consistency with the General Plan, and the eight priority policies of Planning Code, Section 101.1; and making findings under the City's Local Coastal Program and the California Coastal Act of 1976.

Existing Law

The Zoning Map of the City and County of San Francisco establishes the designations, locations, and boundaries of various districts within the City. The Zoning Maps consists of a series of numbers sectional maps, which depict the use district, height and bulk district, and Special Use Districts established in the Planning Code. Type of use districts include: Residential, Residential-Mixed, Residential Transit-Oriented, Neighborhood Commercial, Commercial, and Public. Height and Bulk District maps generally depict heights ranging from 40 feet to 1000 feet. Bulk limits are generally designated by a letter, which corresponds to a chart in Planning Code section 270. Planning Code section 270 and related sections regulate the maximum lengths and diagonal dimensions of projects, thereby limiting the size and shape of buildings on a particular parcel or lot. Special Use Districts are areas or parcels with

particular zoning controls that may deviate from some or all of the otherwise applicable Planning Code requirements.

Amendments to Current Law

This ordinance would amend the Zoning Map to implement the Family Zoning Plan by changing the use districts, and height and bulk districts for parcels in well-resourced areas, which are neighborhoods or areas with existing infrastructure, transit, businesses, well-performing public schools and lower levels of environmental pollution. Some of these changes would apply in areas outside well-resourced neighborhoods. The ordinance is being introduced in tandem with another ordinance amending the Planning Code, which can be found in Board File No. 250701 ("Planning Code ordinance").

Changes to Zoning Districts
This ordinance would establish the designations, locations, and boundaries of two new use districts: Residential Transit Oriented – Commercial (RTO-C), and Residential Transit Oriented-1 (RTO-1), which are proposed for adoption in the Planning Code ordinance. The RTO-C use district would apply to certain parcels currently zoned various other Residential districts, such as Residential or Residential-Mixed, and would allow, but not require, certain non-residential uses on the ground floor. Parcels currently zoned Residential Transit Oriented (RTO), if not otherwise reclassified in this ordinance, and some Residential Districts would be reclassified Residential Transit Oriented-1 (RTO-1). Generally, RTO-1 parcels would have the same controls as parcels currently zoned RTO. The general designation "RTO District" would encompass RTO-1, RTO-C and RTO-Mission.

The ordinance would also classify three properties zoned Neighborhood Commercial (NC) or Public (P) to Community Business (C-2).

In addition, the ordinance would establish the boundaries of a new Height and Bulk District called R-4, established in the Planning Code ordinance. The R-4 Height and Bulk District designation would allow development on those parcels the option to use the Housing Choice-San Francisco Program, proposed in the companion ordinance, which would allow form-based density, additional height, and other Planning Code modifications.

Changes to Height and Bulk
The ordinance would amend the Height and Bulk District maps to primarily increase, or in some limited instances decrease, the applicable height limit. Generally, additional height – between 65 and 85 feet – is proposed for most corridors, with wider streets adjacent to or near major transit lines and stations getting rezoned to 85 feet. Heights ranging from 140 feet to 650 feet are proposed in areas that currently allow high rise construction above 85 feet (such as the Van Ness Avenue corridor), at key intersections and locations along major corridors (such as the intersection of Geary Boulevard and 19th Avenue), on wider streets that have a number of medium and large-sized parcels (for example Market Street and Lombard

Street) and areas near major transit stops or stations (such as Market Street, Geary Boulevard, and Glen Park).

The ordinance would create the R-4 Height and Bulk District. Parcels in the R-4 Height and Bulk District would have two designated height limits separated by a double slash. The number before the double slash indicates the base height; the number after the double slash, which is often, but not always higher, indicates the height limit for projects using the Housing Choice-San Francisco Program. If numbers are separated by a single slash, the first number is the maximum height for podium buildings and the number following the single slash is the maximum height for towers. Some parcels will have numbers separated by a single slash and numbers separated by a double slash, indicating the podium and tower heights for projects not using, or using, the Housing Choice-San Francisco Program, respectively.

The Ordinance would designate parcels for the Non-contiguous San Francisco Municipal Transportation Agency Special Use District. The SFMTA SUD would be established in the Planning Code ordinance, and would rezone those parcels from Public (P) or Residential (R) to various Neighborhood Commercial (NC) districts.

Finally, the Ordinance would amend the City's Local Coastal Program to update the Zoning Map changes to the parcels within the Local Coastal Program.

Background Information

This ordinance (Version 3) is a substitute for the ordinance (Version 2) that was introduced on July 29, 2025 in Board File No. 250700. Version 1 of this ordinance was introduced on June 24, 2025.

On November 17, 2025 the Land Use and Transportation Committee amended Version 3 of this ordinance as follows:

- Removed properties with structures designated as landmarks or contributors to historic districts pursuant to Article 10 of the Planning Code from the R-4 Height and Bulk District
- Decreased heights for parcels on Geary Boulevard between Wood Street and Emerson Street from 70//140-R-4 to 50//85-R-4 and 40//65-R-4
- Retained existing zoning district (RH-2) for a parcel on Geary Boulevard between Wood Street and Emerson Street
- Decreased heights at 11-15 Marina Boulevard from 40//65-R-4 to 40//40-R-4
- Decreased heights on Block 0452 (Ghirardelli Square) from 40//65-R-4 to 40//40-R-4
- Decreased heights on North Point Street between Larkin Street and Hyde Street from 40//65-R-4 to 40//40-R-4
- Increased heights along the western portion of Van Ness Avenue between Ellis Street and Turk Street, generally from 130//300-R-4 to 140//350-R-4

- Increased heights along Pine Street between Leavenworth Street and Larkin Street, generally from 65//120-R-4 to 80//140-R-4

On October 20, 2025, the Land Use and Transportation Committee duplicated and amended Version 3 of the ordinance; the duplicate file is located in Board File No. 251071. That duplicate ordinance was further amended on November 3, 2025. On November 17, 2025, the Land Use and Transportation Committee tabled the duplicate file.

Under State law, every city and county must have a housing element. Among other requirements, state law requires that a housing element identify adequate sites for housing for all economic segments of the community. (Gov. Code § 65583.) The City's adopted the 2022 Housing Element update on January 31, 2023.

A jurisdiction's existing and projected housing needs is known as its Regional Housing Needs Allocation (RHNA). If a jurisdiction is not able to identify adequate sites to accommodate its RHNA, it must adopt zoning changes, generally within three years of housing element adoption. San Francisco's RHNA is approximately 82,000 units, and because the City does not have sufficient capacity to accommodate its RHNA, it must rezone sufficient sites to allow for additional units by January 31, 2026.

The number of individual parcels to be rezoned to meet the City's RHNA exceeds 92,000. Therefore, the text of the Zoning Map ordinance only includes a general description of the Zoning Map amendments. The exact parcels to be rezoned, and the new zoning categories are provided in the "Family Zoning Plan Map Ordinance Parcel Tables" document which is incorporated by reference, and can be found in Board File No. 250700. An interactive rezoning map can be found on the Planning Department's Family Zoning Plan website: https://sfplanning.org/sf-family-zoning-plan#hearing-info-resources.

This ordinance is part of a package of ordinances that will implement the Family Zoning Plan, which will allow the City to accommodate approximately 36,200 additional units as required by state housing law. Additional ordinances include the Planning Code ordinance found in Board File No. 250701, and a General Plan amendment found in Board File 250966.

4897-1057-9835, v. 1

LAND USE AND TRANSPORTATION COMMITTEE
CITY AND COUNTY OF SAN FRANCISCO

MEETING MINUTES - DRAFT

Monday, October 20, 2025 - 1:30 PM

City Hall, Legislative Chamber, Room 250

Regular Meeting

Members: Myrna Melgar, Chyanne Chen, Bilal Mahmood

Clerk: John Carroll

(415) 554-4445 ~ john.carroll@sfgov.org

Angela Calvillo, Clerk of the Board

BOARD COMMITTEES

Committee Membership	Meeting Days
Budget and Appropriations Committee Supervisors Chan, Dorsey, Walton, Mandelman	Wednesday 1:30 PM
Budget and Finance Committee Supervisors Chan, Dorsey	Wednesday 10:00 AM
Government Audit and Oversight Committee Supervisors Fielder, Sauter, Sherrill	1st and 3rd Thursday 10:00 AM
Land Use and Transportation Committee Supervisors Melgar, Chen, Mahmood	Monday 1:30 PM
Public Safety and Neighborhood Services Committee Supervisors Dorsey, Mahmood, Sauter	2nd and 4th Thursday 10:00 AM
Rules Committee Supervisors Walton, Sherrill, Mandelman	Monday 10:00 AM

First-named Supervisor is Chair, Second-named Supervisor is Vice-Chair of the Committee.

Members Present: Myrna Melgar, Chyanne Chen, and Bilal Mahmood

The Land Use and Transportation Committee met in regular session on Monday, October 20, 2025, with Chair Myrna Melgar presiding. Chair Melgar called the meeting to order at 1:33 p.m.

ROLL CALL AND ANNOUNCEMENTS

On the call of the roll, Chair Melgar, Vice Chair Chen, and Member Mahmood were noted present. A quorum was present.

COMMUNICATIONS

John Carroll, Land Use and Transportation Committee Clerk, instructed members of the public that public comment is taken on each item on the agenda. Alternatively, written comments may be submitted through email (john.carroll@sfgov.org) or the U.S. Postal Service at City Hall, 1 Dr. Carlton B. Goodlett Place, Room 244, San Francisco, CA 94102.

AGENDA CHANGES

There were no agenda changes.

REGULAR AGENDA

SPECIAL MEETING OF THE BOARD OF SUPERVISORS

Supervisors Chan, Sauter, and Fielder were noted present at 1:33 p.m., thereby constituting a quorum of the Board of Supervisors. A special meeting of the Board of Supervisors was convened at 1:33 p.m., although the meeting was conducted in all respects as a committee meeting for items on the agenda and any substantive decisions constitute a recommendation of the committee and not action taken by the board.

Present: Supervisors Melgar, Chen, Mahmood, Chan, Sauter, and Fielder.

Supervisors Mandelman, Walton, and Sherrill were noted present at 1:42 p.m.

Supervisor Walton was noted not present at 2:05 p.m.

Supervisor Mandelman was noted not present at 2:51 p.m.

Supervisor Sherrill was noted not present at 3:01 p.m.

ADJOURNMENT OF THE BOARD OF SUPERVISORS

At the hour of 3:48 p.m., Supervisor Fielder was noted not present, thereby adjouring the Special Meeting of the Board of Supervisors.

Chair Melgar requested that File Nos. 250966, 250700, 250701, and 250985 be heard together.

Chair Melgar recessed the meeting at 8:33 p.m., and reconvened at 8:35 p.m.

250966 **[General Plan Amendments - Family Zoning Plan]**

Ordinance amending the General Plan to revise the Urban Design Element, Commerce and Industry Element, Transportation Element, Balboa Park Station Area Plan, Glen Park Community Plan, Market and Octavia Area Plan, Northeastern Waterfront Plan, Van Ness Avenue Area Plan, Western SoMa (South of Market) Area Plan, Western Shoreline Area Plan, Downtown Area Plan, and Land Use Index, to implement the Family Housing Zoning Program, including the Housing Choice-San Francisco Program, by adjusting guidelines regarding building heights, density, design, and other matters; amending the City's Local Coastal Program to implement the Housing Choice-San Francisco Program and other associated changes in the City's Coastal Zone, and directing the Planning Director to transmit the Ordinance to the Coastal Commission upon enactment; affirming the Planning Department's determination under the California Environmental Quality Act; making findings of consistency with the General Plan, and the eight priority policies of Planning Code, Section 101.1; and adopting findings of public necessity, convenience, and welfare under Planning Code, Section 340. (Planning Commission)
(Pursuant to Charter, Section 4.105, the Planning Commission recommends General Plan amendments to the Board of Supervisors for approval or rejection. If the Board fails to act within 90 days of receipt, the proposed General Plan amendment shall be deemed approved. Transmittal Date: September 22, 2025)

Heard in Committee. Speakers: Brad Russi (Office of the City Attorney); Rachel Tanner, Lisa Chen, James Pappas, Josh Switzky, Lisa Gibson (Planning Department); Supervisors Rafael Mandelman, Jackie Fielder, Stephen Sherrill, Danny Sauter, and Connie Chan (Board of Supervisors); presented information and answered questions raised throughout the discussion. George Wooding; Speaker; Speaker; Speaker; Speaker; Speaker; Speaker; Speaker; Speaker; Speaker; Speaker; Speaker; Kent; Georgia Schuttish; Lisa Lugi; Gary; Jennifer Belson; Christopher Peterson; Speaker; Alex Landsberg; Julie Fischer; Speaker; Speaker; Sam; Speaker; Carmen Lee; Rosa Shields: Alexandra Zang; Katherine Howard; Speaker; Tyson; Bernie Green; David Woo; Richard Frankel; Sam Hayes; Eileen Purcell; Leslie Simon; Paul; Jessica; Speaker; Justin; Quentin Mecke (Council of Community Housing Organizations); Rahama; John Espinoza; Steven Torres; Carolyn; Dan Rosenfeld; Eileen Hearst; Catherine; Madison; Gwen McLaughlin; Speaker; Sarah Cruz; Romalyn Schmaltz; Apollo; Aldo Weisman; Lori Leiderman; Lance; Speaker; Steph; Jess; Emily Mock; Michelle; Speaker; Jeff; Joanna; Wes; Jacinda; Jacob Talbot; Asia Duncan; Speaker; Christian Tersios; Speaker; Peggy; Patrick; Christin Evans; Speaker; Ellen; Jordan; Mikah; Speaker; Speaker; Speaker; Eileen Boken; Speaker; Jason Wright; Richard; Speaker; Theresa; Miranda Erlicht; Nina Block; Phillip; Speaker; Tadd Buckner; Katt Well; Charlie; Speaker; Speaker; Speaker; Kate; Speaker; Speaker; Patrice; Mike Casey; Speaker; Will Jackson; Speaker; Speaker; Sarah Rogers; Speaker; Bobak Esfandiari; Bernie Powell; Taylor; Juliana; Mark; Nicholas; Mike; Lucas Wang; John Crabtree; Lisa Arges; Tyler; Frank; Leanne; Speaker; Speaker; Speaker; Peter; David Kim; Thomas Rogers; Monica Morse; Speaker; Mikela; Speaker; Paula Katz (See addendum on page 12); Honest Charlie Bodkin; Brianna Morales (Housing Action Coalition); Alec Bash; Jane Natoli; Edward; shared various concerns regarding the ordinance matter.

Chair Melgar moved that this Ordinance be CONTINUED to the Land Use and Transportation Committee meeting of November 3, 2025. The motion carried by the following vote:

Ayes: 3 - Melgar, Chen, Mahmood

250700 **[Zoning Map - Family Zoning Plan]**

Sponsors: Mayor; Sauter, Mahmood and Dorsey

Ordinance amending the Zoning Map to implement the Family Zoning Plan by: amending the Zoning Use District Maps to: 1) reclassify certain properties currently zoned as various types of Residential to Residential Transit Oriented - Commercial (RTO-C); 2) reclassify properties currently zoned Residential Transit Oriented (RTO) to Residential Transit Oriented - 1 (RTO-1); 3) reclassify certain properties from Residential districts other than RTO to RTO-1; 4) reclassify certain properties currently zoned Neighborhood Commercial (NC) or Public (P) to Community Business (C-2); and 5) reclassify certain properties from Public to Mixed-Use or Neighborhood Commercial Districts; amending the Height and Bulk Map to: 1) reclassify properties in the Family Zoning Plan to R-4 Height and Bulk District; 2) change the height limits on certain lots in the R-4 Height and Bulk District; and 3) designating various parcels to be included in the Non-Contiguous San Francisco Municipal Transportation Agency Sites Special Use District (SFMTA SUD); amending the Local Coastal Program to: 1) reclassify all properties in the Coastal Zone to R-4 Height and Bulk District; 2) reclassify certain properties to RTO-C and Neighborhood Commercial District; 3) designate one parcel as part of the SFMTA SUD; and 4) directing the Planning Director to transmit the Ordinance to the Coastal Commission upon enactment; affirming the Planning Department's determination under the California Environmental Quality Act; making findings of public necessity, convenience, and welfare under Planning Code, Section 302; making findings of consistency with the General Plan, and the eight priority policies of Planning Code, Section 101.1; and making findings under the City's Local Coastal Program and the California Coastal Act of 1976.
(Economic Impact; No Economic Impact Analysis Report)

Heard in Committee. Speakers: Brad Russi (Office of the City Attorney); Rachel Tanner, Lisa Chen, James Pappas, Josh Switzky, Lisa Gibson (Planning Department); Supervisors Rafael Mandelman, Jackie Fielder, Stephen Sherrill, Danny Sauter, and Connie Chan (Board of Supervisors); presented information and answered questions raised throughout the discussion. George Wooding; Speaker; Speaker; Speaker; Speaker; Speaker; Speaker; Speaker; Speaker; Speaker; Speaker; Speaker; Kent; Georgia Schuttish; Lisa Lugi; Gary; Jennifer Belson; Christopher Peterson; Speaker; Alex Landsberg; Julie Fischer; Speaker; Speaker; Sam; Speaker; Carmen Lee; Rosa Shields: Alexandra Zang; Katherine Howard; Speaker; Tyson; Bernie Green; David Woo; Richard Frankel; Sam Hayes; Eileen Purcell; Leslie Simon; Paul; Jessica; Speaker; Justin; Quentin Mecke (Council of Community Housing Organizations); Rahama; John Espinoza; Steven Torres; Carolyn; Dan Rosenfeld; Eileen Hearst; Catherine; Madison; Gwen McLaughlin; Speaker; Sarah Cruz; Romalyn Schmaltz; Apollo; Aldo Weisman; Lori Leiderman; Lance; Speaker; Steph; Jess; Emily Mock; Michelle; Speaker; Jeff; Joanna; Wes; Jacinda; Jacob Talbot; Asia Duncan; Speaker; Christian Tersios; Speaker; Peggy; Patrick; Christin Evans; Speaker; Ellen; Jordan; Mikah; Speaker; Speaker; Speaker; Eileen Boken; Speaker; Jason Wright; Richard; Speaker; Theresa; Miranda Erlicht; Nina Block; Phillip; Speaker; Tadd Buckner; Katt Well; Charlie; Speaker; Speaker; Speaker; Kate; Speaker; Speaker; Patrice; Mike Casey; Speaker; Will Jackson; Speaker; Speaker; Sarah Rogers; Speaker; Bobak Esfandiari; Bernie Powell; Taylor; Juliana; Mark; Nicholas; Mike; Lucas Wang; John Crabtree; Lisa Arges; Tyler; Frank; Leanne; Speaker; Speaker; Speaker; Peter; David Kim; Thomas Rogers; Monica Morse; Speaker; Mikela; Speaker; Paula Katz (See addendum on page 12); Honest Charlie Bodkin; Brianna Morales (Housing Action Coalition); Alec Bash; Jane Natoli; Edward; shared various concerns regarding the ordinance matter.

Chair Melgar requested that this Ordinance be DUPLICATED

See duplicate File No. 251071.

Chair Melgar moved that this Ordinance be CONTINUED to the Land Use and Transportation Committee meeting of November 3, 2025. The motion carried by the following vote:

Ayes: 3 - Melgar, Chen, Mahmood

251071 [Zoning Map - Family Zoning Plan]

Sponsors: Mayor; Sauter, Mahmood and Dorsey

Ordinance amending the Zoning Map to implement the Family Zoning Plan by: amending the Zoning Use District Maps to: 1) reclassify certain properties currently zoned as various types of Residential to Residential Transit Oriented - Commercial (RTO-C); 2) reclassify properties currently zoned Residential Transit Oriented (RTO) to Residential Transit Oriented - 1 (RTO-1); 3) reclassify certain properties from Residential districts other than RTO to RTO-1; 4) reclassify certain properties currently zoned Neighborhood Commercial (NC) or Public (P) to Community Business (C-2); and 5) reclassify certain properties from Public to Mixed-Use or Neighborhood Commercial Districts; amending the Height and Bulk Map to: 1) reclassify properties in the Family Zoning Plan to R-4 Height and Bulk District; 2) change the height limits on certain lots in the R-4 Height and Bulk District; and 3) designating various parcels to be included in the Non-Contiguous San Francisco Municipal Transportation Agency Sites Special Use District (SFMTA SUD); amending the Local Coastal Program to: 1) reclassify all properties in the Coastal Zone to R-4 Height and Bulk District; 2) reclassify certain properties to RTO-C and Neighborhood Commercial District; 3) designate one parcel as part of the SFMTA SUD; and 4) directing the Planning Director to transmit the Ordinance to the Coastal Commission upon enactment; affirming the Planning Department's determination under the California Environmental Quality Act; making findings of public necessity, convenience, and welfare under Planning Code, Section 302; making findings of consistency with the General Plan, and the eight priority policies of Planning Code, Section 101.1; and making findings under the City's Local Coastal Program and the California Coastal Act of 1976.
(Economic Impact; No Economic Impact Analysis Report)

Duplicated from File No. 250700.

Chair Melgar moved that this Ordinance be AMENDED, AN AMENDMENT OF THE WHOLE BEARING NEW TITLE, to remove the base zoning and height and bulk changes to parcels in the Priority Equity Geographies Special Use District ("PEG SUD", Planning Code, Section 249.97), except that any parcels with RTO zoning in the PEG shall be reclassified to RTO-1; remove the base zoning and height and bulk changes to parcels located in the Coastal Zone north of Fulton Street; remove two parcels in the Coastal Zone from the SFMTA SUD; to adjust the base height for the R-4 Height and Bulk Districts for the following areas and street segments: Inner Clement NCD: 40//40-R-4, Outer Clement NCD: 40//40-R-4, Outer Balboa NCD: 40//40-R-4, Geary Boulevard between 32nd and 43rd Avenue: 50//65-R-4, Portions of Block 1070 on Geary Boulevard: 50//85-R-4, Block 0446 on Marina Boulevard: 40//40-R-4, Block 0452 on North Point Street: 40//40-R-4, Portions of Block 0025 along Hyde, Beach, and North Point Streets: 40//40-R-4; eliminate the proposed change from RH-2 to Geary Boulevard NCD for Assessor's Parcel Block No. 1070/002; and made conforming amendments throughout the ordinance text. The motion carried by the following vote:

Ayes: 3 - Melgar, Chen, Mahmood

Ordinance amending the Zoning Map to implement the Family Zoning Plan by: amending the Zoning Use District Maps to: 1) reclassify certain properties currently zoned as various types of Residential to Residential Transit Oriented – Commercial (RTO-C), except for properties located in the Priority Equity Geographies Special Use District ("PEG SUD"); 2) reclassify properties currently zoned Residential Transit Oriented (RTO) to Residential Transit Oriented – 1 (RTO-1); 3) reclassify certain properties from Residential districts other than RTO to RTO-1, except for properties located in the PEG SUD; 4) reclassify certain properties currently zoned Neighborhood Commercial (NC) or Public (P) to Community Business (C-2) , except for properties located in the PEG SUD; and 5) reclassify certain properties from Public to Mixed-Use or Neighborhood Commercial Districts, except for properties located in the PEG SUD; amending the Height and Bulk Map to: 1) reclassify properties in the Family Zoning Plan to R-4 Height and Bulk District, except for properties located in the PEG SUD; 2) change the height limits on certain lots in the R-4 Height and Bulk District, except for properties located in the PEG SUD; and 3) designating various parcels to be included in the Non-Contiguous San Francisco Municipal Transportation Agency Sites Special Use District (SFMTA SUD); amending the Local Coastal Program to: 1) reclassify all properties in the Coastal Zone south of Lincoln Way to R-4 Height and Bulk District; 2) reclassify certain properties south of Lincoln Way to RTO-C and Neighborhood Commercial District; and 3) directing the Planning Director to transmit the Ordinance to the Coastal Commission upon enactment; affirming the Planning Department's determination under the California Environmental Quality Act; making findings of public necessity, convenience, and welfare under Planning Code, Section 302; making findings of consistency with the General Plan, and the eight priority policies of Planning Code, Section 101.1; and making findings under the City's Local Coastal Program and the California Coastal Act of 1976.
(Economic Impact; No Economic Impact Analysis Report)

Chair Melgar moved that this Ordinance be CONTINUED AS AMENDED to the Land Use and Transportation Committee meeting of November 3, 2025. The motion carried by the following vote:

Ayes: 3 - Melgar, Chen, Mahmood

250701 **[Planning, Business and Tax Regulations Codes - Family Zoning Plan]**

Sponsor: Mayor

Ordinance amending the Planning Code to: 1) create the Housing Choice-San Francisco Program to incent housing development through a local bonus program and by adopting a Housing Sustainability District, 2) modify height and bulk limits to provide for additional capacity in well-resourced neighborhoods, and to allow additional height and bulk for projects using the local bonus program, 3) require only buildings taller than 85 feet in certain Districts to reduce ground level wind currents, 4) make conforming changes to the RH (Residential, House), RM (Residential, Mixed), and RC (Residential-Commercial) District zoning tables to reflect the changes to density controls, and parking requirements made in this Ordinance, 5) create the RTO-C (Residential Transit Oriented-Commercial) District, 6) implement the Metropolitan Transportation Commission's Transit-Oriented Communities Policy by making changes to parking requirements, minimum residential densities, and minimum office intensities, and requiring maximum dwelling unit sizes, 7) revise off-street parking and curb cut obligations citywide, 8) create the Non-contiguous San Francisco Municipal Transportation Agency Sites Special Use District, 9) permit businesses displaced by new construction to relocate without a conditional use authorization and waive development impact fees for those businesses, 10) make technical amendments to the Code to implement the above changes, 11) make conforming changes to zoning tables in various Districts, including the Neighborhood Commercial District and Mixed Use Districts, and 12) reduce usable open space and bicycle parking requirements for senior housing; amending the Business and Tax Regulations Code regarding the Board of Appeals' review of permits in the Housing Choice Program Housing Sustainability District; also, amending the Local Coastal Program to implement the Housing Choice-San Francisco Program and other associated changes in the City's Coastal Zone, and directing the Planning Director to transmit the Ordinance to the Coastal Commission upon enactment; affirming the Planning Department's determination under the California Environmental Quality Act; making findings of consistency with the General Plan, and the eight priority policies of Planning Code, Section 101.1; and making public necessity, convenience, and welfare findings under Planning Code, Section 302.
(Economic Impact; No Economic Impact Analysis Report)

Heard in Committee. Speakers: Brad Russi (Office of the City Attorney); Rachel Tanner, Lisa Chen, James Pappas, Josh Switzky, Lisa Gibson (Planning Department); Supervisors Rafael Mandelman, Jackie Fielder, Stephen Sherrill, Danny Sauter, and Connie Chan (Board of Supervisors); presented information and answered questions raised throughout the discussion. George Wooding; Speaker; Speaker; Speaker; Speaker; Speaker; Speaker; Speaker; Speaker; Speaker; Speaker; Speaker; Speaker; Kent; Georgia Schuttish; Lisa Lugi; Gary; Jennifer Belson; Christopher Peterson; Speaker; Alex Landsberg; Julie Fischer; Speaker; Speaker; Sam; Speaker; Carmen Lee; Rosa Shields: Alexandra Zang; Katherine Howard; Speaker; Tyson; Bernie Green; David Woo; Richard Frankel; Sam Hayes; Eileen Purcell; Leslie Simon; Paul; Jessica; Speaker; Justin; Quentin Mecke (Council of Community Housing Organizations); Rahama; John Espinoza; Steven Torres; Carolyn; Dan Rosenfeld; Eileen Hearst; Catherine; Madison; Gwen McLaughlin; Speaker; Sarah Cruz; Romalyn Schmaltz; Apollo; Aldo Weisman; Lori Leiderman; Lance; Speaker; Steph; Jess; Emily Mock; Michelle; Speaker; Jeff; Joanna; Wes; Jacinda; Jacob Talbot; Asia Duncan; Speaker; Christian Tersios; Speaker; Peggy; Patrick; Christin Evans; Speaker; Ellen; Jordan; Mikah; Speaker; Speaker; Speaker; Eileen Boken; Speaker; Jason Wright; Richard; Speaker; Theresa; Miranda Erlicht; Nina Block; Phillip; Speaker; Tadd Buckner; Katt Well; Charlie; Speaker; Speaker; Speaker; Kate; Speaker; Speaker; Patrice; Mike Casey; Speaker; Will Jackson; Speaker; Speaker; Sarah Rogers; Speaker; Bobak Esfandiari; Bernie Powell; Taylor; Juliana; Mark; Nicholas; Mike; Lucas Wang; John Crabtree; Lisa Arges; Tyler; Frank; Leanne; Speaker; Speaker; Speaker; Peter; David Kim; Thomas Rogers; Monica Morse; Speaker; Mikela; Speaker; Paula Katz (See addendum on page 12); Honest Charlie Bodkin; Brianna Morales (Housing Action Coalition); Alec Bash; Jane Natoli; Edward; shared various concerns regarding the ordinance matter.

Chair Melgar moved that this Ordinance be AMENDED, AN AMENDMENT OF THE WHOLE BEARING SAME

TITLE, to prohibit projects using the Local Program if the project requires demolition of housing where there are 3 or more rent controlled units; amend the bonus for "warm shell" commercial spaces by limiting the proposed 3 square foot bonus to food service-ready "warm shells" and creating a 2.5 square foot bonus for "general warm shells"; amend the local program bonus to offer an additional bonus where the Local Program project replaces existing commercial space; and made conforming changes throughout the ordinance text. The motion carried by the following vote:

Ayes: 3 - Melgar, Chen, Mahmood

(Economic Impact; No Economic Impact Analysis Report)

Chair Melgar requested that this Ordinance be DUPLICATED AS AMENDED

See dulplicated File No. 251072.

Chair Melgar requested that this Ordinance be DUPLICATED AS AMENDED

See dulplicated File No. 251073.

Chair Melgar moved that this Ordinance be CONTINUED AS AMENDED to the Land Use and Transportation Committee meeting of November 3, 2025. The motion carried by the following vote:

Ayes: 3 - Melgar, Chen, Mahmood

251072 [Planning, Business and Tax Regulations Codes - Family Zoning Plan]

Sponsor: Mayor

Ordinance amending the Planning Code to: 1) create the Housing Choice-San Francisco Program to incent housing development through a local bonus program and by adopting a Housing Sustainability District, 2) modify height and bulk limits to provide for additional capacity in well-resourced neighborhoods, and to allow additional height and bulk for projects using the local bonus program, 3) require only buildings taller than 85 feet in certain Districts to reduce ground level wind currents, 4) make conforming changes to the RH (Residential, House), RM (Residential, Mixed), and RC (Residential-Commercial) District zoning tables to reflect the changes to density controls, and parking requirements made in this Ordinance, 5) create the RTO-C (Residential Transit Oriented-Commercial) District, 6) implement the Metropolitan Transportation Commission's Transit-Oriented Communities Policy by making changes to parking requirements, minimum residential densities, and minimum office intensities, and requiring maximum dwelling unit sizes, 7) revise off-street parking and curb cut obligations citywide, 8) create the Non-contiguous San Francisco Municipal Transportation Agency Sites Special Use District, 9) permit businesses displaced by new construction to relocate without a conditional use authorization and waive development impact fees for those businesses, 10) make technical amendments to the Code to implement the above changes, 11) make conforming changes to zoning tables in various Districts, including the Neighborhood Commercial District and Mixed Use Districts, and 12) reduce usable open space and bicycle parking requirements for senior housing; amending the Business and Tax Regulations Code regarding the Board of Appeals' review of permits in the Housing Choice Program Housing Sustainability District; also, amending the Local Coastal Program to implement the Housing Choice-San Francisco Program and other associated changes in the City's Coastal Zone, and directing the Planning Director to transmit the Ordinance to the Coastal Commission upon enactment; affirming the Planning Department's determination under the California Environmental Quality Act; making findings of consistency with the General Plan, and the eight priority policies of Planning Code, Section 101.1; and making public necessity, convenience, and welfare findings under Planning Code, Section 302.

(Economic Impact; No Economic Impact Analysis Report)

Duplicated from File No. 250701.

Chair Melgar moved that this Ordinance be AMENDED, AN AMENDMENT OF THE WHOLE BEARING NEW TITLE, to prohibit Lot Mergers on properties with certain types of historic resources; and making conforming amendments throughout the ordinance text. The motion carried by the following vote:

Ayes: 3 - Melgar, Chen, Mahmood

Ordinance amending the Planning Code to: 1) create the Housing Choice-San Francisco Program to incent housing development through a local bonus program and by adopting a Housing Sustainability District, 2) modify height and bulk limits to provide for additional capacity in well-resourced neighborhoods, and to allow additional height and bulk for projects using the local bonus program, 3) require only buildings taller than 85 feet in certain Districts to reduce ground level wind currents, 4) make conforming changes to the RH (Residential, House), RM (Residential, Mixed), and RC (Residential-Commercial) District zoning tables to reflect the changes to density controls, and parking requirements made in this ordinance, 5) create the RTO-C (Residential Transit Oriented-Commercial) District, 6) implement the Metropolitan Transportation Commission's Transit-Oriented Communities Policy by making changes to parking requirements, minimum residential densities, and minimum office intensities, and requiring maximum dwelling unit sizes, 7) revise off-street parking and curb cut obligations citywide, 8) create the Non-contiguous San Francisco Municipal Transportation Agency Sites Special Use District, 9) permit businesses displaced by new construction to relocate without a conditional use authorization and waive development impact fees for those businesses, 10) make technical amendments to the Code to implement the above changes, 11) make conforming changes to zoning tables in various Districts, including the Neighborhood Commercial District and Mixed Use Districts, prohibit Lot mergers on Lots with Category A historic resources, subject to certain preservation obligations, and 13) reduce usable open space and bicycle parking requirements for senior housing; amending the Business and Tax Regulations Code regarding the Board of Appeals' review of permits in the Housing Choice Program Housing Sustainability District; also, amending the Local Coastal Program to implement the Housing Choice-San Francisco Program and other associated changes in the City's Coastal Zone, and directing the Planning Director to transmit the ordinance to the Coastal Commission upon enactment; affirming the Planning Department's determination under the California Environmental Quality Act; making findings of consistency with the General Plan, and the eight priority policies of Planning Code, Section 101.1; and making public necessity, convenience, and welfare findings under Planning Code, Section 302.
(Economic Impact; No Economic Impact Analysis Report)

Chair Melgar moved that this Ordinance be CONTINUED AS AMENDED to the Land Use and Transportation Committee meeting of December 1, 2025. The motion carried by the following vote:

Ayes: 3 - Melgar, Chen, Mahmood

251073 **[Planning, Business and Tax Regulations Codes - Family Zoning Plan]**

Sponsor: Mayor

Ordinance amending the Planning Code to: 1) create the Housing Choice-San Francisco Program to incent housing development through a local bonus program and by adopting a Housing Sustainability District, 2) modify height and bulk limits to provide for additional capacity in well-resourced neighborhoods, and to allow additional height and bulk for projects using the local bonus program, 3) require only buildings taller than 85 feet in certain Districts to reduce ground level wind currents, 4) make conforming changes to the RH (Residential, House), RM (Residential, Mixed), and RC (Residential-Commercial) District zoning tables to reflect the changes to density controls, and parking requirements made in this Ordinance, 5) create the RTO-C (Residential Transit Oriented-Commercial) District, 6) implement the Metropolitan Transportation Commission's Transit-Oriented Communities Policy by making changes to parking requirements, minimum residential densities, and minimum office intensities, and requiring maximum dwelling unit sizes, 7) revise off-street parking and curb cut obligations citywide, 8) create the Non-contiguous San Francisco Municipal Transportation Agency Sites Special Use District, 9) permit businesses displaced by new construction to relocate without a conditional use authorization and waive development impact fees for those businesses, 10) make technical amendments to the Code to implement the above changes, 11) make conforming changes to zoning tables in various Districts, including the Neighborhood Commercial District and Mixed Use Districts, and 12) reduce usable open space and bicycle parking requirements for senior housing; amending the Business and Tax Regulations Code regarding the Board of Appeals' review of permits in the Housing Choice Program Housing Sustainability District; also, amending the Local Coastal Program to implement the Housing Choice-San Francisco Program and other associated changes in the City's Coastal Zone, and directing the Planning Director to transmit the Ordinance to the Coastal Commission upon enactment; affirming the Planning Department's determination under the California Environmental Quality Act; making findings of consistency with the General Plan, and the eight priority policies of Planning Code, Section 101.1; and making public necessity, convenience, and welfare findings under Planning Code, Section 302.
(Economic Impact; No Economic Impact Analysis Report)

Duplicated from File No. 250701.

Chair Melgar moved that this Ordinance be AMENDED, AN AMENDMENT OF THE WHOLE BEARING SAME TITLE, to amend the Local Program to exclude projects that: demolish or substantially alter Category A historic resources, demolish, remove, or convert dwelling units or residential flats, or demolish or convert any portion of a Tourist Hotel; to amend the Local Program to state that other City's laws would apply to Local Program projects, such as Dwelling Unit Mix requirements in Section 207.7, Article 4 development impact fees and requirements, displaced business requirements in new Section 202.17, tenant protections in the Planning Code or SF Rent Ordinance, or other permitting or licensing requirements outside of the Planning Code; to require projects that comply with the Inclusionary ordinance through off-site units or land dedication to provide those units within 1/2 mile of the project; to amend the Local Program approvals to expire if the project sponsor fails to obtain a building permit within 30 days, subject to six-month extension; to amend the Local Program to provide additional bonus square footage of 250 additional square feet for every two-bedroom unit in excess of the dwelling unit requirements for the Local Program; to amend the Housing Sustainability District to prohibit any projects using the Housing Sustainability District streamlining from demolishing or substantially altering Category A historic resources, or demolishing or converting any portion of a Tourist Hotel; to amend the SFMTA SUD by adding findings regarding the purpose of the SUD, adding pre-application requirements, and excluding properties in the Coastal Zone; to remove the exception included in the ordinance in Board File No. 250701 that did not require a Conditional Use Authorization to merge, reconfigure or reduce a residential flats, if the project adds at least one unit; and making conforming changes throughout the ordinance text. The motion carried by the following vote:

Ayes: 3 - Melgar, Chen, Mahmood

(Economic Impact; No Economic Impact Analysis Report)

Chair Melgar moved that this Ordinance be CONTINUED AS AMENDED to the Land Use and Transportation Committee meeting of November 3, 2025. The motion carried by the following vote:

Ayes: 3 - Melgar, Chen, Mahmood

250985 **[Local Coastal Program Amendment - Family Zoning Plan]**

Sponsor: Mayor

Resolution transmitting to the California Coastal Commission for review and certification an amendment to the Implementation Program and Land Use Plan of the City's certified Local Coastal Program to implement the Family Zoning Plan; and affirming the Planning Department's determination under the California Environmental Quality Act.

Heard in Committee. Speakers: Brad Russi (Office of the City Attorney); Rachel Tanner, Lisa Chen, James Pappas, Josh Switzky, Lisa Gibson (Planning Department); Supervisors Rafael Mandelman, Jackie Fielder, Stephen Sherrill, Danny Sauter, and Connie Chan (Board of Supervisors); presented information and answered questions raised throughout the discussion. George Wooding; Speaker; Speaker; Speaker; Speaker; Speaker; Speaker; Speaker; Speaker; Speaker; Speaker; Speaker; Kent; Georgia Schuttish; Lisa Lugi; Gary; Jennifer Belson; Christopher Peterson; Speaker; Alex Landsberg; Julie Fischer; Speaker; Speaker; Sam; Speaker; Carmen Lee; Rosa Shields: Alexandra Zang; Katherine Howard; Speaker; Tyson; Bernie Green; David Woo; Richard Frankel; Sam Hayes; Eileen Purcell; Leslie Simon; Paul; Jessica; Speaker; Justin; Quentin Mecke (Council of Community Housing Organizations); Rahama; John Espinoza; Steven Torres; Carolyn; Dan Rosenfeld; Eileen Hearst; Catherine; Madison; Gwen McLaughlin; Speaker; Sarah Cruz; Romalyn Schmaltz; Apollo; Aldo Weisman; Lori Leiderman; Lance; Speaker; Steph; Jess; Emily Mock; Michelle; Speaker; Jeff; Joanna; Wes; Jacinda; Jacob Talbot; Asia Duncan; Speaker; Christian Tersios; Speaker; Peggy; Patrick; Christin Evans; Speaker; Ellen; Jordan; Mikah; Speaker; Speaker; Speaker; Eileen Boken; Speaker; Jason Wright; Richard; Speaker; Theresa; Miranda Erlicht; Nina Block; Phillip; Speaker; Tadd Buckner; Katt Well; Charlie; Speaker; Speaker; Speaker; Kate; Speaker; Speaker; Patrice; Mike Casey; Speaker; Will Jackson; Speaker; Speaker; Sarah Rogers; Speaker; Bobak Esfandiari; Bernie Powell; Taylor; Juliana; Mark; Nicholas; Mike; Lucas Wang; John Crabtree; Lisa Arges; Tyler; Frank; Leanne; Speaker; Speaker; Speaker; Peter; David Kim; Thomas Rogers; Monica Morse; Speaker; Mikela; Speaker; Paula Katz (See addendum on page 12); Honest Charlie Bodkin; Brianna Morales (Housing Action Coalition); Alec Bash; Jane Natoli; Edward; shared various concerns regarding the resolution matter.

Chair Melgar moved that this Resolution be CONTINUED to the Land Use and Transportation Committee meeting of November 3, 2025. The motion carried by the following vote:

Ayes: 3 - Melgar, Chen, Mahmood

ADJOURNMENT

There being no further business, the Land Use and Transportation Committee adjourned at the hour of 8:37 p.m.

N.B. The Minutes of this meeting set forth all actions taken by the Land Use and Transportation Committee on the matters stated, but not necessarily in the chronological sequence in which the matters were taken up.

ADDENDUM

Pursuant to Administrative Code, Section 67.16, the following statement was provided by a speaker during the public comment period who supplied a brief written summary of their comments, which shall be included in the meeting minutes and are incorporated by individual reference as fully set forth herein. The content is neither generated by, nor subject to approval or verification of accuracy by, the Clerk of the Board of Supervisors.

Paula Katz submitted the following statement during Public Comment, as follows: "I urge you not to accept the upzoning plan without significant amendments: 1. Require any plan to include 20-25% of on-site affordable housing, along with more two and three bedroom family units. And 100% affordable housing should be required on publicly owned lands. 2. All rent controlled buildings must be excluded from the plan. 3. Require sufficient parking for all upzoned buildings so their new residents will not have to compete with current residents already struggling to find limited street parking. 4. Remove overlapping base and density maps and excessive height bonuses that allow state density bonus incentives, including very high buildings. 5. Support small businesses affected by upzoning, and don't allow locations with legacy businesses to be upzoned."

LAND USE AND TRANSPORTATION COMMITTEE
CITY AND COUNTY OF SAN FRANCISCO

MEETING MINUTES - DRAFT

Monday, November 3, 2025 - 1:30 PM

City Hall, Legislative Chamber, Room 250

Regular Meeting

Members: Myrna Melgar, Chyanne Chen, Bilal Mahmood

Clerk: John Carroll

(415) 554-4445 ~ john.carroll@sfgov.org

Angela Calvillo, Clerk of the Board

BOARD COMMITTEES

Committee Membership	Meeting Days
Budget and Appropriations Committee Supervisors Chan, Dorsey, Walton, Mandelman	Wednesday 1:30 PM
Budget and Finance Committee Supervisors Chan, Dorsey	Wednesday 10:00 AM
Government Audit and Oversight Committee Supervisors Fielder, Sauter, Sherrill	1st and 3rd Thursday 10:00 AM
Land Use and Transportation Committee Supervisors Melgar, Chen, Mahmood	Monday 1:30 PM
Public Safety and Neighborhood Services Committee Supervisors Dorsey, Mahmood, Sauter	2nd and 4th Thursday 10:00 AM
Rules Committee Supervisors Walton, Sherrill, Mandelman	Monday 10:00 AM

First-named Supervisor is Chair, Second-named Supervisor is Vice-Chair of the Committee.

Members Present: Myrna Melgar, Chyanne Chen, and Bilal Mahmood

The Land Use and Transportation Committee met in regular session on Monday, November 3, 2025, with Chair Myrna Melgar presiding. Chair Melgar called the meeting to order at 1:32 p.m.

ROLL CALL AND ANNOUNCEMENTS

On the call of the roll, Chair Melgar, Vice Chair Chen, and Member Mahmood were noted present. A quorum was present.

COMMUNICATIONS

John Carroll, Land Use and Transportation Committee Clerk, instructed members of the public that public comment is taken on each item on the agenda. Alternatively, written comments may be submitted through email (john.carroll@sfgov.org) or the U.S. Postal Service at City Hall, 1 Dr. Carlton B. Goodlett Place, Room 244, San Francisco, CA 94102.

AGENDA CHANGES

There were no agenda changes.

REGULAR AGENDA

Chair Melgar requested that File Nos. 250426 and 250427 be heard together.

250426 [Planning Code, Zoning Map - San Francisco Gateway Special Use District]
Sponsors: Walton; Fielder, Chen, Melgar and Dorsey

Ordinance amending the Planning Code and the Zoning Map to establish the San Francisco Gateway Special Use District generally bounded by Kirkwood Avenue to the northeast, Rankin Street to the southeast, McKinnon Avenue to the southwest, and Toland Street to the northwest; making findings under the California Environmental Quality Act; making findings of consistency with the General Plan, and the eight priority policies of Planning Code, Section 101.1; and making findings of public necessity, convenience, and welfare under Planning Code, Section 302.
(Economic Impact; No Economic Impact Analysis Report)

Heard in Committee. Speaker(s): Supervisor Shamann Walton (Board of Supervisors); Susan Ma (Office of Economic and Workforce Development); presented information and answered questions raised throughout the discussion. Rev. Dr. Carolyn Ransom-Scott; Lindsay Palmer; Michael; Speaker; Vanessa; Kristin Hardy; Dan Torres; Rudy Gonzalez (San Francisco Building & Construction Trades Council); Raymond Tan; spoke in support of the ordinance matter. Steve Zeltzer; spoke in opposition to the ordinance matter. Francisco Da Costa; shared various concerns regarding the ordinance matter.

Chair Melgar moved that this Ordinance be RECOMMENDED. The motion carried by the following vote:

Ayes: 3 - Melgar, Chen, Mahmood

250427 [Development Agreement - Prologis, L.P. - San Francisco Gateway Project - Toland Street at Kirkwood Avenue]

Sponsors: Walton; Fielder, Chen, Melgar and Dorsey

Ordinance approving a Development Agreement between the City and County of San Francisco and Prologis, L.P., a Delaware limited partnership, for the development of an approximately 17.1-acre site located at Toland Street at Kirkwood Avenue with two multi-story production, distribution, and repair buildings in a core industrial area, including 1,646,000 square feet of production, distribution, and repair, space for non-retail sales and service, automotive, and retail uses, a rooftop solar array, ground-floor maker space, and streets built to City standard; making findings under the California Environmental Quality Act; making findings of conformity with the General Plan, and with the eight priority policies of Planning Code, Section 101.1(b); making findings of public convenience, necessity, and welfare under Planning Code, Section 302; approving certain development impact fees for the Project and waiving certain Planning Code fees and requirements; confirming compliance with or waiving certain provisions of Labor and Employment Code, Articles 131, 132, 103, 104, and 106, and Administrative Code, Chapters 56, 14B, 82, 83, and 23; and ratifying certain actions taken in connection therewith, as defined herein.
(Economic Impact; No Economic Impact Analysis Report)

Heard in Committee. Speaker(s): Supervisor Shamann Walton (Board of Supervisors); Susan Ma (Office of Economic and Workforce Development); presented information and answered questions raised throughout the discussion. Rev. Dr. Carolyn Ransom-Scott; Lindsay Palmer; Michael; Speaker; Vanessa; Kristin Hardy; Dan Torres; Rudy Gonzalez (San Francisco Building & Construction Trades Council); Raymond Tan; spoke in support of the ordinance matter. Steve Zeltzer; spoke in opposition to the ordinance matter. Francisco Da Costa; shared various concerns regarding the ordinance matter.

Chair Melgar moved that this Ordinance be RECOMMENDED. The motion carried by the following vote:

Ayes: 3 - Melgar, Chen, Mahmood

250886 [Planning Code - Adaptive Reuse of Historic Buildings]

Sponsor: Mayor

Ordinance amending the Planning Code to allow additional uses as principally or conditionally permitted in Historic Buildings citywide, exempt Historic Buildings in certain Eastern Neighborhood Plan Areas from Conditional Use authorization otherwise required to remove Production, Distribution, and Repair (PDR), Institutional Community, and Arts Activities uses, and from providing replacement space for such uses, make conforming amendments to provisions affected by the foregoing, including zoning control tables; affirming the Planning Department's determination under the California Environmental Quality Act; making findings of consistency with the General Plan, and the eight priority policies of Planning Code, Section 101.1, and making findings of public necessity, convenience, and general welfare under Planning Code, Section 302.

Heard in Committee. Speaker(s): Lisa Gluckstein (Planning Department); presented information and answered questions raised throughout the discussion. Speaker; Speaker; Romalyn Schmaltz; Apollo; Pat Huey; Heather Davies; Raymond Tan; Speaker; Speaker; Speaker; Speaker; shared various concerns regarding the ordinance matter.

Chair Melgar moved that this Ordinance be CONTINUED TO CALL OF THE CHAIR. The motion carried by the following vote:

Ayes: 3 - Melgar, Chen, Mahmood

250888 [Planning Code - Planning Fees]

Sponsors: Mayor; Dorsey

Ordinance amending the Planning Code to require certain Planning Department fees to be paid to the Department at the time the Development Application is submitted, modify the environmental review fees for large projects, and remove the separate fee schedule for “Class 32” categorical exemptions under the California Environmental Quality Act; affirming the Planning Department’s determination under the California Environmental Quality Act; making findings of consistency with the General Plan, and the eight priority policies of Planning Code, Section 101.1; and making findings of public necessity, convenience, and welfare pursuant to Planning Code, Section 302.

Heard in Committee. Speaker(s): Veronica Flores (Planning Department); presented information and answered questions raised throughout the discussion. Speaker; Romalyn Schmaltz; Speaker; spoke in opposition to the ordinance matter. Raymond Tan; shared various concerns regarding the ordinance matter.

Chair Melgar moved that this Ordinance be RECOMMENDED AS COMMITTEE REPORT. The motion carried by the following vote:

Ayes: 3 - Melgar, Chen, Mahmood

Supervisor Mandelman was noted present at 2:06 p.m.

Supervisor Sauter was noted present at 2:23 p.m.

SPECIAL MEETING OF THE BOARD OF SUPERVISORS

Supervisor Chan was noted present at 2:25 p.m., thereby constituting a quorum of the Board of Supervisors. A special meeting of the Board of Supervisors was convened at 2:25 p.m., and maintained sporadically throughout the meeting through 4:24 p.m., although the meeting was conducted in all respects as a committee meeting for items on the agenda and any substantive decisions constitute a recommendation of the committee and not action taken by the board.

Present: Supervisors Melgar, Chen, Mahmood, Mandelman, Sauter, and Chan.

Supervisor Dorsey was noted present at 2:50 p.m.

Supervisor Sherrill was noted present at 3:46 p.m.

250808 [Planning Code; Administrative Code - Legacy Businesses in Neighborhood Commercial Districts]

Sponsor: Chan

Ordinance amending the Planning Code to define Legacy Business and to require conditional use authorization prior to replacing a Legacy Business with a new non-residential use in certain Neighborhood Commercial, Named Neighborhood Commercial, and Neighborhood Commercial Transit Districts, and in the Chinatown Mixed Use Districts; amending the Administrative Code to allow a business that has been operating for 15 years to qualify as a Legacy Business; affirming the Planning Department's determination under the California Environmental Quality Act; making findings of consistency with the General Plan and the eight priority policies of Planning Code, Section 101.1; and adopting findings of public necessity, convenience, and welfare under Planning Code, Section 302.
(Supervisor Mahmood dissented in committee.)

Heard in Committee. Speaker(s): Supervisor Connie Chan (Board of Supervisors); Lisa Gluckstein (Planning Department); presented information and answered questions raised throughout the discussion. George Wooding; Marc Bruno; Romalyn Schmaltz; Speaker; Yolanda; Gwen McLaughlin (Small Business Forward); Justin; Pat Huey; Speaker; Steven Torres; Andy Katz; Katherine Howard; Raymond Tan; Bridget Maley; Howard Wong; Speaker; spoke in support of the ordinance matter.

Vice Chair Chen moved that this Ordinance be RECOMMENDED. The motion carried by the following vote:

Ayes: 2 - Melgar, Chen
Noes: 1 - Mahmood

Chair Melgar requested that File Nos. 250966, 250700, 251071, 250701, 251073, and 250985 be heard together.

ADJOURNMENT OF THE BOARD OF SUPERVISORS

At the hour of 4:25 p.m., Supervisors Mandelman, Sauter, Chan, Dorsey and Sherrill were noted not present, thereby adjouring the Special Meeting of the Board of Supervisors.

250966 [General Plan Amendments - Family Zoning Plan]

Ordinance amending the General Plan to revise the Urban Design Element, Commerce and Industry Element, Transportation Element, Balboa Park Station Area Plan, Glen Park Community Plan, Market and Octavia Area Plan, Northeastern Waterfront Plan, Van Ness Avenue Area Plan, Western SoMa (South of Market) Area Plan, Western Shoreline Area Plan, Downtown Area Plan, and Land Use Index, to implement the Family Housing Zoning Program, including the Housing Choice-San Francisco Program, by adjusting guidelines regarding building heights, density, design, and other matters; amending the City's Local Coastal Program to implement the Housing Choice-San Francisco Program and other associated changes in the City's Coastal Zone, and directing the Planning Director to transmit the Ordinance to the Coastal Commission upon enactment; affirming the Planning Department's determination under the California Environmental Quality Act; making findings of consistency with the General Plan, and the eight priority policies of Planning Code, Section 101.1; and adopting findings of public necessity, convenience, and welfare under Planning Code, Section 340. (Planning Commission)
(Pursuant to Charter, Section 4.105, the Planning Commission recommends General Plan amendments to the Board of Supervisors for approval or rejection. If the Board fails to act within 90 days of receipt, the proposed General Plan amendment shall be deemed approved. Transmittal Date: September 22, 2025)

Heard in Committee. Speaker(s): Ted Egan (Office of the Controller); Supervisors Connie Chan, Danny Sauter, Rafael Mandelman, and Matt Dorsey (Board of Supervisors); Joshua Switzky, Lisa Chen (Planning Department); presented information and answered questions raised throughout the discussion. George Wooding; Herbert Mintz; Ray Borraca; Speaker; Naj Daniels; Kristen Hardy; Marc Bruno; Julie Fisher; Jessica Visness; Tony Hallier; Romalyn Schmaltz; Apollo; John Huliman; Mike Casey; Randy Tan; Alden Weissman; Pat Huey; Speaker; Andy Katz; Carol Brewer; Lori Brooke; Bridget Manley; Donna Hurliss; Katherine Howard; Nick Ferriss, President (Telegraph Hill Dwellers); Niels Pierson; Kathleen Courtney; Eileen Hirst; George; Fred; Lisa Arges; Lila Holtzman; Speaker; Theresa; Speaker; Dan Wollette; Speaker; Speaker; Howard Wong; Gwen McLaughlin (Small Business Forward); Paul Conwright; P. Segal; Ruth Fergusson; Charlie Natoli; Mo Zu; Speaker; Annie Fryman (SPUR); Deborah Solomon; Speaker; Marie Joyce; Speaker; Brianna Morales (Housing Action Coalition); Witt Turner; Speaker; Speaker; Stan Hayes (Telegraph Hill Dwellers); Honest Charley Bodkin; Mike Chan; Speaker; Jane Natoli (YIMBY Action); Monica Morse (West of Twin Peaks Neighborhood Council); Speaker; Eric Brooks; Greg Jacino; Eileen Boken; shared various concerns regarding the ordinance matter.

Chair Melgar moved that this Ordinance be CONTINUED to the Land Use and Transportation Committee meeting of November 17, 2025. The motion carried by the following vote:

Ayes: 3 - Melgar, Chen, Mahmood

250700 [Zoning Map - Family Zoning Plan]

Sponsors: Mayor; Sauter, Mahmood and Dorsey

Ordinance amending the Zoning Map to implement the Family Zoning Plan by: amending the Zoning Use District Maps to: 1) reclassify certain properties currently zoned as various types of Residential to Residential Transit Oriented - Commercial (RTO-C); 2) reclassify properties currently zoned Residential Transit Oriented (RTO) to Residential Transit Oriented - 1 (RTO-1); 3) reclassify certain properties from Residential districts other than RTO to RTO-1; 4) reclassify certain properties currently zoned Neighborhood Commercial (NC) or Public (P) to Community Business (C-2); and 5) reclassify certain properties from Public to Mixed-Use or Neighborhood Commercial Districts; amending the Height and Bulk Map to: 1) reclassify properties in the Family Zoning Plan to R-4 Height and Bulk District; 2) change the height limits on certain lots in the R-4 Height and Bulk District; and 3) designating various parcels to be included in the Non-Contiguous San Francisco Municipal Transportation Agency Sites Special Use District (SFMTA SUD); amending the Local Coastal Program to: 1) reclassify all properties in the Coastal Zone to R-4 Height and Bulk District; 2) reclassify certain properties to RTO-C and Neighborhood Commercial District; 3) designate one parcel as part of the SFMTA SUD; and 4) directing the Planning Director to transmit the Ordinance to the Coastal Commission upon enactment; affirming the Planning Department's determination under the California Environmental Quality Act; making findings of public necessity, convenience, and welfare under Planning Code, Section 302; making findings of consistency with the General Plan, and the eight priority policies of Planning Code, Section 101.1; and making findings under the City's Local Coastal Program and the California Coastal Act of 1976.
(Economic Impact)

Heard in Committee. Speaker(s): Ted Egan (Office of the Controller); Supervisors Connie Chan, Danny Sauter, Rafael Mandelman, and Matt Dorsey (Board of Supervisors); Joshua Switzky, Lisa Chen (Planning Department); presented information and answered questions raised throughout the discussion. George Wooding; Herbert Mintz; Ray Borraca; Speaker; Naj Daniels; Kristen Hardy; Marc Bruno; Julie Fisher; Jessica Visness; Tony Hallier; Romalyn Schmaltz; Apollo; John Huliman; Mike Casey; Randy Tan; Alden Weissman; Pat Huey; Speaker; Andy Katz; Carol Brewer; Lori Brooke; Bridget Manley; Donna Hurliss; Katherine Howard; Nick Ferriss, President (Telegraph Hill Dwellers); Niels Pierson; Kathleen Courtney; Eileen Hirst; George; Fred; Lisa Arges; Lila Holtzman; Speaker; Theresa; Speaker; Dan Wollette; Speaker; Speaker; Howard Wong; Gwen McLaughlin (Small Business Forward); Paul Conwright; P. Segal; Ruth Fergusson; Charlie Natoli; Mo Zu; Speaker; Annie Fryman (SPUR); Deborah Solomon; Speaker; Marie Joyce; Speaker; Brianna Morales (Housing Action Coalition); Witt Turner; Speaker; Speaker; Stan Hayes (Telegraph Hill Dwellers); Honest Charley Bodkin; Mike Chan; Speaker; Jane Natoli (YIMBY Action); Monica Morse (West of Twin Peaks Neighborhood Council); Speaker; Eric Brooks; Greg Jacino; Eileen Boken; shared various concerns regarding the ordinance matter.

Chair Melgar moved that this Ordinance be CONTINUED to the Land Use and Transportation Committee meeting of November 17, 2025. The motion carried by the following vote:

Ayes: 3 - Melgar, Chen, Mahmood

251071 [Zoning Map - Family Zoning Plan]

Sponsors: Mayor; Sauter, Mahmood and Dorsey

Ordinance amending the Zoning Map to implement the Family Zoning Plan by: amending the Zoning Use District Maps to: 1) reclassify certain properties currently zoned as various types of Residential to Residential Transit Oriented - Commercial (RTO-C), except for properties located in the Priority Equity Geographies Special Use District ("PEG SUD"); 2) reclassify properties currently zoned Residential Transit Oriented (RTO) to Residential Transit Oriented - 1 (RTO-1); 3) reclassify certain properties from Residential districts other than RTO to RTO-1, except for properties located in the PEG SUD; 4) reclassify certain properties currently zoned Neighborhood Commercial (NC) or Public (P) to Community Business (C-2) , except for properties located in the PEG SUD; and 5) reclassify certain properties from Public to Mixed-Use or Neighborhood Commercial Districts, except for properties located in the PEG SUD; amending the Height and Bulk Map to: 1) reclassify properties in the Family Zoning Plan to R-4 Height and Bulk District, except for properties located in the PEG SUD; 2) change the height limits on certain lots in the R-4 Height and Bulk District, except for properties located in the PEG SUD; and 3) designating various parcels to be included in the Non-Contiguous San Francisco Municipal Transportation Agency Sites Special Use District (SFMTA SUD); amending the Local Coastal Program to: 1) reclassify all properties in the Coastal Zone south of Lincoln Way to R-4 Height and Bulk District; 2) reclassify certain properties south of Lincoln Way to RTO-C and Neighborhood Commercial District; and 3) directing the Planning Director to transmit the Ordinance to the Coastal Commission upon enactment; affirming the Planning Department's determination under the California Environmental Quality Act; making findings of public necessity, convenience, and welfare under Planning Code, Section 302; making findings of consistency with the General Plan, and the eight priority policies of Planning Code, Section 101.1; and making findings under the City's Local Coastal Program and the California Coastal Act of 1976.
(Economic Impact)

Heard in Committee. Speaker(s): Ted Egan (Office of the Controller); Supervisors Connie Chan, Danny Sauter, Rafael Mandelman, and Matt Dorsey (Board of Supervisors); Joshua Switzky, Lisa Chen (Planning Department); presented information and answered questions raised throughout the discussion. George Wooding; Herbert Mintz; Ray Borraca; Speaker; Naj Daniels; Kristen Hardy; Marc Bruno; Julie Fisher; Jessica Visness; Tony Hallier; Romalyn Schmaltz; Apollo; John Huliman; Mike Casey; Randy Tan; Alden Weissman; Pat Huey; Speaker; Andy Katz; Carol Brewer; Lori Brooke; Bridget Manley; Donna Hurliss; Katherine Howard; Nick Ferriss, President (Telegraph Hill Dwellers); Niels Pierson; Kathleen Courtney; Eileen Hirst; George; Fred; Lisa Arges; Lila Holtzman; Speaker; Theresa; Speaker; Dan Wollette; Speaker; Speaker; Howard Wong; Gwen McLaughlin (Small Business Forward); Paul Conwright; P. Segal; Ruth Fergusson; Charlie Natoli; Mo Zu; Speaker; Annie Fryman (SPUR); Deborah Solomon; Speaker; Marie Joyce; Speaker; Brianna Morales (Housing Action Coalition); Witt Turner; Speaker; Speaker; Stan Hayes (Telegraph Hill Dwellers); Honest Charley Bodkin; Mike Chan; Speaker; Jane Natoli (YIMBY Action); Monica Morse (West of Twin Peaks Neighborhood Council); Speaker; Eric Brooks; Greg Jacino; Eileen Boken; shared various concerns regarding the ordinance matter.

Vice Chair Chen moved that this Ordinance be AMENDED, AN AMENDMENT OF THE WHOLE BEARING SAME TITLE, on Pages 13-16, to delete certain parcels along Ocean Avenue from the changes in the ordinance. The motion carried by the following vote:

Ayes: 3 - Melgar, Chen, Mahmood
(Economic Impact)

Chair Melgar moved that this Ordinance be CONTINUED AS AMENDED to the Land Use and Transportation Committee meeting of November 17, 2025. The motion carried by the following vote:

Ayes: 3 - Melgar, Chen, Mahmood

250701 [Planning, Business and Tax Regulations Codes - Family Zoning Plan]
Sponsor: Mayor

Ordinance amending the Planning Code to: 1) create the Housing Choice-San Francisco Program to incent housing development through a local bonus program and by adopting a Housing Sustainability District, 2) modify height and bulk limits to provide for additional capacity in well-resourced neighborhoods, and to allow additional height and bulk for projects using the local bonus program, 3) require only buildings taller than 85 feet in certain Districts to reduce ground level wind currents, 4) make conforming changes to the RH (Residential, House), RM (Residential, Mixed), and RC (Residential-Commercial) District zoning tables to reflect the changes to density controls, and parking requirements made in this Ordinance, 5) create the RTO-C (Residential Transit Oriented-Commercial) District, 6) implement the Metropolitan Transportation Commission's Transit-Oriented Communities Policy by making changes to parking requirements, minimum residential densities, and minimum office intensities, and requiring maximum dwelling unit sizes, 7) revise off-street parking and curb cut obligations citywide, 8) create the Non-contiguous San Francisco Municipal Transportation Agency Sites Special Use District, 9) permit businesses displaced by new construction to relocate without a conditional use authorization and waive development impact fees for those businesses, 10) make technical amendments to the Code to implement the above changes, 11) make conforming changes to zoning tables in various Districts, including the Neighborhood Commercial District and Mixed Use Districts, and 12) reduce usable open space and bicycle parking requirements for senior housing; amending the Business and Tax Regulations Code regarding the Board of Appeals' review of permits in the Housing Choice Program Housing Sustainability District; also, amending the Local Coastal Program to implement the Housing Choice-San Francisco Program and other associated changes in the City's Coastal Zone, and directing the Planning Director to transmit the Ordinance to the Coastal Commission upon enactment; affirming the Planning Department's determination under the California Environmental Quality Act; making findings of consistency with the General Plan, and the eight priority policies of Planning Code, Section 101.1; and making public necessity, convenience, and welfare findings under Planning Code, Section 302.
(Economic Impact)

Heard in Committee. Speaker(s): Ted Egan (Office of the Controller); Supervisors Connie Chan, Danny Sauter, Rafael Mandelman, and Matt Dorsey (Board of Supervisors); Joshua Switzky, Lisa Chen (Planning Department); presented information and answered questions raised throughout the discussion. George Wooding; Herbert Mintz; Ray Borraca; Speaker; Naj Daniels; Kristen Hardy; Marc Bruno; Julie Fisher; Jessica Visness; Tony Hallier; Romalyn Schmaltz; Apollo; John Huliman; Mike Casey; Randy Tan; Alden Weissman; Pat Huey; Speaker; Andy Katz; Carol Brewer; Lori Brooke; Bridget Manley; Donna Hurliss; Katherine Howard; Nick Ferriss, President (Telegraph Hill Dwellers); Niels Pierson; Kathleen Courtney; Eileen Hirst; George; Fred; Lisa Arges; Lila Holtzman; Speaker; Theresa; Speaker; Dan Wollette; Speaker; Speaker; Howard Wong; Gwen McLaughlin (Small Business Forward); Paul Conwright; P. Segal; Ruth Fergusson; Charlie Natoli; Mo Zu; Speaker; Annie Fryman (SPUR); Deborah Solomon; Speaker; Marie Joyce; Speaker; Brianna Morales (Housing Action Coalition); Witt Turner; Speaker; Speaker; Stan Hayes (Telegraph Hill Dwellers); Honest Charley Bodkin; Mike Chan; Speaker; Jane Natoli (YIMBY Action); Monica Morse (West of Twin Peaks Neighborhood Council); Speaker; Eric Brooks; Greg Jacino; Eileen Boken; shared various concerns regarding the ordinance matter.

Chair Melgar moved that this Ordinance be AMENDED, AN AMENDMENT OF THE WHOLE BEARING SAME TITLE, on Page 11, Lines 23-24, by inserting 'Except as provided in this Section 206.10, all HC-SF projects shall comply with Article 4 of the Planning Code.' The motion carried by the following vote:

Ayes: 3 - Melgar, Chen, Mahmood

(Economic Impact)

Chair Melgar moved that this Ordinance be AMENDED, AN AMENDMENT OF THE WHOLE BEARING SAME TITLE, on Page 17, Lines 15-18, by inserting '(4) Exclusions. In no event shall this Section 206.10 be interpreted as relieving a HC-SF project from complying with: Article 4 of the Planning Code other than as specified in this subsection (d); Section 202.17; any tenant protections contained elsewhere in the Planning Code, including Section 317 et seq.; or Chapter 37 of the Administrative Code.' The motion carried by the following vote:

Ayes: 3 - Melgar, Chen, Mahmood

(Economic Impact)

Chair Melgar moved that this Ordinance be AMENDED, AN AMENDMENT OF THE WHOLE BEARING SAME TITLE, on Page 21, Lines 5-8 to read '(4) Units With Two or More Bedrooms. Projects that contain units with two or more bedrooms shall be permitted to include additional square footage, as set forth below: (A) 250 square feet for every two-bedroom unit provided in excess of the number of two-bedroom units required by subsection (d)(1)(B);' and making a conforming change on Line 25. The motion carried by the following vote:

Ayes: 3 - Melgar, Chen, Mahmood

(Economic Impact)

Chair Melgar moved that this Ordinance be AMENDED, AN AMENDMENT OF THE WHOLE BEARING SAME TITLE, on Page 27, Lines 5-9, to read '(c) Administrative Review. The Planning Department shall administratively review an HC-SF Project, unless the Project seeks a Major Modification pursuant to subsection (d), or any HC-SF Project that is a 100% Affordable HC-SF Project. The Planning Department's determination regarding an HC-SF Project under this subsection (c) shall not be appealable. Nothing in this Section 334 abrogates permit, license, or other requirements codified outside the Planning Code.' The motion carried by the following vote:

Ayes: 3 - Melgar, Chen, Mahmood

(Economic Impact)

Chair Melgar moved that this Ordinance be AMENDED, AN AMENDMENT OF THE WHOLE BEARING SAME TITLE, on Page 29, Line 23 through Page 30, Line 9, to read '(4) The project does not demolish or substantially alter a historic resource that is: designated as a landmark or listed as a contributor to or located within a historic district under Article 10; listed as a Significant or Contributory Building under Article 11; listed in the California Register of Historical Resources or the National Register of Historic Places; identified in an adopted survey or historic context statement as potentially eligible for individual listing in the California Register of Historical Resources or the National Register of Historic Places; or, located within an historic district that is listed in, or identified in an adopted survey or historic context statement as potentially eligible for listing in, the California Register of Historical Resources or the National Register of Historic Places.' The motion carried by the following vote:

Ayes: 3 - Melgar, Chen, Mahmood

(Economic Impact)

Chair Melgar moved that this Ordinance be AMENDED, AN AMENDMENT OF THE WHOLE BEARING SAME TITLE, on Page 31, Line 4, by inserting '(13) The project does not demolish or convert any portion of a Hotel.' The motion carried by the following vote:

Ayes: 3 - Melgar, Chen, Mahmood

(Economic Impact)

Chair Melgar moved that this Ordinance be AMENDED, AN AMENDMENT OF THE WHOLE BEARING SAME TITLE, on Page 189, Lines 22-25, by striking '(12) Residential Flats. Notwithstanding anything to the contrary in this Section 317, projects that propose the Merger, reconfiguration, or reduction in size of Residential Flats shall not require a Conditional Use authorization if the project would increase the number of Dwelling Units on the property.' The motion carried by the following vote:

Ayes: 2 - Melgar, Chen

Noes: 1 - Mahmood

(Economic Impact)

Chair Melgar moved that this Ordinance be AMENDED, AN AMENDMENT OF THE WHOLE BEARING SAME TITLE, on Page 190, Lines 8-10, by striking 'and in the case of demolition of any Residential Flats whether the proposed project is maintaining or increasing the number of units on the lot that contain at least two or more bedrooms or that are at least equivalent in size to the Residential Flats being demolished'. The motion carried by the following vote:

Ayes: 2 - Melgar, Chen

Noes: 1 - Mahmood

(Economic Impact)

Chair Melgar moved that this Ordinance be CONTINUED AS AMENDED to the Land Use and Transportation Committee meeting of November 17, 2025. The motion carried by the following vote:

Ayes: 3 - Melgar, Chen, Mahmood

251073 [Planning, Business and Tax Regulations, Administrative Codes - Family Zoning Plan]

Sponsor: Mayor

Ordinance amending the Planning Code to: 1) create the Housing Choice-San Francisco Program to incent housing development through a local bonus program and by adopting a Housing Sustainability District, 2) modify height and bulk limits to provide for additional capacity in well-resourced neighborhoods, and to allow additional height and bulk for projects using the local bonus program, 3) require only buildings taller than 85 feet in certain Districts to reduce ground level wind currents, 4) make conforming changes to the RH (Residential, House), RM (Residential, Mixed), and RC (Residential-Commercial) District zoning tables to reflect the changes to density controls, and parking requirements made in this Ordinance, 5) create the RTO-C (Residential Transit Oriented-Commercial) District, 6) implement the Metropolitan Transportation Commission's Transit-Oriented Communities Policy by making changes to parking requirements, minimum residential densities, and minimum office intensities, and requiring maximum dwelling unit sizes, 7) revise off-street parking and curb cut obligations citywide, 8) create the Non-contiguous San Francisco Municipal Transportation Agency Sites Special Use District, 9) permit businesses displaced by new construction to relocate without a conditional use authorization and waive development impact fees for those businesses, 10) make technical amendments to the Code to implement the above changes, 11) make conforming changes to zoning tables in various Districts, including the Neighborhood Commercial District and Mixed Use Districts, and 12) reduce usable open space and bicycle parking requirements for senior housing; amending the Business and Tax Regulations Code regarding the Board of Appeals' review of permits in the Housing Choice Program Housing Sustainability District; also, amending the Local Coastal Program to implement the Housing Choice-San Francisco Program and other associated changes in the City's Coastal Zone, and directing the Planning Director to transmit the Ordinance to the Coastal Commission upon enactment; affirming the Planning Department's determination under the California Environmental Quality Act; making findings of consistency with the General Plan, and the eight priority policies of Planning Code, Section 101.1; and making public necessity, convenience, and welfare findings under Planning Code, Section 302.
(Economic Impact)

Heard in Committee. Speaker(s): Ted Egan (Office of the Controller); Supervisors Connie Chan, Danny Sauter, Rafael Mandelman, and Matt Dorsey (Board of Supervisors); Joshua Switzky, Lisa Chen (Planning Department); presented information and answered questions raised throughout the discussion. George Wooding; Herbert Mintz; Ray Borraca; Speaker; Naj Daniels; Kristen Hardy; Marc Bruno; Julie Fisher; Jessica Visness; Tony Hallier; Romalyn Schmaltz; Apollo; John Huliman; Mike Casey; Randy Tan; Alden Weissman; Pat Huey; Speaker; Andy Katz; Carol Brewer; Lori Brooke; Bridget Manley; Donna Hurliss; Katherine Howard; Nick Ferriss, President (Telegraph Hill Dwellers); Niels Pierson; Kathleen Courtney; Eileen Hirst; George; Fred; Lisa Arges; Lila Holtzman; Speaker; Theresa; Speaker; Dan Wollette; Speaker; Speaker; Howard Wong; Gwen McLaughlin (Small Business Forward); Paul Conwright; P. Segal; Ruth Fergusson; Charlie Natoli; Mo Zu; Speaker; Annie Fryman (SPUR); Deborah Solomon; Speaker; Marie Joyce; Speaker; Brianna Morales (Housing Action Coalition); Witt Turner; Speaker; Speaker; Stan Hayes (Telegraph Hill Dwellers); Honest Charley Bodkin; Mike Chan; Speaker; Jane Natoli (YIMBY Action); Monica Morse (West of Twin Peaks Neighborhood Council); Speaker; Eric Brooks; Greg Jacino; Eileen Boken; shared various concerns regarding the ordinance matter.

Vice Chair Chen moved that this Ordinance be AMENDED, AN AMENDMENT OF THE WHOLE BEARING SAME TITLE, on Page 14, Line 21, through Page 15, Line 14, to read '(B) Dwelling Unit Mix. Section 207.6 and Section 207.7 shall apply, except that projects between four and nine units shall comply with the following: (i) a project with four dwelling units shall contain at least one unit with two or more bedrooms; and (ii) for projects between five and nine dwelling units, at least 25 percent of units shall contain two or more bedrooms, including at least one unit with three or more bedrooms, unless Section 207.6(c) requires a higher percentage of two- and three-bedroom units.' The motion carried by

the following vote:

Ayes: 3 - Melgar, Chen, Mahmood

(Economic Impact)

Vice Chair Chen moved that this Ordinance be AMENDED, AN AMENDMENT OF THE WHOLE BEARING NEW TITLE, on Page 2, Lines 1-2, by inserting 'amending the Administrative Code to set Board policy regarding the sale or lease of properties within the SFMTA SUD'; on Page 10, Lines 23-25, by inserting '(y) This ordinance, in Section 16 amends the Administrative Code to set Board of Supervisors policy regarding the approval of the sale or lease of properties within the Non-Contiguous San Francisco Municipal Transportation Agency Special Use District.'; and on Page 471-472, by inserting 'Section 16. Article I of Chapter 2 of the Administrative Code is hereby amended by adding Section 2.6-4 to read as follows: SEC. 2.6-4. POLICY FOR APPROVAL OF LEASES OR SALE OF PROPERTY WITHIN THE NON-CONTIGUOUS SAN FRANCISCO MUNICIPAL TRANSPORTATION AGENCY SITES SPECIAL USE DISTRICT. (a) Whenever, in accordance with the provisions of the Charter, the San Francisco Municipal Transportation Agency ("SFMTA") submits a Non-Transit Lease or Sale Agreement to the Board of Supervisors for its approval or disapproval, it shall be the policy of the Board of Supervisors to only approve the Non-Transit Lease or Sale Agreement if: (i) it is for the development and operation of a 100% Affordable Housing Project; (ii) the SFMTA has provided each then-existing Qualified Nonprofit with a right of first refusal to lease or buy, as applicable, the affected property on the same terms in the Non-Transit Lease or Sale Agreement (which may include, but is not limited to, a rent or purchase price based on the highest and best use of the property), except the permitted use shall be modified to only permit the development and operation of a 100% Affordable Housing Project, and either (A) the SFMTA does not receive a bona fide acceptance of that offer from a Qualified Nonprofit within 14 calendar days, or (B) the SFMTA receives a bona fide acceptance within 14 calendar days from a Qualified Nonprofit, but that Qualified Nonprofit fails to sign the Non-Transit Lease or Sale Agreement within 30 days of submitting the bona fide acceptance; or (iii) the SFMTA Board of Directors has determined the Non-Transit Lease or Sale Agreement is needed to further the SFMTA's transit purposes and the Board of Supervisors affirms such determination. (b) A "100% Affordable Housing Project" shall be a residential project where all Residential Uses, except a manager's unit, are comprised solely of Dwelling Units or Group Housing bedrooms that are restricted for the Life of the Project as Affordable Units and meets the requirements in Planning Code Section 406(b)(1)(A) and (C). For purposes of this subsection (b), the terms "Affordable Unit" and "Life of the Project" are as defined in Planning Code Section 401, and the terms Residential Use, Dwelling Unit, and Group Housing are as defined in Planning Code Section 102. (c) A "Non-Transit Lease or Sale Agreement" means an agreement to lease or buy property located within the Non-Contiguous San Francisco Municipal Transportation Agency Sites Special Use District, established in Planning Code Section 249.11, to develop and operate a residential or commercial project. (d) "Qualified Nonprofit" shall be a nonprofit organization that meets the requirements set forth in Administrative Code Section 41B.4 and is listed on the Mayor's Office of Housing and Economic Development's website pursuant to Section 41B.4.' The motion carried by the following vote:

Ayes: 3 - Melgar, Chen, Mahmood

Ordinance amending the Planning Code to: 1) create the Housing Choice-San Francisco Program to incent housing development through a local bonus program and by adopting a Housing Sustainability District, 2) modify height and bulk limits to provide for additional capacity in well-resourced neighborhoods, and to allow additional height and bulk for projects using the local bonus program, 3) require only buildings taller than 85 feet in certain Districts to reduce ground level wind currents, 4) make conforming changes to the RH (Residential, House), RM (Residential, Mixed), and RC (Residential-Commercial) District zoning tables to reflect the changes to density controls, and parking requirements made in this ordinance, 5) create the RTO-C (Residential Transit Oriented-Commercial) District, 6) implement the Metropolitan Transportation Commission's Transit-Oriented Communities Policy by making changes to parking requirements, minimum residential densities, and minimum office intensities, and requiring maximum dwelling unit sizes, 7) revise off-street parking and curb cut obligations citywide, 8) create the Non-contiguous San Francisco Municipal Transportation Agency Sites Special Use District (SFMTA SUD), 9) permit businesses displaced by new construction to relocate without a conditional use authorization and waive development impact fees for those businesses, 10) make technical amendments to the Code to implement the above changes, 11) make conforming changes to zoning tables in various Districts, including the Neighborhood Commercial District and Mixed Use Districts, and 12) reduce usable open space and bicycle parking requirements for senior housing; amending the Business and Tax Regulations Code regarding the Board of Appeals' review of permits in the Housing Choice Program Housing Sustainability District; amending the Administrative Code to set Board policy regarding the sale or lease of properties within the SFMTA SUD; also, amending the Local Coastal Program to implement the Housing Choice-San Francisco Program and other associated changes in the City's Coastal Zone, and directing the Planning Director to transmit the ordinance to the Coastal Commission upon enactment; affirming the Planning Department's determination under the California Environmental Quality Act; making findings of consistency with the General Plan, and the eight priority policies of Planning Code, Section 101.1; and making public necessity, convenience, and welfare findings under Planning Code, Section 302.
(Economic Impact)

Vice Chair Chen moved that this Ordinance be AMENDED, AN AMENDMENT OF THE WHOLE BEARING SAME TITLE, on Pages 170-171, by inserting '(d) Pre-Application Requirements. When a Development Application is submitted pursuant to this Section 249.11 for a site that meets the minimum specifications for 100% affordable housing sites as determined by the Mayor's Office of Housing and Community Development, the project sponsor, in conjunction with SFMTA, shall provide: (1) A feasibility study that models the development of the project site as 100% affordable housing, as that term is defined in Section 406(b)(1)(A) and (C); (2) Documentation that the project sponsor, in conjunction with SFMTA, has conducted at least one pre-application meeting. Mailed notice of the meeting shall be provided to the individuals and neighborhood organizations specified in Planning Code Section 333(e)(2)(A) and (C), as well as posted notice as set forth in Planning Code Section 333(e)(1). The Planning Department may establish procedures and requirements to administer this subsection; and (3) Documentation of how the project advances the City's goals for affordable housing on public lands, as identified in Housing Element Policy Actions 1.2.6 and 1.2.7.' The motion carried by the following vote:

Ayes: 3 - Melgar, Chen, Mahmood
(Economic Impact)

Chair Melgar moved that this Ordinance be CONTINUED AS AMENDED to the Land Use and Transportation Committee meeting of November 17, 2025. The motion carried by the following vote:

Ayes: 3 - Melgar, Chen, Mahmood

250985 [Local Coastal Program Amendment - Family Zoning Plan]
Sponsor: Mayor

Resolution transmitting to the California Coastal Commission for review and certification an amendment to the Implementation Program and Land Use Plan of the City's certified Local Coastal Program to implement the Family Zoning Plan; and affirming the Planning Department's determination under the California Environmental Quality Act.

Heard in Committee. Speaker(s): Ted Egan (Office of the Controller); Supervisors Connie Chan, Danny Sauter, Rafael Mandelman, and Matt Dorsey (Board of Supervisors); Joshua Switzky, Lisa Chen (Planning Department); presented information and answered questions raised throughout the discussion. George Wooding; Herbert Mintz; Ray Borraca; Speaker; Naj Daniels; Kristen Hardy; Marc Bruno; Julie Fisher; Jessica Visness; Tony Hallier; Romalyn Schmaltz; Apollo; John Huliman; Mike Casey; Randy Tan; Alden Weissman; Pat Huey; Speaker; Andy Katz; Carol Brewer; Lori Brooke; Bridget Manley; Donna Hurliss; Katherine Howard; Nick Ferriss, President (Telegraph Hill Dwellers); Niels Pierson; Kathleen Courtney; Eileen Hirst; George; Fred; Lisa Arges; Lila Holtzman; Speaker; Theresa; Speaker; Dan Wollette; Speaker; Speaker; Howard Wong; Gwen McLaughlin (Small Business Forward); Paul Conwright; P. Segal; Ruth Fergusson; Charlie Natoli; Mo Zu; Speaker; Annie Fryman (SPUR); Deborah Solomon; Speaker; Marie Joyce; Speaker; Brianna Morales (Housing Action Coalition); Witt Turner; Speaker; Speaker; Stan Hayes (Telegraph Hill Dwellers); Honest Charley Bodkin; Mike Chan; Speaker; Jane Natoli (YIMBY Action); Monica Morse (West of Twin Peaks Neighborhood Council); Speaker; Eric Brooks; Greg Jacino; Eileen Boken; shared various concerns regarding the resolution matter.

Chair Melgar moved that this Resolution be CONTINUED to the Land Use and Transportation Committee meeting of November 17, 2025. The motion carried by the following vote:

Ayes: 3 - Melgar, Chen, Mahmood

ADJOURNMENT

There being no further business, the Land Use and Transportation Committee adjourned at the hour of 6:48 p.m.

N.B. The Minutes of this meeting set forth all actions taken by the Land Use and Transportation Committee on the matters stated, but not necessarily in the chronological sequence in which the matters were taken up.

LAND USE AND TRANSPORTATION COMMITTEE
CITY AND COUNTY OF SAN FRANCISCO

MEETING MINUTES - DRAFT

Monday, November 17, 2025 - 1:30 PM

City Hall, Legislative Chamber, Room 250

Regular Meeting

Members: Myrna Melgar, Chyanne Chen, Bilal Mahmood

Clerk: John Carroll

(415) 554-4445 ~ john.carroll@sfgov.org

Angela Calvillo, Clerk of the Board

BOARD COMMITTEES

Committee Membership	Meeting Days
Budget and Appropriations Committee Supervisors Chan, Dorsey, Walton, Mandelman	Wednesday 1:30 PM
Budget and Finance Committee Supervisors Chan, Dorsey	Wednesday 10:00 AM
Government Audit and Oversight Committee Supervisors Fielder, Sauter, Sherrill	1st and 3rd Thursday 10:00 AM
Land Use and Transportation Committee Supervisors Melgar, Chen, Mahmood	Monday 1:30 PM
Public Safety and Neighborhood Services Committee Supervisors Dorsey, Mahmood, Sauter	2nd and 4th Thursday 10:00 AM
Rules Committee Supervisors Walton, Sherrill, Mandelman	Monday 10:00 AM

First-named Supervisor is Chair, Second-named Supervisor is Vice-Chair of the Committee.

Members Present: Myrna Melgar, Chyanne Chen, and Bilal Mahmood

The Land Use and Transportation Committee met in regular session on Monday, November 17, 2025, with Chair Myrna Melgar presiding. Chair Melgar called the meeting to order at 1:35 p.m.

ROLL CALL AND ANNOUNCEMENTS

On the call of the roll, Chair Melgar, Vice Chair Chen, and Member Mahmood were noted present. A quorum was present.

COMMUNICATIONS

John Carroll, Land Use and Transportation Committee Clerk, instructed members of the public that public comment is taken on each item on the agenda. Alternatively, written comments may be submitted through email (john.carroll@sfgov.org) or the U.S. Postal Service at City Hall, 1 Dr. Carlton B. Goodlett Place, Room 244, San Francisco, CA 94102.

AGENDA CHANGES

There were no agenda changes.

REGULAR AGENDA

250811 [Building Code - Building Permit Expiration Timelines]

Sponsors: Mahmood; Dorsey

Ordinance amending the Building Code to revise the timing of expiration of certain building permits and building permit applications; and affirming the Planning Department's determination under the California Environmental Quality Act.

Heard in Committee. Speaker(s): Tate Hanna (Department of Building Inspection); presented information and answered questions raised throughout the discussion. Joseph Smooke; shared various concerns regarding the ordinance matter.

Member Mahmood moved that this Ordinance be AMENDED, AN AMENDMENT OF THE WHOLE BEARING SAME TITLE, on Page 1, Line 22, through Page 2, Line 7, to read '(c) No local findings are required under California Health and Safety Code Section 17958.7 because the amendments to the Building Code contained in this ordinance do not regulate materials or manner of construction or repair and therefore do not modify building standards. Even if the amendments are considered modifications to building standards, the amendments to building permit expiration timelines are not new, local building standards because they largely revert to or conform with the underlying provisions of the California Building Code. All amendments are consistent with the intent of recently enacted Assembly Bill 130, which is intended to prohibit local building standards applicable to residential units that are more restrictive than the California Building Code, and are also permissible because they would result in reductions in operating costs for the Department of Building Inspection. (Health & Safety Code § 17958.5(c)(6)(D)).'; on Page 3, Line 8, through Page 4, Line 16, to read '106A.3.7 Application expiration. The Building Official may hold in abeyance or reject any application, plans, or specifications filed which in the Building Official's opinion, do not provide the necessary information in a clear and concise manner as required in Section 106A.3.3. An application for a permit for any proposed work shall be deemed to have been abandoned, and shall expire, 730 days after the date of filing if no permit has been issued, except that the Building Official may grant one or more extensions of time for additional periods not exceeding 180 days each. Such extension shall be requested in writing and shall demonstrate justifiable cause for the extension. See Section 110A, Table 1A-J – Miscellaneous Fees – for applicable fee for such extensions. In the event the application has not been approved and issued within 60 days before the end of the time periods set forth in this Section 106A.3.7, the Department shall notify the applicant that the application will be canceled in 60 days unless the application is extended. An application which exceeds the stated or extended time period after such notice shall be deemed canceled without further action by the Department.'; on Page 4, Lines 18-25, by striking exceptions 1 and 2, '1. For applications resulting from enforcement actions initiated by the Building Official to abate code violations, the above time limits shall be reduced to 30 days and 10 days, respectively. The Building Official may grant an extension for hardship or procedural error. Upon cancellation, such cases shall be referred to the City Attorney for legal action. 2.The above time limits shall not apply to applications which are subject to the work without permit investigation fee per Section 110A, Table 1A-K – Penalties, Hearings, Code Enforcement Assessments. Such applications shall be canceled only through specific action by the Building Official.'; and making clerical and conforming amendments throughout the ordinance text. The motion carried by the following vote:

Ayes: 3 - Melgar, Chen, Mahmood

Member Mahmood moved that this Ordinance be CONTINUED AS AMENDED to the Land Use and Transportation Committee meeting of December 1, 2025. The motion carried by the following vote:

Ayes: 3 - Melgar, Chen, Mahmood

240637 [Planning Code, Zoning Map - Central Neighborhoods Large Residence SUD, Corona Heights Large Residence SUD]

Sponsor: Mandelman

Ordinance amending the Planning Code to expand the boundaries of the Central Neighborhoods Large Residence Special Use District (SUD), and to apply its controls to all lots within the SUD, with some exceptions; to delete the Corona Heights Large Residence SUD, and as a result to merge it into the Central Neighborhoods Large Residence SUD; amending the Zoning Map to reflect the deletion and boundary expansion; affirming the Planning Department's determination under the California Environmental Quality Act; and making public necessity, convenience, and welfare findings under Planning Code, Section 302, and findings of consistency with the General Plan, and the eight priority policies of Planning Code, Section 101.1.

Heard in Committee. Speaker(s): Supervisor Rafael Mandelman (Board of Supervisors); Aaron Starr (Planning Department); presented information and answered questions raised throughout the discussion. Georgia Schuttish; Paul Wormer; Raymond Tan; shared various concerns regarding the ordinance matter.

Chair Melgar moved that this Ordinance be AMENDED, AN AMENDMENT OF THE WHOLE BEARING SAME TITLE, on Page 6, Line 16, through Page 7, Line 18, by striking '(e) Conditional Use Authorizations. For all lots zoned RH wWithin the Central Neighborhoods Large Residence Special Use District, a Conditional Use authorization shall be required for any residential development or expansion of a Residential Building that would result in any Dwelling Unit with a Gross Floor Area exceeding the equivalent of a 1.2:1 Floor Area Ratio, or would result in any Dwelling Unit exceeding 3,000 square feet of Gross Floor Area, except where the total increase of gross floor area of any existing Dwelling Unit is less than 15%. (f) Conditional Use Findings. In addition to the criteria outlined in Planning Code Section 303(c)(1), in acting upon an application for Conditional Use authorization within the Central Neighborhoods Large Residence Special Use District the Planning Commission shall also consider whether facts are presented to establish, based on the record before the Commission, that the following criteria are met: (1) the proposed project is contextual with the neighborhood, meets applicable Residential Design Guidelines, and seeks to retain any existing design elements; (2) the proposed project does not remove Rental Units subject to the Residential Rent Stabilization and Arbitration Ordinance; (3) the proposed project increases the number of Dwelling Units on the lot; (4) no Dwelling Unit is less than one-third the gross floor area of the largest Dwelling Unit in a Residential Building; (5) the proposed project does not negatively impact the historic integrity of the property or any existing structure on a lot that is listed in or formally eligible for listing in the California Register of Historic Resources, or has been determined to appear eligible for listing in the California Register of Historic Resources or to qualify as a "historical resource" under CEQA; and (6) the project does not negatively impact the historic integrity of any existing structure on a lot that has been adopted as a local landmark or a contributor to a local historic district under Articles 10 or 11 of this Code, or would render the property ineligible for historic designation as an individual or contributing resource.'; on Page 7, Lines 23-25, to read '(2) In multi-unit buildings, shared spaces such as stairwells, atriums, and other communal spaces accessible to all building occupants shall not be included in the Gross Floor Area thresholds'; on Page 8, Lines 6-12, by striking '(h) The Conditional Use requirement established by subsections (e)-(f) of this Section 249.92 shall sunset on December 31, 2024. After that date, for all lots zoned RH within the Central Neighborhoods Large Residence Special Use District, no residential development or expansion of an existing Residential Building shall be permitted within the Central Neighborhoods Large Residence Special Use District that would result in any Dwelling Unit exceeding 3,000 square feet of Gross Floor Area, except where the total increase of gross floor area of any existing Dwelling Unit is less than 15%.'; and making conforming and clerical amendments throughout the ordinance text. The motion carried by the following vote:

Ayes: 3 - Melgar, Chen, Mahmood

Chair Melgar moved that this Ordinance be CONTINUED AS AMENDED to the Land Use and Transportation Committee meeting of December 1, 2025. The motion carried by the following vote:

Ayes: 3 - Melgar, Chen, Mahmood

250926 [Planning, Administrative Codes - Tenant Protections Related to Residential Demolitions and Renovations]

Sponsors: Chen; Fielder, Walton, Chan, Dorsey, Sauter, Sherrill, Melgar and Mahmood

Ordinance amending the Planning Code to 1) require property owners seeking to demolish residential units to replace all units that are being demolished; 2) require relocation assistance to affected occupants of those units, with additional assistance and protections for lower-income tenants; 3) modify the conditional use criteria that apply to projects to demolish residential units; amending the Administrative Code to 4) require landlords to provide additional relocation assistance to lower-income tenants who are being required to vacate temporarily due to capital improvements or rehabilitation work; 5) update the standards and procedures for hearings related to tenant harassment; 6) require additional disclosures in buyout agreements; 7) making various non-substantive changes and clarifications; affirming the Planning Department's determination under the California Environmental Quality Act; making public necessity, convenience, and welfare findings under Planning Code, Section 302; and making findings of consistency with the General Plan and the eight priority policies of Planning Code, Section 101.1.

Heard in Committee. Speaker(s): Malena Leon-Farrera and Rachel Tanner (Planning Department); presented information and answered questions raised throughout the discussion. Marc Bruno; Mark Solomon; Sarah "Fred" Sherburn-Zimmer (Housing Rights Committee); David Harlan; Speaker; Speaker; Teresa Dulalas (SOMCAN); Julie Fischer; Kay Walker; Avdi; Zach Weisenberger (Young Community Developers); Aristos Kemiji (Mission Economic Development Agency); Susan Marsh; Georgia Schuttish; Gwen; Joseph Smooke; Peter Stevens; Pauline Worshell; Gen Fujioka; Howard Willies; Speaker; Ocean Blue Coast; Zach Frial (SOMCAN); Asia Nicole Duncan; Christin Evans (Small Business Forward); Speaker; Mitchell Omerberg; Brianna Morales (Housing Action Coalition); Romalyn Schmaltz; Speaker; Alice Mosely; Raymond Tan; shared various concerns regarding the ordinance matter.

Supervisor Mahmood requested to be added as a co-sponsor.

Vice Chair Chen moved that this Ordinance be AMENDED, AN AMENDMENT OF THE WHOLE BEARING NEW TITLE, on Page 1, Lines 4-7, to read '2) require relocation assistance to affected occupants of those units and to former occupants who vacated due to harassment, improper buyout agreements, owner move-ins, or pursuant to the Ellis Act'; on Page 1, Lines 13-14, by inserting '7) require an additional disclosure in notice of intent to withdraw units under the Ellis Act'; on Page 3, Lines 21-25, by inserting '(c) This Ordinance also includes a requirement that a landlord withdrawing a unit under the Ellis Act must state whether they intend to demolish the unit within the next five years. This statement would be for informational purposes only: it is not intended to create a substantive defense to an eviction, but it will be helpful for the City to understand the impacts of SB 330 and to manage tenant displacements.'; on Page 8, Line 11, through Page 9, Line 5, to read '(2) Outside the Priority Equity Geographies Special Use District, any Development Application that seeks authorization for Removal of one or more Residential or Unauthorized Units is required to obtain Conditional Use authorization unless it meets all the following criteria: (A) The project sponsor certifies under penalty of perjury that any units to be demolished are not tenant occupied and are without a history of evictions under Administrative Code Sections 37.9(a)(8)-(12), (14), or (17) within the last ten years, and have not been vacated within the past ten years pursuant to a Buyout Agreement, as defined in Administrative Code Section 37.9E, as it may be amended from time to time, regardless of whether the Buyout Agreement was filed with the Rent Board pursuant to Administrative Code Section 37.9E(h); (B) No units would be removed or demolished that are: (i) subject to a recorded covenant, ordinance, or law that restricts rents to levels affordable to persons and families of lower- or very low-income within the past ten years; or (ii) subject to limits on rent increases under the Residential Rent Stabilization and Arbitration Ordinance (Chapter 37 of the Administrative Code) within the past ten years; or (iii) rented by lower- or very low-income households within the past ten years'; on Page 14, Lines 8-22, to read '(B) The project does not propose changes to more than 20% of the character defining features of a building that is designated as a landmark under Article 10, is listed as a contributor to an historic district in Article 10, is listed as a Significant or Contributory Building under Article 11, is listed in the California Register of Historical Resources, or is listed on the National Register of Historic Places. (C) The project increases

the number of Residential Units subject to the rent increase limitations of the Residential Rent Stabilization and Arbitration Ordinance (Chapter 37 of the Administrative Code) compared to the number of existing Residential Units and Unauthorized Units subject to the rent increase limitations of the Residential Rent Stabilization and Arbitration Ordinance. (D) The project does not require the Residential Demolition of existing, deed-restricted, affordable and/or below market rate housing, or increases the number of permanently Affordable Units located on the site.'; on Page 17, Lines 15-22, to read 'The Planning Commission shall approve, and the Planning Department shall publish on its website, a Replacement Unit Implementation Document (hereafter, the "Implementation Document") containing procedures, regulations, guidelines, notice formats, and application forms, as deemed necessary to assist the Department in ensuring that the relocation assistance and services in this Section 317.2 are available to displaced tenants, as required, and with implementation, monitoring, and enforcement of the policies and procedures of this Section 317.2. The Department may update the Implementation Document from time to time and shall seek Planning Commission approval for any significant changes.'; on Page 18, Line 12, though Page 19, Line 13, to read '"Demolition" is defined as "Residential Demolition" in Section 317(b)(2). "Existing Occupant" shall mean a Tenant of a unit at the time the owner of a unit applied to demolish the unit or recovered possession of the unit in order for the unit to be demolished. A Tenant occupying a unit on the date the project sponsor submitted a Development Application or preliminary application to demolish that unit shall be an Existing Occupant. If there is no Tenant occupying the unit on such date, the prior Tenant shall still qualify as an Existing Occupant for purposes of this Section 317.2 if any of the following circumstances are true as of the date the project sponsor submitted the Development Application or preliminary application: 1) the Tenant vacated the unit within the previous five years following a wrongful endeavor to recover possession of the unit through harassment under Administrative Section 37.9(l), where the Rent Board found the Tenant had vacated the unit because of the harassment or where the Rent Board made a finding of ongoing harassment and the tenant vacated within 12 months after said finding; the Tenant vacated the unit within the previous five years pursuant to a Buyout Agreement that did not substantially comply with the disclosure requirements set forth in Administrative Code Section 37.9E, subdivisions (d)(12) and (f)(5); 3) the Tenant vacated the unit within the previous three years pursuant to a notice to vacate under Administrative Code Section 37.9(a)(8); or 4) the Tenant vacated the unit within the previous five years pursuant to a notice to vacate under Administrative Code Section 37.9(a)(13).'; on Page 20, Lines 4-6, by inserting '"Tenant" is defined in Administrative Code Section 37.2(t) and shall include any lawful occupants of the unit, as well as any persons who have vacated the unit temporarily while the landlord is carrying out capital improvements or rehabilitation work.'; on Page 23, Lines 7-9, by inserting 'To ensure that Existing Occupants are provided the relocation assistance and services required by this Section 317.2'; on Page 24, Lines 2-3, by striking 'sent by certified mail and'; on Page 24, Line 6, by striking 'following receipt of the notice required by subsection (A)'; on Page 24, Lines 11-12, to read '(C) Right to Relocation Assistance. The Department shall ensure that Project sponsors provide relocation assistance to Existing Occupants as follows:'; on Page 30, Lines 6-12, to read '(f) Private Right of Action; Civil Penalties. (1) An aggrieved tenant, or any organization with tax exempt status under United States Code Section 501(c)(3) or 501(c)(4) that has a primary mission of protecting tenants in San Francisco may file a civil action for monetary damages and/or injunctive relief against any project sponsor, including any person(s) acting on their behalf and any successors-in-interest, to enforce violations of this Section 317.2.'; on Page 42, Lines 4-5, by inserting 'Information related to a tenant's source of income shall be treated as confidential information.'; on Page 46, Lines 11-12, by striking '(C) The alleged harassment is so severe that it has materially impacted a tenant's enjoyment of the unit'; on Page 46, Line 19, through Page 47, Line 2, to read '(3) The Executive Director shall schedule any such hearing within 45 days after receipt of the report of alleged harassment, or as soon as practicable thereafter. Both the tenant and the landlord may appear at the hearing and make oral and/or written presentations, including presentation of other witnesses. Following such hearing, the Administrative Law Judge shall issue findings and conclusions in regard to whether harassment occurred that was severe enough that it materially impacted the tenant's enjoyment of the unit, and in the case of a prior tenant whether the prior tenant vacated the unit due to the harassment for purposes of Planning Code Section 317.2. The findings and conclusions may be appealed by either party to provide the Board under Section 37.8.'; on Page 49, Lines 8-9, by inserting 'The notice shall also disclose for informational purposes only whether the landlord intends to demolish the accommodations within the next five years.'; on Page 50, Lines 19-23, by inserting '(F) With respect to notices of intent dated on or after the effective date of the ordinance in Board File No. 250926, whether the landlords intends to demolish within the next five years after the date of the notice

and a statement that the tenant may be entitled to additional protections in the event the unit is demolished pursuant to Planning Code Section 317.2, and that the tenant may keep their contact information on file with the Rent Board.'; and making clerical and conforming amendments throughout the ordinance text. The motion carried by the following vote:

Ayes: 3 - Melgar, Chen, Mahmood

Ordinance amending the Planning Code to 1) require property owners seeking to demolish residential units to replace all units that are being demolished; 2) require relocation assistance to affected occupants of those units and to former occupants who vacated due to harassment, improper buyout agreements, owner move-ins, or pursuant to the Ellis Act, with additional assistance and protections for lower-income tenants; 3) modify the conditional use criteria that apply to projects to demolish residential units; amending the Administrative Code to 4) require landlords to provide additional relocation assistance to lower-income tenants who are being required to vacate temporarily due to capital improvements or rehabilitation work; 5) update the standards and procedures for hearings related to tenant harassment; 6) require additional disclosures in buyout agreements; 7) require an additional disclosure in notice of intent to withdraw units under the Ellis Act; 8) making various non-substantive changes and clarifications; affirming the Planning Department's determination under the California Environmental Quality Act; making public necessity, convenience, and welfare findings under Planning Code, Section 302; and making findings of consistency with the General Plan and the eight priority policies of Planning Code, Section 101.1.

Vice Chair Chen moved that this Ordinance be CONTINUED AS AMENDED to the Land Use and Transportation Committee meeting of December 1, 2025. The motion carried by the following vote:

Ayes: 3 - Melgar, Chen, Mahmood

Chair Melgar requested that File Nos. 250966, 250700, 251071, 250701, 251073, and 250985 be heard together.

SPECIAL MEETING OF THE BOARD OF SUPERVISORS

Supervisors Chan, Mandelman, and Sherrill were noted present at 3:45 p.m., thereby constituting a quorum of the Board of Supervisors. A special meeting of the Board of Supervisors was convened at 3:45 p.m., although the meeting was conducted in all respects as a committee meeting for items on the agenda and any substantive decisions constitute a recommendation of the committee and not action taken by the board.

Present: Supervisors Melgar, Chen, Mahmood, Chan, Mandelman, and Sherrill.

ADJOURNMENT OF THE BOARD OF SUPERVISORS

At the hour of 4:15 p.m., Supervisor Mandelman was noted not present, thereby adjouring the Special Meeting of the Board of Supervisors.

Supervisor Chan was noted not present at 4:18 p.m.

Supervisor Sherrill was noted not present at 4:22 p.m.

Chair Melgar recessed the meeting beginning at 6:04 p.m., and reconvened the meeting at 6:10 p.m.

250966 [General Plan Amendments - Family Zoning Plan]

Ordinance amending the General Plan to revise the Urban Design Element, Commerce and Industry Element, Transportation Element, Balboa Park Station Area Plan, Glen Park Community Plan, Market and Octavia Area Plan, Northeastern Waterfront Plan, Van Ness Avenue Area Plan, Western SoMa (South of Market) Area Plan, Western Shoreline Area Plan, Downtown Area Plan, and Land Use Index, to implement the Family Housing Zoning Program, including the Housing Choice-San Francisco Program, by adjusting guidelines regarding building heights, density, design, and other matters; amending the City's Local Coastal Program to implement the Housing Choice-San Francisco Program and other associated changes in the City's Coastal Zone, and directing the Planning Director to transmit the Ordinance to the Coastal Commission upon enactment; affirming the Planning Department's determination under the California Environmental Quality Act; making findings of consistency with the General Plan, and the eight priority policies of Planning Code, Section 101.1; and adopting findings of public necessity, convenience, and welfare under Planning Code, Section 340. (Planning Commission)
(Pursuant to Charter, Section 4.105, the Planning Commission recommends General Plan amendments to the Board of Supervisors for approval or rejection. If the Board fails to act within 90 days of receipt, the proposed General Plan amendment shall be deemed approved. Transmittal Date: September 22, 2025)

Heard in Committee. Speaker(s): Aly Bonde (Office of the Mayor); Joshua Switzky, Lisa Chen, Rachel Tanner, and Richard Sucre (Planning Department); Supervisors Rafael Mandelman, Connie Chan, and Stephen Sherrill (Board of Supervisors); Maia Small (San Francisco Municipal Transportation Agency); Brad Russi (Office of the City Attorney); presented information and answered questions raised throughout the discussion. Eileen Boken; Georgia Schuttish; Raymond Tan; Paul Wormer; Sarah "Fred" Sherburn-Zimmer (Housing Rights Committee); Jacinda McCann; Speaker; Marie Romero; Zachary Frial (SOMCAN); Theresa Dulales (SOMCAN); Jose Descansera; Christen Evans; Mark Solomon; Jessica Vistnes; Peter Stevens; Marc Bruno; Mary; Robert Ho (Ingleside Terrace Association); Speaker; Speaker; Romalyn Schmaltz; Brian Malnik; Speaker; Andy Katz; David Kim (SF YIMBY); Jenny Gephart; Stan Hayes; Stephen Torres; Kay Walker; Ocean; Speaker; John Gutterman; Nick Ferris, President (Telegraph Hill Dwellers); Speaker; Glendida Farley; Kate Bloomberg; Gwen; Speaker; Paul Michael; Gino Fortunado; Gabe; Erica; Tina Lombardi (San Francisco Heritage); Speaker; Sarah Rogers; Tina; Udya Singh; Corey Smith (Housing Action Coalition); Speaker; Jane Natoli (YIMBY Action); Speaker; Speaker; Phillip; Paula Katz; Mike Chen; Bobak Esfandiari (San Francisco Democratic Party Central Committee); Speaker; Speaker; Brianna Morales (Housing Action Coalition); Speaker; Brian Han; Jeantelle Labarinto; Speaker; Asia Nicole Duncan; Harris; Rosa Shields (San Francisco Labor Council); shared various concerns regarding the ordinance matter.

Chair Melgar moved that this Ordinance be CONTINUED to the Land Use and Transportation Committee meeting of December 1, 2025. The motion carried by the following vote:

Ayes: 3 - Melgar, Chen, Mahmood

250700 [Zoning Map - Family Zoning Plan]

Sponsors: Mayor; Sauter, Mahmood and Dorsey

Ordinance amending the Zoning Map to implement the Family Zoning Plan by: amending the Zoning Use District Maps to: 1) reclassify certain properties currently zoned as various types of Residential to Residential Transit Oriented - Commercial (RTO-C); 2) reclassify properties currently zoned Residential Transit Oriented (RTO) to Residential Transit Oriented - 1 (RTO-1); 3) reclassify certain properties from Residential districts other than RTO to RTO-1; 4) reclassify certain properties currently zoned Neighborhood Commercial (NC) or Public (P) to Community Business (C-2); and 5) reclassify certain properties from Public to Mixed-Use or Neighborhood Commercial Districts; amending the Height and Bulk Map to: 1) reclassify properties in the Family Zoning Plan to R-4 Height and Bulk District; 2) change the height limits on certain lots in the R-4 Height and Bulk District; and 3) designating various parcels to be included in the Non-Contiguous San Francisco Municipal Transportation Agency Sites Special Use District (SFMTA SUD); amending the Local Coastal Program to: 1) reclassify all properties in the Coastal Zone to R-4 Height and Bulk District; 2) reclassify certain properties to RTO-C and Neighborhood Commercial District; 3) designate one parcel as part of the SFMTA SUD; and 4) directing the Planning Director to transmit the Ordinance to the Coastal Commission upon enactment; affirming the Planning Department's determination under the California Environmental Quality Act; making findings of public necessity, convenience, and welfare under Planning Code, Section 302; making findings of consistency with the General Plan, and the eight priority policies of Planning Code, Section 101.1; and making findings under the City's Local Coastal Program and the California Coastal Act of 1976.
(Economic Impact)

Heard in Committee. Speaker(s): Aly Bonde (Office of the Mayor); Joshua Switzky, Lisa Chen, Rachel Tanner, and Richard Sucre (Planning Department); Supervisors Rafael Mandelman, Connie Chan, and Stephen Sherrill (Board of Supervisors); Maia Small (San Francisco Municipal Transportation Agency); Brad Russi (Office of the City Attorney); presented information and answered questions raised throughout the discussion. Eileen Boken; Georgia Schuttish; Raymond Tan; Paul Wormer; Sarah "Fred" Sherburn-Zimmer (Housing Rights Committee); Jacinda McCann; Speaker; Marie Romero; Zachary Frial (SOMCAN); Theresa Dulales (SOMCAN); Jose Descansera; Christen Evans; Mark Solomon; Jessica Vistnes; Peter Stevens; Marc Bruno; Mary; Robert Ho (Ingleside Terrace Association); Speaker; Speaker; Romalyn Schmaltz; Brian Malnik; Speaker; Andy Katz; David Kim (SF YIMBY); Jenny Gephart; Stan Hayes; Stephen Torres; Kay Walker; Ocean; Speaker; John Gutterman; Nick Ferris, President (Telegraph Hill Dwellers); Speaker; Glendida Farley; Kate Bloomberg; Gwen; Speaker; Paul Michael; Gino Fortunado; Gabe; Erica; Tina Lombardi (San Francisco Heritage); Speaker; Sarah Rogers; Tina; Udya Singh; Corey Smith (Housing Action Coalition); Speaker; Jane Natoli (YIMBY Action); Speaker; Speaker; Phillip; Paula Katz; Mike Chen; Bobak Esfandiari (San Francisco Democratic Party Central Committee); Speaker; Speaker; Brianna Morales (Housing Action Coalition); Speaker; Brian Han; Jeantelle Labarinto; Speaker; Asia Nicole Duncan; Harris; Rosa Shields (San Francisco Labor Council); shared various concerns regarding the ordinance matter.

Vice Chair Chen moved that this Ordinance be AMENDED, AN AMENDMENT OF THE WHOLE BEARING NEW TITLE, to exclude all currently designated historic landmarks and contributors to historic districts, pursuant to Article 10, from the rezoning plan. The motion carried by the following vote:

Ayes: 2 - Melgar, Chen
Noes: 1 - Mahmood

Ordinance amending the Zoning Map to implement the Family Zoning Plan by: amending the Zoning Use District Maps to: 1) reclassify certain properties currently zoned as various types of Residential to Residential Transit Oriented - Commercial (RTO-C); 2) reclassify properties currently zoned Residential Transit Oriented (RTO) to Residential Transit Oriented - 1 (RTO-1); 3) reclassify certain properties from Residential districts other than RTO to RTO-1; 4) reclassify certain properties currently zoned Neighborhood Commercial (NC) or Public (P) to Community Business (C-2); and 5) reclassify certain properties from Public to Mixed-Use or Neighborhood Commercial Districts; amending the Height and Bulk Map to: 1) reclassify properties in the Family Zoning Plan to R-4 Height and Bulk District , except for properties with structures designated as landmarks or contributors to historic districts pursuant to Article 10; 2) change the height limits on certain lots in the R-4 Height and Bulk District; and 3) designating various parcels to be included in the Non-Contiguous San Francisco Municipal Transportation Agency Sites Special Use District (SFMTA SUD); amending the Local Coastal Program to: 1) reclassify all properties in the Coastal Zone to R-4 Height and Bulk District; 2) reclassify certain properties to RTO-C and Neighborhood Commercial District; 3) designate one parcel as part of the SFMTA SUD; and 4) directing the Planning Director to transmit the Ordinance to the Coastal Commission upon enactment; affirming the Planning Department's determination under the California Environmental Quality Act; making findings of public necessity, convenience, and welfare under Planning Code, Section 302; making findings of consistency with the General Plan, and the eight priority policies of Planning Code, Section 101.1; and making findings under the City's Local Coastal Program and the California Coastal Act of 1976. (Economic Impact)

Member Mahmood moved that this Ordinance be AMENDED, AN AMENDMENT OF THE WHOLE BEARING SAME TITLE, to decrease heights along one block of Geary Blvd between Wood and Emerson; decrease heights at the Marina Safeway parcel; decrease heights at Ghirardelli Square; increase heights along the western portion of Van Ness between Ellis and Turk; increase heights along Pine Street between Leavenworth and Larkin Streets; and decrease heights on North Point Street between Larkin and Hyde streets. The motion carried by the following vote:

Ayes: 3 - Melgar, Chen, Mahmood

Ordinance amending the Zoning Map to implement the Family Zoning Plan by: amending the Zoning Use District Maps to: 1) reclassify certain properties currently zoned as various types of Residential to Residential Transit Oriented - Commercial (RTO-C); 2) reclassify properties currently zoned Residential Transit Oriented (RTO) to Residential Transit Oriented - 1 (RTO-1); 3) reclassify certain properties from Residential districts other than RTO to RTO-1; 4) reclassify certain properties currently zoned Neighborhood Commercial (NC) or Public (P) to Community Business (C-2); and 5) reclassify certain properties from Public to Mixed-Use or Neighborhood Commercial Districts; amending the Height and Bulk Map to: 1) reclassify properties in the Family Zoning Plan to R-4 Height and Bulk District, except for properties with structures designated as landmarks or contributors to historic districts pursuant to Article 10; 2) change the height limits on certain lots in the R-4 Height and Bulk District; and 3) designating various parcels to be included in the Non-Contiguous San Francisco Municipal Transportation Agency Sites Special Use District (SFMTA SUD); amending the Local Coastal Program to: 1) reclassify all properties in the Coastal Zone to R-4 Height and Bulk District; 2) reclassify certain properties to RTO-C and Neighborhood Commercial District; 3) designate one parcel as part of the SFMTA SUD; and 4) directing the Planning Director to transmit the Ordinance to the Coastal Commission upon enactment; affirming the Planning Department's determination under the California Environmental Quality Act; making findings of public necessity, convenience, and welfare under Planning Code, Section 302; making findings of consistency with the General Plan, and the eight priority policies of Planning Code, Section 101.1; and making findings under the City's Local Coastal Program and the California Coastal Act of 1976. (Economic Impact)

Vice Chair Chen moved that this Ordinance be AMENDED, to incorporate text from the duplicate file in Board File No. 251071, which would remove all Priority Equity Geographies from the rezoning plan. The motion FAILED by the following vote:

Ayes: 1 - Chen

Noes: 2 - Melgar, Mahmood

Chair Melgar moved that this Ordinance be CONTINUED AS AMENDED to the Land Use and Transportation Committee meeting of December 1, 2025. The motion carried by the following vote:

Ayes: 3 - Melgar, Chen, Mahmood

251071 [Zoning Map - Family Zoning Plan]

Sponsors: Mayor; Sauter, Mahmood and Dorsey

Ordinance amending the Zoning Map to implement the Family Zoning Plan by: amending the Zoning Use District Maps to: 1) reclassify certain properties currently zoned as various types of Residential to Residential Transit Oriented - Commercial (RTO-C), except for properties located in the Priority Equity Geographies Special Use District ("PEG SUD"); 2) reclassify properties currently zoned Residential Transit Oriented (RTO) to Residential Transit Oriented - 1 (RTO-1); 3) reclassify certain properties from Residential districts other than RTO to RTO-1, except for properties located in the PEG SUD; 4) reclassify certain properties currently zoned Neighborhood Commercial (NC) or Public (P) to Community Business (C-2) , except for properties located in the PEG SUD; and 5) reclassify certain properties from Public to Mixed-Use or Neighborhood Commercial Districts, except for properties located in the PEG SUD; amending the Height and Bulk Map to: 1) reclassify properties in the Family Zoning Plan to R-4 Height and Bulk District, except for properties located in the PEG SUD; 2) change the height limits on certain lots in the R-4 Height and Bulk District, except for properties located in the PEG SUD; and 3) designating various parcels to be included in the Non-Contiguous San Francisco Municipal Transportation Agency Sites Special Use District (SFMTA SUD); amending the Local Coastal Program to: 1) reclassify all properties in the Coastal Zone south of Lincoln Way to R-4 Height and Bulk District; 2) reclassify certain properties south of Lincoln Way to RTO-C and Neighborhood Commercial District; and 3) directing the Planning Director to transmit the Ordinance to the Coastal Commission upon enactment; affirming the Planning Department's determination under the California Environmental Quality Act; making findings of public necessity, convenience, and welfare under Planning Code, Section 302; making findings of consistency with the General Plan, and the eight priority policies of Planning Code, Section 101.1; and making findings under the City's Local Coastal Program and the California Coastal Act of 1976.
(Economic Impact)

Heard in Committee. Speaker(s): Aly Bonde (Office of the Mayor); Joshua Switzky, Lisa Chen, Rachel Tanner, and Richard Sucre (Planning Department); Supervisors Rafael Mandelman, Connie Chan, and Stephen Sherrill (Board of Supervisors); Maia Small (San Francisco Municipal Transportation Agency); Brad Russi (Office of the City Attorney); presented information and answered questions raised throughout the discussion. Eileen Boken; Georgia Schuttish; Raymond Tan; Paul Wormer; Sarah "Fred" Sherburn-Zimmer (Housing Rights Committee); Jacinda McCann; Speaker; Marie Romero; Zachary Frial (SOMCAN); Theresa Dulales (SOMCAN); Jose Descansera; Christen Evans; Mark Solomon; Jessica Vistnes; Peter Stevens; Marc Bruno; Mary; Robert Ho (Ingleside Terrace Association); Speaker; Speaker; Romalyn Schmaltz; Brian Malnik; Speaker; Andy Katz; David Kim (SF YIMBY); Jenny Gephart; Stan Hayes; Stephen Torres; Kay Walker; Ocean; Speaker; John Gutterman; Nick Ferris, President (Telegraph Hill Dwellers); Speaker; Glendida Farley; Kate Bloomberg; Gwen; Speaker; Paul Michael; Gino Fortunado; Gabe; Erica; Tina Lombardi (San Francisco Heritage); Speaker; Sarah Rogers; Tina; Udya Singh; Corey Smith (Housing Action Coalition); Speaker; Jane Natoli (YIMBY Action); Speaker; Speaker; Phillip; Paula Katz; Mike Chen; Bobak Esfandiari (San Francisco Democratic Party Central Committee); Speaker; Speaker; Brianna Morales (Housing Action Coalition); Speaker; Brian Han; Jeantelle Labarinto; Speaker; Asia Nicole Duncan; Harris; Rosa Shields (San Francisco Labor Council); shared various concerns regarding the ordinance matter.

Member Mahmood moved that this Ordinance be TABLED. The motion carried by the following vote:

Ayes: 2 - Melgar, Mahmood
Noes: 1 - Chen

250701 [Planning, Business and Tax Regulations Codes - Family Zoning Plan]
Sponsor: Mayor

Ordinance amending the Planning Code to: 1) create the Housing Choice-San Francisco Program to incent housing development through a local bonus program and by adopting a Housing Sustainability District, 2) modify height and bulk limits to provide for additional capacity in well-resourced neighborhoods, and to allow additional height and bulk for projects using the local bonus program, 3) require only buildings taller than 85 feet in certain Districts to reduce ground level wind currents, 4) make conforming changes to the RH (Residential, House), RM (Residential, Mixed), and RC (Residential-Commercial) District zoning tables to reflect the changes to density controls, and parking requirements made in this Ordinance, 5) create the RTO-C (Residential Transit Oriented-Commercial) District, 6) implement the Metropolitan Transportation Commission's Transit-Oriented Communities Policy by making changes to parking requirements, minimum residential densities, and minimum office intensities, and requiring maximum dwelling unit sizes, 7) revise off-street parking and curb cut obligations citywide, 8) create the Non-contiguous San Francisco Municipal Transportation Agency Sites Special Use District, 9) permit businesses displaced by new construction to relocate without a conditional use authorization and waive development impact fees for those businesses, 10) make technical amendments to the Code to implement the above changes, 11) make conforming changes to zoning tables in various Districts, including the Neighborhood Commercial District and Mixed Use Districts, and 12) reduce usable open space and bicycle parking requirements for senior housing; amending the Business and Tax Regulations Code regarding the Board of Appeals' review of permits in the Housing Choice Program Housing Sustainability District; also, amending the Local Coastal Program to implement the Housing Choice-San Francisco Program and other associated changes in the City's Coastal Zone, and directing the Planning Director to transmit the Ordinance to the Coastal Commission upon enactment; affirming the Planning Department's determination under the California Environmental Quality Act; making findings of consistency with the General Plan, and the eight priority policies of Planning Code, Section 101.1; and making public necessity, convenience, and welfare findings under Planning Code, Section 302.
(Economic Impact)

Heard in Committee. Speaker(s): Aly Bonde (Office of the Mayor); Joshua Switzky, Lisa Chen, Rachel Tanner, and Richard Sucre (Planning Department); Supervisors Rafael Mandelman, Connie Chan, and Stephen Sherrill (Board of Supervisors); Maia Small (San Francisco Municipal Transportation Agency); Brad Russi (Office of the City Attorney); presented information and answered questions raised throughout the discussion. Eileen Boken; Georgia Schuttish; Raymond Tan; Paul Wormer; Sarah "Fred" Sherburn-Zimmer (Housing Rights Committee); Jacinda McCann; Speaker; Marie Romero; Zachary Frial (SOMCAN); Theresa Dulales (SOMCAN); Jose Descansera; Christen Evans; Mark Solomon; Jessica Vistnes; Peter Stevens; Marc Bruno; Mary; Robert Ho (Ingleside Terrace Association); Speaker; Speaker; Romalyn Schmaltz; Brian Malnik; Speaker; Andy Katz; David Kim (SF YIMBY); Jenny Gephart; Stan Hayes; Stephen Torres; Kay Walker; Ocean; Speaker; John Gutterman; Nick Ferris, President (Telegraph Hill Dwellers); Speaker; Glendida Farley; Kate Bloomberg; Gwen; Speaker; Paul Michael; Gino Fortunado; Gabe; Erica; Tina Lombardi (San Francisco Heritage); Speaker; Sarah Rogers; Tina; Udya Singh; Corey Smith (Housing Action Coalition); Speaker; Jane Natoli (YIMBY Action); Speaker; Speaker; Phillip; Paula Katz; Mike Chen; Bobak Esfandiari (San Francisco Democratic Party Central Committee); Speaker; Speaker; Brianna Morales (Housing Action Coalition); Speaker; Brian Han; Jeantelle Labarinto; Speaker; Asia Nicole Duncan; Harris; Rosa Shields (San Francisco Labor Council); shared various concerns regarding the ordinance matter.

Vice Chair Chen moved that this Ordinance be AMENDED, AN AMENDMENT OF THE WHOLE BEARING SAME TITLE, to make conforming changes to exclude all currently designated historic landmarks and contributors to historic districts, pursuant to Article 10, from the rezoning plan. The motion carried by the following vote:

Ayes: 2 - Melgar, Chen

Noes: 1 - Mahmood

(Economic Impact)

Vice Chair Chen moved that this Ordinance be AMENDED, AN AMENDMENT OF THE WHOLE BEARING SAME TITLE, to incorporate text from the duplicate file in Board File No. 251073 to remove reduced unit mix requirements in the local program and defer to existing unit mix requirements in Planning Code, Sections 207.6 and 207.7. The motion carried by the following vote:

Ayes: 2 - Melgar, Chen

Noes: 1 - Mahmood

(Economic Impact)

Vice Chair Chen moved that this Ordinance be AMENDED, to incorporate text from the duplicate file in Board File No. 251073 related to the SFMTA Special Use District (SUD) which would add findings establishing the objective of prioritizing the Priority Equity Geographies sites in the SFMTA SUD for 100% affordable housing; add a pre-application process with a feasibility study to model those sites which satisfy minimum specifications as 100% affordable housing; require at least one publicly-noticed pre-application meeting; add findings of consistency with Housing Element Actions 1.2.6 and 1.2.7; and provide for a Right of First Refusal for qualified organizations. The motion FAILED by the following vote:

Ayes: 1 - Chen

Noes: 2 - Melgar, Mahmood

Chair Melgar moved that this Ordinance be CONTINUED AS AMENDED to the Land Use and Transportation Committee meeting of December 1, 2025. The motion carried by the following vote:

Ayes: 3 - Melgar, Chen, Mahmood

251073 [Planning, Business and Tax Regulations, Administrative Codes - Family Zoning Plan]

Sponsor: Mayor

Ordinance amending the Planning Code to: 1) create the Housing Choice-San Francisco Program to incent housing development through a local bonus program and by adopting a Housing Sustainability District, 2) modify height and bulk limits to provide for additional capacity in well-resourced neighborhoods, and to allow additional height and bulk for projects using the local bonus program, 3) require only buildings taller than 85 feet in certain Districts to reduce ground level wind currents, 4) make conforming changes to the RH (Residential, House), RM (Residential, Mixed), and RC (Residential-Commercial) District zoning tables to reflect the changes to density controls, and parking requirements made in this ordinance, 5) create the RTO-C (Residential Transit Oriented-Commercial) District, 6) implement the Metropolitan Transportation Commission's Transit-Oriented Communities Policy by making changes to parking requirements, minimum residential densities, and minimum office intensities, and requiring maximum dwelling unit sizes, 7) revise off-street parking and curb cut obligations citywide, 8) create the Non-contiguous San Francisco Municipal Transportation Agency Sites Special Use District (SFMTA SUD), 9) permit businesses displaced by new construction to relocate without a conditional use authorization and waive development impact fees for those businesses, 10) make technical amendments to the Code to implement the above changes, 11) make conforming changes to zoning tables in various Districts, including the Neighborhood Commercial District and Mixed Use Districts, and 12) reduce usable open space and bicycle parking requirements for senior housing; amending the Business and Tax Regulations Code regarding the Board of Appeals' review of permits in the Housing Choice Program Housing Sustainability District; amending the Administrative Code to set Board policy regarding the sale or lease of properties within the SFMTA SUD; also, amending the Local Coastal Program to implement the Housing Choice-San Francisco Program and other associated changes in the City's Coastal Zone, and directing the Planning Director to transmit the ordinance to the Coastal Commission upon enactment; affirming the Planning Department's determination under the California Environmental Quality Act; making findings of consistency with the General Plan, and the eight priority policies of Planning Code, Section 101.1; and making public necessity, convenience, and welfare findings under Planning Code, Section 302.
(Economic Impact)

Heard in Committee. Speaker(s): Aly Bonde (Office of the Mayor); Joshua Switzky, Lisa Chen, Rachel Tanner, and Richard Sucre (Planning Department); Supervisors Rafael Mandelman, Connie Chan, and Stephen Sherrill (Board of Supervisors); Maia Small (San Francisco Municipal Transportation Agency); Brad Russi (Office of the City Attorney); presented information and answered questions raised throughout the discussion. Eileen Boken; Georgia Schuttish; Raymond Tan; Paul Wormer; Sarah "Fred" Sherburn-Zimmer (Housing Rights Committee); Jacinda McCann; Speaker; Marie Romero; Zachary Frial (SOMCAN); Theresa Dulales (SOMCAN); Jose Descansera; Christen Evans; Mark Solomon; Jessica Vistnes; Peter Stevens; Marc Bruno; Mary; Robert Ho (Ingleside Terrace Association); Speaker; Speaker; Romalyn Schmaltz; Brian Malnik; Speaker; Andy Katz; David Kim (SF YIMBY); Jenny Gephart; Stan Hayes; Stephen Torres; Kay Walker; Ocean; Speaker; John Gutterman; Nick Ferris, President (Telegraph Hill Dwellers); Speaker; Glendida Farley; Kate Bloomberg; Gwen; Speaker; Paul Michael; Gino Fortunado; Gabe; Erica; Tina Lombardi (San Francisco Heritage); Speaker; Sarah Rogers; Tina; Udya Singh; Corey Smith (Housing Action Coalition); Speaker; Jane Natoli (YIMBY Action); Speaker; Speaker; Phillip; Paula Katz; Mike Chen; Bobak Esfandiari (San Francisco Democratic Party Central Committee); Speaker; Speaker; Brianna Morales (Housing Action Coalition); Speaker; Brian Han; Jeantelle Labarinto; Speaker; Asia Nicole Duncan; Harris; Rosa Shields (San Francisco Labor Council); shared various concerns regarding the ordinance matter.

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Member Mahmood moved that this Ordinance be TABLED. The motion carried by the following vote:

Ayes: 2 - Melgar, Mahmood
Noes: 1 - Chen

250985 [Local Coastal Program Amendment - Family Zoning Plan]
Sponsor: Mayor

Resolution transmitting to the California Coastal Commission for review and certification an amendment to the Implementation Program and Land Use Plan of the City's certified Local Coastal Program to implement the Family Zoning Plan; and affirming the Planning Department's determination under the California Environmental Quality Act.

Heard in Committee. Speaker(s): Aly Bonde (Office of the Mayor); Joshua Switzky, Lisa Chen, Rachel Tanner, and Richard Sucre (Planning Department); Supervisors Rafael Mandelman, Connie Chan, and Stephen Sherrill (Board of Supervisors); Maia Small (San Francisco Municipal Transportation Agency); Brad Russi (Office of the City Attorney); presented information and answered questions raised throughout the discussion. Eileen Boken; Georgia Schuttish; Raymond Tan; Paul Wormer; Sarah "Fred" Sherburn-Zimmer (Housing Rights Committee); Jacinda McCann; Speaker; Marie Romero; Zachary Frial (SOMCAN); Theresa Dulales (SOMCAN); Jose Descansera; Christen Evans; Mark Solomon; Jessica Vistnes; Peter Stevens; Marc Bruno; Mary; Robert Ho (Ingleside Terrace Association); Speaker; Speaker; Romalyn Schmaltz; Brian Malnik; Speaker; Andy Katz; David Kim (SF YIMBY); Jenny Gephart; Stan Hayes; Stephen Torres; Kay Walker; Ocean; Speaker; John Gutterman; Nick Ferris, President (Telegraph Hill Dwellers); Speaker; Glendida Farley; Kate Bloomberg; Gwen; Speaker; Paul Michael; Gino Fortunado; Gabe; Erica; Tina Lombardi (San Francisco Heritage); Speaker; Sarah Rogers; Tina; Udya Singh; Corey Smith (Housing Action Coalition); Speaker; Jane Natoli (YIMBY Action); Speaker; Speaker; Phillip; Paula Katz; Mike Chen; Bobak Esfandiari (San Francisco Democratic Party Central Committee); Speaker; Speaker; Brianna Morales (Housing Action Coalition); Speaker; Brian Han; Jeantelle Labarinto; Speaker; Asia Nicole Duncan; Harris; Rosa Shields (San Francisco Labor Council); shared various concerns regarding the resolution matter.

Chair Melgar moved that this Resolution be CONTINUED to the Land Use and Transportation Committee meeting of December 1, 2025. The motion carried by the following vote:

Ayes: 3 - Melgar, Chen, Mahmood

ADJOURNMENT

There being no further business, the Land Use and Transportation Committee adjourned at the hour of 7:11 p.m.

N.B. The Minutes of this meeting set forth all actions taken by the Land Use and Transportation Committee on the matters stated, but not necessarily in the chronological sequence in which the matters were taken up.

Youth Commission
City Hall ~ Room 345
1 Dr. Carlton B. Goodlett Place

(415) 554-6446
(415) 554-6140 FAX

YOUTH COMMISSION
MEMORANDUM

TO: Board of Supervisors

CC: John Carroll, Assistant Clerk
Angela Calvillo, Clerk of the Board
Alisa Somera, Legislative Deputy Director

FROM: 2025-2026 Youth Commission

DATE: Thursday, December 4, 2025

RE: SUBJECT: YOUTH COMMISSION LEGISLATION REFERRED 12/04/25

At its in-person meeting on Monday, December 1, 2025 the Youth Commission discussed and took action on BOS File No. 250700 and 250701:

1. The Youth Commission positively recommends this piece of legislation to the full Board of Supervisors and Mayor's Office.
2. The Youth Commission recognizes the need for additional housing units in San Francisco and we need to find the balance to support small businesses across the city who may be impacted by new housing construction. They understand the city needs to meet state requirements to build housing and construct affordable housing units for low-income families living in the city.
3. The Youth Commission expresses the need for housing access for families, youth, and educators.
4. The Youth Commission acknowledges that restrictive zoning has prevented people from living in the City, including youth, families, and essential workers.
5. The Youth Commission also inquired about the following:
    - Needing clarification for construction impacts and how the building of additional housing could disrupt residents.
    - Continuing to refine certain parts of the plan to better meet the needs of people and businesses.
    - Seeing the different effects to rent control housing across the City and ensuring there are tenant protections.

Youth Commission
City Hall ~ Room 345
1 Dr. Carlton B. Goodlett Place

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- Further action to address concerns around affordability, small business support, and the impacts of major citywide development.

6. The Youth Commission appreciates the requirement of family-sized housing and allows for increased development.
7. The Youth Commission hopes with the zoning plan in place, it will welcome more families to move to San Francisco with better access to public infrastructure like transit and parks.

Please do not hesitate to contact Youth Commissioners or Youth Commission staff (415) 554-6446 with any questions. Thank you.

BOARD of SUPERVISORS

City Hall
1 Dr. Carlton B. Goodlett Place, Room 244
San Francisco, CA 94102-4689
Tel. No. (415) 554-5184
Fax No. (415) 554-5163
TDD/TTY No. (415) 554-5227

M E M O R A N D U M

TO: Youth Commission

FROM: John Carroll, Assistant Clerk,
Land Use and Transportation Committee

DATE: October 6, 2025

SUBJECT: REFERRAL FROM BOARD OF SUPERVISORS

The Board of Supervisors has received the following, which at the request of the Youth Commission is being referred as per Charter Section 4.124 for comment and recommendation. The Commission may provide any response it deems appropriate within 12 days from the date of this referral.

File No. 250701

Ordinance amending the Planning Code to: 1) create the Housing Choice-San Francisco Program to incent housing development through a local bonus program and by adopting a Housing Sustainability District, 2) modify height and bulk limits to provide for additional capacity in well-resourced neighborhoods, and to allow additional height and bulk for projects using the local bonus program, 3) require only buildings taller than 85 feet in certain Districts to reduce ground level wind currents, 4) make conforming changes to the RH (Residential, House), RM (Residential, Mixed), and RC (Residential-Commercial) District zoning tables to reflect the changes to density controls, and parking requirements made in this Ordinance, 5) create the RTO-C (Residential Transit Oriented-Commercial) District, 6) implement the Metropolitan Transportation Commission's Transit-Oriented Communities Policy by making changes to parking requirements, minimum residential densities, and minimum office intensities, and requiring maximum dwelling unit sizes, 7) revise off-street parking and curb cut obligations citywide, 8) create the Non-contiguous San Francisco Municipal Transportation Agency Sites Special Use District, 9) permit businesses displaced by new construction to relocate without a conditional use authorization and waive development impact fees for those businesses, 10) make technical amendments to the Code to implement the above changes, 11) make conforming changes to zoning tables in various Districts, including the Neighborhood Commercial District and Mixed Use Districts, and 12) reduce usable open space and bicycle parking requirements for senior housing; amending the Business and Tax Regulations Code regarding the Board of Appeals' review of permits in the Housing Choice Program Housing Sustainability District; also, amending the Local Coastal Program to implement the Housing Choice-San

Francisco Program and other associated changes in the City's Coastal Zone, and directing the Planning Director to transmit the Ordinance to the Coastal Commission upon enactment; affirming the Planning Department's determination under the California Environmental Quality Act; making findings of consistency with the General Plan, and the eight priority policies of Planning Code, Section 101.1; and making public necessity, convenience, and welfare findings under Planning Code, Section 302.

Please return this cover sheet with the Commission's response to John Carroll, Assistant Clerk, Land Use and Transportation Committee at **john.carroll@sfgov.org**.

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RESPONSE FROM YOUTH COMMISSION **Date:** 12/04/2025

____ **No Comment**

✓ **Recommendation Attached**

Gabrille Listana

Chairperson, Youth Commission

BOARD of SUPERVISORS

City Hall
1 Dr. Carlton B. Goodlett Place, Room 244
San Francisco, CA 94102-4689
Tel. No. (415) 554-5184
Fax No. (415) 554-5163
TDD/TTY No. (415) 554-5227

M E M O R A N D U M

TO: Youth Commission

FROM: John Carroll, Assistant Clerk,
Land Use and Transportation Committee

DATE: October 6, 2025

SUBJECT: REFERRAL FROM BOARD OF SUPERVISORS

The Board of Supervisors has received the following, which at the request of the Youth Commission is being referred as per Charter Section 4.124 for comment and recommendation. The Commission may provide any response it deems appropriate within 12 days from the date of this referral.

File No. 250700

Ordinance amending the Zoning Map to implement the Family Zoning Plan by: amending the Zoning Use District Maps to: 1) reclassify certain properties currently zoned as various types of Residential to Residential Transit Oriented - Commercial (RTO-C); 2) reclassify properties currently zoned Residential Transit Oriented (RTO) to Residential Transit Oriented - 1 (RTO-1); 3) reclassify certain properties from Residential districts other than RTO to RTO-1; 4) reclassify certain properties currently zoned Neighborhood Commercial (NC) or Public (P) to Community Business (C-2); and 5) reclassify certain properties from Public to Mixed-Use or Neighborhood Commercial Districts; amending the Height and Bulk Map to: 1) reclassify properties in the Family Zoning Plan to R-4 Height and Bulk District; 2) change the height limits on certain lots in the R-4 Height and Bulk District; and 3) designating various parcels to be included in the Non-Contiguous San Francisco Municipal Transportation Agency Sites Special Use District (SFMTA SUD); amending the Local Coastal Program to: 1) reclassify all properties in the Coastal Zone to R-4 Height and Bulk District; 2) reclassify certain properties to RTO-C and Neighborhood Commercial District; 3) designate one parcel as part of the SFMTA SUD; and 4) directing the Planning Director to transmit the Ordinance to the Coastal Commission upon enactment; affirming the Planning Department's determination under the California Environmental Quality Act; making findings of public necessity, convenience, and welfare under Planning Code, Section 302; making findings of consistency with the General Plan, and the eight priority policies of Planning Code, Section 101.1; and making findings under the City's Local Coastal Program and the California Coastal Act of 1976.

Please return this cover sheet with the Commission's response to John Carroll, Assistant Clerk, Land Use and Transportation Committee at **john.carroll@sfgov.org**.

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RESPONSE FROM YOUTH COMMISSION **Date:** 12/04/2025

____ **No Comment**

✓ **Recommendation Attached**

Gabrille Listana

Chairperson, Youth Commission

San Francisco Planning

49 South Van Ness Avenue, Suite 1400
San Francisco, CA 94103
628.652.7600
www.sfplanning.org

MEMORANDUM TO THE BOARD OF SUPERVISORS

Subject: Family Zoning Plan – Housing Capacity Estimates and Methodologies

Staff Contacts: Rachael Tanner, Director of Citywide Planning
Rachael.Tanner@sfgov.org

Joshua Switzky, Deputy Director of Citywide Planning
Joshua.Switzky@sfgov.org

Date: November 26, 2025

Executive Summary

This memorandum explains how San Francisco has calculated the capacity contained in the Family Zoning Plan. The Family Zoning Plan satisfies the City's RHNA shortfall plus 15% buffer of 36,200 units.

The Planning Department used three methods of analysis to explore the capacity created by the Family Zoning Plan. The analyses show that the Family Zoning Plan satisfies our RHNA shortfall, satisfies state statute regarding shortfall rezoning, and is aligned with Housing and Community Development Department (HCD) guidance. On September 9, 2025, Paul McDougall from HCD provided a letter[1] to the Planning Department indicating that HCD reviewed this analysis, along with other materials related to the proposed Family Zoning Plan, and found the Family Zoning Plan as proposed would meet the quantitative requirements for the mandatory rezoning, including Housing Element Action 7.1.1.

This Executive Summary briefly describes each method used and its outcome. These methods demonstrate that the City adequately satisfies state law and Action 7.1.1 of San Francisco's adopted Housing Element to "reasonably account for sites' likelihood of development during the planning period using an analytical model". (See below for full text of Action 7.1.1).

Given the unprecedented scale of the rezoning and self-imposed requirements to more deeply examine likelihood of development, multiple methods of analysis are necessary. No single method on its own is sufficient. Further, each analytical method has both advantages and disadvantages.

Method 1: Citywide Method – This method is inspired by specific guidance the State of Colorado provides to its cities regarding approaches to calculating effective zoned capacity relative to its housing goals. This method helped the City to explore the likelihood related to the expected yield from the Family Zoning Plan during the remaining RHNA period. This method demonstrates approximately 39,000 units would be expected to be produced in the remaining RHNA period. This method is essential to meeting 7.1.1.

[1] housingelement-HCD-sf-draft-rezoning-package-09092025.pdf

Adjustments to the Family Zoning Plan need to be assessed through this method as part of ensuring that the Plan meets or exceeds San Francisco's shortfall.

Method 2: Soft Sites Methodology – This method replicates the method used to develop the Sites for Rezoning submittal in the City's certified Housing Element (see Appendix B Sites Inventory page 41-45). This method is included (1) at request /advice from HCD staff and (2) to identify the specific sites most likely to develop as required based on existing site characteristics that make them suitable and available for residential development and report on their reasonable capacity under the rezoning.[2] The method demonstrates reasonably available capacity for approximately 38,200-64,400 units created through the Family Zoning Plan on sites more likely to develop based on criteria for suitability and availability.

Method 3: Financial Feasibility Method – This method uses specific financial feasibility metrics to determine a site's likelihood of being redeveloped. This method is fundamentally tied to the specific economic metrics assumed for this analysis. Since little to no housing is feasible under current economic conditions regardless of zoning changes or zoning assumptions[3], this method also assumes that larger macroeconomic conditions will necessarily improve in order to create the prerequisite conditions necessary for any zoning changes to be effective in realizing the City's Housing production goals. This method, which can only effectively analyze the feasibility for market-driven (i.e. primarily Above Moderate-income levels) housing production, suggests that a net addition of 19,000 units of market rate housing units would be produced in 5 years under modestly improved economic conditions.

Through Housing Element Action 8.1.5 (see below), the City has agreed to pursue additional zoning changes and other constraint reduction if building permits are not issued on pace with that projected in the Housing Element Sites Inventory for the RHNA time period through 2026. The City proposes to use the Citywide Method's measured capacity (~39,000) (plus the capacity from the additional focused rezoning actions described at the end of this memo) as the baseline for assessing the additional zoning needed under the formula established in 8.1.5.

[2] In spring 2025 (March 5 and April 2), Planning Department staff met with Paul McDougall and additional HCD staff to discuss the City's methods of analysis. At that time, Mr. McDougall requested we use the same method of analysis we used to develop the Sites for Rezoning as part of the City's certified Housing Element. Additionally, it was advised that any other methods used would need to be justified. Given limited written guidance from HCD on specific methods to measure capacity, San Francisco offered this method previously.

[3] See Financial Feasibility Study discussed and attached to the staff report to the Planning Commission for the hearing on June 26, 2025.

Excerpts from San Francisco's Adopted Housing Element

Action 7.1.1 - Create a rezoning program to meet the requirements of San Francisco's Regional Housing Needs Allocation across income levels and Affirmatively Furthering Fair Housing laws, relying on a combination of strategies in Actions 7.3.2 and 7.2.1 above to accommodate the RHNA shortfall with a buffer (approximately 36,282 new units) primarily in Well-resourced Neighborhoods, in proximity to transit and commercial corridors. The rezoning program shall reasonably account for sites' likelihood of development during the planning period using an analytical model and shall not add government constraints that reduce project financial feasibility as determined by an analysis prior to the rezoning enactment. Seek to implement a rezoning program that exceeds the identified RHNA shortfall plus 15% buffer (i.e., 36,282 units) to provide more capacity sooner and that would reduce the need and size of any subsequent rezoning triggered by Action 8.1.5. In addition, make any conforming amendments to relevant area plans in the city's General Plan based on final rezoning actions. Complete this effort by January 31, 2026.

As described in the Sites Inventory Rezoning Program, the rezoning will meet the requirements of Government Code Section 65583.2(h)-(i), including sites identified to meet the very low and low-income RHNA unmet need will be zoned to:

- permit owner-occupied and rental multifamily uses by-right for developments in which 20 percent or more of the units are affordable to lower-income households. By-right means local government review must not require a conditional use permit, planned unit development permit, or other discretionary review or approval that would constitute a "project" for purposes of CEQA;
- accommodate a minimum of 16 units per site; and
- require a minimum density of 20 units per acre.

At least 50 percent of the lower-income rezoning need must be accommodated on sites designated for residential use only or on sites zoned for mixed uses that accommodate all of the very low- and low-income housing need, if those sites allow 100 percent residential use and require residential use to occupy 50 percent of the total floor area of a mixed-use project.

Action 8.1.5 - If the City issues building permits[24] for fewer than 29,049 new units[25] by January 31, 2027, then the City shall enact and implement:

- additional rezoning outside of Priority Equity Geographies and areas vulnerable to displacement, and
- additional constraints reductions for housing projects, including existing projects in the development pipeline.

This additional rezoning and additional constraints reductions shall accommodate 115% of the shortfall, minus any capacity created by the rezoning(s) in Action 7.1.1 in excess of 36,282 units.[26]

The scope of this additional rezoning and additional constraint reduction:

- shall account for sites' likelihood of development during the RHNA planning period, and affirmatively incorporate the results of an analytical model and the cumulative constraints analysis described in Action 8.1.8 to increase supply choice and affordability and accommodate the RHNA in the planning period.
- shall not impose any new governmental constraints not already in effect on January 31, 2027 to the development of housing unless that constraint is offset by the repeal or mitigation of another constraint.
- shall consider progress and implement strategies toward meeting the RHNA goals by income group and AFFH objectives, including strategies considered under 8.1.10.
- shall consider community engagement, in alignment with Program area 4.2 in areas that may be disproportionately impacted with displacement risk beyond Priority Equity Geographies.

The City shall complete this effort, if needed, by July 31, 2028. The City will implement this program in consultation with HCD, including HCD approval.

Introduction

This memo summarizes the Planning Department's analysis of its Rezoning Sites to demonstrate the adequacy of the proposed rezoning to meet its RHNA Shortfall.

In order to inform the rezoning proposal and ensure the rezoning is providing sufficient zoned capacity pursuant to California GC 65583(c)(1)(A) and 65583.2(h) on sites that have a reasonable likelihood of development, the Planning Department has utilized multiple approaches of estimating capacity. These approaches include the same method used in the certified Housing Element Sites Inventory Sites for Rezoning and two additional analytical methods that consider different approaches to likelihood of development.

All approaches demonstrate that the City's proposed rezoning more than adequately surpasses the Housing Element Sites Inventory's RHNA rezoning targets.

The City's minimum rezoning target is 36,200 units. Broken down by income, the rezoning target includes 20,300 Lower-Income homes, 8,400 Moderate-Income homes, and 7,500 Above Moderate Income homes. The 36,200 target ***includes the state-recommended additional 15%*** buffer on top of RHNA. The City is including the buffer to proactively address the requirement for No-Net Loss for Lower-Income Sites as well as to buffer for the uncertain availability of individual parcels.

Excluding the recommended 15% buffer to the targets, the RHNA gap for rezoning is 24,000 units; of which 15,400 are Lower Income, 6,400 are Moderate Income, and 2,200 are Above Moderate.

	Lower Income	Mod Income	Above Mod	Total	Mod+Above Mod
RHNA Targets	32,881	13,717	35,471	82,069	49,188
Existing Sites	17,486	7,350	33,260	58,097	40,610
RHNA Gap	***15,395***	***6,367***	***2,211***	***23,972***	***8,578***
RHNA Targets with 15% Buffer	37,813	15,775	40,792	94,379	56,567
RHNA Gap with 15% Buffer	***20,327***	***8,425***	***7,532***	***36,282***	***15,957***

Figure 1: San Francisco's Regional Housing Needs Allocation.

General Description of the Proposed Rezoning

The proposed rezoning, also known as the "Family Zoning Plan", is large scale and touches 60% of parcels in San Francisco, focused in High Opportunity Areas. The Family Zoning Plan proposes to rezone approximately 92,800 of the approximately 154,500 parcels in the City and County of San Francisco.

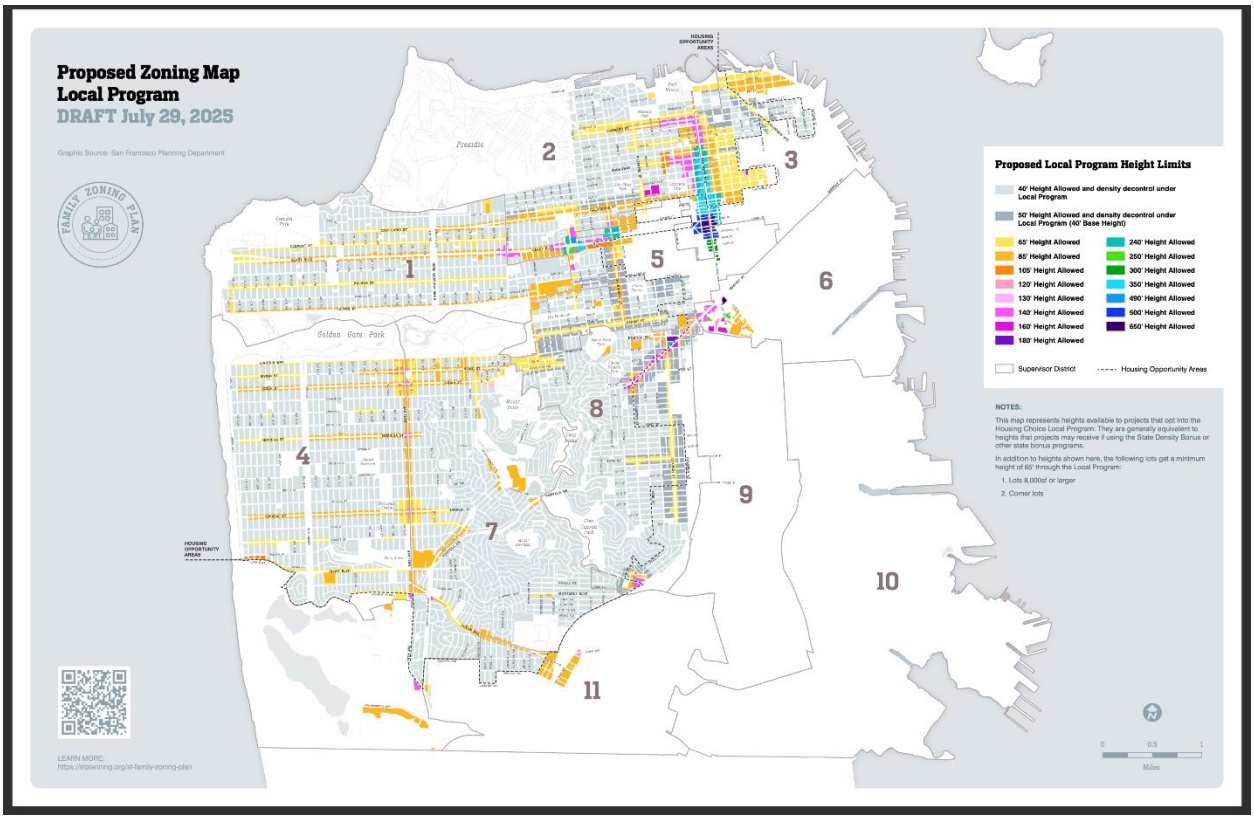

Figure 2: See pdf file or [online map](#) to view in more detail.

The geography is defined largely by the High Opportunity areas of the city, comprising the western and northern portions of the city, as well as some additional contiguous adjacent areas.[4] The proposed rezoning will rezone nearly 100% of the parcels in this broad area that comprises three-fifths of the city's area. This includes rezoning 57% of all parcels zoned "Neighborhood Commercial" and 64% of all parcels zoned "Residential" in the city.

Table 1: Parcels in Family Zoning Plan		
Parcels in Family Zoning Plan	Total Parcels in San Francisco	% Parcels in Family Zoning Plan
92,000	154,500	60%

Form-based density and additional height are key components of Family Zoning Plan. In this broad area, the rezoning would enable "form-based" density rules (i.e., "density decontrol" or no density limits) on every parcel. The Plan also provides for **higher height limits** on parcels in neighborhood commercial areas, in some commercial transition areas near certain commercial and transit corridors, and on all corner parcels and large parcels (8,000 square feet and larger) in residential areas.

[4] The High Opportunity Areas follow the contours of the "highest resource" and "high resource" areas identified in HCD's Opportunity Area Map.

Specifically, building height of six to eight stories would be permitted on all transit and commercial corridors, with six stories on corners and large parcels in residential areas. Certain corridors and major nodes would be permitted with even greater height limits of 12 to 65 stories. *See maps for illustrations of the permitted heights.*

The total net increase in the legal zoned capacity of the City above existing zoning as a result of the proposed rezoning is approximately 780,000 units.[5] This figure is calculated by calculating the total capacity of all parcels under the future rezoning conditions minus existing housing units on each parcel and subtracting from this total the total capacity of all parcels under existing zoning (also accounting for existing units). In other words, this figure removes existing units and remove the capacity under today's zoning. Sites with entitled projects are also excluded from these calculations.

The citywide remaining legal zoned capacity under existing zoning is 313,000 units. Under the rezoning it would be approximately 1.094 million units.

Table 2: Zoned Capacity		
Legal Zoned Capacity with Family Zoning Plan	**Existing (present day) Legal Zone Capacity**	**Increase in Legal Zoned Capacity from Family Zoning Plan**
1,094,000	313,000	780,000

Because these figures account for every possible incremental available housing unit allowed on every parcel regardless of whether the existing uses and buildings on each lot would make the lot more or less available for housing development, the analytical methods described in this memo must be used to estimate the *reasonably likely capacity* for housing development out of this 780,000 units of additional capacity and to identify the sites that are reasonably more likely to be suitable and available for development.

Suitable and Available Sites

Following is a description of the reasonable capacity on suitable and available sites that San Francisco will be submitting to HCD as its revised and final Inventory of Rezoned Sites and these sites' capacity calculations. Based on the analysis described, this is a modest subset of the overall net additional 780,000 maximum legal capacity. This is known within the Planning Department colloquially as the "Soft Sites Method." This method is consistent with the method applied in San Francisco's Rezoning Sites included in the Sites Inventory in the certified Housing Element.

In addition to the "Soft Sites" methodology being submitted, the Planning Department is also presenting two companion analyses on capacity. These methods demonstrate that regardless of methodology, the

[5] Note that all of these zoned capacity figures excludes potential capacity, or zoned capacity changes, on sites with entitled projects (ie "pipeline projects").

City's proposed rezoning more than sufficiently surpasses the minimum rezoning targets set by both state statute and city policy.

Constraints Reductions and Additional Capacity Not Considered

It is important to note that none of these analyses, nor any available analytical model or method, accounts for constraints reductions related to procedural improvements (e.g. administrative and ministerial approvals) that have been undertaken generally in San Francisco, the state of California, or those incorporated into the Family Zoning Plan. These major foundational context changes to housing approvals in San Francisco would likely significantly increase likelihood of development, improve financial feasibility, and reduce investment risk, thus increasing capacity for development that considers the pace or feasibility of development.

The capacity analyses presented here do not account for some of the additional quantitative code relief and modified, looser, objective standards applicable to projects using the Housing Choice-SF local program, including but not limited to reduced rear yard/lot coverage limits for certain projects, providing bonus square footage for units with more bedrooms (including units just required to meet unit mix requirements), elimination of open space and unit exposure requirements, and general 15% flexibility on all other quantitative standards. These various measures of code relief and flexibility are likely to notably increase physical capacity on individual sites beyond what is considered in this analysis. The reduction in rear yard/lot coverage limits amount to at 5-7% increase in physical zoned capacity on a subset of sites. Unit mix bonuses will also provide additional capacity that has not yet been considered. The waiving of open space and exposure requirements and other broad code flexibility are significant constraint reductions that increase capacity and financial feasibility in complex ways that are not easily modeled and that no available model or method can adequately account for.

Finally, the Housing Choice-SF program includes voluntary incentive bonuses of square footage and additional height for projects that provide an array of amenities and features, including but not limited to additional units with multiple bedrooms, family-friendly amenities, "warm shell" retail space, preservation of historic resources, and construction of the 100% affordable housing. All of these incentives could, and likely would, provide substantial additional capacity not accounted for this analysis.

Method 1: "Citywide Capacity Method"

The adopted Housing Element Action 7.1.1 requires the City, in evaluating the sufficiency of its rezoning to meet the 36,200 shortfall, to "reasonably account for sites' likelihood of development during the planning period using an analytical model." As all zoned capacity and not all sites are equally likely to be converted into new housing, analytical methods must be used to reflect this fact, thus discounting the net new zoned capacity by various metrics and methods in order to Ensure that the scale of the rezoning is sufficient to surpass the RHNA shortfall and meet the needs of San Francisco.

Rather than looking at the capacity for units on specific suitable and available sites, this method attempts to forecast the number of units that would be produced under economic and societal conditions that mirror past conditions.

A review of guidance in other jurisdictions as well as review of some research papers that speak to practices for estimating the production expectations of zoning suggest looking at the annualized rate of which a city's total zoned capacity has materialized into actual development entitlements or built units in the past. For instance, the State of Colorado's guidance[6] to jurisdictions in fulfillment of its own state laws mandating certain zoning capacity in relation to production goals is to assume realistic housing capacity of between 10-20% of the total legal zoned capacity across all parcels (i.e. to establish legal zoned capacity of approximately 7.5 times the goal). [7]

It is based on this premise that the San Francisco Planning Department presents here the "citywide capacity method." Rather than take the Colorado-specific metrics directly as applicable to San Francisco, this approach applies a San Francisco-specific fractional factor of the total net increase in legal zoned capacity of the proposed rezoning to estimate reasonable likely capacity for production based on retrospective data on development activity in San Francisco's recent past.

The Planning Department looked back at the years 2005-2023. This is a sufficiently long stretch of the most recent 19 years for which the Department has good data, and it covers multiple economic cycles.[8]

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[6] The State of Colorado has a law (the "Transit-Oriented Communities Law"), similar to California's Housing Element and RHNA law. Colorado requires certain jurisdictions to ensure that the total Zoning Capacity of their Transit Center areas is greater than or equal to the jurisdiction's Housing Opportunity Goal (HOG) for such areas. The Zoning Capacity must account for a "Zoning Capacity 'Buffer'", which means that the estimated raw legal zoning capacity for the area must be a multiple of the HOG. Based on all of the recent research on the relationship of raw zoning capacity to housing production, Colorado guidance sets this buffer at 7.5 times the HOG. In other words, if the HOG is not more than 10-20% of the total zoned capacity, then the zoning is considered to have adequate capacity. While the San Francisco Planning Department developed a partnership with the Terner Center for Housing Innovation to provide modelling support for this rezoning effort, the Center was not able to produce a reliable model that could be validated for San Francisco and paused their efforts in spring 2025; the Citywide Method was inspired by discussions with the Terner Center, amongst the other research and examples cited here.

[7] A paper published in 2022 by the UCLA Lewis Center for Regional Studies endorsed the general concept of the simple "zoning buffer", that is the ratio of total legal zoned capacity in relation to base conditions (either existing housing stock or housing production targets) as an appropriate, and possibly preferrable, framework for creating conditions for housing production. The paper does not recommend a specific buffer ratio, but highlights historic conditions in cities studied where substantial contractions of the zoning buffer due to downzoning were followed by decades of increasing housing unaffordability, increases in land value, and declines in housing production. It looks at zoning buffers that in cities like New York where the legal zoned capacity had been 300-400% of the existing housing stock and then was reduced to less 150% of the existing stock (ie legal zoned capacity would only allow 50% more units than presently existed). The paper generally endorses zoning schemes that cover broad swaths of cities, including residential areas, with zoning that allows small-mid scale multifamily development (6-10 units per parcel) as being ideal for widespread housing production of a modest but financially feasible scale on as many parcels as possible. This is similar to what is proposed here in the Family Zoning Plan, which also would increase the city's "zoning buffer" from about 200% (ie double the existing stock) to approximately 400% (ie legal zoning capacity would allow a 3-fold increase of existing stock). Notably the FZP does what the paper recommends, which is to permit 6-10 unit development across a broad swath of the city's residential parcels in addition to upzoning on commercial corridors, rather than concentrating proposed upzoning on only a small subset of parcels.

[8] Note that because the period stretches 19 years and includes two major macro-economic and societal shocks – the Great Recession and the Covid pandemic – in which housing development activity nearly completely collapsed, this longer-term view biases these estimates downward, as opposed to using production metrics derived only from years that were not affected by these shocks when the economy, demand, housing production was relatively stable and very active and during which housing production in San Francisco was robust.

The data begins at the point (2005) that San Francisco began adopting a major slew of neighborhood rezoning efforts and other zoning reforms of the modern era. During this period of time 90,000 units were entitled (i.e. approved) by the Planning Department and 53,200 units were constructed.

Construction Rate of 1.26% per year – One approach is to compare this past construction rate of built units against the zoned capacity that existed across all sites that are generally suitable for housing development. The categories of parcels excluded in this method are only those not typically developable for new housing development regardless of economic considerations due to use, ownership, or regulatory frameworks. The categories include parcels already entitled for development, parcels owned by government agencies, major college campuses, hospitals, parcels with residential condominiums, parcels with residential rental units of 4 or more units subject to rent control, parcels with formally listed historic properties on local, state and national registers, and parcels used as ROWs or other similar restrictions. (This Citywide Method does *not* exclude parcels based on "softness" or level of underdevelopment as does the "soft site method".) This method of calculation answers the question of how many of the units on sites that are theoretically available for consideration of development were built. Applying these site exclusion criteria allows us to re-create the zoned capacity on potentially developable sites over the past 19 years of 218,000 units (remaining zoned capacity of 183,000 in 2023 – out of the 313,000 legal envelope -- plus the 53,000 that were built which used zoned capacity available at the time). The equivalent net new zoned capacity on non-excluded sites for the Family Zoning Plan is 615,000 units (out of 780,000 legal zoned capacity).

This reveals **a construction rate of 23.7% of the City's reasonably available zoned capacity during this 19-year period, or 1.26% per year.** Applying this rate to the rezoning net capacity increase on non-excluded sites of 615,000 units yields a **predicted construction of 38,800 units during the remaining 5-year period of the RHNA period** (i.e. 1.26%* 5 * 615,000).

Table 3: Rate of Construction				
Year of Study	**Units Constructed**	**Zoned Capacity**	**Rate of Construction - Cumulative**	**Rate of Construction - Annual**
2005 – 2023, 19 years	53,200	218,000	23.7%	1.26%

Entitlement Rate of 1.00% per Year – And alternative version of this method compares the *entitlement* rate to the capacity during this period, for which it is more appropriate to compare this to the full effective zoned capacity during the past period without any exclusions (except for active entitlements to avoid double counting). This is calculated by adding the remaining 2023 zoned capacity of 313,000 units to the 90,000 entitled units from this period, for a total 403,000 units of capacity. ***This yields a total entitlement of 22% of the city's zoned capacity during this time, or 1.00% per year.*** Applying this rate to the net additional capacity added by the rezoning of 780,000 units yields ***a predicted entitlement total of approximately 39,000 units over the remaining 5 years of the current RHNA period*** (i.e. 5 * 1.00% * 780,000).

Entitlement rate could be considered a better barometer of both the suitability and availability of land for development as well as market interest in development in turning zoned capacity into actual housing. This is because actual construction is much more subject to the major swings of the macroeconomy, while entitlements reflect development sponsors' actual intents and commitments to pursue development on available pieces of property that they control. At the time of entitlement, the land is deemed by the developer to be suitable and available for housing and makes financial sense to pursue.

Both of these estimates, 38,800 and 39,000, are greater than the City's minimum overall rezoning target inclusive of the 15% No Net Loss buffer, of 36,200 units. In comparison to Colorado's standard of a zoning capacity buffer for raw legal zoned capacity that is 7.5 times the housing goal, this proposed rezoning here of net 780,000 additional units of raw legal zoning capacity is 21.5 times the goal of 36,200 units.

Method 2: "Soft Sites Method"

Method Used in Housing Element Rezoning Sites Analysis **– Per HCD direction, the primary methodology used to report the capacity on individual sites created by the rezoning is a more conservative version of the same methodology used in the generation of the Sites for Rezoning (Table B) in the Sites Inventory of the HCD-certified Housing Element 2022 Update.** These sites are included in the attached Excel table. This methodology and its assumptions for the Rezoning Program are described in detail in the Sites Inventory and Rezoning Program document pages 41-45.

What the Method Does: In brief, **this methodology identifies sites and accounts for likelihood of development by considering sites primarily based on their degree of underdevelopment relative to proposed zoning after filtering out other rezoned sites from consideration based on certain land use and ownership characteristics.** [9]

The method only counts the capacity from sites that remain after wholly excluding any rezoned sites that meet one of a multiplicity of "exclusion" factors that make them less likely to be redeveloped with new housing construction in the foreseeable future. For example, sites with existing multi-family housing or historic landmarks are excluded. Of the approximately 92,000 parcels proposed for rezoning, over 44,000 have been excluded from the site capacity submittal and are projected with *zero* units of capacity.

Sites that remain after the exclusions are discounted by variable amounts based on whether they currently contain an existing housing unit or do not.

Yield from Sites with 1 or more Residential Units Heavily Discounted - The first filter for likelihood on sites containing existing residential units is to exclude completely all sites containing residential condos or are multi-family buildings most likely to be rental buildings subject to rent control[10]. This smaller universe of rezoned sites that contain residential unit(s) are then reduced further by excluding as unlikely to develop if the ratio of potential units under rezoning to existing units on the sites is less than 5:1.

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[9] This method of estimating realistic zoning capacity was also recommended in a paper published in November 2024 by the UCLA Lewis Center for Regional Policy Studies. That paper, "*CHIPing In: Evaluating the effects of LA's Citywide Housing Incentive Program on neighborhood development potential",* describes (p.13-14) a method nearly identical to that used here, including the site conditions for filtering parcels, to identify sites more likely to develop and that the result of this analysis is "realistic capacity" of the zoning. The paper concludes that this method is both appropriate and sufficient to demonstrate realistic capacity of a rezoning required to meet a RHNA shortfall, such as they evaluated in Los Angeles. The paper authors do not suggest further discounting the results of this calculation, though we do here to add an additional buffer for uncertainty consistent with past discount factors the Planning Department has used when using this method over the past 20 years to estimate the realistic zoned capacity of other rezoning efforts. The paper goes on to distinguish the calculation of "realistic capacity" on a set of reasonably developable sites (ie the standard for RHNA shortfall rezoning) from any uses of modelling that seeks to predict actual housing production, especially using retrospective or historical data and real world exogenous economic and societal conditions outside the control of local government, which may not be conducive to or analogous to conditions needed to produce housing (such as at the volume and pace implied by the RHNA targets).

[10] This universe of buildings are those that contain 4 or more units and were built in 1979 or earlier (and do not contain condos).

Remaining sites that contain existing residential units, (primarily only properties with a single unit zoned to permit five or more units, since most existing multi-family properties are excluded) are heavily discounted by 98%. As a result, only 2% of their capacity is counted given the practical and social inertia that weighs on their potential redevelopment.

Counting Capacity on Non-residential Sites from Only Substantially Underdeveloped Sites as a Proxy for Likelihood – For sites without existing residential uses, and that have not been excluded due to site land uses or official criteria that make them unlikely to be redeveloped[11] the methodology uses level of underdevelopment (in terms of gross square footage) relative to proposed zoning as a proxy for likelihood of development. The analysis only counts capacity on sites currently built out to not more than 30% of the proposed square footage permitted under the rezoning.

To apply further scrutiny to the suitability and availability of sites, HCD staff requested the Planning Department to assess yield expected if projects do not build out to their full zoned capacity. This addresses two considerations: (1) Uncertainty and the fact that some heavily underdeveloped sites, due to unknown conditions or ownership disinterest in housing development, may not be reasonably available, despite the site being objectively underdeveloped and not regulatorily limited. (2) Uncertainty about whether all projects would take advantage of the full capacity available under the Family Zoning Plan's proposed Housing Choice-SF (HC-SF) local zoning program. This flexible zoning program allows greater heights, densities, and specified code relief for projects that adhere to local objective design standards and local inclusionary housing policies.

In response to these considerations, the Department made the following analytical adjustments in the Soft Sites Method. The first was to *further discount by a uniform 30%* the net unit capacity the capacity of all remaining identified non-residential soft sites (note that the residential soft sites were already discounted by 98%). This discount on all non-residential sites is somewhat more conservative than that included in the Housing Element Sites Inventory & Rezoning Program analysis (which counted 100% of the capacity on the non-residential underdeveloped soft sites) in order to more extensively buffer potential capacity in light of the goals of Action 7.1.1.

Second, staff analyzed yield if projects do not take advantage of the proposed Housing Choice-SF (HC-SF) local zoning program that applies throughout the rezoned area. If projects built only their newly allowed base density under the Family Zoning Plan — though without using HC-SF-- approximately 40,000 homes can be expected that are suitable and available for housing in the RHNA period.

The combination of these exclusions, discounts and considerations of underdevelopment as a proxy for likelihood, combined with the 15% buffer added to the RHNA targets creates a true surplus of rezoned capacity relative to the strict minimum RHNA targets required by statute.

Over 48,400 Sites are Suitable & Available for Housing in the RHNA Period, Yielding 64,000 units of reasonable zoned capacity - The result of this rezoning site inventory capacity analysis is that, of the over 92,000 sites proposed for rezoning, approximately 48,400 sites are identified as suitable and available and

[11] Including parcels already entitled for development, parcels owned by government agencies, major college campuses, hospitals, parcels with formally listed historic properties on local, state and national registers, and parcels used as ROWs or other similar restrictions.

contributing a non-zero number of unit capacity, with a total estimated capacity of approximately 64,200 units.

This number of units, 64,700, satisfies the City's RHNA shortfall plus buffer (~36,000). This also satisfies the RHNA shortfall without the buffer; a shortfall of 23,972 homes.

Table 4: Soft Sites Analysis Capacity		
Total Sites Rezoned	**Sites Suitable & Available for Housing in RHNA Period**	**Units**
92,000	48,400	64,700
Lower-Income Units:	33,800	
Moderate & Above Moderate Income:	30,900	

Sites are Allocated by Income Group - These sites are allocated accordingly to RHNA income categories, with sites accounting for approximately **33,800 units to Lower Income units** and sites accounting for **30,900 units to Moderate and Above Moderate units**. All sites in the rezoning area meet the required minimum density of 30 units per acre. The Lower Income units are allocated to sites with a capacity of 16 to 250 units, which is the most economically and programmatically efficient range for delivery of publicly-subsidized 100% affordable housing. The remaining sites are split 50/50 between Moderate and Above-Moderate units.

This Soft Sites methodology is not a prediction of how many units will be produced or constructed during the specific RHNA period that lasts through 2031. It is a measure of the reasonable capacity for units on suitable and available sites based on the proposed zoning relative to current site characteristics that affect the likelihood of development. The actual entitlement of and production of housing development is very substantially subject to macroeconomic factors and other limiting conditions (e.g. availability of construction labor in the region) as well as other funding conditions (e.g. level of government subsidy available to build lower income housing). The other analytical methods presented here seek to use past entitlement and production trends to benchmark potential future production.

Method 3: "Financial Feasibility Method"

The Planning Department engaged with the modelling consultancy Urban Sim to create an interactive citywide model for use by Department staff. The model estimates zoned capacity on each parcel using an array of detailed zoning parameters and then employs a financial feasibility model to simulate which parcels would have financially feasible housing developments on them (and how many units are feasible). The feasibility model runs multiple detailed real estate *pro formas* on each parcel for a range of permitted building scales, using variable financial inputs provided by the user as well as real world data on individual parcels. The model can only run on the entire city (as opposed to subsets of the city, such as just the rezoning area). So, by comparing the model outputs of the number of feasible units citywide under existing zoning and comparing it to output with the rezoning added, we can see how many net additional

units the model says will become feasible (under that particular economic set of assumptions) as a result of the rezoning.

Not surprisingly, the model outputs are highly sensitive to core economic assumptions. While changing zoning to allow taller and denser buildings typically increases the number of feasible units, under challenging economic conditions upzoning alone is insufficient to lead to housing development. Using today's challenging economic conditions as a baseline reveals limited feasibility of housing production. Urban Sim reveals, just like economist and industry leaders acknowledge, that broader macroeconomic changes are needed to see housing development at scale.

Given that the present baseline economic environment is not conducive to significant housing construction, nor similar to more "normal" economic conditions in San Francisco when housing production has been feasible and active, and that changes to the current conditions are a necessary precondition for development to occur, the Planning Department tested the feasibility outcomes for the rezoning under a reasonable set of slightly more favorable economic conditions (though not overly optimistic return to conditions of the mid 2010s). These assumptions include, compared to the baseline conditions of 2023, a slight reduction in construction costs (-8%), a modest increase (+15%) in rents and sales prices, a reduction in interest rates from 7.5% to 5.5%, and slight reductions in developer return expectations of Return on Cost (- 0.25% to 5.0%) for rental projects and Profit Margin (-2% to 18%) for for-sale projects.[12]

It is important to understand that feasibility models such as this (or others that rely on conventional pro forma financial indicators, such as residual land value) are only modelling housing market-driven construction whose finances are determined by conventional market actors using such pro forma anlayses. **Urban Sim is *not* modelling housing built with government subsidy**, which is primarily how housing projects for Lower Income households are financed. As such, the outputs of any model that directly considers feasibility using a conventional pro forma analysis (such as Urban Sim) should only be used to compare against targets or metrics for the type of housing typically produced by the market, which in the context of RHNA is Moderate and Above Moderate income housing.

Under the existing zoning, Urban Sim's output for the total number of feasible units citywide would be about 45,300 units. Under the proposed rezoning (i.e. Family Zoning Plan), Urban Sim returned a result of 262,250 feasible units citywide, for a net increase of approximately 217,000 feasible units resulting from the rezoning.

Because not all financially feasible projects are likely to be pursued, the Planning Department pursued further analysis and refinement of these model outputs. First, similar to the primary Sites Inventory methodology, the Department considered sites without existing residential uses on them separately from those that do. Broken down this way, the rezoning would add net 44,200 feasible units on sites that do not currently have housing and 172,700 units on sites that currently contain residential units (i.e. on

[12] Recent press (including this and this) has suggested that San Francisco may be very recently experiencing a significant change in some of the prevailing housing financial metrics that were not present or apparent when this analysis was run, including a significant rise in housing rental prices and low availability. This suggests that rental price rises of greater than 15% modelled are very possible. As noted, feasibility results are very sensitive to such changes of key metrics. An additional 10% rise in rents (to a total of +25% from "baseline" conditions) shows *at least* a 26K unit (+10%) increase in citywide feasible units from the results at +15% rents.

residential sites not otherwise excluded from the model calculation due to regulatory limitations, leaving generally only sites with a single individual unit, such as a single family residence).

Since not every financially feasible project will be pursued, this analysis further discounts these results based on these two different categories of existing uses. For sites that currently contain residential uses, we only count 2% of feasible projects as likely to be pursued during this time, resulting in 3,500 units on these sites.

For sites that do not currently contain residential uses, we assume that 35% of feasible projects will be pursued, or 15,500 units on these sites. Due to unforeseeable considerations, the Planning Department typically assumes that approximately 30% of feasible or suitable non-residential sites will not be pursued for new development, including for either market-driven or subsidized housing. Since half of the RHNA target is for subsidized and not market-driven housing, half of the remaining total (70%) would be approximately 35% of the total feasible sites.

The combined total of these two categories is 19,000 feasible units. Compared to the rezoning target (inclusive of the 15% additional buffer) of approximately 16,000 units for the two categories of housing conceivably generated by pro-forma driven-production – Moderate and Above Moderate – this analysis shows that the proposed rezoning is more than sufficient to provide suitable and available capacity for the minimum required targets.

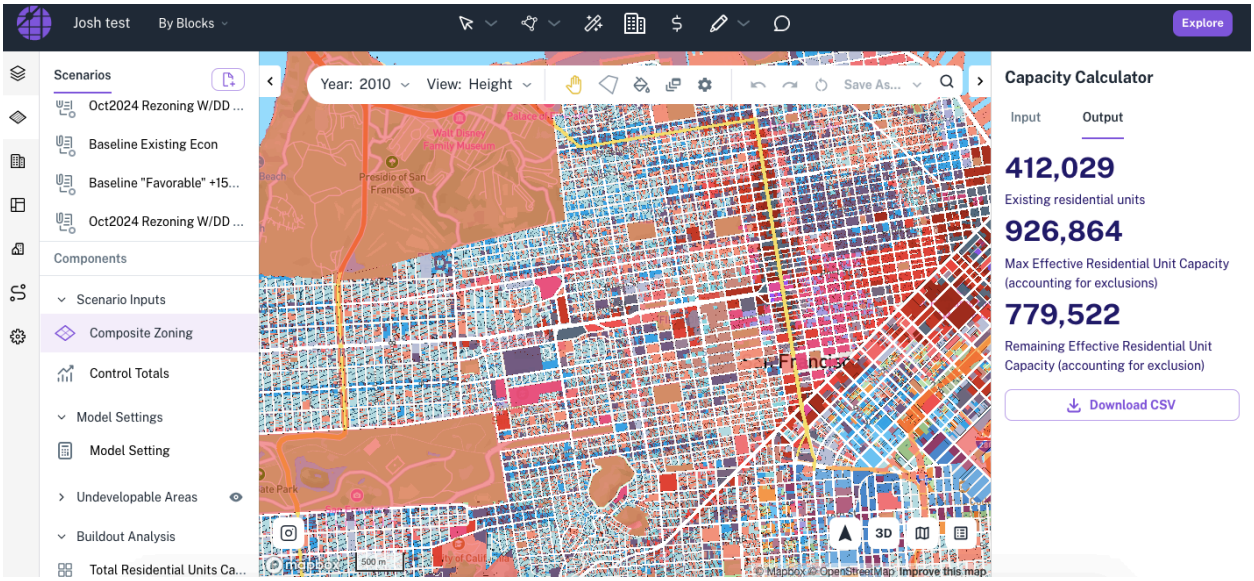


Figure 3: Screen capture from Urban Sim showing capacity calculations.

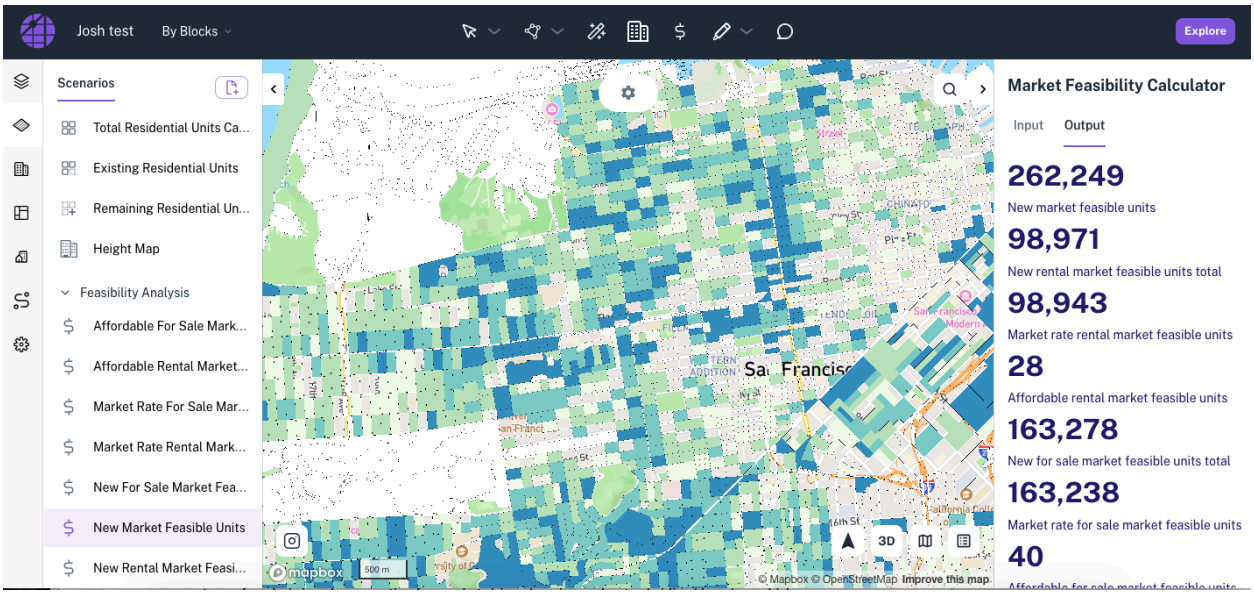


Figure 4: Screen shot of Urban Sim showing Market Feasibility Calculator.

Additional Rezoning Activities

In addition to the Family Zoning Plan, which constitutes the primary rezoning to meet the RHNA Sites Shortfall, the City has adopted at least two significant zoning changes since the adoption of the Housing Element that the City will include in its final submittal and include in the Sites for Rezoning. Neither of these are located in the High Opportunity areas and so are not within the primary areas that the Housing Element identifies for rezoning and to meet AFFH requirements. Nonetheless these increase the capacity for units across the income spectrum and also fulfill Housing Element recommended actions. These parcels are not yet included in the attached Table, but are described here preliminarily, which **would add at least 2,000 units of rezoning-related additional capacity to the estimates generated by the methodologies above**, as follows:

Central SoMa Zoning Changes

Mayor Lurie signed Ordinance No. 42-25 on April 3, 2025 to enact zoning changes that would allow additional housing in the Central SoMa Plan area by lifting zoning requirements for certain large sites to include a certain amount of non-residential development. The result is that several very large sites, most of which were entitled for primarily office development that is yet unbuilt, can re-submit applications and pursue projects that are 100% residential.

At least one project sponsor, at 88 Bluxome, has submitted a new application for a 100% housing project in place of its prior entitled housing project, with approximately 1,500 housing units. In addition to this capacity enabled by the zoning change, the Planning Department expects additional housing on one or more large sites during the RHNA period enabled by the zoning change, and will add these sites and their capacity to the final Table of rezoned sites.

Downtown Office to Residential Conversion Zoning Program

The City passed zoning legislation in July 2023 to reduce the regulatory barriers to make it easier to convert underutilized office buildings into housing. The Commercial to Residential Adaptive Reuse Program is contained in Planning Code Section 210.5 and provides for a slew of zoning waivers and modifications for conversion of non-residential buildings in the greater downtown area to housing.

To supplement these zoning program and as part of ongoing efforts to improve the feasibility of adaptive reuse projects, San Francisco voters approved Measure C on the March 2024 ballot. The City's transfer tax is now waived on the first transfer of a property after a conversion from commercial to residential use. In March 2025, the City passed legislation which waives the inclusionary housing requirement and impact fees for eligible adaptive reuse projects.

The Planning Department is still calculating the projected capacity during the RHNA period enabled by this zoning legislation. We expect to **submit sites with capacity for approximately 500-1,000 units enabled by the conversion legislation.**

Family Zoning Plan: Economic Impact Report

Office of the Controller
Office of Economic Analysis

Items 250700 & 250701
October 29, 2025

Introduction

- Two proposed ordinances would change zoning controls to permit more housing on a large segment of San Francisco, particularly on the western half of the city. They implement changes to the Housing Element of the City's General Plan, a planning document whose revisions were adopted in 2023.
- The Ordinance in file #250700, the Zoning Map Amendment, would generally raise allowable building heights along commercial corridors and transit lines, to permit mid-rise and some high-rise development.
- The Ordinance in file #250701 implements the Housing Choice-San Francisco program, which offers an alternative to the State Density Bonus program.
- The Office of Economic Analysis (OEA) has prepared this report because the proposed legislation may have a material impact on the city's economy. This report uses a model that estimates potential new development, in order to assess economic impact. That model is not a replacement for the City's estimates of realistic capacity under Government Code § 65583.2.

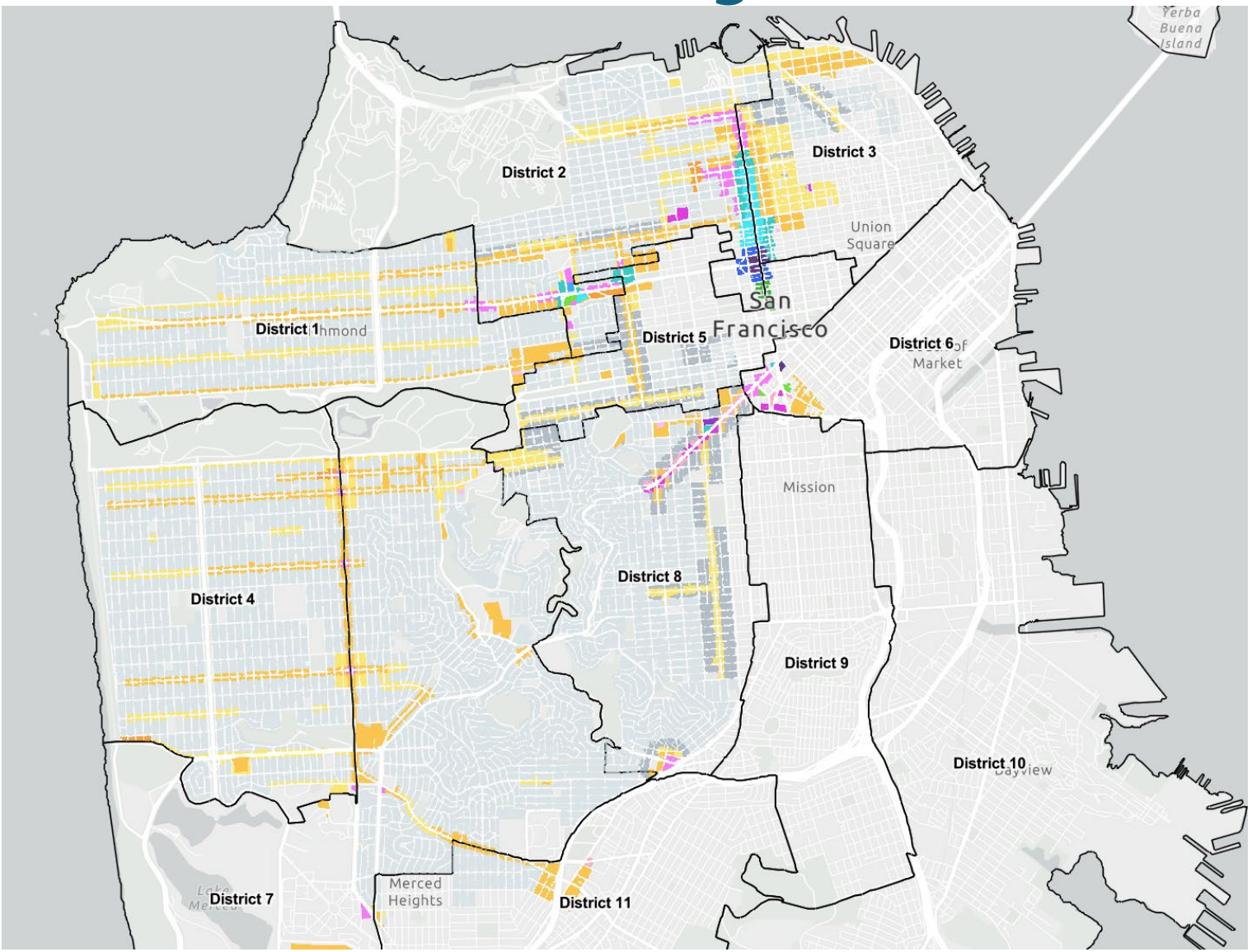
Zoning Map Amendment: Key Provisions

- The Zoning Map Amendment would make changes to allowable building heights and bulk, and/or zoning districts, in over 92,000 parcels in the city.
- The vast majority are residential parcels, whose allowable heights would either remain at 40 feet, or rise to 50 or 65 feet.
- On these and many other rezoned parcels, the Housing Choice San Francisco program (described on the next page) relaxes existing controls on the number of housing units allowed on a parcel.
- Allowable heights are generally increased to 65 to 85 feet along many commercial corridors, with development along wider streets near transit stations or major lines increased to 85 feet.
- Heights above 140 feet are allowed on certain streets that currently allow high-rise development or have larger parcels, at key intersections, and near certain major transit routes and stations. The map on page 5 provides additional details.

Housing Choice San Francisco – Key Provisions

- The Housing Choice San Francisco program, or “Local Program”, gives developers an alternative to the State Density Bonus.
- Many of the rezoned residential parcels are too small to be eligible for the State Density Bonus, but may achieve greater density through the use of the Local Program.
- Local Program users also gain benefits associated with housing unit mix, methods of complying with inclusionary housing requirements, rear-yard and setback requirements, broad code flexibility, and certain process changes.
- The ordinance has several other provisions, including limiting the maximum size of new residential units, reducing allowable parking, and restricting new curb cuts. These policy changes are not considered in this report.
- Additionally, the proposed ordinance gives displaced businesses the right to relocate anywhere in the city where their activity is permitted by zoning, without a conditional use permit, and waives development impact fees associated with the relocation.

Details of the Rezoning



The map to the left, from the City Planning department, indicates which parcels in the city will be rezoned, and to which heights. It reflects the plan as of July.

Gray parcels will be zoned for low-rise, 40-50 feet housing developments. This includes single-family residential zones, within which greater density will be permitted via the Local Program.

Yellow and orange parcels will be upzoned to mid-rise development of 65-105 feet.

Pink and purple parcels will have height limits ranging from 120-180 feet, and the blue and green parcels will be upzoned for high-rise development, of 240 feet or greater.

The Rezoning and the Regional Housing Needs Assessment

- Each jurisdiction in California is required to have its Housing Element be certified by the State's Housing and Community Development Department.
- Certification involves, among other things, ensuring that the City has the zoning capacity to meet the city's obligations under the State's Regional Housing Needs Assessment (RHNA).
- RHNA is a Statewide planning process, in which future needs are forecasted for metropolitan areas, and then allocated to the individual cities and counties that administer land use planning.
- In San Francisco's case, the RHNA obligation requires the City to have realistic capacity for approximately 82,000 new housing units, at different economic levels, within an 8-year planning period ending in 2031.
- Of this 82,000 unit requirement, the City must create capacity for approximately 36,000 units.

Substitutions and Proposed Amendments

- On September 30, a new version of #250700 was substituted by Mayor Lurie, which made relatively minor zoning changes on a number of parcels. This analysis reflects those changes.
- On October 21, Supervisor Melgar proposed an amendment that would prohibit the use of the Local Program on any parcel containing more then two existing housing units, which would involve the demolition of a unit subject to rent control.
- Also on October 21, Supervisor Sauter introduced an amendment that creates incentives for developers to replace lost commercial space.
- As the language of these two amendments was made public less than one week ago, this report does not attempt to model their economic impact.

Economic Impact Factors

- When the City relaxes zoning controls, by reducing density restrictions or increasing allowable heights, more development projects will become financially feasible, and the supply of housing in the city will rise.
- This increased supply will put downward pressure on housing prices in the city. Cheaper housing benefits city residents who move within the city, and also makes San Francisco more affordable for new arrivals.
- The development of new housing also stimulates investment and employment in construction and related industries.
- The population growth associated with new housing also stimulates the local economy, by expanding the numbers of workers and consumers.
- On the other hand, the limited amount of vacant lots in the city means that new housing generally involves the loss of existing buildings, including both residential and commercial properties. This can impose relocation and other costs on residential and commercial tenants.

Estimating the Likelihood of New Housing Development

- The amount of new housing that the rezoning will produce is an important contributor to its economic impact. To estimate this, OEA refined a statistical model that it has used since 2016 to estimate the impact of policy changes on housing production in the city[1].
- The model was the result of statistical analysis of housing production in San Francisco over the 2004-2024 period. Technical details on the model are provided in the Appendix.
- The first part of the model estimates the likelihood that multifamily housing will be developed on a given parcel, in a given year. The statistical analysis found that a parcel is more likely to develop when:
  - it has smaller existing buildings (or is vacant), and is located closer to downtown.
  - its zoning allows for a greater height, makes it eligible for the State Density Bonus, and does not restrict the number of units that may be constructed.
  - housing prices are relatively high, and construction costs are relatively low, compared to other years.

Estimating the Number of Units Produced

- The second part of the model estimates the number of units that will be produced when a parcel does develop housing. Based on past experience, the statistical analysis found that a parcel developing housing will produce more units when:
  - its land area and allowable maximum height are greater;
  - it is eligible for the State Density Bonus;
  - its zoning does not restrict the number of units that may be built.
- The OEA used the first part of the model to estimate the probability that housing will be built on a parcel over the next twenty years[2]. That probability was multiplied by the estimate of housing units from the second part, to create an expected number of housing units generated for each parcel over twenty years. When this is summed across all parcels, a citywide housing total is generated.
- This method was used to create estimates of housing production under the existing zoning, and the proposed rezoning. The difference is the estimate of housing that could be produced as a result of the proposed zoning changes.

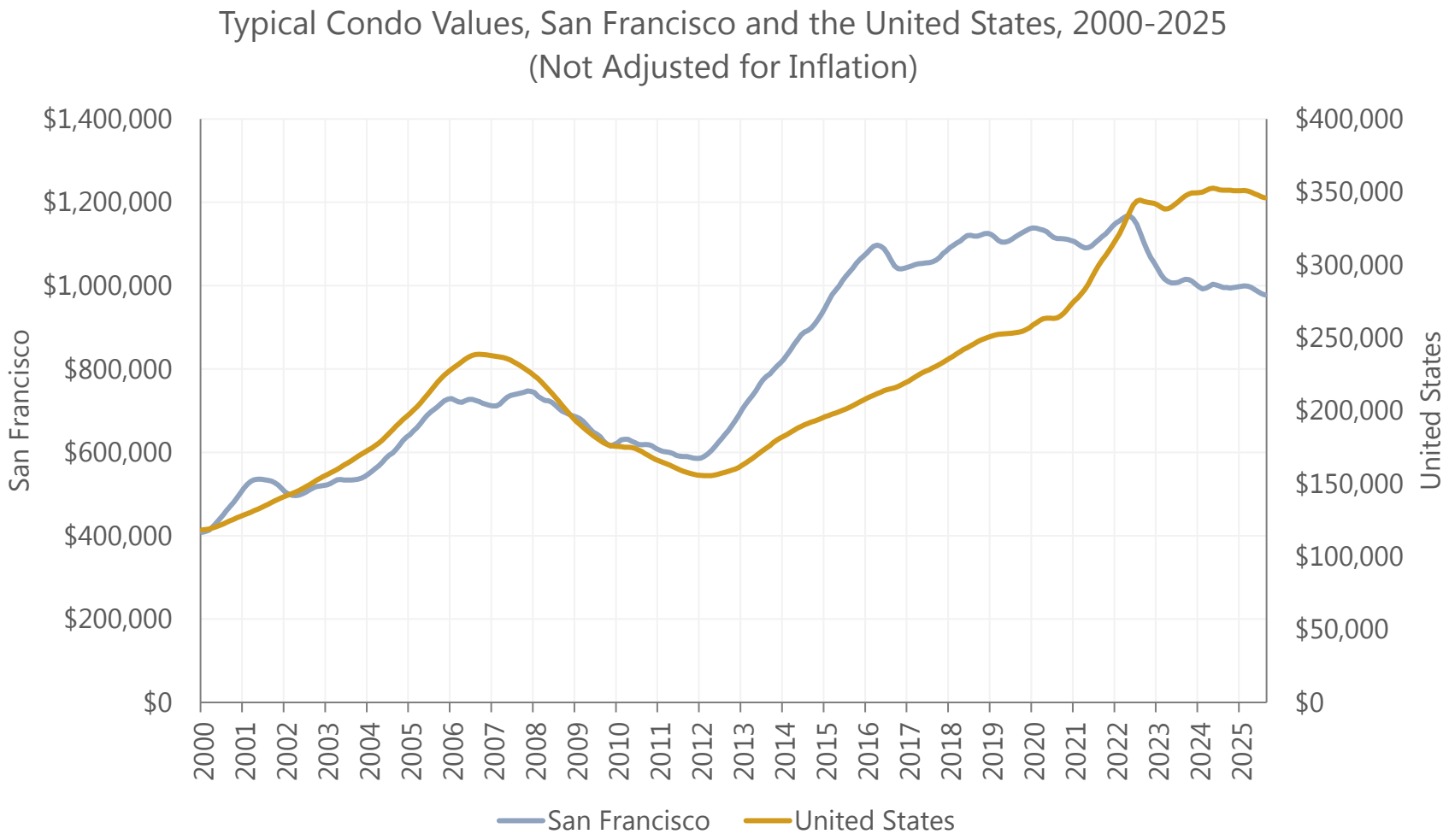
Limitations of the Housing Development Model

- The housing development model can forecast future housing development based on the city's past experience, but important caveats must be made.
- Because of data availability, not every factor that affects housing production could be included. Missing data may include features of the parcel itself, or policies that may have changed over the 2004-24 period, or vary within the aggregated zoning designations used by the model.
- Limited data also prevents the analysis of fine-grained policy changes in the proposed rezoning, such as restrictions on unit size and mix.
- Several new City and State policies that were intended to encourage housing production have been enacted in recent years, such as, for example, the City's 2023 Housing Production Ordinance (0248-23). The model may be unable to properly assess the impact of these policies in the future.
- Despite these limitations, the OEA believes this approach is well-suited to estimating housing production, for the purposes of economic impact reporting.

Future Housing Market Scenarios

- As noted earlier, the amount of housing that will be produced as a result of the rezoning, and its economic impact, will depend on future housing market conditions. This creates an additional level of uncertainty in the forecasts.
- Gauging future market conditions is further complicated by changes in the city's housing market since the COVID-19 pandemic, as described on the next page.
- To understand the scope of what could potentially happen, the OEA created two future scenarios for housing prices and costs in San Francisco.
- In a high-growth scenario, San Francisco's housing prices, relative to the U.S., return to pre-COVID levels by 2030, and grow at the city's pre-COVID rate after that. Construction costs are assumed to grow at the same rate as inflation.
- In a low-growth scenario, San Francisco's post-COVID relative housing prices are assumed to represent a "new normal," and housing prices are assumed to grow only at a national average level over the next twenty years. Construction costs are also assumed to grow at the same rate as inflation.

San Francisco and U.S. Housing Price Trends Since 2000



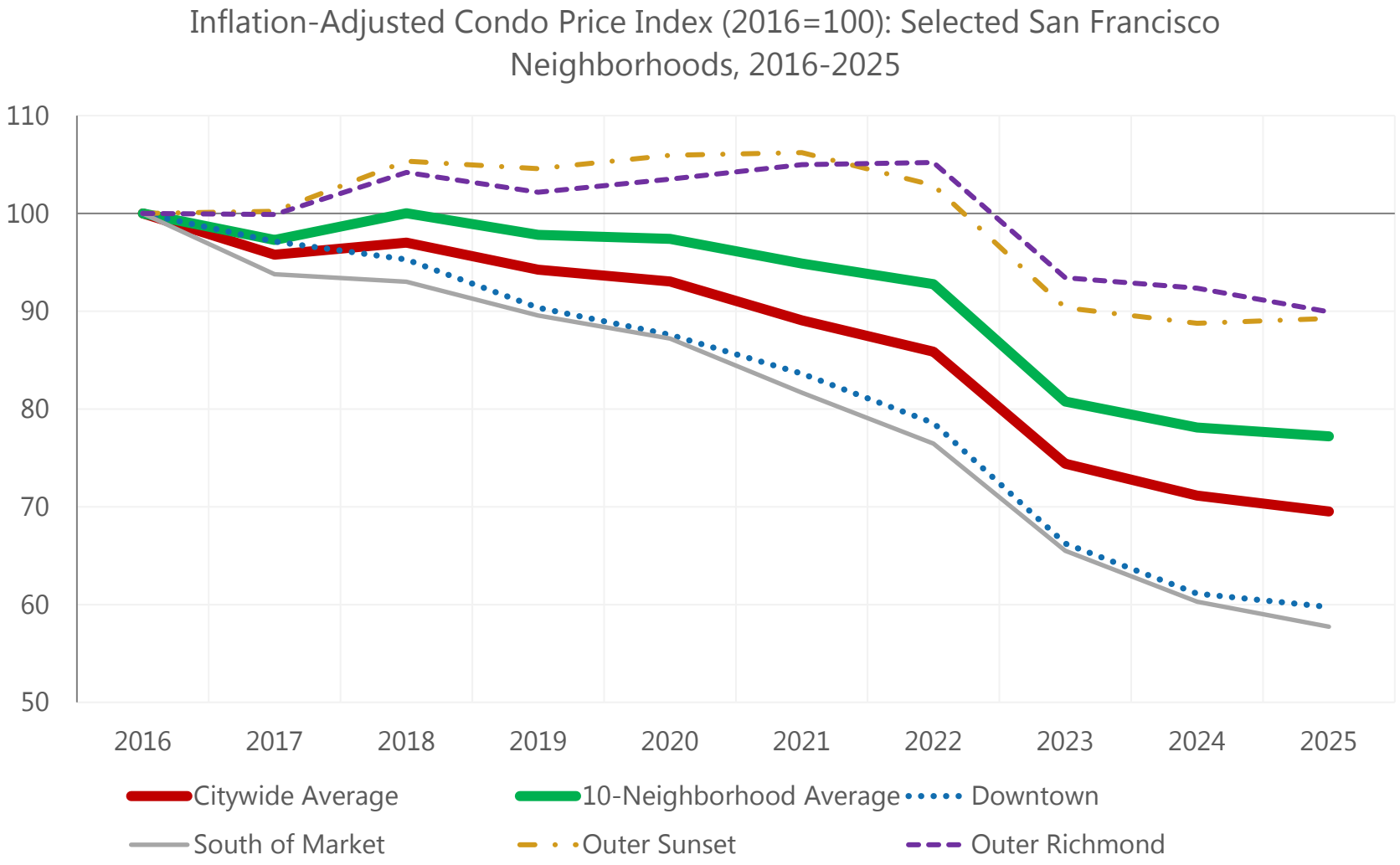
While San Francisco's housing has always been expensive, during the 2010s, average San Francisco condo prices rose much faster than the rest of the U.S., to as much as 5 times the typical U.S. price.

Since 2020, however, San Francisco condo prices have declined, despite rising inflation and rising U.S. condo prices. Adjusted for inflation, typical San Francisco condo prices in 2025 are 25% lower than they were in 2019.

Among other factors, the increase in remote office work during COVID has reduced the value of a residence near large office employment centers like downtown San Francisco.

Source: Zillow. Data retrieved October 1, 2025.

Housing Price Trends Within the City



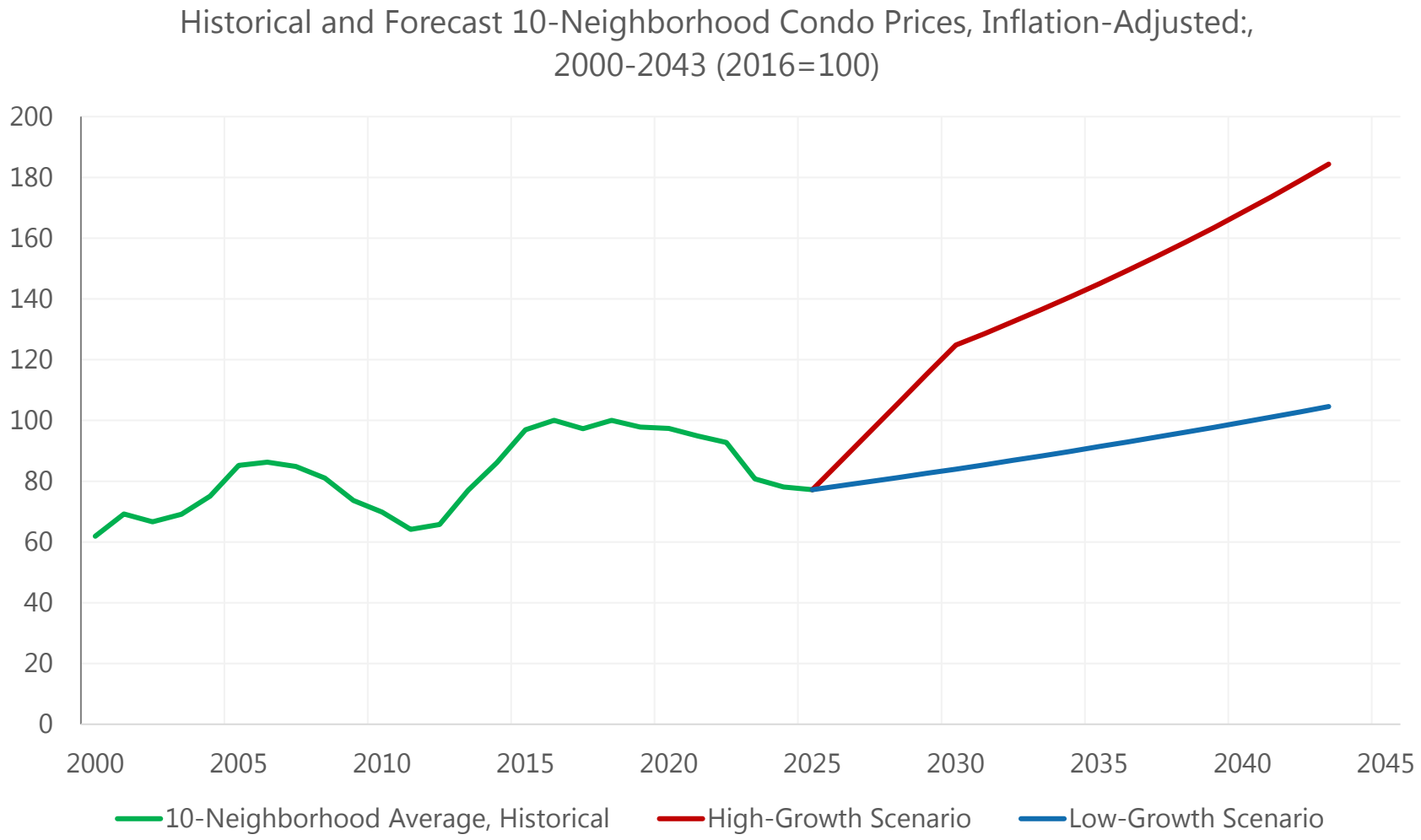
Source: Zillow. Data retrieved October 1, 2025.

The reduced value of a downtown location has also shifted multifamily price patterns within the city.

Condos in neighborhoods like Downtown and South of Market have experienced inflation-adjusted price drops of more than 40% since 2016, while the Richmond and Sunset have fallen by far less.

Because most multifamily housing in the city is near downtown, but most of the proposed rezoning is not, the use of a citywide average condo price index is inappropriate. This analysis uses an average price across the 10 Zillow neighborhoods most affected by the zoning, which is somewhat higher than the citywide average.

High and Low Growth Scenario Price Forecasts

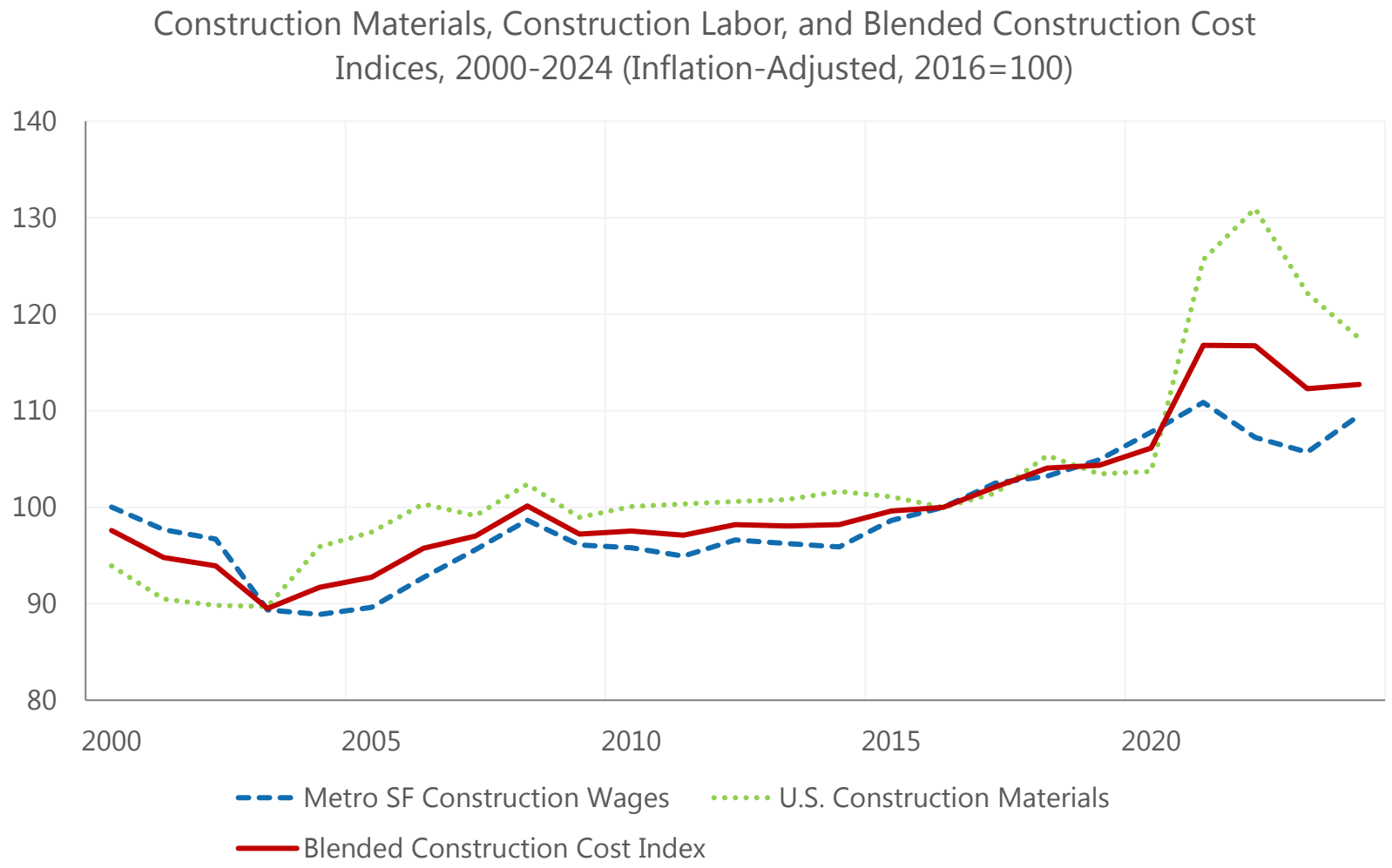


Our high-growth scenario assumes that San Francisco's housing prices, relative to the U.S., return to pre-pandemic levels by 2030, and then grow at the city's long-term average rate until 2045. This implies a rapid growth in housing prices over the next five years, of over 10% per year.

In the low-growth scenario, the post-COVID housing market represents a new normal, and San Francisco housing prices are assumed to grow only at the U.S. long-term rate at 1.8% per year, in inflation-adjusted dollars. Under this assumption, San Franciso housing prices would not recover to their pre-COVID peak, in inflation-adjusted dollars, until 2041.

Source: Zillow. 10 Neighborhoods are Buena Vista, Polk Gulch, Inner Sunset, Marina, Mission, North Waterfront, Outer Sunset, Outer Richmond, Inner Richmond, and Western Addition.

Construction Cost Trends and Scenarios



Source: Bureau of Economic Analysis; U.S. Census Bureau, "Quarterly Workforce Indicators

The housing development model uses two measures of construction costs: materials cost and local construction industry wages. They are blended into a single index for modeling purposes. Details are in the Appendix.

The cost of construction materials and local wages have grown faster than overall inflation, particularly in the last few years. In 2024, real construction materials costs were 18% higher, and real local wages were 10% higher, than they were in 2016.

In both the high-growth and low-growth scenarios, the blended index is assumed to grow at 0% (after inflation) over the 2026-2045 period. This reflects an assumption that both labor and material costs inflation will revert to the broader rate of inflation in the long term.

Housing Production Forecasts Under Current Zoning

Planning District	Historic, 2000-24	Low-Growth Scenario Forecast, 2026-45	High-Growth Scenario Forecast, 2026-45
Buena Vista	975	43	90
Central	72	192	390
Downtown	289	112	230
Ingleside	0	58	120
Inner Sunset	123	28	59
Marina	131	126	263
Mission	187	197	406
Northeast	449	136	283
Outer Sunset	15	16	33
Richmond	0	23	47
South Central	0	6	11
Western Addition	997	658	1,265
Total	3,238	1,594	3,199

Generally, the housing development model forecasts that the current zoning will produce fewer units in the next 20 years than the numbers of units that were produced in the last 20 years.

The table to the left only covers the portion of each planning district that is in the proposed rezoning area. In total, under the current zoning, the model forecasts 1,594 or 3,199 units under the low- and high-growth forecasts, respectively, while 3,238 units were built in the same areas over the 2000-2024 period.

On the next two pages, the model's forecasts of the additional housing created by the proposed zoning is discussed.

Source: For historic housing production, San Francisco Planning Department

Forecast Net Effect of the Zoning

- As shown in the table below, under the low-growth and high-growth scenarios described earlier, the rezoning would lead to 8,504 and 14,646 additional housing units, beyond what would be produced under current zoning, over the next 20 years.

Low Growth Scenario	**Units**
20-Year Housing Production, Existing Zoning	1,594
20-Year Housing Production, Proposed Rezoning	10,098
Effect of Proposed Rezoning	8,504

High Growth Scenario	**Units**
20-Year Housing Production, Existing Zoning	3,199
20-Year Housing Production, Proposed Rezoning	17,845
Effect of Proposed Rezoning	14,646

Summary by Current Zoning District

		Low-Growth			High-Growth		
Current Zoning[3]	Number of Parcels	Average Housing Likelihood, Current	Average Housing Likelihood, Proposed	Change in Housing Units	Average Housing Likelihood, Current	Average Housing Likelihood, Proposed	Change in Housing Units
RH1	43,009	0.001%	0.205%	798	0.003%	0.446%	1,731
RH2	26,486	0.002%	0.259%	576	0.005%	0.565%	1,250
RH3_RM1	13,741	0.009%	0.347%	547	0.018%	0.756%	1,186
Office/Commercial	114	0.570%	0.780%	48	1.185%	1.639%	104
Public	239	0.060%	1.450%	3,483	0.122%	2.560%	4,814
Density-Restricted Multifamily	7,079	0.336%	0.490%	3,007	0.674%	1.026%	5,467
Form-Based Multifamily	2,053	0.725%	0.725%	46	1.502%	1.502%	94
Total	92,721			8,504			14,646

The table to the left breaks out the results by current zoning. It illustrates how many rezoned parcels are in the RH-1, RH-2, and RH-3 or RM-1 residential zones, primarily in the western side of the city. These areas will see a substantial increase in the likelihood of developing housing over the next 20 years, but the chances are still small, so those 83,000+ parcels are only forecast to produce about additional 4,200 housing units by 2045, in the high growth scenario.

Fewer Public parcels (generally owned by the City or SFUSD) are larger, and more likely to develop housing through the rezoning, though this depends on the owner's decisions.

Estimating the Loss of Existing Residential Units

- To evaluate the economic impact, OEA calculated the net increase in housing units.
- In the low-growth scenario, 463 more units would be lost under the proposed zoning than under current zoning, over the 20-year forecast period. In the high-growth scenario, 1,031 more housing units would be lost. These losses represent a 6-8% of the housing units gained as a result of the rezoning. Amendments proposed on October 20th may reduce these losses, along with overall housing production.
- The loss of existing housing slightly dampens the housing price reductions associated with the rezoning, and may impose financial harms on existing tenants. City and State law heavily restricts, but does not prohibit, the eviction of tenants for the purpose of demolition, or the demolition of rent-controlled housing. These events have been quite rare in recent decades. If this occurs, tenants are entitled to relocation payments.
- Without any way to meaningfully estimate the number of evictions or demolitions of rent-controlled units, or the financial impact on tenants, this report does not attempt to quantify these potential costs.

Impacts on Housing Prices

- The responsiveness of housing prices to increases in housing supply is a function of price elasticities of supply and demand, which the OEA has estimated in past research[4].
- The elasticities imply that the proposed rezoning would lead to a -2.5% to -4.2% change in housing prices in the city, depending on the scenario. For context, those percentages are also expressed in terms of current housing prices and apartment rents.

	Low Growth Scenario	**High Growth Scenario**
Net Change in Housing Supply (units produced less demolitions)	8,041	13,615
Percentage Change in Housing Supply[5]	2.0%	3.4%
Price Elasticity of Demand	-0.7	-0.7
Price Elasticity of Supply	0.1	0.1
Percent change in housing prices	-2.5%	-4.2%
Corresponding change in condo prices[6]	-$24,500	-$41,600
Corresponding change in annual apartment market rents[7]	-$903	-$1,529

Estimating Relocation and Disruption Costs

- To account for the impact on commercial businesses, OEA estimated potential displacement costs. Details are provided in the Appendix.
- Displaced businesses are estimated to occupy commercial space ranging from approximately 1.5 to 2.6 million square feet, depending on the scenario. This displacement would occur over twenty years, and it is highly likely that the rezoning would lead to an increase in the amount of commercial space in the city.
- Annual business disruption and relocation costs range from $16 to $28 million, in today's dollars.

	Low Growth	High Growth
Loss of occupied commercial space (million sf)	1.5	2.6
Disruption-relocation cost/sf	$190	$190
Annual disruption/relocation cost (2025 $ million)	$16	$28

REMI Economic Impact Simulation

- Based on the economic impact factors described earlier, the OEA used the REMI model to measure the net economic impact of the changes associated with the high and low growth scenarios to the city's economy over the 2026-2045 period:
  - An increase in the city's residential capital stock of $8.0 billion (low growth) to $13.5 billion (high growth) in today's dollars, representing the investment associated with the new units forecast under the two scenarios. These figures are calculated by multiplying the net increase in units by average prices.
  - A reduction in citywide housing prices, reaching 2.5% (low growth) and 4.2% (high growth) by 2045.
  - Annual business disruption and relocation costs for retail businesses of $16 million (low growth) and $28 million (high growth) in today's dollars, until 2045.

Economic Impact Assessment

- In the low-growth scenario, the city's GDP would be $560 million larger, in today's dollars, on average over the 2026-45 period. Total employment in the city would be approximately 3,000 more than under the current zoning, on average over the period.
- In the high-growth scenario, the city's GDP growth would be $940 million larger than under current zoning, in 2025 dollars. Employment would be about 5,000 higher.
- Employment gains are expected in every sector, but would be most heavily concentrated in the construction, health care, real estate, and accommodations and food services sectors.
- Despite the displacement of businesses, retail trade is forecast to grow as a result of the population and economic growth created by the proposed rezoning, adding about 210 jobs in the low-growth scenario and about 350 jobs in the high-growth scenario.
- Like most major policies, the proposed rezoning involves benefits and costs. Our analysis suggests the proposed rezoning's positive impact on the city's economy, from lower housing prices and construction, outweighs the negative impact from displaced businesses, by a factor of approximately 22:1.

Conclusions

- The context for housing development in San Francisco has changed profoundly in the past several years. Since 2019, after adjusting for inflation, condo prices in San Francisco have dropped by 25%, while our blended construction cost index has risen by 8%.
- Given this starting point, an expansive rezoning effort, like the proposed Family Zoning plan, will be challenged to match the 2010s levels of new housing development in the city, even under an optimistic high-growth scenario.
- Nevertheless, under both scenarios considered in this report, the proposed rezoning would lead to a significant increase in the city's housing supply, and have broadly positive effects on housing prices and the city's broader economy. The benefits of new residential investments and lower housing prices are projected to outweigh the costs of business interruption and displacement by a factor of roughly 22:1.
- If market conditions were such that the 36,000 unit target was achieved, as a result of the rezoning, the economic impact on the city would likely be significantly more positive than the estimates in this report.

Footnotes

1. See, for example, Inclusionary Housing Working Group: Preliminary Report September 2016.
2. Three large parcels were excluded from the analysis: Laguna Honda Hospital, and the USF Main and Lone Mountain campuses. While all three parcels receive height increases in the proposed rezoning, their size and unique uses makes them unsuitable for the model. If the model could accurately estimate the amount of housing likely to occur on those parcels, the total housing estimate reported in this report would be larger.
3. These are the aggregate zoning classifications used by the model. See the Appendix for details.
4. See Potential Effects of Limiting Market-Rate Housing in the Mission.
5. Assuming 406,000 housing units in the city.
6. Based on Zillow's 2025 average condo prices for San Francisco.
7. Based on 2025 average apartment asking rents, from ApartmentList.

Appendix

- Housing Development Model
  - Methodology
  - Data sources
  - Model coefficients and performance
  - Scenario Inputs
  - Zoning District Classification
  - Logic of Applying the Model to the Proposed Rezoning
- Estimates of Business Interruption and Relocation Costs

Appendix: Housing Development Model: Methodology

- The housing development model is a two-stage step model. The first stage is a logistic regression, covering every parcel in the city, except those subject to a development agreement, over the 2004-2024 period.
- The dependent variable of the logistic regression is 1 if the parcel produced housing in a given year, and 0 otherwise. Parcels that produce housing in a given year were removed from the dataset for subsequent years. Independent variables, reflecting existing land use, market conditions, and zoning, are listed on the next page.
- The second stage is a regression model including all parcels that produced multifamily housing with more than 10 units, over the 2004-24 period. The dependent variable is the number of units produced on the parcel, and the independent variables are the parcel's "building envelope" (its area multiplied by its allowable height), and two interaction variables: the building envelope times a dummy indicating if the parcel was eligible for the State Density Bonus in that year, and the building envelope times a dummy indicating if the parcel was subject to density-restricted zoning in that year. The intercept of the model was fixed at zero.

Appendix: Housing Development Model: Methodology

- The models' coefficients were used in a forecast that calculated the log-likelihood of development for each rezoned parcel, in each of the forecast years 2026-2045, using the site and zoning information, and the price and cost assumptions for each year (shown on the next page). The log-likelihoods were converted into annual probabilities, from which a 20-year probability of development was calculated.
- The model coefficients were also used to calculate a units estimate; the 20-year probability times the units estimate is the expected number of units produced on that parcel in the 20-year forecast period.
- The forecast model was run for both the current and the proposed zoning. See the section "Logic of Applying the Model to the Proposed Rezoning" for more details.
- Three parcels were excluded from the forecast: Laguna Honda Hospital, the University of San Francisco Main Campus, and the University of San Francisco Lone Mountain Campus. While some housing may be built on those parcels in the forecast period, the model is not well-suited for large parcels with unique uses like these.

Appendix: Housing Development Model: Data Sources

Variable Description	Variable	Data Source
Height limit for site in ft	Height_Ft	Planning Department, Zoning Districts
Area for lot in 1000 sq ft	Area_1000	Planning Department, Land Use Database 4/16/25
Extisting building square footage in 1000 sq ft	Bldg_SqFt_1000	Planning Department, Land Use Database 4/16/25
Residential Existing Use using ResUnits (Dummy)	Res_Dummy	Planning Department, Land Use Database 4/16/25
Historic Status for Parcel (Dummy)	Historic	Planning Department, Land Use Database 4/16/25
Real Construction Cost Variable, 2 years prior	Construc_Cost_Real	a 60/40 average of Real Construction Materials PPI and Real San Francisco MSA Construction Wages, 2016=100
10-Neighborhood Housing Price Index (Zillow), Real, 2 years prior	Zillow_Price_Real	SF real condo prices per Zillow, 2016=100
Dummy indicating eligibility for State Density Bonus, 2016 forward	SDB_2016_5Plus	Calculated from Zoning Districts
Zoning dummy: Office/Commercial	zp_OfficeComm	Planning Department, Zoning Districts
Zoning dummy: Density Restricted Multifamily, RTO = Form Based	zp_DRMulti_RTO	Planning Department, Zoning Districts
Zoning dummy: Form Based Multifamily, RTO = form based	zp_FBDMulti_RTO	Planning Department, Zoning Districts
Zoning dummy: Industrial / Production, Distribution & Repair	zp_PDRInd	Planning Department, Zoning Districts
Zoning dummy: Public/Open Space	zp_Public	Planning Department, Zoning Districts
Zoning dummy: Redevelopment Area	zp_Redev	Planning Department, Zoning Districts
Zoning dummy: Residential 2-Family (2 Units per Lot)	zp_RH2	Planning Department, Zoning Districts
Zoning = Residential 3-Family or Res Mixed (1/800 sqft)	zp_RH3_RM1	Planning Department, Zoning Districts
Planning District dummy variables	DIST_<District Name>	Planning District from Assessor's Secured Roll DB

Appendix: Logistic Regression Coefficients

Variable Description	Variable	Coeff	StdErr	WaldChiSq	Prob>Chi Sq
Intercept	Intercept	(1.6226)	1.2829	1.5998	0.2059
Height limit for site in ft	Height_Ft	0.0017	0.0007	4.9693	0.0258
Area for lot in 1000 sq ft	Area_1000	0.0049	0.0009	30.6563	0.0000
Envelope Area in 1000 sq ft (area/1000*ht/10)	Env_1000_Area_Height	0.0002	0.0001	5.0369	0.0248
Extisting building square footage in 1000 sq ft	Bldg_SqFt_1000	(0.0023)	0.0007	10.7241	0.0011
Residential Existing Use using ResUnits (Dummy)	Res_Dummy	(0.8231)	0.1222	45.3669	0.0000
Historic Status for Parcel (Dummy)	Historic	(1.0378)	0.1271	66.6847	0.0000
Real Construction Cost Variable	Construc_Cost_Real	(0.0992)	0.0129	58.8929	0.0000
SF Housing Price Index (Zillow), Real	Zillow_Price_Real	0.0143	0.0053	7.1326	0.0076
Dummy for State Density Bonus, 5+ Unit Sites, 2016 forward	SDB_2016_5Plus	0.6303	0.1608	15.3724	0.0000
Zoning = Office/Commercial	zp_OfficeComm	4.2634	0.4873	76.5337	0.0000
Zoning = Density Restricted Multifamily, RTO = Form Based	zp_DRMulti_RTO	4.2450	0.4523	88.0989	0.0000
Zoning = Form Based Multifamily, RTO = form based	zp_FBDMulti_RTO	5.0508	0.4640	118.4768	0.0000
Zoning = Industrial / Production, Distribution & Repair	zp_PDRInd	3.4115	0.4790	50.7257	0.0000
Zoning = Public/Open Space	zp_Public	1.2491	0.8385	2.2190	0.1363
Zoning = Redevelopment Area	zp_Redev	4.5361	0.4999	82.3213	0.0000
Zoning = Residential 2-Family (2 Units per Lot)	zp_RH2	0.2674	0.6672	0.1607	0.6885
Zoning = Residential 3-Family or Res Mixed (1/800 sqft)	zp_RH3_RM1	1.3187	0.6064	4.7289	0.0297

Appendix: Logistic Regression Coefficients (Continued)

Variable Description	Variable	Coeff	StdErr	WaldChiSq	Prob>Chi Sq
District = South Bayshore	DIST_SBayshore	(1.4824)	0.3179	21.7380	0.0000
District = Bernal Heights	DIST_BernalHts	(1.7011)	0.6087	7.8100	0.0052
District = South Central	DIST_Scentral	(1.7307)	0.3867	20.0267	0.0000
District = Central	DIST_Central	(1.1523)	0.3353	11.8102	0.0006
District = Buena Vista	DIST_BuenaVista	(2.5369)	1.0188	6.2010	0.0128
District = Northeast	DIST_Northeast	(1.4171)	0.2539	31.1439	0.0000
District = Western Addition	DIST_WestAddition	(0.6831)	0.2362	8.3630	0.0038
District = South of Market	DIST_SOMA	(0.0756)	0.1903	0.1579	0.6911
District = Inner Sunset	DIST_InnerSunset	(1.6187)	0.4882	10.9939	0.0009
District = Richmond	DIST_Richmond	(2.8019)	0.5355	27.3716	0.0000
District = Ingleside	DIST_Ingleside	(1.8670)	0.4925	14.3711	0.0002
District = Outer Sunset	DIST_OuterSunset	(2.6147)	0.6098	18.3867	0.0000
District = Marina	DIST_Marina	(1.2492)	0.3253	14.7457	0.0001
District = Mission	DIST_Mission	(1.0938)	0.2380	21.1176	0.0000

Omitted Variables for Groups of Dummy Variables:

Omitted zoning = RH1

Omitted district = Downtown

Appendix: Units Regression Coefficients

Variable Description	Variable	Coeff	St Error	T-Stat
Simple building envelope (area/1000 * ht/10)	Env_1000_Area_Height	0.4252	0.0159	26.72
State Density Bonus * Simple Bldg Envelope (5+ Unit Sites, 2016 forward)	SDB_2016_5Plus_EnvFull	0.4385	0.0389	11.28
Simple Bldg Envelope only if density-restricted	Zoning_DR_EnvFull	(0.1601)	0.0174	(9.22)

Note: Model removes largest 5% (Positive and Negative) residual outliers

Appendix: Model Performance

Logistic Regression	
Number of Observations	3,369,573
Number with Dependent Variable = 1	422
Pseudo R-Square	0.000611
Max Rescaled R-Square	0.244596

Units Regression	
Number of Observations	383
R-Sq	0.867779
Adj R-Sq	0.866735
Dependent Mean Value	81.87206
Standard Error of Regression	48.40184

Appendix: Zoning Classifications

- The table below shows the correspondence between the City's zoning districts, and the aggregate zoning variables in the model.

Zoning Variable	Zoning Districts
zp_RH1	C-2/RH-1(D); RH-1(D)/C-2; C-M/RH-1; M-1/RH-1; NC-1/RH-1; NC-1/RH-1/RH-2; NC-2/RH-1; NC-2/RH-1(D); NC-3/RH-1; NCD/RH-1; NCD/RH-1(D); NC-S/RH-1; NCT-OCEAN/RH-1(D); NCT/RH-1(D); P/P-W/RH-1; P/RH-1; P/RH-1(D); P/RH-1/RH-1(D); P/RH-1/RH-2; RH-1; RH-1(D); RH-1(D)/NC-2; RH-1(D)/RH-1; RH-2/RH-1; RH-2/RH-1(D); RH-1(D)/RH-2; RH-1(D)/RM-1; RH-1(S); RH-1/C-M; RH-1/M-1; RH-1/NC-1; RH-1/NC-2; RH-1/NC-3; RH-1/NC-S; RH-1/RH-1(D); RH-1/RH-2; RH-1/RH-2/RM-1; RH-1/RM-1; RM-1/RH-1; RH-3/RH-1
zp_RH2	NC-1/RH-1/RH-2; P/RH-1/RH-2; RH-2/RH-1; RH-2/RH-1(D); RH-1(D)/RH-2; RH-1/RH-2; RH-1/RH-2/RM-1; M-1/RH-2/RM-1; MUR/RH-2; NC-1/RH-2; NC-2/RH-2; NC-3/RH-2; NCD/RH-2; NC-S/RH-2; NCT-GLEN PARK/RH-2; NCT-OCEAN/RH-2; NCT/RH-2; P/RH-2; P/RM-1/RH-2; RH-2; RH-2/NC-1; RH-2/NC-2; RH-2/NC-3; RH-2/RH-3; RH-2/RM-1; RM-1/RH-2; RH-2/RM-2; RM-2/RH-2; RH-2/RM-3; RM-3/RH-2; RH-3/RH-2
zp_RH3_RM1	RH-1/RH-2/RM-1; M-1/RH-2/RM-1; P/RM-1/RH-2; RH-2/RH-3; RH-2/RM-1; RM-1/RH-2; RH-3/RH-2; RH-1(D)/RM-1; RH-1/RM-1; RM-1/RH-1; RH-3/RH-1; C-2/RH-3; C-2/RM-1; C-2/RM-1/RM-4; C-M/RM-1; HP-RA/RM-1; M-1/RM-1; M-2/RH-3; NC-1/RM-1; RM-1/NC-1; NC-2/RH-3; NC-2/RM-1; NC-3/RH-3; NC-3/RM-1; NCD/RH-3; NCD/RH-3/UPR MARKET; NCD/RH-3/UPR MARK; NCD/RH-3/VALENCIA; NCD/RM-1; NCD/RM-1/SACRAMENTO; NCD/SACRAMENTO ST; NCD/SACRAMENTO/RM-1; NCD/RM-1/SACRAMEN; NCT-DIVISADERO/RH-3; NCT-DIVISADERO/RM-1; NCT/RH-3; NCT/RM-1; P/PM-R/RM-1; P/RH-3; P/RM-1; PM-MU2/PM-OS/PM-R/RM-1; PM-R/RM-1; RH-3; RH-3/C-2; RH-3/HAYES; RH-3/M-2; RH-3/NC-2; RH-3/RM-1; RM-1/RH-3; RH-3/RM-2; RM-2/RH-3; RH-3/RM-3; RM-3/RH-3; RH-3/RSD; RH-3/VALENCIA; RM-1; RM-1/C-M; RM-1/C-M/M-1; RM-1/NC-3; RM-1/RM-2; RM-1/RM-3; RM-1/RM-4; RM-1/SACRAMENTO
zp_OfficeComm	C-2/RH-3; C-2/RM-1; C-2/RM-1/RM-4; C-M/RM-1; RH-3/C-2; RM-1/C-M; RM-1/C-M/M-1; C-2/RH-1(D); RH-1(D)/C-2; C-M/RH-1; RH-1/C-M; C-2; C-2/M-1; C-2/M-1/P; C-2/P; C-3-G; C-3-G/C-3-R; C-3-G/C-M; C-3-G/RC-4; C-3-O; C-3-O(SD); C-3-O(SD)/P; C-3-O(SD)/TB DTR; C-3-O/C-3-O(SD); C-3-O/C-3-R; C-3-O/C-3-S; C-3-O/C-3-S/P; C-3-O/TB DTR; C-3-R; C-3-S; C-3-S/P; C-M; C-M/M-1; CMUO; CMUO/MUR; CMUO/P; MUO; NCD/C-2; P/C-3-R; RM-3/C-2; RM-4/C-2; WMUO

Appendix: Zoning Classifications (Continued)

Zoning Variable	Zoning Districts
zp_DRMulti_RTO	NC-2/P; NC-3/P/RM-3; NCD/P; NC-S/P; P/NC-S; P/NC-2; P/RC-4; P/RM-2; P/RM-3; C-2/RM-1/RM-4; C-3-G/RC-4; NCD/C-2; RM-3/C-2; RM-4/C-2; NC-1/RM-1; RM-1/NC-1; NC-2/RH-3; NC-2/RM-1; NC-3/RH-3; NC-3/RM-1; NCD/RH-3; NCD/RH-3/UPR MARKET; NCD/RH-3/UPR MARK; NCD/RH-3/VALENCIA; NCD/RM-1; NCD/RM-1/SACRAMENTO; NCD/SACRAMENTO ST; NCD/SACRAMENTO/RM-1; NCD/RM-1/SACRAMEN; RH-3/HAYES; RH-3/NC-2; RH-3/RM-2; RM-2/RH-3; RH-3/RM-3; RM-3/RH-3; RH-3/RSD; RH-3/VALENCIA; RM-1/NC-3; RM-1/RM-2; RM-1/RM-3; RM-1/RM-4; RM-1/SACRAMENTO; NC-1/RH-1/RH-2; NC-1/RH-2; NC-2/RH-2; NC-3/RH-2; NCD/RH-2; NC-S/RH-2; RH-2/NC-1; RH-2/NC-2; RH-2/NC-3; RH-2/RM-2; RM-2/RH-2; RH-2/RM-3; RM-3/RH-2; NC-1/RH-1; NC-2/RH-1; NC-2/RH-1(D); NC-3/RH-1; NCD/RH-1; NCD/RH-1(D); NC-S/RH-1; RH-1(D)/NC-2; RH-1/NC-1; RH-1/NC-2; RH-1/NC-3; RH-1/NC-S; 24TH-MISSION; 24TH STREET- NOE VALL; 24TH-NOE; BROADWAY; BROADWAY NEIGHBORHOOD; C-2/RM-4; CASTRO STREET NEIGHBO; CASTRO; CCB; CRNC; CR-NC; CRNC/CVR; CR-NC/CVR; CRNC/RM-4; CVR; DTR/RC-4; FILLMORE; HAIGHT; HAIGHT STREET NEIGHBO; HAYES; HAIGHT STREET NEIGHBO; INNER CLEMENT; INNER CLEMENT STREET; INNER SUNSET; INNER SUNSET NEIGHBOR; M-1/NC-2; M-1/RM-2; M-1/RSD; NC-1; NC-1/RM-2; NC-1/RM-3; NC-2; NC-2/M-1; NC-2/NC-3; NC-3/NC-2; NC-2/RM-3; NC-2/RM-4; NC-3; NC-3/RC-4; NC-3/RM-3; NC-3/RM-4; NCD; NCD/; NCD/24TH STREET- NOE VALL; NCD/24TH STREET-; NCD/24TH-MISSION; NCD/24TH-NOE; NCD/24TH-NOE-VALLE; NCD/24TH-NOE-VALLEY; NCD/BROADWAY; NCD/BROADWAY NEIG; NCD/BROADWAY NEIGHBORHOOD; NCD/CASTRO; NCD/CASTRO STREET; NCD/CASTRO STREET NEIGHBO; NCD/EXCELSIOR OUTER MISSI; NCD/EXCELSIOR OUT; EXCELSIOR OUTER MISSI; NCD/FILLMORE; NCD/HAIGHT; NCD/HAIGHT STREET; NCD/HAIGHT STREET NEIGHBO; NCD/HAYES; NCD/HAYES NCT; NCD/HAYES NCT/RTO; NCD/INNER CLEMENT; NCD/INNER CLEMENT STREET; NCD/INNER SUNSET; NCD/INNER SUNSET NEIGHBOR; NCD/IRVING STREET NEIGHBO; NCD/IRVING STREET; NCD/IRVING; IRVING STREET NEIGHBO; NCD/JAPANTOWN NEIGHBORHOO; NCD/JAPANTOWN NEI; JAPANTOWN NEIGHBORHOO; NCD/JUDAH STREET NEIGHBOR; NCD/JUDAH; NCD/JUDAH STREET; JUDAH STREET NEIGHBOR; NCD/NC-1; NCD/NC-2; NCD/NC-3; NCD/NCT; NCD/NO BEACH; NCD/NORIEGA STREET NEIGHB; NCD/NORIEGA STREE; NCD/NORIEGA; NCD/NORTH BEACH NEIGHBORH; NCD/NORTH BEACH N; NCD/NORTH BEACH; NCD/NORTHBEACH; NCD/NORTH BEACH/RM-1; NCD/NORTHBEACH/RM-1; NCD/OUTER CLEMENT; NCD/OUTER CLEMENT STREET; NCD/OUTER CLEMENT STREET; NCD/PACIFIC; NCD/PACIFIC AVENU; NCD/PACIFIC/RM-3; NCD/PACIFIC;RM-3; NCD/PACIFIC AVENUE NEIGHB; NCD/POLK; NCD/POLK STREET N; NCD/POLK STREET NEIGHBORH; NCD/POLK/RC-3; NCD/POLK/RC-4; NCD/RC-3; NCD/RESIDENTIAL- HOUSE, O; NCD/RESIDENTIAL-; NCD/RM-2; NCD/RM-3; NCD/RM-3/PACIFIC; NCD/RTO; NCD/SACRAMENTO; NCD/SACRAMENTO STREET NEI; NCD/TARAVAL STREET NEIGHB; NCD/TARAVAL STREE; NCD/TARAVAL; NCD/UNION; NCD/UNION STREET; NCD/UNION STREET NEIGHBOR; NCD/UPPER FILLMORE NEIGHB; NCD/UPPER FILLMOR; NCD/UPPER FILLMORE; NCD/UPPERFILLMORE; NCD/UPPER MARKET STREET N; NCD/UPPER MARKET; NCD/UPR MARKET NC; NCD/UPR MARKET; NCD/UPR MARKET NCT; NCD/UPR MARKET NCT/; NCD/VALENCIA; NCD/WEST PORTAL; NCD/WEST PORTAL A; NCD/WEST PORTAL AVENUE NE; NCD/BAYVIEW; NCD/COLE VALLEY; NCD/CORTLAND AVENUE; NCD/GEARY BOULEVARD; NCD/GEARY BOULEVA; NCD/GEARY BOULEVARD/RH-2; NCD/GEARY BOULEVARD/RM-1; NCD/INNER BALBOA STREET; NCD/INNER BALBOA S; NCD/OUTER BALBOA STREET; NCD/ OUTER BALBOA STREET; NCD/OUTER BALBOA S; NCD/LOWER HAIGHT STREET; NCD/LOWER HAIGHT S; NCD/LOWER HAIGHT STREET/RH-3; NCD/LOWER POLK STREET; NCD/MISSION BERNAL; NCD/INNER TARAVAL STREET; NCD/INNER TARAVAL; NCD/SAN BRUNO AVENUE; NCD/LAKESIDE VILLAGE; NCD/LAKESIDE VILLAG; NC-S; NC-S/PM-R; NC-S/RM-3; NCT-DIVISADERO/RM-3; NCT/RM-3; NCT/RM-4; NO BEACH; OUTER CLEMENT; POLK; RC-3; RC-3/POLK; RC-3/RM-3; RC-4; RC-4/NC-3; RC-4/RH DTR; RC-4/RM-4; RED/SLR; RM-2; RM-2/M-1; RM-2/NC-1; RM-2/NC-2; RM-2/NO BEACH; RM-2/RM-3; RM-2/RM-4; RM-3; RM-3/NC-1; RM-3/NC-2; RM-3/NC-3; RM-3/NC-S; RM-3/RC-3; RM-3/RM-4; RM-4; RM-4/CR-NC; RM-4/NC-2; RM-4/NC-3; RM-4/RC-4; RSD; RSD/SLR; SACRAMENTO; SLR; SSO; UNION; UPR MARKET; VALENCIA; WEST PORTAL

Appendix: Zoning Classifications (Continued)

Zoning Variable	Zoning Districts
zp_Public	C-2/M-1/P; C-2/P; C-3-O(SD)/P; C-3-O/C-3-S/P; C-3-S/P; CMUO/P; P/C-3-R; P/RM-1/RH-2; P/PM-R/RM-1; P/RH-3; P/RM-1; PM-MU2/PM-OS/PM-R/RM-1; P/RH-1/RH-2; P/RH-2; P/P-W/RH-1; P/RH-1; P/RH-1(D); P/RH-1/RH-1(D); Remove; HP-RA/M-1/M-2/P; HP-RA/M-2/P; M-1/M-2/P; M-1/P; M-2/MB-OS; M-2/MB-RA/P; M-2/P; MB-O; MB-O/MB-RA; MB-OS; MB-RA/P; MUG/P; NC-2/P; NC-3/P/RM-3; NCD/P; NC-S/P; NCT/P; NCT-3/P; NCT-3/RTO; P; P/C-3-O(SD); P/M-1; P/M-2; P/MISS BAY S PL; P/MISS BAY S PLN; P/MUR; P/NC-S; P/NC-2; P/PDR-2; P/PM-OS; P/PM-OS/PM-R; P/P-W; P/RC-4; P/RM-2; P/RM-3; P/TB DTR; P/RTO-C; P, RTO-C; PM-CF; PM-CF/PM-OS; PM-CF/PM-OS/PM-R; PM-MU1/PM-OS; PM-MU2/PM-OS/PM-R; PM-OS; PM-OS/PM-R; PM-OS/PM-R/PM-S; PM-OS/PM-S; Public
zp_FBDMulti_RTO	DTR/RC-4; NCD/HAYES NCT; NCD/HAYES NCT/RTO; NCD/NCT; NCD/RTO; NCD/UPR MARKET NCT; NCD/UPR MARKET NCT/; NC-S/PM-R; NCT-DIVISADERO/RM-3; NCT/RM-3; NCT/RM-4; RC-4/RH DTR; RED/SLR; P/PM-R/RM-1; PM-MU2/PM-OS/PM-R/RM-1; MUG/P; NCT/P; NCT-3/P; NCT-3/RTO; P/MUR; P/PM-OS/PM-R; P/TB DTR; P/RTO-C; P, RTO-C; PM-CF/PM-OS/PM-R; PM-MU1/PM-OS; PM-MU2/PM-OS/PM-R; PM-OS/PM-R; PM-OS/PM-R/PM-S; C-3-O(SD)/TB DTR; C-3-O/TB DTR; CMUO/MUR; NCT-DIVISADERO/RH-3; NCT-DIVISADERO/RM-1; NCT/RH-3; NCT/RM-1; PM-R/RM-1; MUR/RH-2; NCT-GLEN PARK/RH-2; NCT-OCEAN/RH-2; NCT/RH-2; NCT-OCEAN/RH-1(D); NCT/RH-1(D); DTR; DTR/M-1; M-1/RH DTR; M-2/MR-MU; M-2/P70-MU; MB-RA/MR-MU; MR-MU; MUG; MUG/RED; MUR; NCT; NCT-DIVISADERO; NCT-FOLSOM; NCT-GLEN PARK; NCT-HAYES; NCT-HAYES/RTO; NCT-HAYES/RTO-1; NCT-MISSION; NCT-UPPER MARKET; NCT-UPPER MARKET;; NCT-UPPER MARKET/RH-2; NCT-UPPER MARKET/RH-3; NCT-OCEAN; NCT-SOMA; NCT/NCT-3; NCT/RCD; NCT/RED-MX; NCT/RTO; NCT/RTO-M; NCT/UMU; NCT-1; NCT-2; NCT-3; NCT-3/NCT-HAYES; RTO-1/NCT-3; RTO/NCT-3; P70-MU; PDR-1-D/UMU; PDR-1-G/UMU; PM-MU1; PM-MU1/PM-R; PM-MU2/PM-R; PM-MU2; PM-R; RCD; RED; RED-MX; RED-MX/WMUG; RH DTR; RH DTR/SB-DTR; RH DTR/TB DTR; RTO; RTO-1; RTO/NCT; RTO-1/RTO-C; RTO-C; RTO-M; SB-DTR; SPD; TB DTR; UMU; WMUG
zp_PDRInd	DTR/M-1; M-1/RH DTR; M-2/MR-MU; M-2/P70-MU; PDR-1-D/UMU; PDR-1-G/UMU; M-1/NC-2; M-1/RM-2; M-1/RSD; NC-2/M-1; RM-2/M-1; C-2/M-1/P; HP-RA/M-1/M-2/P; HP-RA/M-2/P; M-1/M-2/P; M-1/P; M-2/MB-OS; M-2/MB-RA/P; M-2/P; P/M-1; P/M-2; P/PDR-2; C-2/M-1; C-M/M-1; RH-1/RH-2/RM-1; M-1/RH-2/RM-1; M-1/RM-1; M-2/RH-3; RH-3/M-2; M-1/RH-1; RH-1/M-1; HP-RA/M-1; HP-RA/M-2; M-1; M-1/M-1; M-1/M-2; M-1/PDR-1-B; M-1/PDR-2; M-2; M-2 (MB); M-2/MB-RA; M-2/PDR-2; M-2/SLI; MISS BAY S PLN/M-2; MISS BAY S PL; MISS BAY S PLN; MISS BAY S PLN/M-; PDR-1; PDR-1/PDR-2; PDR-1-B; PDR-1-B/PDR-2; PDR-1-D; PDR-1-G; PDR-2; SALI; SLI; SLI/M-2
zp_Redev	HP-RA/M-1/M-2/P; HP-RA/M-2/P; M-2/MB-RA/P; HP-RA/M-1; HP-RA/M-2; M-2/MB-RA; MISS BAY S PLN/M-2; MISS BAY S PL; MISS BAY S PLN; MISS BAY S PLN/M-; MB-RA/MR-MU; MB-O/MB-RA; MB-RA/P; P/MISS BAY S PL; P/MISS BAY S PLN; HP-RA/RM-1; HP-RA; MB-RA; MISS BAY N RED; MISS BAY N RED PLN; MISS BAY N RED PL; MISS BAY S RED; MISS BAY S RED PLN; MISS BAY S RED PL

Appendix: Logic of Applying the Model

- This section of the appendix describes in more detail how the model was used to produce estimates of future housing production.
- For the existing zoning ("baseline"), the application of the model is straightforward. Current zoning was encoded using the zoning classification on the previous page, and current allowable height was used as the height variable in the logistic regression, and to calculate building envelope in the units regression.
- For the proposed rezoning ("policy"), the logic used was as follows: based on the units regression, each 1000 square feet of building envelope results in 0.42 units. The State Density Bonus adds an additional 0.44 units. Parcels that elect to use the Local Program therefore need to accommodate at least 0.44 additional units per 1000 square feet of envelope if developers are to choose this option. For parcels where the Local Program was more desirable, and on parcels that are ineligible for the SDB, because their zoning and size prevents them from building more than 5 units, the Local Program was applied. For all other parcels the SDB was used.

Appendix: Logic of Applying the Model (Continued)

- Probabilities and units for any parcel using the State Density Bonus were calculated by:
  - In the logistic regression, using the first new height in the rezoning table for Height_Ft and in the Env_1000_Area_Height calculation.
  - In the units regression, using the first new height in the rezoning table to calculate Env_1000_Area_Height;
  - Incorporating the SDB_2016_5Plus_EnvFull effect;
  - Incorporating the Zoning_DR_EnvFull if applicable (i.e. the parcel is density-restricted.

Appendix: Logic of Applying the Model (Continued)

- Probabilities and units for any parcel using the Local Program were calculated by:
  - In the logistic regression, setting zp_FBDMulti_RTO = 1, to account for the relaxation of density controls in the Local Program;
  - In the logistic regression, using the second new height in the rezoning table for Height_Ft and in the Env_1000_Area_Height calculation.
  - In the units regression, using the second new height in the rezoning table to calculate Env_1000_Area_Height;
  - In the units regression, removing the SDB_2016_5Plus_EnvFull effect;
  - In the units regression, removing the Zoning_DR_EnvFull effect.

Appendix: Business Disruption / Relocation Costs

- The analysis makes the following assumptions about business disruption and relocation costs:
  - Lost space will be 10% vacant, so 90% of the loss represents the loss of occupied space.
  - Lost business net income (for 6 months of disruption): $5/occupied square foot.
  - Fixed labor costs (for 6 months): $10/occupied square foot.
  - Moving costs and build-out of space at new premises: $175/occupied square foot

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San Francisco Family Zoning Program

HOUSING ELEMENT REZONING

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Principal Planner, Plan Manager

LAND USE & TRANSPORTATION COMMITTEE

NOVEMBER 17, 2025

TODAY'S PRESENTATION

- Housing Capacity Calculations
- SB 79 Overview
- Summary

San Francisco's obligations under state law

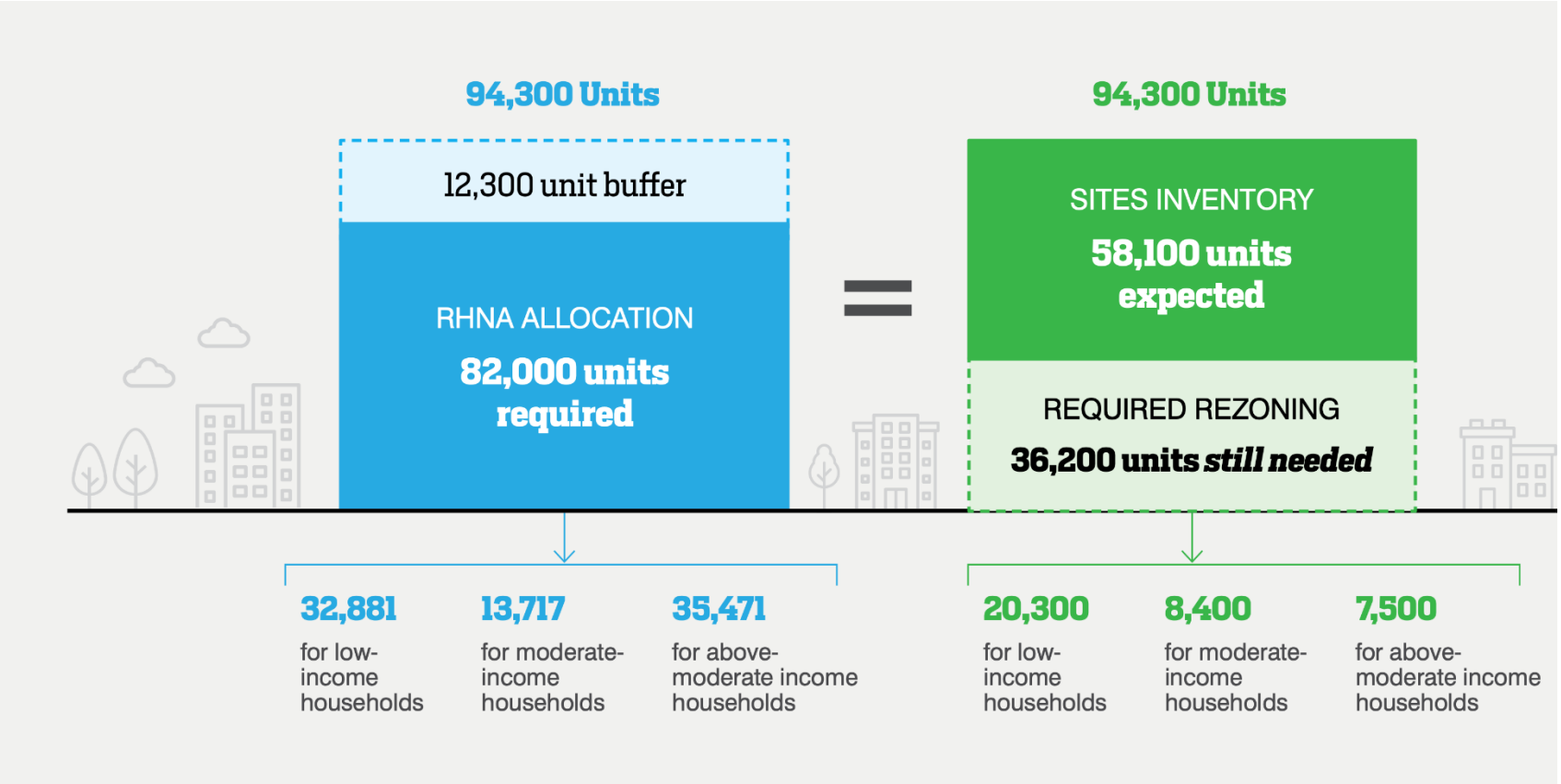
To maintain Housing Element certification, by January 2026 we must:

- Rezone for **realistic capacity** to meet our RHNA shortfall (36,200 units).
- Affirmatively Further Fair Housing by **zoning in high opportunity areas**.
- **Identify low-income housing sites** that will be eligible for ministerial approval.

NOTE:

Housing Element certification will not be revoked if planned units are not ultimately built.

Target: We have suitable & available sites for 36,200 homes



State Law: Calculating Realistic Capacity

To meet state law and Housing Element Action 7.1.1: SF must demonstrate that rezoning adds at least 36,200 units of capacity on **sites that are suitable and available**, using **methods that reasonably account for development likelihood.**

HCD issued a preliminary approval of the Plan on September 9th, noting that SF must continue use **all of these methods in combination** to demonstrate realistic capacity and meet various obligations:

Method	Analysis	Capacity
Citywide	Uses an annual pace of development relative to total zoned capacity.	**39,000 units** *(meets target of 36,200 units)*
Soft Sites	Excludes or discounts parcels based on current uses and other characteristics.	**40,000 – 64,000 units** *(meets target of 36,200 units)*
Feasibility	Computational model testing financial feasibility and economic conditions on each parcel.	**19,000 units** *(meets target of 16,000 moderate & above-moderate units)*

Method: Citywide Method

- Need this method to comply with HE 7.1.1 to supplement the "Soft Sites Analysis (method 2).
- Inspired by methodologies used in cases by the **State of CO, Terner Center, UCLA Lewis Center – concept of "zoning buffer"** of overall zoned capacity to housing targets
- Examines the **rate at which homes were approved** in the city from 2005 – 2023.
- Considers **how much zoned capacity was available** during that period and, of that zoned capacity, **how much (%) was entitled**.
- Annualizes that buildout to get a rate (%) of zoned capacity that we can say is likely to be built during the remainder of Housing Element cycle (5 years)
- Includes **RHNA shortfall across income groups**
- Assumes that we will do at least as well in our future as in our past

Citywide Housing Production Method	
Housing entitlements citywide 2005-2023	90,000
Current Remaining Total Zoned Capacity (2025)	313,000
Total	403,000
% capacity entitled	22%
Number of years	19
Annual	1%
% entitled in remaining RHNA period (5 yrs)	5%
Rezoning Net Increase to Total Zoned Capacity (Local Program)	780,000
Expected Net Approvals from Rezoning	**39,000**

Target: 36,200 homes likely within RHNA period

Method: Soft Sites Analysis

- Uses **similar assumptions submitted for rezoning in the adopted Housing Element** for consistency (requested by HCD)
- Necessary to **identify and filter specific sites** as required by HCD to meet test of **"suitable and available"**
- This method assumes:
  - 70% of capacity on "soft sites" (ie no existing units, built <30% of zoned capacity)
  - 2% of capacity on sites with existing units (min 5:1 allowed:existing)
- Excludes: Rent controlled buildings, sites w/pipeline projects, condo parcels, public properties, unusual parcels, listed historic resources

40k in Base

- Includes average use of SDB
- 26K VLI/LI, 14K Mod/Above

64k under Local Program

- 34K VLI/LI, 30K Mod/Above

Method: Financially Feasible

Urban Sim – online simulation tool to determine how many units are financially feasible.

- Urban Sim runs a **proforma analysis on every parcel** using (1) economic assumptions, (2) allowed building envelope, (3) existing lot conditions, to determine for each lot the largest feasible project, if any.
- Helps us **understand how economic conditions impact the construction of moderate and above moderate homes** relative to our RHNA targets.
- Since most affordable housing relies on public subsidy instead of financial feasibility, this method provides limited information for how the city will meet its affordable targets.
- **Not all Financially Feasible Projects will be pursued during the RHNA period.** Discount factors must be applied. In "improved" financial conditions, as many as 221K units are feasible, but many are on sites with homes or other conditions that must be accounted for.

19,000 – 47,000 likely units

Target: 16,000 Mod/Above Mod on sites suitable and available during the RHNA period

Senate Bill 79 (SB 79): Applies after July 1, 2026

- **SETS MINIMUM HEIGHT & DENSITY: 5 to 9 stories,** ½-mile around BART, Caltrain, Muni Metro, and Major Bus Stops
- **VARIOUS EXEMPTIONS UNTIL 2032:** For lots with >50% SB79 density, low-resource census tracts, other conditions. ***Most SF parcels are exempt under these rules***.
- **ALLOWS LOCAL "ALTERNATIVE PLAN" IN-LIEU OF SB79:** provided that Alternative Plan has at least same cumulative housing capacity as SB79.

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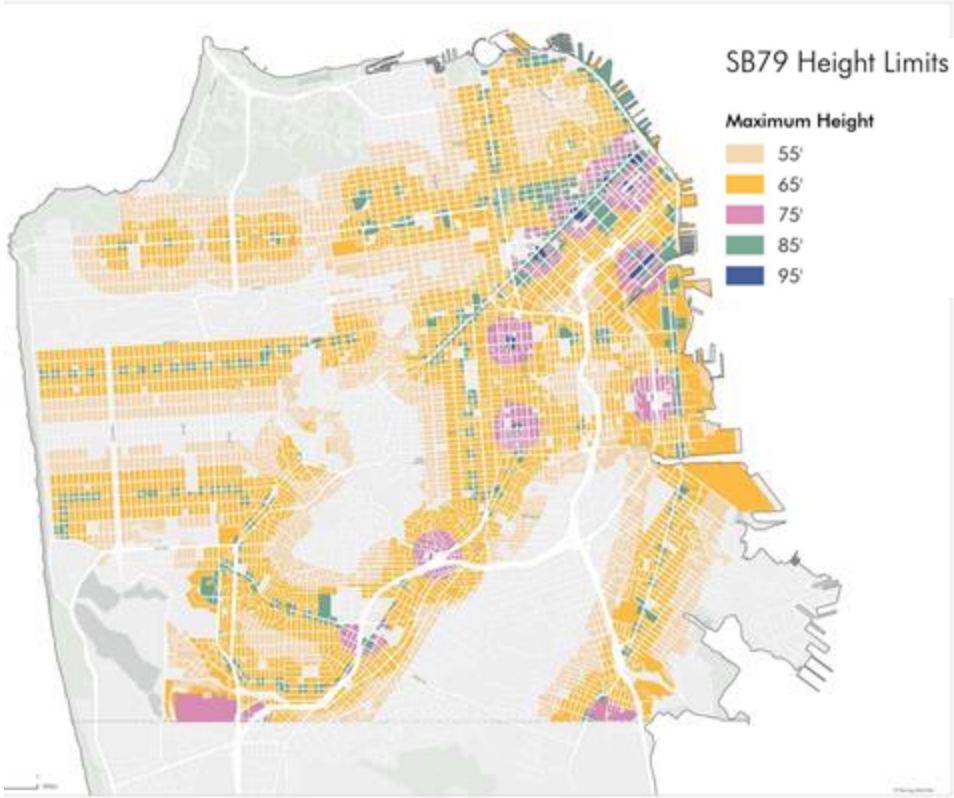
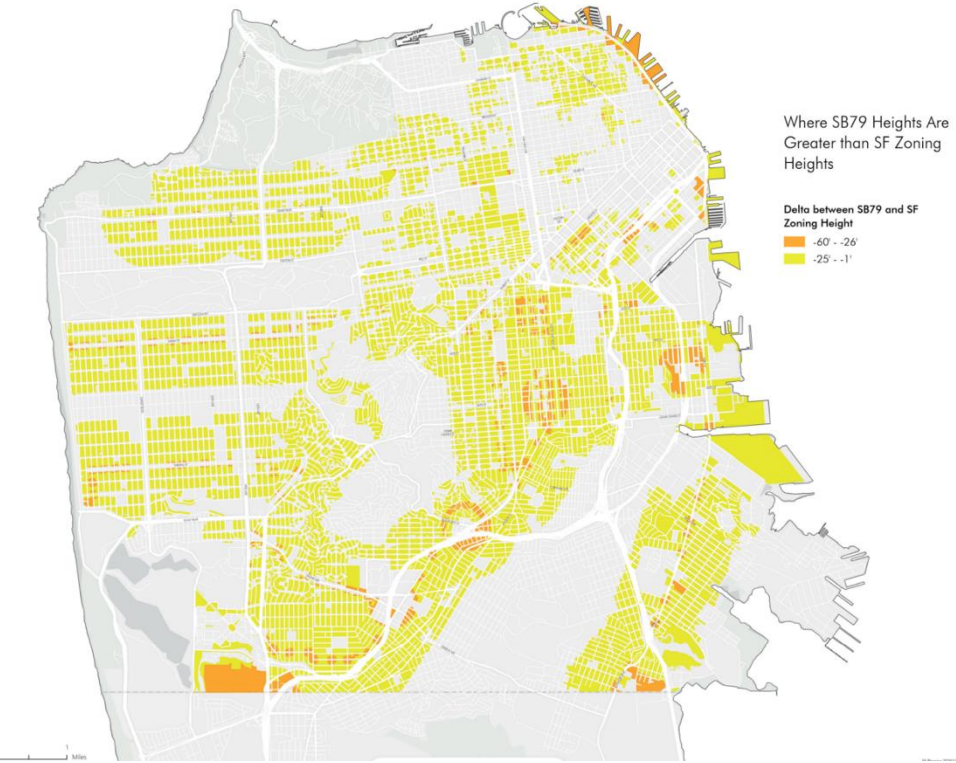
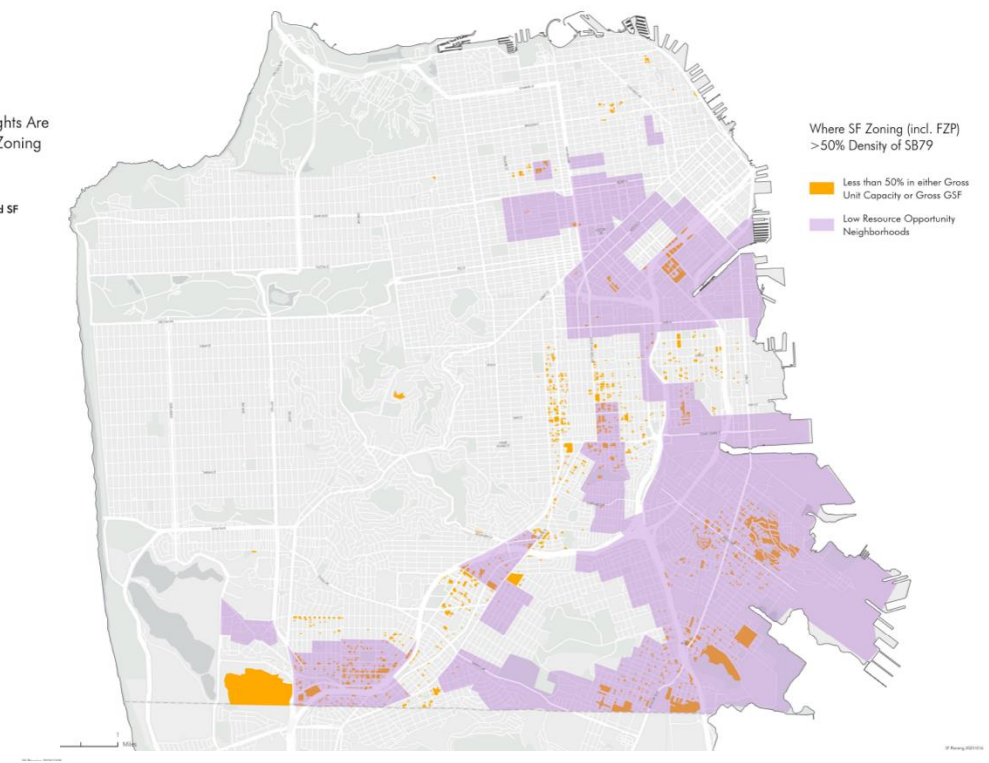


If the Family Zoning Plan is NOT adopted



If the Family Zoning Plan IS adopted

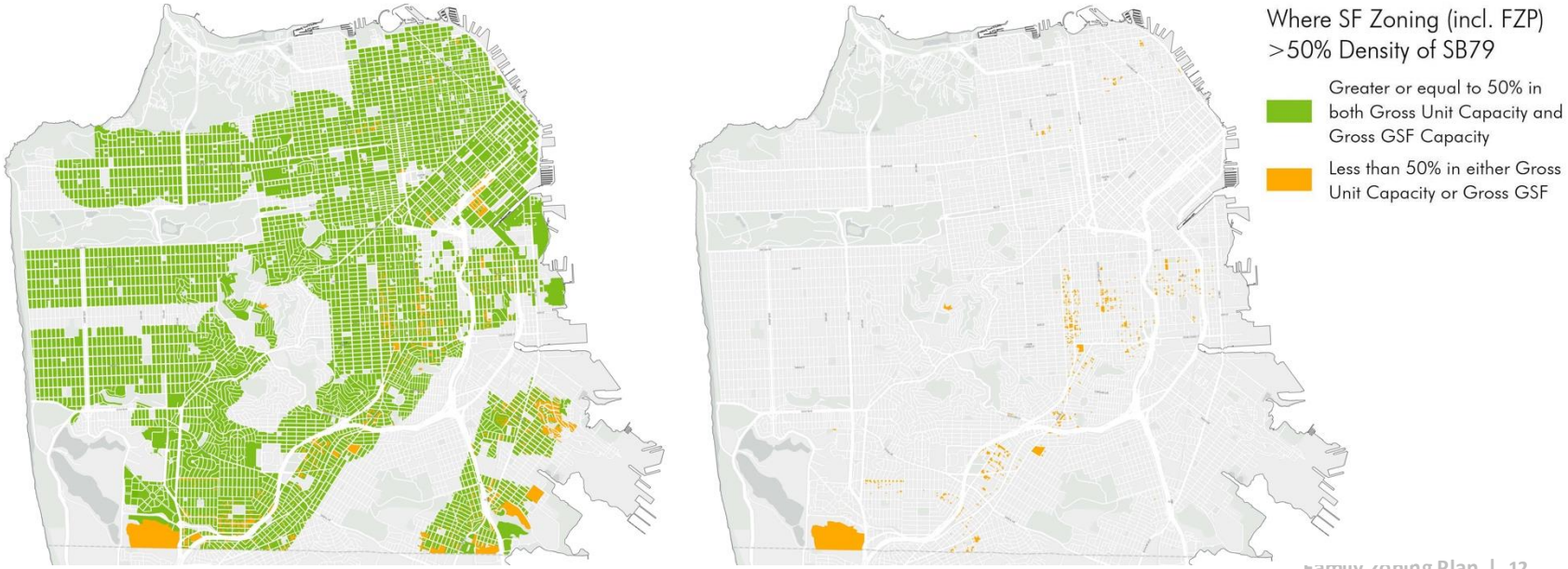


SB 79: Family Zoning Plan is Adequate as "Alternative Plan"

Preliminary analysis shows that **if the proposed rezoning is adopted, SF will likely have an adequate Alternative Plan**, though further analysis is needed.

SB79 Net Capacity: 763,000

SF Zoning Net Capacity in SB79 Area (with FZP): >800,000

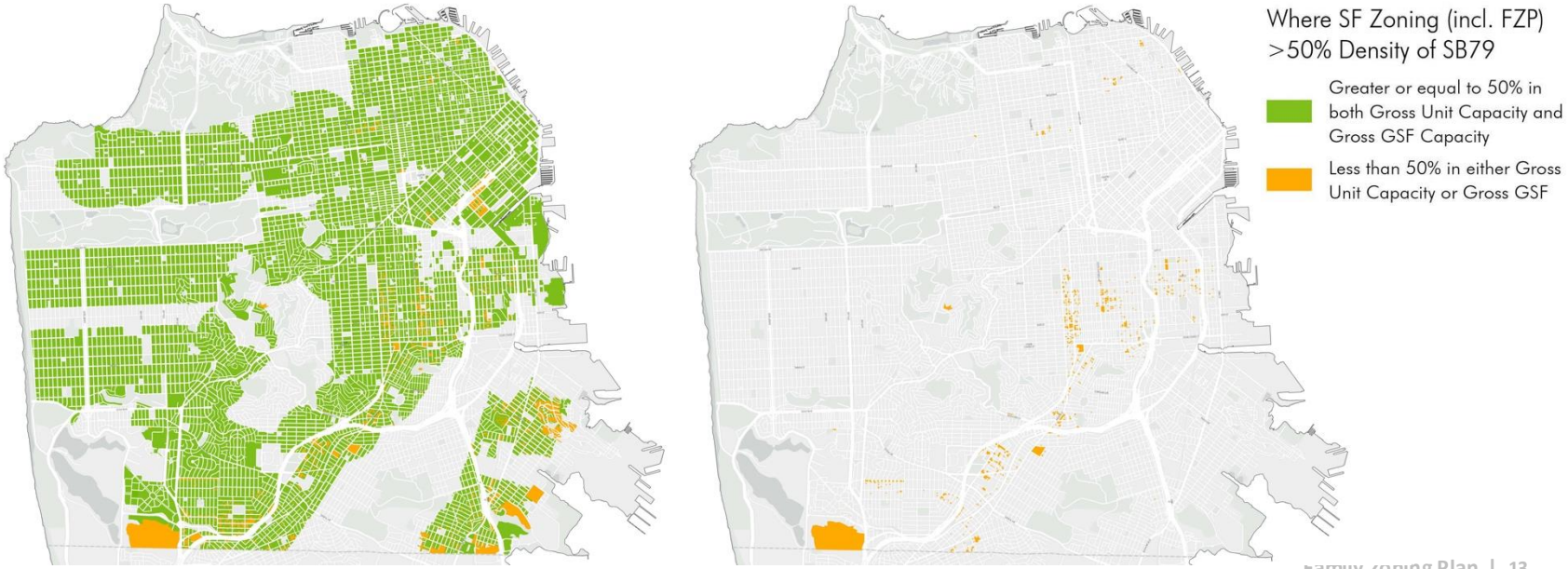


SB 79: Family Zoning Plan is Adequate as "Alternative Plan"

MTC needs to publish final map of stations and station areas

SF is collaborating with other cities on implementation (eg SD, SJ, LA, Sac, Oak)

HCD needs to review and approve Alt Plan ordinance, may take up to 120 days



Summary: Realistic Capacity & SB 79

- **MULTIPLE CAPACITY METHODS NEED TO BE CONSIDERED** and all must meet our requirement for **realistic capacity for 36,200 units** (16,000 units moderate & above-moderate).

- **AMENDMENTS NEED TO BE "NET NEUTRAL":** Per HCD preliminary approval letter in September, **changes that negatively affect housing capacity and/or constraints should be offset with changes elsewhere.**

Summary: Realistic Capacity & SB 79

- **SIGNIFICANT STEP TOWARD SB 79 ALTERNATIVE PLAN:** If the Family Zoning Plan is adopted, **it will satisfy the primary criteria for the "Alternative Plan" under SB 79, which would allow us to use local height limits.**
  - A small number of parcels outside of the Family Zoning Plan will need **minor adjustments to increase density** before July 2026 to meet the Alternative Plan criteria.
  - We will have the opportunity to **recertify our Alternative Plan in 2032** so that local zoning controls will continue to apply, instead of SB 79.

Possible amendment: Commercial Replacement Incentive

- **Commercial Replacement Incentive** was adopted into the original file on 10/20/25 and provides a square footage bonus in the Local Program for projects that:
  - **Replace existing commercial uses** with a space of equivalent size and street-facing dimensions.
  - **Preserve a historic storefront**, which are granted an additional bonus.
- Supervisor Sauter is working with City Attorney and Planning Department **on a non-substantive amendment to refine the proposal and make it easier to use.**
  - Would allow projects to **replace an existing space(s) with multiple spaces** so long as the cumulative commercial square footage on the site and the street-facing dimensions are preserved.
  - Will clarify requirements for replacing existing spaces with a “warm shell” for food service use.

Thank you!

http://sfplanning.org/sf-family-zoning-plan

sf.housing.choice@sfgov.org

San Francisco Family Zoning Program

HOUSING ELEMENT REZONING

Lisa Chen
Principal Planner, Plan Manager

James Pappas
Principal Planner

LAND USE & TRANSPORTATION COMMITTEE

OCTOBER 20, 2025

TODAY'S PRESENTATION

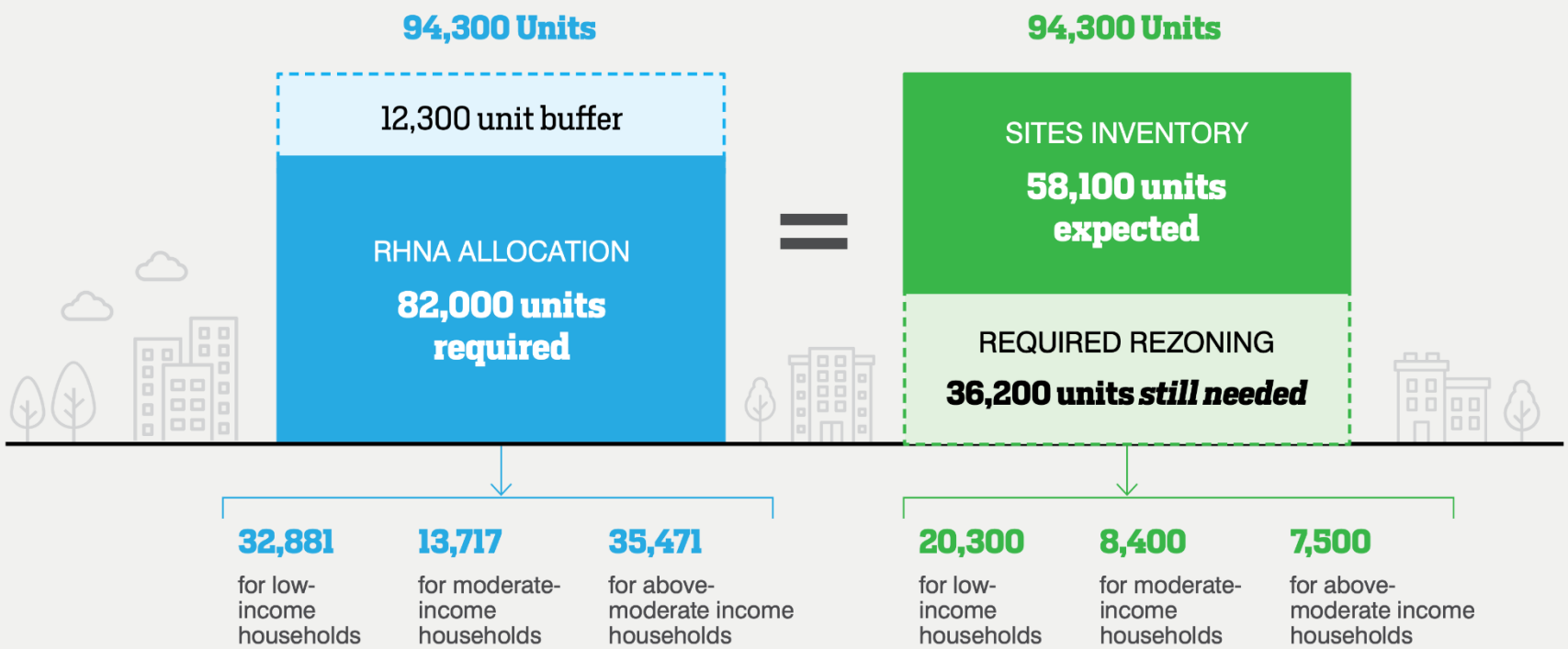
- Background
- Legislation under Consideration
- Affordable Housing Sites Analysis & Strategy
- Informational Resources & Visuals

Image from Wikipedia

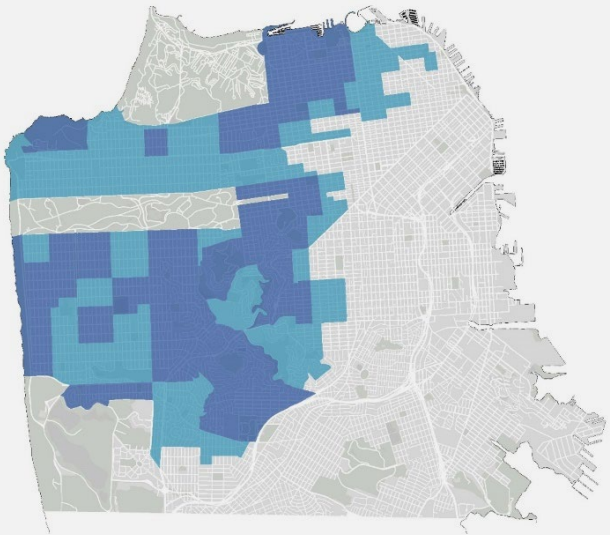
San Francisco's Pervasive Housing Crisis

- SF is 2nd most expensive rental market and 2025 rents grew fastest of any US city.
- Rental vacancies are down to 3.8% — on par with pre-pandemic levels.
- It takes more than 4 minimum wage jobs to afford average SF rent.
- In 2024, 81,200 people applied in the lottery for 512 affordable housing units.
- Evictions nearly doubled in 2024 and are at their highest rate since 2018.
- 1/3 of households are cost-burdened, both renters and owners.
- SF has more than 8,300 unsheltered individuals.

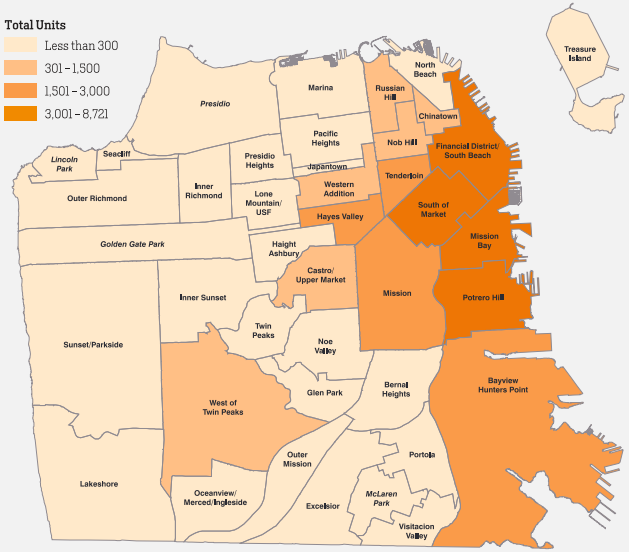
California needs 2.5 million housing units. San Francisco's fair share is 82,000 units.



The Family Zoning Plan fulfills state laws by planning for affordable and mixed-income housing to overcome historic patterns of exclusion.



Housing Opportunity Areas*



Housing Production (2005-2019)

90% of housing was built outside "housing opportunity areas," even though they cover over 50% of the city.

*Areas designated "Highest Resource" and "High Resource" on the Opportunity Area Map (CA Dept of Housing & Community Development)

What's at stake if we don't rezone

BUILDERS REMEDY: Menlo Park 446' proposal; zoned for 70'

If San Francisco does not adopt compliant rezoning, we risk:

- **State seizure of local permitting power,** a.k.a. "builders remedy"
- **Loss of state funding,** including transportation & affordable housing
- **Fines and lawsuits**

Source: Menlo Park

Communities facing Builders Remedy

See factsheet:
What happens if we don't rezone?

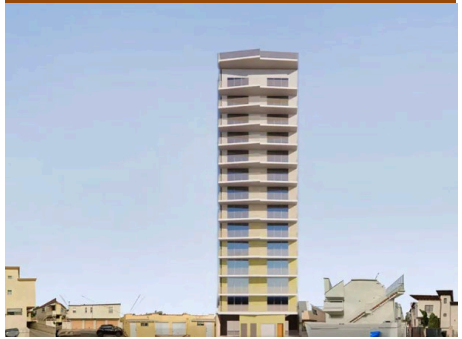
PALO ALTO

MENLO PARK

MOUNTAIN VIEW

BEVERLY HILLS

SANTA MONICA



SANTA CRUZ COUNTY

REDONDO BEACH

LOS GATOS

The Kelsey: $30million AHSC award

SF received $110 million/year in funds requiring Housing Element compliance:

CalTrans Sustainable Communities Grant

One Bay Area Grant

Affordable Housing and Sustainable Communities

Permanent Local Housing Allocation

Community Development Block Grant Program

Infill Infrastructure Grant Program

Local Housing Trust Fund Program

HOME Program

Local Partnership Program

Transit and Intercity Rail Capital Program

Active Transportation Program

Solutions for Congested Corridors Program

… and more

San Francisco's obligations under state law

To maintain Housing Element certification, by January 2026 we must:

- Rezone for **realistic capacity** to meet our RHNA shortfall (36,200 units).
- Affirmatively Further Fair Housing by **zoning in high opportunity areas**.
- **Identify low-income housing sites** that will be eligible for ministerial approval.

NOTE:

Housing Element certification will not be revoked if planned units are not ultimately built.

Community Engagement 2023-2025

18 Public Hearings

70 Education Workshops
1200+ attendees

8 Focus Groups
85 attendees

Survey
2,382 respondents

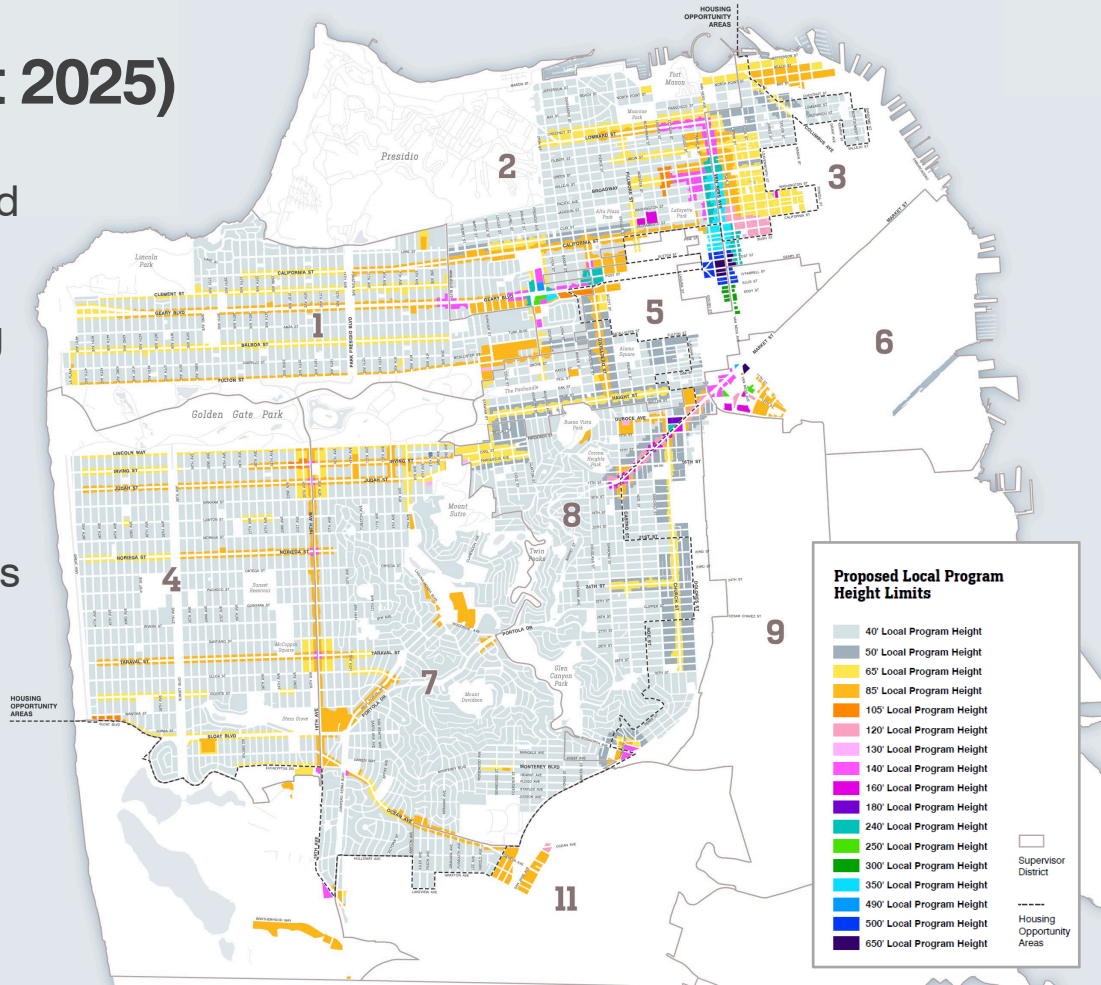
90+ Community Conversations
2000+ attendees

4 Open Houses, 2 Housing Summits
800+ attendees

Photos: SF Planning, Wah Mei School

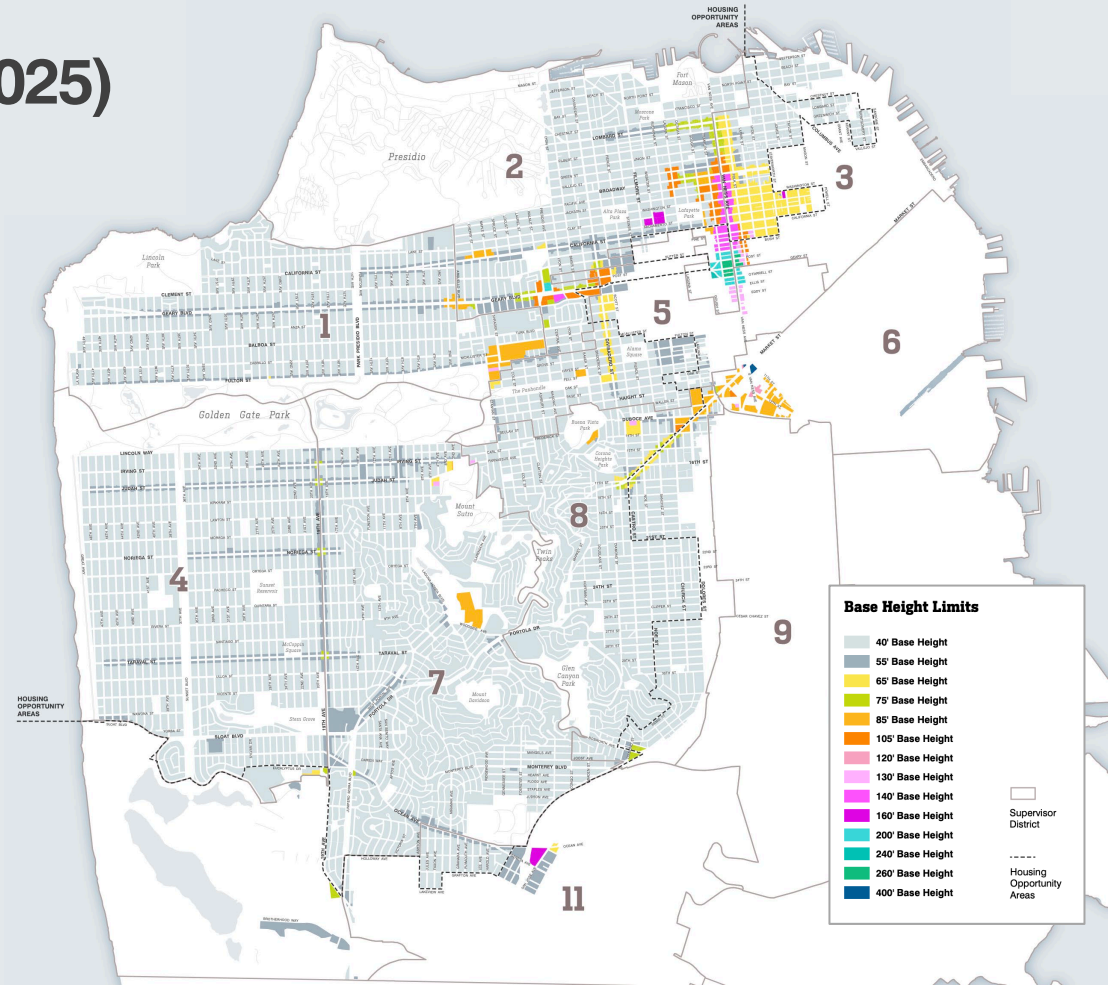
Proposed
Local Program Map (Sept 2025)

- **MEETS STATE REQUIREMENTS** and allows for at least 36,200 new homes.
- **KEEPS LOCAL CONTROL** by setting base heights lower and incentivizing projects to use a Local Program.
- **PUTS TALLER BUILDINGS NEAR TRANSIT AND SERVICES:** 6+ stories on main streets and near transit.
- **ALLOWS SMALL APARTMENTS ELSEWHERE:** keeps existing 40’ height (4 stories) while welcoming more homes.



Proposed
Base Height Map (Sept 2025)

- **ON CORRIDORS, PROJECTS CHOOSE LOCAL OR STATE PROGRAMS:** Projects can get to similar heights under either option.
- **IN RESIDENTIAL AREAS, PROJECTS MUST USE LOCAL PROGRAM.** Projects in program get form-based zoning and **may not use State Density bonus.**

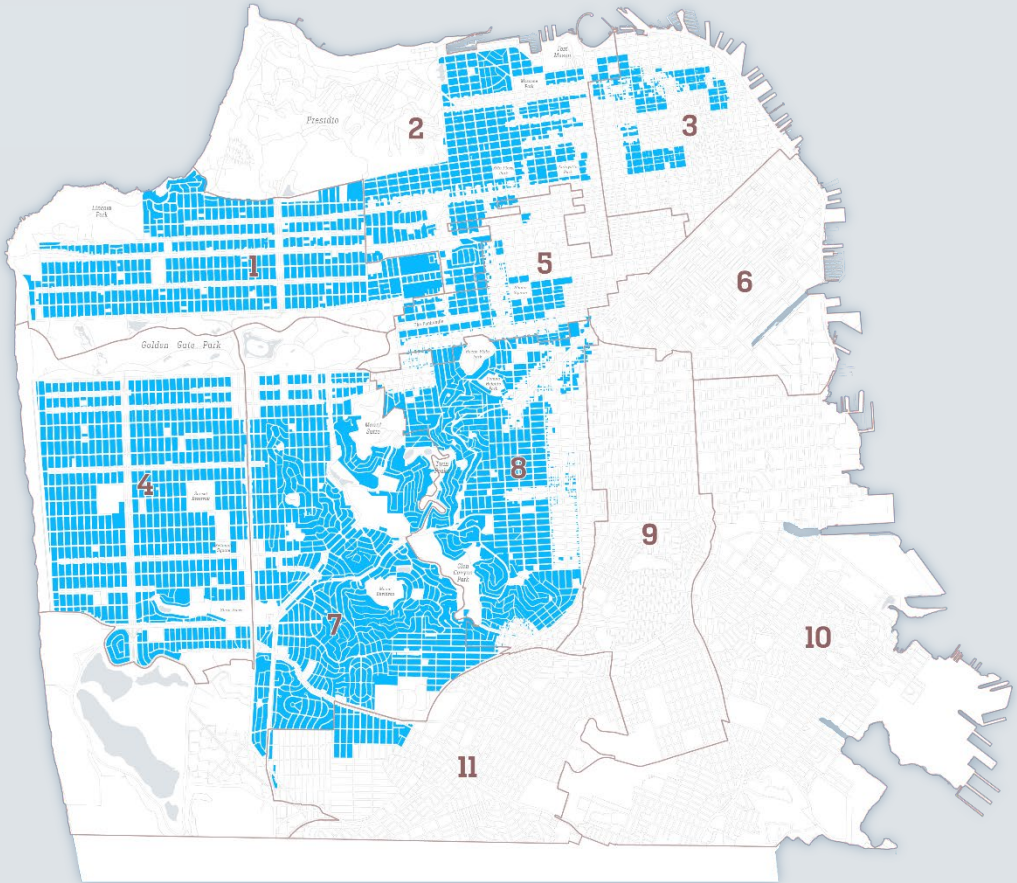


40’ Gentle Density (4 stories)

77% of sites in the rezoning receive no height changes but will get to build more units within their 40’ height limit.

These projects **<u>cannot</u> use State Density Bonus** to increase heights further.

2-unit (left) and a 4-unit building (right) on Hermann Street.

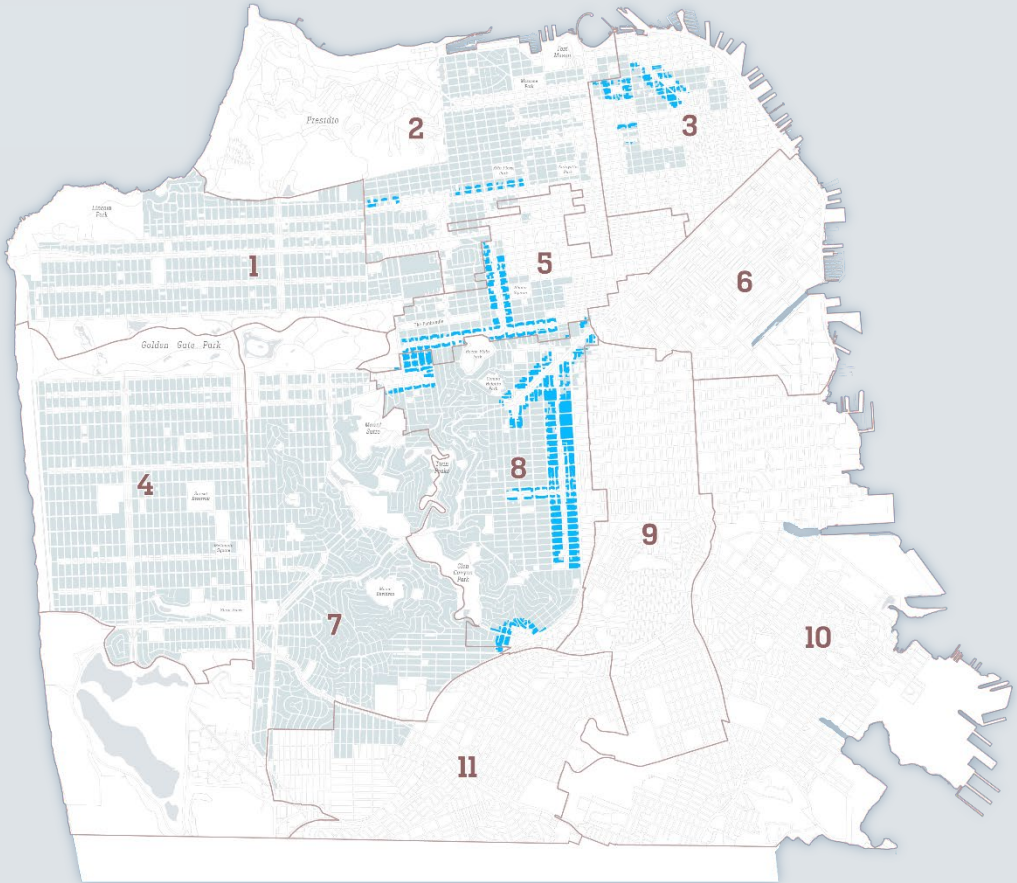


50’ Commercial Transition (5 stories)

Commercial transition areas get an additional **1 story (10’)** through the Local Program.

These projects **cannot use State Density Bonus** to increase heights further.

5-story building on West Portal Avenue

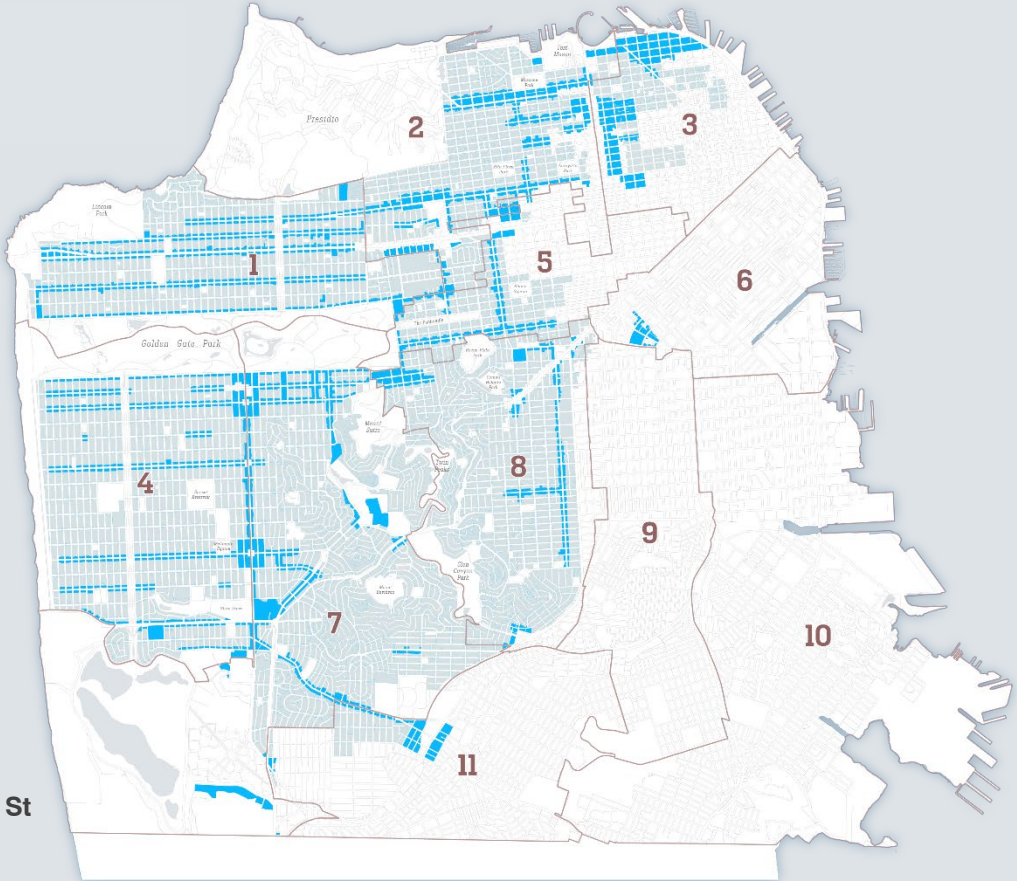


65’ & 85’ Mid-Rise Corridors (6 and 8 stories)

Generally 2 to 4 stories above today’s height limit.

<u>Projects can choose</u> either Local Program or State Density Bonus to get to similar heights.

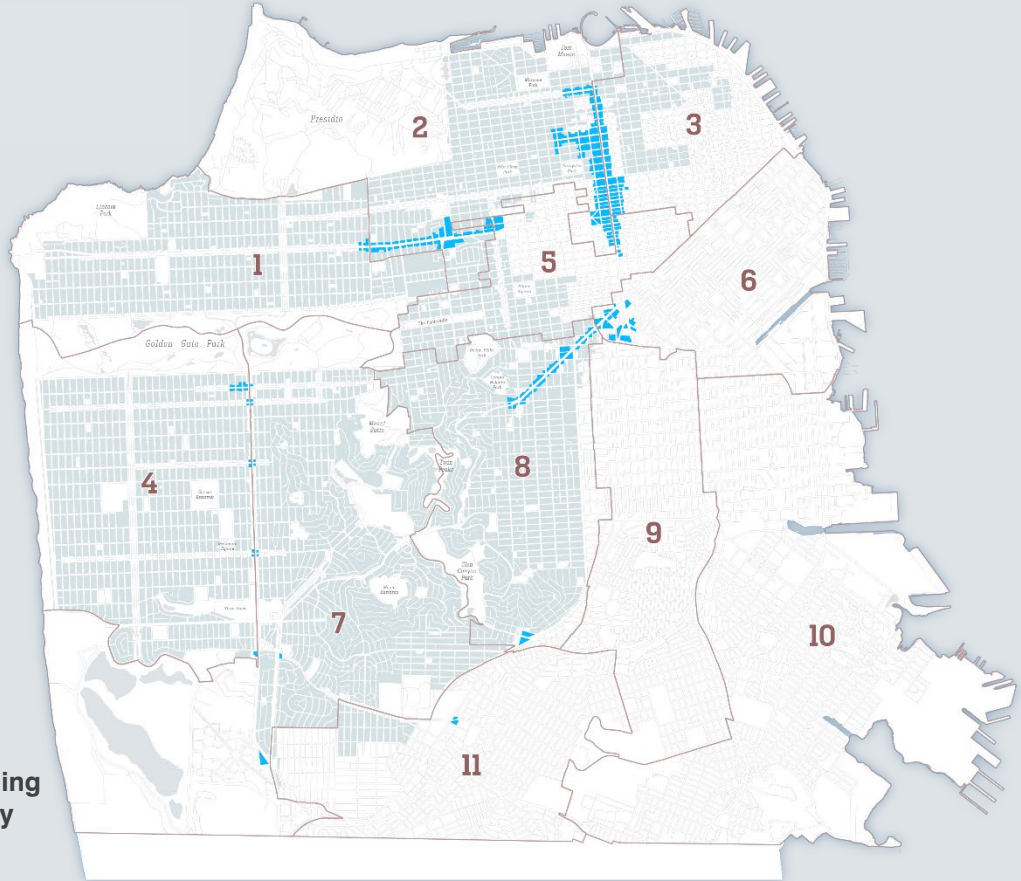
6- and 8-story building on Polk St



Select High Rise Area (Height varies)

<u>Projects can choose</u> either Local Program or State Density Bonus to get to similar heights.

16-story building in Mission Bay



State Law & Capacity Calculations

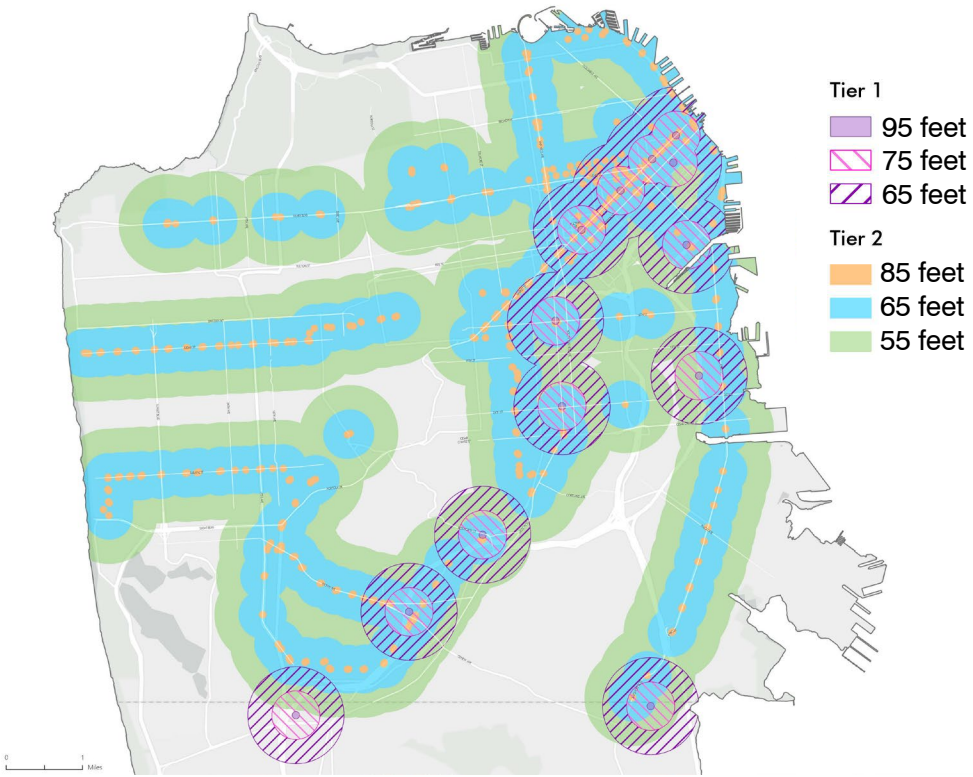
To meet state law and Housing Element Action 7.1.1: SF must demonstrate that rezoning adds at least 36,200 units of capacity on **sites that are suitable and available**, using **methods that reasonably account for development likelihood.**

HCD issued a preliminary approval of the Plan on September 9th, noting that SF must use **all three of these methods** in combination to demonstrate realistic capacity:

Method	Analysis	Capacity *(June & Sept ordinances)*
Citywide	Uses an annual pace of development relative to zoned capacity.	**39,000 units** *(meets target of 36,200 units)*
Soft Sites	Excludes or discounts parcels based on current uses and other characteristics.	**45,000 units** *(meets target of 36,200 units)*
Feasibility	Computational model testing financial feasibility and economic conditions on each parcel.	**19,000 units** *(meets target of 16,000 moderate & above-moderate units)*

Senate Bill 79 (SB 79): Applies after July 1, 2026

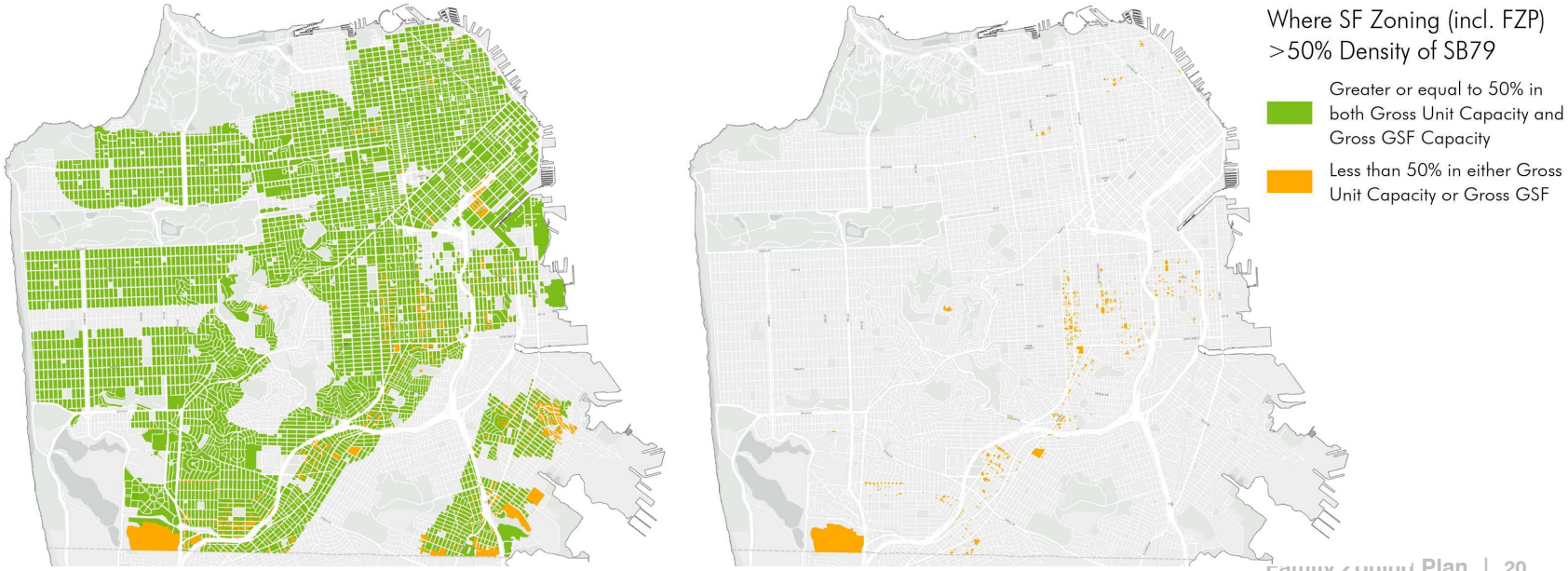
- **SETS MINIMUM HEIGHT & DENSITY: 5 to 9 stories,** ½-mile around BART, Caltrain, Muni Metro, and Major Bus Stops
- **VARIOUS EXEMPTIONS UNTIL 2032:** For lots with >50% SB79 density, low-resource census tracts, other conditions. ***Most SF parcels are exempt under these rules.***
- **ALLOWS LOCAL "ALTERNATIVE PLAN" IN-LIEU OF SB79:** provided that Alternative Plan has at least same cumulative housing capacity as SB79.



SB 79: Family Zoning Plan is Adequate as "Alternative Plan"

Preliminary analysis shows that **if the proposed rezoning is adopted, SF will likely have an adequate Alternative Plan**, though further analysis is needed.

HCD and MTC will issue additional guidance on SB79 implementation.



ENVIRONMENTAL REVIEW

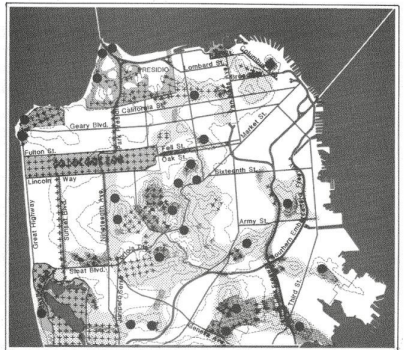
ACTIONS UNDER CONSIDERATION

1. Adoption of General Plan Amendments Ordinance (File 250966)
2. Adoption of Map Ordinance (File 250700)
3. Adoption of Planning, Business, & Tax Regulations Code Ordinance (File 250701)
4. Adoption of Local Costal Plan Amendment Resolution (File 250985)

General Plan Amendments Ordinance (File 250966)

- **Goal:** Modernize the General Plan and bring it into **alignment with the Family Zoning Plan**.

- **Proposed Amendments:**
  - Remove **outdated height maps**
  - **Update language** about height limits, density limits, and building scale and character.



PROPOSED AREA PLAN AND ELEMENT UPDATES

Urban Design Element
Commerce and Industry Element
Transportation Element
Balboa Park Station Area Plan
Glen Park Community Plan
Market and Octavia Area Plan
Northeastern Waterfront Plan
Van Ness Avenue Area Plan
Western SoMa (South of Market) Area Plan
Western Shoreline Area Plan.
Land Use Index

Source: Glen Park Community Plan, Urban Design Element

Zoning Map Ordinance (File 250700)

- **ZONING DISTRICT CHANGES:** Reclassifies various parcels to other districts to **allow more housing**, including Mixed Use, NC, and new RTO-C zoning.
- **HEIGHT CHANGES:** Changes **height limits** on certain parcels,and sets a “Base” height and “Local Program” height.
- **NEW BULK DISTRICT:** Creates new **R-4 Height and Bulk District**, which establishes eligibility for optional Local Program (“Housing Choice SF Program”)
- **SFMTA SPECIAL USE DISTRICT (SUD):** Adds various properties to a SFMTA SUD to enable housing production. **Future development projects will need Board approval.**
- **LOCAL COASTAL PLAN:** Amends parcels in Local Coastal Plan to be **consistent with the changes above**.

Planning, Business & Tax Regulation Code Ordinance (File 250701)

Topic	Amendment	Sections
Local Program (Housing Choice SF Program)	**Offers Incentives and streamlined process** via Local Program (Housing Choice SF Program), a flexible alternative to the State Density Bonus that **ensures local control over height and design standards**	206.10; 344
New Residential Zoning District (RTO-C)	Sets rules for newly created Residential Transit Oriented – Commercial (RTO-C) district, a **form-based district which allows ground floor commercial**	209.4
SFMTA Special Use District	Sets rules for SFMTA Special Use District to **allow for future housing on sites** (future developments projects will still require Board approval)	249.11

Planning, Business & Tax Regulation Code Ordinance (File 250701)

Topic	Amendment	Sections
Senior Housing Flexibility	Makes it **easier to build senior housing** by adjusting open space, bike parking, and minimum unit requirements.	135 155.1 202.1(f)(1)(C)
Small Business Relocation & Early Notification	• Supports **relocation of displaced businesses** by exempting Conditional Use hearings and impact fees; • Requires **early notification** to the commercial tenant and Office of Small Business.	202.17; 311
Efficient Land Use Near Transit; Parking Management	• Establishes **minimum densities** for residential and office uses near transit. • Adjusts **maximum parking ratios** according to proximity to transit.	Various

Planning, Business & Tax Regulation Code Ordinance (File 250701)

Topic	Amendment	Sections
Housing Sustainability District (HSD)	Creates a Housing Sustainability District (HSD), **another ministerial pathway** for qualifying projects in the Local Program.	344
Height and bulk limits	Modifies height and bulk standards to be **consistent with Citywide Design Standards**.	260
Wind Review Standards	**Consolidates wind review standards** for projects 85' and above in some districts	148
Code Cleanup & Local Coastal Plan Consistency	• Conforming edits to **zoning control tables** • Referral of amendments in **Local Coastal Plan** to Coastal Commission • Clarifying edits to conform with **state law** and other **code cleanup**	Various

Local Program (206.10): Menu of Code Flexibility

Automatic Flexibility in Local Program

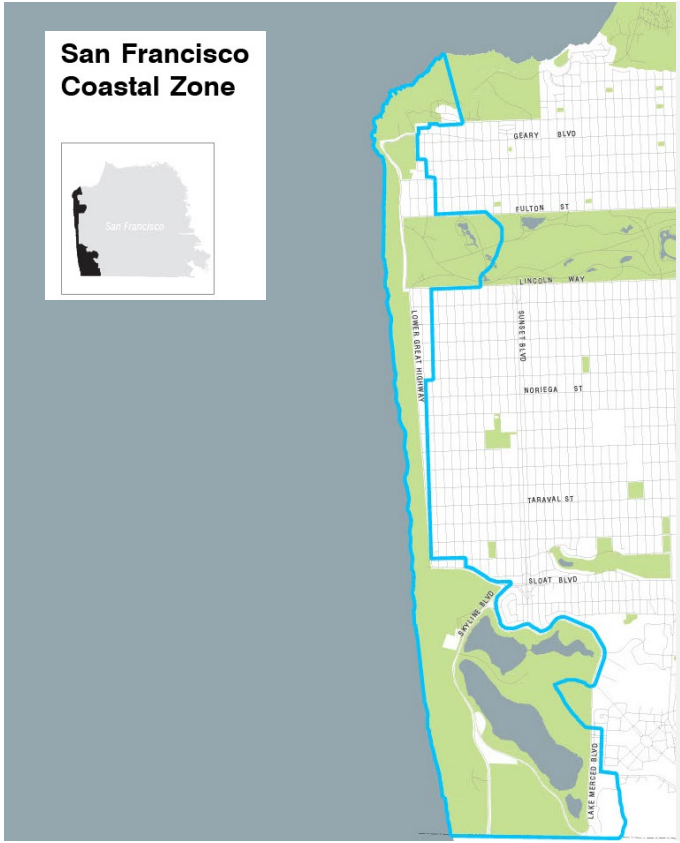
- **Density:** form-based density (if not already in base zoning)
- **Inclusionary Housing:** flexibility to use all affordable options; rent-control option for <25 units.
- **100% Affordable Projects** receive 2 extra stories (20') and other flexibility.
- **Waive Exposure and Usable Open Space** requirements
- **Waive Large Lot and Non-residential Use Size** Conditional Use hearing.
- **Rear Yard** reduction to the greater of 18% or 15'.
- **Ground Floor Height** waiver for projects in 85' height districts
- **"Catchall" Flexibility:** 15% additional relief on other topics.

Local Program (206.10): Development Bonuses

Projects can receive a **square footage bonus**, added via height or horizontal bonuses:

Height bonuses (Corridors Only)	Horizontal bonuses (Location varies)
Cumulative 2 stories (20') bonus for historic preservation: for adaptive reuse **Cumulative 1 story (10') bonus for various incentives:** • **Commercial:** Warm Shell, Micro-Retail, Legacy Business or displaced business • **Community-serving use:** nonprofits, grocery, community facilities, childcare • **Family-sized units:** 3+ bedrooms	• **Historic preservation (corridors only):** may reduce rear yard • **Family-sized unit incentives:** may reduce rear yard, side yard, and upper-story setbacks • **Family-friendly amenities (residential districts only):** may reduce rear yard, side yard, and upper-story setbacks

Local Costal Plan Amendment Resolution (File 250985)



- **CONSISTENCY WITH COASTAL ACT:** Certifies Local Coastal Plan (LCP) Amendment is **consistent with Coastal Act**
- **REFERRAL TO COASTAL COMMISSION:** Directs Planning Director to submit LCP Amendment to **CA Coastal Commission for public hearing and certification.**

Affordable Housing **Sites Analysis and Strategies**

Topics We'll Cover Today

- Project **Purpose and Context**
- Research and Analysis:
  - **Pipeline and Parcel Analysis**
  - **Policy and Financial Research**
- Recommended **Strategies**

Affordable Housing Sites Analysis & Strategies Purpose

Affordable Housing Sites Analysis and Strategies (AHSAS) informs how the City and affordable housing developers can **acquire and develop sites for 100% affordable housing,** focused on:

- **Effectively managing the existing pipeline** of affordable housing
- **Ensuring ongoing affordable housing production** along with equitable geographic distribution of affordable housing
- **Identifying and acquiring new sites for affordable housing development** using a range of approaches

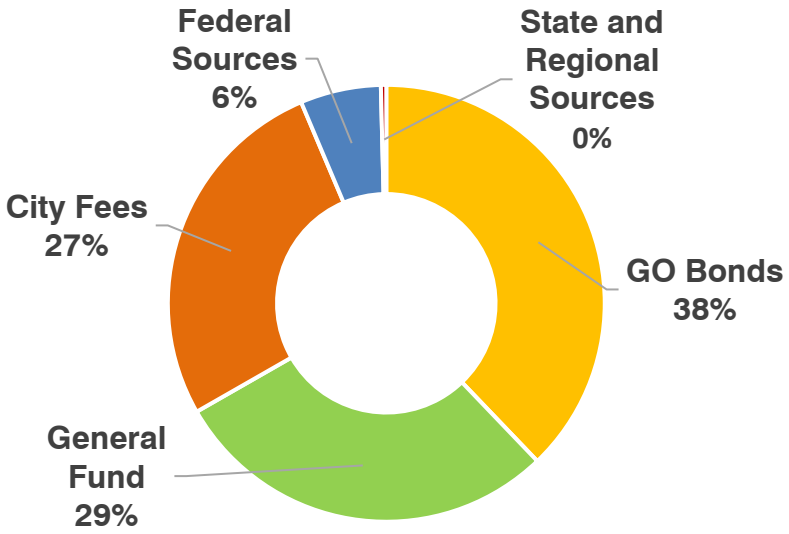
Affordable Housing Funding as the Key Challenge

Funding and cost lowering are key to produce and preserve affordable housing.

Affordable Housing Leadership Council Report (Spring 2024) addresses **funding, financing,** and **costs**.

- **Increase Federal, State, and regional funding**.
- **Expand San Francisco's capacity and coordination to fund** affordable housing.
- **Innovation and alternative approaches** to delivering affordable housing.

Local Affordable Housing Funding 2018-2023



Property taxes and other revenue from new development provide majority of local funding

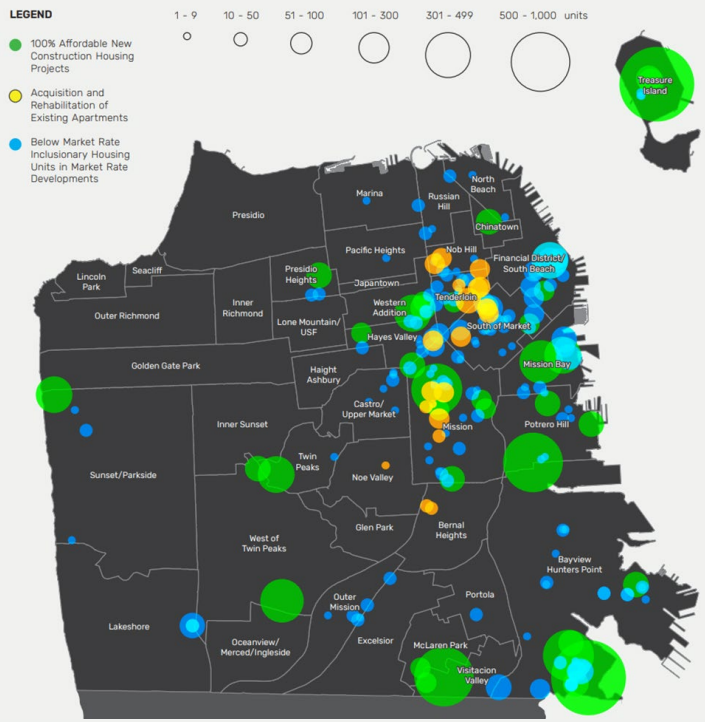
Affordable Housing Pipeline Analysis

Mapping and Analysis of Existing Affordable Housing Pipeline

- **Prospective sites & Pre-construction:** 12,600+ units (59 projects)
- **Under Construction:** 2,299 units (30 projects)
- **Inclusionary BMR Units:** 2,500+ units (124 projects)

Geography: Affordable Housing pipeline **mirrors the market-rate pipeline,** with most projects in equity geographies.

Significant funding gap holds back the completion of existing pipeline



Source: MOHCD July 2025

Site Suitability Analysis (pre-rezoning)

Purpose: Identify potential affordable housing sites based on:

- **Policy** (local/state law) and development potential
- **MOHCD and affordable developer criteria**: preference for 100+ units on 8,000+ sq ft for efficiency
- **Analysis excludes existing residential units** and various public sites

Draft Finding: Under today's rules (pre-rezoning), 1,200 parcels may be suitable for affordable housing with capacity for 148,000 units.

Assembling smaller adjacent lots yields additional 2,200 parcels with capacity for 98,000 units.

100% Affordable Sites: Relationship to Rezoning

FAMILY ZONING PLAN

REZONED SITES (overall)

- Required to meet Housing Element (e.g., **RHNA**) at all income levels.
- **Primarily located in Well-Resourced Neighborhoods**.

LOW-INCOME SITES

- Subset of rezoned sites to meet **low-income** RHNA requirement.
- Must meet **minimum size and density**.
- Future projects proposing >20% BMR are eligible for **ministerial approval**

100% AFFORDABLE SITES

- Sites meeting **suitability criteria** for MOHCD, state, and federal funding.
- **Located citywide**; overlaps with rezoning & low-income sites
- **Rezoning will enable additional parcels** to meet criteria.

Affordable Housing Financial and Policy Research

Financial Research: Trends in land and development costs

- **Construction costs are 60%+ of affordable housing development costs while land costs averaged about 10%** (ranging from 7-14%). Land holding can add cost as well
- **Land prices have been relatively stable averaging ~$121K per unit over the last decade**. Fewer land sales in down markets; prices fluctuating just 5%.
- **Rezoning has limited effect on land costs per unit**; effects are linked to economic conditions and financial feasibility. Recent land prices per unit for affordable housing sites were comparable in rezoned areas and areas with no zoning changes

Policy research: Best practices from other cities

- **Establishing stable funding and aligning pipeline growth with funding capacity** and building on **partnerships with public, nonprofit, & faith-based property owners**

Affordable Housing Sites Recommended Strategies

1. **Managing the pipeline** of housing development and site acquisition
2. **Expanding the geography** of affordable housing
3. **Public sites and faith- and nonprofit-owned sites** for affordable housing
4. **Strategic market practices** for site acquisition
5. **Expanding opportunities for "missing middle"** affordable housing types.

Updated Informational Resources

Resources providing factual information and addressing misinformation:

- **What is the Family Zoning Plan?**
- **(NEW) Capacity Calculations**
- **Small Business**
- **Tenant Protections**
- **What Happens if We Don't Rezone?**
- **Example visualizations**

Residential demolitions are extraordinarily rare and will remain so after rezoning.

235

Units demolished (2012-24)

18 units/year
(0.00004% of SF housing stock)

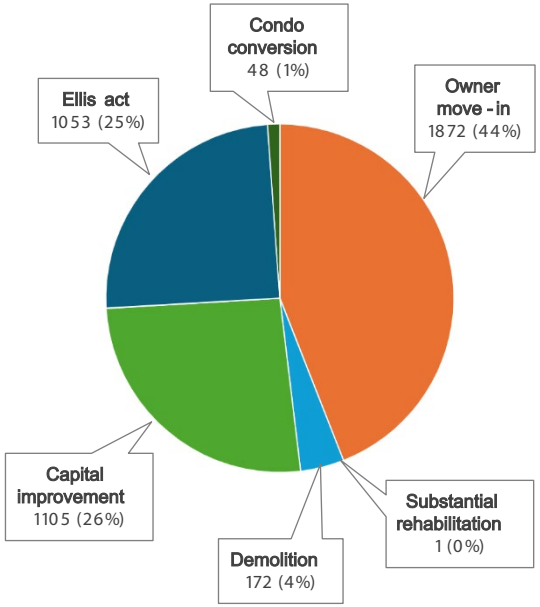
139 single family (**11 units/yr**)
(352 units built; 213 net new)

96 multifamily (**7 units/yr**)
(284 units built; 188 net new)

4%

of no-fault evictions are due to demolition (2015-2025)

96% of evictions are due to **owner move-in (44%), capital improvement (26%), and Ellis Act (24%)**



Source: Planning Department, Rent Board. Demolition data does not include HOPE SF, development agreements, or emergency demolitions.

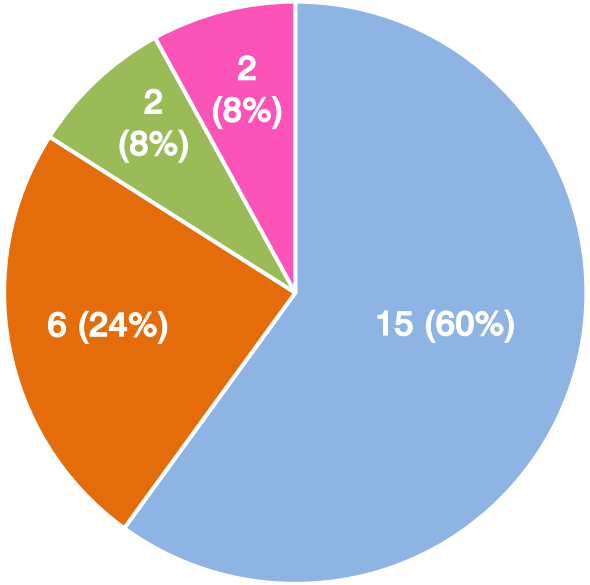
Most housing developments are built on vacant and underutilized lots.

Case study: Market Street & Ocean Ave

2,800 new homes built since 2007

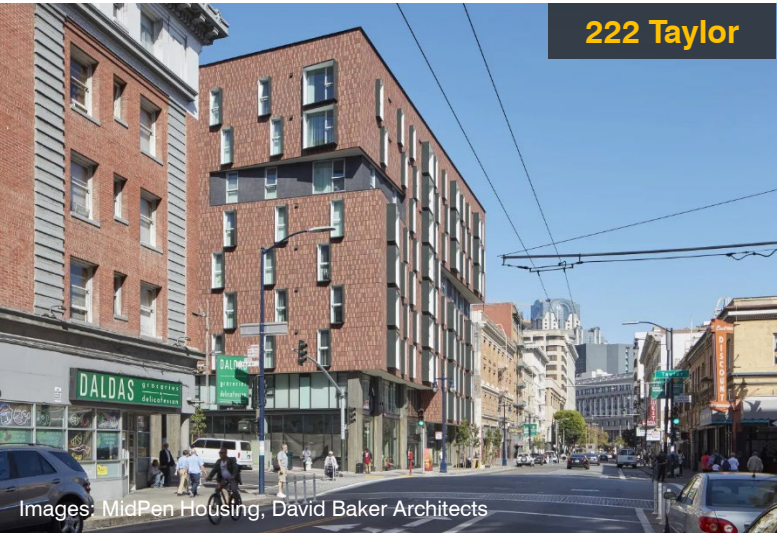
84% of new housing projects were on sites without storefront businesses

92% did not result in major impacts to historic resources



- Projects without previous commercial
- Previously auto use
- Previously retail
- Previously food business

Source: SF Planning Land Use Database (2025)



Images: MidPen Housing, David Baker Architects

Rezoning will increase housing affordability & diversity.

- **100% AFFORDABLE HOUSING:** funded by **bonds, inclusionary fees, state & federal funds**.
- **MIXED-INCOME HOUSING:** Market-rate projects contribute at least **15-20% affordable** units.
- **SITES FOR AFFORDABLE:** Enabling **sufficient sites** for affordable housing
- **INCENTIVES FOR 100% AFFORDABLE:** through our **Local Program**.
- **DIVERSITY = AFFORDABILITY:** **Allowing more housing will increase affordability**, esp. for middle-income households.

What will change look like?

- **Spending at local businesses** ($5.6 billion over 8yr)
- **Housing diversity and affordability**
- **More housing choices & stability for employees**
- **Revenues for public services & infrastructure**
- **Climate & environmental benefits**

Images: David Baker Architects, Handel Architecture, HKS

Visualization: Geary Blvd at 3rd Ave

Credit: AECOM

Visualization: Noriega St @ 25th Ave

Credit: AECOM

Visualization: Lombard St @ Buchanan St

Credit: AECOM

Visualization: Lombard St at Richardson St

Credit: AECOM

Visualization: Ocean Ave and Lee Ave

Credit: AECOM

Visualization: Divisadero St and Bush St

Credit: AECOM

Visualization: Residential District (composite; not an actual location)
40'
Credit: AECOM

Visualization: Lyon St Steps view

Credit: AECOM

Visualization: Francisco Park view
45
65
45
Credit: AECOM

Visualization: Francisco Park view

Credit: AECOM

Visualization: Coit Tower view

Credit: AECOM

Acknowledgements

Sarah Dennis-Phillips, Planning Director
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Art by ChatGPT with modifications by SF Planning

Thank you!

http://sfplanning.org/sf-family-zoning-plan

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NOTICE OF ELECTRONIC TRANSMITTAL

DATE: November 17, 2025

TO: Angela Calvillo, Clerk of the Board of Supervisors

FROM: Debra Dwyer, Principal Environmental Planner, 628.652.7576 or Debra.Dwyer@sfgov.org

RE: Environmental Review for the Family Zoning Program
Board Files 250700, 250701, and 250966

In compliance with San Francisco's Administrative Code Section 8.12.5 "Electronic Distribution of Multi-Page Documents," the Planning Department is submitting a memorandum addressing analysis of proposed zoning map amendments to the family zoning program sponsored by Supervisor Sherrill, District 2.

The Land Use and Transportation Committee of the Board of Supervisors will hold a hearing on the Family Zoning Program on November 17, 2025. These environmental documents are associated with Board Files 250700, 250701, and 250966. For questions regarding the environmental review for this project, please contact Ryan Shum, 628.652.7542 or ryan.shum@sfgov.org.

Enclosure

San Francisco Planning

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MEMORANDUM 3

Date: November 17, 2025
To: San Francisco Board of Supervisors
From: Lisa Gibson, Environmental Review Officer – lisa.gibson@sfgov.org , (628) 652-7571
Debra Dwyer, Principal Planner – debra.dwyer@sfgov.org, (628) 652-7576
Ryan Shum, Senior Planner – ryan.shum@sfgov.org, (628) 652-7542

RE: CEQA Analysis for Family Zoning Plan – Proposed Amendments
Planning Case Nos. 2019-016230ENV, 2021-005878CWP, and 2021-005878GPA
Board file nos. 250700, 250701, and 250966

Introduction

The purpose of this memorandum is to document why proposed amendments to the Family Zoning Plan proposed Zoning Map amendments do not require further analysis pursuant to the California Environmental Quality Act (CEQA) beyond the previously prepared environmental impact report, addendum, and supplemental memo.

Following the publication of the Housing Element 2022 Update Final Environmental Impact Report (FEIR) and adoption of the Housing Element, the San Francisco Planning Department (department) undertook an iterative process to develop a proposed rezoning program. The Mayor introduced the Family Zoning Plan (rezoning program) on June 24 and July 28, 2025. The department reviewed the legislation in compliance with CEQA, determined that there would be no new environmental impacts from the legislation, and prepared an addendum to the FEIR to confirm the findings of the FEIR analysis. The department published Addendum No. 1 to the Housing Element 2022 Update FEIR (addendum) on September 3, 2025, pursuant to CEQA.[1] The Planning Commission (commission) heard the rezoning program on September 11, 2025 and recommended its approval with modifications to the Board of Supervisors (board).

After the September 11 hearing at the Planning Commission, the Mayor submitted substitute legislation on September 30, 2025 that included minor changes to the zoning map and the planning code.[2] An October 16, 2025 memorandum to the file provided analysis for the modifications in the substitute legislation (Version 3 – September 30, 2025) pursuant to CEQA Statute section 21166 and CEQA Guidelines section 15162-15164, and incorporated by reference analysis in the FEIR and addendum.

1 San Francisco Planning Department. *Addendum No. 1 to the Environmental Impact Report*. September 3, 2025. Available at: https://sfplanning.org/environmental-review-documents?title=housing+element&field_environmental_review_categ_target_id=All&items_per_page=10

2 San Francisco Planning Department. *Family Zoning Plan: September 30, 2025, Substitute Legislation (version 3).* Available at: https://sfgov.legistar.com/View.ashx?M=F&ID=14834613&GUID=01515652-61EE-41BB-B353-CFB0C61A2C95

On October 20, 2025 the Land Use and Transportation Committee (land use committee) of the Board of Supervisors (board) held a hearing on the family zoning program. Proposed amendments to both the proposed zoning ordinance and zoning map were introduced (See attachment A). The land use committee will hold a second hearing on the family zoning program as well as the proposed amendments on November 3, 2025. This memorandum 2 provides analysis for the proposed amendments to the substitute legislation (Version 3 – September 30, 2025) pursuant to CEQA Statute section 21166 and CEQA Guidelines section 15162-15164, and incorporates by reference analysis in the FEIR, addendum, and supplemental memorandum.

On November 3, 2025 the Land Use and Transportation Committee (land use committee) of the Board of Supervisors (board) held a hearing on the family zoning program. Proposed amendments to both the proposed zoning ordinance and zoning map were introduced (See attachment A to 11/3/2025 memorandum 2).

The land use committee will hold a third hearing on the family zoning program and further proposed map amendments on November 17, 2025. This memorandum 3 provides analysis for the proposed map amendments to the substitute legislation (Version 3 – September 30, 2025) pursuant to CEQA Statute section 21166 and CEQA Guidelines section 15162-15164, and incorporates by reference analysis in the FEIR, addendum, and supplemental memoranda.

Description and Analysis of Proposed Amendments

The full text of the proposed ordinances and map changes are available online at on the board's Legislative Research Center (https://sfbos.org/legislative-research-center-lrc) under board file nos. 250700, 250701, and 250966.

The proposed amendments shown in Table 1 (attached) as well as in Board File 250700. The environmental analysis of proposed map changes with the potential to result in physical environmental effects are discussed below according to the Summary, a description of the general location for the change and whether the amendment is decreasing or increasing heights.

Summary Nos. 1, 2, 3 and 6 would result in decreased heights compared to the heights proposed in the Family Zoning Program as analyzed in the FEIR and addendum. Therefore, these amendments would not increase height or number of units allowed compared to the rezoning program analyzed in the addendum. These decreases are anticipated to result in an estimated decrease of 330 units. No further analysis is required.

Summary No. 4 would result in increased heights along the western portion of Van Ness Avenue between Ellis and Turk streets. In particular, the amendment would increase the base height from 130 feet to 140 feet and an increase in the local program height from 300 feet to 350 feet. The amendment would result in an increase of approximately 250 units within this area of western portion of Van Ness Avenue.

Summary No. 5 would result in increased heights along Pine Street between Leavenworth and Larkin streets. In particular, the amendment would change parcels proposed for 65//120-R-4 to 80//140-R-4. For these parcels the base height would change from 65 feet to 80 feet and the local program would increase from 120 feet to 140 feet. Other parcels would change from 80//120-R-4 to 80//140-R-4 where the base height would not change but the local program height would increase from 120 feet to 140 feet. The amendment would result in an increase of approximately 256 units.

The proposed modifications in item Nos. 4 and 5 may result in an incremental increases in height of between 15 to 50 feet and a marginal increase in the number of units allowed within two areas by about 250 units.

Wind and Shadow. The increases in heights in these two limited areas are within the range of heights studied in the programmatic and representative analysis in the FEIR and addendum. Therefore, these modifications would not result in new or more significant shadow or wind impacts and would be subject to project-level environmental review, as applicable. FEIR shadow and wind mitigation measures to reduce the impacts would apply, as applicable; the planning department would determine whether shadow or wind mitigation measures are required during project-level environmental review, as applicable.

Transportation. The net increase of about 250 units in two areas would result in a marginal increase in housing growth along Van Ness Avenue and closer to the 19-Polk Muni route, but the number of vehicle trips would be similar and would result in similar transportation impacts. The proposed modifications on Van Ness Avenue would not contribute to transit delay as transit operations on Van Ness Avenue are within protected transit only lanes for bus rapid transit. In each area, the increases could add approximately 1,730 daily person trips (289 automobile, 69 TNC/taxi, 485 transit, 50 bike, and 653 walking trips) to the area. Of the 358 automobile trips, only 13 vehicle trips would occur during the PM peak hour. These 13 peak hour vehicle trips would not significantly contribute to transit delay on the 19-Polk. The proposed modifications would not result in a new significant transportation impact that was not previously identified in the FEIR and addendum, nor would it result in substantially more severe impacts than those previously identified. Furthermore, the potential additional units in these two limited areas would be offset by the decreases in areas in item Nos. 1, 2, 3, and 6.

Other Topics. The potential additional units in these two limited areas are offset by the decreases in areas Nos. 1, 2, 3, and 6. The proposed modifications do not consist of peculiar features or unusual circumstances that would distinguish these areas from other areas of the rezoning that have been analyzed. Thus, while the proposed modification would result in a minor increase in housing units in these areas, the impacts of the following topics would be similar as to what is described in the FEIR and addendum: aesthetics, agriculture and forestry resources, air quality, biological resources, cultural resources, energy, geology and soils, greenhouse gas emissions, hazards and hazardous materials, hydrology and water quality, land use and planning, mineral resources, noise, paleontological resources, population and housing, public services, recreation, tribal cultural resources, utilities and service systems, and wildfire. No further analysis is required.

Conclusion

The proposed amendments to the family zoning program zoning map could result in minor increases in height, density, and housing unit growth in certain parts of the city, primarily in well-resourced areas. Limited growth could occur in areas adjacent to well-resourced areas, but the Housing Element FEIR and addendum acknowledged that the height and growth distribution depicted in the FEIR was hypothetical and not intended to be a precise depiction of future zoning changes. In addition, the FEIR indicated that future growth would likely be concentrated in, but is not limited to, the well-resourced areas of the city. The incremental growth would not result in new or substantially more severe significant impacts that were not already disclosed in the EIR. The mitigation measures that were identified in the FEIR would continue to apply to future development projects as determined applicable, and the department will determine which mitigation measures would apply during the project-specific environmental review phase. For these reasons, additional environmental review is not required for the proposed amendments to the legislation as described above.

TABLE 1: Proposed Rezoning Map Amendments

No.	Summary	Location	Block/Lot	Proposed Local Program Zoning Designation	Amendment
1	Decreasing heights along one block of Geary Blvd between Wood and Emerson	2700 Geary Blvd	1070003	70//140-R-4	50//85-R-4
		2750 Geary Blvd	1070001A	70//140-R-4	50//85-R-4 from Geary Boulevard to 100 feet from Geary Boulevard; 40//65-R-4 rest of lot
		75 Wood Street	1070002	40//65-R-4	40//65-R-4

No.	Summary	Location	Block/Lot	Proposed Local Program Zoning Designation	Amendment
2	Decreasing heights at the Marina Safeway parcel	15 Marina Blvd	0446002	40//65-R-4	40//40-R-4
		11 Marina Blvd	0446003	40//65-R-4	40//40-R-4
3	Decreasing heights at Ghirardelli Square Block	Ghirardelli Square Block	0452NA	40//65-R-4	40//40-R-4
4	Increasing heights along the western portion of Van Ness Avenue between Ellis and Turk streets	851 Van Ness Ave C1, San Francisco, CA 94109	0738045	130//300-R-4	140//350-R-4
		939 Ellis St, San Francisco, CA 94109	0738019	130//300-R-4	140//350-R-4
		815 Van Ness Ave, San Francisco, CA 94109	0738022	130//300-R-4	140//350-R-4

No.	Summary	Location	Block/Lot	Proposed Local Program Zoning Designation	Amendment
		801 Van Ness Ave, San Francisco, CA 94109	0738005	130//300-R-4	140//350-R-4
		830 Eddy St, San Francisco, CA 94109	0738018	130//300-R-4	140//350-R-4
		860 Eddy St, San Francisco, CA 94109	0738007	130//300-R-4	140//350-R-4
		815 Eddy Street, San Francisco, CA 94109	0743001	130//300-R-4	140//350-R-4
		799 Van Ness Avenue, San Francisco, CA 94109	0743204	130//300-R-4	140//350-R-4
		821 Eddy Street, San Francisco, CA 94109	0743015	130//300-R-4	140//350-R-4
		725 Van Ness Ave, San Francisco, CA 94102	0743002	130//300-R-4	140//350-R-4
		701 Van Ness Ave, San Francisco, CA 94102	0743203	130//300-R-4	140//350-R-4
5	Increasing heights along Pine Street between Leavenworth and Larkin	1390 Pine Street, San Francisco, CA 94109	0250009	65//120-R-4	80//140-R-4
		1372 Pine Street, San Francisco, CA 94109	0250008	65//120-R-4	80//140-R-4

No.	Summary	Location	Block/Lot	Proposed Local Program Zoning Designation	Amendment
		1370 Pine Street, San Francisco, CA 94109	0250007	65//120-R-4	80//140-R-4
		1350 Pine Street, San Francisco, CA 94109	0250006	65//120-R-4	80//140-R-4
		1346 Pine Street, San Francisco, CA 94109	0250005	65//120-R-4	80//140-R-4
		1330 Pine Street, San Francisco, CA 94109	0250004	65//120-R-4	80//140-R-4
		1324 Pine Street, San Francisco, CA 94109	0250003E	65//120-R-4	80//140-R-4
		1005 Hyde Street, San Francisco, CA 94109	0250003D	65//120-R-4	80//140-R-4
		1000 Hyde St, San Francisco, CA 94109	0251015	65//120-R-4	80//140-R-4
		1280 Pine Street, San Francisco, CA 94109	0251014	65//120-R-4	80//140-R-4
		1270 Pine Street, San Francisco, CA 94109	0251013	65//120-R-4	80//140-R-4
		1262 Pine Street, San	0251012	65//120-R-4	80//140-R-4

No.	Summary	Location	Block/Lot	Proposed Local Program Zoning Designation	Amendment
		Francisco, CA 94109			
		1254 Pine Street, San Francisco, CA 94109	0251011	65//120-R-4	80//140-R-4
		1250 Pine Street, San Francisco, CA 94109	0251010	65//120-R-4	80//140-R-4
		1234 Pine St, San Francisco, CA 94109	0251009	65//120-R-4	80//140-R-4
		1220 Pine Street, San Francisco, CA 94109	0251008	65//120-R-4	80//140-R-4
		1200 Pine Street, San Francisco, CA 94109	0251007	65//120-R-4	80//140-R-4
		1385 Pine St, San Francisco, CA 94109	0278012	80//120-R-4	80//140-R-4
		1359 Pine St, San Francisco, CA 94109	0278019	80//120-R-4	80//140-R-4
		1355 Pine St., San Francisco, CA 94109	0278016	80//120-R-4	80//140-R-4
		1331 Pine St., San Francisco, CA 94109	0278020	80//120-R-4	80//140-R-4
		969 Hyde Street, San Francisco, CA 94109	0278001	80//120-R-4	80//140-R-4

No.	Summary	Location	Block/Lot	Proposed Local Program Zoning Designation	Amendment
		972 Hyde Street, San Francisco, CA 94109	0277025	80//120-R-4	80//140-R-4
		1243 Pine Street, San Francisco, CA 94109	0277021	80//120-R-4	80//140-R-4
		1235 Pine Street, San Francisco, CA 94109	0277022	80//120-R-4	80//140-R-4
		1225 Pine Street, San Francisco, CA 94109	0277023	80//120-R-4	80//140-R-4
		1201 Pine Street, San Francisco, CA 94109	0277001	80//120-R-4	80//140-R-4
6	Decreasing heights on North Point Street between Larkin and Hyde	ENTIRE Block of North Point Street bound by Larkin Street (west) and Hyde Street (east)	0025004A	40//65-R-4	40//40-R-4
		ENTIRE Block of North Point Street bound by Larkin Street (west) and Hyde Street (east)	0025004B	40//65-R-4	40//40-R-4
		ENTIRE Block of North Point Street bound by Larkin Street (west) and Hyde Street (east)	0025004C	40//65-R-4	40//40-R-4

No.	Summary	Location	Block/Lot	Proposed Local Program Zoning Designation	Amendment
		ENTIRE Block of North Point Street bound by Larkin Street (west) and Hyde Street (east)	0025004D	40//65-R-4	40//40-R-4
		ENTIRE Block of North Point Street bound by Larkin Street (west) and Hyde Street (east)	0025004E	40//65-R-4	40//40-R-4
		ENTIRE Block of North Point Street bound by Larkin Street (west) and Hyde Street (east)	0025004F	40//65-R-4	40//40-R-4
		ENTIRE Block of North Point Street bound by Larkin Street (west) and Hyde Street (east)	0025008	40//65-R-4	40//40-R-4
			0025023	40//65-R-4	40//40-R-4
		ENTIRE Block of North Point Street bound by Larkin Street (west) and Hyde Street (east)	0025024	40//65-R-4	40//40-R-4
		ENTIRE Block of North Point Street bound by Larkin Street	0025028	40//65-R-4	40//40-R-4

No.	Summary	Location	Block/Lot	Proposed Local Program Zoning Designation	Amendment
		(west) and Hyde Street (east)			
		ENTIRE Block of North Point Street bound by Larkin Street (west) and Hyde Street (east)	0025029	40//65-R-4	40//40-R-4
		ENTIRE Block of North Point Street bound by Larkin Street (west) and Hyde Street (east)	0025032	40//65-R-4	40//40-R-4
		ENTIRE Block of North Point Street bound by Larkin Street (west) and Hyde Street (east)	0025039	40//65-R-4	40//40-R-4
		ENTIRE Block of North Point Street bound by Larkin Street (west) and Hyde Street (east)	0025042	40//65-R-4	40//40-R-4
		ENTIRE Block of North Point Street bound by Larkin Street (west) and Hyde Street (east)	0025045	40//65-R-4	40//40-R-4

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NOTICE OF ELECTRONIC TRANSMITTAL

DATE: November 3, 2025

TO: Angela Calvillo, Clerk of the Board of Supervisors

FROM: Debra Dwyer, Principal Environmental Planner, 628.652.7576 or Debra.Dwyer@sfgov.org

RE: Environmental Review for the Family Zoning Program
Board Files 250700, 250701, and 250966

In compliance with San Francisco's Administrative Code Section 8.12.5 "Electronic Distribution of Multi-Page Documents," the Planning Department is submitting a memorandum addressing analysis of proposed amendments to the family zoning program as heard at the Land Use and Transportation Committee hearing on October 20, 2025.

The Land Use and Transportation Committee of the Board of Supervisors will hold a hearing on the Family Zoning Program on November 3, 2025. These environmental documents are associated with Board Files 250700, 250701, and 250966. For questions regarding the environmental review for this project, please contact Ryan Shum, 628.652.7542 or ryan.shum@sfgov.org.

Enclosure

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MEMORANDUM 2

Date: November 3, 2025
To: San Francisco Board of Supervisors
From: Lisa Gibson, Environmental Review Officer – lisa.gibson@sfgov.org , (628) 652-7571
Debra Dwyer, Principal Planner – debra.dwyer@sfgov.org, (628) 652-7576
Ryan Shum, Senior Planner – ryan.shum@sfgov.org, (628) 652-7542

RE: CEQA Analysis for Family Zoning Plan – Proposed Amendments
Planning Case Nos. 2019-016230ENV, 2021-005878CWP, and 2021-005878GPA
Board file nos. 250700, 250701, and 250966
Attachments: Attachment A – Summary Table for October 20th Land Use & Transportation Committee Amendments

Introduction

The purpose of this memorandum is to document why proposed amendments to the Family Zoning Plan legislation do not require further analysis pursuant to the California Environmental Quality Act (CEQA) beyond the previously prepared environmental impact report, addendum, and supplemental memo.

Following the publication of the Housing Element 2022 Update Final Environmental Impact Report (FEIR) and adoption of the Housing Element, the San Francisco Planning Department (department) undertook an iterative process to develop a proposed rezoning program. The Mayor introduced the Family Zoning Plan (rezoning program) on June 24 and July 28, 2025. The department reviewed the legislation in compliance with CEQA, determined that there would be no new environmental impacts from the legislation, and prepared an addendum to the FEIR to confirm the findings of the FEIR analysis. The department published Addendum No. 1 to the Housing Element 2022 Update FEIR (addendum) on September 3, 2025, pursuant to CEQA.[1] The Planning Commission (commission) heard the rezoning program on September 11, 2025 and recommended its approval with modifications to the Board of Supervisors (board).

After the September 11 hearing at the Planning Commission, the Mayor submitted substitute legislation on September 30, 2025 that included minor changes to the zoning map and the planning code.[2] An October 16, 2025 memorandum to the file provided analysis for the modifications in the substitute legislation (Version 3

1 San Francisco Planning Department. *Addendum No. 1 to the Environmental Impact Report*. September 3, 2025. Available at: https://sfplanning.org/environmental-review-documents?title=housing+element&field_environmental_review_categ_target_id=All&items_per_page=10

2 San Francisco Planning Department. *Family Zoning Plan: September 30, 2025, Substitute Legislation (version 3).* Available at: https://sfgov.legistar.com/View.ashx?M=F&ID=14834613&GUID=01515652-61EE-41BB-B353-CFB0C61A2C95

– September 30, 2025) pursuant to CEQA Statute section 21166 and CEQA Guidelines section 15162-15164, and incorporated by reference analysis in the FEIR and addendum.

On October 20, 2025 the Land Use and Transportation Committee (land use committee) of the Board of Supervisors (board) held a hearing on the family zoning program. Proposed amendments to both the proposed zoning ordinance and zoning map were introduced (See attachment A). The land use committee will hold a second hearing on the family zoning program as well as the proposed amendments on November 3, 2025. This memorandum 2 provides analysis for the proposed amendments to the substitute legislation (Version 3 – September 30, 2025) pursuant to CEQA Statute section 21166 and CEQA Guidelines section 15162-15164, and incorporates by reference analysis in the FEIR, addendum, and supplemental memorandum.

Description and Analysis of Proposed Amendments

The full text of the proposed ordinances and map changes are available online at on the board's Legislative Research Center (https://sfbos.org/legislative-research-center-lrc) under board file nos. 250700, 250701, and 250966.

The proposed amendments include modifications to the Zoning map as well as the Planning Code. The proposed modifications with the potential to result in physical environmental effects are discussed further below. Table 1 below presents the environmental analysis of proposed map changes. Table 2 presents the potential environmental analysis of proposed planning code changes.

TABLE 1: CEQA Analysis of Map Changes

#	Block/Lot(s)	Amendment	Sponsor	CEQA Analysis
1	0446/002,003; 0452/002 [Safe way site, and Ghiradelli Square]	Reclassify height limit and bulk district from 65' to 40//40-R-4.	Sherill	Proposed modification would not increase height or number of units allowed compared to the rezoning program analyzed in the addendum. No further analysis required.
2	0025/east of and including 008 [Northpoint, north side between Hyde and Larkin]	Reclassify zoning from 40//65-R-4 to 40//40-R-4	Sherill	Proposed modification would not alter the maximum height or density or number of units allowed compared to the rezoning program analyzed in the addendum. No further analysis required.
3	1070/ 001A, 003 [Geary, between Wood and Emmerson, northside]	Reclassify 140' to 50//85-R-4	Sherill	Proposed modification would not alter the maximum height or density or number of units allowed compared to the rezoning program analyzed in the addendum. No further analysis required.
4	Various	Various – Remove all priority equity geographies	Chen	Would not change height or density compared to existing conditions. No further analysis required.

#	Block/Lot(s)	Amendment	Sponsor	CEQA Analysis
5	Various	Removes Article 10 structures (Local Landmarks). (pending proposal)	Mandelman	Would not change height or density compared to existing conditions. No further analysis required.
6	All NCs Various LOWER HEIGHTS IN NEIGHBORHOOD and COMMERCIAL DISTRICTS (OTHER THAN GEARY)	Remove from parcel table and maps completely all parcels in District 1. Lowers height to 40' (Inner Clement, Outer Clement, Outer Balboa, and some other non-named NCs), Decreases heights in many other locations: All RTO-C will be decreased from 85' to 65' (from 50//85 RTO-C to 40//65 or 50//65.)	Chan	Remove proposed changes to areas in District 1 from proposed zoning program. No further analysis is required.
7	Coastal Zone District 1	Blocks: 1591, 1593, 1596, 1598, 1689, 1690, 1691, 1481, 1483 [approx. 122 parcels]	Chan	Remove parcels on these blocks from the proposed zoning program; no analysis required.

Table 2: CEQA Analysis of Planning Code Changes

#	Planning Code Sec.	Sponsor	Amendment	CEQA Analysis
1	206.10(b)(9)	Melgar	EXEMPT RENT-CONTROLLED BUILDINGS OVER 2 UNITS FROM LOCAL PROGRAM: Such buildings would not be eligible for the local program but could still use State programs, if applicable.	The proposed modification would not alter the maximum height or density or number of units allowed compared to the assumptions in the FEIR or the indirect effects of the proposed zoning program analyzed in the addendum. No further analysis required.
2	206.10(b)(9)	Melgar	NO DEMOLITION OR CONVERSION OF TOURIST Hotels**:** Remove tourist hotels from Local Program eligibility.	The proposed modification would not alter the maximum height or density or number of units allowed compared to the assumptions in the FEIR or the indirect effects of the rezoning

#	Planning Code Sec.	Sponsor	Amendment	CEQA Analysis
				program analyzed in the addendum. No further analysis required.
3	344 (d)(13)	Melgar	NO DEMOLITION OR CONVERSION OF TOURIST HOTELS IN HOUSING SUSTAINABILITY DISTRICT. Adds eligibility criteria in HSD that project may not demolish or convert any portion of a Tourist Hotel.	The proposed modification would not alter the maximum height or density or number of units allowed compared to the assumptions in the FEIR or the indirect effects of the rezoning program analyzed in the addendum. No further analysis required.
4	334 (c)	Melgar	TECHNICAL CLARIFICATION: Affirms that nothing in Section 334 (Housing Sustainability District) abrogates permit, license, or other requirements codified outside the planning code.	The proposed modification would not result in physical impacts. No further analysis required.
5	206.10(d)(1)(B)	Chen	REINSTATES LOCAL PROGRAM UNIT MIX REQUIREMENT: Removes reduced unit mix requirement in the local program and defers to existing unit mix requirements in Planning Code 207.6 and 207.7.	The proposed modification would not alter the maximum height or density or number of units allowed compared to the assumptions in the FEIR or the indirect effects of the rezoning program analyzed in the addendum. No further analysis required.
6	334(d)(3)	Chen	NO LOCAL PROGRAM MODIFICATIONS OF UNIT MIX: includes unit mix as an exclusion that cannot be modified through a Major Modification.	The proposed modification would not alter the maximum height or density or number of units allowed compared to the assumptions in the FEIR or the indirect effects of the rezoning program analyzed in the addendum. No further analysis required.
7	249.11 (a)(2), (d) (1-3)	Chen	100% AFFORDABLE ON SFMTA SITES: For the SFMTA Special Use District (SUD), -Add findings establishing the objective of prioritizing the SFMTA sites for 100% affordable housing -Add pre-application process with a feasibility study modeling the site as 100% affordable housing, at least one pre-application meeting (publicly noticed), and documentation of consistency with Housing	The proposed modification would not result in physical impacts. No further analysis required.

#	Planning Code Sec.	Sponsor	Amendment	CEQA Analysis
			Element Actions 1.2.6 and 1.2.7.	
8	270(i)(2)	Mandelman	EXEMPT HISTORIC LANDMARKS FROM REZONING: establishes that Article 10 buildings are excluded from the R-4 Height and Bulk District, specifically: "Lots that contain a structure that has been designated as a historic landmark or a contributor to a historic district, pursuant to Article 10."	The proposed modification would not alter the maximum height or density or number of units allowed compared to the assumptions in the FEIR or the indirect effects of the rezoning program analyzed in the addendum. No further analysis required.
9	121.7(e)	Mandelman	RESTRICT LOT MERGERS WITH HISTORIC PROPERTIES: restricts all A-rated sites (Article 10, Article 11, National Register listed or eligible; Cal register listed or eligible) from lot mergers unless project maintains historic resource, compliant with Preservation Design Standards. Applicable historic resources: Any Lot with a historic resource that is - * designated as a landmark or listed as a contributor to or located within a historic district under Article 10; listed as a Significant or Contributory Building under Article 11; listed in the California Register of Historical Resources or the National Register of Historic Places; * identified in an adopted survey or historic context statement as potentially eligible for individual listing in the California Register of Historical Resources or the National Register of Historic	The proposed modification would not alter the maximum height or density or number of units allowed compared to the assumptions in the FEIR or the indirect effects of the rezoning program analyzed in the addendum. No further analysis required.

#	Planning Code Sec.	Sponsor	Amendment	CEQA Analysis
			Places" * or, located within an historic district that is listed in, or identified in an adopted survey or historic context statement as potentially eligible for listing in, the California Register of Historical Resources or the National Register of Historic Places."	
10	206.10(e)(2)	Sauter	ADDS "WARM SHELL" RETAIL INCENTIVE: provides edits to Warm Shell definition to delineate Food Service Warm Shell and General Warm Shell. Up to 3.0 square-foot bonus for Food Service and up to 2.5 square-foot bonus for General Warm Shell. Also clarifies how square footage bonuses may or may not be combined to result in additional height.	The proposed modification may result in an incremental increase in height of up to one to three additional story(ies)[3] and a marginal increase in the number of units allowed on a project site. **Preservation.** Future development projects that utilize this proposed bonus would be required to preserve the historic resource on-site and comply with the Preservation Design Standards so that the project would not result in a significant and unavoidable impact on the historic resource. Therefore, the proposed modification would not result in a new or substantially more severe significant impact on built-environment historic resources. **Wind & Shadow.** The incremental increase in height would not result in new or more significant shadow or wind impacts and would be subject to project-level environmental review, as applicable. FEIR shadow and wind mitigation measures to reduce shadow and wind impacts, respectively, would apply, as applicable; the planning department would determine whether shadow or wind mitigation measures are required during project-level environmental review.

3 The various square footage bonuses cannot cumulatively add more than one story onto a building, except on projects involving historic preservation on the parcel (see proposed code change #12 "Square Footage Bonus and Code Flexibility for Preservation of Historic Structures". Projects that utilize the square footage bonus and code flexibility for preservation of historic structures may be allowed up to two additional stories for the preservation bonus, plus one additional story cumulatively for the non-preservation incentives. In total, a project may be allowed to add up to three stories if they achieve the maximum allowable square footage bonus for both the preservation and non-preservation incentives. However, note that the square footage bonuses would not automatically grant additional height as horizontal bonuses would be considered and the total amount of square footage bonus would need to add up to one additional story. Furthermore, parcels in residential districts would not be allowed to use the additional square footage bonus as height at all and would be required to use the bonus space in other horizontal ways (e.g., reduced rear yard, etc.).

#	Planning Code Sec.	Sponsor	Amendment	CEQA Analysis
				Other Topics. The potential additional units on-site would be similar in nature to other housing units in the rezoning and on the project site, and would represent a marginal increase over the number of units allowed without the square footage bonus. Thus, the marginal increase in units would not result in new or substantially more severe impacts that were not previously identified in the FEIR and addendum.
11	206.10(e)(5)	Sauter	ADDS STOREFRONT REPLACEMENT INCENTIVE: Adds 1.5 square-foot bonus incentive for Replacement of Commercial Space, defined as a space that has 90-100% the space of the original space, and the same linear storefront dimensions (with allowance for a small lobby).	The proposed modification may result in an incremental increase in height of up to one to three additional story(ies)[4] and a marginal increase in the number of units allowed on a project site. **Preservation.** Future development projects that utilize this proposed bonus would be required to preserve the historic resource on-site and comply with the Preservation Design Standards so that the project would not result in a significant and unavoidable impact on the historic resource. Therefore, the proposed modification would not result in a new or substantially more severe significant impact on built-environment historic resources. **Wind & Shadow.** The incremental increase in height would not result in new or more significant shadow or wind impacts and would be subject to project-level environmental review, as applicable. FEIR shadow and wind mitigation measures to reduce shadow and wind impacts, respectively, would apply, as applicable; the planning department would determine whether shadow or wind mitigation measures are required during project-level environmental review. **Other Topics.** The potential additional units on-site would be similar in nature to other housing units in the rezoning and on the project site, and would represent a marginal increase over the number of units allowed without the square footage bonus. Thus, the marginal increase in units would not result in

4 See footnote 3.

#	Planning Code Sec.	Sponsor	Amendment	CEQA Analysis
				new or substantially more severe impacts that were not previously identified in the FEIR and addendum.
12	206(e)(6)(B)	Sauter	ADDS HISTORIC STOREFRONT PRESERVATION INCENTIVE: Adds incentive to retain historic storefronts per Preservation Design Standards (additional 0.25 gross-square-feet per square foot of storefront, added to other Adaptive Reuse incentive).	The proposed modification may result in an incremental increase in height that may be combined with other Adaptive Reuse incentives. See discussion in item 11. This modification would not result in new or substantially more severe impacts that were not previously identified in the FEIR and addendum.
13	206(e)(4)(A)	Sherrill, Sauter	ADDS 2-BEDROOM UNIT INCENTIVE: Adds incentive for additional 2 BD units above what is required (add 250 sf for each 2 BD unit)	The proposed modification would offer additional bulk for providing larger units. It would not alter the maximum height or number of units allowed compared to the assumptions in the FEIR or the indirect effects of the rezoning program analyzed in the addendum. No further analysis required.
14	Various	Chan	REMOVES FORM-BASED DENSITY IN THE BASE ZONING in all districts, and reverts density to existing density limits (applicable to Dwelling Units, Group Housing, Senior Housing)	The proposed modification would not alter the maximum height or density or number of units allowed compared to the assumptions in the FEIR or the indirect effects of the rezoning program analyzed in the addendum. No further analysis required.
15	209.4	Chan	NO FORM-BASED ZONING FOR NEW RTO-C DISTRICT: Updates the RTO District Zoning Control Table RTO-C column changing form-based density to density allowed in the nearest NC district.	The proposed modification would not alter the maximum height or density or number of units allowed compared to the assumptions in the FEIR or the indirect effects of the rezoning program analyzed in the addendum. No further analysis required.
16	206.10 (b)(4)	Chan	EXPANDS CATEGORIES OF HISTORIC RESOURCES FOR PROHIBITION OF DEMOLITION AND ADDS NO ALTERATIONS OF HISTORIC RESOURCES IN LOCAL PROGRAM: Expands universe of historic resources ineligible for Local Program from listed resources to those eligible	The proposed modification would not alter the maximum height or density or number of units allowed compared to the assumptions in the FEIR or the indirect effects of the rezoning program analyzed in the addendum. No further analysis required.

#	Planning Code Sec.	Sponsor	Amendment	CEQA Analysis
			and "potentially eligible", including non-contributing sites that are within districts. Expands the historic resource protection by clarifying that in addition to not demolishing, it does not "substantially alter a historic resource".	
17	206.10 (b)(10)	Chan	NO RESIDENTIAL DEMOLITIONS IN LOCAL PROGRAM: Adds "(9) does not demolish, remove, or convert to another use any existing Dwelling Unit(s), or Residential Flat" under HC-SF applicability.	The proposed modification would not alter the maximum height or density or number of units allowed compared to the assumptions in the FEIR or the indirect effects of the rezoning program analyzed in the addendum. No further analysis required.
18	334 (g)	Chan	30-MONTH "SHOT CLOCK": Adds a "Progress Requirement" through expiration if a project sponsor has not procured a building or site permit for construction within 30 months of project approval, with the ability to extend by 6 months (or longer in the case of appeal or lawsuit).	The proposed modification would not result in a physical environmental effect. No further analysis required.
19	206.10 (c)	Chan	RESTRICTS LOCATION OF OFF-SITE BMR UNITS: Removes "shall provide the required units within the R-4 Height and Bulk District or" under Inclusionary Housing Ordinance Alternatives. (Instead, revert to earlier requirement that they be provided within ½ mile of project site).	The proposed modification would not alter the maximum height or density or number of units allowed compared to the assumptions in the FEIR or the indirect effects of the rezoning program analyzed in the addendum. No further analysis required.
20	317 (c)(12)	Chan	STRENGTHEN REVIEW OF RESIDENTIAL FLAT DEMOLITION: Removes the CUA exemption for projects with residential flats that increase the number of units on a property; under this amendment, these projects	The proposed modification is a process change would not result in a physical environmental effect. No further analysis required.

#	Planning Code Sec.	Sponsor	Amendment	CEQA Analysis
			would require a CUA hearing.	
21	317 (g)(6)(L)	Chan	STRENGTHEN REVIEW OF RESIDENTIAL FLAT DEMOLITION: Removes CUA criteria language regarding whether residential flats maintain or increase the number of units on the lot that contain 2BD+ or that are at least equivalent in size to residential flats demolished.	The proposed modification is a process change would not result in a physical environmental effect. No further analysis required.
22	344 (d)(4)	Chan	NO ALTERATIONS OF HISTORIC RESOURCES IN HOUSING SUSTAINABILITY DISTRICT (HSD): Expands the historic resource protection by clarifying that in addition to not demolishing, it does not "substantially alter a historic resource"	The proposed modification would not alter the maximum height or density or number of units allowed compared to the assumptions in the FEIR or the indirect effects of the rezoning program analyzed in the addendum. No further analysis required.
23	249.11	Chan	REMOVE SPECIFIC SFMTA PARCELS FROM SUD: Removes Block/lot 1596/044 and 045 from the Non-contiguous SFMTA SUD (La Playa bus turnaround).	The proposed modification would not alter the maximum height or density or number of units allowed compared to the assumptions in the FEIR or the indirect effects of the rezoning program analyzed in the addendum. No further analysis required.
24	Section 8 (g)	Chan	REMOVES REFERENCE TO SFMTA SUD IN THE LOCAL COASTAL PROGRAM: In the description of deletes section (g) which references planning code section 249.11 SFMTA SUD	The proposed modification would not result in a physical environmental effect. No further analysis required.
25	206.10 (a)	Chan	AFFIRM LOCAL PROGRAM COMPLIANCE WITH ARTICLE 4 (FEES, AFFORDABILITY): Adds "Except as provided in this Section 206.10, all HC-SF shall comply with Article 4 of the Planning Code"	The proposed modification would not result in a physical environmental effect. No further analysis required.
26	206.10 (d)(4)	Chan	AFFIRM LOCAL PROGRAM COMPLIANCE WITH ARTICLE 4 (FEES, AFFORDABILITY) AND TENANT PROTECTIONS: Adds an exclusions clause to	The proposed modification would not result in a physical environmental effect. No further analysis required.

#	Planning Code Sec.	Sponsor	Amendment	CEQA Analysis
			current requirements clarifying FZP is not relieving a HC-SF project from complying with : Article 4 of the Planning Code other than as specified in this subsection (d); Section 202.17; or any tenant protections contained elsewhere in the Planning Code, including Section 317 et seq ., and Chapter 37 of the Administrative Code.	

Conclusion

The proposed amendments to the family zoning program zoning map and planning code could result in minor increases in height, density, and housing unit growth in certain parts of the city, primarily in well-resourced areas. Limited growth could occur in areas adjacent to well-resourced areas, but the Housing Element FEIR and addendum acknowledged that the height and growth distribution depicted in the FEIR was hypothetical and not intended to be a precise depiction of future zoning changes. In addition, the FEIR indicated that future growth would likely be concentrated in, but is not limited to, the well-resourced areas of the city. The incremental growth would not result in new or substantially more severe significant impacts that were not already disclosed in the EIR. The mitigation measures that were identified in the FEIR would continue to apply to future development projects as determined applicable, and the department will determine which mitigation measures would apply during the project-specific environmental review phase. For these reasons, additional environmental review is not required for the proposed amendments to the legislation as described above.

Attachment A

SF FAMILY ZONING PLAN
October 20th Land Use & Transportation Committee Amendments

NOTE: The amendments in the attached summary were added to the Family Zoning Plan ordinances at the October 20, 2025 Board of Supervisors Land Use & Transportation Committee hearing. The ordinances are continuing to be reviewed by the Board of Supervisors and are subject to change.

SF FAMILY ZONING PLAN

October 20th Land Use & Transportation Committee Amendments

NOTE: The amendments listed below were added to the Family Zoning Plan ordinances at the October 20, 2025 Board of Supervisors Land Use & Transportation Committee hearing. The ordinances are continuing to be reviewed by the Board of Supervisors and are subject to change.

ZONING MAP AMENDMENTS

#	Board File	Location	Block	Lot	Sponsoring Supervisor	Amendment
1	251071	Safeway site @ Marina Boulevard & Laguna St	0446	002, 003	**Sherill**	**LOWER HEIGHT OF SAFEWAY SITE:** Lower height from 65' to 40//40-R-4.
2	251071	Ghirardelli Square	452	002	**Sherill**	**LOWER HEIGHT OF GHIRADELLI SQUARE (A HISTORIC LANDMARK):** Lower height from 65' to 40//40-R-4
3	251071	North Point, north side btwn. Hyde and Larkin	0025	all parcels east of and including 008	**Sherill**	**LOWER HEIGHT OF PARCELS ON NORTH SIDE OF NORTH POINT STREET BETWEEN HYDE AND LARKIN:** Lower height from 40//65-R-4 to 40//40-R-4
4	251071	Geary, btwn. Wood & Emerson, North side	1070	001A, 003	**Sherill**	**LOWER HEIGHT OF TWO GEARY BLVD PARCELS:** Lower height from 140' to 50//85-R-4

#	Board File	Location	Block	Lot	Sponsoring Supervisor	Amendment
5	251071	Priority Equity Geographies	Various	Various	**Chen**	**REMOVE ALL PRIORITY EQUITY GEOGRAPHIES (PEGs) FROM REZONING:** Remove all PEGs from Zoning Tables (Table 1) Remove all PEGs from reclassifying residential to RTO-C Remove all PEGs from reclassifying residential districts other than RTO to RTO-1 Remove all PEGs from reclassifying from NC or P to C-2 Remove all PEGs from P to Mixed-Use or NCs Remove all PEGs from changing the height limits in the R-4 Remove all PEGs from rezoning to R-4. Remove Block 0019 (MTA Kirkland Yard) at Stockton Street and North Point Street Remove all PEGs from increasing heights to 40' if in height districts that are less than 40' Remove all PEGs from being reclassified to 40'//50' Remove all PEGs from being reclassified to 40'//65' Remove all PEGs from being reclassified to 50'//85' Remove all PEGs from being reclassified to 85' Remove all PEGs from being reclassified to base heights of 50'-80' and to HC-SF heights of 120'-180' Remove all PEGs from being reclassified to base heights of 100'-140' and HC-SF heights of 240'-350' Remove Van Ness Market bounded by Polk and Ellis from base heights of 195'-260' and HC-SF heights of 490'-650'. Instead, bound it by Van Ness, O'Farrell, etc.
6	Pending - may be proposed at 11/3 Land Use & Transportation Committee	Article 10 structures throughout the rezoning.	Various	Various	**Mandelman**	**REMOVE ALL ARTICLE 10 HISTORIC BUILDINGS (LOCAL LANDMARKS).** Maintains the properties in the ordinance only where they are changing from RTO to RTO-1, to clarify the name change.

#	Board File	Location	Block	Lot	Sponsoring Supervisor	Amendment
7	251071	District 1	All NCs and RTO-Cs in District 1	Various	**Chan**	**LOWER HEIGHTS IN NEIGHBORHOOD COMMERCIAL DISTRICTS (OTHER THAN GEARY) AND ON PROPOSED RTO-C DISTRICT THROUGHOUT ALL OF DISTRICT 1.** *** On most NC corridors, rolls back heights to current heights:** Lowers height to 40' (Inner Clement, Outer Clement, Outer Balboa, and some other non-named NCs), *** Decreases heights in many other locations:** All RTO-C will be decreased from 85' to 65' (from 50//85 RTO-C to 40//65 or 50//65.)
8	251071	Coastal Zone portion of District 1	1591, 1593, 1596, 1598, 1689, 1690, 1691, 1481, 1483	Various	**Chan**	**REMOVE MANY PARCELS IN DISTRICT 1 IN THE COASTAL ZONE** (122 parcels). Removes all parcels proposed for zoning with form-based density -- everything zoned NC, RTO-C -- removing all parcels that face Fulton, Balboa and La Playa. Removes Safeway site, SFMTA bus lot site. Also removes parcels along El Camino del Mar and Seal Rock Dr.

PLANNING, BUSINESS & TAX REGULATIONS CODE AMENDMENTS

#	Board File	Page	Line	Planning Code Sec.	Sponsoring Supervisor	Amendment
1	251072 and 251073	13	13-15	206.10(b)(9)	**Melgar**	**EXEMPT RENT-CONTROLLED BUILDINGS OVER 2 UNITS FROM LOCAL PROGRAM:** Such buildings would not be eligible for the Local Program (but could still use State programs, if applicable).
2	251073	13	18	206.10(b)(9)	**Melgar**	**NO DEMOLITION OR CONVERSION OF TOURIST HOTELS IN LOCAL PROGRAM:** Remove tourist hotels from Local Program eligibility. (They may still use State programs.)
3	251073	31	24	344 (d)(13)	**Melgar**	**NO DEMOLITION OR CONVERSION OF TOURIST HOTELS IN HOUSING SUSTAINABILITY DISTRICT (HSD):** Adds eligibility criteria in HSD that project may not demolish or convert any portion of a Tourist Hotel.
4	251073	27	18-19	334 (c)	**Melgar**	**TECHNICAL CLARIFICATION:** Affirms that nothing in Section 334 (Housing Sustainability District) cancels or repeals permit, license, or other requirements codified outside of the Planning Code.
5	251073	14-15	17-25; 1-4	206.10(d)(1)(B)	**Chen**	**REINSTATES LOCAL PROGRAM UNIT MIX REQUIREMENT:** Removes reduced unit mix requirement in the Local Program and defers to existing unit mix requirements in PC 207.6 and 207.7
6	251073	28	9	334(d)(3)	**Chen**	**NO LOCAL PROGRAM MODIFICATIONS OF UNIT MIX:** Includes unit mix as an exclusion that cannot be modified through a Major Modification
7	251073	166-167; 170	12-25; 1-6; 8-20	249.11 (a)(2), (d) (1-3)	**Chen**	**100% AFFORDABLE ON SFMTA SITES:** For the MTA Special Use District: - Add findings establishing the objective of prioritizing the MTA sites for 100% affordable housing - Add pre-application process with a feasibility study modeling the site as 100% affordable housing, at least one pre-application meeting (publicly noticed), and documentation of consistency with Housing Element Actions 1.2.6 and 1.2.7.

#	Board File	Page	Line	Planning Code Sec.	Sponsoring Supervisor	Amendment
8	Pending - may be proposed at 11/3 Land Use & Transportation Committee			270(i)(2)	**Mandelman**	**EXEMPT HISTORIC LANDMARKS FROM REZONING:** establishes that Article 10 buildings are excluded from the R-4 Height and Bulk District, specifically: "Lots that contain a structure that has been designated as a historic landmark or a contributor to a historic district, pursuant to Article 10"
9	251072	171-172	21-25; 1-8	121.7(e)	**Mandelman**	**RESTRICT LOT MERGERS WITH HISTORIC PROPERTIES:** restricts all A-rated sites (Article 10, A11, National Register listed or eligible; California Register listed or eligible) from lot mergers unless project maintains historic resource, compliant with Preservation Design Standards. <u>Applicable historic resources</u>: Any Lot with a historic resource that is: * designated as a landmark or listed as a contributor to or located within a historic district under Article 10; listed as a Significant or Contributory Building under Article 11; listed in the California Register of Historical Resources or the National Register of Historic Places; * identified in an adopted survey or historic context statement as potentially eligible for individual listing in the California Register of Historical Resources or the National Register of Historic Places; * or, located within an historic district that is listed in, or identified in an adopted survey or historic context statement as potentially eligible for listing in, the California Register of Historical Resources or the National Register of Historic Places.
10	251072 and 251073	18-19; 19-20	13-25 and 1-15; 2-25 and 1-4	206.10(e)(2)	**Sauter**	**ADDS "WARM SHELL" RETAIL INCENTIVE:** provides edits to Warm Shell definition to delineate Food Service Warm Shell and General Warm Shell. Up to 3.0 square footage bonus for Food Service and up to 2.5 square footage bonus for General Warm Shell. Also clarifies how square footage bonuses may or may not be combined to result in additional height.

#	Board File	Page	Line	Planning Code Sec.	Sponsoring Supervisor	Amendment
11	251072 and 251073	21-22; 22-23	21-25 and 1-18; 12-25 and 1-9	206.10(e)(5)	**Sauter**	**ADDS STOREFRONT REPLACEMENT INCENTIVE:** Adds 1.5 square footage bonus incentive for Replacement of Commercial Space, defined as a space that has 90-100% the space of the original space, and the same linear storefront dimensions (with allowance for a small lobby).
12	251072 and 251073	23; 23-24	7-10; 23-25 and 1	206(e)(6)(B)	**Sauter**	**ADDS HISTORIC STOREFRONT PRESERVATION INCENTIVE:** Adds incentive to retain historic storefronts per Preservation Design Standards (additional 0.25 gross square footage per square foot of storefront, added to other Adaptive Reuse incentive).
13	251073	21	14-17	206(e)(4)(A)	**Sherrill, Sauter**	**ADDS 2-BEDROOM UNIT INCENTIVE:** Adds incentive for additional 2-bedroom units above what is required (at 250+ square feet / 2-bedroom unit)
14	251073	Various	Various	Various	**Chan**	**REMOVES FORM-BASED DENSITY IN THE BASE ZONING** in all districts, and reverts density to existing density limits (applicable to Dwelling Units, Group Housing, Senior Housing)
15	251073	107	1-9	209.4	**Chan**	**NO FORM-BASED ZONING FOR NEW RTO-C DISTRICT:** Updates the RTO District Zoning Control Table RTO-C column changing form-based density to density allowed in the nearest NC district.
16	251073	12	20-Sep	206.10 (b)(4)	**Chan**	**EXPANDS CATEGORIES OF HISTORIC RESOURCES FOR PROHIBITION OF DEMOLITION AND ADDS NO ALTERATIONS OF HISTORIC RESOURCES IN LOCAL PROGRAM:** Expands universe of historic resources ineligible for Local Program from listed resources to those eligible and "potentially eligible", including non-contributing sites that are within districts. Expands the historic resource protection by clarifying that in addition to not demolishing, it does not "substantially alter a historic resource".
17	251073	13	16-17	206.10 (b)(10)	**Chan**	**NO RESIDENTIAL DEMOLITIONS IN LOCAL PROGRAM:** Adds “(9) does not demolish, remove, or convert to another use any existing Dwelling Unit(s), or Residential Flat” under Local Program applicability.
18	251073	29	8-16	334 (g)	**Chan**	**30-MONTH "SHOT CLOCK":** Adds a "Progress Requirement" through expiration if a project sponsor has not procured a building or site permit for construction within 30 months of project approval, with the ability to extend by 6 months (or longer in the case of appeal or lawsuit).

#	Board File	Page	Line	Planning Code Sec.	Sponsoring Supervisor	Amendment
19	251073	13	23	206.10 (c)	**Chan**	**RESTRICTS LOCATION OF OFF-SITE BMR UNITS:** Removes "shall provide the required units within the R-4 Height and Bulk District or" under Inclusionary Housing Ordinance Alternatives. (Instead, units revert to earlier requirement that they be provided within ½ mile of project)
20	251073	191	21-24	317 (c)(12)	**Chan**	**STRENGTHEN REVIEW OF RESIDENTIAL FLAT DEMOLITION:** Removes the Conditional Use Authorization exemption for projects with residential flats that increase the number of units on a property; under this amendment, these projects would require a Conditional Use Authorization hearing.
21	251073	192	6-9	317 (g)(6)(L)	**Chan**	**STRENGTHEN REVIEW OF RESIDENTIAL FLAT DEMOLITION:** Removes Conditional Use Authorization criteria language referencing whether residential flats maintain or increase the number of units on the lot that contain 2+ bedrooms or are at least equivalent in size to residential flats demolished.
22	251073	30-31	17-25 and 1-4	344 (d)(4)	**Chan**	**NO ALTERATIONS OF HISTORIC RESOURCES IN HOUSING SUSTAINABILITY DISTRICT (HSD):** Expands the historic resource protection by clarifying that in addition to not demolishing, it does not "substantially alter a historic resource"
23	251073	167	9	249.11	**Chan**	**REMOVE SPECIFIC SFMTA PARCELS FROM SPECIAL USE DISTRICT (SUD):** Removes 1596/044 and 045 from the Non-contiguous SFMTA SUD (La Playa bus turnaround).
24	251073	471	22-23	Section 8 (g)	**Chan**	**REMOVES REFERENCE TO SFMTA SPECIAL USE DISTRICT (SUD) IN THE LOCAL COASTAL PROGRAM:** In the description of deletes section (g) which references PC 249.11 SFMTA SUD
25	251073	11	23-24	206.10 (a)	**Chan**	**AFFIRM LOCAL PROGRAM COMPLIANCE WITH ARTICLE 4 (FEES, AFFORDABILITY):** Adds "Except as provided in this Section 206.10, all HC-SF projects shall comply with Article 4 of the Planning Code"

#	Board File	Page	Line	Planning Code Sec.	Sponsoring Supervisor	Amendment
26	251073	17-18	24-25; 1-2	206.10 (d)(4)	**Chan**	**AFFIRM LOCAL PROGRAM COMPLIANCE WITH ARTICLE 4 (FEES, AFFORDABILITY) AND TENANT PROTECTIONS:** Adds an exclusions clause clarifying Family Zoning Plan is not relieving a Local Program project from complying with: Article 4 of the Planning Code other than as specified in this subsection (d); Section 202.17; or any tenant protections contained elsewhere in the Planning Code, including Section 317 et seq., and Chapter 37 of the Administrative Code.

Member, Board of Supervisors
District 1

City and County of San Francisco

CONNIE CHAN

陳詩敏

第一區市參事

November 17, 2025

Mayor Daniel Lurie
City Hall, Room 200
1 Dr. Carlton B. Goodlett Place
San Francisco, CA 94102

Dear Mayor Lurie:

In partnership with community advocates across the city, we have been working with you in good faith to improve the proposed upzoning plan by doing more to mitigate harm to tenants and small businesses facing displacement. We understand that the proposal is one version in response to the state-mandate, but we need full and transparent accounting of the capacity the City has created over the past year to ensure we protect San Francisco and maintain local control.

After months of meeting and public discussion, and now with the steadfast support of our community stakeholders, **we remain committed to the following "non-negotiable" amendments:**

1. We will not demolish people's homes to replace them with market-rate units. Our existing housing is our most affordable housing.
2. We will not demolish the most important parts of San Francisco's iconic history and culture.
3. We will protect our coastal zone and defend against Trumpian privatization of public access.
4. We demand real family housing.

As stated in the proposed ordinance, Housing Element 2022 requires that the city has a realistic capacity for 82,000 additional units by 2032. This capacity comes from a combination of pipeline projects, inventory of the city's existing development sites, and changing the city's existing zoning. The Sites Inventory in the Housing Element identified approximately 58,500 units of

existing realistic capacity and was certified by California Housing and Community Development (HCD) in 2023. The proposed upzoning plan aims “to rezone and address the shortfall of 36,200 housing units” (File No. 250701, Page 7, Line 2).

Since the Sites Inventory was conducted over two years ago, the shortfall of 36,200 units was determined according to the conditions in 2022 and has not been updated to account for any capacity created as a result of zoning changes between then and the publication of the proposed upzoning plan.

This is a fact that Planning had foreseen in its Sites Inventory, citing that pending legislations – including Board File 210866 “Fourplex” and Board File 211092 "Automotive Uses and Housing Density” – “will raise the number of available sites in sites inventory output and lower the anticipated shortfall and potential rezoning proposal accordingly” (Housing Element - Appendix B, Page 46). Both of the legislations have since passed and been signed into law.

Additionally, in March of this year, the Board of Supervisors unanimously passed legislation sponsored by the Mayor and Supervisor Matt Dorsey, which reduced commercial and office development requirements for large projects in the Central SoMa Area Plan and the Transit Center C-3-O SUD (Board Files 240787 and 250003). **This action alone increased the city’s realistic housing capacity by as much as 8,500 units.**

For example, the following five large sites can now accommodate thousands more additional housing units according to new project applications submitted by developers after the recent policy change:

- 610 Brannan (Former Flower Mart) - Developer Kilroy Realty submitted new plans to Planning in September 2025 which include a variant with 3,532 additional housing units.
- 88 Bluxome - Developer Strata has submitted new plans in response to this new legislation with 1,500 new housing units.
- 725 Harrison - Currently entitled office project (845,000 sf) can now accommodate up to 1,000 housing units (Estimation proportionate to Flower Market project variants).
- 598 Brannan - Entitled office project (1 million sf) can now accommodate 1,175 housing units (Estimation proportionate to Flower Market project variants).
- 490 Brannan - Entitled office project (269,000 sf) can now accommodate 315 housing units (Estimation proportionate to Flower Market project variants).
- 3 large “opportunity sites” – approximately 1,000 unentitled units spread across three undisclosed “soft sites” identified by SF Planning. “One of these sites is in the Transit Center District and two are in Central SoMa” (SF Planning Department report on its change to the Central SoMa Plan, Page 6).

It is evident that the Board of Supervisors has been proactively working towards compliance of the Housing Element, but San Francisco has yet to receive credit for capacity created before the proposed upzoning plan. The upzoning plan's goal of creating 36,200 should be amended to reflect the increased capacity.

Again, we remain committed to meeting the State's housing mandate. We also believe that San Francisco has the capacity to meet this goal and develop family housing without displacement and erasure of San Francisco's most critical assets.

We sincerely urge you to stand with San Francisco, defend local control, and accept the collective amendments into your proposed upzoning plan.

Sincerely,

Connie Chan
Board of Supervisors

CC:
Supervisor Rafael Mandelman, President of the Board of Supervisors
Supervisor Myrna Melgar, Chair of the Land Use & Transportation Committee
Supervisor Chyanne Chen, Vice Chair of the Land Use & Transportation Committee
Supervisor Bilal Mahmood, Land Use & Transportation Committee
Director Sarah Dennis Phillips, San Francisco Planning Department
San Francisco Planning Commission

Member, Board of Supervisors
District 1

City and County of San Francisco

CONNIE CHAN
陳詩敏
第一區市參事

October 20, 2025

Chair Myrna Melgar
Vice Chair Chyanne Chen
Supervisor Bilal Mahmood
San Francisco Board of Supervisors Land Use and Transportation Committee
1 Dr. Carlton B. Goodlett Place, Suite 244
San Francisco, CA 94102

Dear Chair Melgar, Vice Chair Chen, and Supervisor Mahmood:

I first want to thank Chair Melgar for your efforts in organizing the agenda for today's hearing and allowing us the opportunity for a robust policy discussion on the Mayor's proposed upzoning plan and our proposed amendments.

It is our full intention to meet the State's housing mandate and I believe that San Francisco can both meet this goal and develop without displacement.

Since this summer, I have not only been studying the Mayor's proposed upzoning plan, my team and I have also been in conversations with many stakeholders and community members in the Richmond and citywide. We have heard from many San Franciscans who are questioning whether they will be part of our City's future or whether they will be left in the past because of this proposed upzoning plan.

Together with stakeholders, we have gone to great lengths to study the Housing Element's Site Inventory and Rezoning Program previously submitted by the City and approved by California Department of Housing and Community Development (California HCD). We used the approved guidelines to evaluate the Mayor's proposed upzoning plan and have found that the Mayor's proposed plan is a significant departure from what was already approved, with a great increase of upzoning and density to sites that have existing dwelling units. This ignores the overarching principle already agreed upon by both our local and state governments, that "change that the city needs must not harm

City Hall • 1 Dr.Carlton B. Goodlett Place • Room 244 • San Francisco, California 94102-4689
Office (415) 554-7410 • TDD/TTY (415) 554-5227 • E-mail: Connie.Chan@sfgov.org

people", as clearly stated on page 36 in the Site Inventory and Rezoning Program document.

As a result, the amendments we propose before the Land Use Committee today, will remarkably improve this Plan and add a balanced approach to encourage housing production and meet the state housing mandate, without incentivizing displacement.

Based on the model used for the Existing Sites Inventory in the Site Inventory and Rezoning Program, again a document approved by California HCD, there is a list of characteristics used to determine non-vacant sites to be excluded for rezoning unit potential. With this model determining site inventory and excluding specific non-vacant sites, the City can still meet the mandate of San Francisco's Regional Housing Needs Allocation and Affirmatively Furthering Fair Housing laws to accommodate about 36,282 new units in Well-Resourced Neighborhoods.

In fact, as indicated in the very same document on page 42, "Sites with existing residential uses of any amount that have not otherwise been wholly excluded from the Rezoning capacity assessment were deemed to have very low reasonable likelihood of redevelopment and, as a result, had their net capacities reduced downward (generally by 98%, leaving only 2% of their theoretical capacity represented in the Rezoning capacity)."

With that in mind, we are proposing language ranging from:

- Furthering demolition controls to protect tenants;
- Implementing nexus studies and impact fees to ensure adequate infrastructure investment, especially given the fact the City is facing existing funding challenges to build out the emergency water firefighting system for well-resourced neighborhoods, a deficit in public transit, and increased risk of tenant and small business displacement;
- Placing a "shot clock" to require developers to build within 30 months to boost housing production in the near future to meet the state mandated timeline of 2031;
- Limiting Form-Based Density to the Local Density Bonus Program to provide meaningful incentives to build family housing with 2-3 bedroom requirements; and
- Strengthening historic preservation to protect the unique characters of our neighborhoods and history of San Francisco;

In the end, when the proposed amendments are overlaid with each other, they meet one policy goal: that the displacement of tenants and small businesses should not be the

cost of doing business. Instead, we can meet our housing mandate and provide incentives for developers to drive housing developments at vacant sites.

We have been in discussion with Mayor Lurie and his team almost weekly since the end of summer. Our conversation has been productive and I want to especially thank the Mayor's Deputy Chief of Staff Aly Bonde for her efforts. We have been sharing with her our amendments and continuing our conversations.

As we all know, to build housing we need both land and money. And the housing San Francisco needs most is housing people can afford. In fact, it is my intention to request the drafting and introduction of an Affordable Housing Special Use District at a later date to identify all public land, including SF Municipal Transportation Authority owned land, private land of 8,000 square feet or larger and merger lots, as well as vacant and blighted lots, and rezone them specifically for housing with a different set of local density bonus. We also must identify funding to build, and to this end I will continue to push forward conversations for a Regional Housing Bond in 2028.

I appreciate all the months of dialogue and the incredible amount of work that has gone into this upzoning plan and I know that it is our intent as a City to meet our housing needs without harming San Franciscans. I believe the amendments I have before you today will do just that. We can develop without displacement.

So again thank you, Chair Melgar and the entire Land Use Committee, for doing your due diligence of evaluating the Plan accordingly and reviewing our proposed amendments. I look forward to having your support.

Sincerely,

Connie Chan
Supervisor, District 1

City Hall • 1 Dr.Carlton B. Goodlett Place • Room 244 • San Francisco, California 94102-4689
Office (415) 554-7410 • TDD/TTY (415) 554-5227 • E-mail: Connie.Chan@sfgov.org

BOARD of SUPERVISORS

City Hall
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Fax No. (415) 554-5163
TDD/TTY No. (415) 554-5227

NOTICE OF PUBLIC HEARING

LAND USE AND TRANSPORTATION COMMITTEE

BOARD OF SUPERVISORS OF THE CITY AND COUNTY OF SAN FRANCISCO

NOTICE IS HEREBY GIVEN THAT the Board of Supervisors of the City and County of San Francisco's Land Use and Transportation Committee will hold a public hearing to consider the following proposals and said public hearing will be held as follows, at which time all interested parties may attend and be heard:

Date: **Monday, October 20, 2025**

Time: **1:30 p.m.**

Location: **Legislative Chamber, Room 250, located at City Hall**
1 Dr. Carlton B. Goodlett Place, San Francisco, CA 94102

Subject: **File No. 250700.** Ordinance amending the Zoning Map to implement the Family Zoning Plan by: amending the Zoning Use District Maps to: 1) reclassify certain properties currently zoned as various types of Residential to Residential Transit Oriented - Commercial (RTO-C); 2) reclassify properties currently zoned Residential Transit Oriented (RTO) to Residential Transit Oriented - 1 (RTO-1); 3) reclassify certain properties from Residential districts other than RTO to RTO-1; 4) reclassify certain properties currently zoned Neighborhood Commercial (NC) or Public (P) to Community Business (C-2); and 5) reclassify certain properties from Public to Mixed-Use or Neighborhood Commercial Districts; amending the Height and Bulk Map to: 1) reclassify properties in the Family Zoning Plan to R-4 Height and Bulk District; 2) change the height limits on certain lots in the R-4 Height and Bulk District; and 3) designating various parcels to be included in the Non-Contiguous San Francisco Municipal Transportation Agency Sites Special Use District (SFMTA SUD); amending the Local Coastal Program to: 1) reclassify all properties in the Coastal Zone to R-4 Height and Bulk District; 2) reclassify certain properties to RTO-C and Neighborhood Commercial District; 3) designate one parcel as part of the SFMTA SUD; and 4) directing the Planning Director to transmit the Ordinance to the Coastal Commission upon enactment; affirming the Planning Department's determination under the California Environmental Quality Act; making findings of public necessity, convenience, and welfare under Planning Code, Section 302; making findings of consistency with the General Plan, and the eight priority policies of Planning Code, Section 101.1; and making findings under the City's Local Coastal Program and the California Coastal Act of 1976.

Subject: **File No. 250701.** Ordinance amending the Planning Code to: 1) create the Housing Choice-San Francisco Program to incent housing development through a local bonus program and by adopting a Housing Sustainability District, 2) modify height and bulk limits to provide for additional capacity in well-resourced neighborhoods, and to allow additional height and bulk for projects using the local bonus program, 3) require only buildings taller than 85 feet in certain Districts to reduce ground level wind currents, 4) make conforming changes to the RH (Residential, House), RM (Residential, Mixed), and RC (Residential-Commercial) District zoning tables to reflect the changes to density controls, and parking requirements made in this ordinance, 5) create the RTO-C (Residential Transit Oriented-Commercial) District, 6) implement the Metropolitan Transportation Commission's Transit-Oriented Communities Policy by making changes to parking requirements, minimum residential densities, and minimum office intensities, and requiring maximum dwelling unit sizes, 7) revise off-street parking and curb cut obligations citywide, 8) create the Non-contiguous San Francisco Municipal Transportation Agency Sites Special Use District, 9) permit businesses displaced by new construction to relocate without a conditional use authorization and waive development impact fees for those businesses, 10) make technical amendments to the Code to implement the above changes, 11) make conforming changes to zoning tables in various Districts, including the Neighborhood Commercial District and Mixed Use Districts, and 12) reduce usable open space and bicycle parking requirements for senior housing; amending the Business and Tax Regulations Code regarding the Board of Appeals' review of permits in the Housing Choice Program Housing Sustainability District; also, amending the Local Coastal Program to implement the Housing Choice-San Francisco Program and other associated changes in the City's Coastal Zone, and directing the Planning Director to transmit the ordinance to the Coastal Commission upon enactment; affirming the Planning Department's determination under the California Environmental Quality Act; making findings of consistency with the General Plan, and the eight priority policies of Planning Code, Section 101.1; and making public necessity, convenience, and welfare findings under Planning Code, Section 302.

Subject: **File No. 250966.** Ordinance amending the General Plan to revise the Urban Design Element, Commerce and Industry Element, Transportation Element, Balboa Park Station Area Plan, Glen Park Community Plan, Market and Octavia Area Plan, Northeastern Waterfront Plan, Van Ness Avenue Area Plan, Western SoMa (South of Market) Area Plan, Western Shoreline Area Plan, Downtown Area Plan, and Land Use Index, to implement the Family Housing Zoning Program, including the Housing Choice-San Francisco Program, by adjusting guidelines regarding building heights, density, design, and other matters; amending the City's Local Coastal Program to implement the Housing Choice-San Francisco Program and other associated changes in the City's Coastal Zone, and directing the Planning Director to transmit the Ordinance to the Coastal Commission upon enactment; affirming the Planning Department's determination under the California Environmental Quality Act; making findings of consistency with the General Plan, and the eight priority policies of Planning Code, Section 101.1; and adopting findings of public necessity, convenience, and welfare under Planning Code, Section 340.

In accordance with Administrative Code, Section 67.7-1, persons who are unable to attend the hearing on these matters may submit written comments. These comments will be added to the official public record in these matters and shall be brought to the attention of the Board of Supervisors. Written comments should be addressed to Angela Calvillo, Clerk of the Board, City Hall, 1 Dr. Carlton B. Goodlett Place, Room 244, San Francisco, CA, 94102 or sent via email (bos@sfgov.org). Information relating to these matters are available with the Office of the Clerk of the Board or the Board of Supervisors' Legislative Research Center (https://sfbos.org/legislative-research-center-lrc). Agenda information relating to these matters will be available for public review on Friday, October 17, 2025.

For any questions about this hearing, please contact the Assistant Clerk for the Land Use and Transportation Committee:

John Carroll (john.carroll@sfgov.org ~ (415) 554-4445)

Angela Calvillo
Clerk of the Board of Supervisors
City and County of San Francisco

jec:bjj:ams

San Francisco Examiner

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GOVERNMENT

NOTICE OF PUBLIC HEARING BOARD OF SUPERVISORS OF THE CITY AND COUNTY OF SAN FRANCISCO LAND USE AND TRANSPORTATION COMMITTEE MONDAY OCTOBER 20, 2025 - 1:30 PM Legislative Chamber, Room 250, City Hall 1 Dr. Carlton B. Goodlett Place, San Francisco. CA 94102

NOTICE IS HEREBY GIVEN THAT the Board of Supervisors of the City and County of San Francisco's Land Use and Transportation Committee will hold a public hearing to consider the following proposals and said public hearing will be held as follows, at which time all interested parties may attend and be heard:

File No. 250700. Ordinance amending the Zoning Map to implement the Family Zoning Plan by: amending the Zoning Use District Maps to: 1) reclassify certain properties currently zoned as various types of Residential to Residential Transit Oriented - Commercial (RTO-C); 2) reclassify properties currently zoned Residential Transit Oriented (RTO) to Residential Transit Oriented - 1 (RTO-1); 3) reclassify certain properties from Residential districts other than RTO to RTO-1; 4) reclassify certain properties currently zoned Neighborhood Commercial (NC) or Public (P) to Community Business (C-2); and 5) reclassify certain properties from Public to Mixed-Use or Neighborhood Commercial Districts; amending the Height and Bulk Map to: 1) reclassify properties in the Family Zoning Plan to R-4 Height and Bulk District; 2) change the height limits on certain lots in the R-4 Height and Bulk District; and 3) designating various parcels to be included in the Non-Contiguous San Francisco Municipal Transportation Agency Sites Special Use District (SFMTA SUD); amending the Local Coastal Program to: 1) reclassify all properties in the Coastal Zone to R-4 Height and Bulk District; 2) reclassify certain properties to RTO-C and Neighborhood Commercial District; 3) designate one parcel as part of the SFMTA SUD; and 4) directing the Planning Director to transmit the Ordinance to the Coastal Commission upon enactment; affirming the Planning Department's determination under the California Environmental Quality Act; making findings of public necessity, convenience, and welfare under Planning Code, Section 302; making findings of consistency with the General Plan, and the eight priority policies of Planning Code, Section 101.1; and making findings under the City's Local Coastal Program and the California Coastal Act of 1976.

File No. 250701. Ordinance amending the Planning Code to: 1) create the Housing Choice-San Francisco Program to incent housing development through a local bonus program and by adopting a Housing Sustainability District, 2) modify height and bulk limits to provide for additional capacity in well-resourced neighborhoods, and to allow additional height and bulk for projects using the local bonus program, 3) require only buildings taller than 85 feet in certain Districts to reduce ground level wind currents, 4) make conforming changes to the RH (Residential, House), RM (Residential, Mixed), and RC (Residential-Commercial) District zoning tables to reflect the changes to density controls, and parking requirements made in this ordinance, 5) create the RTO-C (Residential Transit Oriented-Commercial) District, 6) implement the Metropolitan Transportation Commission's Transit-Oriented Communities Policy by making changes to parking requirements, minimum residential densities, and minimum office intensities, and requiring maximum dwelling unit sizes, 7) revise off-street parking and curb cut obligations citywide, 8) create the Non-contiguous San Francisco Municipal Transportation Agency Sites Special Use District, 9) permit businesses displaced by new construction to relocate without a conditional use authorization and waive development impact fees for those businesses, 10) make technical amendments to the Code to implement the above changes, 11) make conforming changes to zoning tables in various Districts, including the Neighborhood Commercial District and Mixed Use Districts, and 12) reduce usable open space and bicycle parking requirements for senior housing; amending the Business and Tax Regulations Code regarding the Board of Appeals' review of permits in the Housing Choice Program Housing Sustainability District; also, amending the Local Coastal Program to implement the Housing Choice-San Francisco Program and other associated changes in the City's Coastal Zone, and directing the Planning Director to transmit the ordinance to the Coastal Commission upon enactment; affirming the Planning Department's determination under the California Environmental Quality Act; making findings of consistency with the General Plan, and the eight priority policies of Planning Code, Section 101.1; and making public necessity, convenience, and welfare findings under Planning Code, Section 302.

File No. 250966. Ordinance amending the General Plan to revise the Urban Design Element, Commerce and Industry Element, Transportation Element, Balboa Park Station Area Plan, Glen Park Community Plan, Market and Octavia Area Plan, Northeastern Waterfront Plan, Van Ness Avenue Area Plan, Western SoMa (South of Market) Area Plan, Western Shoreline Area Plan, Downtown Area Plan, and Land Use Index, to implement the Family Housing Zoning Program, including the Housing Choice-San Francisco Program, by adjusting guidelines regarding building heights, density, design, and other matters; amending the City's Local Coastal Program to implement the Housing Choice-San Francisco Program and other associated changes in the City's Coastal Zone, and directing the Planning Director to transmit the Ordinance to the Coastal Commission upon enactment; affirming the Planning Department's determination under the California Environmental Quality Act; making findings of consistency with the General Plan, and the eight priority policies of Planning Code, Section 101.1; and adopting findings of public necessity, convenience, and welfare under Planning Code, Section 340.

In accordance with Administrative Code, Section 67.7-1, persons who are unable to attend the hearing on these matters may submit written comments. These comments will be added to the official public record in these matters and shall be brought to the attention of the Board of Supervisors. Written comments should be addressed to Angela Calvillo, Clerk of the Board, City Hall, 1 Dr. Carlton B. Goodlett Place, Room 244, San Francisco, CA, 94102 or sent via email (bos@sfgov.org). Information relating to these matters are available with the Office of the Clerk of the Board or the Board of Supervisors' Legislative Research Center (https://sfbos.org/legislative-research-center-lrc). Agenda information relating to these matters will be available for public review on Friday, October 17, 2025.

For any questions about this hearing, please contact the Assistant Clerk for the Land Use and Transportation Committee: John Carroll (john.carroll@sfgov.org ~ (415) 554-4445)

EXM-3973931#

NOTICE OF REGULAR MEETING SAN FRANCISCO BOARD OF SUPERVISORS LAND USE AND TRANSPORTATION COMMITTEE CITY HALL, LEGISLATIVE CHAMBER, ROOM 250 1 DR. CARLTON B. GOODLETT PLACE, SAN FRANCISCO, CA 94102 MONDAY, OCTOBER 6, 2025 - 1:30 PM

The agenda packet and legislative files are available for review at https://sfbos.org/legislative-research-center-lrc, in Room 244 at City Hall, or by calling (415) 554-5184.

EXM-3973907#

NOTICE OF REGULAR MEETING SAN FRANCISCO BOARD OF SUPERVISORS RULES COMMITTEE CITY HALL, LEGISLATIVE CHAMBER, ROOM 250 1 DR. CARLTON B. GOODLETT PLACE, SAN FRANCISCO, CA 94102 October 6, 2025 – 10:00 AM

The agenda packet and legislative files are available for review at https://sfbos.org/legislative-research-center-lrc, in Room 244 at City Hall, or by calling (415) 554-5184.

EXM-3973812#

NOTICE OF SPECIAL MEETING SAN FRANCISCO BOARD OF SUPERVISORS GOVERNMENT AUDIT AND OVERSIGHT COMMITTEE CITY HALL, COMMITTEE ROOM 263 1 DR. CARLTON B. GOODLETT PLACE SAN FRANCISCO, CA 94102 October 6, 2025 - 12:00 PM

The agenda packet and legislative files are available for review at https://sfbos.org/legislative-research-center-lrc, in Room 244 at City Hall, or by calling (415) 554-5184.

EXM-3971474#

CIVIL

ORDER TO SHOW CAUSE FOR CHANGE OF NAME

Case No. 25CIV06662
Superior Court of California, County of SAN MATEO
Petition of: AI ZHEN XIAN AKA JANE AIZHEN XIAN AKA AIZHEN XIAN for Change of Name
TO ALL INTERESTED PERSONS:
Petitioner AI ZHEN XIAN AKA JANE AIZHEN XIAN AKA AIZHEN XIAN filed a petition with this court for a decree changing names as follows:
AI ZHEN XIAN AKA JANE AIZHEN XIAN AKA AIZHEN XIAN to JANE AIZHEN XIAN
The Court orders that all persons interested in this matter appear before this court at the hearing indicated below to show cause, if any, why the petition for change of name should not be granted. Any person objecting to the name changes described above must file a written objection that includes the reasons for the objection at least two court days before the matter is scheduled to be heard and must appear at the hearing to show cause why the petition should not be granted. If no written objection is timely filed, the court may grant the petition without a hearing.
Notice of Hearing:
Date: 11/18/2025, Time: 9:00 A.M., Dept.: MC, Room: N/A
The address of the court is 400 COUNTY CENTER, REDWOOD CITY, CA 94063
(To appear remotely, check in advance of the hearing for information about how to do so on the court's website. To find your court's website, go to www.courts.ca.gov/find-my-court.htm.)
A copy of this Order to Show Cause must be published at least once each week for four successive weeks before the date set for hearing on the petition in a newspaper of general circulation, printed in this county: EXAMINER REDWOOD CITY TRIBUNE
Date: 9/15/2025

Judge of the Superior Court
9/26, 10/3, 10/10, 10/17/25
SPEN-3971404#
EXAMINER - REDWOOD CITY TRIBUNE

ORDER TO SHOW CAUSE FOR CHANGE OF NAME

Case No. CNC-25-56120
Superior Court of California, County of San Francisco
Petition of: Azar Saeidi for Change of Name
TO ALL INTERESTED PERSONS:
Petitioner Azar Saeidi filed a petition with this court for a decree changing names as follows:
Azar Saeidi to Azar Sona Saeidi
The Court orders that all persons interested in this matter appear before this court at the hearing indicated below to show cause, if any, why the petition for change of name should not be granted. Any person objecting to the name changes described above must file a written objection that includes the reasons for the objection at least two court days before the matter is scheduled to be heard and must appear at the hearing to show cause why the petition should not be granted. If no written objection is timely filed, the court may grant the petition without a hearing.
Notice of Hearing:
Date: 11/04/2025, Time: 9 am, Dept.: 103, Room: 103
The address of the court is 400 McAllister Street San Francisco, CA-94102
A copy of this Order to Show Cause shall be published at least once each week for four successive weeks prior to the date set for hearing on the petition in the following newspaper of general circulation, printed in this county: - SAN FRANCISCO EXAMINER
Date: 09/18/2025
Michelle Tong
Judge of the Superior Court
9/26, 10/3, 10/10, 10/17/25
CNS-3971228#

ORDER TO SHOW CAUSE FOR CHANGE OF NAME

Case No. CNC-25-560132
Superior Court of California, County of SAN FRANCISCO
Petition of: JORDAN SUGAR-CARLSGAARD ON BEHALF OF MONROE MARGOT SUGAR-PICKLES, A MINOR for Change of Name
TO ALL INTERESTED PERSONS:
Petitioner JORDAN SUGAR-CARLSGAARD filed a petition with this court for a decree changing names as follows:
MONROE MARGOT SUGAR-PICKLES to MONROE MARGOT SUGAR
The Court orders that all persons interested in this matter appear before this court at the hearing indicated below to show cause, if any, why the petition for change of name should not be granted. Any person objecting to the name changes described above must file a written objection that includes the reasons for the objection at least two court days before the matter is scheduled to be heard and must appear at the hearing to show cause why the petition should not be granted. If no written objection is timely filed, the court may grant the petition without a hearing.
Notice of Hearing:
Date: NOVEMBER 6, 2025, Time: 9:00 A.M., Dept.: 103, Room: 103
The address of the court is 400 MCALLISTER STREET, SAN FRANCISCO, CA 94102
(To appear remotely, check in advance of the hearing for information about how to do so on the court's website. To find your court's website, go to www.courts.ca.gov/find-my-court.htm.)
A copy of this Order to Show Cause must be published at least once each week for four successive weeks before the date set for hearing on the petition in a newspaper of general circulation, printed in this county: SAN FRANCISCO EXAMINER
Date: SEPTEMBER 23, 2025
MICHELLE TONG
Judge of the Superior Court
10/3, 10/10, 10/17, 10/24/25
CNS-3971201#
SAN FRANCISCO EXAMINER

ORDER TO SHOW CAUSE FOR CHANGE OF NAME

Case No. CNC-25-560088
Superior Court of California, County of SAN FRANCISCO
Petition of: MIA ROSE HAYNES for Change of Name
TO ALL INTERESTED PERSONS:
Petitioner MIA ROSE HAYNES filed a petition with this court for a decree changing names as follows:
MIA ROSE HAYNES to MIA ROSE OUSSET
The Court orders that all persons interested in this matter appear before this court at the hearing indicated below to show cause, if any, why the petition for change of name should not be granted. Any person objecting to the name changes described above must file a written objection that includes the reasons for the objection at least two court days before the matter is scheduled to be heard and must appear at the hearing to show cause why the petition should not be granted. If no written objection is timely filed, the court may grant the petition without a hearing.
Notice of Hearing:
Date: OCTOBER 21, 2025, Time: 9:00 A.M., Dept.: 103N, Room: 103N
The address of the court is 400 MCALLISTER STREET, SAN FRANCISCO, CA 94102
(To appear remotely, check in advance of the hearing for information about how to do so on the court's website. To find your court's website, go to www.courts.ca.gov/find-my-court.htm.)
A copy of this Order to Show Cause must be published at least once each week for four successive weeks before the date set for hearing on the petition in a newspaper of general circulation, printed in this county: SAN FRANCISCO EXAMINER
Date: SEPTEMBER 5, 2025
MICHELLE TONG
Judge of the Superior Court
9/12, 9/19, 9/26, 10/3/25
CNS-3966299#
SAN FRANCISCO EXAMINER

FICTITIOUS BUSINESS NAMES

FICTITIOUS BUSINESS NAME STATEMENT

File No. 2025-0407217
Fictitious Business Name(s)/Trade Name (DBA):
OMEN & AETHER, 1640 KIRKHAM ST APT 8, SAN FRANCISCO, CA 94122
County of SAN FRANCISCO
Registered Owner(s):
MARIA KEEHN, 1640 KIRKHAM ST APT 8, SAN FRANCISCO, CA 94122
This business is conducted by: AN INDIVIDUAL
The registrant commenced to transact business under the fictitious business name or names listed above on 9/02/2025.
I declare that all information in this statement is true and correct. (A registrant who declares as true any material matter pursuant to Section 17913 of the Business and Professions code that the registrant knows to be false is guilty of a misdemeanor punishable by a fine not to exceed one thousand dollars ($1,000).)
S/ MARIA KEEHN
This statement was filed with the County Clerk of San Francisco County on 09/02/2025.
NOTICE-In accordance with Subdivision (a) of Section 17920, a Fictitious Name Statement generally expires at the end of five years from the date on which it was filed in the office of the County Clerk, except, as provided in Subdivision (b) of Section 17920, where it expires 40 days after any change in the facts set forth in the statement pursuant to Section 17913 other than a change in the residence address of a registered owner. A new Fictitious Business Name Statement must be filed before the expiration. The filing of this statement does not of itself authorize the use in this state of a Fictitious Business Name in violation of the rights of another under federal, state, or common law (See Section 14411 et seq., Business and Professions Code).
10/3, 10/10, 10/17, 10/24/25
CNS-3972840#
SAN FRANCISCO EXAMINER

FICTITIOUS BUSINESS NAME STATEMENT

File No. 2025-0407319
Fictitious Business Name(s)/Trade Name (DBA):
AFFIRM, 650 CALIFORNIA ST. 12TH FLOOR, SAN FRANCISCO, CA 94108
County of SAN FRANCISCO
Registered Owner(s):
AFFIRM, INC, (DE) 650 CALIFORNIA ST., 12TH FLOOR, SAN FRANCISCO, CA 94108
This business is conducted by: A CORPORATION
The registrant commenced to transact business under the fictitious business name or names listed above on 2/5/2013.
I declare that all information in this statement is true and correct. (A registrant who declares as true any material matter pursuant to Section 17913 of the Business and Professions code that the registrant knows to be false is guilty of a misdemeanor punishable by a fine not to exceed one thousand dollars ($1,000).)
S/ KATHERINE ADKINS, SECRETARY
This statement was filed with the County Clerk of San Francisco County on 09/12/2025.
NOTICE-In accordance with Subdivision (a) of Section 17920, a Fictitious Name Statement generally expires at the end of five years from the date on which it was filed in the office of the County Clerk, except, as provided in Subdivision (b) of Section 17920, where it expires 40 days after any change in the facts set forth in the statement pursuant to Section 17913 other than a change in the residence address of a registered owner. A new Fictitious Business Name Statement must be filed before the expiration. The filing of this statement does not of itself authorize the use in this state of a Fictitious Business Name in violation of the rights of another under federal, state, or common law (See Section 14411 et seq., Business and Professions Code).
10/3, 10/10, 10/17, 10/24/25
CNS-3972838#
SAN FRANCISCO EXAMINER

FICTITIOUS BUSINESS NAME STATEMENT

File No. M-301718
The following person(s) is (are) doing business as:
Garcia Home and Office Solutions, 1532 Day Ave, San Mateo, CA 94403 County of California
Sonia Maribel Garcia, 1532 Day Ave, San Mateo, CA 94403
This business is conducted by an Individual
The registrant(s) commenced to transact business under the fictitious business name or names listed above on 12/17/24.
I declare that all information in this statement is true and correct. (A registrant who declares as true information which he or she knows to be false is guilty of a crime.)
S/ Sonia Garcia,
This statement was filed with the County Clerk of San Mateo County on 09/23/2025.
Mark Church, County Clerk
[Deputy], Deputy
Original
10/3, 10/10, 10/17, 10/24/25
NPEN-3972731#
EXAMINER - BOUTIQUE & VILLAGER

FICTITIOUS BUSINESS NAME STATEMENT

File No. 2025-0407333
Fictitious Business Name(s)/Trade Name (DBA):
FANCY MONKEYS PUBLISHING, 385 10TH STREET, APT 3, SAN FRANCISCO, CA 94103
County of SAN FRANCISCO
Registered Owner(s):
ARIEL ONGOCO, 385 10TH STREET APT 3, SAN FRANCISCO, CA 94103
This business is conducted by: AN INDIVIDUAL
The registrant commenced to transact business under the fictitious business name or names listed above on 9/92025.
I declare that all information in this statement is true and correct. (A registrant who declares as true any material matter pursuant to Section 17913 of the Business and Professions code that the registrant knows to be false is guilty of a misdemeanor punishable by a fine not to exceed one thousand dollars ($1,000).)
S/ ARIEL ONGOCO
This statement was filed with the County Clerk of San Francisco County on 09/16/2025.
NOTICE-In accordance with Subdivision (a) of Section 17920, a Fictitious Name Statement generally expires at the end of five years from the date on which it was filed in the office of the County Clerk, except, as provided in Subdivision (b) of Section 17920, where it expires 40 days after any change in the facts set forth in the statement pursuant to Section 17913 other than a change in the residence address of a registered owner. A new Fictitious Business Name Statement must be filed before the expiration. The filing of this statement does not of itself authorize the use in this state of a Fictitious Business Name in violation of the rights of another under federal, state, or common law (See Section 14411 et seq., Business and Professions Code).
10/3, 10/10, 10/17, 10/24/25
CNS-3971878#
SAN FRANCISCO EXAMINER

FICTITIOUS BUSINESS NAME STATEMENT

File No. 2025-0407351
Fictitious Business Name(s)/Trade Name (DBA):
SHINE FACILITY SERVICES, 970 FOLSOM ST, SAN FRANCISCO, CA 94107
County of SAN FRANCISCO
Registered Owner(s):
GREEN LIVING PLANET LLC, (CA), 970 FOLSOM ST,

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1 DR CARLTON B GOODLETT PL #244
SAN FRANCISCO, CA 94102

EXM# 3973931

COPY OF NOTICE

Notice Type: GPN GOVT PUBLIC NOTICE

Ad Description

JEC - LUT HEARING - OCTOBER 20, 2025 - FILE NOS. 250700, 250701, and 250966

To the right is a copy of the notice you sent to us for publication in the SAN FRANCISCO EXAMINER. Thank you for using our newspaper. Please read this notice carefully and call us with ny corrections. The Proof of Publication will be filed with the County Clerk, if required, and mailed to you after the last date below. Publication date(s) for this notice is (are):

10/03/2025

The charge(s) for this order is as follows. An invoice will be sent after the last date of publication. If you prepaid this order in full, you will not receive an invoice.

Publication	$1719.90
Set aside for CCSF Outreach Fund	$191.10
Total	$1911.00

NOTICE OF PUBLIC HEARING BOARD OF SUPERVISORS OF THE CITY AND COUNTY OF SAN FRANCISCO LAND USE AND TRANSPORTATION COMMITTEE MONDAY OCTOBER 20, 2025 - 1:30 PM Legislative Chamber, Room 250, City Hall 1 Dr. Carlton B. Goodlett Place, San Francisco. CA 94102

NOTICE IS HEREBY GIVEN THAT the Board of Supervisors of the City and County of San Francisco's Land Use and Transportation Committee will hold a public hearing to consider the following proposals and said public hearing will be held as follows, at which time all interested parties may attend and be heard:

File No. 250700. Ordinance amending the Zoning Map to implement the Family Zoning Plan by: amending the Zoning Use District Maps to: 1) reclassify certain properties currently zoned as various types of Residential to Residential Transit Oriented - Commercial (RTO-C); 2) reclassify properties currently zoned Residential Transit Oriented (RTO) to Residential Transit Oriented - 1 (RTO-1); 3) reclassify certain properties from Residential districts other than RTO to RTO-1; 4) reclassify certain properties currently zoned Neighborhood Commercial (NC) or Public (P) to Community Business (C-2); and 5) reclassify certain properties from Public to Mixed-Use or Neighborhood Commercial Districts; amending the Height and Bulk Map to: 1) reclassify properties in the Family Zoning Plan to R-4 Height and Bulk District; 2) change the height limits on certain lots in the R-4 Height and Bulk District; and 3) designating various parcels to be included in the Non-Contiguous San Francisco Municipal Transportation Agency Sites Special Use District (SFMTA SUD); amending the Local Coastal Program to: 1) reclassify all properties in the Coastal Zone to R-4 Height and Bulk District; 2) reclassify certain properties to RTO-C and Neighborhood Commercial District; 3) designate one parcel as part of the SFMTA SUD; and 4) directing the Planning Director to transmit the Ordinance to the Coastal Commission upon enactment; affirming the Planning Department's determination under the California Environmental Quality Act; making findings of public necessity, convenience, and welfare under Planning Code, Section 302; making findings of consistency with the General Plan, and the eight priority policies of Planning Code, Section 101.1; and making findings under the City's Local Coastal Program and the California Coastal Act of 1976.

File No. 250701. Ordinance amending the Planning Code to: 1) create the Housing Choice-San Francisco Program to incent housing development through a local bonus program and by adopting a Housing Sustainability District, 2) modify height and bulk limits to provide for additional capacity in well-resourced neighborhoods, and to allow additional height and bulk for projects using the local bonus program, 3) require only buildings taller than 85 feet in certain Districts to reduce ground level wind currents, 4) make conforming changes to the RH (Residential, House), RM (Residential, Mixed), and RC (Residential-Commercial) District zoning tables to reflect the changes to density controls, and parking requirements made in this ordinance, 5) create the RTO-C (Residential Transit Oriented-Commercial) District, 6) implement the Metropolitan Transportation Commission's Transit-Oriented Communities Policy by making changes to parking requirements, minimum residential densities, and minimum office intensities, and requiring maximum dwelling unit sizes, 7) revise off-street parking and curb cut obligations citywide, 8) create the Non-contiguous San Francisco Municipal Transportation Agency Sites Special Use District, 9) permit businesses displaced by new construction to relocate without a conditional use authorization and waive development impact fees for those businesses, 10) make technical amendments to the Code to implement the above changes, 11) make conforming changes to zoning tables in various Districts, including the Neighborhood Commercial District and Mixed Use Districts, and 12) reduce usable open space and bicycle parking requirements for senior housing; amending the Business and Tax Regulations Code regarding the Board of Appeals' review of permits in the Housing Choice Program Housing Sustainability District; also, amending the Local Coastal

A0000072180 92

Program to implement the Housing Choice-San Francisco Program and other associated changes in the City's Coastal Zone, and directing the Planning Director to transmit the ordinance to the Coastal Commission upon enactment; affirming the Planning Department's determination under the California Environmental Quality Act; making findings of consistency with the General Plan, and the eight priority policies of Planning Code, Section 101.1; and making public necessity, convenience, and welfare findings under Planning Code, Section 302.

File No. 250966. Ordinance amending the General Plan to revise the Urban Design Element, Commerce and Industry Element, Transportation Element, Balboa Park Station Area Plan, Glen Park Community Plan, Market and Octavia Area Plan, Northeastern Waterfront Plan, Van Ness Avenue Area Plan, Western SoMa (South of Market) Area Plan, Western Shoreline Area Plan, Downtown Area Plan, and Land Use Index, to implement the Family Housing Zoning Program, including the Housing Choice-San Francisco Program, by adjusting guidelines regarding building heights, density, design, and other matters; amending the City's Local Coastal Program to implement the Housing Choice-San Francisco Program and other associated changes in the City's Coastal Zone, and directing the Planning Director to transmit the Ordinance to the Coastal Commission upon enactment; affirming the Planning Department's determination under the California Environmental Quality Act; making findings of consistency with the General Plan, and the eight priority policies of Planning Code, Section 101.1; and adopting findings of public necessity, convenience, and welfare under Planning Code, Section 340.

In accordance with Administrative Code, Section 67.7-1, persons who are unable to attend the hearing on these matters may submit written comments. These comments will be added to the official public record in these matters and shall be brought to the attention of the Board of Supervisors. Written comments should be addressed to Angela Calvillo, Clerk of the Board, City Hall, 1 Dr. Carlton B. Goodlett Place, Room 244, San Francisco, CA, 94102 or sent via email (bos@sfgov.org). Information relating to these matters are available with the Office of the Clerk of the Board or the Board of Supervisors' Legislative Research Center (https://sfbos.org/legislative-research-center-lrc). Agenda information relating to these matters will be available for public review on Friday, October 17, 2025.

For any questions about this hearing, please contact the Assistant Clerk for the Land Use and Transportation Committee: John Carroll (john.carroll@sfgov.org ~ (415) 554-4445)

EXM-3973931#

San Francisco Planning

49 South Van Ness Avenue, Suite 1400
San Francisco, CA 94103
628.652.7600
www.sfplanning.org

NOTICE OF AVAILABILITY

LOCAL COASTAL PROGRAM AMENDMENT

(GENERAL PLAN AMENDMENT, PLANNING CODE TEXT AMENDMENT, ZONING MAP AMENDMENT)

NOTICE IS HEREBY GIVEN THAT in accordance with the applicable provisions of the California Coastal Act and implementing regulations, drafts of the proposed amendments to the San Francisco General Plan, Zoning Map, Planning Code, and **Local Coastal Program** are available for public review and inspection for a six-week public review period beginning August 1, 2025.

Documents are available at the following locations and online:

San Francisco Planning Code, Zoning Map, and Local Coastal Program Implementation Plan Amendments:

- San Francisco Planning Department 49 South Van Ness Avenue, Suite 1400, San Francisco, CA 94103
- Office of the Clerk of the Board of Supervisors, 1 Dr. Carlton B. Goodlett Place, Room 244, San Francisco, CA 94102
- https://sfbos.org/legislative-research-center-lrc (File Nos. 250700, 250701)
- City and County of San Francisco - File #: 250700
- City and County of San Francisco - File #: 250701

San Francisco General Plan and Local Coastal Program Land Use Plan Amendments:

- San Francisco Planning Department, 49 South Van Ness Avenue, Suite 1400, San Francisco, CA 94103
- https://citypln-m-extnl.sfgov.org/Commissions/CPC/7_17_2025/Commission Packet/2021-005878GPA.pdf

Ordinance and Local Coastal Program Amendment Description: Three Ordinances are proposed for adoption by the City. Because the Ordinances apply in part to property located in the Coastal Zone, enactment requires amending the Land Use Plan and Implementation Plan of the City's Local Coastal Program.

1) Board File No. 250700 - Ordinance amending the Zoning Map to implement the Family Zoning Plan by amending the Zoning Use District Maps to: 1) reclassify certain properties currently zoned as various types of Residential to Residential Transit Oriented - Commercial (RTO-C); 2) reclassify properties currently zoned Residential Transit Oriented (RTO) to Residential Transit Oriented - 1 (RTO-1); 3) reclassify certain properties from Residential districts other than RTO to RTO-1; 4) reclassify certain properties currently zoned Neighborhood Commercial (NC) or Public (P) to Community Business (C-2); and 5) reclassify certain properties from Public to Mixed-Use or Neighborhood Commercial Districts; amending the Height and Bulk Map to: 1) reclassify properties in the Family Zoning Plan to R-4 Height and Bulk District; 2) change the height limits on certain lots in the R-4 Height and Bulk District; and 3) designating various parcels to be included in the Non-Contiguous San Francisco Municipal Transportation Agency Special Use District (SFMTA SUD); **amending the Local Coastal Program to: 1) reclassify all properties in the Coastal Zone to R-4 Height and Bulk District; 2) reclassify certain properties to RTO-C and Neighborhood Commercial District; 3) designate one parcel as part of the SFMTA SUD; and 4) directing the Planning Director to transmit the Ordinance to the Coastal Commission upon enactment;**

2) Board File No. 250701 - Ordinance amending the Planning Code to: 1) create the Housing Choice-San Francisco Program to incent housing development through a local bonus program and by adopting a Housing Sustainability District, 2) modify height and bulk limits to provide for additional capacity in well-resourced neighborhoods, and to allow additional height and bulk for projects using the local bonus program, 3) require only buildings taller than 85 feet in

certain Districts to reduce ground level wind currents, 4) make conforming changes to the RH (Residential, House), RM (Residential, Mixed), and RC (Residential-Commercial) District zoning tables to reflect the changes to density controls, and parking requirements made in this ordinance, 5) create the RTO-C (Residential Transit Oriented-Commercial) District, 6) implement the Metropolitan Transportation Commission's Transit-Oriented Communities Policy by making changes to parking requirements, minimum residential densities, and minimum office intensities, and requiring maximum dwelling unit sizes, 7) revise off-street parking and curb cut obligations citywide, 8) create the Non-contiguous San Francisco Municipal Transportation Agency Sites Special Use District, 9) permit certain Legacy Businesses to relocate without a conditional use authorization and waive development impact fees for those businesses, 10) make technical amendments to the Code to implement the above changes, and 11) make conforming changes to zoning tables in various Districts, including the Neighborhood Commercial District and Mixed Use Districts; amending the Business and Tax Regulations Code regarding the Board of Appeals' review of permits in the Housing Choice Program Housing Sustainability District; **amending the Local Coastal Program to implement the Housing Choice-San Francisco Program and other associated changes in the City's Coastal Zone, and directing the Planning Director to transmit the Ordinance to the Coastal Commission upon enactment;**

3) Planning Commission Case Number 2021-005878GPA - Ordinance amending the General Plan to revise the Urban Design Element, Commerce and Industry Element, Transportation Element, Balboa Park Station Area Plan, Glen Park Community Plan, Market and Octavia Area Plan, Northeastern Waterfront Plan, Van Ness Avenue Area Plan, Western SoMa (South of Market) Area Plan, Western Shoreline Area Plan, Downtown Area Plan, and Land Use Index, to implement the Family Housing Zoning Program, including the Housing Choice-San Francisco Program, by adjusting guidelines regarding building heights, density, design, and other matters; **amending the City's Local Coastal Program to implement the Housing Choice- San Francisco Program and other associated changes in the City's Coastal Zone, and directing the Planning Director to transmit the ordinance to the Coastal Commission upon enactment;**

The Planning Commission will consider these Amendments on or after September 11, 2025. The Planning Commission recommendation on these Amendments will be advisory to the Board of Supervisors, which has final approval authority over the San Francisco General Plan, Planning Code, Zoning Map, and Local Coastal Program Amendments.

The final decision by the Board of Supervisors will occur no sooner than six weeks after the date of this notice; after which the City shall submit the Local Coastal Program Amendments to the California Coastal Commission for certification. The Ordinances and Local Coastal Program Amendments are not operative within the Coastal Zone until final certification by the California Coastal Commission. If the California Coastal Commission certifies these Local Coastal Program Amendments, subject to modifications, the Local Coastal Program Amendments shall become effective 30 days after enactment of the modifications.

All interested persons are invited to comment on the draft amendment either in person at the scheduled public hearing, or in writing to the San Francisco Planning Department, 49 South Van Ness Avenue, Suite 1400, San Francisco, CA 94103 before September 11, 2025. If you wish to challenge the City's action on the above proceedings in court, you may be limited to addressing only those issues you or someone else have raised at the public hearing described in this notice or written in correspondence to the City at or before the public hearing.

For any questions about this Notice of Availability, please contact Amnon Ben-Pazi, Planning Department staff, at Amnon.Ben-Pazi@sfgov.org or call (628) 652-7428.

From:	Ben-Pazi, Amnon (CPC)
To:	Carroll, John (BOS)
Cc:	GUALCO, GIULIA (CAT)
Subject:	FW: Notice of Availability of Local Coastal Program Amendment
Date:	Monday, August 4, 2025 1:47:49 PM

John, FYI this is the email that went out 8/1.

Amnon Ben-Pazi, Senior Planner
Citywide Division
San Francisco Planning
49 South Van Ness Avenue, Suite 1400, San Francisco, CA 94103
Direct: 628.652.7428 | www.sfplanning.org
San Francisco Property Information Map

From: San Francisco Planning Department <CPC.PlanningNews@sfgov.org>
Sent: Friday, August 01, 2025 12:00 PM
To: Ben-Pazi, Amnon (CPC) <amnon.ben-pazi@sfgov.org>
Subject: Notice of Availability of Local Coastal Program Amendment

San Francisco Planning logo

NOTICE OF AVAILABILITY: LOCAL COASTAL PROGRAM AMENDMENT (GENERAL PLAN AMENDMENT, PLANNING CODE TEXT AMENDMENT, ZONING MAP AMENDMENT)

NOTICE IS HEREBY GIVEN THAT in accordance with the applicable provisions of the California Coastal Act and implementing regulations, drafts of the proposed amendments to the San Francisco General Plan, Zoning Map, Planning Code, and **Local Coastal Program** are available for public review and inspection for a six-week public review period beginning August 1, 2025.

Documents are available at the following locations and online:

- **San Francisco Planning Code, Zoning Map, and Local Coastal Program Implementation Plan Amendments:**
  - San Francisco Planning Department 49 South Van Ness Avenue, Suite 1400, San Francisco, CA 94103
  - Office of the Clerk of the Board of Supervisors, 1 Dr. Carlton B. Goodlett Place, Room 244, San Francisco, CA 94102
  - Board Of Supervisors File #250700

- Board Of Supervisors File #250701

- **San Francisco General Plan and Local Coastal Program Land Use Plan Amendments:**
  - San Francisco Planning Department, 49 South Van Ness Avenue, Suite 1400, San Francisco, CA 94103
  - Planning Commission Case Number 2021-005878GPA

Ordinance and Local Coastal Program Amendment Description: Three Ordinances are proposed for adoption by the City. Because the Ordinances apply in part to property located in the Coastal Zone, enactment requires amending the Land Use Plan and Implementation Plan of the City's Local Coastal Program.

1. **Board File No. 250700 - Ordinance amending the Zoning Map** to implement the Family Zoning Plan by amending the Zoning Use District Maps to: 1) reclassify certain properties currently zoned as various types of Residential to Residential Transit Oriented - Commercial (RTO-C); 2) reclassify properties currently zoned Residential Transit Oriented (RTO) to Residential Transit Oriented - 1 (RTO-1); 3) reclassify certain properties from Residential districts other than RTO to RTO-1; 4) reclassify certain properties currently zoned Neighborhood Commercial (NC) or Public (P) to Community Business (C-2); and 5) reclassify certain properties from Public to Mixed-Use or Neighborhood Commercial Districts; amending the Height and Bulk Map to: 1) reclassify properties in the Family Zoning Plan to R-4 Height and Bulk District; 2) change the height limits on certain lots in the R-4 Height and Bulk District; and 3) designating various parcels to be included in the Non-Contiguous San Francisco Municipal Transportation Agency Special Use District (SFMTA SUD); **amending the Local Coastal Program to: 1) reclassify all properties in the Coastal Zone to R-4 Height and Bulk District; 2) reclassify certain properties to RTO-C and Neighborhood Commercial District; 3) designate one parcel as part of the SFMTA SUD; and 4) directing the Planning Director to transmit the Ordinance to the Coastal Commission upon enactment;**
2. **Board File No. 250701 - Ordinance amending the Planning Code** to: 1) create the Housing Choice-San Francisco Program to incent housing development through a local bonus program and by adopting a Housing Sustainability District, 2) modify height and bulk limits to provide for additional capacity in well-resourced neighborhoods, and to allow additional height and bulk for projects using the local bonus program, 3) require only buildings taller than 85 feet in certain Districts to reduce ground level wind currents, 4) make conforming changes to the RH (Residential, House), RM (Residential, Mixed), and RC (Residential-Commercial) District zoning tables to reflect the changes to density controls, and parking requirements made in this ordinance, 5) create the RTO-C (Residential Transit Oriented-Commercial) District, 6) implement the Metropolitan Transportation Commission's Transit-Oriented Communities Policy by making changes to parking requirements, minimum residential densities, and minimum office intensities, and requiring maximum dwelling unit sizes, 7) revise off-street parking and curb cut obligations citywide, 8) create the Non-contiguous San Francisco Municipal

Transportation Agency Sites Special Use District, 9) permit certain Legacy Businesses to relocate without a conditional use authorization and waive development impact fees for those businesses, 10) make technical amendments to the Code to implement the above changes, and 11) make conforming changes to zoning tables in various Districts, including the Neighborhood Commercial District and Mixed Use Districts; amending the Business and Tax Regulations Code regarding the Board of Appeals' review of permits in the Housing Choice Program Housing Sustainability District; **amending the Local Coastal Program to implement the Housing Choice-San Francisco Program and other associated changes in the City's Coastal Zone, and directing the Planning Director to transmit the Ordinance to the Coastal Commission upon enactment;**

3. **Planning Commission Case Number 2021-005878GPA - Ordinance amending the General Plan** to revise the Urban Design Element, Commerce and Industry Element, Transportation Element, Balboa Park Station Area Plan, Glen Park Community Plan, Market and Octavia Area Plan, Northeastern Waterfront Plan, Van Ness Avenue Area Plan, Western SoMa (South of Market) Area Plan, Western Shoreline Area Plan, Downtown Area Plan, and Land Use Index, to implement the Family Housing Zoning Program, including the Housing Choice-San Francisco Program, by adjusting guidelines regarding building heights, density, design, and other matters; **amending the City's Local Coastal Program to implement the Housing Choice- San Francisco Program and other associated changes in the City's Coastal Zone, and directing the Planning Director to transmit the ordinance to the Coastal Commission upon enactment;**

The Planning Commission will consider these Amendments on or after September 11, 2025. The Planning Commission recommendation on these Amendments will be advisory to the Board of Supervisors, which has final approval authority over the San Francisco General Plan, Planning Code, Zoning Map, and Local Coastal Program Amendments.

The final decision by the Board of Supervisors will occur no sooner than six weeks after the date of this notice; after which the City shall submit the Local Coastal Program Amendments to the California Coastal Commission for certification. The Ordinances and Local Coastal Program Amendments are not operative within the Coastal Zone until final certification by the California Coastal Commission. If the California Coastal Commission certifies these Local Coastal Program Amendments, subject to modifications, the Local Coastal Program Amendments shall become effective 30 days after enactment of the modifications.

All interested persons are invited to comment on the draft amendment either in person at the scheduled public hearing, or in writing to the San Francisco Planning Department, 49 South Van Ness Avenue, Suite 1400, San Francisco, CA 94103 before September 11, 2025. If you wish to challenge the City's action on the above proceedings in court, you may be limited to addressing only those issues you or someone else have raised at the public hearing described in this notice or written in correspondence to the City at or before the public hearing.

For any questions about this Notice of Availability, please contact Amnon Ben-Pazi,

Planning Department staff, at Amnon.Ben-Pazi@sfgov.org or call (628) 652-7428.

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Para sa impormasyon sa Tagalog tumawag sa (628) 652-7550.

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49 South Van Ness | San Francisco, CA 94103 US

This email was sent to amnon.ben-pazi@sfgov.org.
To continue receiving our emails, add us to your address book.

Member, Board of Supervisors
District 7

City and County of San Francisco

MYRNA MELGAR

DATE: November 24, 2025

TO: Angela Calvillo
Clerk of the Board of Supervisors

FROM: Supervisor Myrna Melgar, Chair, Land Use and Transportation Committee

RE: Land Use and Transportation Committee
COMMITTEE REPORTS

Pursuant to Board Rule 4.20, as Chair of the Land Use and Transportation Committee, I have deemed the following matters are of an urgent nature and request them be considered by the full Board on Tuesday, December 2, 2025.

File No. 240637	**Planning Code, Zoning Map - Central Neighborhoods Large Residence SUD, Corona Heights Large Residence SUD** Sponsor: Mandelman
File No. 250966	**General Plan Amendments - Family Zoning Plan**
File No. 250700	**Zoning Map - Family Zoning Plan** Sponsors: Mayor; Sauter, Mahmood and Dorsey
File No. 250701	**Planning, Business and Tax Regulations Codes - Family Zoning Plan** Sponsor: Mayor

These matters will be heard in the Land Use and Transportation Committee at a Regular Meeting on Monday, December 1, 2025.

City Hall · 1 Dr. Carlton B. Goodlett Place, Room 244 · San Francisco, California 94102-4689 · (415) 554-6516
TDD/TTY (415) 554-5227 · E-mail: Myrna.Melgar@sfgov.org

BOARD of SUPERVISORS

City Hall
1 Dr. Carlton B. Goodlett Place, Room 244
San Francisco, CA 94102-4689
Tel. No. (415) 554-5184
Fax No. (415) 554-5163
TDD/TTY No. (415) 554-5227

MEMORANDUM

LAND USE AND TRANSPORTATION COMMITTEE

Date:	December 1, 2025
To:	Supervisor Myrna Melgar, Chair Land Use and Transportation Committee
From:	Alisa Somera, Legislative Deputy Director
Subject:	COMMITTEE REPORT, BOARD MEETING Tuesday, December 2, 2025

The following file should be presented as COMMITTEE REPORT during the Board meeting on Tuesday, December 2, 2025. This Ordinance was acted upon during the Land Use and Transportation Committee meeting on Monday, December 1, 2025, at 1:30 p.m., by the votes indicated.

BOS Item No. 37 **File No. 250700**

[Zoning Map - Family Zoning Plan]

Ordinance amending the Zoning Map to implement the Family Zoning Plan by: amending the Zoning Use District Maps to: 1) reclassify certain properties currently zoned as various types of Residential to Residential Transit Oriented - Commercial (RTO-C); 2) reclassify properties currently zoned Residential Transit Oriented (RTO) to Residential Transit Oriented - 1 (RTO-1); 3) reclassify certain properties from Residential districts other than RTO to RTO-1; 4) reclassify certain properties currently zoned Neighborhood Commercial (NC) or Public (P) to Community Business (C-2); and 5) reclassify certain properties from Public to Mixed-Use or Neighborhood Commercial Districts; amending the Height and Bulk Map to: 1) reclassify properties in the Family Zoning Plan to R-4 Height and Bulk District, except for properties with structures designated as landmarks or contributors to historic districts pursuant to Article 10; 2) change the height limits on certain lots in the R-4 Height and Bulk District; and 3) designating various parcels to be included in the Non-Contiguous San Francisco Municipal Transportation Agency Sites Special Use District (SFMTA SUD); amending the Local Coastal Program to: 1) reclassify all properties in the Coastal Zone to R-4 Height and Bulk District; 2) reclassify certain properties to RTO-C and Neighborhood Commercial District; 3) designate one parcel as part of the SFMTA SUD; and 4) directing the Planning Director to transmit the Ordinance to the Coastal Commission upon enactment; affirming the Planning Department's determination under the California Environmental Quality Act; making findings of public necessity, convenience, and welfare under Planning Code, Section 302; making findings of consistency with the

General Plan, and the eight priority policies of Planning Code, Section 101.1; and making findings under the City's Local Coastal Program and the California Coastal Act of 1976.

RECOMMENDED AS A COMMITTEE REPORT

Vote: Supervisor Myrna Melgar – Aye
Supervisor Chyanne Chen – No
Supervisor Bilal Mahmood – Aye

c: Board of Supervisors
Angela Calvillo, Clerk of the Board
Alisa Somera, Legislative Deputy
Brad Russi, Deputy City Attorney

From:	Board of Supervisors (BOS)
To:	BOS-Supervisors; BOS-Legislative Aides
Cc:	BOS-Operations; Carroll, John (BOS); BOS Legislation, (BOS); Calvillo, Angela (BOS); De Asis, Edward (BOS); Entezari, Mehran (BOS); Mchugh, Eileen (BOS); Ng, Wilson (BOS); Somera, Alisa (BOS)
Subject:	3 Letters Regarding File Nos. 250700, 250701, 250966, and 251072
Date:	Thursday, December 4, 2025 12:06:04 PM
Attachments:	3 Letters Regarding File Nos. 250700, 250701, 250966, and 251072.pdf

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Hello,

Please see attached 3 letters regarding File Nos.:

250700: Zoning Map - Family Zoning Plan
250701: Planning, Business and Tax Regulations Codes - Family Zoning Plan
250966: General Plan Amendments - Family Zoning Plan
251072: Planning, Business and Tax Regulations Codes - Family Zoning Plan

Regards,

John Bullock
Office of the Clerk of the Board
San Francisco Board of Supervisors
1 Dr. Carlton B. Goodlett Place, Room 244
San Francisco, CA 94102
(415) 554-5184
BOS@sfgov.org | www.sfbos.org

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From:	Kathy Howard
To:	DorseyStaff (BOS); MahmoodStaff; MandelmanStaff (BOS); MelgarStaff (BOS); SauterStaff; SherrilStaff@sfgov.org; Board of Supervisors (BOS); WongStaff (BOS)
Subject:	You vote on the "Family" Zoning plan does not meet the needs of San Franciscans.
Date:	Thursday, December 4, 2025 11:00:41 AM

This message is from outside the City email system. Do not open links or attachments from untrusted sources.

Dear Supervisors who voted to approve the Mayor Rich Family Zoning Plan,

Please rethink your vote. There are so many problems with this plan! See my email below. Please stand up for San Franciscans!
Please vote NO next week and make these changes.

Katherine Howard
Sunset District

From: kh <kathyhoward@earthlink.net>
Date: Monday, December 1, 2025 at 9:11 PM
To: Supervisor Connie Chan <ChanStaff@sfgov.org>, <ChenStaff@sfgov.org>, <DorseyStaff@sfgov.org>, <Jackie.Fielder@sfgov.org>, <MahmoodStaff@sfgov.org>, Rafael Mandelman <MandelmanStaff@sfgov.org>, <MelgarStaff@sfgov.org>, <SauterStaff@sfgov.org>, Shamann Walton <Shamann.Walton@sfgov.org>, <SherrilStaff@sfgov.org>, A Clerk of the Board <Board.of.Supervisors@sfgov.org>, <daniel.lurie@sfgov.org>
Cc: <sean.mcgarry@sfgov.org>, <amy.campbell@sfgov.org>, Theresa Imperial <theresa.imperial@sfgov.org>, <kathrin.moore@sfgov.org>, <derek.braun@sfgov.org>, <lydia.so@sfgov.org>, <gilbert.a.williams@sfgov.org>, Jonas Ionin <jonas.ionin@sfgov.org>
Subject: BOS: Postpone vote on the 'Family' Zoning plan.

Dear Supervisors,

The entire City voted on District 4's Great Highway, but once again **District 4**, through no fault of our own, **has NO voice in the upzoning legislation**. This is despite the fact that the upzoning legislation could result in bulldozing our entire neighborhood. We have had a new Supervisor all of one day and no easy way to contact him. He has not had time to hold neighborhood meetings; he has not had the opportunity to find out what his district thinks.

You should **postpone this vote** until we have had the opportunity to meet with our new Supervisor. *We are tired of being ignored*.

As to the legislation, many changes must be made:

- **Eliminate in-lieu fees**. In-lieu fees delay affordable housing and create exclusive enclaves of luxury housing.
- **Dedicate all suitable public land – excluding parks and public open space - to 100% affordable housing.**
- **Preserve the Coastal Zone as it is today.**
- **Prohibit upzoning in the Tsunami Zone.** It is reckless to increase building heights or density in areas at high risk of tsunami inundation.
- **Repair and reactivate the local tsunami warning system**.
- **Protect historic and culturally significant buildings, districts and open space.** All **Category A and A-eligible historic buildings, districts, and open space** should be exempted from upzoning. District 4's mid-century homes and civic buildings reflect our community's unique cultural heritage and deserve preservation.
- **Prevent height increases near parks and schools.** Casting shadows on open spaces and classrooms undermines the very "well-resourced" character of our district that the City claims to value.
- **Install the emergency firefighting system before more density is built, or a major quake and the ocean winds could result in an unstoppable fire that will run from west to east over all of San Francisco.**

Thank you for your consideration of these points.

Sincerely,

Katherine Howard

Outer Sunset

District 4

From:	Stephen Torres
To:	Board of Supervisors (BOS)
Subject:	Letter Re: Family Zoning Plan
Date:	Tuesday, December 2, 2025 3:12:11 PM
Attachments:	2025.12.02.pdf.pdf

This message is from outside the City email system. Do not open links or attachments from untrusted sources.

Dear Clerk of the Board,

Please see my attached letter regarding items 35-38 in today's agenda.

Best,

Stephen Torres

Stephen Torres
Mission District
San Francisco, California

December 2, 2025

The San Francisco Board of Supervisors
Legislative Chamber, City Hall
San Francisco, California 94102

Dear President Mandelman and Members of the Board of Supervisors,

I am writing today to implore you again not to pass the Family Zoning Plan in its current form. Far from an actual plan, it continues to lack the protections and guidance that should be in a plan for our City's future. Vital amendments that could have mitigated the egregious gaps have been rejected and instead this gives over our control wholesale to developers and private equity with very little in regulation and oversight.

Many of you have held that we can do nothing because our hands are being tied by the state or that we cannot stand in the way of progress. I would like to remind you that you were elected to challenge anything that may negatively impact our communities and to guide community determination over our future, not to acquiesce or remain passive. At a time when power is being consolidated to the most wealthy and private interests at every level of government, voting yes on this plan would send a troubling and dangerous signal to San Franciscans as well as Californians when they should have the most confidence in those who represent them closest to home.

Please vote no on this legislation and work for a more representative and integrative plan for all San Franciscans and challenge any mandate from Sacramento or anywhere that removes our City's voice and determination.

Sincerely,

Stephen Torres
District 8 & 9 Worker
District 9 Resident

From:	D7 Youth Council
To:	Board of Supervisors (BOS)
Cc:	Low, Jen (BOS)
Subject:	Letter of Support - File No. 250700 and File No. 250701
Date:	Tuesday, December 2, 2025 1:21:15 PM
Attachments:	Letter from D7 Youth Council.pdf

This message is from outside the City email system. Do not open links or attachments from untrusted sources.

Dear Supervisors,

Please find attached a letter from the District 7 Youth Council for File No 250700 [Zoning Map - Family Zoning Plan] and File No. 250701 [Planning, Business and Tax Regulations Codes - Family Zoning Plan].

Thank you.

November 18, 2025

District 7 Youth Council
d7youthcouncil@gmail.com

Dear Supervisors,

On behalf of the District 7 Youth Council, we would like to express our support for the Family Zoning Plan. The District 7 Youth Council is a body of 15 youths who live or attend school in District 7. Created by former Supervisor Norman Yee, the District 7 Youth Council looks to provide the District 7 Supervisor with guidance on youth issues. Additionally, it works to improve the conditions for youth across District 7.

We all know it's vital to increase housing across the city. However, as a Youth Council representing San Francisco's youth, we especially recognize the importance of prioritizing increasing density around schools and transit corridors. This is crucial for a number of reasons, but above all, it would reduce commuting times for students and traffic on the street. Public transit thrives with more riders, neighborhood small businesses thrive with more neighbors, and local public schools thrive with more kids.

We would also like to express our support for facilitating 2-4-bedroom housing units to incentivize families to stay and thrive in San Francisco. Currently, developers often find smaller studio and one-bedroom units more financially viable, which makes it difficult for families with children to find appropriate housing in San Francisco. Offering density bonuses and implementing zoning modifications as incentives for developers to build 2-4-bedroom units creates financial incentives that align developers' interests and San Francisco's need for family housing. We support Supervisor Melgar's amendment to exempt buildings with three or more rent-controlled apartments from upzoning. This protection for approximately 84,000 rental units balances both safeguarding existing tenants and affordable housing, while still allowing the development necessary to address the city's housing crisis.

We recognize that development may impact local businesses, and we strongly support funds for small business relocation. We encourage creative solutions like Supervisor Melgar's small business construction relief fund, as well as community donations and fundraisers, to help small businesses relocate and continue serving our neighborhoods. Additionally, we need to prioritize finding affordable family housing strategies and implementing strong tenant protections to ensure that existing residents aren't displaced as we work to create more housing opportunities.

As young citizens of San Francisco, we want to be able to continue to live in our beautiful city. For that reason, the D7 Youth Council, on behalf of youth around the city, supports the family zoning plan.

Sincerely,
Sophia Shen, Andrew Martinovsky, Nicole Lee, Edward Naser, Konrad Kruszka
Housing & Transportation Committee, District 7 Youth Council

From:	Bullock, John (BOS)
To:	BOS-Supervisors; BOS-Legislative Aides
Cc:	BOS-Operations; Carroll, John (BOS); BOS Legislation, (BOS); Calvillo, Angela (BOS); De Asis, Edward (BOS); Entezari, Mehran (BOS); Mchugh, Eileen (BOS); Ng, Wilson (BOS); Somera, Alisa (BOS)
Subject:	7 Letters Regarding File Nos. 250700, 250701, 250966, and 251072
Date:	Tuesday, December 2, 2025 12:10:14 PM
Attachments:	7 Letters Regarding File Nos. 250700, 250701, 250966, and 251072.pdf

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Hello,

Please see attached 7 letters regarding File Nos.:

250700: Zoning Map - Family Zoning Plan
250701: Planning, Business and Tax Regulations Codes - Family Zoning Plan
250966: General Plan Amendments - Family Zoning Plan
251072: Planning, Business and Tax Regulations Codes - Family Zoning Plan

Regards,

John Bullock
Office of the Clerk of the Board
San Francisco Board of Supervisors
1 Dr. Carlton B. Goodlett Place, Room 244
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From:	Mchugh, Eileen (BOS)
To:	BOS-Operations
Subject:	Fw: San Francisco Eastern Neighborhoods Democratic Club (SFENDC) Support for Mayor Lurie"s Family Zoning Plan
Date:	Tuesday, December 2, 2025 9:57:18 AM

Get Outlook for iOS

From: Bruce Agid <bruce.h.agid@gmail.com>
Sent: Tuesday, December 2, 2025 9:02 AM
To: Melgar, Myrna (BOS) <myrna.melgar@sfgov.org>; Mahmood, Bilal (BOS) <bilal.mahmood@sfgov.org>; Chen, Chyanne (BOS) <Chyanne.Chen@sfgov.org>; Sherrill, Stephen (BOS) <Stephen.Sherrill@sfgov.org>; Walton, Shamann (BOS) <shamann.walton@sfgov.org>; Chan, Connie (BOS) <connie.chan@sfgov.org>; Sauter, Danny (BOS) <Danny.Sauter@sfgov.org>; Dorsey, Matt (BOS) <matt.dorsey@sfgov.org>; Fielder, Jackie (BOS) <Jackie.Fielder@sfgov.org>; Alan.Wong1@sfgov.org <Alan.Wong1@sfgov.org>; Mandelman, Rafael (BOS) <rafael.mandelman@sfgov.org>
Cc: Meaghan Mitchell <Meaghanmitchell@gmail.com>; Tyra Fennell <tyrafennellsf@gmail.com>; Sean Karlin <sean.karlin@gmail.com>; Amerika Sanchez <amerikasanchez@gmail.com>; Charley Goss <charlesbgoss@gmail.com>; Derek Lee <derekjlee27@gmail.com>; Kurt Grimes <kurtb.grimes@gmail.com>; Chris Chang <chriskchang@gmail.com>; Maika Pinkston <maikapinkston@gmail.com>; Latoya Pitcher <ltpitcher@gmail.com>; Spencer Lam <spencerl1296@gmail.com>; Eric Dew <edew@theizegroup.com>; Mark Malouf <mmalouf@teamsters665.org>; Alan Tsui <alant2k@yahoo.com>; Rachael Tanner <r.ann.tanner@gmail.com>; Gary Pegueros <garypegueros@sbcglobal.net>; Chanel Blackwell <chanelblackwell1@gmail.com>; Elijah Ball <elijahiball@gmail.com>; Courtney Sid <courtneysid@gmail.com>; sliubettencourt@gmail.com <sliubettencourt@gmail.com>; JiLon Li <jilonli@gmail.com>; Rupali Singhal <rupa9988@gmail.com>; Carroll, John (BOS) <john.carroll@sfgov.org>; Calvillo, Angela (BOS) <angela.calvillo@sfgov.org>; Herrera, Ana (BOS) <ana.herrera@sfgov.org>; Burch, Percy (BOS) <percy.burch@sfgov.org>; Yan, Calvin (BOS) <calvin.yan@sfgov.org>; Andrews, Michelle (BOS) <michelle.andrews@sfgov.org>; Tam, Madison (BOS) <madison.r.tam@sfgov.org>; Rosas, Lorenzo (BOS) <Lorenzo.Rosas@sfgov.org>; Low, Jen (BOS) <jen.low@sfgov.org>; Fieber, Jennifer (BOS) <jennifer.fieber@sfgov.org>; Cooper, Raynell (BOS) <raynell.cooper@sfgov.org>; Sciammas, Charlie (BOS) <charlie.sciammas@sfgov.org>; Ho, Calvin (BOS) <calvin.ho@sfgov.org>; DorseyStaff (BOS) <DorseyStaff@sfgov.org>; Waltonstaff (BOS) <waltonstaff@sfgov.org>; Mathew Castillon <mcastillon10@gmail.com>; Lurie, Daniel (MYR) <daniel.lurie@sfgov.org>; Thongsavat, Adam (MYR) <adam.thongsavat@sfgov.org>; Zou, Han (MYR) <han.zou@sfgov.org>
Subject: San Francisco Eastern Neighborhoods Democratic Club (SFENDC) Support for Mayor

Lurie's Family Zoning Plan

This message is from outside the City email system. Do not open links or attachments from untrusted sources.

December 2, 2025

RE: Support Mayor Lurie's Family Zoning Plan

Dear Members of the Board of Supervisors,

The Board of the Eastern Neighborhoods Democratic Club (ENDC) supports the passage and adoption of Mayor Lurie's Family Zoning Plan.

This proposal plans to build more housing for San Franciscans while ensuring we can control our own destiny by maintaining local land use controls. Without the Family Zoning Plan, San Francisco will face the Builder's Remedy as well as fines and loss of ~$100 million in funding for transit and housing. Furthermore, this plan incentivizes family-sized homes of at least two, three, or more bedrooms. These types of homes help more families stay in San Francisco.

The plan aligns with ENDC's Mission & Vision. The San Francisco Eastern Neighborhoods Democratic Club (ENDC) was established by residents of San Francisco's Supervisorial Districts 3, 6, and 10 to organize voters and provide a discussion and educational forum to address the most pressing issues facing the eastern neighborhoods of our City.

The ENDC provides a Democratic political voice to advocate an urbanist-equity platform (a focus on creating complete communities) with twin goals of keeping current residents and families in San Francisco while welcoming newcomers. The Family Zoning Plan aligns firmly with these values.

We are proud to support the Family Zoning Plan, which incorporates many important accepted amendments, and urge the Board of Supervisors to adopt the plan without delay.

Thanks in advance,

Bruce Agid
President, ENDC on behalf of the Board of ENDC

From:	Richard Drury
To:	Board of Supervisors (BOS); MandelmanStaff (BOS); ChanStaff (BOS); SherrillStaff; SauterStaff; MelgarStaff (BOS); ChenStaff; MahmoodStaff; DorseyStaff (BOS); FielderStaff; Waltonstaff (BOS); Carroll, John (BOS); CPC.SF.Housing.Choice; CPC.FamilyZoningCEQA; Shum, Ryan (CPC)
Cc:	Lori Brooke
Subject:	Family Zoning Plan Board File Nos. 250966, 250700, 251071, 250701, 251073 and 250985
Date:	Tuesday, December 2, 2025 9:02:54 AM
Attachments:	2025.12.02.SF Rezone Supoplemental BOS ComLtr-PDF w Exhibit.pdf

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Dear Board of Supervisors:
Attached please find the supplemental comments of Neighborhoods United SF concerning the San Francisco "Family Zoning Plan." Board of Supervisors December 2, 2025. Board File Nos. 250966, 250700, 251071, 250701, 251073 and 250985.
Thank you for considering our comments, and please include these comments in the record for this matter.
Richard Drury

--
Richard Drury
Lozeau Drury LLP
1939 Harrison Street, Suite 150
Oakland, CA 94612
(510) 836-4200
richard@lozeaudrury.com

LOZEAU DRURY LLP
T 510.836.4200
F 510.836.4205
1939 Harrison Street, Ste. 150
Oakland, CA 94612
www.lozeaudrury.com
richard@lozeaudrury.com

BY E-MAIL

December 2, 2025

Board President Rafael Mandelman and
Honorable Supervisors
San Francisco Board of Supervisors
Attn: Angela Calvillo, Clerk of the Board
Land Use and Transportation Committee c/o Clerk John Carroll
1 Dr. Carlton B. Goodlett Place, Room 244
San Francisco, CA 94102
Board.of.Supervisors@sfgov.org
mandelmanstaff@sfgov.org
ChanStaff@sfgov.org
SherrillStaff@sfgov.org
SauterStaff@sfgov.org
MelgarStaff@sfgov.org
ChenStaff@sfgov.org
MahmoodStaff@sfgov.org
DorseyStaff@sfgov.org
FielderStaff@sfgov.org
waltonstaff@sfgov.org
John.Carroll@sfgov.org
Lisa Chen, sf.housing.choice@sfgov.org
Ryan Shum, CPC, cpc.FamilyZoningCEQA@sfgov.org; ryan.shum@sfgov.org

RE: Comment on CEQA Addendum for San Francisco "Family Zoning Plan."
Board of Supervisors December 2, 2025.
Board File Nos. 250966, 250700, 251071, 250701, 251073 and 250985

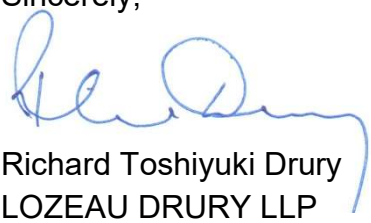
President Mandelman and Honorable Supervisors:

I am writing on behalf of Neighborhoods United SF, a consortium of San Francisco neighborhood and community groups representing thousands of San Francisco residents, concerning the so-called San Francisco "Family Zoning Plan" ("Rezone"). This letter supplements our filing yesterday in which we requested that the Board defer any decision on the Rezone until the City Planning Department prepares a Supplemental Environmental Impact Report ("SEIR").

We attach hereto the shadow "heat map" prepared by Adam Noble of FastCast showing that the Rezone will have dramatic shadow impacts on Joe DiMaggio Park. This is a zero-tolerance park under the City's Prop M (Planning Code Section 295). This is a new significant impact of the Rezone that must be analyzed in an SEIR, along with the

impacts discussed in yesterday's letter. We urge the City to prepare a SEIR to consider feasible mitigation measures to reduce the Rezone's impacts, and also to consider feasible alternatives, such as placing the proposed 4,000 additional units in specific locations, rather than upzoning entire swaths of the city in hopes that the 4,000 units will be built somewhere within the upzoned areas. We do not need to destroy the City to save it. Instead, the necessary new development can be place in areas of the City where it will not destroy rent-controlled housing and where it will not destroy functional, urban communities.

Sincerely,

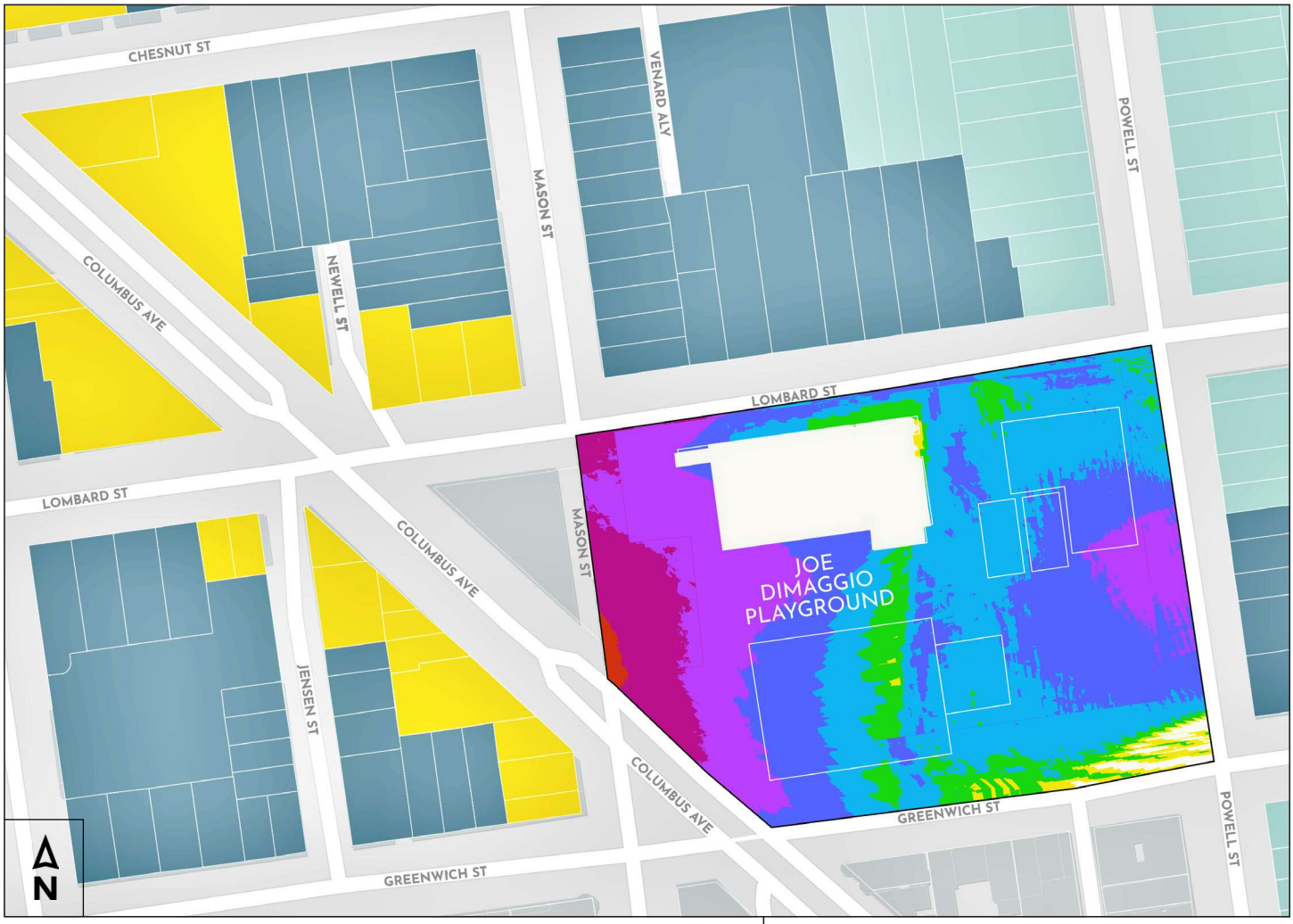


Richard Toshiyuki Drury
LOZEAU DRURY LLP

FAMILY ZONING SHADOW ANALYSIS

Joe DiMaggio Playground, Single Day

EXHIBIT B



NET NEW SHADOW LOCATIONS & DURATIONS

Full Year Distribution

Duration Range of Net New Shadow

Under 2 min/day	(under 13 hrs/year)
2 - 4 min/day	(13 - 25 hrs/year)
4 - 8 min/day	(25 - 49 hrs/year)
8 - 16 min/day	(49 - 98 hrs/year)
16 - 32 min/day	(98 - 195 hrs/year)
32 - 64 min/day	(195 - 390 hrs/year)
64 - 128 min/day	(390 - 779 hrs/year)
Over 128 min/day	(over 779 hrs/year)

FULL YEAR

SHADOW FAN ANALYSIS

Rec & Park Open Spaces

Joe DiMaggio Playground*

Proposed Local Program Height Limits

40’

50’

65’

Shadow Fan is cropped to park boundaries

FAMILY ZONING SHADOW ANALYSIS

Joe DiMaggio Playground, Single Day

NET NEW SHADOW LOCATIONS & DURATIONS

Single Day Distribution

Duration Range of Net New Shadow

- Over 16 hr
- 8 hr - 16 hr
- 4 hr - 8 hr
- 2 hr - 4 hr
- 1 hr - 2 hr
- 30 min - 1 hr
- 15 min - 30 min
- 1 min - 15 min

JUNE 21

SHADOW FAN ANALYSIS

Rec & Park Open Spaces

- Joe DiMaggio Playground

Proposed Local Program Height Limits

- 40’
- 50’
- 65’

FAMILY ZONING SHADOW ANALYSIS

Joe DiMaggio Playground, Single Day

NET NEW SHADOW LOCATIONS & DURATIONS

Single Day Distribution

Duration Range of Net New Shadow

- Over 16 hr
- 8 hr - 16 hr
- 4 hr - 8 hr
- 2 hr - 4 hr
- 1 hr - 2 hr
- 30 min - 1 hr
- 15 min - 30 min
- 1 min - 15 min

JUNE 28

SHADOW FAN ANALYSIS

Rec & Park Open Spaces

- Joe DiMaggio Playground

Proposed Local Program Height Limits

- 40’
- 50’
- 65’

FAMILY ZONING SHADOW ANALYSIS

Joe DiMaggio Playground, Single Day

NET NEW SHADOW LOCATIONS & DURATIONS

Single Day Distribution

Duration Range of Net New Shadow

- Over 16 hr
- 8 hr - 16 hr
- 4 hr - 8 hr
- 2 hr - 4 hr
- 1 hr - 2 hr
- 30 min - 1 hr
- 15 min - 30 min
- 1 min - 15 min

JULY 5

SHADOW FAN ANALYSIS

Rec & Park Open Spaces

- Joe DiMaggio Playground

Proposed Local Program Height Limits

- 40’
- 50’
- 65’

FAMILY ZONING SHADOW ANALYSIS

Joe DiMaggio Playground, Single Day

NET NEW SHADOW LOCATIONS & DURATIONS

Single Day Distribution

Duration Range of Net New Shadow

- Over 16 hr
- 8 hr - 16 hr
- 4 hr - 8 hr
- 2 hr - 4 hr
- 1 hr - 2 hr
- 30 min - 1 hr
- 15 min - 30 min
- 1 min - 15 min

JULY 12

SHADOW FAN ANALYSIS

Rec & Park Open Spaces

- Joe DiMaggio Playground

Proposed Local Program Height Limits

- 40’
- 50’
- 65’

FAMILY ZONING SHADOW ANALYSIS

Joe DiMaggio Playground, Single Day

NET NEW SHADOW LOCATIONS & DURATIONS

Single Day Distribution

Duration Range of Net New Shadow

- Over 16 hr
- 8 hr - 16 hr
- 4 hr - 8 hr
- 2 hr - 4 hr
- 1 hr - 2 hr
- 30 min - 1 hr
- 15 min - 30 min
- 1 min - 15 min

JULY 19

SHADOW FAN ANALYSIS

Rec & Park Open Spaces

- Joe DiMaggio Playground

Proposed Local Program Height Limits

- 40’
- 50’
- 65’

FAMILY ZONING SHADOW ANALYSIS

Joe DiMaggio Playground, Single Day

NET NEW SHADOW LOCATIONS & DURATIONS

Single Day Distribution

Duration Range of Net New Shadow

- Over 16 hr
- 8 hr - 16 hr
- 4 hr - 8 hr
- 2 hr - 4 hr
- 1 hr - 2 hr
- 30 min - 1 hr
- 15 min - 30 min
- 1 min - 15 min

JULY 26

SHADOW FAN ANALYSIS

Rec & Park Open Spaces

- Joe DiMaggio Playground

Proposed Local Program Height Limits

- 40’
- 50’
- 65’

FAMILY ZONING SHADOW ANALYSIS

Joe DiMaggio Playground, Single Day

NET NEW SHADOW LOCATIONS & DURATIONS

Single Day Distribution

Duration Range of Net New Shadow

- Over 16 hr
- 8 hr - 16 hr
- 4 hr - 8 hr
- 2 hr - 4 hr
- 1 hr - 2 hr
- 30 min - 1 hr
- 15 min - 30 min
- 1 min - 15 min

AUGUST 2

SHADOW FAN ANALYSIS

Rec & Park Open Spaces

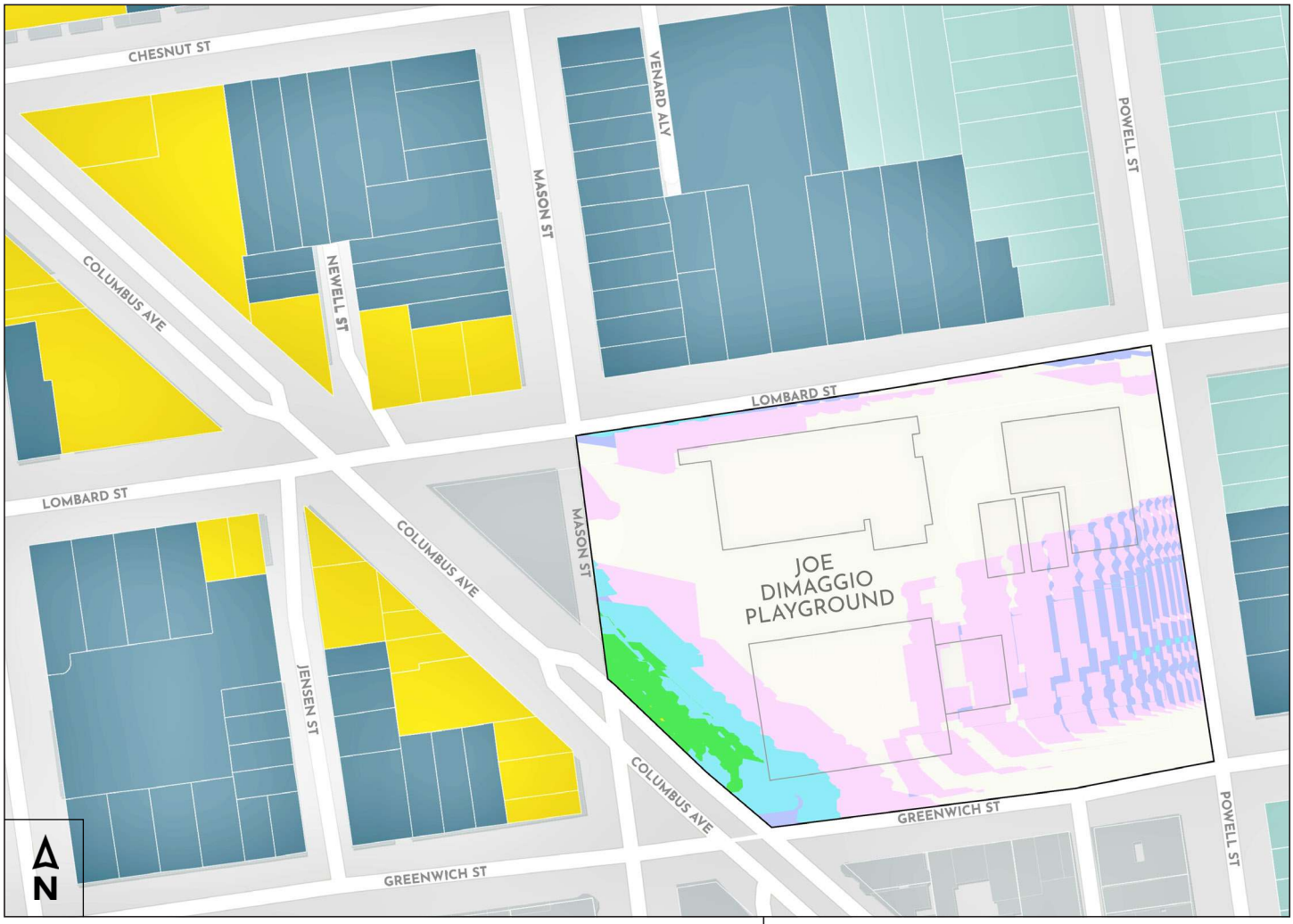
- Joe DiMaggio Playground

Proposed Local Program Height Limits

- 40’
- 50’
- 65’

FAMILY ZONING SHADOW ANALYSIS

Joe DiMaggio Playground, Single Day



NET NEW SHADOW LOCATIONS & DURATIONS

Single Day Distribution

Duration Range of Net New Shadow

- Over 16 hr
- 8 hr - 16 hr
- 4 hr - 8 hr
- 2 hr - 4 hr
- 1 hr - 2 hr
- 30 min - 1 hr
- 15 min - 30 min
- 1 min - 15 min

AUGUST 9

SHADOW FAN ANALYSIS

Rec & Park Open Spaces

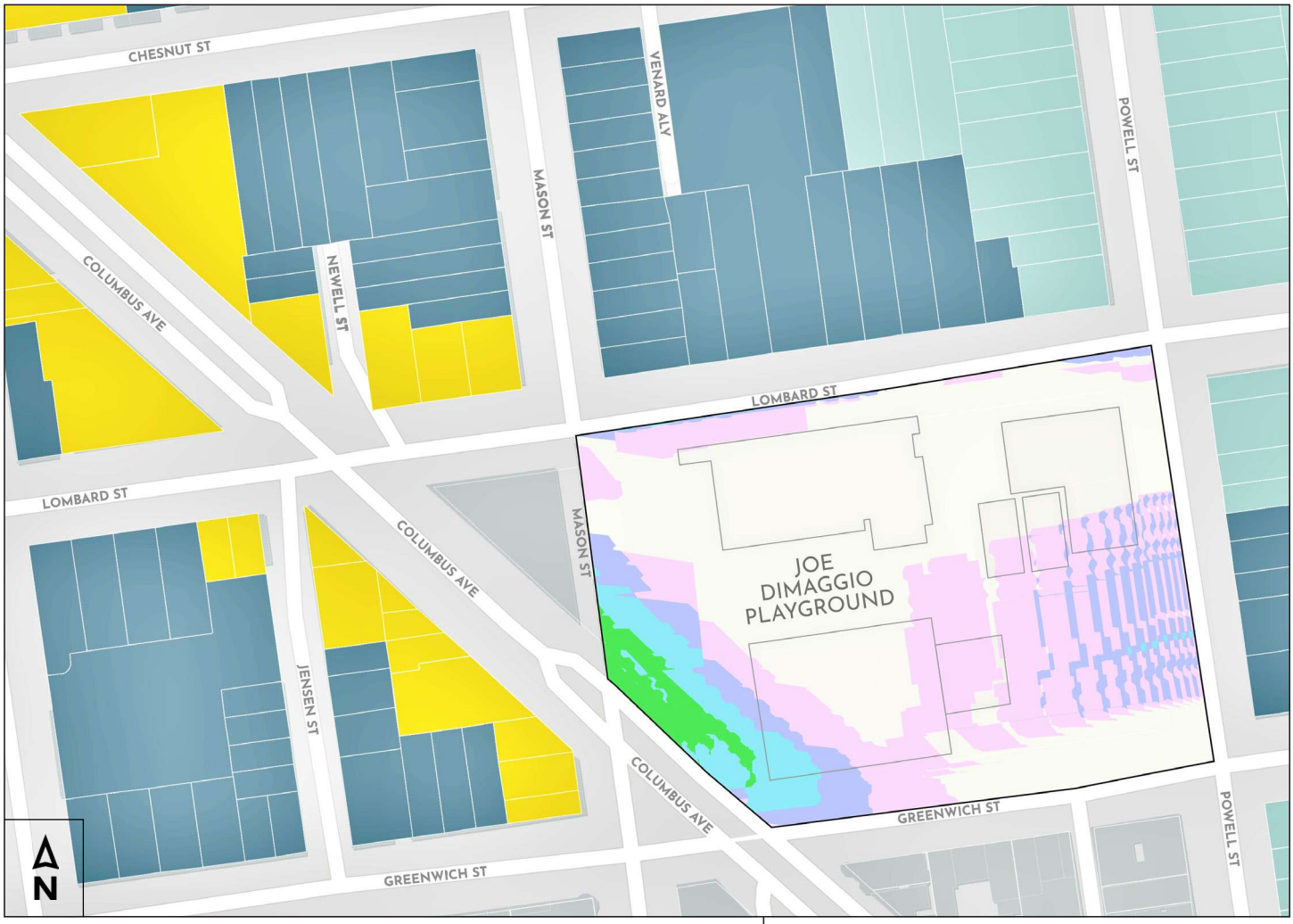
- Joe DiMaggio Playground

Proposed Local Program Height Limits

- 40’
- 50’
- 65’

FAMILY ZONING SHADOW ANALYSIS

Joe DiMaggio Playground, Single Day



NET NEW SHADOW LOCATIONS & DURATIONS

Single Day Distribution

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- Over 16 hr
- 8 hr - 16 hr
- 4 hr - 8 hr
- 2 hr - 4 hr
- 1 hr - 2 hr
- 30 min - 1 hr
- 15 min - 30 min
- 1 min - 15 min

AUGUST 16

SHADOW FAN ANALYSIS

Rec & Park Open Spaces

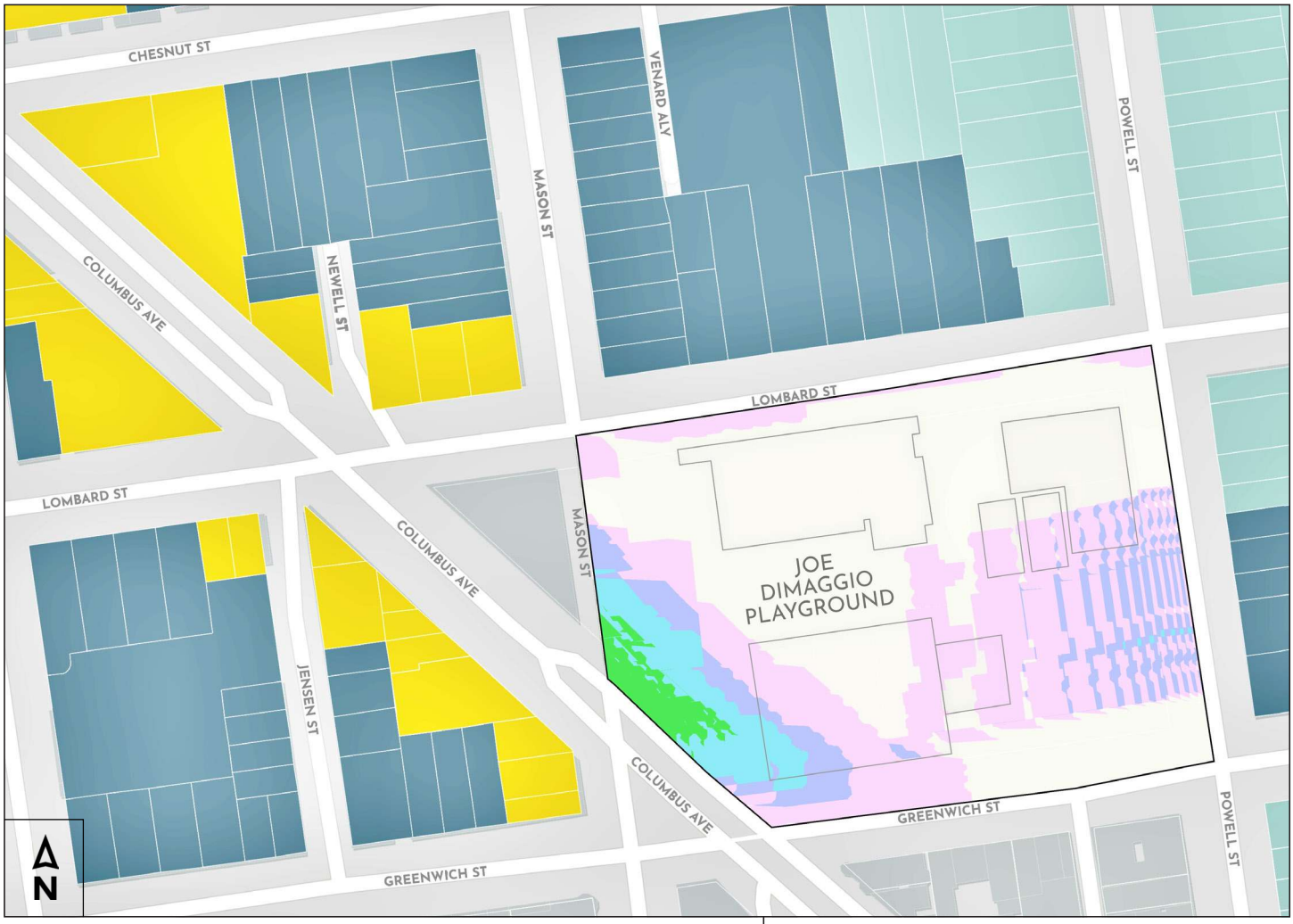
- Joe DiMaggio Playground

Proposed Local Program Height Limits

- 40’
- 50’
- 65’

FAMILY ZONING SHADOW ANALYSIS

Joe DiMaggio Playground, Single Day



NET NEW SHADOW LOCATIONS & DURATIONS

Single Day Distribution

Duration Range of Net New Shadow

- Over 16 hr
- 8 hr - 16 hr
- 4 hr - 8 hr
- 2 hr - 4 hr
- 1 hr - 2 hr
- 30 min - 1 hr
- 15 min - 30 min
- 1 min - 15 min

AUGUST 23

SHADOW FAN ANALYSIS

Rec & Park Open Spaces

- Joe DiMaggio Playground

Proposed Local Program Height Limits

- 40’
- 50’
- 65’

FAMILY ZONING SHADOW ANALYSIS

Joe DiMaggio Playground, Single Day

NET NEW SHADOW LOCATIONS & DURATIONS

Single Day Distribution

Duration Range of Net New Shadow

- Over 16 hr
- 8 hr - 16 hr
- 4 hr - 8 hr
- 2 hr - 4 hr
- 1 hr - 2 hr
- 30 min - 1 hr
- 15 min - 30 min
- 1 min - 15 min

AUGUST 30

SHADOW FAN ANALYSIS

Rec & Park Open Spaces

- Joe DiMaggio Playground

Proposed Local Program Height Limits

- 40’
- 50’
- 65’

FAMILY ZONING SHADOW ANALYSIS

Joe DiMaggio Playground, Single Day

NET NEW SHADOW LOCATIONS & DURATIONS

Single Day Distribution

Duration Range of Net New Shadow

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- 8 hr - 16 hr
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SEPTEMBER 6

SHADOW FAN ANALYSIS

Rec & Park Open Spaces

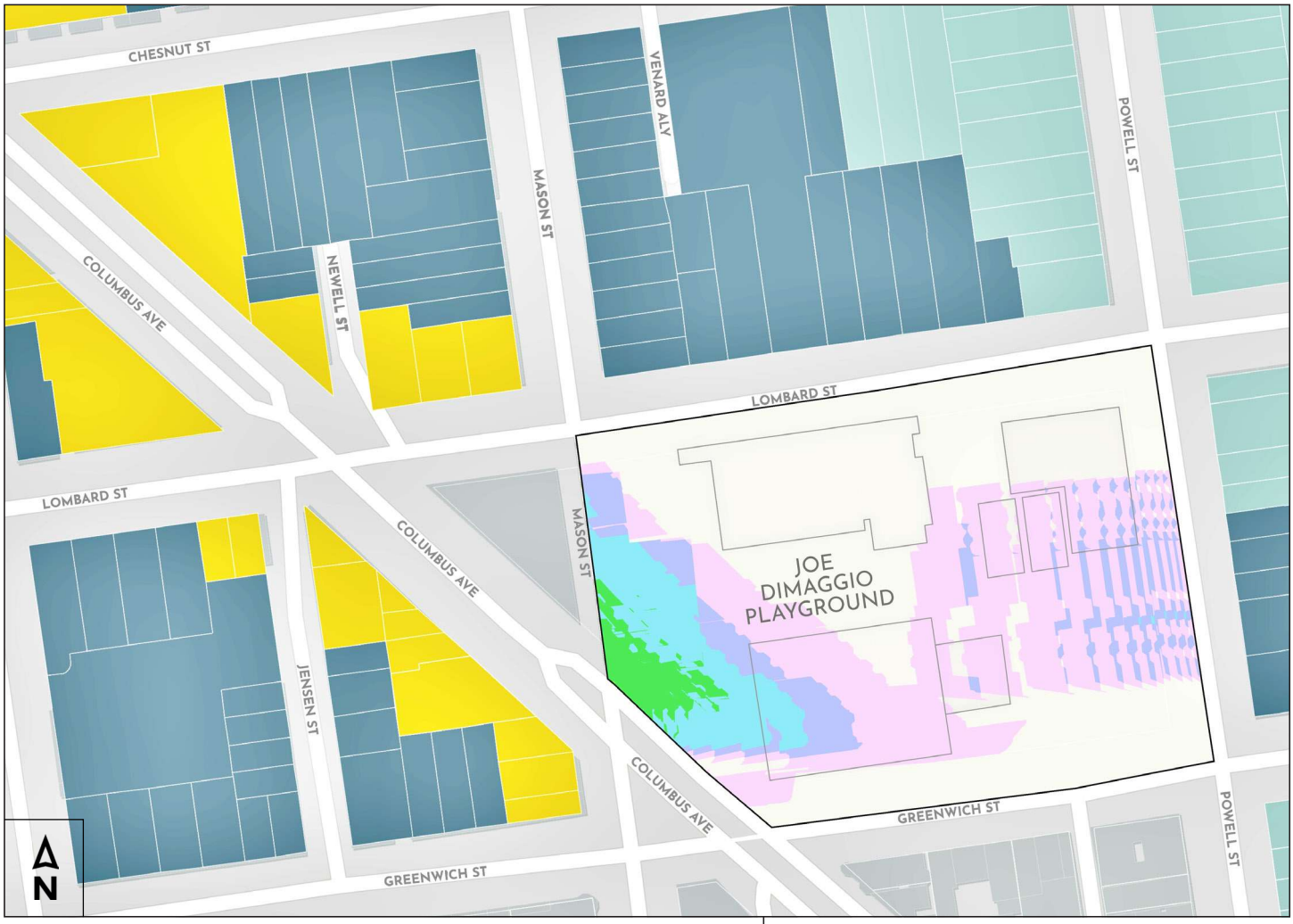
- Joe DiMaggio Playground

Proposed Local Program Height Limits

- 40’
- 50’
- 65’

FAMILY ZONING SHADOW ANALYSIS

Joe DiMaggio Playground, Single Day



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Single Day Distribution

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- 1 min - 15 min

SEPTEMBER 13

SHADOW FAN ANALYSIS

Rec & Park Open Spaces

- Joe DiMaggio Playground

Proposed Local Program Height Limits

- 40’
- 50’
- 65’

FAMILY ZONING SHADOW ANALYSIS

Joe DiMaggio Playground, Single Day

NET NEW SHADOW LOCATIONS & DURATIONS

Single Day Distribution

Duration Range of Net New Shadow

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- 8 hr - 16 hr
- 4 hr - 8 hr
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- 15 min - 30 min
- 1 min - 15 min

SEPTEMBER 20

SHADOW FAN ANALYSIS

Rec & Park Open Spaces

- Joe DiMaggio Playground

Proposed Local Program Height Limits

- 40’
- 50’
- 65’

FAMILY ZONING SHADOW ANALYSIS

Joe DiMaggio Playground, Single Day

NET NEW SHADOW LOCATIONS & DURATIONS

Single Day Distribution

Duration Range of Net New Shadow

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- 8 hr - 16 hr
- 4 hr - 8 hr
- 2 hr - 4 hr
- 1 hr - 2 hr
- 30 min - 1 hr
- 15 min - 30 min
- 1 min - 15 min

SEPTEMBER 27

SHADOW FAN ANALYSIS

Rec & Park Open Spaces

- Joe DiMaggio Playground

Proposed Local Program Height Limits

- 40’
- 50’
- 65’

FAMILY ZONING SHADOW ANALYSIS

Joe DiMaggio Playground, Single Day

NET NEW SHADOW LOCATIONS & DURATIONS

Single Day Distribution

Duration Range of Net New Shadow

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- 1 hr - 2 hr
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- 15 min - 30 min
- 1 min - 15 min

OCTOBER 4

SHADOW FAN ANALYSIS

Rec & Park Open Spaces

- Joe DiMaggio Playground

Proposed Local Program Height Limits

- 40’
- 50’
- 65’

FAMILY ZONING SHADOW ANALYSIS

Joe DiMaggio Playground, Single Day

NET NEW SHADOW LOCATIONS & DURATIONS

Single Day Distribution

Duration Range of Net New Shadow

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- 8 hr - 16 hr
- 4 hr - 8 hr
- 2 hr - 4 hr
- 1 hr - 2 hr
- 30 min - 1 hr
- 15 min - 30 min
- 1 min - 15 min

OCTOBER 11

SHADOW FAN ANALYSIS

Rec & Park Open Spaces

- Joe DiMaggio Playground

Proposed Local Program Height Limits

- 40’
- 50’
- 65’

FAMILY ZONING SHADOW ANALYSIS

Joe DiMaggio Playground, Single Day

NET NEW SHADOW LOCATIONS & DURATIONS

Single Day Distribution

Duration Range of Net New Shadow

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- 8 hr - 16 hr
- 4 hr - 8 hr
- 2 hr - 4 hr
- 1 hr - 2 hr
- 30 min - 1 hr
- 15 min - 30 min
- 1 min - 15 min

OCTOBER 18

SHADOW FAN ANALYSIS

Rec & Park Open Spaces

- Joe DiMaggio Playground

Proposed Local Program Height Limits

- 40’
- 50’
- 65’

FAMILY ZONING SHADOW ANALYSIS

Joe DiMaggio Playground, Single Day

NET NEW SHADOW LOCATIONS & DURATIONS

Single Day Distribution

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- 1 min - 15 min

OCTOBER 25

SHADOW FAN ANALYSIS

Rec & Park Open Spaces

- Joe DiMaggio Playground

Proposed Local Program Height Limits

- 40’
- 50’
- 65’

FAMILY ZONING SHADOW ANALYSIS

Joe DiMaggio Playground, Single Day

NET NEW SHADOW LOCATIONS & DURATIONS

Single Day Distribution

Duration Range of Net New Shadow

- Over 16 hr
- 8 hr - 16 hr
- 4 hr - 8 hr
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- 1 hr - 2 hr
- 30 min - 1 hr
- 15 min - 30 min
- 1 min - 15 min

NOVEMBER 1

SHADOW FAN ANALYSIS

Rec & Park Open Spaces

- Joe DiMaggio Playground

Proposed Local Program Height Limits

- 40’
- 50’
- 65’

FAMILY ZONING SHADOW ANALYSIS

Joe DiMaggio Playground, Single Day

NET NEW SHADOW LOCATIONS & DURATIONS

Single Day Distribution

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- 1 min - 15 min

NOVEMBER 8

SHADOW FAN ANALYSIS

Rec & Park Open Spaces

- Joe DiMaggio Playground

Proposed Local Program Height Limits

- 40’
- 50’
- 65’

FAMILY ZONING SHADOW ANALYSIS

Joe DiMaggio Playground, Single Day

NET NEW SHADOW LOCATIONS & DURATIONS

Single Day Distribution

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NOVEMBER 15

SHADOW FAN ANALYSIS

Rec & Park Open Spaces

- Joe DiMaggio Playground

Proposed Local Program Height Limits

- 40’
- 50’
- 65’

FAMILY ZONING SHADOW ANALYSIS

Joe DiMaggio Playground, Single Day

NET NEW SHADOW LOCATIONS & DURATIONS

Single Day Distribution

Duration Range of Net New Shadow

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- 8 hr - 16 hr
- 4 hr - 8 hr
- 2 hr - 4 hr
- 1 hr - 2 hr
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- 15 min - 30 min
- 1 min - 15 min

NOVEMBER 22

SHADOW FAN ANALYSIS

Rec & Park Open Spaces

- Joe DiMaggio Playground

Proposed Local Program Height Limits

- 40’
- 50’
- 65’

FAMILY ZONING SHADOW ANALYSIS

Joe DiMaggio Playground, Single Day

NET NEW SHADOW LOCATIONS & DURATIONS

Single Day Distribution

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- 8 hr - 16 hr
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NOVEMBER 29

SHADOW FAN ANALYSIS

Rec & Park Open Spaces

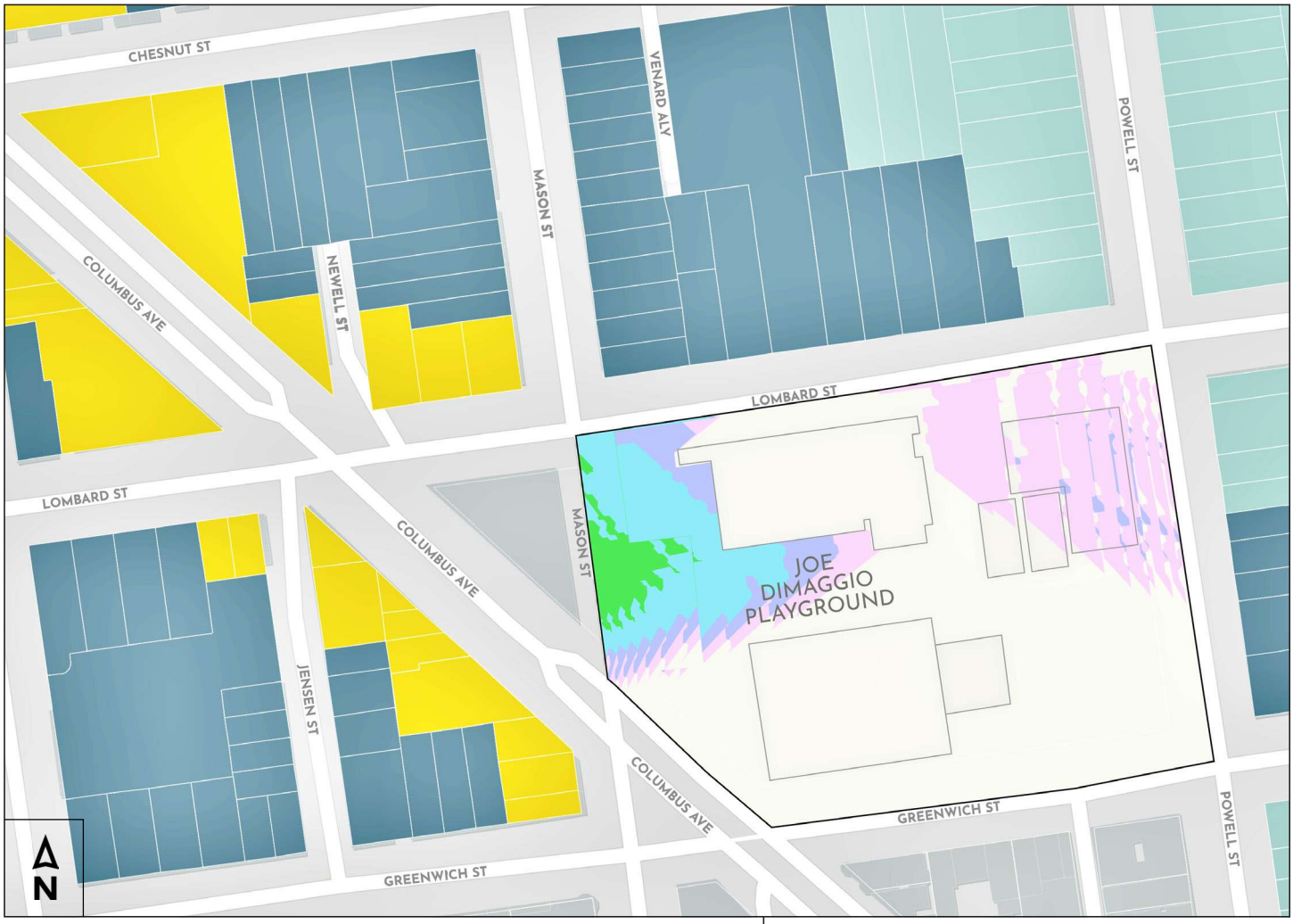
- Joe DiMaggio Playground

Proposed Local Program Height Limits

- 40’
- 50’
- 65’

FAMILY ZONING SHADOW ANALYSIS

Joe DiMaggio Playground, Single Day



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DECEMBER 6

SHADOW FAN ANALYSIS

Rec & Park Open Spaces

- Joe DiMaggio Playground

Proposed Local Program Height Limits

- 40’
- 50’
- 65’

FAMILY ZONING SHADOW ANALYSIS

Joe DiMaggio Playground, Single Day

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DECEMBER 13

SHADOW FAN ANALYSIS

Rec & Park Open Spaces

- Joe DiMaggio Playground

Proposed Local Program Height Limits

- 40’
- 50’
- 65’

FAMILY ZONING SHADOW ANALYSIS

Joe DiMaggio Playground, Single Day

NET NEW SHADOW LOCATIONS & DURATIONS

Single Day Distribution

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- 15 min - 30 min
- 1 min - 15 min

DECEMBER 20

SHADOW FAN ANALYSIS

Rec & Park Open Spaces

- Joe DiMaggio Playground

Proposed Local Program Height Limits

- 40’
- 50’
- 65’

From:	Kathryn Hyde
To:	Press Office, Mayor (MYR); Severiano.Christian@sen.ca.gov; Raayan.Mohtashemi@sen.ca.gov
Cc:	Carroll, John (BOS); Chan, Connie (BOS); MelgarStaff (BOS); Board of Supervisors (BOS); Hsieh, Frances (BOS); Mandelman, Rafael (BOS); Walton, Shamann (BOS); Andrews, Michelle (BOS); radhika.gawde@sen.ca.gov
Subject:	Re: housing SF
Date:	Monday, December 1, 2025 6:51:15 PM

This message is from outside the City email system. Do not open links or attachments from untrusted sources.

Dear Supervisors,

The City Economist's report shows clearly that Lurie's plan will not work and will trigger the State to hijack San Francisco's housing decisions. This is because zoning changes don't produce new affordable housing.

- We do not have the infrastructure, police force, roads, parking and water to support this plan.
- Structures should be limited to 5 stories to preserve lighting and wind

- Much of the new construction is poorly designed - i,e, Haight and Stanyan

- We are only 7 x 7 square miles. SF is not like cities that have space
- Concerns about earthquakes
- There is space to build on vacant lots, Walgreens sites, 7/11 on Clment/9th Ave., etc.
- No buildings close to the shoreline
- We still have 2 months to replace the Mayor's plan with one that will work. Here's a real strategy to solve the City's affordable housing crisis.

I favor producing housing out of existing vacancies and empty office space as much as possible, instead of building new units. New construction uses massive amounts of cement, wood, and diesel construction equipment, releasing more greenhouse gas emissions.

The Mayor's plan would build more excess housing for the wealthy, create more homelessness, and is an environmentally destructive giveaway to rapacious Wall Street and corporate real estate speculators.

Thank you!

Kathryn Hyde
130 Frederick St SF 94117

From:	Kathy Howard
To:	ChanStaff (BOS); ChenStaff; DorseyStaff (BOS); Fielder, Jackie (BOS); MahmoodStaff; MandelmanStaff (BOS); MelgarStaff (BOS); SauterStaff; Walton, Shamann (BOS); SherrilStaff@sfgov.org; Board of Supervisors (BOS); Lurie, Daniel (MYR)
Cc:	Mcgarry, Sean (CPC); Campbell, Amy (CPC); Imperial, Theresa (CPC); Moore, Kathrin (CPC); Braun, Derek (CPC); So, Lydia (CPC); Williams, Gilbert A (CPC); Ionin, Jonas (CPC)
Subject:	BOS: Postpone vote on the "Family" Zoning plan.
Date:	Monday, December 1, 2025 9:11:37 PM

This message is from outside the City email system. Do not open links or attachments from untrusted sources.

Dear Supervisors,

The entire City voted on District 4's Great Highway, but once again **District 4**, through no fault of our own, **has NO voice in the upzoning legislation**. This is despite the fact that the upzoning legislation could result in bulldozing our entire neighborhood. We have had a new Supervisor all of one day and no easy way to contact him. He has not had time to hold neighborhood meetings; he has not had the opportunity to find out what his district thinks.

You should **postpone this vote** until we have had the opportunity to meet with our new Supervisor. *We are tired of being ignored*.

As to the legislation, many changes must be made:

- **Eliminate in-lieu fees**. In-lieu fees delay affordable housing and create exclusive enclaves of luxury housing.
- **Dedicate all suitable public land – excluding parks and public open space - to 100% affordable housing.**
- **Preserve the Coastal Zone as it is today.**
- **Prohibit upzoning in the Tsunami Zone.** It is reckless to increase building heights or density in areas at high risk of tsunami inundation.
- **Repair and reactivate the local tsunami warning system**.
- **Protect historic and culturally significant buildings, districts and open space.** All **Category A and A-eligible historic buildings, districts, and open space** should be exempted from upzoning. District 4's mid-century homes and civic buildings reflect our community's unique cultural heritage and deserve preservation.
- **Prevent height increases near parks and schools.** Casting shadows on open spaces

and classrooms undermines the very “well-resourced” character of our district that the City claims to value.

- **Install the emergency firefighting system before more density is built, or a major quake and the ocean winds could result in an unstoppable fire that will run from west to east over all of San Francisco.**

Thank you for your consideration of these points.

Sincerely,

Katherine Howard

Outer Sunset

District 4

From: deejoyce@everyactioncustom.com on behalf of Marie D. Joyce
To: Board of Supervisors (BOS)
Subject: Protect Our Neighborhoods — Reject Extreme Upzoning [Files: 250700, 250701, 250966]
Date: Monday, December 1, 2025 9:37:39 PM

This message is from outside the City email system. Do not open links or attachments from untrusted sources.

Dear Board of Supervisors,

The Board of Supervisors now faces a Tuesday, 12/2 vote on the most massive zoning changes in San Francisco history. Yet without hearing a single public comment, less than a dozen people could allow sweeping redevelopment along our parks, beaches, waterfronts and thriving commercial corridors. Even more incredulously, one of those supervisors was just appointed today.

A proposal of this magnitude should go before voters on a citywide ballot. Back in 2013, voters resoundingly rejected a proposed "Wall on the Waterfront," which was merely one luxury project on the Embarcadero. But under the "Family Zoning Plan," huge swaths of our northern and western neighborhoods are now targeted - mainly for their potential high-rise iconic views. And this development can only be accomplished with a wrecking ball, which will also displace beloved small businesses and tenant neighbors.

As a 20-year San Francisco resident, I urge you to:.

- Drastically scale back the Mayor's upzoning maps
- Request a postponement of the arbitrary January 2026 upzoning deadline

Mayor Lurie's upzoning maps would impose permanent, irreversible changes to San Francisco's land use — going far beyond what is required, with zero affordability guarantees.

Together, these plans clear the way for mass demolition and luxury towers, prioritizing the interests of developers and billionaire investors while silencing the voices of the very communities they are supposed to represent. This is not planning — it is displacement disguised as progress.

Sincerely,
Marie D. Joyce
San Francisco, CA 94121

From:	Richard Drury
To:	Board of Supervisors (BOS); MandelmanStaff (BOS); ChanStaff (BOS); SherrillStaff; SauterStaff; MelgarStaff (BOS); ChenStaff; MahmoodStaff; DorseyStaff (BOS); FielderStaff; Waltonstaff (BOS); Carroll, John (BOS); FamilyZoningCEQA@sfgov.org
Subject:	CEQA comments for Family Zoning Plan (Board File Nos. 250966, 250700, 251071, 250701, 251073 and 250985)
Date:	Monday, December 1, 2025 12:44:59 PM
Attachments:	2025.12.01.SF Rezone BOS ComLtr-PDF w exhibits.pdf

This message is from outside the City email system. Do not open links or attachments from untrusted sources.

Dear Board of Supervisors and Land Use and Transportation Committee:
Attached please find the comments of Neighbors United SF concerning the Family Zoning Plan, (Board File Nos. 250966, 250700, 251071, 250701, 251073 and 250985).
Thank you for considering these comments. Please include these comments in the record for this matter.
Richard Drury

--
Richard Drury
Lozeau Drury LLP
1939 Harrison Street, Suite 150
Oakland, CA 94612
(510) 836-4200
richard@lozeaudrury.com

LOZEAU DRURY LLP
T 510.836.4200
F 510.836.4205
1939 Harrison Street, Ste. 150
Oakland, CA 94612
www.lozeaudrury.com
richard@lozeaudrury.com

BY E-MAIL

December 1, 2025

Board President Rafael Mandelman and
Honorable Supervisors
San Francisco Board of Supervisors
Attn: Angela Calvillo, Clerk of the Board
Land Use and Transportation Committee c/o Clerk John Carroll
1 Dr. Carlton B. Goodlett Place, Room 244
San Francisco, CA 94102
Board.of.Supervisors@sfgov.org
mandelmanstaff@sfgov.org
ChanStaff@sfgov.org
SherrillStaff@sfgov.org
SauterStaff@sfgov.org
MelgarStaff@sfgov.org
ChenStaff@sfgov.org
MahmoodStaff@sfgov.org
DorseyStaff@sfgov.org
FielderStaff@sfgov.org
waltonstaff@sfgov.org
John.Carroll@sfgov.org
Lisa Chen, sf.housing.choice@sfgov.org
Ryan Shum, CPC, FamilyZoningCEQA@sfgov.org

RE: Comment on CEQA Addendum for San Francisco "Family Zoning Plan."
Board of Supervisors December 2, 2025.
Board File Nos. 250966, 250700, 251071, 250701, 251073 and 250985

President Mandelman and Honorable Supervisors:

I am writing on behalf of Neighborhoods United SF, a consortium of San Francisco neighborhood and community groups representing thousands of San Francisco residents, concerning the so-called San Francisco "Family Zoning Plan" ("Rezone"). We request that the Board defer any decision on the Rezone until the City Planning Department prepares a Supplemental Environmental Impact Report ("SEIR"). CEQA review would force the City to consider feasible mitigation measures to reduce the Rezone's impacts, and also to consider feasible alternatives, such as placing the proposed 4,000 additional units in specific locations (such as Park Merced, Stonestown, Treasure Island, Hunters Point, etc.), rather than upzoning entire swaths of the city in hopes that the 4,000 units will be built somewhere within the upzoned areas.

I. INTRODUCTION

The Rezone will forever change the face of the City. It will allow new development to accommodate 54,000 new housing units in so-called "well-resourced" areas of the City.[1] While the City prepared an environmental impact report ("EIR") for its Housing Element in 2022 (2022 EIR), the proposed Rezone is vastly different from the zoning studied in the 2022 Housing Element and its associated 2022 EIR. Nevertheless, the Planning Department proposes to rely on the 2022 EIR.

A rezoning of this magnitude requires thorough environmental review under the California Environmental Quality Act ("CEQA") so that the City's residents and decision-makers can be aware of its impacts, can consider all feasible mitigation measures and alternatives, and can have a robust and open discussion prior to making irreversible changes to San Francisco's landscape for all time. The California Court of Appeal recently held that a supplemental EIR ("SEIR") is required for a general plan amendment that allows taller buildings than allowed by a prior plan (as here), and that the SEIR must analyze all of the increased impacts caused by the taller buildings. (*Save Our Access v. City of San Diego*, 2025 WL 2945714, 115 Cal.App.5th 388 (Cal. Ct. App. Oct. 17, 2025) (*Save Our Access II*); *Save Our Access v. City of San Diego*, 92 Cal.App.5th 819 (2023) (*Save Our Access I*).) Under the *Save Our Access* line of cases, an SEIR is clearly required for the Rezone since it allows vastly taller building heights, and includes different geographic areas than the 2022 Plan.

The Rezone will have myriad significant new impacts that were not analyzed in the 2022 EIR or included in the Housing Element.

- HISTORIC RESOURCES: The Rezone, unlike the Housing Element, will allow new, high-rise development in the historic northeast neighborhoods of North Beach and the Northern Waterfront, including Fisherman's Wharf– something not allowed or analyzed the 2022 EIR or Housing Element.
- HEIGHT LIMITS INCREASED: The Rezone, unlike the Housing Element, includes amendments to base zoning and base height limits, and creating new zoning for many areas. The Rezone will allow the construction of buildings up to 350-feet taller than anything analyzed in the 2022 EIR, resulting in new wind, aesthetic, biological and shadow impacts not analyzed in the 2022 EIR.

---

[1] While the Rezone purports to address racial disparities in the City by targeting "well-resourced" areas, the Rezone seems to focus on largely Asian "well-resourced" areas, such as the Sunset District, Richmond District, and Northeast, while leaving largely untouched predominantly Caucasian "well-resourced" area such as Pacific Heights, Marina and Seacliff. As such, the Rezone may have discriminatory impacts, much like the development of the Western Addition, or the City's historic bans on wood-framed buildings that targeted Chinese-owned businesses. (See, *Yick Wo v. Hopkins*, 118 U.S. 356, 6 S. Ct. 1064, 1065, 30 L. Ed. 220 (1886).) The City should analyze the potentially racially discriminatory impacts of the Rezone.

- HOUSING SUSTAINABILITY DISTRICT: The Rezone, unlike the Housing Element, establishes a housing sustainability district.
- WIND: The Rezone will create significant new wind impacts from vastly taller buildings, while at the same time the Rezone ordinance proposes to weaken the City's wind ordinance to eliminate the requirement for mandatory wind mitigation, and to redefine significant wind impacts from 1-hour to 9-hours – all of which will conspire to create significant new wind impacts far greater than anything analyzed or contemplated in the 2022 EIR.
- DISPLACEMENT OF RENT-CONTROLLED HOUSING: The Rezone will result in the displacement of rent-controlled tenants and legacy businesses, by replacing rent-controlled and existing affordable units with luxury, high-rise condos and allowing development in the areas within the Priority Equity Geographies Special Use District – something avoided in the 2022 Housing Element.
- AIR POLLUTION: The Rezone will create significant airborne cancer risks in newly identified APEZ zones (air pollutant exposure zones), and will result in criteria air pollution far above CEQA significance threshold set by the Bay Area Air District .
- SHADOW: The Rezone will create significant new shadow impacts due to much taller buildings.
- CONTAMINATED SITES: The Rezone will allow development on contaminated sites not analyzed in the 2022 EIR.
- TRAFFIC: The Rezone will create new significant air quality impacts from increased vehicle miles travelled (VMT), and from construction emissions.
- SEWAGE TREATMENT PLANT: The Rezone will allow development on the site of the North Point Wet Weather Sewage Treatment Facility, which will require either a replacement facility or vast amounts of infrastructure to transport sewage to other plants.
- NORTH BEACH SUD: The Rezone will have cumulative impacts with the recent repeal of the North Beach Special Use District, which removes protections for almost all historic resources in the North Beach area.
- GREAT HIGHWAY CLOSURE CUMULATIVE IMPACTS: The City has failed to analyze new changed circumstances, particularly the closure of the Great Highway, which will exacerbate significant traffic and public transit impacts on the Rezone, which adds thousands of new residential units to the Sunset and Richmond neighborhoods.

It is legally improper for the City to bypass CEQA review for the Rezone. Addenda are only allowed where '(2) Only **minor technical changes** or additions are necessary to make the EIR under consideration adequate under CEQA." (CEQA Guidelines §15164, subd. (a); *Save Our Heritage Organization v. City of San Diego*, 28

Cal. App. 5th 656, 664–65 (2018) (emphasis added). The Proposed Rezone in this case allows **increased height of up to 350-feet above those analyzed in the 2022 EIR**. (Addendum No. 1 to 2022 Housing Element Environmental Impact Report, ("Addendum") at p. 11). The 2022 EIR analyzed building heights of up to 300 feet for proposed buildings, which the Rezone allows building heights of up to 500 to 650 feet – 350 feet taller than anything analyzed in the 2022 EIR. (Addendum 11). These are not "minor technical changes," but rather major substantive changes with significant environmental impacts.

For these reasons, we ask the City to prepare a Supplement EIR to analyze the Rezone, and to consider feasible mitigation measures and alternative to reduce its myriad impacts.

II. PROJECT DESCRIPTION

The Rezone proposes to add 54,000 new housing units to San Francisco, above levels that would occur without rezoning. The City contends that the Rezone is necessary to meet state-mandated Regional Housing Needs Assessment (RHNA) goals of 36,200 additional housing units. The 2022 Housing Element provided for 50,000 new units of housing, so the Rezone allows for significantly more housing – 4,000 additional units. The Rezone moves the proposed housing to different areas of the city where it will have far greater impacts to historic resources, air quality, transportation, displacement and other resources.

We are commenting on the version of the Rezone that has been provided to the public. However, we are aware that the Rezone is in a state of flux, as new amendments are being proposed on an almost daily basis. The Rezone is a moving target, which makes meaningful public comment all but impossible. "An accurate, stable and finite project description is the sine qua non of an informative and legally adequate EIR." (*County of Inyo v. City of Los Angeles* (1977) 71 Cal.App.3d 185, 192.) "[A] curtailed or distorted project description," on the other hand, "may stultify the objectives of the reporting process. Only through an accurate view of the project may affected outsiders and public decision-makers balance the proposal's benefit against its environmental costs, consider mitigation measures, assess the advantage of terminating the proposal (i.e., the "no project" alternative) and weigh other alternatives in the balance." (*Id.* See also, CEQA section 15124.) The City has abjectly failed to provide the public with an accurate and stable project description that would allow meaningful comment. At the very least, the City should allow a 30-day public comment period between the first reading of the Rezone Ordinance at the Board of Supervisors, anticipated to occur on December 2, 2025 and the second reading. The Project description will not be stable until the December 2, 2025 vote. This will allow a 30-day period for the public to review and comment on the stable project description.

The Project description in the 2022 EIR simply does not accurately describe the Rezone project. As such, the City may not rely on the 2022 EIR, which describes a very different Project. Some courts have allowed agencies to rely on prior EIRs when the revised project has the same footprint or the same or reduced environmental impacts.

(*Sw. Reg'l Council of Carpenters v. City of Los Angeles* (2022) 76 Cal. App. 5th 1154). However, when, as here, the project's footprint is expanded, the project's height is increased, and/or the project's impacts are increased, a supplemental EIR is required. (*Save Our Access I and II*).

The City largely ignores or mischaracterizes the Rezone's environmental impacts. For example, the Addendum does not even mention the fact that the Rezone (unlike the 2022 Housing Element) will allow redevelopment in the northeast districts of Telegraph Hill, North Beach and the Northern Waterfront, including Fisherman's Wharf. The City also ignores the fact that it has already approved 71,772 new units of housing that have yet to be built. The City' RHNA goal is 82,069. Therefore, the City only needs another 10,297 units to meet its RHNA goal – not 36,200, or 54,000.[2] Nor does the City discuss the fact that the Rezone is likely to displace low-income residents from rent-controlled units, while constructing new market-rate units without rent-control. The Rezone does not require any affordable housing and allows rent-controlled units to be replaced with luxury housing. The net result is likely to be less affordable housing – not more. The City's own calculations show that the Rezone will abjectly fail to meet RHNA's affordable housing goals.

The City fails to accurately describe the Rezone project. The City calculates that the "realistic" projected build-out as a result of the Rezone will be 54,000 additional housing units – 4,000 more than analyzed in the 2022 EIR. However, the Rezone actually creates a capacity for an additional 800,000 housing units. Full build-out would more than double the population of the City. Even the City's own calculations estimate that the Rezone could result in a range of additional housing ranging from 64,000 units (soft sites method); 39,000 units (citywide capacity method); to 19,000 units (financial feasibility method). (SF Planning Dept., Family Zoning Plan Rezoning Capacity Calculations Fact Sheet). Since the City's own staff admits that these are all realistic scenarios, a CEQA document should be prepared to compare the environmental impacts of these feasible outcomes, as well as the full build-out scenario.

The Rezone is vastly different from the Housing Element analyzed in the 2022 EIR. Supplemental CEQA review is required to analyze the impacts created by these vast changes to the Housing Element. These major modifications are discussed in the attached letter from Certified Urban Planner, Deborah Holley. (Exhibit A). Ms. Holley provides a map showing that the Rezone adds massive amounts of new development to District 3 (North Beach, Fisherman's Warf), and District 8 (Mission/Noe Valley), none of which was even mentioned in the 2022 EIR.

- The 2025 Rezone adds 6,938 parcels and 12,150 units, that were not in the 2022 Housing Element.

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[2] Housing and Community Development barely accounted for the capacity created by the 4-plex and 6-plex legislation passed in 2023. Roughly 120,000 parcels are eligible, and even a fraction of those converting to 4–6 units would generate hundreds of thousands of potential homes.

- The Rezone increases height on 7,580 parcels and 10,009 units, above heights analyzed in the 2022 EIR.
- The Rezone increases density on 16,135 parcels, with 16,135 units currently on those parcels.
- The Rezone adds 30,653 parcels with 38,692 units that were not analyzed in the 2022 EIR – mostly in District 3 and District 8.
- The Rezone almost doubles the square footage of developable land, increasing the amount by 254,211,574 square feet.

The Rezone opens up thousands of rent-controlled units for high density, market rate development, virtually ensuring that thousands of low-income residents will be displaced to make way for luxury housing. The Rezone includes 3,481 two-unit rent-controlled parcels with 32,237 units, increases height on 4,345 rent-controlled parcels with 26,784 units, an increases density on 1,341 rent-controlled parcels with 20,691 units. While the Board of Supervisors is considering amendments to protect rent-controlled units with 3 or more units, this leaves about 20,564 two-unit rent-controlled units (10,282 parcels) with absolutely no protection from displacement and redevelopment.

None of these impacts were proposed, discussed or analyzed in the 2022 EIR, and must be analyzed and mitigated in a supplemental EIR.

III. LEGAL STANDARD.

A. CEQA Addendum (Pub. Res. Code section 21166).

The City Planning Department proposes to approve the Rezone based on an Addendum to the 2022 Housing Element EIR. This is entirely inappropriate since, as discussed above, the Rezone adds 30,653 parcels that were not analyzed in the 2022 EIR. The proposed Rezone is vastly different from the project analyzed in the 2022 EIR, and will have significant new environmental impacts that must be analyzed in a Supplemental EIR. (SEIR).

The court of appeal has stated, "The addendum is the other side of the coin from the supplement to an EIR. This section provides an interpretation with a label and an explanation of the kind of document that does not need additional public review." "It must be remembered that an addendum is prepared where '(2) **Only minor technical changes or additions are necessary to make the EIR under consideration adequate under CEQA; and (3) The changes to the EIR made by the addendum do not raise important new issues about the significant effects on the environment.**' (CEQA Guidelines §15164 (a); *Save Our Heritage Organization v. City of San Diego*, 28 Cal. App. 5th 656, 664–65 (2018) (emphasis added).) Even a 15-foot increase in height for a residential building (increasing height from 75 feet to 90 feet) requires a supplemental EIR, not an addendum. "Accordingly, the appropriate protocol is to have the county draft and recirculate a focused supplemental EIR, limited solely to analysis of height and profile-related impacts of the medical clinic, as built and where built to a height of ninety feet." *Ventura Foothills Neighbors v. Cty. of Ventura*, 232 Cal. App. 4th 429, 434, (2014).

Section 15164(a) of the CEQA Guidelines states that "the lead agency or a responsible agency shall prepare an addendum to a previously certified EIR if some changes or additions are necessary, but none of the conditions described in Section 15162 calling for preparation of a subsequent EIR have occurred." Pursuant to Section 15162(a) of the State CEQA Guidelines, a subsequent EIR or Negative Declaration is only required when:

(1) Substantial changes are proposed in the project which will require major revisions of the previous EIR or negative declaration due to the involvement of new significant environmental effects or a substantial increase in the severity of previously identified significant effects;
(2) Substantial changes occur with respect to the circumstances under which the project is undertaken which will require major revisions of the previous EIR or Negative Declaration due to the involvement of new significant environmental effects or a substantial increase in the severity of previously identified significant effects; or
(3) New information of substantial importance, which was not known and could not have been known with the exercise of reasonable diligence at the time the previous EIR was certified as complete or the negative declaration was adopted, shows any of the following:

    (A) The project will have one or more significant effects not discussed in the previous EIR or negative declaration;
    (B) Significant effects previously examined will be substantially more severe than shown in the previous EIR;
    (C) Mitigation measures or alternatives previously found not to be feasible would, in fact, be feasible and would substantially reduce one or more significant effects of the project, but the project proponents decline to adopt the mitigation measure or alternative; or
    (D) Mitigation measures or alternatives which are considerably different from those analyzed in the previous EIR would substantially reduce one or more significant effects on the environment, but the project proponents decline to adopt the mitigation measure or alternative.

The "fair argument" standard applies to analysis under Section 21166 when the proposed project is outside the scope of the prior EIR. As the Court of Appeal recently held:

> We similarly apply the **fair argument** test to review an agency's determination whether to prepare a **new** or **supplemental EIR** in a later **new project** following certification of a **program EIR**. [Citation.] The Legislature's use of similar language in sections 21151 and 21094 indicate "it intended to establish a similar **low threshold** for an agency's determination **whether to prepare a new EIR** on a later new project that follows certification of a program or plan EIR. In other words, **if** there is **substantial evidence** in the record that the **later project may arguably have** a **significant adverse effect** on the environment

> which was **not examined in the prior program EIR, doubts must be resolved in favor of environmental review** and the agency **must prepare** a **new tiered EIR, notwithstanding** the existence of **contrary evidence**." [Citation.]
>
> (*Save Our Access I*, 92 Cal.App.5th at 860 [citing *Sierra Club v. County of Sonoma* (1992) 6 Cal.App.4th 1307, 1320–1321] [emph. added].)

As the court held in *Save Our Access I*, a project that allows development of a greater height than analyzed in a prior programmatic EIR, is outside the scope of the prior EIR. (*Save Our Access I*, 92 Cal.App.5th at 845.) Therefore, the "fair argument" standard applies to subsequent projects that exceed the height limits in the program EIR. (*Id*. at 860). A project that includes geographic areas outside the scope of the prior program EIR is also subject to the fair argument standard. (*Sierra Club v. County of Sonoma* (1992) 6 Cal.App.4th 1307, 1320–1321). A subsequent project is not within the scope of a previous Program EIR if it is inconsistent with the plan addressed in the Program EIR. (14 CCR § 15168(c)(2); *see* PRC § 21094(b).) "**If the subsequent project is not consistent with the program or plan, it is treated as a new project and must be fully analyzed in a project—or another tiered EIR if it may have a significant effect on the environment.**" (*Friends of College of San Mateo Gardens v. San Mateo County Community College Dist*. (2016) 1 Cal.5th 937, 960 [emph. added]; *Save Our Access I,* 92 Cal.App.5th at 845.)

Since the Rezone allows vast swaths of development outside of geographic areas analyzed in the 2022 EIR, allows building heights of up to 350 taller than analyzed in the 2022 EIR, and allows development of historic resources and contaminated sites not analyzed in the 2022 EIR, the "fair argument" standard applies to the City's use of an Addendum. Under the fair argument standard, an EIR is required if there is a "fair argument" based on substantial evidence that the project may have any significant adverse environmental impacts. Pub. Res. Code § 21080(d).

B. SB 131.

The Addendum briefly argues that the recently passed SB 131 applies to some, but not all, of the Rezone. (Addendum 8). SB 131 exempts from CEQA review "a rezoning that implements the schedule of actions contained in an approved housing element pursuant to subdivision (c) of section 65583 of the Government Code." The City argues that this exemption applies to all but 3.4 percent of the parcels in the Rezone, which are excluded from SB 131 as "natural and protected lands." (Addendum 8).

The City misinterprets SB 131. First, the Rezone does not implement the approved 2022 Housing Element. In fact, the Rezone is flatly inconsistent with the 2022 Housing Element. Most obviously, the 2022 Housing Element included almost no new development in the historic Northeast sector of the city (800 units), while the Rezone allows 5,900 units in that area. (Addendum 19). The 2022 Housing Element provided for negative 1,800 units in Downtown, while the Rezone placed 500 units in the Downtown area. (Id.). The Rezone placed 2,800 additional units in the Western Addition. Also, the

Rezone allows construction of buildings up to 350 taller than allowed by the Housing Element. As discussed above, the Rezone adds 30,653 parcels that were not analyzed in the 2022 EIR. Since the Rezone is inconsistent with the 2022 Housing Element, SB 131 does not apply at all.

Second, SB 131 provides that it does not apply to "natural and protected lands," and the Rezone admittedly includes numerous parcels that meet this definition. (Pub. Res. Code § 21080.085).

> (a) This division does not apply to a rezoning that implements the schedule of actions contained in an approved housing element pursuant to subdivision (c) of Section 65583 of the Government Code.
> (b) (1) Subdivision (a) does not apply to either of the following:
> (B) A rezoning that would allow for construction to occur within the boundaries of any natural and protected lands as defined pursuant to Section 21067.5.
> (2) (A) (i) Subdivision (a) applies to a rezoning that contains within its boundaries any natural and protected lands as defined pursuant to Section 21067.5 if those natural and protected lands are excluded from the rezoning.
> (ii) The definition of "natural and protected lands" described in clause (i) does not include the lands described in subdivision (p) of Section 21067.5.
> (B) The rezoning of any parcel or portions of a parcel that is excluded from a rezoning under this paragraph shall be a separate project that is subject to this division.
>
> Public Resources Code §21067.5 defines "natural and protected land" as follows:
>
> "Natural and protected lands" means sites located within any of the following locations:
> (a) The state park system, as described in Article 1 (commencing with Section 5001) of Chapter 1 of Division 5.
> …
> (i) A hazardous waste site that is listed pursuant to Section 65962.5 of the Government Code or a hazardous waste site designated by the Department of Toxic Substances Control pursuant to Section 25356 of the Health and Safety Code, unless either of the following apply:
> (1) The site is an underground storage tank site that received a uniform closure letter issued pursuant to subdivision (g) of Section 25296.10 of the Health and Safety Code based on closure criteria established by the State Water Resources Control Board for the use proposed by the project. This paragraph does not alter or change the conditions to remove a site from the list of hazardous waste sites listed pursuant to Section 65962.5 of the Government Code.
> (2) The State Department of Public Health, State Water Resources Control Board, Department of Toxic Substances Control, or a local agency making a determination pursuant to subdivision (c) of Section 25296.10 of the Health and Safety Code has otherwise determined that the site is suitable for the use proposed by the project.

> (j) Within a regulatory floodway as determined by the Federal Emergency Management Agency in any official maps published by the Federal Emergency Management Agency, unless the development has received a no-rise certification in accordance with Section 60.3(d)(3) of Title 44 of the Code of Federal Regulations.
> …
> (m) An environmentally sensitive area within the coastal zone, as defined in Section 30107.5…

The Addendum admits that at least 3.4 percent of the Rezone area are "natural and protected lands," within the meaning of SB 131. The Upzoning Plan includes several Cortese List contaminated sites. Several of these sites are "active," meaning that they have not be remediated. We have retained a hazardous materials expert to identify all of the Cortese List sites covered by the Upzoning. But we have already identified at least nine active Cortese List sites in our informal review, including 1100 JUNIPERO SERRA BLVD; and 300 W PORTAL AVE. The Rezone also includes parcels in listed flood zones. The Rezone also includes environmentally sensitive areas in the Coastal zone. These areas are expressly excluded from SB 131 and render the entire Rezone project ineligible for an SB 131 exemption.[3]

IV. CEQA ANALYSIS.

A. HISTORIC RESOURCES.

The Rezone will have significant historic resources impacts that were not analyzed in the 2022 EIR. The 2022 EIR found significant and unmitigated impacts to historic resources, (Addendum 60), but the Rezone's impacts are far greater and also significant and unmitigated. (Addendum 61). Since "significant effects previously examined will be substantially more severe than shown in the previous EIR," a Supplemental EIR is required. (CEQA Guidelines 15162(a)(1)(3)(B).)

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[3] The Addendum suggests that it can review the Rezone using a hybrid approach – reviewing the natural and protected lands under CEQA section 21166, and the remainder of the Project under SB 131. However, CEQA prohibits such a schizophrenic analysis. Under CEQA, the agency must review the "whole of the action" in a single document. A "project" is "the whole of an action" directly undertaken, supported, or authorized by a public agency "which may cause either a direct physical change in the environment, or a reasonably foreseeable ***indirect*** physical change in the environment." (PRC § 21065; CEQA Guidelines, 14 CCR § 15378(a).) A public agency is not permitted to subdivide a single project into smaller individual subprojects in order to avoid the responsibility of considering the environmental impact of the project as a whole. "The requirements of CEQA, 'cannot be avoided by chopping up proposed projects into bite-size pieces which, individually considered, might be found to have no significant effect on the environment or to be only ministerial.' [Citation.]" (*Topanga Beach Renters Assn.* v. *Department of General Services* (1976) 58 Cal.App.3d 188, 195-196 [129 Cal.Rptr. 739].)

We submit herewith the comments of Architectural Historian Bridget Maley, former President of the San Francisco Landmarks Advisory Board. (Exhibit B). She states:

> The Rezone would result in a myriad of significant new impacts that were not analyzed in the 2022 EIR or included in the Housing Element, not the least of which are impacts to historic resources. The Rezone will have significant historic resources impacts that were not analyzed in the 2022 EIR. The 2022 EIR found significant and unmitigated impacts to historic resources, but the Rezone's impacts are far greater, with significant and unmitigated impacts. Since "significant effects previously examined will be substantially more severe than shown in the previous EIR," a Supplemental EIR is required. (CEQA Guidelines 15162(a)(1)(3)(B).)
>
> The Rezone allows high-rise development on, near, or within areas that contain historic resources. Many of these areas were not included for development in the 2022 Housing Element, and the impacts of this potential development on historic resources was not analyzed in the 2022 EIR.
>
> Further, the Rezone includes the following language related to Bonuses for "Historic Preservation." However, these bonuses, as shown below, encourage height increases, facadism, and other over-scaled additions that would result in diminished historic fabric and result in unintended impacts to historic resources. Additionally, this proposed legislation added at the last minute in the September 11, 2025 version of the legislation, and has not been evaluated in the Addendum or in a SEIR.
>
> (Maley at 2-3).

Maley goes on to discuss provisions of the Rezone that encourage development of historic buildings. She states, "This late addition to the legislation has the great potential to cause impacts to historic resources, instead of preserving them, as it would allow large sections of historic buildings to be demolished and over scaled additions and height increases to be implemented as bonuses. For the reasons listed above, it is my professional opinion that the Rezone, if approved, would have potentially significant environmental impacts that must be analyzed and mitigated under the California Environmental Quality Act ("CEQA") through a full recirculated SEIR." (Id. at 4).

The 2022 EIR assumed that historic buildings (Category A resources) would not be redeveloped for housing. (2022 EIR, App. C, pp. 10, 17). The 2022 EIR stated, "The department's housing growth projection factored in the locations of known historic districts in San Francisco and assumed that future development would primarily occur outside those districts." (2022 EIR p. 4.2-82). The HE EIR conceded that its "analysis cannot anticipate the exact manner in which future construction may be designed or whether such projects will propose altering or demolishing historic resources." (2022 EIR p. 4.2-85.) The 2022 EIR stated:

> The representative pattern of growth depicted in the department's projection of future housing units under the Housing Element 2022 Update takes into account

> the presence of individual built-environment historic resources and historic districts identified as of 2021 (including resources designated or found eligible for listing in local, state, and federal historic resource registers). Specifically, the projection assumes future housing construction would be less likely to occur on parcels that currently contain Category A resources (i.e., properties that are already known to qualify as historic resources)... This assumption reflects that Category A resource status would act as a development constraint for future housing development construction. Additionally, the planning department did not increase height limits in historic districts identified in [the Planning Code]. (2022 EIR, App. C, pp. 10, 17.)

However, the Rezone now identifies numerous historic resources for upzoning for residential development, contrary to the analysis in the 2022 EIR.

The 2022 EIR concluded that any impacts to historic resources would be significant even after mitigation. By increasing impacts to historic resource, the 2025 Rezone will have "significant effects previously examined will be substantially more severe than shown in the previous EIR," and a Supplemental EIR is required. (CEQA Guidelines 15162(a)(1)(3)(B).) The 2022 EIR concluded that even with the implementation of mitigation, impacts to "project-level and cumulative: built-environment historic resources" would be significant and unmitigated. (2022 EIR p. S-4.) "Because demolition of built-environment historic resources or alteration in an adverse manner could still occur, the impact would be significant and unavoidable with mitigation." (2022 EIR, p. 4.2-100.)

In *Communities for a Better Environ. v. Calif. Resources Agency* (2002) 103 Cal.App.4th 98 at 122-125 (*CBE v. CRA*), the court held that when a "first tier" EIR admits a significant, unavoidable environmental impact, a lead agency must prepare second tier EIRs for later projects to ensure that those unmitigated impacts are "mitigated or avoided." (Id.) The court reasoned that the unmitigated impacts were not "adequately addressed" in the first tier EIR since they were not "mitigated or avoided." (Id.) Thus, significant effects disclosed in first tier EIRs will trigger second tier EIRs unless such effects have been "adequately addressed," in a way that ensures the effects will be "mitigated or avoided." (Id.) Such a second tier EIR is required even if the impact still cannot be fully mitigated and a statement of overriding considerations will be required. The court explained, "The requirement of a statement of overriding considerations is central to CEQA's role as a public accountability statute; it requires public officials, in approving environmentally detrimental projects, to justify their decisions based on counterbalancing social, economic or other benefits, and to point to substantial evidence in support." (Id. at 124-125.) Since the 2022 EIR determined that impacts to historic resources would be significant and unmitigated, supplemental CEQA review is required for the 2025 Rezone, which increases impacts to historic resources.

The Rezone allows high-rise development in the Northeast Sector of the City, including in the historic district of North Beach. These areas were not included for development in the 2022 Housing Element, and the impacts of this development on historic resources was not analyzed in the 2022 EIR. By moving over 5000 units of new housing to this area, the Rezone exacerbates the impact on historic resources. Since this

is “one or more significant effects not discussed in the previous EIR,” (CEQA Guidelines 15162(a)(3)(A)), a supplemental EIR is required to analyze and mitigate this impact. Since this impact is beyond the scope of the 2022 EIR, it is subject to the fair argument standard.

The Housing Element EIR Addendum fails to analyze impacts of additional height and density increases, as well as changes in zoning use districts, on designated historic resources or historic districts or areas with known concentrations of “A” rated historic resources, but not yet designated as historic districts. Bridget Maley’s letter includes a listing of historic resources adversely affected by the Rezone. Impacts to these historic resources were not analyzed in the 2022 EIR and must be analyzed in a Supplemental EIR. That list included herein by reference. It includes, but is not limited to:

- Fully documented North Beach National Register Historic District submitted to the State Historic Preservation Office and awaiting hearing by the State Historical Resource Commission was not included in the 2022 Housing Element or analyzed in the 2022 EIR .The Rezone could have significant impacts to this identified historic district, including heights rezoned from 40 feet to 50 feet in block Block 0076.
- Designated Northeast Waterfront Article 10 Historic District.
- Eligible Washington Square Historic District, an eligible California Register Historic District. This area was not included in the 2022 Housing Element or analyzed in the 2022 EIR.
- Eligible Upper Grant Avenue Historic District, an eligible California Register Historic District. This area was not included in the 2022 Housing Element or analyzed in the 2022 EIR .
- Designated Otis Elevator Company National Register No. 99001265 (1 Beach Street; Parcel 0018/001).
- Designated Grabhorn Press Building National Register No. 97000349 (1335 Sutter Street; Parcel 0690/012A).
- Designated Thomas Payne House National Register No. 80000847 (1409 Sutter Street; Parcel 0689/025). This parcel is rezoned from its existing height limit of 130 feet to 500 feet.
- Designated Washington Square Article 10 Landmark No. 226 (1651 Stockton Street and Filbert Street; 0102/022001) . The parcels on the northern edge of Washington Square are now within the Rezone but were not included in the 2022 Housing Element or analyzed in the 2022 EIR . This could result in significant impacts to this park.
- Temple Sherith Israel National Register #10000114 (2266 California St., Parcel 0637/011).

- Designated Cable Car National Register Historic District No. 66000233. The Cable Car lines located within areas being upzoned and/or density decontrolled by the Upzone Plan could be significantly impacted.
- Designated Grace Cathedral Article 10 Landmark No. 170 (1100 California Street; Parcel 0246/001). This parcel and area of Nob Hill are now within the Rezone but were not included in the 2022 Housing Element or analyzed in the EIR.
- Designated Old Flood Mansion, Pacific Union Club, both Article 10 Landmark No. 64 and National Register No. 66000230 (1000 California Street; Parcel 0245/001).
- Historic Category "A" rated buildings across the city would be impacted by the Rezone as it affords no protection for these previously identified but not designated historic resources. The City of San Francisco Planning Department has previously required full Historic Resource Evaluations for projects involving Category "A" rated buildings. This policy change was not included in the 2022 Housing Element or analyzed in the 2022 EIR.
- Casebolt House Article 10 Landmark No 51 (2727 Pierce Street, Parcel 0560/005). The Rezone includes this parcel, which was not included in the 2022 Housing Element or analyzed in the 2022 EIR.
- Spreckels Residence Article 10 Landmark No. 197 (2080 Washington Street, Parcel 0601/005. The Rezone includes this parcel, which was not included in the 2022 Housing Element or analyzed in the EIR.
- Haas-Lilienthal House Article 10 Landmark No. 69 and National Register No 730000438 (2007 Franklin St. 0600/002). The Rezone includes this parcel, which was not included in the 2022 Housing Element or analyzed in the EIR.
- Sacred Heart Parish Complex Article 10 Landmark No.316 and National Register 10000112 (660 Oak Street, Parcel 0828/012; 735 Fell Street, Parcel 0828/022A; 554 Filmore Street, Parcel 0828/22; and 546-548 Filmore Street, Parcel 0828/21). The Rezone includes these parcels, which were not included in the 2022 Housing Element or analyzed in the EIR.
- Many other historic buildings listed in letter of Bridget Maley.

B. HEIGHT AND RELATED IMPACTS.

The Rezone will allow construction of buildings up to 350-feet taller than analyzed in the 2022 EIR. The 2022 EIR analyzed building height ranging from 55 feet to 300 feet high. (Addendum 11). The Rezone allows building heights up to 500 feet high, and up to 650 feet high in two areas. (Addendum 11). These taller buildings are beyond the scope of the 2022 EIR, triggering the fair argument standard of review, as in the *Save Our Access* cases, discussed above. As the court of appeal held in *Save Our Access II*, supplemental CEQA review is required to analyze all of the impacts stemming from the greater building heights allowed by the Rezone.

1. Biological Impacts.

The Addendum admits that taller buildings may have biological impacts by obstructing flight paths of birds and impacting movement of special status species. (Addendum 48-49). The 2022 EIR found biological impacts to be less than significant. Since the Rezone will have significant biological impacts, the project will have "one or more significant effects not discussed in the previous EIR," (CEQA Guidelines 15162(a)(3)(A),) and a supplemental EIR is required.

The 2022 EIR did not analyze biological impacts since it found the impact to be less than significant. (2022 EIR, p. 4.1-1.) Since the EIR found biological impacts to be less than significant, it imposed no mitigation measures. (2022 EIR, p. 4.1-149.) Since biological impacts were not examined as significant effects in the 2022 EIR, CEQA review is now mandated because the project will have one or more significant effects not discussed in the previous EIR or negative declaration. (CEQA Guildelines 15163(a)(3)(A)).

Expert wildlife biologist Dr. Smallwood, Ph.D., concludes that the 2025 Rezone will have significant biological impacts not analyzed in the 2022 EIR. (Exhibit C). Dr. Smallwood concludes that by adding 4,000 additional residential units, changing the spatial distribution of the buildings, and increasing building heights, that the Rezone will have greater impacts on birds than the 2022 Plan. In particular, he concludes that the Rezone will have greater impacts on bird-window collisions, and that these impacts will not be adequately mitigated by the City's bird-safe window requirements. (Smallwood at 2-3). Dr. Smallwood states, "the additional 4,000 residential units could result in very large numbers of collision fatalities despite implementation of the City's Standards for Bird-Safe Buildings." (Id. at 3).

Dr. Smallwood notes that San Francisco includes areas in the Pacific Flyway and areas that are rich in biological diversity. He states, "San Francisco is situated within the Pacific Flyway, which is one of the most intensely used bird migration pathways in the world." (Id. at 13). He states that "there are 147 special-status species of wildlife documented near enough to the project site to warrant a closer look at their occurrence likelihoods for the purpose of predicting potential project impacts." (Id.at 3). Dr. Smallwood concludes that the 2025 Rezone will result in 7,095 additional bird fatalities each year compared to the 2022 Plan, to a 95% confidence level. (Id. at 12). Dr. Smallwood concludes:

> Nearly all predicted deaths would be of birds protected under the Migratory Bird Treaty Act and under the California Migratory Bird Protection Act, thus causing significant impacts. Given the predicted level of bird-window collision mortality, it is my opinion that the proposed project would result in potentially significant adverse biological impacts, including the unmitigated take of aerial habitats of birds, bats and other volant wildlife. Not only would the project take habitat of rare and sensitive species of birds, but it would transform the building's airspace into a lethal collision trap to birds. (Id. at 13).

Dr. Smallwood concludes that CEQA review is required to analyze patterns of bird movement through the City and to propose feasible mitigation measures and alternatives to avoid impacts. (Id. at 17).

2. Wind.

The 2022 EIR concluded that the Housing Element would have significant and unmitigated wind impacts. (Addendum 99). The 2022 EIR did not analyze the impacts of the taller buildings allowed in the 2025 Rezone. The 2022 EIR assumed that projects would "stay within existing height limits." (2022 EIR, App. C, p. 17, 3.)

The Addendum admits that the Rezone will have significant unmitigated wind impacts. (Addendum 108). It concluded that buildings over 85-feet tall would have significant wind impacts. (Addendum 104). The Rezone will add taller buildings over 85-feet to more areas of the City, resulting in much greater wind impacts. Since "significant effects previously examined will be substantially more severe than shown in the previous EIR," (CEQA Guidelines 15162(a)(3)(B)), a supplemental EIR is required.

The Rezone allows buildings of up to 650-feet tall in certain areas. It allows increased heights along Market Street between Castro and Van Ness. Up to 160 feet. (Addendum 100). The Rezone allows 85-feet heights along Geary, and up to 300 feet at Geary and Masonic. (Addendum 101). The height difference between the rezoned blocks and the surrounding blocks with low heights would result in wind speeds that would likely exceed the hazard criteria. (Addendum 102).

The 2022 EIR stated, "Wind impacts are generally caused by large building masses that are substantially taller than their surroundings." (2022 EIR, p. 4.7-2.) The 2022 EIR states, "All projects greater than 85 feet In height would require a screening-level assessment conducted by a qualified wind expert in consultation with the department to determine their potential to result in a new wind hazard exceedance or aggravate an existing pedestrian-level wind hazard exceedance defined as the one-hour wind hazard criterion with a 26 mph equivalent wind speed." (2022 EIR, p. 4.7-11.) Since the Rezone will allow much taller buildings, well over 85-feet tall and up to 650-feet tall, it will have significant wind impacts under the standards set forth in the 2022 EIR, and an SEIR is required to analyze and mitigate these impacts.

The Rezone includes a change to the City's wind ordinance that requires CEQA review for buildings over 85 feet. The Rezone proposes to change the hazard criterion such that proposed development must not create any net new exceedance of 26 MPH wind speed for nine hours or more in a year, rather than one hour. (Addendum 104). In other words, after the Rezone, a building may cause hazardous wind conditions for a full workday, which is not currently allowed. The Rezone also eliminates an existing code requirement for "landscaping and/or wind baffling measure shall be installed on the windward side .. of the areas of concern.:" (Addendum 109).

By allowing vastly greater building heights, and eliminating previously existing mitigation standards and mitigation measures, the Rezone will have much greater wind

impacts that were never analyzed in the 2022 EIR. A supplemental EIR is required to analyze these wind impacts because "significant effects previously examined will be substantially more severe than shown in the previous EIR," (CEQA Guidelines section 15162(a)(3)(B)), and "Mitigation measures or alternatives which are considerably different from those analyzed in the previous EIR would substantially reduce one or more significant effects on the environment, but the project proponents decline to adopt the mitigation measure or alternative." (CEQA Guidelines section 15162(a)(3)(D)).

3. Shadow.

The vastly taller buildings allowed by the Rezone will have significant shadow impacts exceeding the City's CEQA significance thresholds. The 2022 Housing Element had significant unmitigated shadow impacts on Duboce Park, Larsen Playgrond, and Laurel Hill Playground.(Addendum 110-111). The Rezone creates new significant unmitigated shadow impacts on public parks including but not limited to, Noe Valley Town Square and Helen Wills Park, (Addendum 111, 113, 119) and on other parks and open spaces in areas added by the Rezone to the Northeast District including Washington Square, Joe DiMaggio Playground, and Levi Plazza Park. A supplemental EIR is required to analyze these impacts because "significant effects previously examined will be substantially more severe than shown in the previous EIR," (CEQA Guidelines section 15162(a)(3)(B))

We submit herewith the analysis of shadow expert Adam Noble of the consulting firm FastCast. (Exhibit D). Mr. Noble concludes that the Rezone will result in net new shadow impacts on Joe DiMaggio Playground not analyzed in the 2022 EIR. This is a zero-tolerance park, not allowed to have any additional shadow under CEQA and Measure M (Planning Code Section 295). Mr. Noble's analysis shows that on certain periods of the year and times of day, the Rezone will more than double the amount of shadow on Joe DiMaggio Park.

The City contends that a project that adds new shadow to sidewalks or a publicly accessible open space (whether subject to Section 295 or not) does not necessarily result in a significant impact under CEQA. The shadow impact analysis described in the city's Initial Study CEQA Checklist examines whether a project would "***create new shadow that substantially and adversely affects the use and enjoyment of publicly accessible open spaces***".

Under planning code section 295 and the joint Planning Commission/Recreation and Park Commission criterion, the impact of any amount of shadow cast by a project on public parks, open spaces, or recreational facilities under the jurisdiction of SFRPD would be considered "significant" if it would affect a facility with an established quantitative limit.

Joe DiMaggio Playground has an established quantitative limit of zero, and as detailed below, the proposed rezoning would have a net increase in shadow cast on the playground, and would therefore, result in a significant impact.

In assessing impacts per the City's CEQA significance criterion, the environmental review requires evaluation of quantitative and qualitative factors but requires ***use and enjoyment of the park or public space to be substantially and adversely affected for the impact to be "significant."*** Therefore, the City contends that in certain situations, new shadow effects on an open space might not be a significant environmental impact under CEQA but could be found to be significant under planning code section 295. (Housing Element EIR p 4.8-17)[4]

Because Joe DiMaggio playground is heavily used throughout all periods of the day throughout the year by residents from the neighborhood and nearby neighborhoods, as well as schools for P.E. classes, the additional shadow would adversely and substantially impact the use and enjoyment of the park.

As detailed in Mr. Noble's analysis, this would be particularly true for fall periods when shadow impacts would be the most significant and lower temperatures create a greater need for sunlight to be able to enjoy the park.

C. DISPLACEMENT.

The Addendum admits that the Rezone will result in displacement of low-income residents, small businesses, and legacy businesses. (Addendum 37-38). The Addendum states, "new market-rate housing development may contribute to indirect displacement of lower-income communities in San Francisco." (Addendum 37). It continues, "there could be a connection between market rate housing development and displacement." (Addendum 38). By allowing more market rate housing in the Rezone than in the 2022

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[4] Commenter disputes the City's shadow impacts methodology because it conflicts with well-established court of appeal precedent. Where a local or regional policy of general applicability, such as an ordinance, is adopted in order to avoid or mitigate environmental effects, a conflict with that policy in itself indicates a potentially significant impact on the environment. (*Pocket Protectors v. Sacramento* (2005) 124 Cal.App.4th 903.) Indeed, any inconsistencies between a proposed project and applicable plans must be discussed in an EIR. (14 CCR § 15125(d); *City of Long Beach v. Los Angeles Unif. School Dist.* (2009) 176 Cal. App. 4th 889, 918*; Friends of the Eel River v. Sonoma County Water* Agency (2003) 108 Cal. App. 4th 859, 874 (EIR inadequate when Lead Agency failed to identify relationship of project to relevant local plans).) A Project's inconsistencies with local plans and policies constitute significant impacts under CEQA. (*Endangered Habitats League, Inc. v. County of Orange* (2005) 131 Cal.App.4th 777, 783-4; *Georgetown Preservation Society v. County of El Dorado* (2018) 30 Cal.App.5th 358.) Since the Rezone Project has significant impacts under Prop M (Section 295), it also has significant impacts under CEQA. However, because the Rezone Project has significant shadow impacts even under the City's improperly narrow interpretation of the law, the issue is moot.

Housing Element, this displacement impact will be exacerbated. According to an economic analysis prepared by the San Francisco Office of the Controller, as a result of Rezone 500 to 1,000 additional units would be demolished over 20 years. Many of these units will be rent-controlled (pre-1979) units since these properties will have the lowest land value. This is very different than the 2022 Housing Element, which avoided Priority Equity Geographies (PEGs), where lower income residents live. By contrast, the Rezone includes large PEG areas, where displacement is inevitable.

While the Supervisors are considering measures to provide some protection for rent-controlled properties with 3 or more units, this does nothing to protect the thousands of duplex rent-controlled properties found throughout the Richmond and Sunset Districts and elsewhere in the City. Ms. Holley calculates that the Rezone will affect 3,838 2-unit rent-controlled parcels with 7,676 rent-controlled units. Holley states (Exhibit A):

> under the rezoning, there are a significant number of two-unit rent-controlled buildings on parcels with an existing height limit of 40 feet that would be rezoned to allow heights of 50', 65' and 85', and would no longer require setbacks, creating greater incentives and likelihood that they would be redeveloped under the proposed rezoning.

Also, the Rezone allows increased development in North Beach and the Western Addition (Addendum 19), which include high levels of rent-controlled units and Priority Equity Geographies, which were excluded from development in the 2022 Housing Element. San Francisco Planning Code states that "The Priority Equity Geographies SUD is comprised of areas or neighborhoods with a higher density of vulnerable populations" and that the 2022 Update of the Housing Element of the General Plan ((2022 Housing Element) identifies them as "areas…where zoning changes must be tailored to serve the specific needs of the communities that live there; and where programs that stabilize communities and meet community needs need to be prioritized."

The Rezone shifts 5,100 units of housing to the Northeast District, (Addendum 19) which is home to the highest percentage of rent-controlled units in the City. The Rezone adds 939 parcels in PEG areas, with 2,321 units, including 70 two-unit rent-controlled buildings with 140 units.

Urban Planner Deborah Holley states, "The inclusion of parcels in the Priority Equity Geographies SUD and the associated displacement impacts need to be identified and assessed in a supplemental EIR."

Allowing this development and displacement in the Priority Equity Geographies SUD is flatly inconsistent with the 2022 EIR and the 2022 Plan since the stated purpose of the 2022 Plan was to focus development on "well-resourced areas" and away from Priority Equity Geographies. The 2025 Rezone does the exact opposite of the stated goal of the 2022 Plan, which is an obvious inconsistency requiring supplemental CEQA review.

Ms. Holley also points out that the Rezone for the first time adds Laguna Honda Hospital. Redevelopment of this parcel would result in massive displacement. Ms. Holley

states, "The 62-acre Laguna Honda hospital and rehabilitation center located 375 Laguna Honda Boulevard was added to the rezoning plan, and if redeveloped would result in significant displacement impacts for the long-term nursing home residents. Laguna Honda has 769 beds and offers short-term rehab and long-term nursing care…The FEIR did not address the impacts of redevelopment of Laguna Honda with housing because this site was not designated for rezoning. The rezoning program changes the allowable height limit on this site from 40' which covers the majority of the 62 acres under existing height limits, to 85' for the entire site, and increases the likelihood that it would be redeveloped with housing."

Displacement is an environmental issue under CEQA. (*Save Berkeley Neighborhoods v. Regents* (2020) 51 Cal.App.5th 226, 233 (displacement of tenants is a CEQA impact)). CEQA requires the lead agency to determine whether the "environmental effects of a project will cause substantial adverse effects on human beings, either directly or indirectly," (PRC § 21083(b)(3), (d)). CEQA Guidelines Appendix G, Section XII provides that a project will have significant impacts where it will:

- Induce substantial population growth or concentration of population in an area, either directly (for example, by proposing new housing or businesses), or indirectly (for example, through extension of roads or other infrastructure);
- Displace substantial numbers of existing housing necessitating the construction of replacement housing elsewhere; or
- Displace substantial numbers of people, necessitating the construction of replacement housing elsewhere. See CEQA Guidelines Appendix G, Section XII.

The Addendum suggests vague mitigation measures such as "advancing equitable housing access, promoting racial and social equity, and eliminating displacement with strategies such as tenant protections, preservation of affordability, production of affordable housing, and advancing equitable access to housing resources and affordable units." However, these are vague and unenforceable measures. The Addendum fails to propose any binding and enforceable mitigation measures, such as requiring the mandatory construction of affordable housing, requiring payment for the construction of affordable housing, or requiring public lands to be used for 100% affordable housing. In fact, the city is reversing or weakening all of these requirements. The 2025 Rezone requires absolutely no affordable housing.

A public agency may not rely on mitigation measures of uncertain efficacy or feasibility. (*Kings County Farm Bureau v. City of Hanford* (1990) 221 Cal.App.3d 692, 727.) "Feasible" means capable of being accomplished in a successful manner within a reasonable period of time, taking into account economic, environmental, legal, social and technological factors. (14 CCR § 15364.) Mitigation measures must be fully enforceable through permit conditions, agreements or other legally binding instruments. (14 CCR § 15126.4(a)(2).) In fact, proposals to provide benefits to legacy businesses, may not be legally allowable, let alone, legally enforceable. (*City of Santa Barbara v. Adamson* (1980) 27 Cal.3d 123, 134.)

The Rezone is reminiscent of the City's "urban renewal" of the Western Addition in the 1960s and 1970s, which wiped out what was at that time one of the most ethnically diverse communities in the United States and displaced much of the City's African-American community. Like the current "Family Zoning Plan," the urban renewal of the Western Addition was justified by the alleged need for more affordable housing. However, to make way for the new housing, the City destroyed a thriving African-American, Latino and Asian-American community, which never fully recovered, and the new housing was occupied largely by wealthier, white residents. The main difference is that the 2025 Family Zoning Plan is now targeting the City's Chinese Community, in the Richmond and Sunset Districts, which will undoubtedly face widescale displacement under the Rezone. This form of "White Urbanism" is now well-documented. (See, e.g,, Goetz, Whiteness and Urban Planning, *Journal of the American Planning Association*, Vol 86 (2020).)

The Federal Reserve Bank has concluded that supply-side constraints such as zoning and environmental regulation have absolutely no impact on housing costs. The single most significant factors driving high housing costs are extreme wealth disparities, and remote work. (Federal Reserve Bank of San Francisco, J. Mondragon, Supply Constraints Do Not Explain House Price and Quantity Growth Across U.S. Cities (2025), https://www.frbsf.org/research-and-insights/publications/working-papers/2025/03/supply-constraints-do-not-explain-house-price-and-quantity-growth-across-u-s-cities/); Federal Reserve Bank, J. Mondragon, Housing Demand and Remote Work (2025), https://www.nber.org/papers/w30041). Building more luxury housing does not decrease housing costs and in fact often leads to gentrification of previously affordable neighborhoods. Trickle-down economics did not work in the Reagan Administration and it will not work now.

Since the Rezone will displace both existing housing and people, it will have a significant impact that must be analyzed in a supplemental EIR. The SEIR must consider mitigation measures and feasible alternatives to reduce this impact.

D. AIR QUALITY AND CANCER RISK.

The Addendum admits that the Rezone will create significant air quality impacts, including additional cancer risk from fine particulate matter, known as PM-2.5. (Addendum 95). The Housing Element EIR admitted significant unmitigated PM-2.5 cancer risk (Addendum 90), but the Rezone will have even greater air quality and cancer risks since it allows more development and taller buildings, and will result in more vehicle miles traveled (VMT). (Addendum 90, 92-93).

The 2022 EIR concluded that buildings under 240-feet and 495 units would have less than significant construction air quality impacts. (Addendum 89). Taller buildings have significant PM-2.5 and nitrogen oxide impacts. (Addendum 94). But allowing taller and larger buildings, the Rezone will create more significant construction air quality impacts, including emissions of cancer-cause PM-2.5. The Rezone will have significant unmitigated cancer risk from PM-2.5 and the Rezone will change the distribution of those risks compared to the Housing Element. (Addendum 95).

The 2022 EIR concluded that even with the implementation of mitigation, air quality impacts would be significant and unmitigated. (2022 EIR, p. S-4, 4.6-56, 4,6-70.) By adding another 4,000 housing units, the 2025 Rezone will have "Significant effects previously examined will be substantially more severe than shown in the previous EIR." (CEQA Guidelines §15164(a)(3)(B).)

Attached hereto are the comments of Dr. Paul Rosenfeld and Matthew Hagemann, P.G., C. Hg., of the environmental consulting firm Soil, Water, Air Protection Enterprise (SWAPE). (Exhibit E). SWAPE notes that the Addendum erroneously states, "The proposed rezoning program and subsequent development is expected to result in the same significant criteria air pollutant impacts from construction but not substantially more severe impacts than those disclosed in the EIR" (Addendum 93). However, SWAPE points out that by adding 4,000 additional residential units, the Rezone vastly exceeds air quality significance threshold set by the Bay Area Air District ("BAAD").

The Bay Area Air District has published screening thresholds to determine whether proposed projects will have significant impacts to air quality. (https://www.baaqmd.gov/~/media/files/planning-and-research/ceqa/ceqa-guidelines-2022/ceqa-guidelines-chapter-4-screening_final-pdf.pdf?rev=ac551d35a52d479dad475e7d4c57afa6&sc_lang=en) Under the official BAAQMD thresholds, construction of 416 apartments is expected to have significant air quality impacts from the construction phase, and 638 apartments are expected to have significant operational air quality impacts. The addition of 4,000 residential units will vastly exceed these significance thresholds, and will therefore have a significant impacts on air quality that must be analyzed under CEQA. (SWAPE at 4).

SWAPE calculates that the additional 4,000 units of housing will create emissions of Reactive Organic Gases (ROGs) of 148 pounds per day (ppd) for the construction phase (far above the CEQA significance threshold of 54 ppd) and 145 ppd of operation ROG emissions (far above the CEQA significance threshold of 54 ppd). (SWAPE at 5). SWAPE concludes, "This finding indicates a potentially significant air quality impact that the Addendum did not identify or address. In our opinion, a subsequent EIR should be conducted to provide a more substantial calculation of the Project's emissions and a more detailed evaluation of the Project's potential air quality impacts." (SWAPE at 5).

When a project exceeds an Air District CEQA significance threshold, as here, this alone establishes substantial evidence that the project will have a significant adverse environmental impact. Indeed, in many instances, such air quality thresholds are the only criteria reviewed and treated as dispositive in evaluating the significance of a project's air quality impacts. (See, e.g. *Schenck v. County of Sonoma* (2011) 198 Cal.App.4th 949, 960 [County applies Air District's "published CEQA quantitative criteria" and "threshold level of cumulative significance"]; see also *Communities for a Better Environment v. California Resources Agency* (2002) 103 Cal.App.4th 98, 110-11 ["A 'threshold of significance' for a given environmental effect is simply that level at which the lead agency finds the effects of the project to be significant"].) The California Supreme Court has shown the importance an air district significance threshold has in providing substantial

evidence of a significant adverse impact. (*Communities for a Better Environment v. South Coast Air Quality Management Dist*. (2010) 48 Cal.4th 310, 327 [estimated emissions in excess of air district's significance thresholds "constitute substantial evidence supporting a fair argument for a significant adverse impact"].)

Also, in 2025 city released a new APEZ (air pollutant exposure zone) map showing areas with high cancer risk. The Rezone allows development in some of these newly identified areas. This is a significant new information and a changed circumstance that was not known at the time of the 2022 EIR. (Addendum 95). The new APEZ areas include Sunset Blvd, and Lake Merced. These areas will receive significant development under the Rezone. This impact must be analyzed. (Addendum 96). The Addendum admits that the cancer risks created by the Rezone in the new APEZ areas are significant and unmitigated. (Addendum 97). The Northeast District is within the APEZ area. By moving over 5000 units of new housing to this area, the Rezone exacerbates cancer risks from airborne pollutants.

A supplemental EIR is required because "significant effects previously examined will be substantially more severe than shown in the previous EIR." (CEQA Guidelines section 15162(a)(3)(B).) Also, the new APEZ map constitutes, "new information of substantial importance, which was not known and could not have been known with the exercise of reasonable diligence at the time the previous EIR was certified as complete." (CEQA Guidelines section 15162(a)(3).)

SWAPE states,

> The Addendum proposes development in the Downtown, Marina, Mission, Northeast, and Western Addition planning districts, which have areas within the City's air pollutant exposure zones ("APEZ"). The Addendum states that "the proposed rezoning program may result in a small proportion of additional rezoned parcels being in the APEZ, which could increase the number of people exposed to the generally high pollutant concentrations in the APEZ" (p. 97).
>
> In 2025, the City identified new APEZ areas, defined as locations "where particulate matter (PM2.5) is greater than or equal to 9 µg/m3 or where the risk of cancer from air pollutants is greater than or equal to 100 in a million." (SWAPE at 5).

The Addendum concludes that this impact is "significant and unavoidable." (Addendum 97). SWAPE disagrees with this conclusion and proposes numerous feasible mitigation measures to reduce air pollution impacts that should be analyzed in a supplemental EIR. (SWAPE at 7-9). Among the mitigation measures suggested by SWAPE are requiring the use of ultra-low VOC paints, advanced air filtration units, emissions controls on backup generators, and many other measures. These mitigation measures should all be analyzed and imposed through a supplemental EIR process.

E. TRANSIT DELAY.

The Addendum admits that the Rezone will create significant impacts related to public transit delay, particularly along the busy 19th Avenue corridor, and on the 38-Geary and 19-Polk lines. (Addendum 71, 78, 84). The Addendum concludes that Rezone would contribute considerably to significant and unavoidable bus loading impacts. (Addendum 84). These impacts, particularly along the 19th Avenue corridor, will be exacerbated by the recent closure of the Great Highway, which has caused congestion on 19th Avenue by closing a major thoroughfare in the Western side of the City. The closure of the Great Highway is a changed circumstance that was unknown at the time of the 2022 EIR.

A supplemental EIR is required because "substantial changes [have] occur[ed] with respect to the circumstances under which the project is undertaken which will require major revisions of the previous EIR or Negative Declaration due to the involvement of new significant environmental effects or a substantial increase in the severity of previously identified significant effects." (CEQA Guidelines §15162(a)(2).) The closure of the Great Highway is clearly a significant changed circumstance that was not analyzed in the 2022 EIR and that will impact the Transportation analysis for the Rezone.

F. PUBLIC SERVICES.

The Rezone will allow residential development on the site of the North Point Wet Weather Sewage Treatment Facility. This site was not slated for development in the 2022 Plan. This amendment will require either a replacement facility or vast amounts of infrastructure to transport sewage to other plants. The sewage currently treated by the North Point Plant must go somewhere. Urban Planner Deborah Holley states, "This City-owned and -operated sewage treatment plant is one of three facilities in San Francisco that treats wastewater. It is only active during wet weather and treats up to 150 million gallons a day (MGD) during rainstorms, or 26 percent of the wastewater treated on a rainy day." She continues, "The FEIR did not address the impacts of redevelopment of this treatment plant with housing because this site was not designated for rezoning. The rezoning program changes the allowable height limit on this site from 40' to 85' and increases the likelihood that it would be redeveloped with housing. The site is in the P (Public) District where residential uses in 100 percent Affordable Housing Projects and Educator Housing Projects are permitted, and other residential uses are conditional. There is no reason the City would include this site in the rezoning program other than the fact that the City believes rezoning this site will increase the likelihood of housing development at this location. Since it is inconceivable that a developer would build housing on top of a sewage treatment plant, the City needs to analyze the impacts associated with elimination of the sewage treatment plant." Ms. Holley states:

> Elimination of the sewage treatment plant would result in reduced sewage treatment capacity during wet weather. This would require (a) the construction of a new sewage treatment facility in this area of the city, or (b) the construction of new infrastructure to convey wastewater from the northeast quadrant of the city to the Oceanside Treatment Plant or the Southeast Treatment Plant in Bayview/Hunters

Point and expansion of one of these facilities to expand the treatment capacity by 150 MGD to compensate for the loss of the North Point facility.

The potential public health and hazardous materials impacts of redeveloping the site with housing must be identified and analyzed and mitigation measures must be identified in a supplemental EIR. This includes but would not be limited to testing and classification of contaminants, calculations of health risk, specific remediation measures, associated secondary impacts due to the excavation of contaminated soil, transportation and disposal of infrastructure, and treatment and disposal of contaminated water and soil.

CEQA does not allow the City to defer analysis of obvious sewage treatment needs. When a project will require construction of additional sewage treatment infrastructure, the CEQA document must analyze and mitigate the impacts of that necessary new construction. (*Sundstrom v. Cnty. of Mendocino* (1988) 202 Cal. App. 3d 296; *San Joaquin Raptor/Wildlife Rescue Ctr. v. Cnty. of Stanislaus* (1994) 27 Cal. App. 4th 713 (EIR was also inadequate with respect to project description by its lack of reference to wastewater treatment plant which was necessary element of project).)

V. GENERAL PLAN ANALYSIS.

The Rezone is legally prohibited because it is inconsistent with the General Plan. "The Legislature has mandated that every county and city must adopt a 'comprehensive, long-term general plan for the physical development of the county or city, and of any land outside its boundaries which in the planning agency's judgment bears relation to its planning.'" (*Citizens of Goleta Valley v. Bd. of Sups*. (1990) 52 Cal.3d 553, 570 (quoting Gov. Code §65300).) The Supreme Court has described the general plan as "the constitution for all future developments within the city or county." *Id*. (internal quotation marks omitted). The "propriety of virtually any local decision affecting land use and development depends upon consistency with the applicable general plan and its elements." (*Id. DeVita v. Cty. of Napa*, 9 Cal. 4th 763, 803 (1995).) The "propriety of virtually any local decision affecting land use and development depends upon consistency with the applicable general plan and its elements." (*Citizens of Goleta Valley v. Bd. of Sups.* (1990) 52 C.3d 553, 570.)

The Rezone is flatly inconsistent with the adopted General Plan, and its adopted Housing Element. The Rezone allows development in historic districts, such as North Beach and Telegraph Hill, which were protected from development in the General Plan. The Rezone allows development in Priority Equity Geographies that were protected from development in the General Plan. The Rezone allows building heights and density throughout the City that vastly exceed limits set forth in the General Plan. As such, the Rezone is legally prohibited unless and until the City amends its General Plan.

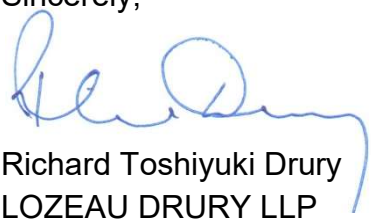
In addition, each of these General Plan inconsistencies is a significant impact that must be analyzed in an EIR. Any inconsistencies between a proposed project and applicable plans must be discussed in an EIR. (14 CCR § 15125(d); *City of Long Beach v. Los Angeles Unif. School Dist*. (2009) 176 Cal. App. 4th 889, 918; *Friends of the Eel*

River v. Sonoma County Water Agency (2003) 108 Cal. App. 4th 859, 874 (EIR inadequate when Lead Agency failed to identify relationship of project to relevant local plans).) A Project's inconsistencies with local plans and policies constitute significant impacts under CEQA. (*Endangered Habitats League, Inc. v. County of Orange* (2005) 131 Cal.App.4th 777, 783-4.)

VI. CONCLUSION.

For the foregoing reasons, we respectfully request that the Planning Commission direct the Planning Staff to prepare a Supplement EIR to analyze the Rezone and to consider feasible mitigation measures and alternatives to reduce its significant environmental impacts that were not analyzed in the 2022 EIR for the Housing Element. We further request that the Planning Commission conclude that the Rezone is prohibited since it is inconsistent with the City's General Plan.

Sincerely,



Richard Toshiyuki Drury
LOZEAU DRURY LLP

EXHIBIT A

December 1, 2025

Richard Drury
Lozeau | Drury LLP
1939 Harrison St., Suite 150
Oakland, CA 94612

RE: Adequacy of the San Francisco Housing Element 2022 Update FEIR Addendum

Dear Mr. Drury,

The San Francisco Planning Department published an Addendum to the Final Environmental Impact Report for the 2022 Housing Element ("Housing Element FEIR") on September 3, 2025, stating that no supplemental or subsequent environmental review was required for the Family Housing Rezoning Program ("proposed rezoning program, Family Zoning Plan, FZP, rezoning plan").

Because there are potential new or more severe environmental impacts that would result from the proposed rezoning program that were not identified and analyzed in the Housing Element FEIR, a supplemental EIR should have been prepared instead of an Addendum.

Such impacts include, but are not limited to the following:

A. The rezoning plan would result in new impacts associated with the potential redevelopment of the North Point Wet Weather Sewage Treatment Facility which was not included and therefore not analyzed in the Housing Element FEIR but which, as a result of the rezoning plan, is now designated as a site for the development of housing.

B. The rezoning plan would result in more severe displacement impacts, particularly those associated with the addition of numerous parcels within the Priority Equity Geographies SUD that were added to the rezoning plan but not included, and therefore not analyzed, in the Housing Element FEIR.

My qualifications for preparing this analysis include over 25 years of professional experience in land use and environmental planning, including the management and preparation of CEQA documents, and a Master of Science degree in Urban Planning

from Columbia University. My resume can be accessed via this link: https://www.holleyconsulting.com/resume/.

The Addendum to the Housing Element FEIR maintains that no supplemental or subsequent environmental review is required for the proposed rezoning program because the environmental impacts were adequately identified and analyzed in the Housing Element FEIR, and the rezoning program "…would not result in any new or more severe environmental impacts than were identified previously."

Specifically, the Addendum states that "…no additional environmental review is required under CEQA Section 21166 and CEQA Guideline Sections 15162-15164 for the following reasons:

(1) the Family Housing Rezoning Program would not involve new significant environmental effects or a substantial increase in the severity of significant effects previously identified in the Housing Element EIR;
(2) no substantial changes have occurred that would require major revisions to the Final EIR due to the involvement of new environmental effects or a substantial increase in the severity of effects identified in the Housing Element EIR; and
(3) no new information of substantial importance has become available which would indicate that (i) the Family Housing Rezoning Program will have significant effects not discussed in the Final EIR; (ii) significant environmental effects will be substantially more severe; (iii) mitigation measure or alternatives found not feasible that would reduce one or more significant effects have become feasible, or (iv) mitigation measures or alternatives that are considerably different from those in the Housing Element EIR would substantially reduce one or more significant effects on the environment."

2022 FEIR compared to Proposed Rezoning

Baseline Map. In order to understand what was analyzed in the 2022 FEIR, and what was added in subsequent policy changes, I reconstructed "Figure 2-7 Projected Heights and Density Controls Under the Proposed Action" from page 2-25 of Vol. 1 of the FEIR. ***Figure 1***, below, provides the most detailed description of the parcel-level impacts of the proposed rezoning for parcels analyzed in the 2022 Final EIR.

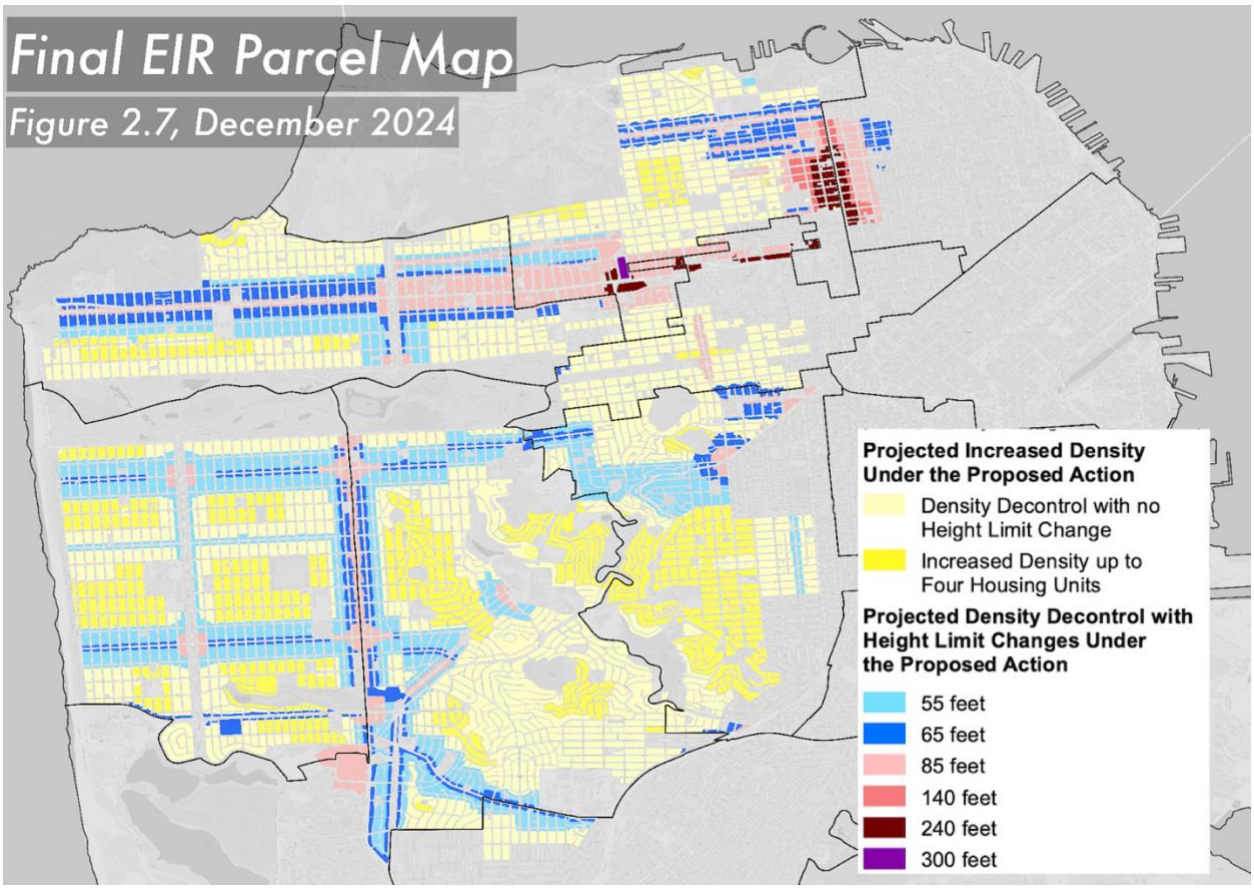


Figure 1. Baseline Map: 2022 FER Map Compared to the September 2025 Map, plus removing 3-unit+ Rent-Controlled Buildings and Hotels

The September 2025 map, based on the rezoning legislation introduced in board file 250700, was the most recent parcel-level map released by the Planning Department. The most significant amendments passed include exempting rent-controlled buildings of three units or larger from the local program, and exempting hotel parcels. *Planning recently released a November 17th map but it is not accurate as it does not yet exclude three-units+ rent controlled buildings.*

Figure 2 below shows that 6,938 new parcels were added in the proposed rezoning plan, 7,580 parcels have increased heights, and 16,135 parcels allow for greater densities. Associated unit counts were also estimated and are provided in the table following Figure 2.

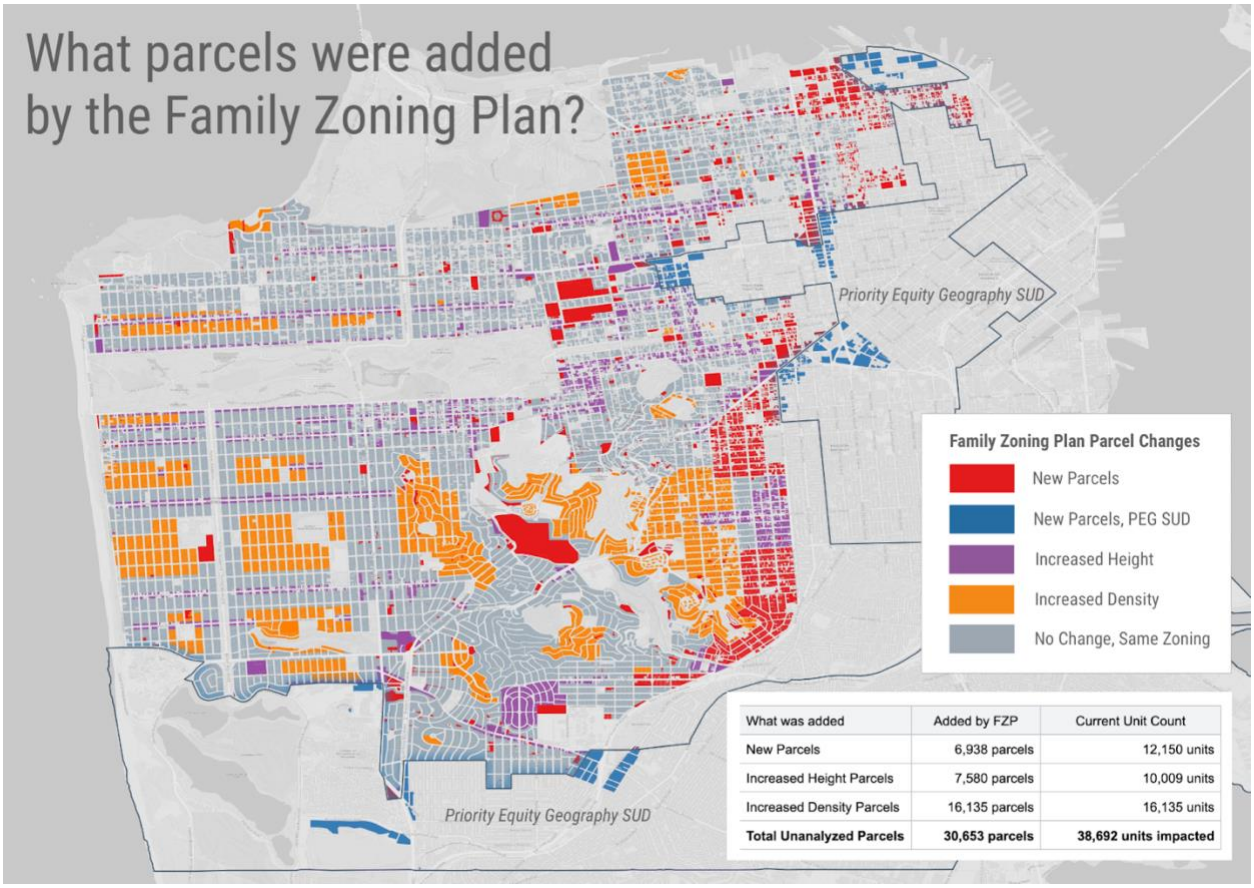


Figure 2. Parcels added and parcels with increased heights and densities under the rezoning

1. **What was added to the Family Zoning Plan from the FEIR?**

What was added	Added by FZP	Current Unit Count
New Parcels	6,938 parcels	12,150 units
Increased Height Parcels	7,580 parcels	10,009 units
Increased Density Parcels	16,135 parcels	16,135 units
Total Unanalyzed Parcels	**30,653 parcels**	**38,692 units impacted**

2) Scope of Family Zoning Plan vs. 2022 Final EIR

Total Count	Final EIR - 2022	Family Zoning Plan - 2025
Parcel Count	82,834	79,932
Current Units Count*	150,031	94,281
Area Added (sq ft)	257,461,954	254,211,574

** Residential and non-residential "units" (commercial spaces) impacted*

3. **Existing Parcels with increased height limits**

a. **7,580 parcels** with increased height limits
b. **10,009 currently existing units** in parcels with increased height limits
c. **31,424,690 sq ft** of total lot area in parcels with increased height limits

Height Limit Increase	Parcels	Current Unit Count
100' +	73	201
60' - 100'	34	31
40' - 60'	667	823
20' - 40'	3,244	4,906
< 20'	3,562	4,048

The following discussion describes potential impacts that were not analyzed in the CEQA document for the rezoning project. The Addendum is inadequate under CEQA and a supplemental EIR must be prepared to identify and analyze the potentially new and more severe impacts described below.

A. Rezoning of the North Point Wet Weather Sewage Treatment Facility

There are new potentially significant impacts associated with the proposed rezoning plan that were not identified and assessed in the Housing Element EIR or Addendum including impacts associated with development of the North Point Wet Weather Facility located at Bay Street and the Embarcadero. This City-owned and -operated sewage treatment plant is one of three facilities in San Francisco that treats wastewater. It is only active during wet weather and treats up to 150 million gallons a day (MGD) during rainstorms, or 26 percent of the wastewater treated on a rainy day.

The 2022 FEIR did not address the impacts of redevelopment of this treatment plant with housing because this site was not designated for rezoning at that time. The rezoning program changes the allowable height limit on this site from 40' to 85' and increases the likelihood that it would be redeveloped with housing. The site is in the P (Public) District where residential uses in 100 percent Affordable Housing Projects and Educator Housing Projects are permitted, and other residential uses are conditional.

There is no reason the City would include this site in the rezoning program other than the fact that the City believes rezoning this site will increase the likelihood of housing development at this location. Since it is inconceivable that a developer would build housing on top of a sewage treatment plant, the City needs to analyze the impacts associated with elimination of the sewage treatment plant.

Moreover, although the Addendum states that "It is likely that the Oceanside Water Pollution Control Plant would experience reduced pollutant loads under the proposed rezoning program compared to the adopted housing element because housing growth distribution under the proposed rezoning program would be more evenly distributed in the western and northern parts of the city and along transit corridors, instead of heavily concentrated in the Inner Sunset, Outer Sunset, and Richmond planning districts as assumed under the adopted housing element; thus pollutant load generation, would be more evenly distributed throughout the city rather than concentrated in the western portion of the city," there is no mention at all of the North Point treatment plant. (See pages 127-128 of the Addendum.)

Potentially significant impacts that should have been identified and analyzed in a supplemental EIR include, but are not limited to the following:

1. Elimination of the sewage treatment plant would result in reduced sewage treatment capacity during wet weather. This would require (a) the construction of a new sewage treatment facility in this area of the city, or (b) the construction of new infrastructure to convey wastewater from the northeast quadrant of the city to the Oceanside Treatment Plant or the Southeast Treatment Plant in Bayview/Hunters Point and expansion of one of these facilities to expand the treatment capacity by 150 MGD to compensate for the loss of the North Point facility.

2. The potential public health and hazardous materials impacts of redeveloping the site with housing must be identified and analyzed and mitigation measures must be identified in a supplemental EIR. This includes but would not be limited to

testing and classification of contaminants, calculations of health risk, specific remediation measures, associated secondary impacts due to the excavation of contaminated soil, transportation and disposal of infrastructure, and treatment and disposal of contaminated water and soil.

B. More severe displacement Impacts would result from the proposed rezoning program than were assumed in the Housing Element FEIR

Potentially significant displacement impacts that should have been identified and analyzed in a supplemental EIR include, but are not limited to the following:

1. ***Rezoning and displacement of tenants in two-unit rent-controlled buildings***. As shown below, under the proposed rezoning, there are a significant number of two-unit rent-controlled buildings on parcels with an existing height limit of 40 feet that would be rezoned to allow heights of 50', 65' and 85', and would no longer require setbacks, creating greater incentives and likelihood that they would be redeveloped under the proposed rezoning. In other words, it is reasonably foreseeable that they would be redeveloped and therefore should have been considered in the CEQA review for the project.

<u>Rent Controlled Parcels</u>

What was added	Parcels affected	Existing units affected
New Parcels	1,237 parcels	2,474 units
Increased Height Parcels	1,818 parcels	3,636 units
Increased Density Parcels	783 parcels	1,566 units
Total Rent Controlled Parcels	3,838 parcels	7,676 units

It is widely accepted that tenants of two-unit rent-controlled buildings already have fewer protections than tenants who live in buildings with three or more units because a two-unit building can more easily be converted into condos. In two-unit buildings, all an owner needs to do is move in, and they can evict a tenant to do so.

The inclusion of parcels with two-unit rent controlled buildings in the rezoning plan and the associated displacement impacts need to be identified and assessed in a supplemental EIR.

2. ***Rezoning and displacement in the Priority Equity Geographies Special Use District.*** Section 249.97 (b) of the San Francisco Planning Code states that "The Priority Equity Geographies SUD is comprised of areas or neighborhoods with a higher density of vulnerable populations" and that the 2022 Update of the Housing Element of the General Plan ((2022 Housing Element) identifies them as "***areas***…***where zoning changes must be tailored to serve the specific needs of the communities that live there; and where programs that stabilize communities and meet community needs need to be prioritized***."

   As shown in ***Figure 2*** above and quantified below, close to 1,000 parcels in the proposed rezoning program that were not analyzed in the Housing Element FEIR are located within the PEG SUD. Displacement impacts for residents in these areas are more severe than for residents outside of the SUD.

   New Priority Equity Geography Parcels
   a. 939 parcels
   b. 2,321 current existing units (including RC and non-RC)
   c. 70 two-unit RC buildings, 140 units

   The inclusion of parcels in the Priority Equity Geographies SUD and the associated displacement impacts need to be identified and assessed in a supplemental EIR.

3. ***Rezoning and displacement of Laguna Hospital and Rehabilitation Center occupants***. As shown in ***Figure, 2*** above, the 62-acre Laguna Honda hospital and rehabilitation center located 375 Laguna Honda Boulevard was added to the rezoning plan, and if redeveloped would result in significant displacement impacts for the long-term nursing home residents.

   Laguna Honda has 769 beds and offers short-term rehab and long-term nursing care. in the Forest Hill neighborhood of San Francisco.

   The FEIR did not address the impacts of redevelopment of Laguna Honda with housing because this site was not designated for rezoning. The rezoning program changes the allowable height limit on this site from 40' which covers the majority of the 62 acres under existing height limits, to 85' for the entire site, and increases the likelihood that it would be redeveloped with housing. The site is in the P (Public) District where residential uses in 100 percent Affordable Housing Projects and Educator Housing Projects are permitted, and other residential uses are conditional.

There is no reason the City would include this site in the rezoning program other than the fact that the City believes rezoning this site will increase the likelihood of housing development there.

Because the impacts of redevelopment of Laguna Honda Hospital and Rehabilitation Center was not analyzed in the Housing Element FEIR, a supplemental EIR is needed to determine the impacts and required mitigation measures.

EXHIBIT B

November 30, 2025

Mr. Richard Drury
Lozeau | Drury LLP
1939 Harrison St., Suite 150
Oakland, CA 94612

RE: Family Zoning Plan (Rezone) – Impacts on Historic Resources

Dear Mr. Drury,

This letter sets forth my professional opinion concerning the impacts on historic resources from the proposed San Francisco Rezoning Plan ("Rezone"), also known as the "Family Zoning Plan."

As a professional with 32 years of experience in historic preservation and with the California Environmental Quality Act (CEQA), I meet the Secretary of the Interior's Professional Qualification Standards in History and Architectural History. I also have the following credentials: received a Master of Arts Degree in Architectural History from the University of Virginia's School of Architecture; previously served as president of the San Francisco Landmarks Advisory Board (appointed by Mayor Newsom); since 2012 have continuously been on the City of San Francisco Planning Department's approved consultant pool for historic resources consultants; and certified by the San Francsico Contract Monitoring Division (CMD) as a woman-owned Local Business Enterprise (LBE). I have written innumerable historic resource and historic district designation and evaluation reports throughout the course of my career.

While the City of San Francisco (City) prepared and certified an Environmental Impact Report (EIR) for its 2022 Housing Element, the proposed Rezone is vastly different from the rezoning scenarios studied in the 2022 EIR. Nevertheless, the Planning Department proposes to rely on an Addendum (September 3, 2022) to the previously certified EIR. A rezoning of this magnitude requires thorough environmental review under CEQA so that the City's residents and decision-makers can be aware of its impacts, can consider all feasible mitigation measures and alternatives, and can have a robust and open discussion prior to making irreversible changes to San Francisco's landscape for all time.

The Rezone would result in a myriad of significant new impacts that were not analyzed in the 2022 EIR or included in the Housing Element, not the least of which are impacts to historic resources. The Rezone would result in significant impacts to historic resources that have not yet been analyzed. The 2022 EIR found significant and unmitigated impacts to historic resources, but the Rezone's impacts are far greater and substantially more severe than shown in the previous EIR, with significant and unmitigated impacts. Since "significant effects previously examined will be substantially more severe than shown in the previous EIR," a Supplemental EIR is required. (CEQA Guidelines 15162(a)(1)(3)(B).)

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As set forth in the Attachments to this letter, the Rezone would allow the demolition and redevelopment on, near, or within areas containing historic resources. Many known and designated, either locally under Article 10 of the Planning Code, or through state or federal historic designation programs, are within areas that were not included for rezoning in the 2022 Housing Element or analyzed in the 2022 EIR, while others were included in the analysis, but have since been upzoned or changed to form based density or have significantly higher heights on or around them by the Upzone. None of the potentially significant impacts that could result from redevelopment of these historic resources were analyzed in the 2022 EIR. See the following attachments for further analysis: Attachment 1 - Historic Resource Impact Analysis of Rezone and Attachment 2 - North Beach National Register of Historic Places Historic District Parcel Analysis.

Since this new information provided in the Attachments constitute significant and substantially more severe effects not discussed in the 2022 EIR, a Supplemental EIR is required to analyze and mitigate these impacts. The newly identified impacts are beyond the scope of the 2022 EIR. The Addendum barely mentions additional historic resources impacts and fails to analyze impacts of the drastically additional height and density increases as they relate to known historic resources. Further, the Addendum fails to analyze changes in zoning use districts on designated historic resources or historic districts or areas with known concentrations of "A" rated historic resources, which are identified, but not yet designated resources.

Further, the Rezone now includes the following language related to Bonuses for "Historic Preservation." However, these bonuses, as shown below, encourage height increases, facadism, and other over-scaled additions that would result in diminished historic fabric and result in unintended impacts to historic resources. Additionally, this proposed legislation, added in the September 11, 2025 version of the legislation, has not been evaluated for its potentially significant impacts on historic resources.

The following language has been added to Section 206.10(e) of the Rezone legislation providing additional height and square footage bonuses for the "preservation" of Historic Building.

> *(e)* ***Additional Height, Square Footage, and Other Bonuses.*** *HC-SF Projects that contain certain uses, amenities, or other building features are eligible for additional bonuses and code modifications, as described below.*

****

(6) ***Preservation of Historic Buildings.*** *In districts other than Residential districts, projects proposing an alteration to a Historic Building and/or constructing new buildings on sites that contain a Historic Building shall be permitted to include additional square footage, as provided below:*

(A) up to 1.5 times the gross floor area foregone by retaining the Historic Building and complying with Objective Standards pertaining to Historic Buildings, including through setting back building additions and/or new construction in relation to the Historic Building. For the purposes of this subsection (e)(56)(A), the foregone gross floor area shall be equal to the gross floor area within the volume that would otherwise be permitted under the Planning Code and all applicable Objective Standards, inclusive of modifications allowed pursuant to this Section 206.10, but is not being constructed in order to accommodate a reduced building mass above or around a Historic Building and that complies with or exceeds the setbacks or mass reductions required by the Objective Standards pertaining to Historic Buildings. The Zoning Administrator may publish further guidance on the calculation of foregone gross floor area; and

(B) for Historic Buildings with storefronts that contain character-defining features, an additional 0.25 square feet for every square foot of space in the storefront, provided that the project preserves the storefront in compliance with Objective Standards pertaining to Historic Buildings; and

(C) *horizontal or vertical additions to accommodate this extra square footage, except that any such additions shall not:*

(i) exceed 20 feet above the Housing Choice-SF height limit (Section 263.19); or

(ii) reduce the required rear yard above the ground floor to less than 15 feet where the site abuts the rear yard of adjacent parcels containing residential uses.

(D*) The Historic Building* and/or historic storefront *shall be maintained in compliance with the Preservation Design Standards for the life of the project, and the requirement shall be recorded in a Notice of Special Restrictions.*

This late addition of the above language to the legislation has the great potential to cause impacts to historic resources, instead of preserving them, as it would allow large sections of historic buildings to be demolished and over scaled additions and height increases to be implemented as bonuses.

For the reasons listed above, and as set forth in the Attachments, it is my professional opinion that the Rezone, if approved, would have additional and substantially more severe impacts to historic resources than were analyzed in the certified EIR. These potentially significant environmental impacts must be analyzed and mitigated under the California Environmental Quality Act ("CEQA") through a full recirculated Supplemental EIR.

Sincerely,

Bridget Maley
Principal

Attachment 1: Historic Resource Impact Analysis of Rezone
Attachment 2: North Beach National Register of Historic Places Historic District Parcel Analysis

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Attachment 1: Historic Resource Impact Analysis of Family Zoning Plan (Rezone)
November 30, 2025
Compiled by Bridget Maley, architecture + history, llc

The Family Zoning Plan (Rezone) would result in significant new impacts on historic resources that were not included in the 2022 Housing Element or analyzed in its associated Environmental Impact Report (2022 EIR). The area of the Rezone is significantly larger than the area included in the 2022 Housing Element and analyzed in the 2022 EIR.

It should be noted that all projects using the Rezone would be subject to form-based density (i.e. density decontrol) regardless of height limit or underlying zoning district. These height and density changes would encourage demolition of smaller-scale historic resources throughout the Rezone area.

In addition, for many parcels within the Rezone area, increases to the existing base height limits and/or changes from density limited to form based density (i.e. density decontrol) would be allowed for projects NOT using the Rezone, which would encourage demolition and development using the State Density Bonus or other State programs that provide density or development bonuses.

The Housing Element EIR Addendum No. 1 (September 3, 2025) fails to analyze impacts of additional height and density increases described above, as well as changes in zoning use districts, on designated historic resources and historic districts or on areas with known concentrations of “A” rated historic resources, but not yet designated as historic districts, including, but not limited to those resources listed below.

The list below includes landmarks and contributors to historic districts designated pursuant to Article 10 of the San Francisco Planning Code that may be removed from the Upzone by a pending amendment to the Upzone legislation.

Historic Resources Not Evaluated in 2022 Housing Element EIR

The following districts and individual historic resources were not included in the 2022 Housing Element or analyzed in the 2022 EIR, but are now included in the Rezone as of November 2025.

- Fully documented North Beach National Register Historic District submitted to the State Historic Preservation Office and awaiting hearing by the State Historical Resource Commission was not included in the 2022 Housing Element or analyzed in the 2022 EIR. The Rezone could have significant impacts to this identified historic district, including heights rezoned from 40 feet to 50 feet in block Block 0076. (See Attachment 2: List of Historic Resources in North Beach Historic District in Rezone.)

- Designated Northeast Waterfront Article 10 Historic District. Sansome Street Area Revision contained in “Appendix D: Memorandum Regarding Potential Zoning Map Changes in Supervisor District 3” disclosed the intent to include in the Rezone Plan areas within this Historic District centered along Sansome Street include the following seventeen parcels: Block 0085/Lots 005 and 048; Block 0106/Lots 001, 002, 003, 004, and 042; Block 0112/Lots 008 and 009; Block 0113/Lots 006, 041, 040, and 063; Block 0134/Lot 001; and Block 0135/Lots 007, 008, and 009. This area was not included in the

2022 Housing Element or analyzed in the 2022 EIR and could result in significant impacts to this Historic District.

- Eligible Washington Square Historic District, an eligible California Register Historic District. This area was not included in the 2022 Housing Element or analyzed in the 2022 EIR. The Rezone now includes six parcels on Filbert Street between Powell Street and Stockton Street, including the Church of Saints Peter and Paul and the Priests' Residence, which could result in significant impacts to this Historic District.

- Eligible Upper Grant Avenue Historic District, an eligible California Register Historic District. This area was not included in the 2022 Housing Element or analyzed in the 2022 EIR. The Rezone now includes seven contributory buildings in this District along Filbert Street, Medau Place, and Grant Avenue (Blk 0088/Lots 5, 41-57, and 9), which could result in significant impacts to this Historic District.

- Designated Otis Elevator Company National Register No. 99001265 (1 Beach Street; Parcel 0018/001). This parcel is rezoned from its existing height limit of 40 feet to 65 feet. This was not included in the 2022 Housing Element or analyzed in the 2022 EIR and could result in significant impacts to this historic site.

- Designated Grabhorn Press Building National Register No. 97000349 (1335 Sutter Street; Parcel 0690/012A). This parcel was rezoned from its existing height limit of 130 feet to to 500 feet. The Rezone also increases the base height limit from 130 feet to 200 feet and changes the density to form-based, which would encourage demolition and development using the State Density Bonus or other State programs that provide density or development bonuses.This drastic upzoning was not included in the 2022 Housing Element or analyzed in the 2022 EIR and could result in significant impacts to this historic site.

- Designated Thomas Payne House National Register No. 80000847 (1409 Sutter Street; Parcel 0689/025). This parcel is rezoned from its existing height limit of 130 feet to 500 feet. The Rezone also increases the base height limit from 130 feet to 200 feet and changes the density to form-based, which would encourage demolition and development using the State Density Bonus or other State programs that provide density or development bonuses. This drastic upzoning was not included in the 2022 Housing Element or analyzed in the 2022 EIR and could result in significant impacts to this historic site.

- Designated Myrtle Street Flats Building, both National Register No. 76000520 and Article 10 Landmark No. 71 (234-248 Myrtle Street; Parcel 0714/020), sometimes referred to as part of the Goodman Building. This parcel is rezoned from its existing height limit of 130 feet to 650 feet. The Rezone also increases the base height limit from 130 feet to 260 feet and changes the density to form-based, which would encourage demolition and development using the State Density Bonus or other State programs that provide density or development bonuses.This was not included in the 2022 Housing Element or analyzed in the 2022 EIR and could result in significant impacts to this historic site.

- Designated Washington Square Article 10 Landmark No. 226 (1651 Stockton Street and Filbert Street; 0102/022001). The parcels on the northern edge of Washington Square are now within the Rezone but were not included in the 2022 Housing Element or analyzed in the 2022 EIR. This could result in significant impacts to this park.
- Designated Article 10 "Structure of Merit" The Cannery (600 Beach Street; Parcel 0010/001). This parcel is rezoned from its existing height limit of 40 feet to 65 feet. As the density is form-based, the use of the State Density Bonus or other State programs that provide development bonuses would be allowed. This was not included in the 2022 Housing Element or analyzed in the 2022 EIR and could result in significant impacts to this site.
- Designated Building at 1840-1842 Eddy Street National Register No. 73000437 (1840-1842 Eddy Street, Parcel 1127/015). This parcel is rezoned from its existing height limit of 65 feet to 85 feet and changed to form-based density (density decontrol). This was not included in the 2022 Housing Element or analyzed in the 2022 EIR and could result in significant impacts to this historic site.
- Designated Building at 45-57 Beideman Place National Register No. 73000436 (45-57 Beideman Place, Parcel 1100/118). This parcel is included in the Rezone and changed to form-based density (density decontrol) and rezoned from RM-1 to RTO-C which allows commercial uses on the ground floor. These changes were not included in the 2022 Housing Element or analyzed in the 2022 EIR and could result in significant impacts to this historic site.
- Designated Building at 33-35 Beideman Place National Register No. 73000435 (33-35 Beideman Place, Parcel 1100/095). This parcel is included in the Rezone and changed to form-based density (density decontrol) and rezoned from RM-1 to RTO-C which allows commercial uses on the ground floor. These changes were not included in the 2022 Housing Element or analyzed in the 2022 EIR and could result in significant impacts to this historic site.
- Designated House at 1331-1335 Scott Street National Register No. 73000440 (1331-35 Scott Street, Parcel 1100/120). This parcel is included in the Rezone and changed to form-based density (density decontrol) and rezoned from RM-1 to RTO-C which allows commercial uses on the ground floor. These changes were not included in the 2022 Housing Element or analyzed in the 2022 EIR and could result in significant impacts to this historic site.
- Designated House at 1321 Scott Street National Register No. 7300439 (1321 Scott Street, Parcel 1100/049). This parcel is included in the Rezone and changed to form-based density (density decontrol) and rezoned from RM-1 to RTO-C which allows commercial uses on the ground floor. These changes were not included in the 2022 Housing Element or analyzed in the 2022 EIR and could result in significant impacts to this historic site.

- Designated House at 1249-1251 Scott Street National Register No. 73000442 (1249-51 Scott Street, Parcel 1127/035). This parcel now included in the Rezone and changed to form-based density (density decontrol) and rezoned from RM-1 to RTO-C which allows commercial uses on the ground floor. These changes were not included in the 2022 Housing Element or analyzed in the 2022 EIR and could result in significant impacts to this historic site.
- Designated House at 1239-1245 Scott Street National Register No. 7300441 (1239-45 Scott Street, Parcel 1127/043). This parcel now included in the Rezone and changed to form-based density (density decontrol) and rezoned from RM-1 to RTO-C which allows commercial uses on the ground floor. These changes were not included in the 2022 Housing Element or analyzed in the 2022 EIR and could result in significant impacts to this historic site.
- Temple Sherith Israel National Register #10000114 (2266 California St., Parcel 0637/011). Now included in the Rezone, this parcel is being upzoned from its existing 40 feet to 85 feet with a new base height of 50 feet. It is also changed to form based density and rezoned to RTO-C which allows commercial uses on the ground floor. These changes were not included in the 2022 Housing Element or analyzed in the 2022 EIR and could result in significant impacts to this historic site.
- Dallam-Merritt House National Register #84001185 (2355 Washington Street, Parcel 0613/021). Now in the Rezone, this parcel was not included in the 2022 Housing Element or analyzed in the 2022 EIR.
- Designated site of Third Baptist Church California Registered Historical Landmark No. 1010 (483 Greenwich Street, Parcel 0087047). Now in the Rezone, this parcel was not included in the 2022 Housing Element or analyzed in the 2022 EIR.
- Designated Fillmore-Pine Building National Landmark No. 82002247 (1940-1946 Fillmore Street, Parcel 0660/023). Now in the Rezone, this parcel is being rezoned from its existing height limit of 40 feet to 65 feet. This parcel was not included in the 2022 Housing Element or analyzed in the 2022 EIR and could result in significant impacts to this historic site.
- Designated Park View Hotel National Register No. 83001235 (750 Stanyan Street, Parcel 1250/025). Now in the Rezone, this parcel is being rezoned from its existing height limit of 50 feet to 65 feet. This parcel was not included in the 2022 Housing Element or analyzed in the 2022 EIR and could result in significant impacts to this historic site.
- Designated Delane House National Register No. 82000984 (70 Buena Vista Terrace, Parcel 2608/013). Now in the Rezone, this parcel was not included in the 2022 Housing Element or analyzed in the 2022 EIR and could result in significant impacts to this historic site.

- Designated House at 584 Page Street National Register No. 85002195 (584 Page Street, Parcel 0842/017). Now in the Rezone, this parcel was not included in the 2022 Housing Element or analyzed in the 2022 EIR and could result in significant impacts to this historic site.

- Designated Moss Beach House National Register No. 83001232 (1626 Great Highway, Parcel 1895/038). Now in the Rezone, this parcel was not included in the 2022 Housing Element or analyzed in the 2022 EIR and could result in significant impacts to this historic site.

- Designated Real Estate Associates (TREA) Houses National Register No. 85000705 (2503, 2524, 2530 and 2536 Clay Street (Parcel 0630/032, 0611/008, 0611/009 and 0611/010). Now in the Rezone, the house at 2503 Clay is upzoned from 40 feet to 65 feet. These 4 historic houses were not included in the 2022 Housing Element or analyzed in the 2022 EIR.

- Wilford Houses National Register No.85001914 (2121 & 2127 Vallejo Street, Parcels 0565/021and 0565/022). Now in the Rezone, these parcels adjoin parcels upzoned to 65 feet. These 2 historic houses were not included in the 2022 Housing Element or analyzed in the 2022 EIR.

- Sinton House National Register No. 11000944(1020 Francisco Street, Parcel 0476002C).Now in the Rezone, this parcel was not included in the 2022 Housing Element or analyzed in the 2022 EIR.

- Designated Russian Hill Paris Block Architectural Historic District National Register of Historic Places Historic District No. 87002288. The Rezone includes four parcels in this District between Green Street and Macondray Lane (Block 0121/Lots 005, 006, 049, and 056), which were not included in the 2022 Housing Element or analyzed in the 2022 EIR. This could result in significant impacts to this Historic District.

- Designated Russian Hill Macondray Lane National Register Historic District No. 87002286. The Rezone includes this entire Historic District, which was not included in the 2022 Housing Element or analyzed in the 2022 EIR. This could result in significant impacts to this Historic District, especially corner parcels that could be up to 65 feet in height in this residential district.

- Designated Port of San Francisco Embarcadero National Register Historic District No. 06000372. The Rezone includes increased height and density along the Embarcadero, especially on Bay, North Point, Beach and Jefferson Streets, which could impact this Historic District. These heights, not included in the 2022 Housing Element or analyzed in the 2022 EIR, could result in significant impacts to this Historic District.

- Designated Golden Gate Park National Register Historic District No. 04001137. The Rezone includes height increases along Fulton Street and Lincoln Boulevard bordering the north and south sides of Golden Gate Park and Stanyon Street bordering the east side. The heights along Fulton Street are increased from 40 feet to 85 feet and along

Lincoln from 40 feet to 65 feet, both streets are changed to form-based density (density decontrol) and rezoned to RTO-C that allows commercial uses on the ground floors. Heights along a portion of Stanyan Street are rezoned from 50 feet to 65 feet. Heights are also increased in places along Fell and Oak Streets in the Panhandle of the Park. These proposed height, density, and use changes in the Rezone were not included in the 2022 Housing Element or analyzed in the 2022 EIR and would have significant impacts on this designated historic district.

- Designated Presidio of San Francisco National Historic Landmark Historic District No. 66000232. Development proposed in the Rezone adjacent to the Presidio of San Francisco at 300 Lake Street; Parcel No. 1354/001, upzoned from 40 feet to 65 and from 65 feet to 85 feet. Also upzoned at the Lombard Gate from 40 feet to 65 feet. Additionally, development in the residential zoned areas of Presidio Terrace and Sea Cliff heights would be allowed to 65 feet on 8,000 square foot parcels. These Rezone heights were not included in the 2022 Housing Element or analyzed in the 2022 EIR.

- Designated Lower Nob Hill Apartment Hotel National Register Historic District No. 91000957. Height increases along the edges would impact this designated Historic District. The increased heights at Bush and Leavenworth Streets from the existing height limit of 65 feet to 120 feet and Polk Street between Geary and Sutter Streets from the existing height limit of 80 feet to 240 feet. These heights were not included in the 2022 Housing Element or analyzed in the 2022 EIR and could impact this Historic District.

- Designated Veterans Affairs Medical Center National Register Historic District No. 05001112 (4150 Clement Street). Along the southern edge of this District the Rezone includes increases from the existing height limit of 40 feet to 65 feet on Clement Street. This was not included in the 2022 Housing Element or analyzed in the 2022 EIR and could impact this Historic District.

- Designated Cable Car National Register Historic District No. 66000233. The Cable Car lines located within areas being upzoned and/or density decontrolled by the Upzone Plan could be significantly impacted. These include, without limitation, those lines along the following routes: Hyde between Beach and Washington, Washington between Hyde and Mason, Jackson between Leavenworth and Hyde, California between Van Ness and Mason, Mason between Green and Columbus, Columbus between Mason and Taylor, and Taylor between Chestnut and Francisco. Height increases adjacent to these streets could impact these linear transit historic resources, and construction activities resulting from development incentivized by the Upzone could cause extensive service interruptions. Impacts to the Cable Car National Register Historic District were not included in the 2022 Housing Element or analyzed in the 2022 EIR.

- Designated Geneva Office Building and Power House (S.F. & San Mateo Railroad Co.Office Building), both National Register No. 10000111 and Article 10 Landmark No. 180 (500 Geneva; Parcel 6972/036). The Rezone Plan upzones this publicly owned site from the existing height of 40 feet to 85 feet and includes it in the Non-Contiguous SFMTA Special Use District, which allows the site to be developed for mixed use residential development. The Rezone Plan also increases the base height limit from 40

feet to 50 feet and changes the density to form-based, which would allow development using the State Density Bonus or other State programs that provide density or development bonuses. New development on and adjacent to this historic site could result in significant impacts. These changes were not included in the 2022 Housing Element or analyzed in the 2022 EIR.

- Eligible Hayes Valley Residential Historic District, an eligible California Register Historic District. The current Rezone includes a significant portion of the District. This area of Hayes Valley was not included in the 2022 Housing Element or analyzed in the 2022 EIR and could result in significant impacts to this Historic District.

- Eligible Northpoint Sewage Treatment Plant Historic District, an eligible National Register and California Historic District. The District includes 101 North Point (Parcel 0033/005), 66 Bay Street (0034/002) and 160 Bay Street (0033/003). This entire site is increased from the existing height limit of 40 feet to 85 feet. The Rezone of this eligible district was not included in the 2022 Housing Element or analyzed in the 2022 EIR and could have significant impacts to this District.

- Designated Dietle Residence Article 10 Landmark No.48 (294 Page Street, Parcel 0839/017). Located within and adjacent to the Hayes Valley Residential Historic District, an eligible California Register Historic District, the Rezone includes this parcel which is rezoned to RTO-1.This parcel was not included in the 2022 Housing Element or analyzed in the 2022 EIR and could result in significant impacts to this Historic District.

- Designated Nightingale House Article 10 Landmark No. 47 (201 Buchanan Street, Parcel 0858/002). Located within and adjacent to the Hayes Valley Residential Historic District, an eligible California Register Historic District, the Rezone includes this parcel which is rezoned to RTO-1.This parcel was not included in the 2022 Housing Element or analyzed in the 2022 EIR and could result in significant impacts to this Historic District.

- Designated McMorry-Lagan Building Article 10 Landmark No.164 (188-198 Haight Street, Parcels 0852/033 and 0852/034). Located within and adjacent to the Hayes Valley Residential Historic District, an eligible California Register Historic District, the Rezone includes this parcel which is rezoned to RTO-1.This parcel was not included in the 2022 Housing Element or analyzed in the 2022 EIR and could result in significant impacts to this Historic District.

- Designated Duboce Park Article 10 Historic District, specifically the contributory buildings located along Waller and Steiner Streets being rezoned RTO-1. Although certain parcels within the Duboce Park Historic District are proposed for removal from the Rezone by a pending amendment to the Upzone legislation (see list below), the contributory buildings located along Waller and Steiner Streets would remain in the Rezone. This Historic District was not included in the 2022 Housing Element or analyzed in the 2022 EIR.

Historic Resources Evaluated in 2022 Housing Element and 2022 EIR, But Now with Significant Height Increases

- Designated St. Luke's Episcopal Church, National Register No. 100009644 (1755 Clay; Parcel 0622/013). Included in the 2022 EIR as being upzoned from its existing height limit of 80 feet to 240 feet, but height increased by the Rezone to 350 feet with a base height of 140 feet. These increased heights were not studied in the 2022 EIR and could have significant impacts to this historic site. Further, as the density is form-based, the use of the State Density Bonus or other State programs that provide development bonuses would be allowed from the new base height.

- Designated Paige Motor Company National Register No. 83001234 (1699 Van Ness Parcel 0642/001). Included in the 2022 EIR as being upzoned from existing height limit of 80 feet to 240 feet, but height increased by the Rezone to 350 feet with a base height of 140 feet. These increased heights were not studied in the 2022 EIR and could have significant impacts to this historic site. Further, as the density is form-based, the use of the State Density Bonus or other State programs that provide development bonuses would be allowed from the new base height.

- Eligible Ocean Avenue Commercial Historic District, a documented eligible California Register Historic District under review by the Planning Department. The EIR analyzed the height along Ocean Avenue at a height of 65 feet, which was increased by the Rezone to 85 feet. This increased height was not studied in the 2022 EIR and could have significant impacts to this Historic District.

- Eligible fully documented Ingleside Terraces National Register Historic District submitted to the State Historic Preservation Office and awaiting hearing by the State Historical Resource Commission. The EIR analyzed the height along Ocean Avenue, Block 6915, with a height of 65 feet, which was increased by the Rezone to both 85 feet and 140 feet. These increased heights were not included in the 2022 Housing Element or analyzed in the 2022 EIR and could have significant impacts on this fully documented historic district.

- Designated St. Francis Wood National Register Historic District No. 100007846 was listed on June 30, 2022. This historic district was not included in the 2022 Housing Element or analyzed in the 2022 EIR. The Rezone could have significant impacts on this historic district.

- *The Gardens in the City; San Francisco Residence Parks, 1906-1940, Historic Context Statement* identified 8 residence parks neighborhoods as eligible historic districts. Since this was last heard by the Historic Preservation Commission in April 2021, St. Francis Wood has been listed on the National Register of Historic Place No. 100007846 and Ingleside Terraces has been fully documented as a National Register Historic District and submitted to the State Historic Preservation Office. Six other neighborhoods Jordan Park, West Clay Park, Forest Hill and Forest Hill Extension, Sea Cliff, Lincoln Manor and

Balboa Terrace are identified as potential historic districts. These six neighborhoods would be impacted by upzoning in and along the edges.

- Historic Category "A" rated buildings across the city would be impacted by the Rezone as it affords no protection for these previously identified, but not designated historic resources. The City of San Francisco Planning Department has previously required full Historic Resource Evaluations for projects involving Category "A" rated buildings. This policy change was not included in the 2022 Housing Element or analyzed in the 2022 EIR.

The following landmarks and contributors to historic districts designated pursuant to Article 10 of the San Francisco Planning Code may be removed from the Upzone by a pending amendment to the Upzone legislation:

- Designated Telegraph Hill Article 10 Historic District. The Rezone includes this entire Historic District, which was not in the 2022 Housing Element or analyzed in the 2022 EIR.
- Designated Alamo Square Article 10 Historic District. The Rezone includes most of this Historic District, including increased heights from 40 feet to 50 feet along Scott Street. This District was not in the 2022 Housing Element or analyzed in the EIR and could result in significant impacts to the District.
- Designated Webster Street Article 10 Historic District. The Rezone includes this entire Historic District, which was not in the 2022 Housing Element or analyzed in the EIR.
- Designated Haslett Warehouse, both National Register No. 75000172 and Article 10 Landmark No. 57 (680 Beach Street; Parcel 0010/002). he Rezone includes this parcel, owned by the United States National Park Service, upzoning it from its existing height of 40 feet to 65 feet. This was not included in the 2022 Housing Element or analyzed in the EIR.
- Designated San Francisco Art Institute Article 10 Landmark No 85 including the Diego Rivera Gallery Landmark No 284 (800 Chestnut Street; Parcel 0049/001). This parcel is rezoned from its existing height of 40 feet to 50 feet. This was not included in the 2022 Housing Element or analyzed in the EIR.
- Designated Ghiradelli Square, both National Register No. 82002249 and Article 10 Landmark No. 36 (920 North Point; Parcel 0452/002). This parcel is rezoned from its existing height limit of 40 feet to 65 feet. This was not included in the 2022 Housing Element or analyzed in the EIR.
- Designated Goodman Building/Emeric Building, both National Register No. 75000473 and Article 10 Landmark No. 71 (1117 Geary Blvd; Parcel 0714/018). This parcel is rezoned from its existing height limit of 130 feet to 650 feet. The Rezone also increases the base height limit from 130 feet to 260 feet and changes the density to form-based, which would encourage demolition and development using the State Density Bonus or

other State programs that provide density or development bonuses. This was not included in the 2022 Housing Element or analyzed in the EIR and could result in significant impacts to this historic site. Even if this parcel is removed from the Rezone, it is surrounded by parcels zoned to 650 feet, which could result in significant impacts to this historic resource.

- Designated First Unitarian Church Article 10 Landmark No. 40 (1187 Franklin Street; Parcel 0713/034). This parcel is rezoned from its existing height limit of 130 feet to 500 feet. The Rezone also increases the base height limit from 130 feet to 200 feet and, as the density is form-based, use of the State Density Bonus or other State programs that provide development bonuses would be encouraged. This was not included in the 2022 Housing Element or analyzed in the EIR and could result in significant impacts to this historic site. Even if this parcel is removed from the Rezone, it is surrounded by parcels zoned to 650 feet, which could result in significant impacts to this historic resource.

- Designated Earl C. Anthony Packard Showroom Article 10 Landmark No. 153 (901 Van Ness Avenue; Parcel 0719/002). The parcel is rezoned from its existing height limit of 130 feet to 500 feet. The Rezone also increases the base height limit from 130 feet to 200 feet and, as the density is form-based, use of the State Density Bonus or other State programs that provide development bonuses would be encouraged. This was not included in the 2022 Housing Element or analyzed in the EIR and could result in significant impacts to this historic site. Even if this parcel is removed from the Rezone, it is surrounded by parcels zoned to 500 feet and 350 feet, which could result in significant impacts to this historic resource.

- Designated Don Lee Auto Showroom, both National Register No. 01001179 and Article 10 Landmark No.152 (1000 Van Ness Avenue; Parcel 0715/014). This parcel is rezoned from its existing height limit of 130 feet to 500 feet. The Rezone also increases the base height limit from 130 feet to 200 feet and as the density is form-based, use of the State Density Bonus or other State programs that provide development bonuses would be encouraged. This was not included in the 2022 Housing Element or analyzed in the EIR and could result in significant impacts to this historic site. Even if this parcel is removed from the Rezone, it is surrounded by parcels zoned to 500 feet and 650 feet, which could result in significant impacts to this historic resource.

- Designated Stradtmuller House, both National Register No. 76000523 and Article 10 Landmark No. 35 (819 Eddy Street; Parcel 0743/015). This parcel is rezoned from its existing height limit of 130 feet to 300 feet. This was not included in the 2022 Housing Element or analyzed in the EIR and could result in significant impacts to this historic site. Even if this parcel is removed from the Rezone, it is surrounded by parcels zoned to 350 feet, which could result in significant impacts to this historic resource.

- Designated Engine Company Number 31 Fire House Article 10 Landmark No. 220 (1088 Green St (0121/010). This parcel is now within the Rezone but was not included in the 2022 Housing Element or analyzed in the EIR and could result in significant impacts to this historic building.

- Designated Clay Theater Article 10 Landmark No. 302 (2261 Fillmore Street; Parcel 0630/002). This parcel and area of Fillmore Street are rezoned from their existing height limit of 40 feet to 65 feet. This was not included in the 2022 Housing Element or analyzed in the EIR and this could result in significant impacts to this historic site. Even if this parcel is removed from the Rezone, it is surrounded by parcels zoned to 65 feet, which could result in significant impacts to this historic resource.
- Designated Calvary Presbyterian Church National Register No 78000755 and Article 10 Landmark No. 103 (2501 Fillmore Street; Parcel 0587/027). This parcel and area of Fillmore are now within the Rezone but were not included in the 2022 Housing Element or analyzed in the 2022 EIR. This could result in significant impacts to this historic site.
- Designated Grace Cathedral Article 10 Landmark No. 170 (1100 California Street; Parcel 0246/001). This parcel and area of Nob Hill are now within the Rezone but were not included in the 2022 Housing Element or analyzed in the EIR. This could result in significant impacts to this site.
- Designated Chambord Apartments, both Article 10 Landmark No. 106 and National Register No. 84001184 (1298 Sacramento Street; Parcel 0221/125). This parcel and area of Nob Hill are now within the Rezone but were not included in the 2022 Housing Element or analyzed in the EIR. This could result in significant impacts to this site.
- Designated Old Flood Mansion, Pacific Union Club, both Article 10 Landmark No. 64 and National Register No. 66000230 (1000 California Street; Parcel 0245/001). This parcel and area of Nob Hill are now within the Rezone but were not included in the 2022 Housing Element or analyzed in the EIR. This could result in significant impacts to this site.
- Designated Westfield House Article 10 Landmark No. 135 (1198 Fulton Street, Parcel 0777/015) located in the Alamo Square Article 10 Historic District. The Rezone includes this parcel, which was not included in the 2022 Housing Element or analyzed in the EIR. The Rezone could result in significant impacts to this historic site and the Alamo Square Historic District.
- Designated Third Baptist Church Complex Article 10 Landmark No. 275 (1399 McAllister Street, Parcel 0778/013). The Rezone includes this parcel, which was not included in the 2022 Housing Element or analyzed in the EIR. The Rezone could result in significant impacts to this historic site.
- Designated Archbishop's Mansion Article 10 Landmark No. 151 (1000 Fulton Street, Parcel 0778/006) located in the Alamo Square Article 10 Historic District. The Rezone includes this parcel, which was not included in the 2022 Housing Element or analyzed in the 2022 EIR. The Rezone could result in significant impacts to this historic site and the Alamo Square Historic District.
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- Designated Abner Phelps House, both National Register No. 71000187 and Article 10 Landmark No. 32 (1111 Oak Street; Parcel 1218/050). This parcel is rezoned from its existing height limit of 40 feet to 50 feet. This was not included in the 2022 Housing Element or analyzed in the 2022 EIR and could result in significant impacts to this historic site. Even if this parcel is removed from the Rezone, because it is adjacent to parcels zoned up to 85 feet, this could result in significant impacts to this historic resource.

- Designated Sarah Mish House, both National Register No. 79000534 and Article 10 Landmark No. 62 (1153 Oak Street; Parcel 1218/029). This parcel is rezoned from its existing height limit of 40 feet to 50 feet. This was not included in the 2022 Housing Element or analyzed in the 2022 EIR and could result in significant impacts to this historic site.

- Designated Firehouse Engine Company No. 2, both Article 10 Landmark No. 89 (1152 Oak Street, Parcel 1215/010) and a contributor to the Buena Vista North Historic District, an eligible California Register Historic District. The inclusion of this parcel in the Rezone was not included in the 2022 Housing Element or analyzed in the EIR and could result in significant impacts to this historic site. Even if this parcel is removed from the Rezone, because it is surrounded by parcels zoned 65 feet and 85 feet, this could result in significant impacts to this historic resource.

- Designated Richard Doolan/Norman Larson Residence Article 10 Landmark No. 253 (557 Ashbury Street, Parcel 1231/009). As the density is form-based, the use of the State Density Bonus or other State programs that provide development bonuses would be allowed. Even if this parcel is removed from the Rezone, because it is surrounded by parcels zoned to 65 feet with form-based density and rezoned to RTO-C, this could result in significant impacts to this historic resource.

- Designated Theodore Green Apothecary Article 10 Landmark No. 182 (500 Divisadero Street, Parcel 1203/017A). This parcel is rezoned from its existing height limit of 65 feet to 85 feet. This was not included in the 2022 Housing Element or analyzed in the EIR and could result in significant impacts to this historic site. Even if this parcel is removed from the Rezone, because it is surrounded by parcels zoned up to 85 feet, this could result in significant impacts to this historic resource.

- Designated Charles L. Hinkel House and Carriage House Article 10 Landmark No. 190 (280 Divisadero Street; Parcel 1238/023). This parcel is rezoned from its existing height limit of 40 feet to 85 feet. This was not included in the 2022 Housing Element or analyzed in the EIR and could result in significant impacts to this historic site. Even if this parcel is removed from the Rezone, because it is adjacent to parcels zoned up to 85 feet, this could result in significant impacts to this historic resource.

- Designated Old Saint Patrick's Church Article 10 Landmark No. 6 (1820 Eddy Street, Parcel 1127/007A). This parcel now included in the Rezone and changed to form-based density (density decontrol) and rezoned from RM-3 to RTO-C which allows commercial uses on the ground floor. These changes were not included in the 2022 Housing

Element or analyzed in the EIR and could result in significant impacts to this historic site. Even if this parcel is removed from the Rezone, because it is surrounded by parcels zoned to 65 feet with form-based density and rezoned to RTO-C, this could result in significant impacts to this historic resource.

- Glazer-Keating House Article 10 Landmark No. 251 (1110 Taylor Street, Parcel 0222/018). The Rezone now includes this parcel, which was not included in the 2022 Housing Element or analyzed in the EIR.

- Merryvale Antiques (S.F. Gas Light Co.) Article 10 Landmark No 58 (3640 Buchanan Street, Parcel 0459/003) This parcel is included in the Rezone and changed to form-based density (density decontrol). The Rezone now includes this parcel, which was not included in the 2022 Housing Element or analyzed in the EIR.

- Ladies Protection and Relief Society Article 10 Landmark No 320 (3400 Laguna Street, Parcel 0471/003). The Rezone now includes this parcel, which was not included in the 2022 Housing Element or analyzed in the EIR.

- Blackstone Court Article 10 Historic District (30 Blackstone Court, 1545 Lombard Street, and 1549 Lombard Street (Parcels 0504/003, 0504/003H & 0504/019). The Rezone increases the height of two of the parcels in this District from 40 feet to140 feet and the density is changed to form-based. This Historic District was not included in the 2022 Housing Element or analyzed in the EIR. Even if this parcel is removed from the Rezone, because it is surrounded by parcels zoned to 140 feet with form-based density, this could result in significant impacts to this historic resource.

- North End Police Station and Garage Article 10 Landmark No. 218 (2475 Greenwich, Parcel 0513/015). The Rezone includes this parcel, which was not included in the 2022 Housing Element or analyzed in the 2022 EIR.

- Filbert Street Cottages Article 10 Landmark No 232 (1338 Lombard Street, Parcel 0524/031). This parcel is rezoned from its existing height limit of 40 feet to 85 feet. This was not included in the 2022 Housing Element or analyzed in the 2022 EIR and could result in significant impacts to this historic site. Even if this parcel is removed from the Rezone, because it is adjacent to parcels zoned up to 85 feet, this could result in significant impacts to this historic resource.

- Metro Theater Article 10 Landmark No 261 (2055 Union Street, Parcel 0541/018. The Rezone includes this parcel, which is upzoned from its existing height limit of 40 feet to 65 feet. This site was not included in the 2022 Housing Element or analyzed in the 2022 EIR.

- The Colonial Dames (McElroy) Octagon House Article 10 Landmark No. 17 and National Register No 720000250 (2645 Gough Street, Parcels 0544/001 and 0544/001C. This historic site, included in the Upzone, is rezoned from its existing height limit of 40 feet to 65 feet and its density changed to form-based. This was not included in the 2022 Housing Element or analyzed in the 2022 EIR.

- Alhambra Theater Article 10 Landmark No. 21 (2320-366 Polk Street, Parcel 0548/022). The Rezone includes this parcel, which is upzoned from its existing height limit of 65 to 85 and now form-based. This was not included in the 2022 Housing Element or analyzed in the 2022 EIR.

- The Burr Mansion Article 10 Landmark No.31 and National Register #14000967 (1772 Vallejo Street, Parcel 0552/029). The Rezone includes this parcel, which is upzoned from its existing height limit of 40 feet to 85 feet. This was not included in the 2022 Housing Element or analyzed in the 2022 EIR. Even if this parcel is removed from the Rezone, because it is adjacent to parcels zoned up to 85 feet, this could result in significant impacts to this historic resource.

- Golden Gate Valley Carnegie Library Article 10 Landmark No. 300 (1801 Green Street, Parcel 0554/001). The Rezone includes this parcel, which was not included in the 2022 Housing Element or analyzed in the 2022 EIR.

- Casebolt House Article 10 Landmark No 51 (2727 Pierce Street, Parcel 0560/005). The Rezone includes this parcel, which was not included in the 2022 Housing Element or analyzed in the 2022 EIR.

- Church For The Fellowship of All People Article 10 Landmark No. 309 (2041 Larkin Street, Parcel 0572/003). The Rezone includes this parcel, which is upzoned from its existing height limit of 40 feet to 65 feet. This was not included in the 2022 Housing Element or analyzed in the 2022 EIR. Even if this parcel is removed from the Rezone, because it is adjacent to parcels zoned up to 85 feet, this could result in significant impacts to this historic resource.

- Engine Company No. 8 Truck No. 4 Article 10 Landmark No. 188 (1648 Pacific St., Parcel 0574/011). The Rezone includes this parcel, which is upzoned from its existing height limit of 65 feet to 350 feet. This extreme upzoning was not included in the 2022 Housing Element or analyzed in the 2022 EIR. Even if this parcel is removed from the Rezone, because it is adjacent to parcels zoned up to 350 feet, this could result in significant impacts to this historic resource.

- Talbot-Dutton House Article 10 Landmark No. 57 (2200 Franklin/1782 Pacific Avenue, Parcel 0575/010). The Rezone includes this parcel, which is upzoned from its existing height limit of 80 feet to 240 feet, its density is changed form-based, and rezoned from residential to RTO-C. This extreme rezoning was not included in the 2022 Housing Element or analyzed in the2022 EIR. Even if this parcel is removed from the Rezone, because it is adjacent to parcels zoned up to 240 feet to 350 feet, this could result in significant impacts to this historic resource.

- St. Brigid's Church Article 10 Landmark No. 252 (2151 Van Ness Avenue, Parcel 575/015). The Rezone includes this parcel, which is upzoned from its existing height limit of 80 feet to 350. Even if this parcel is removed from the Rezone, because it is adjacent to parcels zoned up to 240 feet to 350 feet, this could result in significant impacts to this historic resource.

- Bourne Mansion Article 10 Landmark No 38 (2550 Webster Street, Parcel 0580/013). The Rezone includes this parcel, which is upzoned from its existing height limit of 40 feet to 65 feet, and rezoned from residential to RTO-C. Even if this parcel is removed from the Rezone, because it is adjacent to parcels zoned up to 65 feet, this could result in significant impacts to this historic resource.

- Leale House Article 10 Landmark No. 45 (2475 Pacific Avenue, Parcel 0587/018). The Rezone includes this parcel, which was not included in the 2022 Housing Element or analyzed in the EIR.

- Whittier Mansion Article 10 Landmark No. 75 and National Register No 76000524 (2090 Jackson St, Parcel 0591/007). The Rezone includes this parcel, which was not included in the 2022 Housing Element or analyzed in the EIR.

- Haas-Lilienthal House Article 10 Landmark No. 69 and National Register No 730000438 (2007 Franklin St. 0600/002). The Rezone includes this parcel, which was not included in the 2022 Housing Element or analyzed in the EIR.

- Spreckels Residence Article 10 Landmark No. 197 (2080 Washington Street, Parcel 0601/005. The Rezone includes this parcel, which was not included in the 2022 Housing Element or analyzed in the EIR.

- Sacred Heart Parish Complex Article 10 Landmark No.316 and National Register 10000112 (660 Oak Street, Parcel 0828/012; 735 Fell Street, Parcel 0828/022A; 554 Filmore Street, Parcel 0828/22; and 546-548 Filmore Street, Parcel 0828/21). The Rezone includes these parcels, which were not included in the 2022 Housing Element or analyzed in the EIR.

- Market Street Masonry Historic District Article 10 Historic District and listed in the California Register of Historical Resources (7 non-contiguous historic buildings on Market Street Between Franklin Street and Valencia Street, including Parcels 3504/038, 3504/040, 3504/046, 3504/001, 0854/004 and 0854/005, and the Miramar Apartments at 1582 Market Street, Parcel 0836/010. The Rezone includes the parcels in this District, which are upzoned from their existing height limit of 85 feet to 140 feet. Even if these parcels are removed from the Upzone, because they are surrounded by parcels rezoned to 140 feet, this could result in significant impacts to this historic resource.

- Health Sciences Library Article 10 Landmark No. 115 (2395 Sacramento Street, Parcel 0637/016). The Rezone includes this parcel, which was not included in the 2022 Housing Element or analyzed in the 2022 EIR.

- William Vale House Article 10 Landmark No. 168 (2226 California Street, Parcel 0637/040). The Rezone includes this parcel, which is upzoned from its existing height limit of 40 feet to 85 feet, and the density is changed to form-based. Even if this parcel is removed from the Upzone, because it is surrounded by parcels rezoned to 85 feet, this could result in significant impacts to this historic resource.

- Chambers Mansion Article 10 Landmark No.119 (2220-2222 Sacramento Street, Parcel 0627/054). The Rezone includes this parcel, which was not included in the 2022 Housing Element or analyzed in the 2022 EIR.

- Richard E. Queen House Article 10 Landmark No. 198 (2212 Sacramento Street, Parcel 0627/004). The Rezone includes this parcel, which was not included in the 2022 Housing Element or analyzed in the 2022 EIR.

- Atherton House Article 10 Landmark No. 70 and National Register No. 79000527 (1990 California Street, Parcel 0640/010). The Rezone includes this parcel, which is upzoned from its existing height limit of 40 feet to 85 feet, and rezoned from residential to RTO-C. Even if this parcel is removed from the Upzone, because it is surrounded by parcels rezoned to 85 feet, this could result in significant impacts to this historic resource.

- Isaac Wormser House/John C. Coleman House Article 10 Landmark No. 53 (1834 California Street, Parcel 0641/005). The Rezone includes this parcel, which was not included in the 2022 Housing Element or analyzed in the 2022 EIR.

- Lilienthal-Orville Pratt House Article 10 Landmark No. 55 (1818-1820 California Street, Parcel 0641/004). The Rezone includes this parcel, which was not included in the 2022 Housing Element or analyzed in the 2022 EIR.

- Golden Gate Commandery of the Knights Templar (Macedonia Missionary Baptist Church Article 10 Landmark No. 202 (2135 Sutter Street, Parcel 0682/006). The Rezone includes this parcel, which is upzoned from its existing height limit of 50 feet to 85 feet and is now form-based. This was not included in the 2022 Housing Element or analyzed in the 2022 EIR.

- Richardson Hall Article 10 Landmark Nos. 256, 257, and 258 (55 Laguna Street, Parcel 0870/001). The Rezone includes these Landmarks, which are upzoned from their existing height limits to 85 feet and their density has been changed to form-based. These buildings were not included in the 2022 Housing Element or analyzed in the 2022 EIR.

- Carmel Fallon Building Article 10 Landmark No. 223 and Contributor to the designated Hayes Valley Residential Historic District listed on the California Register of Historic Resources (1800-1806 Market Street, Parcel 0871/014). The Rezone includes this parcel, which is upzoned from its existing height limit of 85 feet to 120 feet and its density has been changed to form-based. This was not included in the 2022 Housing Element or analyzed in the 2022 EIR. Even if this parcel is removed from the Upzone,

because it is surrounded by parcels rezoned to 140 feet, this could result in significant impacts to this historic resource.

- Roos Residence both Article 10 Landmark No. 56 and National Register 09000805 (3500 Jackson Street, Parcel 0970/002). The Rezone includes this parcel, which was not included in the 2022 Housing Element or analyzed in the 2022 EIR.
- Ellingwood House Article 10 Landmark No. 207 (2799 Pacific Ave, Parcel 0978/010) and within the California Register eligible Presidio Heights Historic District. The Rezone includes this parcel, which was not included in the 2022 Housing Element or analyzed in the 2022 EIR.
- Koshland House Article 10 Landmark No. 95 and National Register No. 84001186, within the CA eligible Presidio Heights Historic District. (3800 Washington, Parcel 0989/028). The Rezone includes this parcel, which was not included in the 2022 Housing Element or analyzed in the 2022 EIR.
- Ortman-Shumate House Article 10 Landmark No. 98 (1901 Scott Street, Parcel 1027/003). The Rezone includes this parcel, which was not included in the 2022 Housing Element or analyzed in the 2022 EIR.
- Theodore Roosevelt Jr. High School Article 10 Landmark No. 285 (460 Arguello Street, Parcel 1061/049). The Rezone includes this parcel, which was not included in the 2022 Housing Element or analyzed in the 2022 EIR.
- San Francisco Memorial Columbarium Article 10 Landmark No. 209 (1 Loraine Court, Parcel 1084/002).The Rezone includes this parcel, which was not included in the 2022 Housing Element or analyzed in the 2022 EIR.
- Clunie House Article 10 Landmark No. 128 (301 Lyon Street, Parcel 1207/008). The Rezone includes this parcel, which was not included in the 2022 Housing Element or analyzed in the 2022 EIR.
- Alfred G. Hanson Residence Article 10 Landmark No. 196 (128 27th Avenue, Parcel 1332/049). The Rezone includes this parcel, which was not included in the 2022 Housing Element or analyzed in the 2022 EIR.
- St. John's Presbyterian Church Article 10 Landmark No. 83 (201 Arguello Boulevard, Parcel 1361/001). The Rezone includes this parcel, which was not included in the 2022 Housing Element or analyzed in the 2022 EIR.
- Campfire Girls Building Article 10 Landmark No. 169 (325 Arguello Boulevard), Parcel 1432/003). The Rezone includes this parcel, which was not included in the 2022 Housing Element or analyzed in the 2022 EIR.
- Richmond Branch Library Article 10 Landmark No. 247 (351 9th Avenue, Parcel 1441/007). The Rezone includes this parcel, which was not included in the 2022 Housing Element or analyzed in the 2022 EIR.

- Refugee Shack Article 10 Landmark No. 171 (1227 24th Avenue, Parcel 1726/004). The Rezone includes this parcel, which was not included in the 2022 Housing Element or analyzed in the 2022 EIR.
- Doelger Building Article 10 Landmark No.265 (320-26 Judah Street, Parcel 1763/020). The Rezone includes this parcel, which is upzoned from its existing height limit of 40 feet to 85 feet and its density has been changed to form-based. This was not included in the 2022 Housing Element or analyzed in the 2022 EIR. Even if this parcel is removed from the Upzone, because it is surrounded by parcels rezoned to 85 feet, this could result in significant impacts to this historic resource.
- Old Fire House Article 10 Landmark No.29 (1348 10th Avenue, Parcel 1764/031). The Rezone includes this parcel, which was not included in the 2022 Housing Element or analyzed in the 2022 EIR.
- Sunset Branch Library Article 10 Landmark No. 239 (1305-49 18th Street, Parcel 1773/001). The Rezone includes this parcel, which was not included in the 2022 Housing Element or analyzed in the 2022 EIR. Even if this parcel is removed from the Upzone, because it is surrounded by parcels rezoned to 65, 85 and 140 feet, this could result in significant impacts to this historic resource.
- Shriners' Hospital for Crippled Children Article 10 Landmark No.221 (1601 19th Avenue, Parcel 1924/004). The Rezone includes this parcel, which was not included in the 2022 Housing Element or analyzed in the 2022 EIR.
- San Francisco Conservatory of Music Article 10 Landmark No. 242 (1201 Ortega Street, Parcel 2115/037). The Rezone includes this parcel, which was not included in the 2022 Housing Element or analyzed in the 2022 EIR.
- The McCormick House Article 10 Landmark No. 208 (4040-4042 17th Street, Parcel 2623/012). The Rezone includes this parcel, which is upzoned from its existing height limit of 40 feet to 120 feet, its density is changed form-based, and it is rezoned from residential to RTO-C. Even if this parcel is removed from the Upzone, because it is surrounded by parcels rezoned to 140 feet with form based density, this could result in significant impacts to this historic resource.
- Alfred E. (Nobby) Clarke Mansion Article 10 Landmark No. 80 (250 Douglass St., Parcel 2700/001). The Rezone includes this parcel, which was not included in the 2022 Housing Element or analyzed in the 2022 EIR.
- Miller-Joost House Article 10 Landmark No. 79 (3224 Market Street, Parcel 2704/040). The Rezone includes this parcel, which was not included in the 2022 Housing Element or analyzed in the 2022 EIR.
- David Lewis House Article 10 Landmark No.186 (4143 23rd Street, Parcel 2804/040). The Rezone includes this parcel, which was not included in the 2022 Housing Element or analyzed in the 2022 EIR.

- 171 San Marcos Avenue (aka Cowell House) Article 10 Landmark No. 270 (171 San Marcos Avenue, Parcel 2882/035). The Rezone includes this parcel, which was not included in the 2022 Housing Element or analyzed in the 2022 EIR.
- El Rey Theater Article 10 Landmark No.274 (1970 Ocean Avenue, Parcel 3280/018). The Rezone includes this parcel, which is upzoned from its existing height limit of 40 feet to 85 feet. This was not included in the 2022 Housing Element or analyzed in the 2022 EIR.
- Juvenile Court and Detention Center Article 10 Landmark No. 248 (170 Otis Street, Parcel 3513/207). The Rezone includes this parcel, which is upzoned from its existing height limit of 125 feet to 160 feet. This was not included in the 2022 Housing Element or analyzed in the 2022 EIR.
- 396-398 12th Street (aka San Francisco Eagle Bar) Article 10 Landmark No. 295 (396-398 12th Street, Parcel 3522/014). The Rezone includes this parcel, which is upzoned from its existing height limit of 55 feet to 85 feet. This was not included in the 2022 Housing Element or analyzed in the 2022 EIR.
- Saint Francis Lutheran Church Article 10 Landmark No. 39 (152 Church Street, Parcel 3537010). The Rezone includes this parcel, which is upzoned from its existing height limit of 40 feet to 85 feet. This was not included in the 2022 Housing Element or analyzed in the 2022 EIR.
- Swedish American Hall Building Article 10 Landmark No. 267 (2168-2174 Market Street, Parcel 3542/062). The Rezone includes this parcel, which is upzoned from its existing height limit of 40-50 feet to 120 feet. This upzoning was not included in the 2022 Housing Element or analyzed in the 2022 EIR. Even if this parcel is removed from the Upzone, because it is surrounded by parcels rezoned to 120 feet and 160 feet with form based density, this could result in significant impacts to this historic resource.
- 2117-2123 Market Street (aka New Era Hall) Article 10 Landmark No. 277 (2117-2123 Market Street, Parcel 3543/012). The Rezone includes this parcel, which is upzoned from its existing height limit of 40-50 feet to 120 feet. This upzoning was not included in the 2022 Housing Element or analyzed in the 2022 EIR. Even if this parcel is removed from the Upzone, because it is surrounded by parcels rezoned to 120 feet and 160 feet with form based density, this could result in significant impacts to this historic resource.
- 22 Beaver Street (aka Benedict-Gieling House) Article 10 Landmark No. 284 (22 Beaver Street, Parcel 3561060). The Rezone includes this parcel, which is upzoned from its existing height limit of 40 feet to 50 feet. This upzoning was not included in the 2022 Housing Element or analyzed in the 2022 EIR.
- The Jose Theater/Names Project Building Article 10 Landmark No. 241 (2362 Market Street, Parcel 3562/011). The Rezone includes this parcel, which is upzoned from its existing height limit of 65 feet to 120 feet. This upzoning was not included in the 2022 Housing Element or analyzed in the 2022 EIR. Even if this parcel is removed from the

Upzone, because it is surrounded by parcels rezoned to 120 feet and 160 feet with form based density, this could result in significant impacts to this historic resource.

- Mission Dolores Article 10 Landmark No. 1 and National Register No.72000251 (310-20 Dolores Street, Parcel 3566/001). The Rezone includes this parcel, which is upzoned from its existing height limit of 40 feet to 50 feet. This upzoning was not included in the 2022 Housing Element or analyzed in the EIR.
- Mission High School Article 10 Landmark No. 255 (3750 18th Street, Parcel 3579/006). The Rezone includes this parcel, which was not included in the 2022 Housing Element or analyzed in the EIR.
- Twin Peaks Tavern Article 10 Landmark No. 264 (3997 17th Street, Parcel 3582/071). The Rezone includes this parcel as being upzoned from its existing height limit of 65 feet to 160 feet and its density is changed to form-based. While this site was included in the 2022 Housing Element and the 2022 EIR as upzoned to 85 feet, the Rezone upzones it to 160 feet. Even if this parcel is removed from the Upzone, because it is surrounded by parcels rezoned to 160 feet with form based density, this could result in significant impacts to this historic resource.
- Castro Theater Article 10 Landmark No. 100 (429-431 Castro Street, Parcel 3582/085). The Rezone includes this parcel, which is upzoned from its existing height limit of 65 feet to 85 feet and its density is changed to form-based. This upzoning was not included in the 2022 Housing Element or analyzed in the 2022 EIR. Even if this parcel is removed from the Upzone, because it is adjacent to parcels rezoned to 160 feet with form based density, this could result in significant impacts to this historic resource.
- Castro Camera Article 10 Landmark No. 227 (573-75 Castro Street, Parcel 3583/061). The Rezone includes this parcel, which is upzoned from its existing height limit of 40 feet to 50 feet. This upzoning was not included in the 2022 Housing Element or analyzed in the 2022 EIR.
- Axford House Article 10 Landmark No. 133 (1190 Noe Street, Parcel 6538/048). The Rezone includes this parcel, which was not included in the 2022 Housing Element or analyzed in the 2022 EIR.
- Carnegie Noe Valley/Sally Brunn Branch Library Article 10 Landmark No. 259 (451 Jersey Street, Parcel 6539/034). The Rezone includes this parcel, which was not included in the 2022 Housing Element or analyzed in the 2022 EIR.
- 651 Duncan Street (aka Lyon-Martin House) Article 10 Landmark No. 292 (651 Duncan Street, Parcel 6604/036). The Rezone includes this parcel, which was not included in the 2022 Housing Element or analyzed in the 2022 EIR.
- Sunnyside Conservatory Article 10 Landmark No. 78 (236 Monterey Blvd, Parcel 6770/057). The Rezone includes this parcel, which was not included in the 2022 Housing Element or analyzed in the 2022 EIR.

- Joseph Leonard/Cecil F. Poole House Article 10 Landmark No. 213 (90 Cedro Avenue, Parcel 6908/016). The Rezone includes this parcel, which was not included in the 2022 Housing Element or analyzed in the 2022 EIR.

- 1345 Ocean Ave (aka Ingleside Presbyterian Church and the Great Cloud of Witnesses) Article 10 Landmark No. 273 (1345 Ocean Avenue, Parcel 6942/050). The Rezone includes this parcel, which is upzoned from its existing height limit of 50 feet to 85 feet.

- This upzoning was not included in the 2022 Housing Element or analyzed in the 2022 EIR.

- Sherman House Article 10 Landmark No. 49 (2160 Green Street, Parcels 0540/030 and 0540/028). The Rezone includes this parcel, which was not included in the 2022 Housing Element or analyzed in the 2022 EIR.

- Gibbs Residence and Caretaker's Cottage Article 10 Landmark 203 (2622-24 Jackson Street and 2624-29 Pacific Avenue, Parcels 0585/008, 0585/009 and 0585/010). The Rezone includes these parcels, which were not included in the 2022 Housing Element or analyzed in the 2022 EIR.
  .
- Southern Pacific Co. Hospital Complex Article 10 Landmark No. 192 and National Register 89000319 (1400-1599 Fell Street & 1509-1599 Hayes Street, Parcels 1206/002 and 1206/003). Also within the Panhandle Historic District, an eligible California Register Historic District. The Rezone includes these parcels, which were not included in the 2022 Housing Element or analyzed in the 2022 EIR.

- Edward Coleman House Article 10 Landmark No. 54 (1701 Franklin Street, Parcels 0641/014 and 0641/015). The Rezone includes this parcel, which was not included in the 2022 Housing Element or analyzed in the 2022 EIR.

- Designated Duboce Park Article 10 Historic District, is proposed for removal from the Rezone except for the contributory buildings located along Waller and Steiner Streets are proposed to be rezoned RTO-1, remaining in the Rezone. This Historic District was not included in the 2022 Housing Element or analyzed in the 2022 EIR.

Attachment 2: North Beach National Register of Historic Places Historic District Parcel Analysis Within Rezone
November 30, 2025
Compiled by Bridget Maley, architecture + history, llc

Address	APN Number	Year Built	District Status
490 Lombard St	0062017B	1926	C
1916-18 Stockton St	0062017C	1940	C
1922-24 Stockton St	0062017D	1940	C
1934-36 Stockton St	0062017E	1940	C
1946-48 Stockton St	0062019	1908	C
1952-56 Stockton St	0062020	1908	C
1958-60 Stockton St	0062021	1906	C
379-99 Chestnut St/1952-56 Stockton	0062022	1906	C
1940 Stockton St	0062052-058	1980	NC
401 Chestnut St/1957-61 Stockton	0063001	c. 1906	C
1951-55 Stockton St	0063002	1906	C
1943-47 Stockton St	0063003	1907	C
1935-41 Stockton St	0063004	1907	C
1929-33 Stockton St	0063005	1907	C
1923-25 Stockton St	0063006	1908	C
1915-17 Stockton St	0063007	1907	C
1901-05 Stockton St	0063009	1906	C
520-24 Lombard St	0063010	1911	C
526-30 Lombard St	0063011	1909	C
532-36 Lombard St	0063012	1912	C
538-42 Lombard St	0063013	1912	C
544-46 Lombard St	0063014	1916	C
548 Lombard St	0063015	1926	NC
566-76 Lombard St	0063017	1908	C
590-94 Lombard St	0063018	1925	C
2006-08 Powell St	0063018A	1924	C

Address	APN Number	Year Built	District Status
2018-20 Powell St	0063018C	1924	NC
2024-30 Powell St	0063019	1906	C
2038-40 Powell St	0063021	1956	NC
2044-48 Powell St	0063022	1909	C
2050-64 Powell St	0063023	1907	C
475 Chestnut St	0063024	1946	C
461-67 Chestnut St	0063025	c. 1907	C
455-59 Chestnut St	0063025A	1908	C
449-53 Chestnut St	0063026	1912	C
443-47 Chestnut St	0063027	1908	C
437-41 Chestnut St	0063027A	1908	C
427 Chestnut St	0063028	1932	C
421-23 Chestnut St	0063029	1907	C
1907-13 Stockton St	0063030-033	1906	C
560-64A Lombard St	0063034-036 & 16A	1907	C
2032-34 Powell St	0063037-038	1912	C
2061-65 Powell St	0064001	1906	C
2055-59 Powell St	0064002	1908	C
2049-53 Powell St	0064003	1909	C
2043-47 Powell St	0064004	1909	C
2035-41 Powell St	0064005	1909	C
2027-31 Powell St	0064006	1907	C
2017-21 Powell St	0064007	1912	C
602-04 Lombard St	0064009	1926	C
616-18 Lombard St	0064032	1922	C
2011-15 Powell St	0064033-035	c. 1912	C
513-19 Lombard St	0076001	1917	C

Address	APN Number	Year Built	District Status
1847-57 Stockton St	0076003	1910	C
1843 Stockton St	0076004	1906	NC
1815-25 Stockton St	0076006	1907	C
1807-09 Stockton St	0076007	1907	C
1801-03 Stockton St	0076008	1908	C
622-24 Greenwich St	0076009	1908	C
628-30 Greenwich St	0076010	1908	C
638-42 Greenwich St & 632A Greenwich	0076011	1906	C
644-46 Greenwich St	0076012	1925	C
652-56 Greenwich St	0076013	1906	C
658-64 Greenwich St	0076014	1907	C
666-76 Greenwich St	0076015	1906	C
678-80 Greenwich St	0076016	1906	C
1906 Powell St & 690-92 Greenwich	0076017	1923	C
1918-22 Powell St	0076020	1906	C
1930-34 Powell St	0076022	1912	C
1936-38 Powell St	0076023	1906	C
1942-46 Powell St	0076024	1912	C
1948-54 Powell St	0076025	1914	C
1956-66 Powell St	0076025A	1914	C
585-87 Lombard St	0076025B	1908	C
567-79 Lombard St	0076026	1914	C
563-65 Lombard St	0076027	1906	C
551-61 Lombard St	0076027A	1914	C
547-49 Lombard St	0076028	1913	C
537-39 Lombard St	0076030	1907	C

Address	APN Number	Year Built	District Status
1 Tuscany Alley	0076032	1906	C
529-31 Lombard St	0076033	1925	C
525-27 Lombard St	0076033A	1925	C
543-45 Lombard St	0076034-035	1925	C
1839-41 Stockton St	0076054-055	c. 2014	NC
1924-26 Powell St	0076056-057	1922	C
1865-76 Stockton St	0076058-059	1906	C
5-11 Edith St/1721-25 Grant	0077008	1913	C
1707-09 Grant Ave	0077009	1907	NC
1703-05 Grant Ave	0077010	1909	NC
500-12 Greenwich St	0077011	1908	C
514-16 Greenwich St & 15-17 Edith	0077012	1924	C
520-22 Greenwich St & 19-21 Edith	0077013	1910	C
528-30 Greenwich St & 25-27 Edith	0077014	1909	C
532-34 Greenwich St	0077015	1908	C
540 Greenwich St & 33-35 Edith	0077016	1931	C
544-46 Greenwich St & 43-45 Edith	0077017	1912	C
550-52 Greenwich St & 49-51 Edith	0077018	1912	C
558-60 Greenwich St	0077019	1911	C
562-64 Greenwich St	0077020	1908	C
568-70 Greenwich St	0077021	1908	C
586-90 Greenwich St	0077023	1908	C
1800-04 Stockton St	0077023A	1907	C
1814 Stockton St	0077024	1966	C
1816-20 Stockton St	0077025	1911	C
1822-26 Stockton St	0077026	1915	C
1828-32 Stockton St	0077027	1914	C

Address	APN Number	Year Built	District Status
1848 Stockton St	0077030	1907	C
1852-56 Stockton St	0077031	1906	C
1858-60 Stockton St	0077032	1914	C
1864-66 Stockton St	0077032A	1915	C
576-80 Greenwich St	0077049-051	1997	NC
1840-44 Stockton St	0077052-054	1911	C
1653-67 Grant Ave	0088001	1908	C
1647-51 Grant Ave	0088002	1908	C
1639-45 Grant Ave	0088003	1913	C
1635-37 Grant Ave	0088004	1908	C
12-26 Medau Place & 1615-33 Grant	0088005	1908	C
1601 Grant Ave	0088006	1965	NC
540-50 Filbert St & 51-61 Medau	0088009	1909	C
552-56 Filbert St & 63-65 Medau	0088010	1906	C
558-62A Filbert St	0088011	1907	C
566 Filbert St	0088012	c. 1907	C
570-74 Filbert St & 12-18 Krausgrill	0088013	1907	C
579-81 Greenwich St	0088023	1908	C
561 Greenwich St	0088025	1961	C
551-57 Greenwich St	0088026	1911	C
547-49 Greenwich St	0088027	1911	C
533-57 Greenwich St	0088029	1912	C
517-23 Greenwich St	0088031	1912	C
1-3 Kramer Place	0088034	1910	C
577 Greenwich St	0088036	1909	C
567-69 Greenwich St	0088037	1906	C
19-33 Medau Place	0088041-048	1909	C

Address	APN Number	Year Built	District Status
526-30 Filbert St	0088052-054	1912	C
532-36 Filbert St	0088055-057	c. 1986	NC
539-45 Greenwich St	0088058-061	1913	C
525-31 Greenwich St	0088071-072	1914	C
7-9 Kramer Place	0088073-074	1910	C
608-20 Filbert St	0089011	1951	C
622-26 Filbert St	0089013	1913	C
630-34 Filbert St	0089014	1910	C
650-60 Filbert St	0089015	1912-1939	C
666 Filbert St	0089016	1917	C
673-77 Greenwich St	0089022A	1915	C
667-71 Greenwich St	0089022B	1914	NC
695-99 Greenwich St	0089022C	1925	C
659-59BGreenwich St	0089024	1907/2002	C/NC
651-55 Greenwich St	0089025	1908	C
643 Greenwich St	0089026	1907	C
637-41 Greenwich St	0089027	1911	C
637A-641A Greenwich St	0089027	unknown	C
619-21 Greenwich St	0089029	1961	C
1856-60 Powell St	0089031-036	1934	C
625-27 Greenwich St	0089038	1908	C
631A-C Greenwich St	0089039-041	1983	NC
1850-52 Powell St	0089042-043	1933	C
661-65 Greenwich St	0089044-046	1906	C
680 Filbert St	0089048-049	1971	NC
690 Filbert St	0089050-051	1961	NC

EXHIBIT C

Shawn Smallwood, PhD
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Richard Drury
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24 October 2025

RE: San Francisco Housing Element 2022 Update FEIR Addendum

Dear Mr. Drury,

I write to comment on potential impacts on biological resources from the proposed Addendum to the San Francisco Housing Element 2022 Update Final Environmental Impact Report (FEIR). The FEIR, which was adopted by the Board of Supervisors and later signed by the Mayor on 31 January 2023, evaluated the impacts on the environment that could result from adoption and implementation of the San Francisco Housing Element 2022 Update. According to the Addendum, the FEIR anticipated "future actions, such as San Francisco Planning Code … amendments, designation of housing sustainability districts, and approval of development projects consistent with the goals, policies, and actions of the housing element update." The Addendum characterizes the proposed actions as "reasonably foreseeable changes," and states that its purpose "is to evaluate the environmental impacts of the rezoning program and document the San Francisco Planning Department's … determination that these impacts are adequately addressed in the FEIR." I am concerned that the proposed actions in the Addendum have not been adequately addressed, and that the action's impacts on wildlife would be excessive and highly significant.

My qualifications for preparing expert comments are the following. I hold a Ph.D. degree in Ecology from University of California at Davis, where I also worked as a post-graduate researcher in the Department of Agronomy and Range Sciences. My research has been on animal density and distribution, habitat selection, wildlife interactions with the anthrosphere, and conservation of rare and endangered species. I authored many papers on these and other topics. I served as Chair of the Conservation Affairs Committee for The Wildlife Society – Western Section. I am a member of The Wildlife Society and Raptor Research Foundation, and I've lectured part-time at California State University, Sacramento. I was Associate Editor of wildlife biology's premier scientific journal, The Journal of Wildlife Management, as well as of Biological Conservation, and I was on the Editorial Board of Environmental Management. I have performed wildlife surveys in California for thirty-seven years. My CV is attached.

POTENTIAL IMPACTS ON THE WILDLIFE COMMUNITY

The Addendum claims that the FEIR's analysis of wildlife impacts potentially caused by the originally planned 50,000 residential units have already addressed the impacts of the additionally proposed of 4,000 residential units. It further claims that the change in

outlay of the height and density of the originally planned 50,000 residential units are irrelevant to the analysis of potential impacts on wildlife. Deemed in no need of additional environmental review is the planned addition of 4,000 residential units, major shifts in the spatial distribution of the original 50,000 units, and increases in maximum building heights from 300 feet to 650 feet.

The Addendum (p. 48) points out that the FEIR had determined that future development associated with the adopted housing element would not adversely affect candidate, sensitive, or special-status species or sensitive natural communities, nor would it interfere with wildlife movement. I disagree with these determinations as they applied to the originally planned 50,000 residential units, as these determinations were simply not credible in the face of this much change to the environment. Here and now the City attempts to extend these same claims to the development associated with an additional 4,000 residential units and to substantial shifts in the spatial and vertical outlay of all 54,000 residential units.

One rationalization for the determinations was that special-status species such as peregrine falcon are adapted to the structural environment of San Francisco. Another was that compliance with existing state and federal regulations would ensure less-than-significant impacts to nesting birds. And for bats, the rationale was that compliance with the open space element of the general plan (Chapter 8 of the San Francisco Environment Code), would avoid potential impacts. These rationalizations, however, were speculative, having cited no evidence in their support. There was no citation of any comparative study of peregrine falcon population performance within the City versus in natural areas. There was no citation of monitoring data that would support the notion that existing state and federal regulations have been preventing significant impacts to nesting birds in the face of development pressure. There was no citation of monitoring data that would support the notion that Chapter 8 of the San Francisco Environment Code has managed to avoid development impacts on bats. Instead of relying on scientific inference, each argument leading to less-than-significant impact determinations was speculative. And this same strategy is carried forward in the Addendum with respect to the added 4,000 residential units and the changes in lateral and vertical outlay.

In fact, the evidence is overwhelming that overall bird abundance is on the decline, having declined 29% across North America over the past half-century (Rosenberg et al. 2019). In fact, all but three of the bat species in California are special-status species, indicating that bats as a taxonomic group are of serious conservation concern in California. And in fact, along with my co-investigator I have measured substantial declines in birds and special-status species as results of development projects (Smallwood and Smallwood 2023). The Addendum selects Peregrine falcon as an anecdote to imply that all birds simply adapt to the cityscape, but even the Peregrine falcon is vulnerable to window collisions. As another anecdote to the Addendum's, I happened to be in a meeting with attorneys of the California Attorney General's Office and agents with the U.S. Fish and Wildlife Service when we observed a Peregrine falcon nearly collide with our 14th story window as it chased after a rock pigeon in Oakland. And yet another anecdote from a few years ago, a Peregrine falcon fledgling fatally

collided with a window on the same UC Berkely building where it attempted its first flight from the nest. Peregrine falcons are vulnerable to window collision mortality just like any other bird, and perhaps even more so.

The Addendum does not consider the potential loss and fragmentation of the aerosphere in which these species travel and forage. The aerosphere is that part of the gaseous atmosphere where birds and bats and other volant animals with wings migrate, disperse, forage, perform courtship and where some of them mate (Davy et al. 2017, Diehl et al. 2017). Nor does the Addendum give any consideration to the potential loss and fragmentation of aerohabitat, which is that portion of the aerosphere used by each species (Kunz et al. 2008), and usually within 1,000 feet of the ground. Although both the peregrine falcon and bats often take prey on the ground, these animals are known for taking prey largely on the wing. These animals hunt other volant wildlife, which means that both these hunters and their prey perform vital life functions and interact with each other within the aerosphere. As for nesting birds, there would be no nesting birds without the birds' access to the aerosphere. Despite the vital importance of the aerosphere to peregrine falcons, nesting birds, and to bats, the Addendum fails to recognize the aerosphere as essential habitat to volant wildlife.

The Addendum does recognize that the new buildings would pose barriers to movement and collision hazards to birds. At page 49, the Addendum warns, "Changes to building heights could result in new impacts on migratory species if they result in flight paths being obstructed, more bird strikes, or impacts on falcon nesting habitat." The Addendum then dismisses these potential impacts by citing the adoption in the Aesthetics section of the FEIR of planning code section 139's Standards for Bird-Safe Buildings. However, there exist major logic problems with this purported solution. First, the standards for bird-safe buildings do not avoid the barrier effects of buildings, and in fact the strategic objective of bird-safe building guidelines is to increase the visibility of buildings as barriers to bird movement so that birds less often collide with the structural glass on the exteriors of the buildings. Second, the Standards for Bird-Safe Buildings, while meritorious as a first step toward reducing bird-window collision mortality, are of unmeasured efficacy. While it is great that the City adopted the Bird-Safe Guidelines, the City has yet to follow up with any study of whether or to what degree the Standards truly minimize or reduce bird-window collision mortality. In the face of this uncertainty, the additional 4,000 residential units, greater building heights, and revised spatial distribution could result in significantly larger numbers of collision fatalities compared to the 2022 plan, despite implementation of the City's Standards for Bird-Safe Buildings.

In my assessment, there are 147 special-status species of wildlife documented near enough to the project site to warrant a closer look at their occurrence likelihoods for the purpose of predicting potential project impacts (Table 1). Of these 147 special-status species, 14 are bats that, if they truly occur where construction would take place, would be at risk of losing aerohabitat in which they travel and forage. Another 112 special-status species of wildlife would be birds, 49 of which have been documented throughout the project area, eight of which are known to be centrally located, six are known to Golden Gate Park or Lake Merced, and 19 of which have been documented as generally

coastal. All these bird species would be vulnerable to collision mortality and greater expenditures of indispensable energy to negotiate the structural hazards of another 4,000 residential units and the reallocation of vertical building heights across the planning area.

All the birds represented in Table 1 can quickly fly from wherever they have been documented to any of the new buildings that would be part of the added project, so they would all be within brief flights to the proposed project's windows. At the California Academy of Sciences, the glass facades facing adjacent gardens killed 0.077 and 0.086 birds per m^2 of glass per year (Kahle et al. 2016), which might look like small numbers at first read, but which translate to large numbers of dead birds when projected to the extent of glass in the project (see below).

Window collisions are often characterized as either the second or third largest source or human-caused bird mortality. The numbers behind these characterizations are often attributed to Klem's (1990) and Dunn's (1993) estimates of about 100 million to 1 billion bird fatalities in the USA, or more recently by Loss et al.'s (2014) estimate of 365-988 million bird fatalities in the USA or Calvert et al.'s (2013) and Machtans et al.'s (2013) estimates of 22.4 million and 25 million bird fatalities in Canada, respectively. The proposed project would impose windows in the airspace normally used by birds.

Glass-façades of buildings intercept and kill many birds, but they are differentially hazardous to birds based on spatial extent, contiguity, orientation, and other factors. At Washington State University, Johnson and Hudson (1976) found 266 bird fatalities of 41 species within 73 months of monitoring of a three-story glass walkway (no fatality adjustments attempted). Prior to marking the windows to warn birds of the collision hazard, the collision rate was 84.7 per year. At that rate, and not attempting to adjust the fatality estimate for the proportion of fatalities not found, 4,574 birds were likely killed over the 54 years since the start of their study, and that's at a relatively small building façade. Accounting for the proportion of fatalities not found, the number of birds killed by this walkway over the last 54 years would have been about 14,270. And this is just for one 3-story, glass-sided walkway between two college campus buildings.

Klem's (1990) estimate was based on speculation that 1 to 10 birds are killed per building per year, and this speculated range was extended to the number of buildings estimated by the US Census Bureau in 1986. Klem's speculation was supported by fatality monitoring at only two houses, one in Illinois and the other in New York. Also, the basis of his fatality rate extension has changed greatly since 1986. Whereas his estimate served the need to alert the public of the possible magnitude of the bird-window collision issue, it was highly uncertain at the time and undoubtedly outdated more than three decades hence. Indeed, by 2010 Klem (2010) characterized the upper end of his estimated range – 1 billion bird fatalities – as conservative. Furthermore, the estimate lumped species together as if all birds are the same and the loss of all birds to windows has the same level of impact.

Table 1. *Occurrence likelihoods of special-status bird species at or near the proposed project site, according to eBird/iNaturalist records (https://eBird.org, https://www.inaturalist.org) and on-site survey findings, where 'Very close' indicates within 1.5 miles of the site, "nearby" indicates within 1.5 and 4 miles, and "in region" indicates within 4 and 30 miles, and 'in range' means the species' geographic range overlaps the site.*

Common name	***Species name***	**Status**[1]	**Occurrence records**	**Locations of On-site and Very-close records**
San Bruno elfin butterfly	*Callophrys mossii bayensis*	FE	In region	iNat obscured points
Monarch	*Danaus plexippus*	FC	On site	Throughout
Bay checkerspot butterfly	*Euphydryas editha bayensis*	FT	In region	iNat obscured points
Mission blue butterfly	*Icaricia icarioides missionensis*	FE	In region	iNat obscured points
Callippe silverspot butterfly	*Speyeria callippe callippe*	FE	In region	iNat obscured points
Myrtle's silverspot butterfly	*Speyeria zerene myrtleae*	FE	In region	
Crotch's bumble bee	*Bombus crotchii*	CCE	In region	
Western bumble bee	*Bombus occidentalis*	CCE	Very close	
Longfin smelt	*Spirinchus thaleichthys*	CT	In region	
Delta Smelt	*Hypomesus transpacificus*	FT, CE	In region	
Tidewater goby	*Eucyclogobius newberryi*	FE, SSC	In region	iNat obscured points
California giant salamander	*Dicamptodon ensatus*	SSC	In region	Obscured
Foothill yellow-legged frog	*Rana boylii*	FT, CE	In region	
California red-legged frog	*Rana draytonii*	FT, SSC	In region	iNat obscured points
Green sea turtle	*Chelonia mydas*	FT	In region	
Northwestern pond turtle	*Actinemys marmorata*	FC, SSC	On site	West and SW
San Francisco garter snake	*Thamnophis sirtalis tetrataenia*	FE, CE, CFP	In region	iNat obscured points
Brant	*Branta bernicla*	SSC2	On site	West and NE, along shores
Cackling goose (Aleutian)	*Branta hutchinsii leucopareia*	WL	On site	Generally throughout
Redhead	*Aythya americana*	SSC2	On site	North
Harlequin duck	*Histrionicus histrionicus*	SSC2	Very close	Presidio
Barrow's goldeneye	*Bucephala islandica*	SSC	On site	NW
Short-tailed albatross	*Phoebastria albatrus*	FE, SSC	In region	
Fork-tailed storm petrel		SSC	Very close	North and west shores
Ashy storm-petrel	*Hydrobates homochroa*	BCC, SSC	Very close	Lake Merced
Black storm-petrel	*Hydrobates melania*	SSC, BCC	Very close	NW corner of peninsula
Western grebe	*Aechmophorus occidentalis*	BCC	On site	Throughout

Common name	***Species name***	**Status[1]**	**Occurrence records**	**Locations of On-site and Very-close records**
Clark's grebe	*Aechmophorus clarkii*	BCC	On site	Throughout
Western yellow-billed cuckoo	*Coccyzus americanus occidentalis*	FT, CE	In region	
Black swift	*Cypseloides niger*	SSC3, BCC	On site	Central
Vaux's swift	*Chaetura vauxi*	SSC2	On site	Throughout
Calliope hummingbird	*Selasphorus calliope*	BCC	On site	Central/South
Rufous hummingbird	*Selasphorus rufus*	BCC	On site	Throughout
Allen's hummingbird	*Selasphorus sasin*	BCC	On site	Throughout
Yellow rail	*Coturnicops noveboracensis*	BCC, SSC	In region	
Ridgway's rail (San Francisco Bay)	*Rallus obsoletus obsoletus*	FE, CE, CFP	On site	North
California black rail			In range	
Black oystercatcher	*Haematopus bachmani*	BCC	On site	Throughout, mostly shoreines
Mountain plover	*Charadrius montanus*	SSC2, BCC	Very close	San Francisco Zoo
Snowy plover	*Charadrius nivosus*	BCC	On site	North and west shores, 1 central
Western snowy plover	*Charadrius nivosus nivosus*	FT, SSC	Very close	West along shore
Long-billed curlew	*Numenius americanus*	WL	On site	Throughout
Marbled godwit	*Limosa fedoa*	BCC	On site	Throughout
Black turnstone	*Arenaria melanocephala*	BCC	On site	Mostly along north, west shores
Red knot (Pacific)	*Calidris canutus*	BCC	On site	West along coast
Pectoral sandpiper	*Calidris melanotos*	BCC	Very close	Lake Merced and Presidio
Short-billed dowitcher	*Limnodromus griseus*	BCC	On site	West, North, and central
Wandering tattler	*Tringa incana*	BCC	On site	North and W, mostly shores
Lesser yellowlegs	*Tringa flavipes*	BCC	On site	North /central (Richmond)
Willet	*Tringa semipalmata*	BCC	On site	Throughout
Marbled murrelet	*Brachyramphus marmoratus*	FT, CE	On site	West and N/central (Richmond)
Rhinoceros auklet	*Cerorhinca monocerata*	WL	On site	North and W, along shores
Cassin's auklet	*Ptychoramphus aleuticus*	SSC	Very close	North and W of along shores
Scripps' murrelet	*Synthliboramphus scrippsi*	CT, BCC	Very close	NW of site along shore
Tufted puffin			Very close	West along shore

Common name	***Species name***	**Status[1]**	**Occurrence records**	**Locations of On-site and Very-close records**
Laughing gull	*Leucophaeus atricilla*	WL	Very close	Presidio, West shore, Lake Merced
Franklin's gull	*Leucophaeus pipixcan*	BCC	Very close	West shore, Golden Gate Park, Lake Merced
Heermann's gull	*Larus heermanni*	BCC	On site	Throughout
Western gull	*Larus occidentalis*	BCC	On site	Throughout
California gull	*Larus californicus*	BCC, WL	On site	Throughout
California least tern	*Sternula antillarum browni*	FE, CE, CFP	Very close	North and Lake Merced
Black tern	*Chlidonias niger*	SSC2, BCC	Very close	Golden Gate Park, North and west aspects
Elegant tern	*Thalasseus elegans*	BCC, WL	On site	Throughout
Black skimmer	*Rynchops niger*	BCC, SSC3	On site	North shore
Common loon	*Gavia immer*	SSC	On site	Throughout
Brandt's cormorant	*Urile penicillatus*	BCC	On site	Throughout, mostly along North and west shores
Double-crested cormorant	*Phalacrocorax auritus*	WL	On site	Throughout
American white pelican	*Pelacanus erythrorhynchos*	SSC1	On site	Throughout, mostly North, central
Least bittern	*Ixobrychus exilis*	SSC2	Very close	Golden Gate Park, Lake Merced
White-faced ibis	*Plegadis chihi*	WL	On site	West side
Turkey vulture	*Cathartes aura*	BOP	On site	Throughout
Osprey	*Pandion haliaetus*	WL, BOP	On site	Throughout
White-tailed kite	*Elanus luecurus*	CFP, BOP	On site	Throughout
Golden eagle	*Aquila chrysaetos*	BGEPA, CFP, BOP, WL	On site	Throughout, mostly central
Northern harrier	*Circus cyaneus*	BCC, SSC3, BOP	On site	Throughout
Sharp-shinned hawk	*Accipiter striatus*	WL, BOP	On site	Throughout
Cooper's hawk	*Accipiter cooperii*	WL, BOP	On site	Throughout
American goshawk	*Accipiter atricapillus*	SSC2, BOP	On site	North

Common name	***Species name***	**Status[1]**	**Occurrence records**	**Locations of On-site and Very-close records**
Bald eagle	*Haliaeetus leucocephalus*	CE, BGEPA, BOP	On site	Throughout
Red-shouldered hawk	*Buteo lineatus*	BOP	On site	Throughout
Swainson's hawk	*Buteo swainsoni*	CT, BOP	On site	Throughout
Red-tailed hawk	*Buteo jamaicensis*	BOP	On site	Throughout
Ferruginous hawk	*Buteo regalis*	WL, BOP	On site	Throughout
Rough-legged hawk	*Buteo lagopus*	BOP	On site	Central
American barn owl	*Tyto furcata*	BOP	On site	Throughout
Northern spotted owl	*Strix occidentalis caurina*	FT, CT, BOP	In range	
Western screech-owl	*Megascops kennicotti*	BOP	Very close	Presidio, Golden Gate Park
Great horned owl	*Bubo virginianus*	BOP	On site	Throughout
Burrowing owl	*Athene cunicularia*	BCC, SSC2, BOP, CCE	On site	Throughout
Long-eared owl	*Asio otus*	BCC, SSC3, BOP	In region	
Short-eared owl	*Asia flammeus*	BCC, SSC3, BOP	On site	Central
Northern saw-whet owl	*Aegolius acadicus*	BOP	On site	North
Northern pygmy-owl	*Glaucidium gnoma*	BOP	Very close	Lake Merced
Lewis's woodpecker	*Melanerpes lewis*	BCC	On site	North and central
Nuttall's woodpecker	*Picoides nuttallii*	BCC	On site	Throughout
American kestrel	*Falco sparverius*	BOP	On site	Throughout
Merlin	*Falco columbarius*	WL, BOP	On site	Throughout
Peregrine falcon	*Falco peregrinus*	BOP	On site	Throughout
Prairie falcon	*Falco mexicanus*	WL, BOP	On site	Throughout
Olive-sided flycatcher	*Contopus cooperi*	BCC, SSC2	On site	Throughout
Willow flycatcher	*Empidonax trailii*	CE	On site	Throughout
Vermilion flycatcher	*Pyrocephalus rubinus*	SSC2	On site	North /central (Richmond)
Least Bell's vireo	*Vireo bellii pusillus*	FE, CE	In region	
Loggerhead shrike	*Lanius ludovicianus*	SSC2	Very close	Presidio, Lake Merced, Golden Gate Park, SE of site

Common name	***Species name***	**Status[1]**	**Occurrence records**	**Locations of On-site and Very-close records**
Yellow-billed magpie	*Pica nuttalli*	BCC	On site	Central/South
Oak titmouse	*Baeolophus inornatus*	BCC	On site	North and central
California horned lark	*Eremophila alpestris actia*	WL	On site	North and central
Bank swallow	*Riparia riparia*	CT	On site	Throughout
Purple martin	*Progne subis*	SSC2	On site	Throughout
Wrentit	*Chamaea fasciata*	BCC	On site	Throughout
California thrasher	*Toxostoma redivivum*	BCC	On site	N and central
Cassin's finch	*Haemorhous cassinii*	BCC	On site	N and central
Lawrence's goldfinch	*Spinus lawrencei*	BCC	On site	N and central
Grasshopper sparrow	*Ammodramus savannarum*	SSC2	On site	N and central
Black-chinned sparrow	*Spizella atrogularis*	BCC	In region	
Bell's sparrow	*Amphispiza b. belli*	WL	On site	South
Large-billed savannah sparrow	*Passerculus sandwichensis rostratus*	SSC2	In region	
Yellow-breasted chat	*Icteria virens*	SSC3	On site	Throughout
Yellow-headed blackbird	*Xanthocephalus xanthocephalus*	SSC3	On site	North and central
Bullock's oriole	*Icterus bullockii*	BCC	On site	Throughout
Tricolored blackbird	*Agelaius tricolor*	CT, BCC, SSC1	On site	Throughout
Lucy's warbler	*Leiothlypis luciae*	SSC3	On site	SW and North
Virginia's warbler	*Leiothlypis virginiae*	WL, BCC	On site	Throughout
San Francisco common yellowthroat	*Geothlypis trichas sinuosa*	SSC3, BCC	In range	
Prothonotary warbler	*Protonotaria citrea*	BCC	On site	Central and West
Prairie warbler	*Setophaga discolor*	BCC	On site	Central
Yellow warbler	*Setophaga petechia*	SSC2	On site	Throughout
Hepatic tanager	*Piranga flava*	WL	On site	Central/South
Summer tanager	*Piranga rubra*	SSC1	On site	Throughout
Little brown bat	*Myotis lucifugus*	WBWG: M	In region	
Yuma myotis	*Myotis yumanensis*	WBWG: LM	Very close	In golden gate park

Common name	*Species name*	Status[1]	Occurrence records	Locations of On-site and Very-close records
Long-eared myotis	*Myotis evotis*	WBWG: M	In region	
Fringed myotis	*Myotis thysanodes*	WBWG: H	In range	
Long-legged myotis	*Myotis volans*	WBWG: H	In range	
California myotis	*Myotis californicus*	WBWG:L	Very close	In golden gate park
Canyon bat	*Parastrellus hesperus*	WBWG: M	In range	
Big brown bat	*Episticus fuscus*	WBWG: L	Very close	In golden gate park
Silver-haired bat	*Lasionycteris noctivagans*	WBWG: M	On site	North
Hoary bat	*Lasiurus cinereus*	WBWG: M	Very close	In golden gate park
Western red bat	*Lasiurus blossevillii*	SSC, WBWG: H	Very close	In golden gate park
Townsend's big-eared bat	*Corynorhinus townsendii*	SSC, WBWG: H	In region	
Pallid bat	*Antrozous pallidus*	SSC, WBWG: H	In region	
Mexican free-tailed bat	*Tadarida brasiliensis*	WBWG: L	Very close	Golden Gate Park
San Francisco dusky-footed woodrat	*Neotoma fuscipes annectens*	SSC	In region	
Southern sea otter	*nhydra lutris nereis*	FT, CFP, SSC	In region	
Salt-marsh harvest mouse	*Reithrodontomys raviventris*	FE, CE, CFP	In region	
American badger	*Taxidea taxus*	SSC	Nearby	

[1] Listed on CDFW's Special Animals List (https://nrm.dfg.ca.gov/FileHandler.ashx?DocumentID=109406) as FT or FE = federal threatened or endangered; FC = federal candidate for listing; BGEPA = Bald and Golden Eagle Protection Act; CT or CE = California threatened or endangered; CCT or CCE = Candidate California threatened or endangered; CFP = California Fully Protected (California Fish and Game Code 3511); SSC = California Species of Special Concern, and SSC1, SSC2 and SSC3 = California Bird Species of Special Concern priorities 1, 2 and 3, respectively); WL = CDFW's Taxa to Watch List; WBWG = Western Bat Working Group with priority rankings, of low (L), moderate (M), and high (H); BCC = U.S. Fish and Wildlife Service's Bird of Conservation Concern (https://www.fws.gov/sites/default/files/documents/birds-of-conservation-concern-2021.pdf); and BOP = protected by Birds of Prey (California Fish and Game Code 3503.5, see https://wildlife.ca.gov/Conservation/Birds/Raptors).

By the time Loss et al. (2014) performed their effort to estimate annual USA bird-window fatalities, many more fatality monitoring studies had been reported or were underway. Loss et al. (2014) incorporated many more fatality rates based on scientific monitoring, and they were more careful about which fatality rates to include. However, they included estimates based on fatality monitoring by homeowners, which in one study were found to detect only 38% of the available window fatalities (Bracey et al. 2016). Loss et al. (2014) excluded all fatality records lacking a dead bird in hand, such as injured birds or feather or blood spots on windows. Loss et al.'s (2014) fatality metric was the number of fatalities per building (where in this context a building can include a house, low-rise, or high-rise structure), but they assumed that this metric was based on window collisions. Because most of the bird-window collision studies were limited to migration seasons, Loss et al. (2014) developed an admittedly assumption-laden correction factor for making annual estimates. Also, only 2 of the studies included adjustments for carcass persistence and searcher detection error, and it was unclear how and to what degree fatality rates were adjusted for these factors. Although Loss et al. (2014) attempted to account for some biases as well as for large sources of uncertainty mostly resulting from an opportunistic rather than systematic sampling data source, their estimated annual fatality rate across the USA was highly uncertain and vulnerable to multiple biases, most of which would have resulted in fatality estimates biased low.

In my review of bird-window collision monitoring, I found that the search radius around homes and buildings was very narrow, usually 2 meters. Based on my experience with bird collisions in other contexts, I would expect that a large portion of bird-window collision victims would end up farther than 2 m from the windows, especially when the windows are higher up on tall buildings. In my experience, searcher detection rates tend to be low for small birds deposited on ground with vegetation cover or woodchips or other types of organic matter. Also, vertebrate scavengers entrain on anthropogenic sources of mortality and quickly remove many of the carcasses, thereby preventing the fatality searcher from detecting these fatalities. Adjusting fatality rates for these factors – search radius bias, searcher detection error, and carcass persistence rates – would greatly increase nationwide estimates of bird-window collision fatalities.

Buildings can intercept many nocturnal migrants as well as birds flying in daylight. As mentioned above, Johnson and Hudson (1976) found 266 bird fatalities of 41 species within 73 months of monitoring of a four-story glass walkway at Washington State University (no adjustments attempted for undetected fatalities). Somerlot (2003) found 21 bird fatalities among 13 buildings on a university campus within only 61 days. Monitoring twice per week, Hager at al. (2008) found 215 bird fatalities of 48 species, or 55 birds/building/year, and at another site they found 142 bird fatalities of 37 species for 24 birds/building/year. Gelb and Delacretaz (2009) recorded 5,400 bird fatalities under buildings in New York City, based on a decade of monitoring only during migration periods, and some of the high-rises were associated with hundreds of fatalities each. Klem et al. (2009) monitored 73 building façades in New York City during 114 days of two migratory periods, tallying 549 collision victims, nearly 5 birds per day. Borden et al. (2010) surveyed a 1.8 km route 3 times per week during 12-month period and found 271 bird fatalities of 50 species. Parkins et al. (2015) found 35 bird fatalities of 16 species within only 45 days of monitoring under 4 building façades. From

24 days of survey over a 48-day span, Porter and Huang (2015) found 47 fatalities under 8 buildings on a university campus. Sabo et al. (2016) found 27 bird fatalities over 61 days of searches under 31 windows. In San Francisco, Kahle et al. (2016) found 355 collision victims within 1,762 days under a 5-story building. Ocampo-Peñuela et al. (2016) searched the perimeters of 6 buildings on a university campus, finding 86 fatalities after 63 days of surveys. One of these buildings produced 61 of the 86 fatalities, and another building with collision-deterrent glass caused only 2 of the fatalities, thereby indicating a wide range in impacts likely influenced by various factors. There is ample evidence available to support my prediction that the proposed project would result in many collision fatalities of birds.

Project Impact Prediction

By the time of these comments, I had reviewed and processed results of bird collision monitoring at 213 buildings and façades for which bird collisions per m^2 of glass per year could be calculated and averaged (Johnson and Hudson 1976, O'Connell 2001, Somerlot 2003, Hager et al. 2008, Borden et al. 2010, Hager et al. 2013, Porter and Huang 2015, Parkins et al. 2015, Kahle et al. 2016, Ocampo-Peñuela et al. 2016, Sabo et al. 2016, Barton et al. 2017, Gomez-Moreno et al. 2018, Schneider et al. 2018, Loss et al. 2019, Brown et al. 2020, City of Portland Bureau of Environmental Services and Portland Audubon 2020, Riding et al. 2020). These study results averaged 0.073 bird deaths per m^2 of glass per year (95% CI: 0.042-0.102). This average and its 95% confidence interval provide a robust basis for predicting fatality rates at a proposed new project.

The Addendum includes an increase of 4,000 residential units. The floorspace per residential unit of condominiums, townhouses and apartments among the projects I have reviewed as an expert have averaged 1,296.3 square feet per unit. The average square footage of the apartments that contributed to this average was consistent with the floorspace reported in the Addendum as an example 590-foot-tall apartment building in the project, which itself would average 949 sf per unit with 60,700 sf of retail space. I estimate the total square footage of 4,000 residential units would be 5,185,251 sf.

Among the 45 residential projects I have reviewed as an expert and for which I was able to measure the extent of structural glass on proposed building facades depicted in renderings provided in the environmental review documents, I measured an average 0.01872 (95% confidence interval: 0.00989–0.02754) m^2 per square foot of floorspace. This rate multiplied by the total square footage of 4,000 additional residential units would predict 97,060 (95% CI: 51,300–142,821) m^2 of additional structural glass on the facades of new buildings in the City. The mean window area multiplied against the mean collision mortality measured across North America predicts 7,095 (aggregate[1] 95% CI: 2,226–14,82) bird fatalities per year. More than seven thousand additional fatalities per

[1] What I mean by aggregate CI is that the lower bound estimate of the window area is multiplied by the lower bound estimate of collision mortality, and the upper bound estimate of the window area is multiplied by the upper bound estimate of collision mortality.

year above the level that would be expected under the 2022 plan would be a substantial number, and it should easily qualify as a highly significant impact.

Nearly all predicted deaths would be of birds protected under the Migratory Bird Treaty Act and under the California Migratory Bird Protection Act, thus causing significant impacts. Given the predicted level of bird-window collision mortality, it is my opinion that the proposed project would result in potentially significant adverse biological impacts, including the unmitigated take of aerial habitats of birds, bats and other volant wildlife. Not only would the project take habitat of rare and sensitive species of birds, but it would transform the building's airspace into a lethal collision trap to birds.

SPATIAL DISTRIBUTION OF PREDICTED AVIAN COLLISION MORTALITY

San Francisco is situated within the Pacific Flyway, which is one of the most intensely used bird migration pathways in the world. It is also known that birds migrate along the coast and across Hawk Hill and the Marin Headlands, many headed to or from the Altamont Pass where I spent thousands of hours observing migrants during both day and night over about 20 years. Between Hawk Hill and the Altamont Pass is San Francisco, which must be visited by many thousands of migrating birds. Knowing which species of birds and how many birds move across San Francisco, and knowing specific flight paths that are disproportionately used by season would be useful for predicting where increases in building heights would pose greater risks to birds. Unfortunately, the data on bird movement through San Francisco are sparse.

There *are* data on bird species richness. Golden Gate Audubon Society ("GGAS") (2020), tallied 47 species of birds on Mount Sutro Open Space Reserve in about 54 hours of surveys between 16 March and 29 December 2019. On the same Reserve on 20 August 2020, I detected 23 species of birds over a much shorter time, but a model I fit to my data predicts that I would have detected the same number of bird species as GGAS (2020) had I surveyed for 11 hours and 40 minutes, and that I would have detected 117 species of birds had I surveyed for 54 hours (Figure 1).

I repeated my survey on Mount Sutro Open Space Reserve on 16 July 2021, and I implemented the same survey methods such as start time, duration, and survey route. The second survey yielded even more species detections and at a faster rate (red circles in Figure 2). Between both surveys I detected 37 species of birds, but adding the results of GGAS (2021) brings the total number of bird species to 71. With additional surveys, this number would surely increase. The evidence is that many birds find and use aerohabitat in San Francisco.

Kahle et al. (2016) detected 40 species of birds at the California Academy of Sciences building in Golden Gatee Park (Table 2). More importantly, members of 34 (85%) of these species were also recorded as window collision fatalities, and members of 37 (93%) of these species appear in the scientific literature as window collision fatalities. Killed disproportionately relative to their observed abundances were special-status species such as Allen's hummingbird and yellow warbler (Figure 3). Both these species are found in abundance in San Francisco (Photo 1).

Figure 1. *Cumulative number of bird species detected as a power function of the number of minutes devoted to the survey. The model explained 98% of the variation, with a root mean square error of 17.71. Had I been able to commit more time to the survey, I am confident a different model would have better fit the resulting data – a model more expressive of an asymptote.*

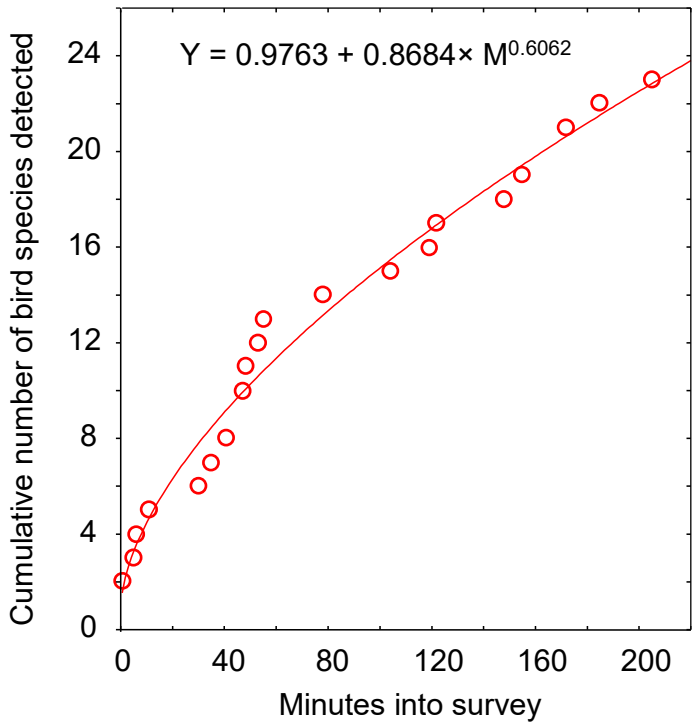

Figure 2. *Actual and predicted relationships between the number of vertebrate wildlife species (all but 2 were birds) detected and the elapsed survey time based on my visual-scan surveys on 20 August 2020 and 16 July 2021.*

$$Y_{2020} = \frac{1}{0.001559 + 0.935847(X+1)^{-0.580731}}$$

$$Y_{2021} = \frac{1}{0.0016586 + 0.459981(X+1)^{-0.543857}}$$

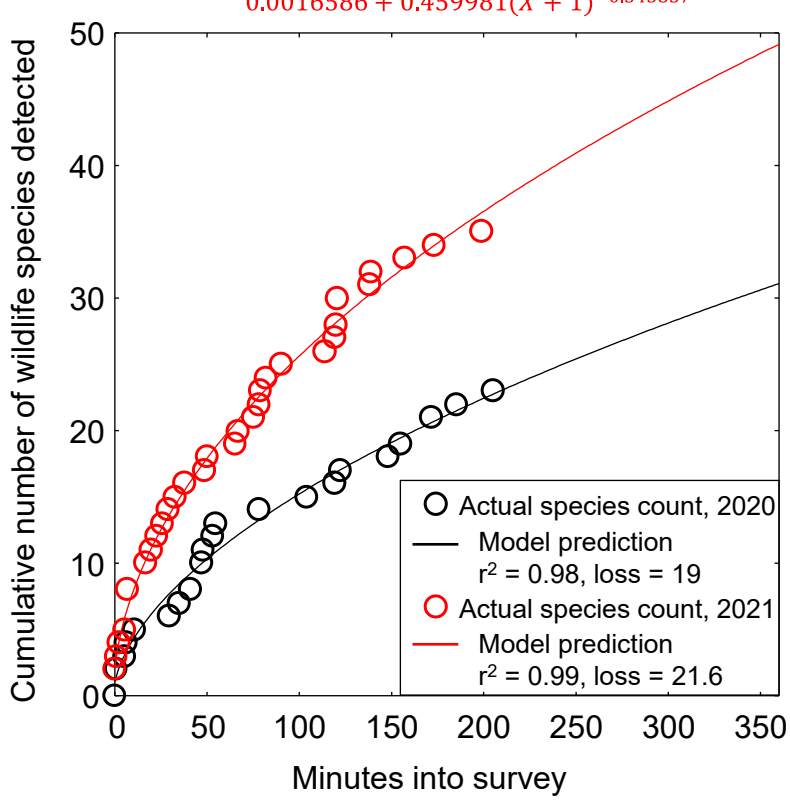

Table 2. *Species observed on site or reported as window-collision victims at the California Academy of Sciences (CAS) buildings (Kahle et al. 2016).*

Species	Scientific name	Status[1]	Number counted at CAS study		Known window deaths in North America
			As window deaths	Alive in survey plots	
Western gull	*Larus occidentalis*	BCC		4	
Red-tailed hawk	*Buteo jamaicensis*	BOP		1	Yes
Red-shouldered hawk	*Buteo lineatus*	BOP		1	Yes
Mourning dove	*Zenaida macroura*		6	3	Yes
Great-horned owl	*Bubo virginianus*	BOP		1	Yes
Anna's hummingbird	*Calypte anna*		131	256	Yes
Allen's hummingbird	*Selasphorus sasin*	BCC	37	29	Yes
Costa's hummingbird	*Calypte costae*	BCC	1	0	Yes
Rufous hummingbird	*Selasphorus rufus*	BCC	4	0	Yes
Nuttall's woodpecker	*Picoides nuttallii*	BCC		13	
Pacific-slope flycatcher	*Empidonax difficilis*		1	5	Yes
Black phoebe	*Sayornis nigricans*		3	34	Yes
Chestnut-backed chickadee	*Poecile rufescens*		1	203	Yes
Bushtit	*Psaltriparus minimus*		1	399	Yes
Brown creeper	*Certhia americana*		1	52	Yes
Pygmy nuthatch	*Sitta pygmaea*		1	242	Yes
Swainson's thrush	*Catharus ustulatus*		1	1	Yes
Hermit thrush	*Catharus guttatus*		8	82	Yes
American robin	*Turdus vulvaris*		3	389	Yes
Warbling vireo	*Vireo gilvus*		1	5	Yes
Yellow-rumped warbler	*Setophaga coronata*		7	92	Yes
Orange-crowned warbler	*Oreothlypis celata*		2	29	Yes
Townsend's warbler	*Setophaga townsendi*		3	101	Yes
Wilson's warbler	*Cardellina pusilla*		3	11	Yes
Yellow warbler	*Setophaga petechia*	SSC2, BCC	7	18	Yes
San Francisco common yellowthroat	*Geothlypis trichas sinuosa*	SSC3, BCC	3	0	Yes
Song sparrow	*Melospiza melodia*		5	435	Yes
Golden-crowned sparrow	*Zonotrichia atricapilla*		3	230	Yes
White-crowned sparrow	*Zonotrichia leucophrys*		1	249	Yes
Savannah sparrow	*Passerculus sandwichensis*		2	0	Yes
Lincoln's sparrow	*Melospiza lincolnii*		3	35	Yes
Fox sparrow	*Passerella iliaca*		6	152	Yes

Species	Scientific name	Status[1]	Number counted at CAS study		Known window deaths in North America
			As window deaths	Alive in survey plots	
Dark-eyed junco	*Junco hyemalis*		22	510	Yes
California towhee	*Melozone crissalis*		1	92	Yes
Brown-headed cowbird	*Molothrus ater*		1	39	Yes
Red-winged blackbird	*Agelaius phoeniceus*		1	261	Yes
Brewer's blackbird	*Euphagus cyanocephalus*		25	1027	Yes
Tricolored blackbird	*Agelaius tricolor*	CT, BCC		15	
House finch	*Haemorhous mexicanus*		5	213	Yes
Lesser goldfinch	*Spinus psaltria*		1	44	Yes

[1] Listed as BCC = U.S. Fish and Wildlife Service Bird Species of Conservation Concern, CT = California threatened, BOP = California Fish and Game Code 3503.5 (Birds of Prey), and SSC1, SSC2 and SSC3 = California Bird Species of Special Concern priorities 1, 2 and 3, respectively.

Figure 3. *Window collision fatalities as a proportion of those observed in visual-scan surveys at the California Academy of Sciences building (data from Kahle et al. 2016).*

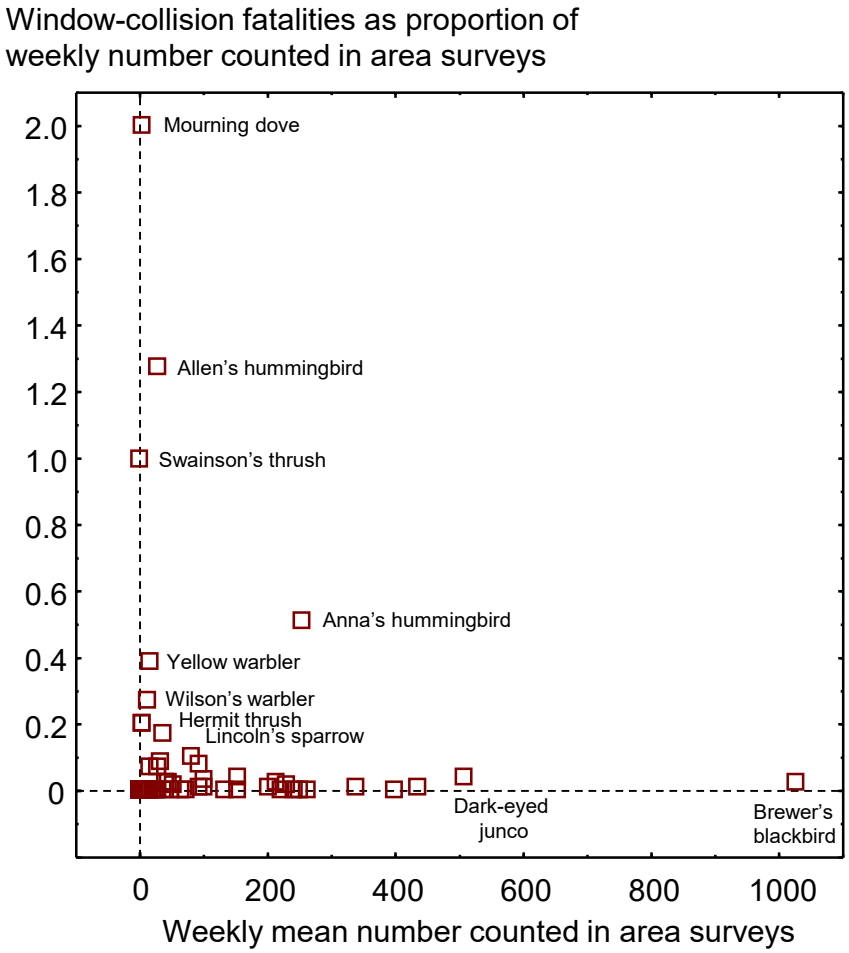

Photo 1. *Allen's hummingbird in Mount Sutro Open Space Reserve, 16 July 2021. As found at the nearby California Academy of Sciences Building, this species is highly vulnerable to window collision mortality (Kahle et al. 2016).*

What is needed is a study of bird movement through San Francisco. Needed are data on species occurrences, numbers of birds, heights above ground, flight direction, specific behaviors and timing of flights across the City. These same types of data were collected in the nearby Altamont Pass Wind Resource Area to acquire an understanding of bird flight traffic for the purposed of guiding the sitings of new wind turbines as part of repowering (Smallwood 2017, Smallwood et al. 2017). The data could be acquired by performing periodic surveys from stations established systematically or randomly across the City, covering all times of day and night (using thermal imaging cameras) and lasting at least one year to characterize seasonality of bird movement. Based on such data, the City could more carefully plan the vertical and lateral outlay of new buildings to minimize the encounter frequencies of birds with buildings. This is important because the existing Bird-Safe Building Guidelines can accomplish only so much, and the efficacy of these Guidelines remains unmeasured and unknown. Therefore, what is also needed is a program to measure the efficacy of the Guidelines by designing an experiment to search for and count bird-window collision victims along with the implementation of carcass detection trials. The San Francisco guidelines should have also covered scientific monitoring of impacts as well as compensatory mitigation for impacts that could not be avoided, minimized or reduced. Until these types of bird movement data are in hand, the City can only speculate as to the magnitude of bird-window collision mortality and whether the mortality can be minimized or reduced via Bird-Safe Building Guidelines.

In the face of such a large increase in the number of residential units, as well as a major shift in the lateral and vertical layout of 54,000 residential units, another need is for an update in the Bird-Safe Building Guidelines (San Francisco Planning Department 2011). Much has been learned about causal factors and mitigation solutions (e.g., Sheppard and Phillips 2015). The American Bird Conservancy (ABC) produced an excellent set of

guidelines recommending actions to: (1) Minimize use of glass; (2) Placing glass behind some type of screening (grilles, shutters, exterior shades); (3) Using glass with inherent properties to reduce collisions, such as patterns, window films, decals or tape; and (4) Turning off lights during migration seasons (Sheppard and Phillips 2015).

New research results inform of the efficacy of marking windows. Whereas Klem (1990) found no deterrent effect from decals on windows, Johnson and Hudson (1976) reported a fatality reduction of about 69% after placing decals on windows. In an experiment of opportunity, Ocampo-Peñuela et al. (2016) found only 2 of 86 fatalities at one of 6 buildings – the only building with windows treated with a bird deterrent film. At the building with fritted glass, bird collisions were 82% lower than at other buildings with untreated windows. Kahle et al. (2016) added external window shades to some windowed façades to reduce fatalities 82% and 95%. Brown et al. (2020) reported an 84% lower collision probability among fritted glass windows and windows treated with ORNILUX R UV. City of Portland Bureau of Environmental Services and Portland Audubon (2020) reduced bird collision fatalities 94% by affixing marked Solyx window film to existing glass panels of Portland's Columbia Building. Many external and internal glass markers have been tested experimentally, some showing no effect and some showing strong deterrent effects (Klem 1989, 1990, 2009, 2011; Klem and Saenger 2013; Rössler et al. 2015).

Van Doren et al. (2021) found that nocturnal migrants contributed most of the collision fatalities in their study, and the largest predictors of fatalities were peak migration and lit windows. Van Doren et al. (2021) predicted that a light-out mitigation measure could reduce bird-window collision mortality by 60%.

Monitoring and the use of compensatory mitigation should be incorporated at any new building project because the measures recommended in the available guidelines remain of uncertain efficacy, and even if these measures are effective, they will not reduce collision fatalities to zero. The only way to assess mitigation efficacy and to quantify post-construction fatalities is to monitor the project for fatalities.

The Addendum (p. 49) concludes, "In summary, the proposed rezoning program would not result in new significant biological resources impacts that were not previously identified in the FEIR, nor would it result in more severe impacts than those previously identified. No new mitigation measures or changes to existing mitigation measures are required." However, the FEIR did not identify the loss of aerohabitat of birds and bats as any sort of project impact, and neither does the Addendum. Furthermore, the FEIR did not identify as an impact my predicted mean mortality of 7,095 birds per year just from the additional 4,000 residential units, and an upper bound CI prediction of 14,082 birds per year.

Thank you for your consideration,

Shawn Smallwood, Ph.D.

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Curriculum Vitae

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Born May 3, 1963 in Sacramento, California.
Married, father of two.

Ecologist

Expertise

- Finding solutions to controversial problems related to wildlife interactions with human industry, infrastructure, and activities;
- Wildlife monitoring and field study using GPS, thermal imaging, behavior surveys;
- Using systems analysis and experimental design principles to identify meaningful ecological patterns that inform management decisions.

Education

Ph.D. Ecology, University of California, Davis. September 1990.
M.S. Ecology, University of California, Davis. June 1987.
B.S. Anthropology, University of California, Davis. June 1985.
Corcoran High School, Corcoran, California. June 1981.

Experience

- 762 professional reports, including:
- 90 peer reviewed publications
- 24 in non-reviewed proceedings
- 646 reports, declarations, posters and book reviews
- 8 in mass media outlets
- 92 public presentations of research results

Editing for scientific journals: Guest Editor, *Wildlife Society Bulletin*, 2012-2013, of invited papers representing international views on the impacts of wind energy on wildlife and how to mitigate the impacts. Associate Editor, *Journal of Wildlife Management*, March 2004 to 30 June 2007. Editorial Board Member, *Environmental Management*, 10/1999 to 8/2004. Associate Editor, *Biological Conservation*, 9/1994 to 9/1995.

Member, Alameda County Scientific Review Committee (SRC), August 2006 to April 2011. The five-member committee investigated causes of bird and bat collisions in the Altamont Pass Wind Resource Area, and recommended mitigation and monitoring measures. The SRC reviewed the science underlying the Alameda County Avian Protection Program, and advised

the County on how to reduce wildlife fatalities.

Consulting Ecologist, 2004-2007, California Energy Commission (CEC). Provided consulting services as needed to the CEC on renewable energy impacts, monitoring and research, and produced several reports. Also collaborated with Lawrence-Livermore National Lab on research to understand and reduce wind turbine impacts on wildlife.

Consulting Ecologist, 1999-2013, U.S. Navy. Performed endangered species surveys, hazardous waste site monitoring, and habitat restoration for the endangered San Joaquin kangaroo rat, California tiger salamander, California red-legged frog, California clapper rail, western burrowing owl, salt marsh harvest mouse, and other species at Naval Air Station Lemoore; Naval Weapons Station, Seal Beach, Detachment Concord; Naval Security Group Activity, Skaggs Island; National Radio Transmitter Facility, Dixon; and, Naval Outlying Landing Field Imperial Beach.

Part-time Lecturer, 1998-2005, California State University, Sacramento. Instructed Mammalogy, Behavioral Ecology, and Ornithology Lab, Contemporary Environmental Issues, Natural Resources Conservation.

Senior Ecologist, 1999-2005, BioResource Consultants. Designed and implemented research and monitoring studies related to avian fatalities at wind turbines, avian electrocutions on electric distribution poles across California, and avian fatalities at transmission lines.

Chairman, Conservation Affairs Committee, The Wildlife Society--Western Section, 1999-2001. Prepared position statements and led efforts directed toward conservation issues, including travel to Washington, D.C. to lobby Congress for more wildlife conservation funding.

Systems Ecologist, 1995-2000, Institute for Sustainable Development. Headed ISD's program on integrated resources management. Developed indicators of ecological integrity for large areas, using remotely sensed data, local community involvement and GIS.

Associate, 1997-1998, Department of Agronomy and Range Science, University of California, Davis. Worked with Shu Geng and Mingua Zhang on several studies related to wildlife interactions with agriculture and patterns of fertilizer and pesticide residues in groundwater across a large landscape.

Lead Scientist, 1996-1999, National Endangered Species Network. Informed academic scientists and environmental activists about emerging issues regarding the Endangered Species Act and other environmental laws. Testified at public hearings on endangered species issues.

Ecologist, 1997-1998, Western Foundation of Vertebrate Zoology. Conducted field research to determine the impact of past mercury mining on the status of California red-legged frogs in Santa Clara County, California.

Senior Systems Ecologist, 1994-1995, EIP Associates, Sacramento, California. Provided consulting services in environmental planning, and quantitative assessment of land units for their conservation and restoration opportunities basedon ecological resource requirements of 29 special-status species. Developed ecological indicators for prioritizing areas within Yolo County

to receive mitigation funds for habitat easements and restoration.

Post-Graduate Researcher, 1990-1994, Department of Agronomy and Range Science, *U.C. Davis*. Under Dr. Shu Geng's mentorship, studied landscape and management effects on temporal and spatial patterns of abundance among pocket gophers and species of Falconiformes and Carnivora in the Sacramento Valley. Managed and analyzed a data base of energy use in California agriculture. Assisted with landscape (GIS) study of groundwater contamination across Tulare County, California.

Work experience in graduate school: Co-taught Conservation Biology with Dr. Christine Schonewald, 1991 & 1993, UC Davis Graduate Group in Ecology; Reader for Dr. Richard Coss's course on Psychobiology in 1990, UC Davis Department of Psychology; Research Assistant to Dr. Walter E. Howard, 1988-1990, UC Davis Department of Wildlife and Fisheries Biology, testing durable baits for pocket gopher management in forest clearcuts; Research Assistant to Dr. Terrell P. Salmon, 1987-1988, UC Wildlife Extension, Department of Wildlife and Fisheries Biology, developing empirical models of mammal and bird invasions in North America, and a rating system for priority research and control of exotic species based on economic, environmental and human health hazards in California. Student Assistant to Dr. E. Lee Fitzhugh, 1985-1987, UC Cooperative Extension, Department of Wildlife and Fisheries Biology, developing and implementing statewide mountain lion track count for long-term monitoring.

Fulbright Research Fellow, Indonesia, 1988. Tested use of new sampling methods for numerical monitoring of Sumatran tiger and six other species of endemic felids, and evaluated methods used by other researchers.

Projects

Repowering wind energy projects through careful siting of new wind turbines using map-based collision hazard models to minimize impacts to volant wildlife. Funded by wind companies (principally NextEra Renewable Energy, Inc.), California Energy Commission and East Bay Regional Park District, I have collaborated with a GIS analyst and managed a crew of five field biologists performing golden eagle behavior surveys and nocturnal surveys on bats and owls. The goal is to quantify flight patterns for development of predictive models to more carefully site new wind turbines in repowering projects. Focused behavior surveys began May 2012 and continue. Collision hazard models have been prepared for seven wind projects, three of which were built. Planning for additional repowering projects is underway.

Test avian safety of new mixer-ejector wind turbine (MEWT). Designed and implemented a before-after, control-impact experimental design to test the avian safety of a new, shrouded wind turbine developed by Ogin Inc. (formerly known as FloDesign Wind Turbine Corporation). Supported by a $718,000 grant from the California Energy Commission's Public Interest Energy Research program and a 20% match share contribution from Ogin, I managed a crew of seven field biologists who performed periodic fatality searches and behavior surveys, carcass detection trials, nocturnal behavior surveys using a thermal camera, and spatial analyses with the collaboration of a GIS analyst. Field work began 1 April 2012 and ended 30 March 2015 without Ogin installing its MEWTs, but we still achieved multiple important scientific advances.

Reduce avian mortality due to wind turbines at Altamont Pass. Studied wildlife impacts caused by 5,400 wind turbines at the world's most notorious wind resource area. Studied how impacts are perceived by monitoring and how they are affected by terrain, wind patterns, food resources, range management practices, wind turbine operations, seasonal patterns, population cycles, infrastructure management such as electric distribution, animal behavior and social interactions.

Reduce avian mortality on electric distribution poles. Directed research toward reducing bird electrocutions on electric distribution poles, 2000-2007. Oversaw 5 founds of fatality searches at 10,000 poles from Orange County to Glenn County, California, and produced two large reports.

Cook *et al*. v. Rockwell International *et al*., No. 90-K-181 (D. Colorado). Provided expert testimony on the role of burrowing animals in affecting the fate of buried and surface-deposited radioactive and hazardous chemical wastes at the Rocky Flats Plant, Colorado. Provided expert reports based on four site visits and an extensive document review of burrowing animals. Conducted transect surveys for evidence of burrowing animals and other wildlife on and around waste facilities. Discovered substantial intrusion of waste structures by burrowing animals. I testified in federal court in November 2005, and my clients were subsequently awarded a $553,000,000 judgment by a jury. After appeals the award was increased to two billion dollars.

Hanford Nuclear Reservation Litigation. Provided expert testimony on the role of burrowing animals in affecting the fate of buried radioactive wastes at the Hanford Nuclear Reservation, Washington. Provided three expert reports based on three site visits and extensive document review. Predicted and verified a certain population density of pocket gophers on buried waste structures, as well as incidence of radionuclide contamination in body tissue. Conducted transect surveys for evidence of burrowing animals and other wildlife on and around waste facilities. Discovered substantial intrusion of waste structures by burrowing animals.

Expert testimony and declarations on proposed residential and commercial developments, gas-fired power plants, wind, solar and geothermal projects, water transfers and water transfer delivery systems, endangered species recovery plans, Habitat Conservation Plans and Natural Communities Conservation Programs. Testified before multiple government agencies, Tribunals, Boards of Supervisors and City Councils, and participated with press conferences and depositions. Prepared expert witness reports and court declarations, which are summarized under Reports (below).

Protocol-level surveys for special-status species. Used California Department of Fish and Wildlife and US Fish and Wildlife Service protocols to search for California red-legged frog, California tiger salamander, arroyo southwestern toad, blunt-nosed leopard lizard, western pond turtle, giant kangaroo rat, San Joaquin kangaroo rat, San Joaquin kit fox, western burrowing owl, Swainson's hawk, Valley elderberry longhorn beetle and other special-status species.

Conservation of San Joaquin kangaroo rat. Performed research to identify factors responsible for the decline of this endangered species at Lemoore Naval Air Station, 2000-2013, and implemented habitat enhancements designed to reverse the trend and expand the population.

Impact of West Nile Virus on yellow-billed magpies. Funded by Sacramento-Yolo Mosquito and Vector Control District, 2005-2008, compared survey results pre- and post-West Nile Virus epidemic for multiple bird species in the Sacramento Valley, particularly on yellow-billed magpie and American crow due to susceptibility to WNV.

Workshops on HCPs. Assisted Dr. Michael Morrison with organizing and conducting a 2-day workshop on Habitat Conservation Plans, sponsored by Southern California Edison, and another 1-day workshop sponsored by PG&E. These Workshops were attended by academics, attorneys, and consultants with HCP experience. We guest-edited a Proceedings published in Environmental Management.

Mapping of biological resources along Highways 101, 46 and 41. Used GPS and GIS to delineate vegetation complexes and locations of special-status species along 26 miles of highway in San Luis Obispo County, 14 miles of highway and roadway in Monterey County, and in a large area north of Fresno, including within reclaimed gravel mining pits.

GPS mapping and monitoring at restoration sites and at Caltrans mitigation sites. Monitored the success of elderberry shrubs at one location, the success of willows at another location, and the response of wildlife to the succession of vegetation at both sites. Also used GPS to monitor the response of fossorial animals to yellow star-thistle eradication and natural grassland restoration efforts at Bear Valley in Colusa County and at the decommissioned Mather Air Force Base in Sacramento County.

Mercury effects on Red-legged Frog. Assisted Dr. Michael Morrison and US Fish and Wildlife Service in assessing the possible impacts of historical mercury mining on the federally listed California red-legged frog in Santa Clara County. Also measured habitat variables in streams.

Opposition to proposed No Surprises rule. Wrote a white paper and summary letter explaining scientific grounds for opposing the incidental take permit (ITP) rules providing ITP applicants and holders with general assurances they will be free of compliance with the Endangered Species Act once they adhere to the terms of a "properly functioning HCP." Submitted 188 signatures of scientists and environmental professionals concerned about No Surprises rule US Fish and Wildlife Service, National Marine Fisheries Service, all US Senators.

Natomas Basin Habitat Conservation Plan alternative. Designed narrow channel marsh to increase the likelihood of survival and recovery in the wild of giant garter snake, Swainson's hawk and Valley Elderberry Longhorn Beetle. The design included replication and interspersion of treatments for experimental testing of critical habitat elements. I provided a report to Northern Territories, Inc.

Assessments of agricultural production system and environmental technology transfer to China. Twice visited China and interviewed scientists, industrialists, agriculturalists, and the Directors of the Chinese Environmental Protection Agency and the Department of Agriculture to assess the need and possible pathways for environmental clean-up technologies and trade opportunities between the US and China.

Yolo County Habitat Conservation Plan. Conducted landscape ecology study of Yolo County to spatially prioritize allocation of mitigation efforts to improve ecosystem functionality within the County from the perspective of 29 special-status species of wildlife and plants. Used a hierarchically structured indicators approach to apply principles of landscape and ecosystem ecology, conservation biology, and local values in rating land units. Derived GIS maps to help guide the conservation area design, and then developed implementation strategies.

Mountain lion track count. Developed and conducted a carnivore monitoring program throughout California since 1985. Species counted include mountain lion, bobcat, black bear, coyote, red and gray fox, raccoon, striped skunk, badger, and black-tailed deer. Vegetation and land use are also monitored. Track survey transect was established on dusty, dirt roads within randomly selected quadrats.

Sumatran tiger and other felids. Upon award of Fulbright Research Fellowship, I designed and initiated track counts for seven species of wild cats in Sumatra, including Sumatran tiger, fishing cat, and golden cat. Spent four months on Sumatra and Java in 1988, and learned Bahasa Indonesia, the official Indonesian language.

Wildlife in agriculture. Beginning as post-graduate research, I studied pocket gophers and other wildlife in 40 alfalfa fields throughout the Sacramento Valley, and I surveyed for wildlife along a 200 mile road transect since 1989 with a hiatus of 1996-2004. The data are analyzed using GIS and methods from landscape ecology, and the results published and presented orally to farming groups in California and elsewhere. I also conducted the first study of wildlife in cover crops used on vineyards and orchards.

Agricultural energy use and Tulare County groundwater study. Developed and analyzed a data base of energy use in California agriculture, and collaborated on a landscape (GIS) study of groundwater contamination across Tulare County, California.

Pocket gopher damage in forest clear-cuts. Developed gopher sampling methods and tested various poison baits and baiting regimes in the largest-ever field study of pocket gopher management in forest plantations, involving 68 research plots in 55 clear-cuts among 6 National Forests in northern California.

Risk assessment of exotic species in North America. Developed empirical models of mammal and bird species invasions in North America, as well as a rating system for assigning priority research and control to exotic species in California, based on economic, environmental, and human health hazards.

Peer Reviewed Publications

Smallwood, K. S. 2022. Utility-scale solar impacts to volant wildlife. Journal of Wildlife Management: e22216. https://doi.org/10.1002/jwmg.22216

Smallwood, K. S., and N. L. Smallwood. 2021. Breeding Density and Collision Mortality of Loggerhead Shrike (*Lanius ludovicianus*) in the Altamont Pass Wind Resource Area. Diversity 13, 540. https://doi.org/10.3390/d13110540.

Smallwood, K. S. 2020. USA wind energy-caused bat fatalities increase with shorter fatality search intervals. Diversity 12(98); https://doi.org/10.3390/d12030098

Smallwood, K. S., D. A. Bell, and S. Standish. 2020. Dogs detect larger wind energy impacts on bats and birds. Journal of Wildlife Management 84:852-864. DOI: 10.1002/jwmg.21863.

Smallwood, K. S., and D. A. Bell. 2020. Relating bat passage rates to wind turbine fatalities.

Diversity 12(84); doi:10.3390/d12020084.

Smallwood, K. S., and D. A. Bell. 2020. Effects of wind turbine curtailment on bird and bat fatalities. Journal of Wildlife Management 84:684-696. DOI: 10.1002/jwmg.21844

Kitano, M., M. Ino, K. S. Smallwood, and S. Shiraki. 2020. Seasonal difference in carcass persistence rates at wind farms with snow, Hokkaido, Japan. Ornithological Science 19: 63 – 71.

Smallwood, K. S. and M. L. Morrison. 2018. Nest-site selection in a high-density colony of burrowing owls. Journal of Raptor Research 52:454-470.

Smallwood, K. S., D. A. Bell, E. L. Walther, E. Leyvas, S. Standish, J. Mount, B. Karas. 2018. Estimating wind turbine fatalities using integrated detection trials. Journal of Wildlife Management 82:1169-1184.

Smallwood, K. S. 2017. Long search intervals under-estimate bird and bat fatalities caused by wind turbines. Wildlife Society Bulletin 41:224-230.

Smallwood, K. S. 2017. The challenges of addressing wildlife impacts when repowering wind energy projects. Pages 175-187 in Köppel, J., Editor, Wind Energy and Wildlife Impacts: Proceedings from the CWW2015 Conference. Springer. Cham, Switzerland.

May, R., Gill, A. B., Köppel, J. Langston, R. H.W., Reichenbach, M., Scheidat, M., Smallwood, S., Voigt, C. C., Hüppop, O., and Portman, M. 2017. Future research directions to reconcile wind turbine–wildlife interactions. Pages 255-276 in Köppel, J., Editor, Wind Energy and Wildlife Impacts: Proceedings from the CWW2015 Conference. Springer. Cham, Switzerland.

Smallwood, K. S. 2017. Monitoring birds. M. Perrow, Ed., Wildlife and Wind Farms - Conflicts and Solutions, Volume 2. Pelagic Publishing, Exeter, United Kingdom. www.bit.ly/2v3cR9Q

Smallwood, K. S., L. Neher, and D. A. Bell. 2017. Turbine siting for raptors: an example from Repowering of the Altamont Pass Wind Resource Area. M. Perrow, Ed., Wildlife and Wind Farms - Conflicts and Solutions, Volume 2. Pelagic Publishing, Exeter, United Kingdom. www.bit.ly/2v3cR9Q

Johnson, D. H., S. R. Loss, K. S. Smallwood, W. P. Erickson. 2016. Avian fatalities at wind energy facilities in North America: A comparison of recent approaches. Human–Wildlife Interactions 10(1):7-18.

Sadar, M. J., D. S.-M. Guzman, A. Mete, J. Foley, N. Stephenson, K. H. Rogers, C. Grosset, K. S. Smallwood, J. Shipman, A. Wells, S. D. White, D. A. Bell, and M. G. Hawkins. 2015. Mange Caused by a novel Micnemidocoptes mite in a Golden Eagle (*Aquila chrysaetos*). Journal of Avian Medicine and Surgery 29(3):231-237.

Smallwood, K. S. 2015. Habitat fragmentation and corridors. Pages 84-101 in M. L. Morrison and H. A. Mathewson, Eds., Wildlife habitat conservation: concepts, challenges, and solutions. John Hopkins University Press, Baltimore, Maryland, USA.

EXHIBIT D

FASTCAST

Deborah Holley

Cc/ Richard Drurey

December 1, 2025

PRELIMINARY SHADOW ANALYSIS: **PROPOSED FAMILY ZONING 2025**, JOE DIMAGGIO PLAYGROUND, SAN FRANCISCO

Fastcast is hereby submitting the results of a **programmatic shadow analysis** prepared for the proposed **Family Zoning Plan**. This analysis is intended to quantify the **generalized potential change in shadow on Joe DiMaggio Playground** under a scenario in which the proposed height increases on surrounding parcels are fully utilized.

As part of the methodology, **City building footprint data** was used to define both the **existing zoning height extrusions** and the **Family Zoning Plan height extrusions** using the **same building footprints**. In this area, the **existing zoning envelope (generally 40 feet in height)** is treated as an **existing shadow-casting condition**, and the Family Zoning scenario adds only the **incremental height above this existing zoning envelope**. The **proposed shadows are therefore based solely on the height increase introduced by the Family Zoning Plan**, and **net new shadow** on Joe DiMaggio Playground is calculated only for this **incremental zoning height increase**.

The analysis applies **methodologies and data models consistent with San Francisco Planning Department and Planning Code Section 295 ("Shadow Ordinance") standards and procedures**, as outlined in the July 2014 memorandum *"Shadow Analysis Procedures and Scope Requirements"* and as refined by subsequent written directives issued by the San Francisco Planning Department.

I. INTRODUCTION

This memorandum documents **preliminary quantitative shadow results** for **Joe DiMaggio Playground** associated with proposed height increases under the **San Francisco Family Zoning Plan (FZP)** in the North Beach area.

The purpose is to:

1. Summarize the **Family Zoning Plan objectives**,
2. Describe the **objective of the shadow analysis** for Joe DiMaggio Playground, and
3. Present a **neutral, scientific summary** of the **net new shadow** on the playground and the **times of day/season** when this potential shadow increase overlaps with typical playground activities.

No conclusions are offered regarding policy, compliance, or adequacy; this memo is limited to **description and quantification**.

II. FAMILY ZONING PLAN – CONTEXT & OBJECTIVES

According to the **Family Zoning Plan "Five Fast Facts"** document:

- The Plan is intended to create capacity for **over 36,000 homes** on San Francisco's north and west sides.
- In most areas, existing building heights remain **40 feet (approximately four stories)**.
- The Plan allows **two to four additional stories** in select locations, mainly **near shopping, transit, and on major streets**, with high-rise buildings permitted only in limited areas.
- The Plan uses a **form-based approach**, regulating height, bulk, and setbacks, and is paired with **objective design standards**.
- The stated goals include meeting state housing requirements, maintaining local control over land use decisions, and strengthening tenant protections by directing growth toward underused and vacant sites.

Within this framework, the North Beach area surrounding **Joe DiMaggio Playground** is identified for **increased maximum building heights**, which in turn has the potential to increase shadow on the playground.

III. OBJECTIVE OF THE SHADOW ANALYSIS

The objective of the shadow analysis is to **quantify net new shadow** that could occur on **Joe DiMaggio Playground** as a result of the **proposed Family Zoning height increases**, using standard methods applied in San Francisco shadow studies.

Specifically, the analysis aims to:

1. Measure **annual shadow load** on Joe DiMaggio Playground under:
    - Existing conditions, and
    - A scenario with Family Zoning Plan height increases.
2. Determine:
    - **Net new annual shadow** (in square foot hours, sfh),
    - **Percent of available sunlight time** affected,
    - **Maximum area of net new shadow** and **percentage of the playground covered**, and
    - **Dates, times of day, and seasons** when net new shadow occurs.

These results are summarized in the City's **"PROPOSED FAMILY ZONING HEIGHT INCREASE – JOE DIMAGGIO ANNUAL SHADOW LOADS / SQUARE FOOT HOURS (sfh)"** sheet, which is the primary quantitative source referenced here.

FASTCAST

IV. QUANTITATIVE SHADOW RESULTS – JOE DIMAGGIO PLAYGROUND

All values below are taken directly from the **Joe DiMaggio Playground shadow summary** unless otherwise noted. Note: Existing shadow is based on Data SF Building Footprints : https://data.sfgov.org/Geographic-Locations-and-Boundaries/Building-Footprints/ynuv-fyni/about_data and Zoning heights derived from Proposed zoning interactive map: https://experience.arcgis.com/experience/6e0e399f9c82456dbda233eacebc433d/

PROPOSED FAMILY ZONING HEIGHT INCREASE JOE DIMAGGIO ANNUAL SHADOW LOADS / SQUARE FOOT HOURS (sfh)			
Existing / Current Shadow	Project Net New Shadow	Existing + Project Shadow	Remaining Sunlight
9.63%	**1.485%**	**11.115%**	**88.89%**
31,210,748 sfh	4,814,888 sfh	36,025,636 sfh	288,182,732 sfh

Joe DiMaggio Annual Shadow Load with Project (sfh)	36,025,636 sfh

EXISTING SHADOW DETAILS	
Range in existing shadow area coverage throughout the year	Between 2% - 72%
Time of year / time of day most affected by existing shadow	Fall / Early Morning (before 8:00 AM)

NET NEW SHADOW DETAILS	
Days net new shadow would occur (date range)	Year-round
Date(s) with most sfh net new shadow	October 11 & March 1
Season / Time of day most affected by net new shadow	Winter / Late Afternoon (after 4:30 PM)
Area of largest net new shadow (date and time)	23,682 sf (October 11 & March 1 @ 5:37 PM)
Percentage of Joe DiMaggio covered by largest shadow	27.18%
Range in shadow coverage throughout the year (area range)	Between 0% - 27% (0 - 23,682 sf)
Average shadow size across affected dates (percent coverage)	4,488 sf (5.15%)
Date(s) with the longest duration of net new shadow (duration)	October 11 & March 1 (4 hr 6 min +/- 14 min)
Range in daily net new shadow duration across affected dates	Between zero minutes up to 4 hr 6 min (+/- 14 min)
Average daily net new shadow duration across affected dates	3 hr 22 min

Timing and Seasonal Pattern of Net New Shadow

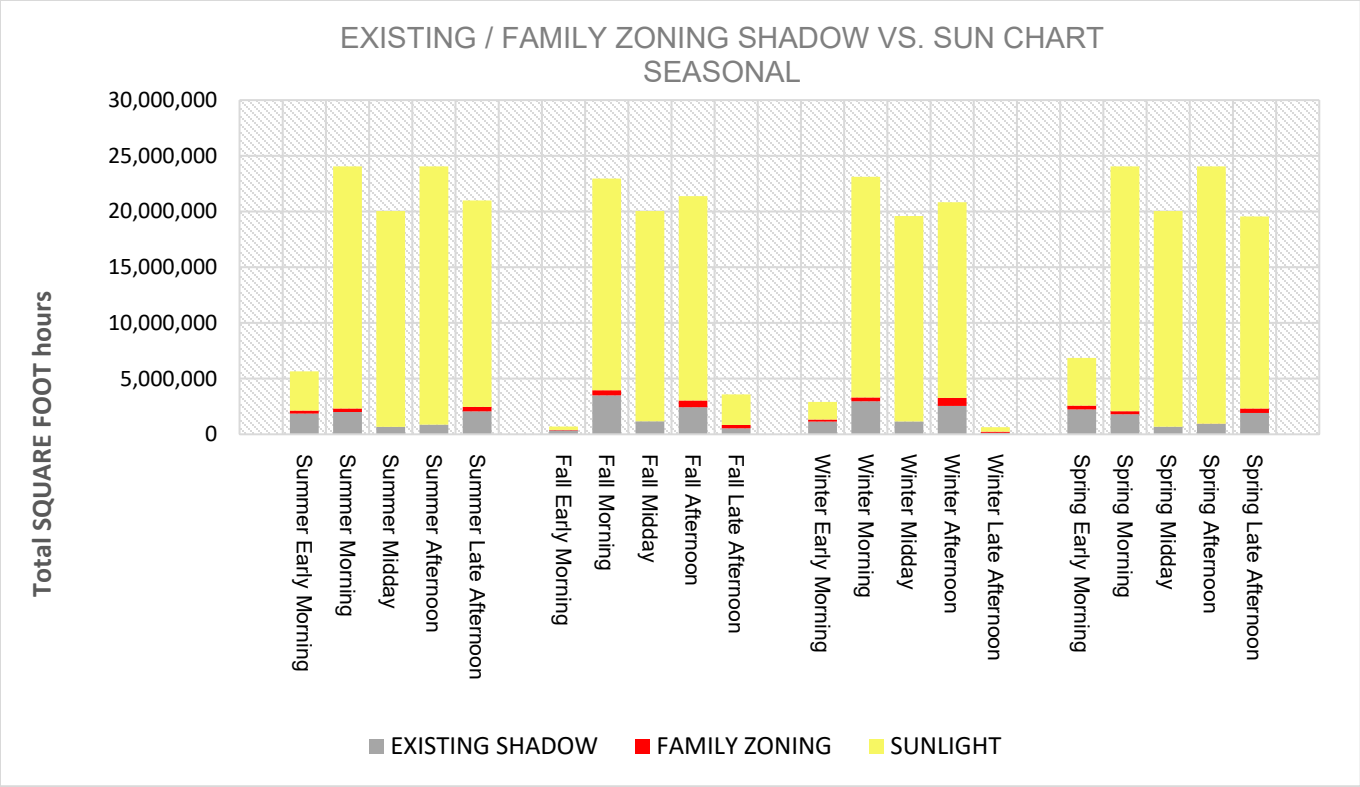
Also from the shadow summary:

- **Days net new shadow would occur:**
  - **Year-round**
- **Date(s) with most sfh net new shadow:**
  - **October 11 & March 1**
  - **Season / Time of day most affected by net new shadow: Winter / Late Afternoon (after 4:30 PM)**

Existing Shadow Context

For reference, the summary characterizes **existing shadow** as:

- **Range in existing shadow area coverage throughout the year: 2% – 72%** of the playground area
- **Time of year / time of day most affected by existing shadow: Fall / Early Morning (before 8:00 AM)**



V. QUALITATIVE CONTEXT: PLAYGROUND ACTIVITIES & TIME OF USE

This section does **not** evaluate impact or significance. It is limited to describing **typical types of activities** that commonly occur in neighborhood playgrounds like Joe DiMaggio during the times identified in the shadow summary.

A. Typical Playground Use Patterns

Based on the nature of Joe DiMaggio Playground as a neighborhood-serving facility (with play equipment, courts/fields, and open space), typical use patterns can reasonably be described as including:

- **Morning hours:**
  - Caregivers with young children,
  - Individual exercise and walking.
- **Midday / Early afternoon:**
  - Younger children and caregivers,
  - Some daytime recreation by residents and visitors.
- **Afternoon / Late afternoon (after school):**
  - **School-aged children and teens** using play areas and courts,
  - Potential **organized or informal sports activities**,
  - Families visiting after school pick-up.
- **Early evening (seasonally):**
  - Adults and families using the space after work,
  - Light recreation, socializing, and play until dusk.

These patterns are typical of urban playgrounds serving nearby residential neighborhoods with families.

B. Alignment with Net New Shadow Timing

The **shadow summary** identifies the **season and time of day most affected by net new shadow** as **"Winter / Late Afternoon (after 4:30 PM)"**, with net new shadow occurring **year-round** and the **longest durations and largest footprints** occurring around **October 11 and March 1 in the late afternoon (e.g., 5:37 PM for the largest single footprint).**
That time window generally overlaps with:

- **After-school hours** for school-aged children and teens, and
- **After-work hours** when adults and families may visit the playground.

The **existing shadow** is described as being most pronounced in **"Fall / Early Morning (before 8:00 AM)"**, which is a different part of the day than the late-afternoon period identified for net new shadow. This indicates that, under the Family Zoning scenario, the **distribution of shadow over the day** changes, with **additional shadow present during late-afternoon hours** when playground use often involves family and youth activities.
Again, this section is descriptive only and does not characterize these changes as beneficial or adverse.

VI. SUMMARY

- The Family Zoning Plan allows **increased building heights** in select areas, including near Joe DiMaggio Playground, in order to support housing production goals and apply form-based, objective design standards.
- The City's **Joe DiMaggio shadow summary** quantifies **net new annual shadow load, coverage, and timing** for the playground under the Family Zoning height scenario, showing:
    - Net new shadow of **4,814,888 sfh (1.485% of available sunlight time)**,
    - A combined total shadow load of **36,025,636 sfh (11.115%)**,
    - Maximum net new momentary coverage of **23,682 square feet (27.18% of the playground)** on specific dates and times, and
    - Concentration of net new shadow in **winter late afternoons (after 4:30 PM)**, with **year-round occurrence**.
- Typical playground use during late afternoons includes **after-school and after-work** activities by children, teens, and families, which may coincide in time with the **period identified as most affected by net new shadow**.

This concludes the **descriptive, non-evaluative summary** of the Family Zoning Plan context and the associated shadow analysis results for Joe DiMaggio Playground.

Conclusion

Fastcast has determined, based on the 3D digital zoning-based massing model and related design information provided by DataSF and the proposed Family Zoning Plan that the height increase would introduce net new shadow on Joe DiMaggio Playground relative to existing zoning conditions. The results presented herein reflect a programmatic, zoning-based analysis; as individual development proposals are advanced and more detailed building designs become available, additional project-specific shadow studies can be prepared using the same methodologies to further refine these findings.

Please direct any question to Adam Noble. adam@fastcastcity.com

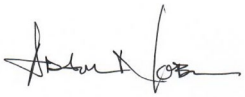


EXHIBIT A

PROJECT: Family Zoning Plan
OPEN SPACE: Joe DiMaggio (87,120 sf)

FASTCAST

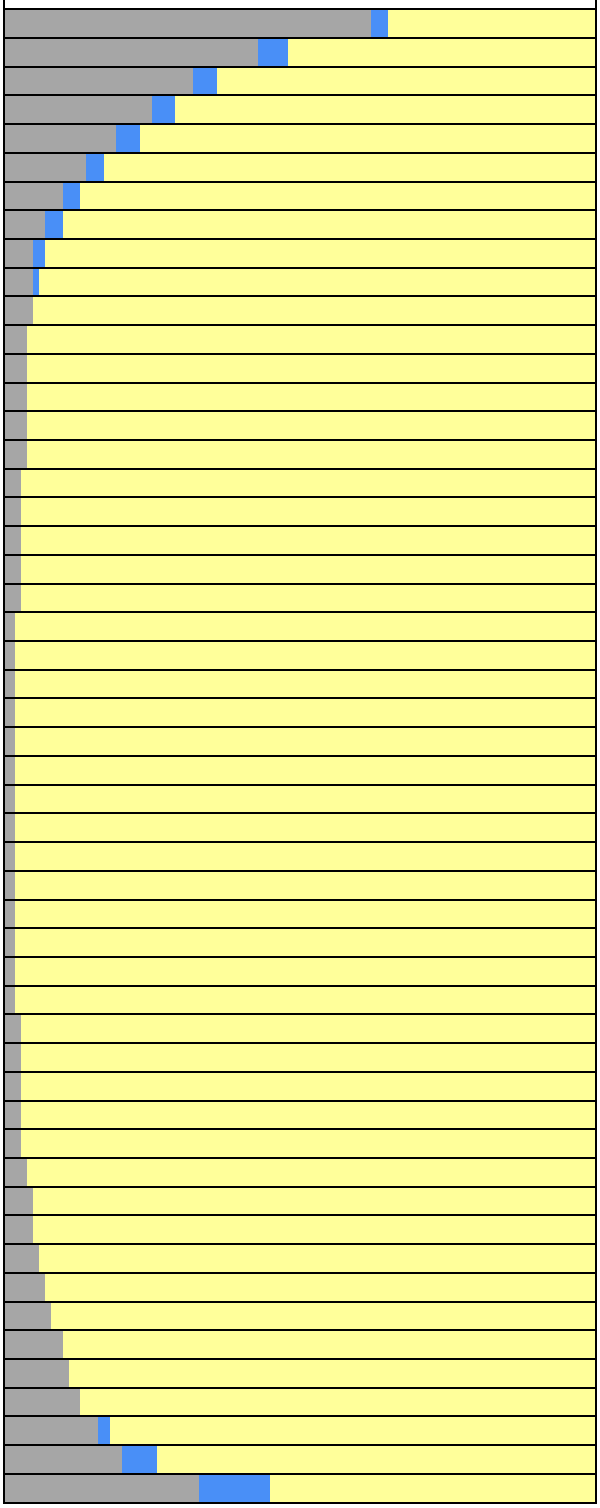
JUNE 21

Summer solstice
Analysis hours: 6:46 AM-7:36 PM (PDT)

Shadow / Sunlight Balance Key
Existing Shadow | Project Shadow | Sunlight Remaining

Analysis Time	EXISTING SHADOW		PROJECT NET NEW SHADOW	
	Shadow Area	Coverage	Shadow Area	Coverage
6:46 AM	54,298 sf	62.33%	2,884 sf	3.31%
7:00 AM	37,059 sf	42.54%	4,008 sf	4.60%
7:15 AM	27,564 sf	31.64%	3,779 sf	4.34%
7:30 AM	21,585 sf	24.78%	3,408 sf	3.91%
7:45 AM	16,695 sf	19.16%	3,117 sf	3.58%
8:00 AM	12,478 sf	14.32%	2,829 sf	3.25%
8:15 AM	8,935 sf	10.26%	2,548 sf	2.92%
8:30 AM	5,965 sf	6.85%	2,316 sf	2.66%
8:45 AM	4,408 sf	5.06%	1,881 sf	2.16%
9:00 AM	4,173 sf	4.79%	730 sf	0.84%
9:15 AM	3,995 sf	4.59%	6 sf	0.01%
9:30 AM	3,816 sf	4.38%	0 sf	0.00%
9:45 AM	3,655 sf	4.20%	0 sf	0.00%
10:00 AM	3,476 sf	3.99%	0 sf	0.00%
10:15 AM	3,299 sf	3.79%	0 sf	0.00%
10:30 AM	3,114 sf	3.57%	0 sf	0.00%
10:45 AM	2,951 sf	3.39%	0 sf	0.00%
11:00 AM	2,772 sf	3.18%	0 sf	0.00%
11:15 AM	2,615 sf	3.00%	0 sf	0.00%
11:30 AM	2,434 sf	2.79%	0 sf	0.00%
11:45 AM	2,277 sf	2.61%	0 sf	0.00%
12:00 PM	2,094 sf	2.40%	0 sf	0.00%
12:15 PM	1,940 sf	2.23%	0 sf	0.00%
12:30 PM	1,737 sf	1.99%	0 sf	0.00%
12:45 PM	1,578 sf	1.81%	0 sf	0.00%
1:00 PM	1,344 sf	1.54%	0 sf	0.00%
1:15 PM	1,442 sf	1.66%	0 sf	0.00%
1:30 PM	1,521 sf	1.75%	0 sf	0.00%
1:45 PM	1,658 sf	1.90%	0 sf	0.00%
2:00 PM	1,721 sf	1.98%	0 sf	0.00%
2:15 PM	1,841 sf	2.11%	0 sf	0.00%
2:30 PM	1,898 sf	2.18%	0 sf	0.00%
2:45 PM	1,995 sf	2.29%	0 sf	0.00%
3:00 PM	2,049 sf	2.35%	0 sf	0.00%
3:15 PM	2,132 sf	2.45%	0 sf	0.00%
3:30 PM	2,186 sf	2.51%	0 sf	0.00%
3:45 PM	2,248 sf	2.58%	0 sf	0.00%
4:00 PM	2,241 sf	2.57%	0 sf	0.00%
4:15 PM	2,472 sf	2.84%	0 sf	0.00%
4:30 PM	3,013 sf	3.46%	0 sf	0.00%
4:45 PM	3,530 sf	4.05%	0 sf	0.00%
5:00 PM	4,110 sf	4.72%	0 sf	0.00%
5:15 PM	4,753 sf	5.46%	0 sf	0.00%
5:30 PM	5,486 sf	6.30%	0 sf	0.00%
5:45 PM	6,314 sf	7.25%	0 sf	0.00%
6:00 PM	7,287 sf	8.36%	0 sf	0.00%
6:15 PM	8,437 sf	9.68%	0 sf	0.00%
6:30 PM	9,878 sf	11.34%	0 sf	0.00%
6:45 PM	11,730 sf	13.46%	295 sf	0.34%
7:00 PM	14,222 sf	16.33%	1,770 sf	2.03%
7:15 PM	17,809 sf	20.44%	5,586 sf	6.41%
7:36 PM	29,084 sf	33.38%	10,652 sf	12.23%

SHADOW/SUNLIGHT BALANCE
Relative levels of Shadow vs. Sun



PROJECT: Family Zoning Plan
OPEN SPACE: Joe DiMaggio (87,120 sf)

JUNE 28

Mirror date: June 14
Analysis hours: 6:48 AM-7:36 PM (PDT)

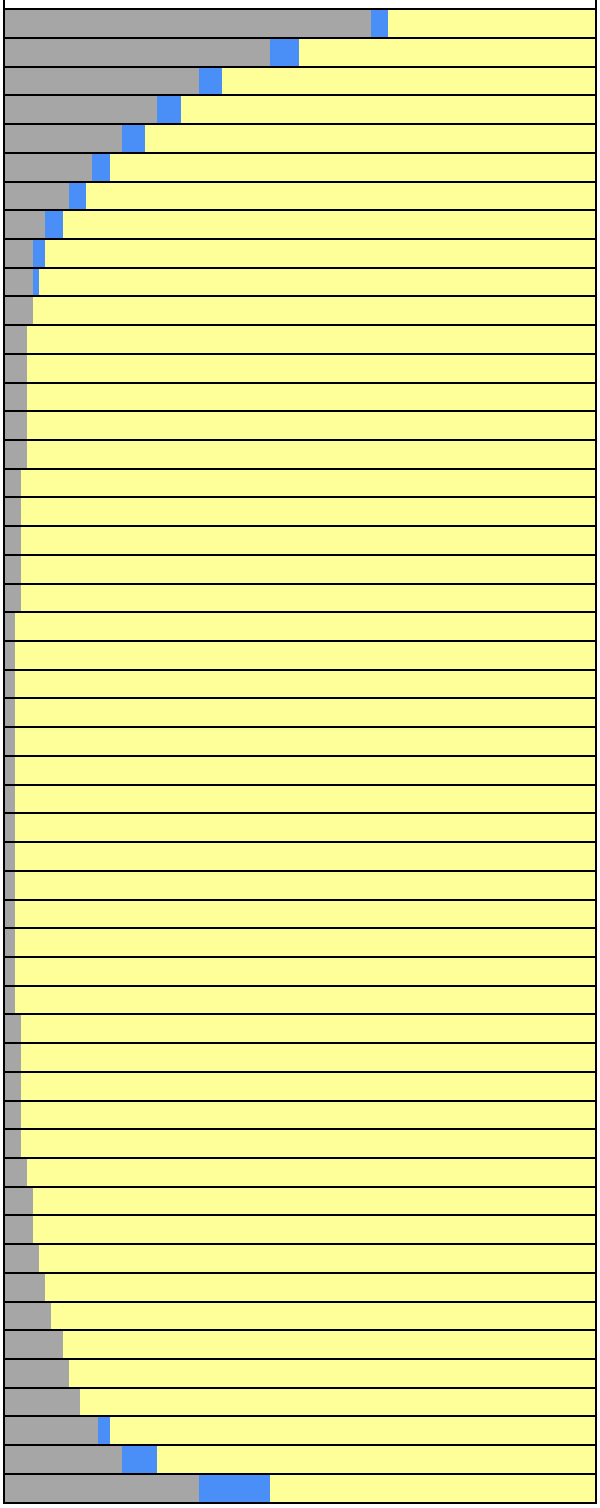
Shadow / Sunlight Balance Key

Existing Shadow | Project Shadow | Sunlight Remaining

Analysis Time	EXISTING SHADOW		PROJECT NET NEW SHADOW	
	Shadow Area	Coverage	Shadow Area	Coverage
6:48 AM	54,172 sf	62.18%	2,814 sf	3.23%
7:00 AM	38,856 sf	44.60%	4,046 sf	4.64%
7:15 AM	28,513 sf	32.73%	3,845 sf	4.41%
7:30 AM	22,279 sf	25.57%	3,463 sf	3.97%
7:45 AM	17,311 sf	19.87%	3,154 sf	3.62%
8:00 AM	12,968 sf	14.88%	2,875 sf	3.30%
8:15 AM	9,336 sf	10.72%	2,593 sf	2.98%
8:30 AM	6,273 sf	7.20%	2,353 sf	2.70%
8:45 AM	4,507 sf	5.17%	2,014 sf	2.31%
9:00 AM	4,222 sf	4.85%	875 sf	1.00%
9:15 AM	4,036 sf	4.63%	30 sf	0.03%
9:30 AM	3,857 sf	4.43%	0 sf	0.00%
9:45 AM	3,694 sf	4.24%	0 sf	0.00%
10:00 AM	3,516 sf	4.04%	0 sf	0.00%
10:15 AM	3,340 sf	3.83%	0 sf	0.00%
10:30 AM	3,152 sf	3.62%	0 sf	0.00%
10:45 AM	2,989 sf	3.43%	0 sf	0.00%
11:00 AM	2,807 sf	3.22%	0 sf	0.00%
11:15 AM	2,650 sf	3.04%	0 sf	0.00%
11:30 AM	2,469 sf	2.83%	0 sf	0.00%
11:45 AM	2,308 sf	2.65%	0 sf	0.00%
12:00 PM	2,127 sf	2.44%	0 sf	0.00%
12:15 PM	1,973 sf	2.26%	0 sf	0.00%
12:30 PM	1,769 sf	2.03%	0 sf	0.00%
12:45 PM	1,612 sf	1.85%	0 sf	0.00%
1:00 PM	1,364 sf	1.57%	0 sf	0.00%
1:15 PM	1,451 sf	1.67%	0 sf	0.00%
1:30 PM	1,523 sf	1.75%	0 sf	0.00%
1:45 PM	1,661 sf	1.91%	0 sf	0.00%
2:00 PM	1,728 sf	1.98%	0 sf	0.00%
2:15 PM	1,848 sf	2.12%	0 sf	0.00%
2:30 PM	1,902 sf	2.18%	0 sf	0.00%
2:45 PM	2,006 sf	2.30%	0 sf	0.00%
3:00 PM	2,063 sf	2.37%	0 sf	0.00%
3:15 PM	2,146 sf	2.46%	0 sf	0.00%
3:30 PM	2,197 sf	2.52%	0 sf	0.00%
3:45 PM	2,264 sf	2.60%	0 sf	0.00%
4:00 PM	2,230 sf	2.56%	0 sf	0.00%
4:15 PM	2,455 sf	2.82%	0 sf	0.00%
4:30 PM	2,953 sf	3.39%	0 sf	0.00%
4:45 PM	3,470 sf	3.98%	0 sf	0.00%
5:00 PM	4,046 sf	4.64%	0 sf	0.00%
5:15 PM	4,679 sf	5.37%	0 sf	0.00%
5:30 PM	5,407 sf	6.21%	0 sf	0.00%
5:45 PM	6,230 sf	7.15%	0 sf	0.00%
6:00 PM	7,192 sf	8.26%	0 sf	0.00%
6:15 PM	8,321 sf	9.55%	0 sf	0.00%
6:30 PM	9,741 sf	11.18%	0 sf	0.00%
6:45 PM	11,553 sf	13.26%	223 sf	0.26%
7:00 PM	13,976 sf	16.04%	1,556 sf	1.79%
7:15 PM	17,471 sf	20.05%	5,228 sf	6.00%
7:36 PM	28,841 sf	33.10%	10,732 sf	12.32%

SHADOW/SUNLIGHT BALANCE

Relative levels of Shadow vs. Sun



PROJECT: Family Zoning Plan
OPEN SPACE: Joe DiMaggio (87,120 sf)

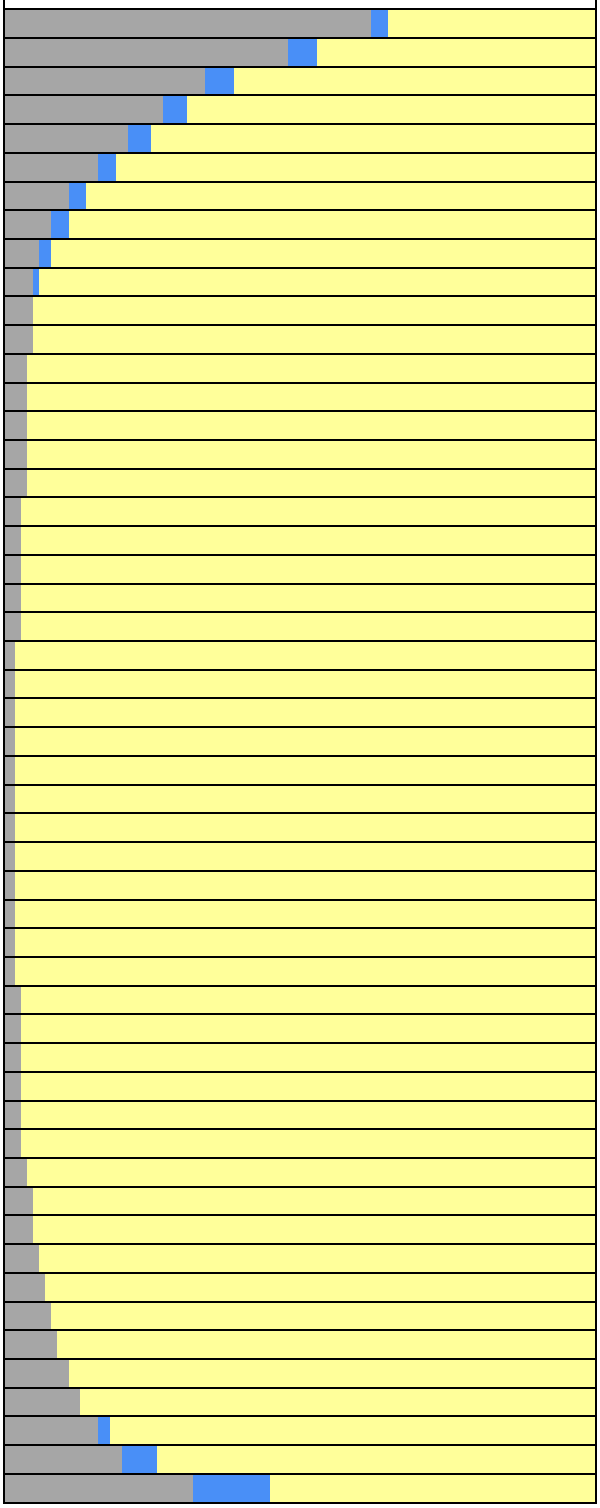
JULY 5

Mirror date: June 7
Analysis hours: 6:52 AM-7:36 PM (PDT)

Shadow / Sunlight Balance Key
Existing Shadow | Project Shadow | Sunlight Remaining

Analysis Time	EXISTING SHADOW		PROJECT NET NEW SHADOW	
	Shadow Area	Coverage	Shadow Area	Coverage
6:52 AM	53,801 sf	61.75%	2,547 sf	2.92%
7:00 AM	41,891 sf	48.08%	4,088 sf	4.69%
7:15 AM	29,973 sf	34.40%	3,979 sf	4.57%
7:30 AM	23,337 sf	26.79%	3,577 sf	4.11%
7:45 AM	18,182 sf	20.87%	3,252 sf	3.73%
8:00 AM	13,674 sf	15.70%	2,949 sf	3.39%
8:15 AM	9,879 sf	11.34%	2,662 sf	3.06%
8:30 AM	6,755 sf	7.75%	2,412 sf	2.77%
8:45 AM	4,826 sf	5.54%	2,115 sf	2.43%
9:00 AM	4,330 sf	4.97%	1,079 sf	1.24%
9:15 AM	4,139 sf	4.75%	107 sf	0.12%
9:30 AM	3,954 sf	4.54%	0 sf	0.00%
9:45 AM	3,782 sf	4.34%	0 sf	0.00%
10:00 AM	3,600 sf	4.13%	0 sf	0.00%
10:15 AM	3,421 sf	3.93%	0 sf	0.00%
10:30 AM	3,230 sf	3.71%	0 sf	0.00%
10:45 AM	3,063 sf	3.52%	0 sf	0.00%
11:00 AM	2,880 sf	3.31%	0 sf	0.00%
11:15 AM	2,722 sf	3.12%	0 sf	0.00%
11:30 AM	2,539 sf	2.91%	0 sf	0.00%
11:45 AM	2,377 sf	2.73%	0 sf	0.00%
12:00 PM	2,192 sf	2.52%	0 sf	0.00%
12:15 PM	2,041 sf	2.34%	0 sf	0.00%
12:30 PM	1,835 sf	2.11%	0 sf	0.00%
12:45 PM	1,675 sf	1.92%	0 sf	0.00%
1:00 PM	1,424 sf	1.63%	0 sf	0.00%
1:15 PM	1,483 sf	1.70%	0 sf	0.00%
1:30 PM	1,568 sf	1.80%	0 sf	0.00%
1:45 PM	1,705 sf	1.96%	0 sf	0.00%
2:00 PM	1,776 sf	2.04%	0 sf	0.00%
2:15 PM	1,894 sf	2.17%	0 sf	0.00%
2:30 PM	1,956 sf	2.24%	0 sf	0.00%
2:45 PM	2,062 sf	2.37%	0 sf	0.00%
3:00 PM	2,117 sf	2.43%	0 sf	0.00%
3:15 PM	2,204 sf	2.53%	0 sf	0.00%
3:30 PM	2,256 sf	2.59%	0 sf	0.00%
3:45 PM	2,337 sf	2.68%	0 sf	0.00%
4:00 PM	2,358 sf	2.71%	0 sf	0.00%
4:15 PM	2,466 sf	2.83%	0 sf	0.00%
4:30 PM	2,885 sf	3.31%	0 sf	0.00%
4:45 PM	3,408 sf	3.91%	0 sf	0.00%
5:00 PM	3,984 sf	4.57%	0 sf	0.00%
5:15 PM	4,615 sf	5.30%	0 sf	0.00%
5:30 PM	5,340 sf	6.13%	0 sf	0.00%
5:45 PM	6,165 sf	7.08%	0 sf	0.00%
6:00 PM	7,127 sf	8.18%	0 sf	0.00%
6:15 PM	8,255 sf	9.48%	0 sf	0.00%
6:30 PM	9,671 sf	11.10%	0 sf	0.00%
6:45 PM	11,478 sf	13.17%	170 sf	0.20%
7:00 PM	13,898 sf	15.95%	1,396 sf	1.60%
7:15 PM	17,367 sf	19.94%	4,992 sf	5.73%
7:36 PM	28,122 sf	32.28%	10,951 sf	12.57%

SHADOW/SUNLIGHT BALANCE
Relative levels of Shadow vs. Sun



PROJECT: Family Zoning Plan
OPEN SPACE: Joe DiMaggio (87,120 sf)

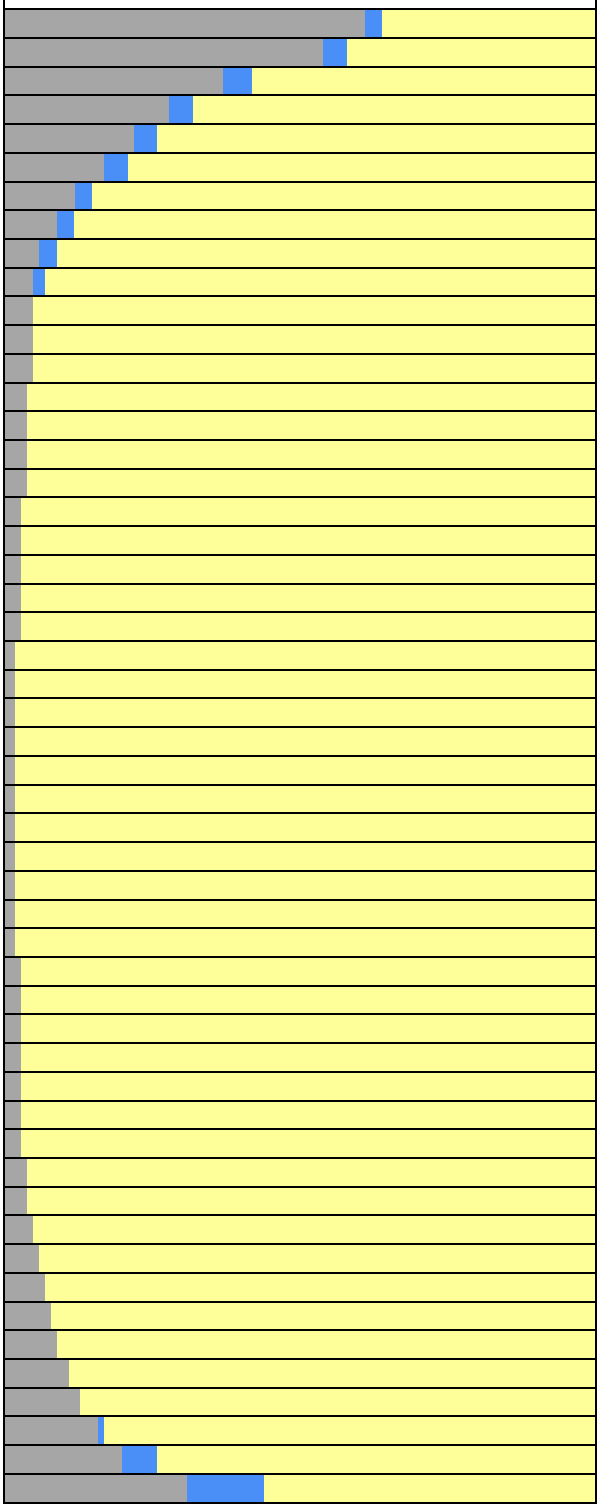
JULY 12

Mirror date: May 31
Analysis hours: 6:56 AM-7:33 PM (PDT)

Shadow / Sunlight Balance Key
Existing Shadow | Project Shadow | Sunlight Remaining

Analysis Time	EXISTING SHADOW		PROJECT NET NEW SHADOW	
	Shadow Area	Coverage	Shadow Area	Coverage
6:56 AM	53,097 sf	60.95%	2,408 sf	2.76%
7:00 AM	47,045 sf	54.00%	3,395 sf	3.90%
7:15 AM	32,076 sf	36.82%	4,194 sf	4.81%
7:30 AM	24,775 sf	28.44%	3,764 sf	4.32%
7:45 AM	19,251 sf	22.10%	3,412 sf	3.92%
8:00 AM	14,578 sf	16.73%	3,072 sf	3.53%
8:15 AM	10,583 sf	12.15%	2,769 sf	3.18%
8:30 AM	7,405 sf	8.50%	2,490 sf	2.86%
8:45 AM	5,297 sf	6.08%	2,234 sf	2.56%
9:00 AM	4,503 sf	5.17%	1,333 sf	1.53%
9:15 AM	4,299 sf	4.93%	244 sf	0.28%
9:30 AM	4,099 sf	4.71%	0 sf	0.00%
9:45 AM	3,921 sf	4.50%	0 sf	0.00%
10:00 AM	3,732 sf	4.28%	0 sf	0.00%
10:15 AM	3,545 sf	4.07%	0 sf	0.00%
10:30 AM	3,347 sf	3.84%	0 sf	0.00%
10:45 AM	3,178 sf	3.65%	0 sf	0.00%
11:00 AM	2,989 sf	3.43%	0 sf	0.00%
11:15 AM	2,825 sf	3.24%	0 sf	0.00%
11:30 AM	2,640 sf	3.03%	0 sf	0.00%
11:45 AM	2,482 sf	2.85%	0 sf	0.00%
12:00 PM	2,290 sf	2.63%	0 sf	0.00%
12:15 PM	2,134 sf	2.45%	0 sf	0.00%
12:30 PM	1,930 sf	2.22%	0 sf	0.00%
12:45 PM	1,769 sf	2.03%	0 sf	0.00%
1:00 PM	1,511 sf	1.73%	0 sf	0.00%
1:15 PM	1,552 sf	1.78%	0 sf	0.00%
1:30 PM	1,648 sf	1.89%	0 sf	0.00%
1:45 PM	1,788 sf	2.05%	0 sf	0.00%
2:00 PM	1,857 sf	2.13%	0 sf	0.00%
2:15 PM	1,980 sf	2.27%	0 sf	0.00%
2:30 PM	2,043 sf	2.34%	0 sf	0.00%
2:45 PM	2,144 sf	2.46%	0 sf	0.00%
3:00 PM	2,204 sf	2.53%	0 sf	0.00%
3:15 PM	2,300 sf	2.64%	0 sf	0.00%
3:30 PM	2,352 sf	2.70%	0 sf	0.00%
3:45 PM	2,434 sf	2.79%	0 sf	0.00%
4:00 PM	2,473 sf	2.84%	0 sf	0.00%
4:15 PM	2,494 sf	2.86%	0 sf	0.00%
4:30 PM	2,739 sf	3.14%	0 sf	0.00%
4:45 PM	3,340 sf	3.83%	0 sf	0.00%
5:00 PM	3,920 sf	4.50%	0 sf	0.00%
5:15 PM	4,559 sf	5.23%	0 sf	0.00%
5:30 PM	5,289 sf	6.07%	0 sf	0.00%
5:45 PM	6,121 sf	7.03%	0 sf	0.00%
6:00 PM	7,093 sf	8.14%	0 sf	0.00%
6:15 PM	8,235 sf	9.45%	0 sf	0.00%
6:30 PM	9,661 sf	11.09%	0 sf	0.00%
6:45 PM	11,496 sf	13.20%	125 sf	0.14%
7:00 PM	13,972 sf	16.04%	1,296 sf	1.49%
7:15 PM	17,555 sf	20.15%	5,128 sf	5.89%
7:33 PM	26,959 sf	30.95%	11,312 sf	12.98%

SHADOW/SUNLIGHT BALANCE
Relative levels of Shadow vs. Sun



PROJECT: Family Zoning Plan
OPEN SPACE: Joe DiMaggio (87,120 sf)

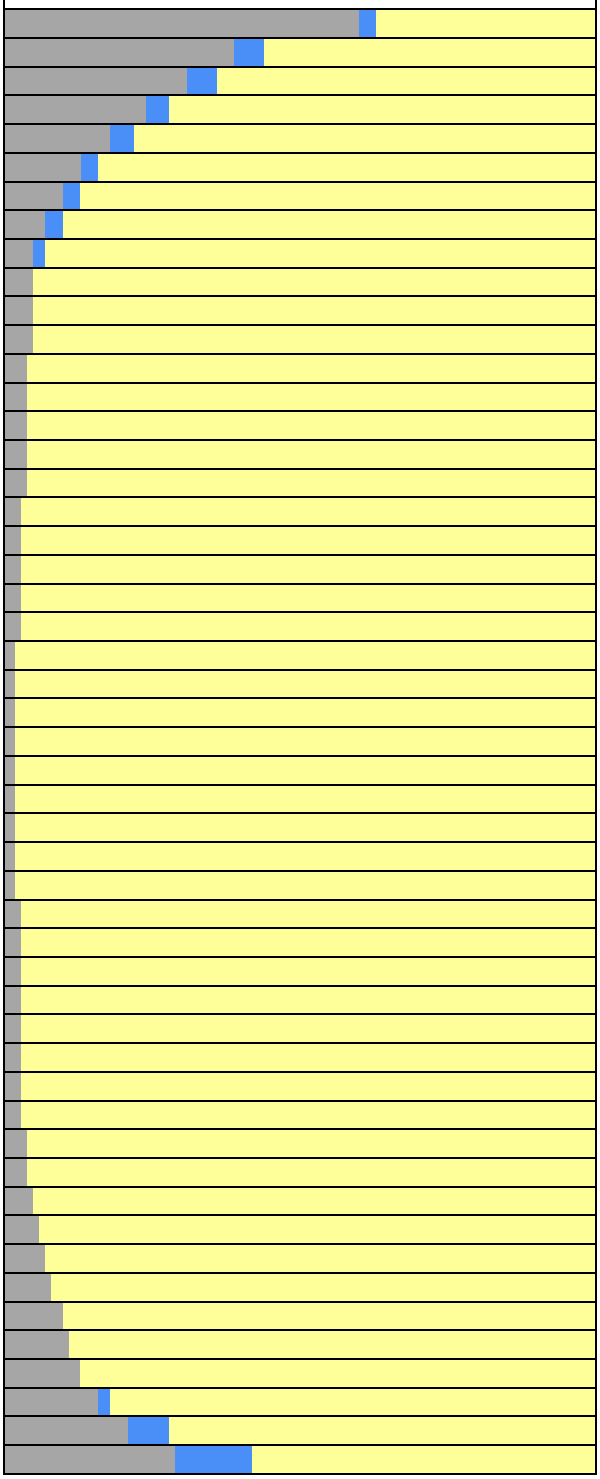
JULY 19

Mirror date: May 24
Analysis hours: 7:01 AM-7:30 PM (PDT)

Shadow / Sunlight Balance Key
Existing Shadow | Project Shadow | Sunlight Remaining

Analysis Time	EXISTING SHADOW		PROJECT NET NEW SHADOW	
	Shadow Area	Coverage	Shadow Area	Coverage
7:01 AM	52,271 sf	60.00%	2,281 sf	2.62%
7:16 AM	33,985 sf	39.01%	4,487 sf	5.15%
7:30 AM	26,609 sf	30.54%	4,026 sf	4.62%
7:45 AM	20,576 sf	23.62%	3,616 sf	4.15%
8:00 AM	15,675 sf	17.99%	3,246 sf	3.73%
8:15 AM	11,348 sf	13.03%	2,894 sf	3.32%
8:30 AM	8,334 sf	9.57%	2,614 sf	3.00%
8:45 AM	5,925 sf	6.80%	2,348 sf	2.69%
9:00 AM	4,748 sf	5.45%	1,645 sf	1.89%
9:15 AM	4,521 sf	5.19%	435 sf	0.50%
9:30 AM	4,297 sf	4.93%	0 sf	0.00%
9:45 AM	4,101 sf	4.71%	0 sf	0.00%
10:00 AM	3,908 sf	4.49%	0 sf	0.00%
10:15 AM	3,712 sf	4.26%	0 sf	0.00%
10:30 AM	3,506 sf	4.02%	0 sf	0.00%
10:45 AM	3,328 sf	3.82%	0 sf	0.00%
11:00 AM	3,134 sf	3.60%	0 sf	0.00%
11:15 AM	2,966 sf	3.40%	0 sf	0.00%
11:30 AM	2,777 sf	3.19%	0 sf	0.00%
11:45 AM	2,612 sf	3.00%	0 sf	0.00%
12:00 PM	2,418 sf	2.78%	0 sf	0.00%
12:15 PM	2,259 sf	2.59%	0 sf	0.00%
12:30 PM	2,055 sf	2.36%	0 sf	0.00%
12:45 PM	1,889 sf	2.17%	0 sf	0.00%
1:00 PM	1,634 sf	1.88%	0 sf	0.00%
1:15 PM	1,667 sf	1.91%	0 sf	0.00%
1:30 PM	1,764 sf	2.03%	0 sf	0.00%
1:45 PM	1,906 sf	2.19%	0 sf	0.00%
2:00 PM	1,976 sf	2.27%	0 sf	0.00%
2:15 PM	2,103 sf	2.41%	0 sf	0.00%
2:30 PM	2,169 sf	2.49%	0 sf	0.00%
2:45 PM	2,279 sf	2.62%	0 sf	0.00%
3:00 PM	2,341 sf	2.69%	0 sf	0.00%
3:15 PM	2,433 sf	2.79%	0 sf	0.00%
3:30 PM	2,495 sf	2.86%	0 sf	0.00%
3:45 PM	2,579 sf	2.96%	0 sf	0.00%
4:00 PM	2,632 sf	3.02%	0 sf	0.00%
4:15 PM	2,708 sf	3.11%	0 sf	0.00%
4:30 PM	2,796 sf	3.21%	0 sf	0.00%
4:45 PM	3,271 sf	3.75%	0 sf	0.00%
5:00 PM	3,867 sf	4.44%	0 sf	0.00%
5:15 PM	4,521 sf	5.19%	0 sf	0.00%
5:30 PM	5,258 sf	6.04%	0 sf	0.00%
5:45 PM	6,110 sf	7.01%	0 sf	0.00%
6:00 PM	7,108 sf	8.16%	0 sf	0.00%
6:15 PM	8,283 sf	9.51%	0 sf	0.00%
6:30 PM	9,748 sf	11.19%	0 sf	0.00%
6:45 PM	11,658 sf	13.38%	95 sf	0.11%
7:00 PM	14,252 sf	16.36%	1,311 sf	1.50%
7:15 PM	18,041 sf	20.71%	5,948 sf	6.83%
7:30 PM	25,516 sf	29.29%	11,670 sf	13.39%

SHADOW/SUNLIGHT BALANCE
Relative levels of Shadow vs. Sun



PROJECT: Family Zoning Plan
OPEN SPACE: Joe DiMaggio (87,120 sf)

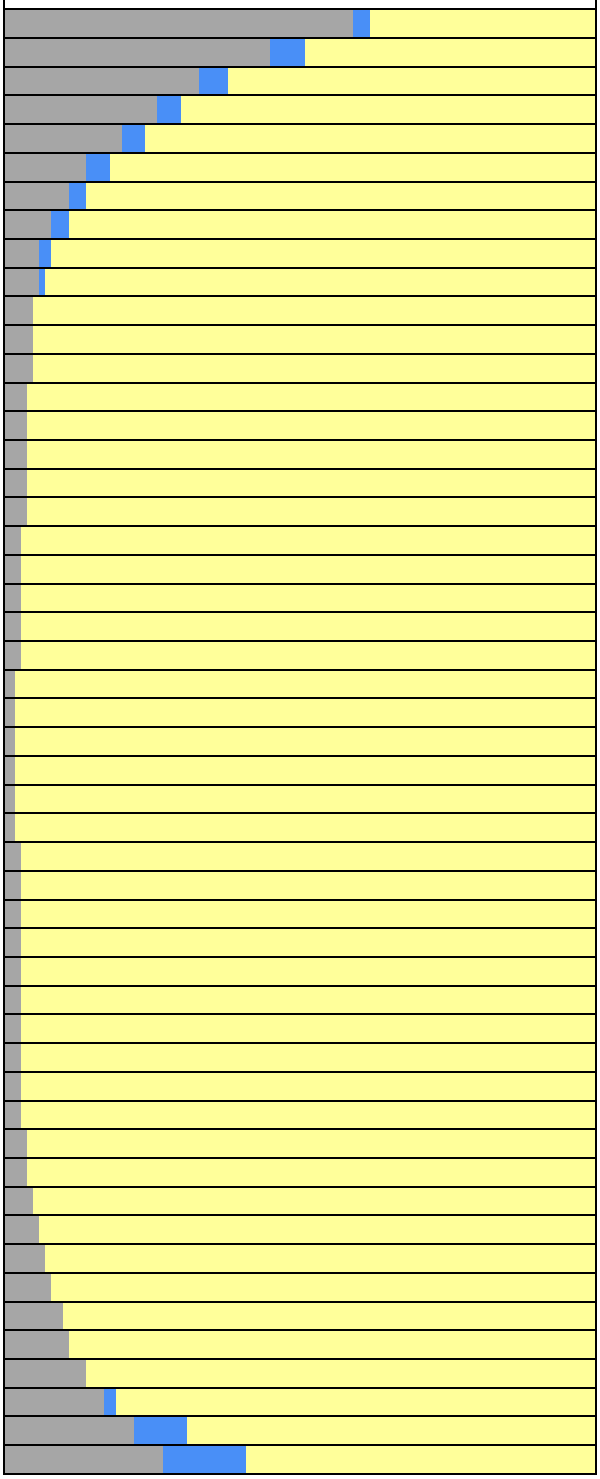
JULY 26

Mirror date: May 17
Analysis hours: 7:07 AM-7:25 PM (PDT)

Shadow / Sunlight Balance Key
Existing Shadow | Project Shadow | Sunlight Remaining

Analysis Time	EXISTING SHADOW		PROJECT NET NEW SHADOW	
	Shadow Area	Coverage	Shadow Area	Coverage
7:07 AM	51,090 sf	58.64%	2,572 sf	2.95%
7:15 AM	38,869 sf	44.62%	4,946 sf	5.68%
7:30 AM	29,015 sf	33.30%	4,396 sf	5.05%
7:45 AM	22,226 sf	25.51%	3,892 sf	4.47%
8:00 AM	17,041 sf	19.56%	3,464 sf	3.98%
8:15 AM	12,600 sf	14.46%	3,080 sf	3.54%
8:30 AM	9,453 sf	10.85%	2,749 sf	3.16%
8:45 AM	6,765 sf	7.77%	2,461 sf	2.82%
9:00 AM	5,085 sf	5.84%	1,979 sf	2.27%
9:15 AM	4,794 sf	5.50%	709 sf	0.81%
9:30 AM	4,553 sf	5.23%	0 sf	0.00%
9:45 AM	4,336 sf	4.98%	0 sf	0.00%
10:00 AM	4,121 sf	4.73%	0 sf	0.00%
10:15 AM	3,918 sf	4.50%	0 sf	0.00%
10:30 AM	3,704 sf	4.25%	0 sf	0.00%
10:45 AM	3,517 sf	4.04%	0 sf	0.00%
11:00 AM	3,313 sf	3.80%	0 sf	0.00%
11:15 AM	3,139 sf	3.60%	0 sf	0.00%
11:30 AM	2,940 sf	3.37%	0 sf	0.00%
11:45 AM	2,774 sf	3.18%	0 sf	0.00%
12:00 PM	2,575 sf	2.96%	0 sf	0.00%
12:15 PM	2,411 sf	2.77%	0 sf	0.00%
12:30 PM	2,204 sf	2.53%	0 sf	0.00%
12:45 PM	2,039 sf	2.34%	0 sf	0.00%
1:00 PM	1,783 sf	2.05%	0 sf	0.00%
1:15 PM	1,826 sf	2.10%	0 sf	0.00%
1:30 PM	1,921 sf	2.21%	0 sf	0.00%
1:45 PM	2,063 sf	2.37%	0 sf	0.00%
2:00 PM	2,139 sf	2.45%	0 sf	0.00%
2:15 PM	2,261 sf	2.60%	0 sf	0.00%
2:30 PM	2,336 sf	2.68%	0 sf	0.00%
2:45 PM	2,452 sf	2.81%	0 sf	0.00%
3:00 PM	2,518 sf	2.89%	0 sf	0.00%
3:15 PM	2,619 sf	3.01%	0 sf	0.00%
3:30 PM	2,681 sf	3.08%	0 sf	0.00%
3:45 PM	2,775 sf	3.19%	0 sf	0.00%
4:00 PM	2,839 sf	3.26%	0 sf	0.00%
4:15 PM	2,913 sf	3.34%	0 sf	0.00%
4:30 PM	2,900 sf	3.33%	0 sf	0.00%
4:45 PM	3,172 sf	3.64%	0 sf	0.00%
5:00 PM	3,822 sf	4.39%	0 sf	0.00%
5:15 PM	4,489 sf	5.15%	0 sf	0.00%
5:30 PM	5,251 sf	6.03%	0 sf	0.00%
5:45 PM	6,127 sf	7.03%	0 sf	0.00%
6:00 PM	7,164 sf	8.22%	0 sf	0.00%
6:15 PM	8,391 sf	9.63%	0 sf	0.00%
6:30 PM	9,922 sf	11.39%	0 sf	0.00%
6:45 PM	11,942 sf	13.71%	76 sf	0.09%
7:00 PM	14,750 sf	16.93%	2,024 sf	2.32%
7:15 PM	18,880 sf	21.67%	7,511 sf	8.62%
7:25 PM	23,869 sf	27.40%	11,981 sf	13.75%

SHADOW/SUNLIGHT BALANCE
Relative levels of Shadow vs. Sun



PROJECT: Family Zoning Plan
OPEN SPACE: Joe DiMaggio (87,120 sf)

AUGUST 2

Mirror date: May 10
Analysis hours: 7:12 AM-7:18 PM (PDT)

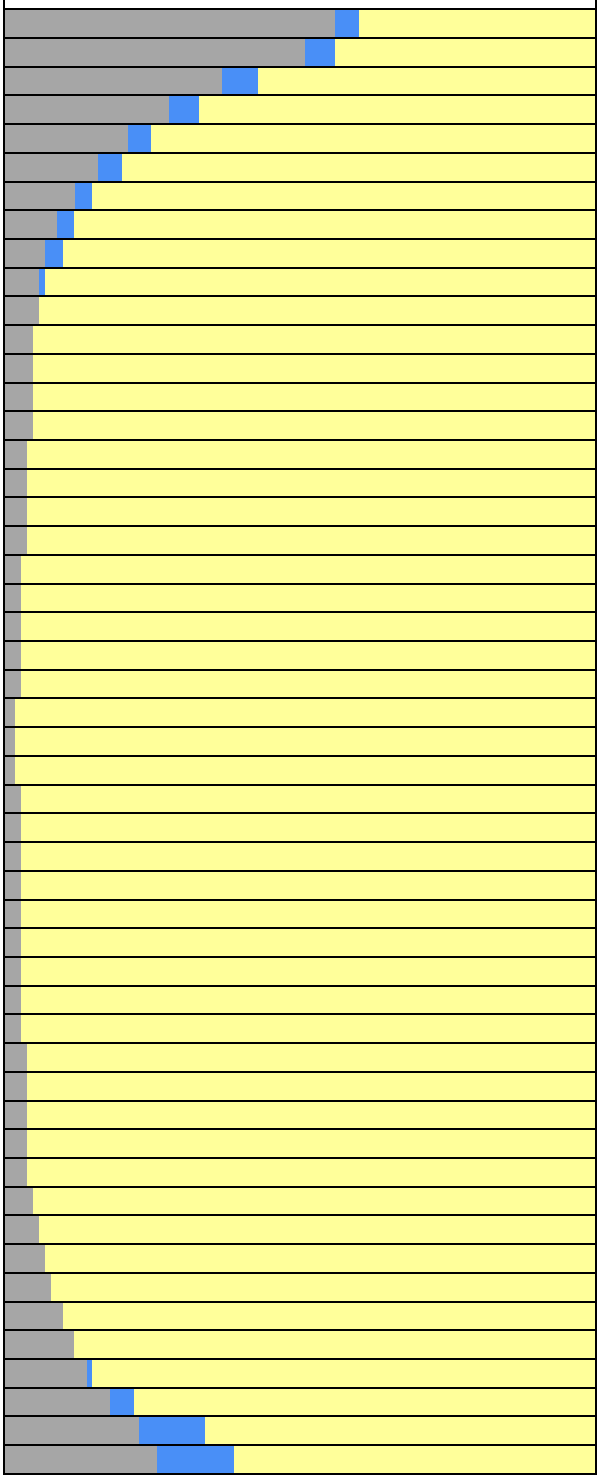
Shadow / Sunlight Balance Key

Existing Shadow | Project Shadow | Sunlight Remaining

Analysis Time	EXISTING SHADOW		PROJECT NET NEW SHADOW	
	Shadow Area	Coverage	Shadow Area	Coverage
7:12 AM	48,899 sf	56.13%	3,210 sf	3.68%
7:15 AM	44,825 sf	51.45%	4,215 sf	4.84%
7:30 AM	31,918 sf	36.64%	4,868 sf	5.59%
7:45 AM	24,175 sf	27.75%	4,263 sf	4.89%
8:00 AM	18,553 sf	21.30%	3,728 sf	4.28%
8:15 AM	14,279 sf	16.39%	3,295 sf	3.78%
8:30 AM	10,743 sf	12.33%	2,923 sf	3.36%
8:45 AM	7,817 sf	8.97%	2,600 sf	2.98%
9:00 AM	5,672 sf	6.51%	2,244 sf	2.58%
9:15 AM	5,131 sf	5.89%	1,027 sf	1.18%
9:30 AM	4,852 sf	5.57%	31 sf	0.04%
9:45 AM	4,613 sf	5.30%	0 sf	0.00%
10:00 AM	4,376 sf	5.02%	0 sf	0.00%
10:15 AM	4,168 sf	4.78%	0 sf	0.00%
10:30 AM	3,937 sf	4.52%	0 sf	0.00%
10:45 AM	3,739 sf	4.29%	0 sf	0.00%
11:00 AM	3,523 sf	4.04%	0 sf	0.00%
11:15 AM	3,342 sf	3.84%	0 sf	0.00%
11:30 AM	3,133 sf	3.60%	0 sf	0.00%
11:45 AM	2,962 sf	3.40%	0 sf	0.00%
12:00 PM	2,757 sf	3.16%	0 sf	0.00%
12:15 PM	2,591 sf	2.97%	0 sf	0.00%
12:30 PM	2,382 sf	2.73%	0 sf	0.00%
12:45 PM	2,210 sf	2.54%	0 sf	0.00%
1:00 PM	1,959 sf	2.25%	0 sf	0.00%
1:15 PM	2,024 sf	2.32%	0 sf	0.00%
1:30 PM	2,120 sf	2.43%	0 sf	0.00%
1:45 PM	2,258 sf	2.59%	0 sf	0.00%
2:00 PM	2,339 sf	2.69%	0 sf	0.00%
2:15 PM	2,465 sf	2.83%	0 sf	0.00%
2:30 PM	2,542 sf	2.92%	0 sf	0.00%
2:45 PM	2,661 sf	3.05%	0 sf	0.00%
3:00 PM	2,738 sf	3.14%	0 sf	0.00%
3:15 PM	2,844 sf	3.26%	0 sf	0.00%
3:30 PM	2,912 sf	3.34%	0 sf	0.00%
3:45 PM	3,018 sf	3.46%	0 sf	0.00%
4:00 PM	3,086 sf	3.54%	0 sf	0.00%
4:15 PM	3,193 sf	3.67%	0 sf	0.00%
4:30 PM	3,263 sf	3.74%	0 sf	0.00%
4:45 PM	3,320 sf	3.81%	0 sf	0.00%
5:00 PM	3,739 sf	4.29%	0 sf	0.00%
5:15 PM	4,484 sf	5.15%	0 sf	0.00%
5:30 PM	5,284 sf	6.06%	0 sf	0.00%
5:45 PM	6,195 sf	7.11%	0 sf	0.00%
6:00 PM	7,291 sf	8.37%	0 sf	0.00%
6:15 PM	8,600 sf	9.87%	0 sf	0.00%
6:30 PM	10,238 sf	11.75%	20 sf	0.02%
6:45 PM	12,439 sf	14.28%	571 sf	0.66%
7:00 PM	15,579 sf	17.88%	3,668 sf	4.21%
7:15 PM	20,473 sf	23.50%	9,975 sf	11.45%
7:18 PM	22,329 sf	25.63%	11,739 sf	13.47%

SHADOW/SUNLIGHT BALANCE

Relative levels of Shadow vs. Sun



PROJECT: Family Zoning Plan
OPEN SPACE: Joe DiMaggio (87,120 sf)

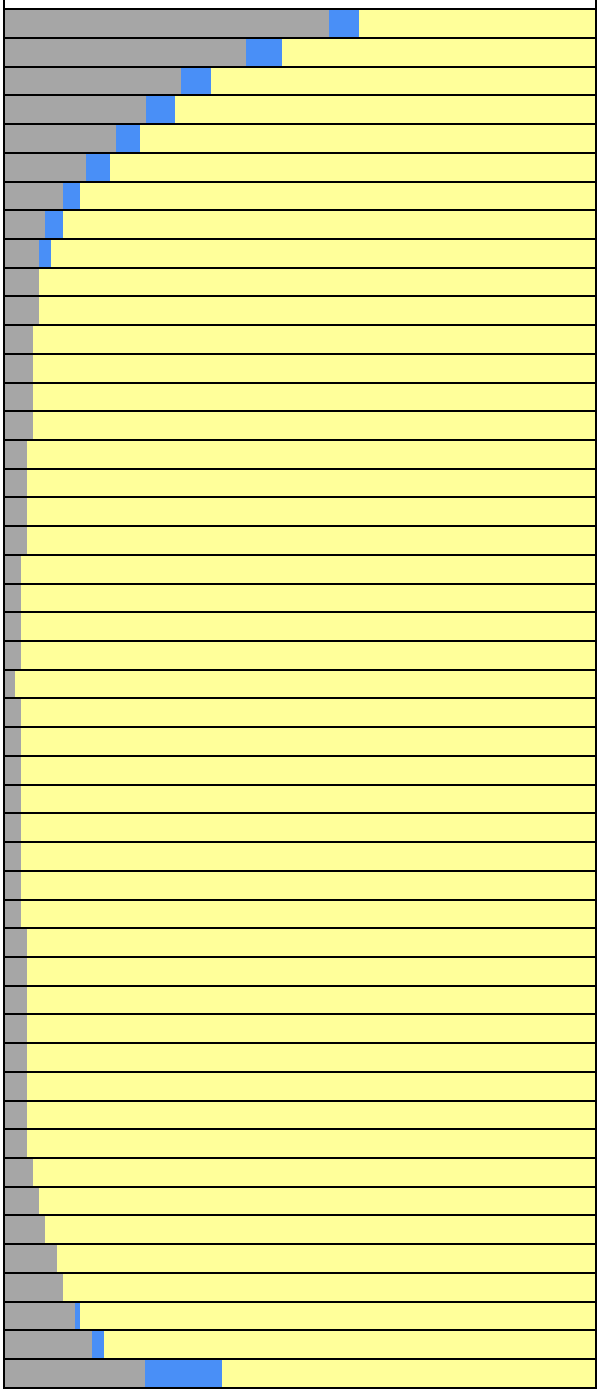
AUGUST 9

Mirror date: May 3
Analysis hours: 7:19 AM-7:10 PM (PDT)

Shadow / Sunlight Balance Key
Existing Shadow | Project Shadow | Sunlight Remaining

Analysis Time	EXISTING SHADOW		PROJECT NET NEW SHADOW	
	Shadow Area	Coverage	Shadow Area	Coverage
7:19 AM	47,564 sf	54.60%	3,935 sf	4.52%
7:30 AM	35,705 sf	40.98%	5,440 sf	6.24%
7:45 AM	26,531 sf	30.45%	4,730 sf	5.43%
8:00 AM	20,849 sf	23.93%	4,088 sf	4.69%
8:15 AM	16,239 sf	18.64%	3,560 sf	4.09%
8:30 AM	12,269 sf	14.08%	3,131 sf	3.59%
8:45 AM	9,041 sf	10.38%	2,768 sf	3.18%
9:00 AM	6,489 sf	7.45%	2,425 sf	2.78%
9:15 AM	5,524 sf	6.34%	1,383 sf	1.59%
9:30 AM	5,210 sf	5.98%	162 sf	0.19%
9:45 AM	4,940 sf	5.67%	0 sf	0.00%
10:00 AM	4,678 sf	5.37%	0 sf	0.00%
10:15 AM	4,449 sf	5.11%	0 sf	0.00%
10:30 AM	4,206 sf	4.83%	0 sf	0.00%
10:45 AM	3,993 sf	4.58%	0 sf	0.00%
11:00 AM	3,769 sf	4.33%	0 sf	0.00%
11:15 AM	3,570 sf	4.10%	0 sf	0.00%
11:30 AM	3,356 sf	3.85%	0 sf	0.00%
11:45 AM	3,181 sf	3.65%	0 sf	0.00%
12:00 PM	2,969 sf	3.41%	0 sf	0.00%
12:15 PM	2,796 sf	3.21%	0 sf	0.00%
12:30 PM	2,582 sf	2.96%	0 sf	0.00%
12:45 PM	2,405 sf	2.76%	0 sf	0.00%
1:00 PM	2,161 sf	2.48%	0 sf	0.00%
1:15 PM	2,255 sf	2.59%	0 sf	0.00%
1:30 PM	2,348 sf	2.69%	0 sf	0.00%
1:45 PM	2,489 sf	2.86%	0 sf	0.00%
2:00 PM	2,572 sf	2.95%	0 sf	0.00%
2:15 PM	2,707 sf	3.11%	0 sf	0.00%
2:30 PM	2,790 sf	3.20%	0 sf	0.00%
2:45 PM	2,916 sf	3.35%	0 sf	0.00%
3:00 PM	2,993 sf	3.44%	0 sf	0.00%
3:15 PM	3,113 sf	3.57%	0 sf	0.00%
3:30 PM	3,195 sf	3.67%	0 sf	0.00%
3:45 PM	3,308 sf	3.80%	0 sf	0.00%
4:00 PM	3,388 sf	3.89%	0 sf	0.00%
4:15 PM	3,499 sf	4.02%	0 sf	0.00%
4:30 PM	3,591 sf	4.12%	0 sf	0.00%
4:45 PM	3,715 sf	4.26%	0 sf	0.00%
5:00 PM	3,848 sf	4.42%	0 sf	0.00%
5:15 PM	4,499 sf	5.16%	0 sf	0.00%
5:30 PM	5,347 sf	6.14%	0 sf	0.00%
5:45 PM	6,322 sf	7.26%	0 sf	0.00%
6:00 PM	7,490 sf	8.60%	0 sf	0.00%
6:15 PM	8,906 sf	10.22%	38 sf	0.04%
6:30 PM	10,707 sf	12.29%	646 sf	0.74%
6:45 PM	13,191 sf	15.14%	1,973 sf	2.26%
7:10 PM	20,827 sf	23.91%	11,528 sf	13.23%

SHADOW/SUNLIGHT BALANCE
Relative levels of Shadow vs. Sun



PROJECT: Family Zoning Plan
OPEN SPACE: Joe DiMaggio (87,120 sf)

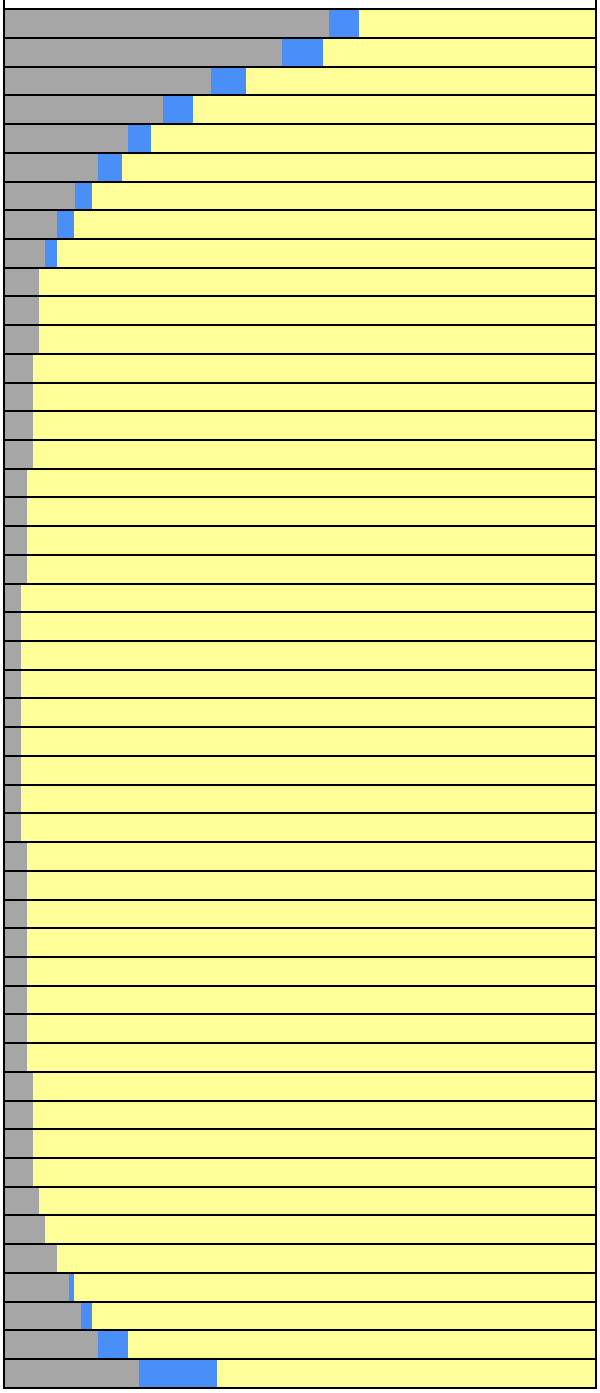
AUGUST 16

Mirror date: April 26
Analysis hours: 7:25 AM-7:02 PM (PDT)

Shadow / Sunlight Balance Key
Existing Shadow | Project Shadow | Sunlight Remaining

Analysis Time	EXISTING SHADOW		PROJECT NET NEW SHADOW	
	Shadow Area	Coverage	Shadow Area	Coverage
7:25 AM	47,761 sf	54.82%	4,668 sf	5.36%
7:30 AM	41,320 sf	47.43%	5,845 sf	6.71%
7:45 AM	30,535 sf	35.05%	5,324 sf	6.11%
8:00 AM	23,646 sf	27.14%	4,536 sf	5.21%
8:15 AM	18,585 sf	21.33%	3,889 sf	4.46%
8:30 AM	14,077 sf	16.16%	3,376 sf	3.88%
8:45 AM	10,458 sf	12.00%	2,964 sf	3.40%
9:00 AM	7,514 sf	8.62%	2,604 sf	2.99%
9:15 AM	5,982 sf	6.87%	1,796 sf	2.06%
9:30 AM	5,623 sf	6.45%	383 sf	0.44%
9:45 AM	5,318 sf	6.10%	0 sf	0.00%
10:00 AM	5,027 sf	5.77%	0 sf	0.00%
10:15 AM	4,774 sf	5.48%	0 sf	0.00%
10:30 AM	4,509 sf	5.18%	0 sf	0.00%
10:45 AM	4,281 sf	4.91%	0 sf	0.00%
11:00 AM	4,052 sf	4.65%	0 sf	0.00%
11:15 AM	3,842 sf	4.41%	0 sf	0.00%
11:30 AM	3,612 sf	4.15%	0 sf	0.00%
11:45 AM	3,421 sf	3.93%	0 sf	0.00%
12:00 PM	3,203 sf	3.68%	0 sf	0.00%
12:15 PM	3,026 sf	3.47%	0 sf	0.00%
12:30 PM	2,811 sf	3.23%	0 sf	0.00%
12:45 PM	2,630 sf	3.02%	0 sf	0.00%
1:00 PM	2,394 sf	2.75%	0 sf	0.00%
1:15 PM	2,524 sf	2.90%	0 sf	0.00%
1:30 PM	2,617 sf	3.00%	0 sf	0.00%
1:45 PM	2,760 sf	3.17%	0 sf	0.00%
2:00 PM	2,850 sf	3.27%	0 sf	0.00%
2:15 PM	2,986 sf	3.43%	0 sf	0.00%
2:30 PM	3,074 sf	3.53%	0 sf	0.00%
2:45 PM	3,210 sf	3.68%	0 sf	0.00%
3:00 PM	3,298 sf	3.79%	0 sf	0.00%
3:15 PM	3,431 sf	3.94%	0 sf	0.00%
3:30 PM	3,519 sf	4.04%	0 sf	0.00%
3:45 PM	3,645 sf	4.18%	0 sf	0.00%
4:00 PM	3,749 sf	4.30%	0 sf	0.00%
4:15 PM	3,879 sf	4.45%	0 sf	0.00%
4:30 PM	3,999 sf	4.59%	0 sf	0.00%
4:45 PM	4,134 sf	4.75%	0 sf	0.00%
5:00 PM	4,283 sf	4.92%	0 sf	0.00%
5:15 PM	4,533 sf	5.20%	0 sf	0.00%
5:30 PM	5,442 sf	6.25%	0 sf	0.00%
5:45 PM	6,492 sf	7.45%	0 sf	0.00%
6:00 PM	7,765 sf	8.91%	81 sf	0.09%
6:15 PM	9,339 sf	10.72%	840 sf	0.96%
6:30 PM	11,363 sf	13.04%	2,115 sf	2.43%
6:45 PM	14,244 sf	16.35%	3,921 sf	4.50%
7:02 PM	19,740 sf	22.66%	11,497 sf	13.20%

SHADOW/SUNLIGHT BALANCE
Relative levels of Shadow vs. Sun



PROJECT: Family Zoning Plan
OPEN SPACE: Joe DiMaggio (87,120 sf)

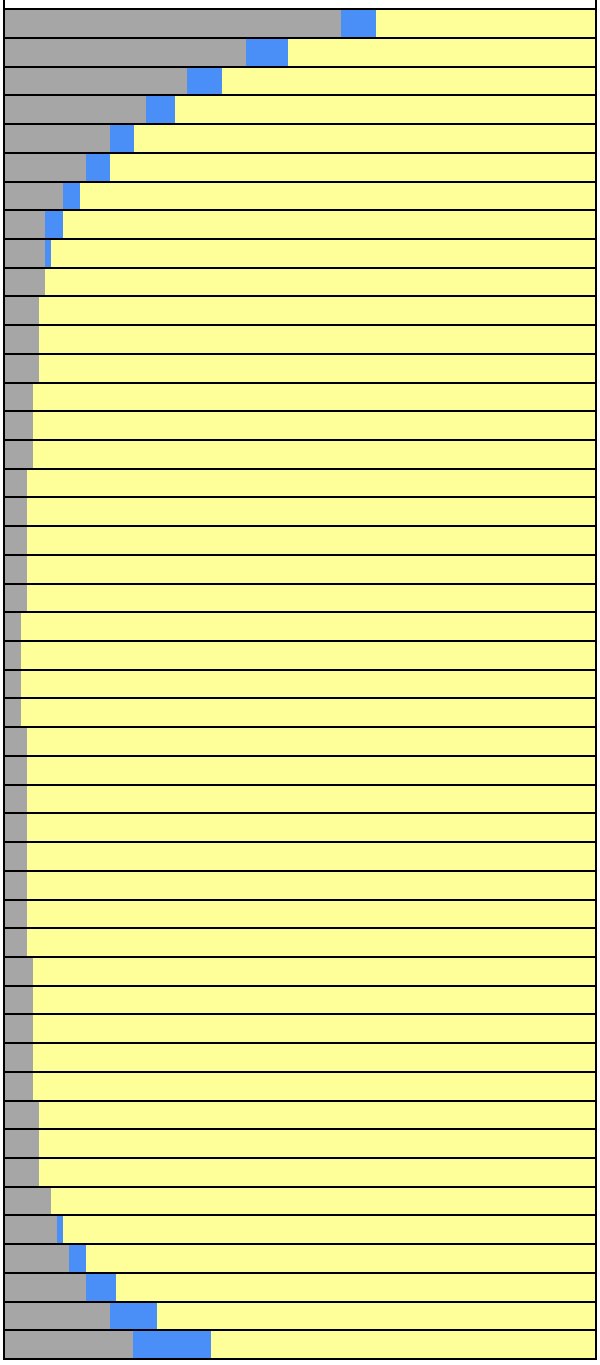
AUGUST 23

Mirror date: April 19
Analysis hours: 7:31 AM-6:52 PM (PDT)

Shadow / Sunlight Balance Key
Existing Shadow | Project Shadow | Sunlight Remaining

Analysis Time	EXISTING SHADOW		PROJECT NET NEW SHADOW	
	Shadow Area	Coverage	Shadow Area	Coverage
7:31 AM	49,794 sf	57.16%	5,555 sf	6.38%
7:45 AM	35,845 sf	41.14%	5,990 sf	6.88%
8:00 AM	26,999 sf	30.99%	5,084 sf	5.84%
8:15 AM	21,114 sf	24.24%	4,292 sf	4.93%
8:30 AM	16,082 sf	18.46%	3,674 sf	4.22%
8:45 AM	12,020 sf	13.80%	3,182 sf	3.65%
9:00 AM	8,672 sf	9.95%	2,776 sf	3.19%
9:15 AM	6,533 sf	7.50%	2,192 sf	2.52%
9:30 AM	6,083 sf	6.98%	646 sf	0.74%
9:45 AM	5,739 sf	6.59%	0 sf	0.00%
10:00 AM	5,409 sf	6.21%	0 sf	0.00%
10:15 AM	5,131 sf	5.89%	0 sf	0.00%
10:30 AM	4,843 sf	5.56%	0 sf	0.00%
10:45 AM	4,602 sf	5.28%	0 sf	0.00%
11:00 AM	4,341 sf	4.98%	0 sf	0.00%
11:15 AM	4,132 sf	4.74%	0 sf	0.00%
11:30 AM	3,892 sf	4.47%	0 sf	0.00%
11:45 AM	3,696 sf	4.24%	0 sf	0.00%
12:00 PM	3,471 sf	3.98%	0 sf	0.00%
12:15 PM	3,284 sf	3.77%	0 sf	0.00%
12:30 PM	3,059 sf	3.51%	0 sf	0.00%
12:45 PM	2,867 sf	3.29%	0 sf	0.00%
1:00 PM	2,667 sf	3.06%	0 sf	0.00%
1:15 PM	2,825 sf	3.24%	0 sf	0.00%
1:30 PM	2,926 sf	3.36%	0 sf	0.00%
1:45 PM	3,069 sf	3.52%	0 sf	0.00%
2:00 PM	3,164 sf	3.63%	0 sf	0.00%
2:15 PM	3,304 sf	3.79%	0 sf	0.00%
2:30 PM	3,407 sf	3.91%	0 sf	0.00%
2:45 PM	3,551 sf	4.08%	0 sf	0.00%
3:00 PM	3,655 sf	4.20%	0 sf	0.00%
3:15 PM	3,794 sf	4.35%	0 sf	0.00%
3:30 PM	3,904 sf	4.48%	0 sf	0.00%
3:45 PM	4,052 sf	4.65%	0 sf	0.00%
4:00 PM	4,165 sf	4.78%	0 sf	0.00%
4:15 PM	4,327 sf	4.97%	0 sf	0.00%
4:30 PM	4,458 sf	5.12%	0 sf	0.00%
4:45 PM	4,647 sf	5.33%	0 sf	0.00%
5:00 PM	4,824 sf	5.54%	0 sf	0.00%
5:15 PM	5,061 sf	5.81%	0 sf	0.00%
5:30 PM	5,505 sf	6.32%	0 sf	0.00%
5:45 PM	6,760 sf	7.76%	168 sf	0.19%
6:00 PM	8,184 sf	9.39%	1,072 sf	1.23%
6:15 PM	9,975 sf	11.45%	2,417 sf	2.77%
6:30 PM	12,345 sf	14.17%	4,204 sf	4.83%
6:45 PM	16,012 sf	18.38%	7,130 sf	8.18%
6:52 PM	19,022 sf	21.83%	11,173 sf	12.82%

SHADOW/SUNLIGHT BALANCE
Relative levels of Shadow vs. Sun



PROJECT: Family Zoning Plan
OPEN SPACE: Joe DiMaggio (87,120 sf)

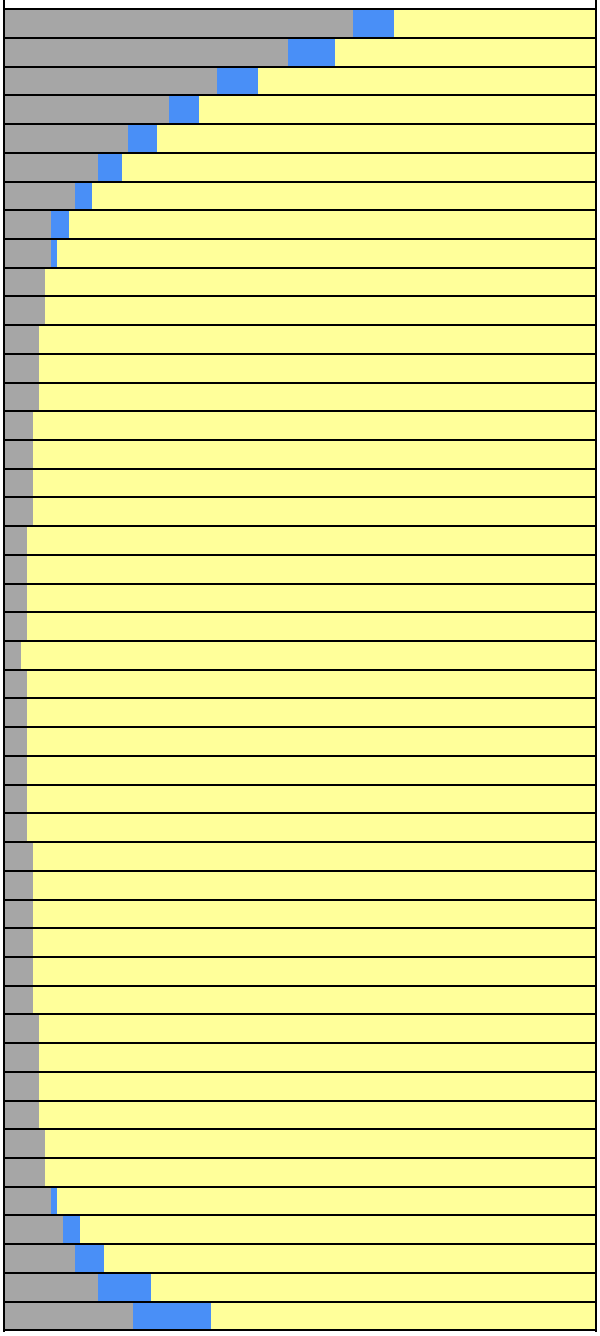
AUGUST 30

Mirror date: April 12
Analysis hours: 7:37 AM-6:42 PM (PDT)

Shadow / Sunlight Balance Key
Existing Shadow | Project Shadow | Sunlight Remaining

Analysis Time	EXISTING SHADOW		PROJECT NET NEW SHADOW	
	Shadow Area	Coverage	Shadow Area	Coverage
7:37 AM	51,378 sf	58.97%	6,128 sf	7.03%
7:45 AM	42,077 sf	48.30%	6,569 sf	7.54%
8:00 AM	31,050 sf	35.64%	5,750 sf	6.60%
8:15 AM	23,975 sf	27.52%	4,748 sf	5.45%
8:30 AM	18,431 sf	21.16%	3,986 sf	4.58%
8:45 AM	13,812 sf	15.85%	3,398 sf	3.90%
9:00 AM	10,078 sf	11.57%	2,926 sf	3.36%
9:15 AM	7,344 sf	8.43%	2,468 sf	2.83%
9:30 AM	6,600 sf	7.58%	976 sf	1.12%
9:45 AM	6,204 sf	7.12%	0 sf	0.00%
10:00 AM	5,837 sf	6.70%	0 sf	0.00%
10:15 AM	5,526 sf	6.34%	0 sf	0.00%
10:30 AM	5,216 sf	5.99%	0 sf	0.00%
10:45 AM	4,950 sf	5.68%	0 sf	0.00%
11:00 AM	4,674 sf	5.37%	0 sf	0.00%
11:15 AM	4,450 sf	5.11%	0 sf	0.00%
11:30 AM	4,196 sf	4.82%	0 sf	0.00%
11:45 AM	3,989 sf	4.58%	0 sf	0.00%
12:00 PM	3,759 sf	4.32%	0 sf	0.00%
12:15 PM	3,567 sf	4.09%	0 sf	0.00%
12:30 PM	3,338 sf	3.83%	0 sf	0.00%
12:45 PM	3,147 sf	3.61%	0 sf	0.00%
1:00 PM	2,985 sf	3.43%	0 sf	0.00%
1:15 PM	3,168 sf	3.64%	0 sf	0.00%
1:30 PM	3,268 sf	3.75%	0 sf	0.00%
1:45 PM	3,418 sf	3.92%	0 sf	0.00%
2:00 PM	3,516 sf	4.04%	0 sf	0.00%
2:15 PM	3,673 sf	4.22%	0 sf	0.00%
2:30 PM	3,782 sf	4.34%	0 sf	0.00%
2:45 PM	3,934 sf	4.52%	0 sf	0.00%
3:00 PM	4,052 sf	4.65%	0 sf	0.00%
3:15 PM	4,215 sf	4.84%	0 sf	0.00%
3:30 PM	4,340 sf	4.98%	0 sf	0.00%
3:45 PM	4,507 sf	5.17%	0 sf	0.00%
4:00 PM	4,653 sf	5.34%	0 sf	0.00%
4:15 PM	4,844 sf	5.56%	0 sf	0.00%
4:30 PM	5,019 sf	5.76%	0 sf	0.00%
4:45 PM	5,239 sf	6.01%	0 sf	0.00%
5:00 PM	5,496 sf	6.31%	0 sf	0.00%
5:15 PM	5,783 sf	6.64%	0 sf	0.00%
5:30 PM	6,102 sf	7.00%	265 sf	0.30%
5:45 PM	7,111 sf	8.16%	1,248 sf	1.43%
6:00 PM	8,743 sf	10.04%	2,673 sf	3.07%
6:15 PM	10,847 sf	12.45%	4,619 sf	5.30%
6:30 PM	13,976 sf	16.04%	7,537 sf	8.65%
6:42 PM	18,780 sf	21.56%	10,984 sf	12.61%

SHADOW/SUNLIGHT BALANCE
Relative levels of Shadow vs. Sun



PROJECT: Family Zoning Plan
OPEN SPACE: Joe DiMaggio (87,120 sf)

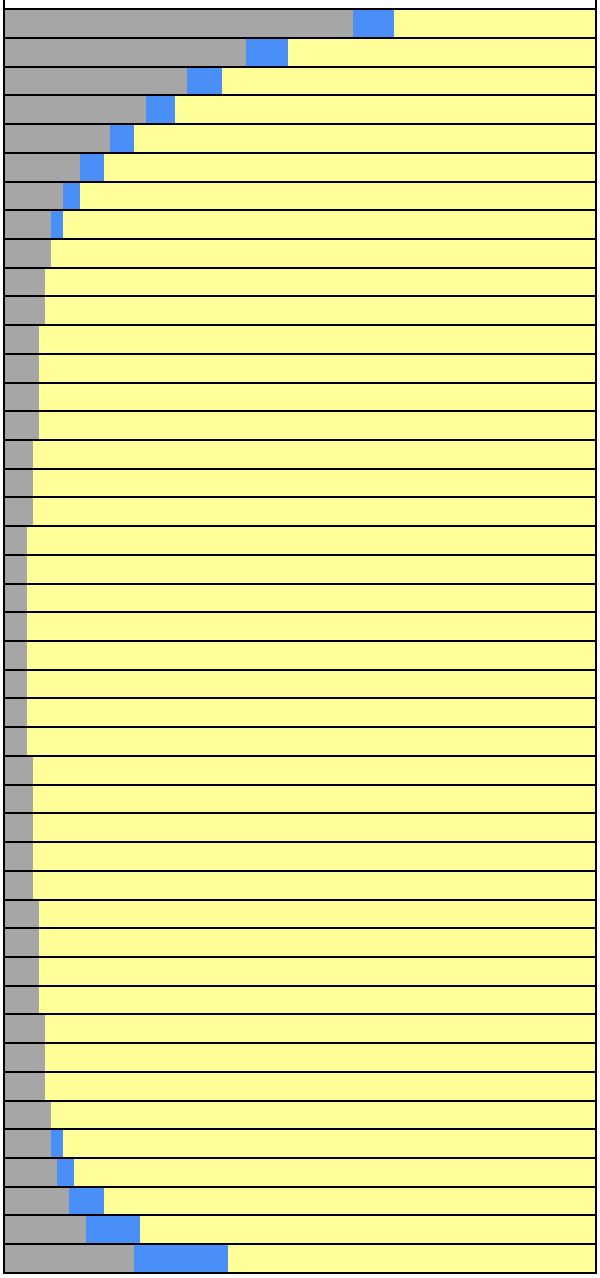
SEPTEMBER 6

Mirror date: April 5
Analysis hours: 7:44 AM-6:31 PM (PDT)

Shadow / Sunlight Balance Key
Existing Shadow | Project Shadow | Sunlight Remaining

Analysis Time	EXISTING SHADOW		PROJECT NET NEW SHADOW	
	Shadow Area	Coverage	Shadow Area	Coverage
7:44 AM	51,583 sf	59.21%	6,349 sf	7.29%
8:00 AM	35,558 sf	40.82%	6,199 sf	7.12%
8:15 AM	27,140 sf	31.15%	5,098 sf	5.85%
8:30 AM	21,004 sf	24.11%	4,222 sf	4.85%
8:45 AM	15,770 sf	18.10%	3,569 sf	4.10%
9:00 AM	11,600 sf	13.32%	3,055 sf	3.51%
9:15 AM	8,406 sf	9.65%	2,619 sf	3.01%
9:30 AM	7,169 sf	8.23%	1,322 sf	1.52%
9:45 AM	6,717 sf	7.71%	35 sf	0.04%
10:00 AM	6,300 sf	7.23%	0 sf	0.00%
10:15 AM	5,963 sf	6.84%	0 sf	0.00%
10:30 AM	5,617 sf	6.45%	0 sf	0.00%
10:45 AM	5,334 sf	6.12%	0 sf	0.00%
11:00 AM	5,043 sf	5.79%	0 sf	0.00%
11:15 AM	4,802 sf	5.51%	0 sf	0.00%
11:30 AM	4,538 sf	5.21%	0 sf	0.00%
11:45 AM	4,315 sf	4.95%	0 sf	0.00%
12:00 PM	4,074 sf	4.68%	0 sf	0.00%
12:15 PM	3,874 sf	4.45%	0 sf	0.00%
12:30 PM	3,640 sf	4.18%	0 sf	0.00%
12:45 PM	3,403 sf	3.91%	0 sf	0.00%
1:00 PM	3,367 sf	3.86%	0 sf	0.00%
1:15 PM	3,544 sf	4.07%	0 sf	0.00%
1:30 PM	3,646 sf	4.18%	0 sf	0.00%
1:45 PM	3,800 sf	4.36%	0 sf	0.00%
2:00 PM	3,913 sf	4.49%	0 sf	0.00%
2:15 PM	4,072 sf	4.67%	0 sf	0.00%
2:30 PM	4,193 sf	4.81%	0 sf	0.00%
2:45 PM	4,370 sf	5.02%	0 sf	0.00%
3:00 PM	4,501 sf	5.17%	0 sf	0.00%
3:15 PM	4,683 sf	5.37%	0 sf	0.00%
3:30 PM	4,830 sf	5.54%	0 sf	0.00%
3:45 PM	5,036 sf	5.78%	0 sf	0.00%
4:00 PM	5,217 sf	5.99%	0 sf	0.00%
4:15 PM	5,444 sf	6.25%	0 sf	0.00%
4:30 PM	5,666 sf	6.50%	0 sf	0.00%
4:45 PM	5,950 sf	6.83%	0 sf	0.00%
5:00 PM	6,254 sf	7.18%	0 sf	0.00%
5:15 PM	6,630 sf	7.61%	396 sf	0.45%
5:30 PM	7,134 sf	8.19%	1,335 sf	1.53%
5:45 PM	7,737 sf	8.88%	2,848 sf	3.27%
6:00 PM	9,498 sf	10.90%	4,921 sf	5.65%
6:15 PM	12,376 sf	14.21%	8,246 sf	9.46%
6:31 PM	18,770 sf	21.54%	13,560 sf	15.56%

SHADOW/SUNLIGHT BALANCE
Relative levels of Shadow vs. Sun



PROJECT: Family Zoning Plan
OPEN SPACE: Joe DiMaggio (87,120 sf)

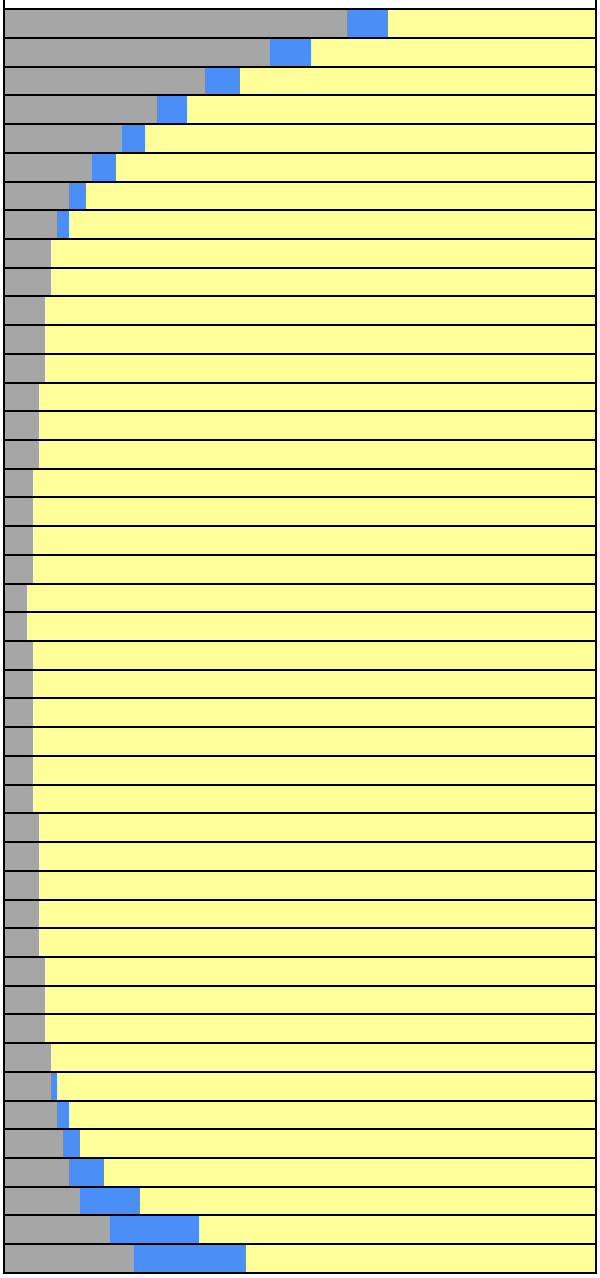
SEPTEMBER 13

Mirror date: March 29
Analysis hours: 7:50 AM-6:21 PM (PDT)

Shadow / Sunlight Balance Key
Existing Shadow | Project Shadow | Sunlight Remaining

Analysis Time	EXISTING SHADOW		PROJECT NET NEW SHADOW	
	Shadow Area	Coverage	Shadow Area	Coverage
7:50 AM	50,273 sf	57.71%	6,355 sf	7.29%
8:00 AM	39,499 sf	45.34%	6,482 sf	7.44%
8:15 AM	29,502 sf	33.86%	5,471 sf	6.28%
8:30 AM	22,804 sf	26.18%	4,477 sf	5.14%
8:45 AM	17,204 sf	19.75%	3,746 sf	4.30%
9:00 AM	12,773 sf	14.66%	3,183 sf	3.65%
9:15 AM	9,286 sf	10.66%	2,730 sf	3.13%
9:30 AM	7,542 sf	8.66%	1,693 sf	1.94%
9:45 AM	7,088 sf	8.14%	170 sf	0.19%
10:00 AM	6,704 sf	7.69%	0 sf	0.00%
10:15 AM	6,361 sf	7.30%	0 sf	0.00%
10:30 AM	6,063 sf	6.96%	0 sf	0.00%
10:45 AM	5,761 sf	6.61%	0 sf	0.00%
11:00 AM	5,448 sf	6.25%	0 sf	0.00%
11:15 AM	5,181 sf	5.95%	0 sf	0.00%
11:30 AM	4,898 sf	5.62%	0 sf	0.00%
11:45 AM	4,672 sf	5.36%	0 sf	0.00%
12:00 PM	4,420 sf	5.07%	0 sf	0.00%
12:15 PM	4,214 sf	4.84%	0 sf	0.00%
12:30 PM	3,970 sf	4.56%	0 sf	0.00%
12:45 PM	3,751 sf	4.31%	0 sf	0.00%
1:00 PM	3,791 sf	4.35%	0 sf	0.00%
1:15 PM	3,956 sf	4.54%	0 sf	0.00%
1:30 PM	4,063 sf	4.66%	0 sf	0.00%
1:45 PM	4,226 sf	4.85%	0 sf	0.00%
2:00 PM	4,346 sf	4.99%	0 sf	0.00%
2:15 PM	4,524 sf	5.19%	0 sf	0.00%
2:30 PM	4,658 sf	5.35%	0 sf	0.00%
2:45 PM	4,847 sf	5.56%	0 sf	0.00%
3:00 PM	5,003 sf	5.74%	0 sf	0.00%
3:15 PM	5,213 sf	5.98%	0 sf	0.00%
3:30 PM	5,394 sf	6.19%	0 sf	0.00%
3:45 PM	5,629 sf	6.46%	0 sf	0.00%
4:00 PM	5,852 sf	6.72%	0 sf	0.00%
4:15 PM	6,139 sf	7.05%	0 sf	0.00%
4:30 PM	6,418 sf	7.37%	0 sf	0.00%
4:45 PM	6,788 sf	7.79%	36 sf	0.04%
5:00 PM	7,188 sf	8.25%	518 sf	0.59%
5:15 PM	7,717 sf	8.86%	1,419 sf	1.63%
5:30 PM	8,362 sf	9.60%	2,769 sf	3.18%
5:45 PM	9,273 sf	10.64%	5,045 sf	5.79%
6:00 PM	10,898 sf	12.51%	8,608 sf	9.88%
6:15 PM	16,029 sf	18.40%	13,134 sf	15.08%
6:21 PM	18,876 sf	21.67%	16,664 sf	19.13%

SHADOW/SUNLIGHT BALANCE
Relative levels of Shadow vs. Sun



PROJECT: Family Zoning Plan
OPEN SPACE: Joe DiMaggio (87,120 sf)

SEPTEMBER 20

Fall equinox (Spring equinox on March 22 similar)
Analysis hours: 7:57 AM-6:09 PM (PDT)

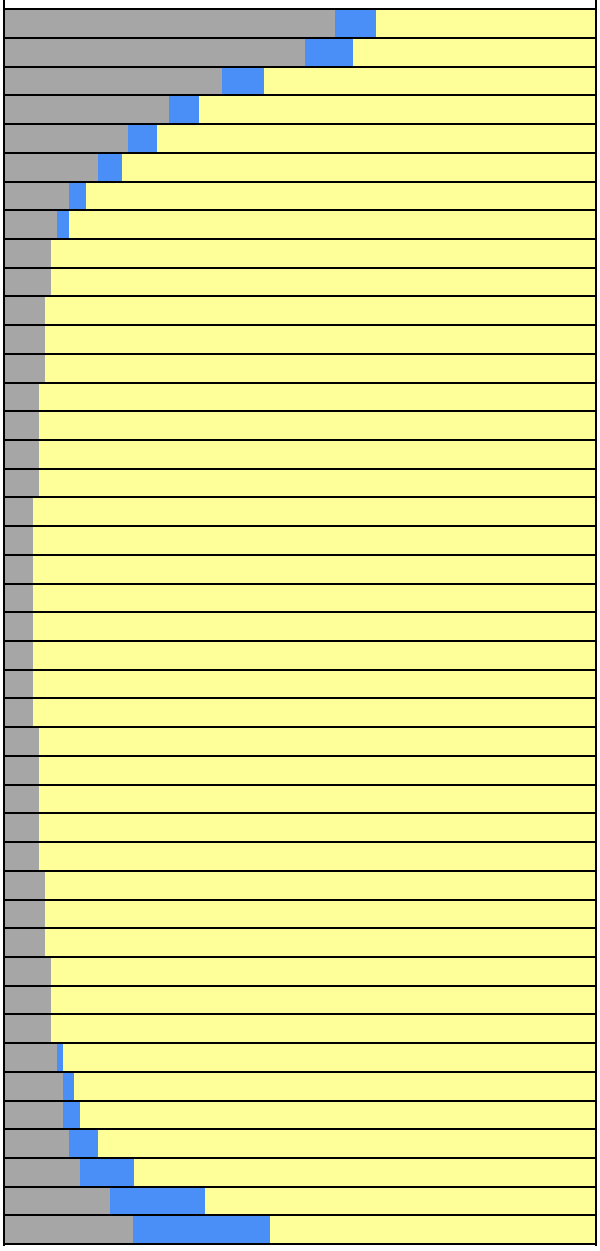
Shadow / Sunlight Balance Key

Existing Shadow | Project Shadow | Sunlight Remaining

Analysis Time	EXISTING SHADOW		PROJECT NET NEW SHADOW	
	Shadow Area	Coverage	Shadow Area	Coverage
7:57 AM	48,971 sf	56.21%	6,393 sf	7.34%
8:00 AM	44,700 sf	51.31%	6,801 sf	7.81%
8:15 AM	32,008 sf	36.74%	5,865 sf	6.73%
8:30 AM	24,397 sf	28.00%	4,773 sf	5.48%
8:45 AM	18,510 sf	21.25%	3,953 sf	4.54%
9:00 AM	13,724 sf	15.75%	3,317 sf	3.81%
9:15 AM	9,958 sf	11.43%	2,829 sf	3.25%
9:30 AM	7,589 sf	8.71%	2,092 sf	2.40%
9:45 AM	7,131 sf	8.19%	396 sf	0.45%
10:00 AM	6,763 sf	7.76%	0 sf	0.00%
10:15 AM	6,427 sf	7.38%	0 sf	0.00%
10:30 AM	6,131 sf	7.04%	0 sf	0.00%
10:45 AM	5,854 sf	6.72%	0 sf	0.00%
11:00 AM	5,600 sf	6.43%	0 sf	0.00%
11:15 AM	5,362 sf	6.15%	0 sf	0.00%
11:30 AM	5,141 sf	5.90%	0 sf	0.00%
11:45 AM	4,939 sf	5.67%	0 sf	0.00%
12:00 PM	4,746 sf	5.45%	0 sf	0.00%
12:15 PM	4,570 sf	5.25%	0 sf	0.00%
12:30 PM	4,334 sf	4.97%	0 sf	0.00%
12:45 PM	4,138 sf	4.75%	0 sf	0.00%
1:00 PM	4,241 sf	4.87%	0 sf	0.00%
1:15 PM	4,404 sf	5.06%	0 sf	0.00%
1:30 PM	4,516 sf	5.18%	0 sf	0.00%
1:45 PM	4,690 sf	5.38%	0 sf	0.00%
2:00 PM	4,822 sf	5.54%	0 sf	0.00%
2:15 PM	5,015 sf	5.76%	0 sf	0.00%
2:30 PM	5,166 sf	5.93%	0 sf	0.00%
2:45 PM	5,381 sf	6.18%	0 sf	0.00%
3:00 PM	5,564 sf	6.39%	0 sf	0.00%
3:15 PM	5,805 sf	6.66%	0 sf	0.00%
3:30 PM	6,023 sf	6.91%	0 sf	0.00%
3:45 PM	6,309 sf	7.24%	0 sf	0.00%
4:00 PM	6,577 sf	7.55%	0 sf	0.00%
4:15 PM	6,934 sf	7.96%	0 sf	0.00%
4:30 PM	7,307 sf	8.39%	99 sf	0.11%
4:45 PM	7,784 sf	8.93%	546 sf	0.63%
5:00 PM	8,321 sf	9.55%	1,360 sf	1.56%
5:15 PM	9,028 sf	10.36%	2,637 sf	3.03%
5:30 PM	9,912 sf	11.38%	4,651 sf	5.34%
5:45 PM	11,638 sf	13.36%	8,117 sf	9.32%
6:00 PM	15,343 sf	17.61%	13,814 sf	15.86%
6:09 PM	19,013 sf	21.82%	20,103 sf	23.08%

SHADOW/SUNLIGHT BALANCE

Relative levels of Shadow vs. Sun



PROJECT: Family Zoning Plan
OPEN SPACE: Joe DiMaggio (87,120 sf)

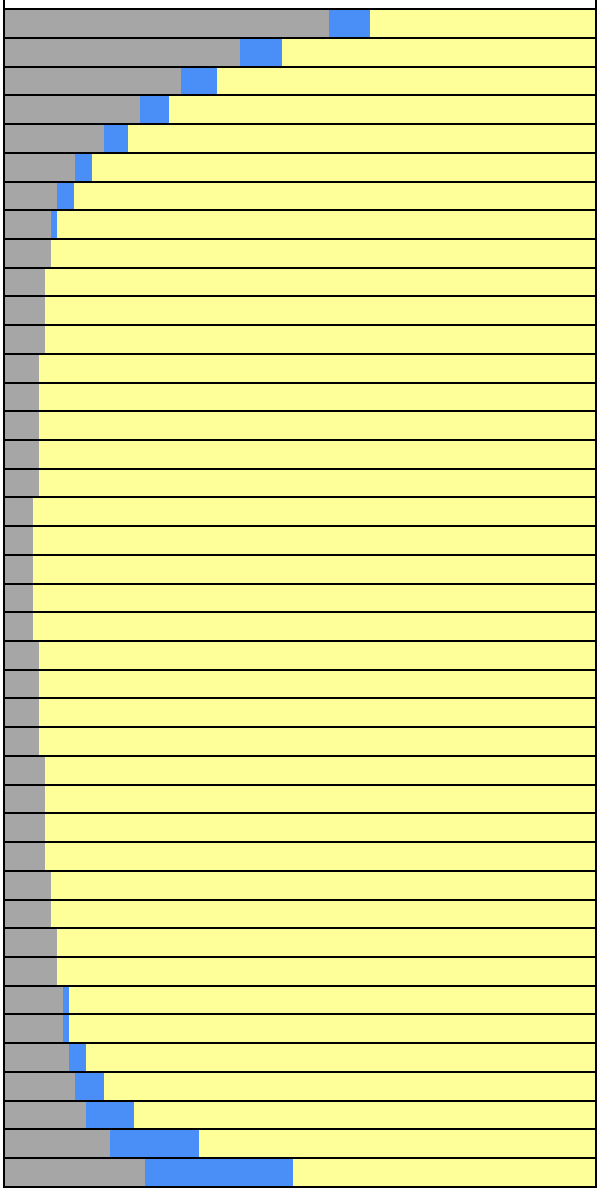
SEPTEMBER 27

Mirror date: March 15
Analysis hours: 8:03 AM-5:58 PM (PDT)

Shadow / Sunlight Balance Key
Existing Shadow | Project Shadow | Sunlight Remaining

Analysis Time	EXISTING SHADOW		PROJECT NET NEW SHADOW	
	Shadow Area	Coverage	Shadow Area	Coverage
8:03 AM	47,524 sf	54.55%	6,398 sf	7.34%
8:15 AM	35,019 sf	40.20%	6,254 sf	7.18%
8:30 AM	26,112 sf	29.97%	5,127 sf	5.89%
8:45 AM	19,923 sf	22.87%	4,186 sf	4.80%
9:00 AM	14,724 sf	16.90%	3,480 sf	3.99%
9:15 AM	10,705 sf	12.29%	2,948 sf	3.38%
9:30 AM	7,691 sf	8.83%	2,458 sf	2.82%
9:45 AM	7,111 sf	8.16%	685 sf	0.79%
10:00 AM	6,725 sf	7.72%	0 sf	0.00%
10:15 AM	6,401 sf	7.35%	0 sf	0.00%
10:30 AM	6,116 sf	7.02%	0 sf	0.00%
10:45 AM	5,852 sf	6.72%	0 sf	0.00%
11:00 AM	5,614 sf	6.44%	0 sf	0.00%
11:15 AM	5,384 sf	6.18%	0 sf	0.00%
11:30 AM	5,178 sf	5.94%	0 sf	0.00%
11:45 AM	4,985 sf	5.72%	0 sf	0.00%
12:00 PM	4,796 sf	5.51%	0 sf	0.00%
12:15 PM	4,613 sf	5.30%	0 sf	0.00%
12:30 PM	4,431 sf	5.09%	0 sf	0.00%
12:45 PM	4,341 sf	4.98%	0 sf	0.00%
1:00 PM	4,541 sf	5.21%	0 sf	0.00%
1:15 PM	4,738 sf	5.44%	0 sf	0.00%
1:30 PM	4,926 sf	5.65%	0 sf	0.00%
1:45 PM	5,135 sf	5.89%	0 sf	0.00%
2:00 PM	5,340 sf	6.13%	0 sf	0.00%
2:15 PM	5,552 sf	6.37%	0 sf	0.00%
2:30 PM	5,727 sf	6.57%	0 sf	0.00%
2:45 PM	5,966 sf	6.85%	0 sf	0.00%
3:00 PM	6,182 sf	7.10%	0 sf	0.00%
3:15 PM	6,460 sf	7.42%	0 sf	0.00%
3:30 PM	6,727 sf	7.72%	0 sf	0.00%
3:45 PM	7,066 sf	8.11%	0 sf	0.00%
4:00 PM	7,407 sf	8.50%	0 sf	0.00%
4:15 PM	7,852 sf	9.01%	143 sf	0.16%
4:30 PM	8,332 sf	9.56%	511 sf	0.59%
4:45 PM	8,956 sf	10.28%	1,221 sf	1.40%
5:00 PM	9,677 sf	11.11%	2,395 sf	2.75%
5:15 PM	10,670 sf	12.25%	4,275 sf	4.91%
5:30 PM	12,408 sf	14.24%	7,222 sf	8.29%
5:45 PM	15,944 sf	18.30%	12,848 sf	14.75%
5:58 PM	21,172 sf	24.30%	22,202 sf	25.48%

SHADOW/SUNLIGHT BALANCE
Relative levels of Shadow vs. Sun



PROJECT: Family Zoning Plan
OPEN SPACE: Joe DiMaggio (87,120 sf)

OCTOBER 4

Mirror date: March 8
Analysis hours: 8:09 AM-5:47 PM (PDT)

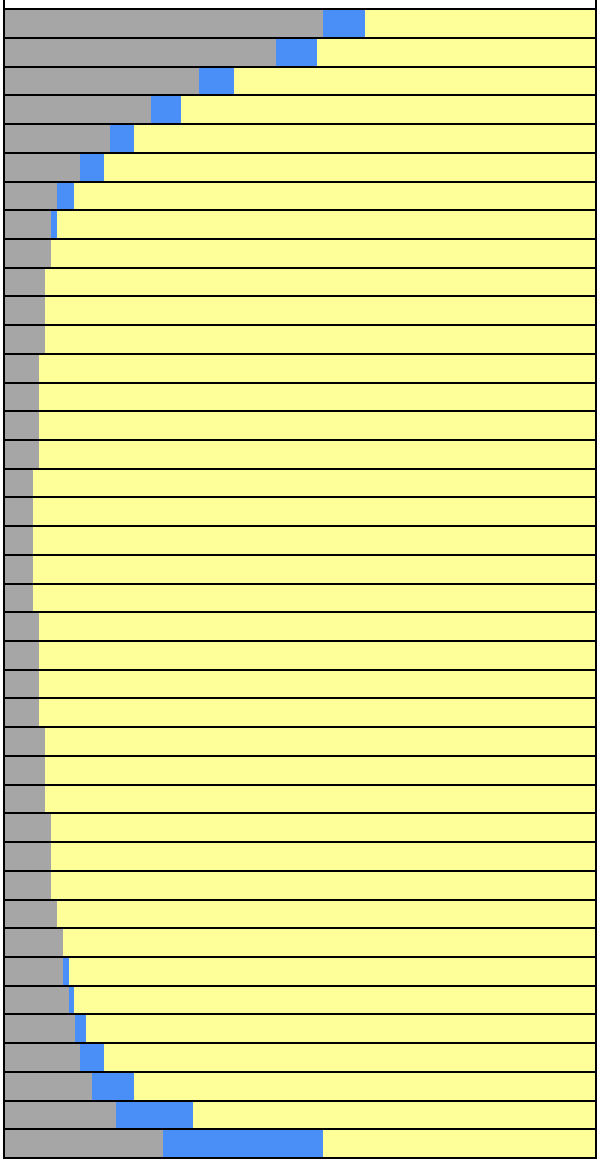
Shadow / Sunlight Balance Key

Existing Shadow | Project Shadow | Sunlight Remaining

Analysis Time	EXISTING SHADOW		PROJECT NET NEW SHADOW	
	Shadow Area	Coverage	Shadow Area	Coverage
8:09 AM	46,677 sf	53.58%	6,434 sf	7.39%
8:15 AM	40,180 sf	46.12%	6,501 sf	7.46%
8:30 AM	28,410 sf	32.61%	5,559 sf	6.38%
8:45 AM	21,439 sf	24.61%	4,472 sf	5.13%
9:00 AM	15,853 sf	18.20%	3,693 sf	4.24%
9:15 AM	11,527 sf	13.23%	3,094 sf	3.55%
9:30 AM	8,163 sf	9.37%	2,599 sf	2.98%
9:45 AM	7,075 sf	8.12%	1,070 sf	1.23%
10:00 AM	6,698 sf	7.69%	0 sf	0.00%
10:15 AM	6,372 sf	7.31%	0 sf	0.00%
10:30 AM	6,088 sf	6.99%	0 sf	0.00%
10:45 AM	5,824 sf	6.69%	0 sf	0.00%
11:00 AM	5,583 sf	6.41%	0 sf	0.00%
11:15 AM	5,360 sf	6.15%	0 sf	0.00%
11:30 AM	5,154 sf	5.92%	0 sf	0.00%
11:45 AM	4,957 sf	5.69%	0 sf	0.00%
12:00 PM	4,789 sf	5.50%	0 sf	0.00%
12:15 PM	4,620 sf	5.30%	0 sf	0.00%
12:30 PM	4,443 sf	5.10%	0 sf	0.00%
12:45 PM	4,424 sf	5.08%	0 sf	0.00%
1:00 PM	4,643 sf	5.33%	0 sf	0.00%
1:15 PM	4,875 sf	5.60%	0 sf	0.00%
1:30 PM	5,088 sf	5.84%	0 sf	0.00%
1:45 PM	5,312 sf	6.10%	0 sf	0.00%
2:00 PM	5,537 sf	6.36%	0 sf	0.00%
2:15 PM	5,795 sf	6.65%	0 sf	0.00%
2:30 PM	6,050 sf	6.94%	0 sf	0.00%
2:45 PM	6,350 sf	7.29%	0 sf	0.00%
3:00 PM	6,654 sf	7.64%	0 sf	0.00%
3:15 PM	7,007 sf	8.04%	0 sf	0.00%
3:30 PM	7,384 sf	8.48%	0 sf	0.00%
3:45 PM	7,820 sf	8.98%	0 sf	0.00%
4:00 PM	8,307 sf	9.53%	119 sf	0.14%
4:15 PM	8,892 sf	10.21%	440 sf	0.51%
4:30 PM	9,517 sf	10.92%	1,000 sf	1.15%
4:45 PM	10,337 sf	11.87%	2,078 sf	2.38%
5:00 PM	11,321 sf	12.99%	3,797 sf	4.36%
5:15 PM	13,160 sf	15.11%	6,402 sf	7.35%
5:30 PM	16,396 sf	18.82%	11,567 sf	13.28%
5:47 PM	23,202 sf	26.63%	23,546 sf	27.03%

SHADOW/SUNLIGHT BALANCE

Relative levels of Shadow vs. Sun



PROJECT: Family Zoning Plan
OPEN SPACE: Joe DiMaggio (87,120 sf)

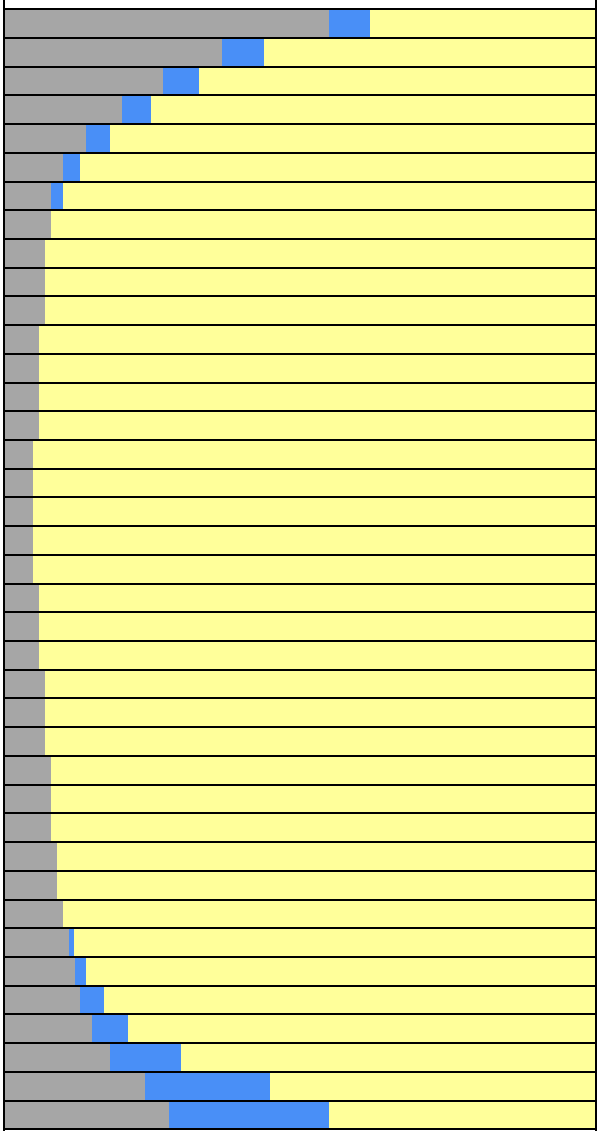
OCTOBER 11

Mirror date: March 1
Analysis hours: 8:16 AM-5:37 PM (PDT)

Shadow / Sunlight Balance Key
Existing Shadow | Project Shadow | Sunlight Remaining

Analysis Time	EXISTING SHADOW		PROJECT NET NEW SHADOW	
	Shadow Area	Coverage	Shadow Area	Coverage
8:16 AM	47,593 sf	54.63%	6,445 sf	7.40%
8:30 AM	31,988 sf	36.72%	5,996 sf	6.88%
8:45 AM	23,183 sf	26.61%	4,817 sf	5.53%
9:00 AM	17,155 sf	19.69%	3,926 sf	4.51%
9:15 AM	12,468 sf	14.31%	3,266 sf	3.75%
9:30 AM	8,774 sf	10.07%	2,746 sf	3.15%
9:45 AM	7,044 sf	8.09%	1,531 sf	1.76%
10:00 AM	6,662 sf	7.65%	24 sf	0.03%
10:15 AM	6,337 sf	7.27%	0 sf	0.00%
10:30 AM	6,058 sf	6.95%	0 sf	0.00%
10:45 AM	5,801 sf	6.66%	0 sf	0.00%
11:00 AM	5,559 sf	6.38%	0 sf	0.00%
11:15 AM	5,335 sf	6.12%	0 sf	0.00%
11:30 AM	5,131 sf	5.89%	0 sf	0.00%
11:45 AM	4,938 sf	5.67%	0 sf	0.00%
12:00 PM	4,769 sf	5.47%	0 sf	0.00%
12:15 PM	4,596 sf	5.28%	0 sf	0.00%
12:30 PM	4,406 sf	5.06%	0 sf	0.00%
12:45 PM	4,524 sf	5.19%	0 sf	0.00%
1:00 PM	4,743 sf	5.44%	0 sf	0.00%
1:15 PM	4,969 sf	5.70%	0 sf	0.00%
1:30 PM	5,188 sf	5.96%	0 sf	0.00%
1:45 PM	5,424 sf	6.23%	0 sf	0.00%
2:00 PM	5,675 sf	6.51%	0 sf	0.00%
2:15 PM	5,950 sf	6.83%	0 sf	0.00%
2:30 PM	6,247 sf	7.17%	0 sf	0.00%
2:45 PM	6,560 sf	7.53%	0 sf	0.00%
3:00 PM	6,900 sf	7.92%	0 sf	0.00%
3:15 PM	7,286 sf	8.36%	0 sf	0.00%
3:30 PM	7,703 sf	8.84%	1 sf	0.00%
3:45 PM	8,189 sf	9.40%	73 sf	0.08%
4:00 PM	8,745 sf	10.04%	319 sf	0.37%
4:15 PM	9,415 sf	10.81%	762 sf	0.87%
4:30 PM	10,214 sf	11.72%	1,657 sf	1.90%
4:45 PM	11,226 sf	12.89%	3,291 sf	3.78%
5:00 PM	12,880 sf	14.78%	5,580 sf	6.41%
5:15 PM	15,792 sf	18.13%	10,343 sf	11.87%
5:30 PM	20,669 sf	23.72%	18,729 sf	21.50%
5:37 PM	24,126 sf	27.69%	23,682 sf	27.18%

SHADOW/SUNLIGHT BALANCE
Relative levels of Shadow vs. Sun



PROJECT: Family Zoning Plan
OPEN SPACE: Joe DiMaggio (87,120 sf)

OCTOBER 18

Mirror date: February 22
Analysis hours: 8:22 AM-5:27 PM (PDT)

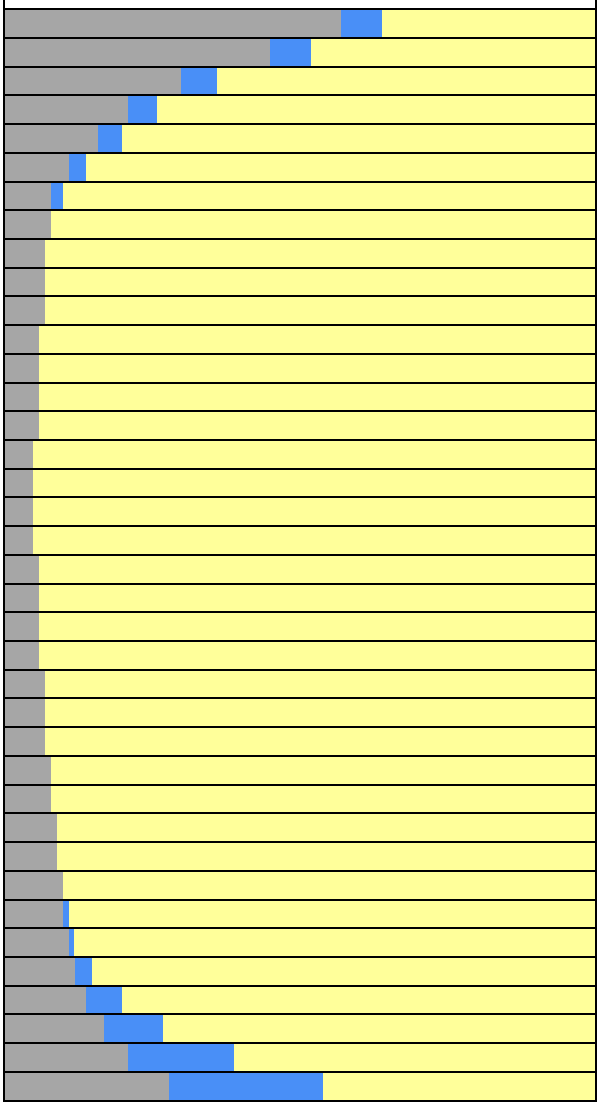
Shadow / Sunlight Balance Key

Existing Shadow | Project Shadow | Sunlight Remaining

Analysis Time	EXISTING SHADOW		PROJECT NET NEW SHADOW	
	Shadow Area	Coverage	Shadow Area	Coverage
8:22 AM	49,356 sf	56.65%	6,407 sf	7.35%
8:30 AM	39,444 sf	45.28%	6,313 sf	7.25%
8:45 AM	26,211 sf	30.09%	5,247 sf	6.02%
9:00 AM	18,682 sf	21.44%	4,215 sf	4.84%
9:15 AM	13,562 sf	15.57%	3,469 sf	3.98%
9:30 AM	9,551 sf	10.96%	2,890 sf	3.32%
9:45 AM	7,027 sf	8.07%	2,062 sf	2.37%
10:00 AM	6,625 sf	7.60%	188 sf	0.22%
10:15 AM	6,299 sf	7.23%	0 sf	0.00%
10:30 AM	6,024 sf	6.91%	0 sf	0.00%
10:45 AM	5,767 sf	6.62%	0 sf	0.00%
11:00 AM	5,537 sf	6.36%	0 sf	0.00%
11:15 AM	5,315 sf	6.10%	0 sf	0.00%
11:30 AM	5,111 sf	5.87%	0 sf	0.00%
11:45 AM	4,923 sf	5.65%	0 sf	0.00%
12:00 PM	4,755 sf	5.46%	0 sf	0.00%
12:15 PM	4,595 sf	5.27%	0 sf	0.00%
12:30 PM	4,416 sf	5.07%	0 sf	0.00%
12:45 PM	4,591 sf	5.27%	0 sf	0.00%
1:00 PM	4,820 sf	5.53%	0 sf	0.00%
1:15 PM	5,051 sf	5.80%	0 sf	0.00%
1:30 PM	5,281 sf	6.06%	0 sf	0.00%
1:45 PM	5,528 sf	6.35%	0 sf	0.00%
2:00 PM	5,787 sf	6.64%	0 sf	0.00%
2:15 PM	6,079 sf	6.98%	0 sf	0.00%
2:30 PM	6,391 sf	7.34%	0 sf	0.00%
2:45 PM	6,728 sf	7.72%	0 sf	0.00%
3:00 PM	7,097 sf	8.15%	0 sf	0.00%
3:15 PM	7,511 sf	8.62%	0 sf	0.00%
3:30 PM	7,978 sf	9.16%	15 sf	0.02%
3:45 PM	8,511 sf	9.77%	190 sf	0.22%
4:00 PM	9,128 sf	10.48%	492 sf	0.57%
4:15 PM	9,887 sf	11.35%	1,215 sf	1.39%
4:30 PM	10,804 sf	12.40%	2,651 sf	3.04%
4:45 PM	12,255 sf	14.07%	4,803 sf	5.51%
5:00 PM	14,625 sf	16.79%	8,955 sf	10.28%
5:15 PM	18,254 sf	20.95%	15,624 sf	17.93%
5:27 PM	24,202 sf	27.78%	22,907 sf	26.29%

SHADOW/SUNLIGHT BALANCE

Relative levels of Shadow vs. Sun



PROJECT: Family Zoning Plan
OPEN SPACE: Joe DiMaggio (87,120 sf)

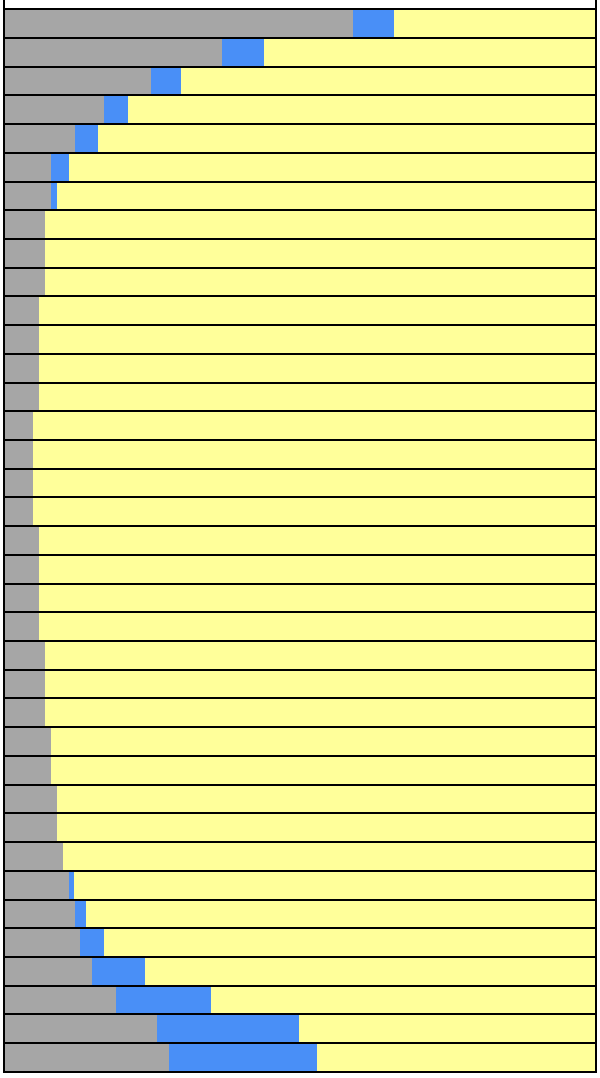
OCTOBER 25

Mirror date: February 15
Analysis hours: 7:30 AM-4:18 PM (PST)

Shadow / Sunlight Balance Key
Existing Shadow | Project Shadow | Sunlight Remaining

Analysis Time	EXISTING SHADOW		PROJECT NET NEW SHADOW	
	Shadow Area	Coverage	Shadow Area	Coverage
7:30 AM	51,336 sf	58.93%	5,893 sf	6.76%
7:45 AM	32,576 sf	37.39%	5,790 sf	6.65%
8:00 AM	21,547 sf	24.73%	4,568 sf	5.24%
8:15 AM	14,922 sf	17.13%	3,712 sf	4.26%
8:30 AM	10,530 sf	12.09%	3,061 sf	3.51%
8:45 AM	7,289 sf	8.37%	2,511 sf	2.88%
9:00 AM	6,606 sf	7.58%	571 sf	0.66%
9:15 AM	6,272 sf	7.20%	0 sf	0.00%
9:30 AM	6,002 sf	6.89%	0 sf	0.00%
9:45 AM	5,744 sf	6.59%	0 sf	0.00%
10:00 AM	5,513 sf	6.33%	0 sf	0.00%
10:15 AM	5,299 sf	6.08%	0 sf	0.00%
10:30 AM	5,090 sf	5.84%	0 sf	0.00%
10:45 AM	4,910 sf	5.64%	0 sf	0.00%
11:00 AM	4,749 sf	5.45%	0 sf	0.00%
11:15 AM	4,593 sf	5.27%	0 sf	0.00%
11:30 AM	4,439 sf	5.10%	0 sf	0.00%
11:45 AM	4,654 sf	5.34%	0 sf	0.00%
12:00 PM	4,885 sf	5.61%	0 sf	0.00%
12:15 PM	5,128 sf	5.89%	0 sf	0.00%
12:30 PM	5,367 sf	6.16%	0 sf	0.00%
12:45 PM	5,624 sf	6.46%	0 sf	0.00%
1:00 PM	5,896 sf	6.77%	0 sf	0.00%
1:15 PM	6,202 sf	7.12%	0 sf	0.00%
1:30 PM	6,528 sf	7.49%	0 sf	0.00%
1:45 PM	6,893 sf	7.91%	0 sf	0.00%
2:00 PM	7,282 sf	8.36%	0 sf	0.00%
2:15 PM	7,731 sf	8.87%	0 sf	0.00%
2:30 PM	8,229 sf	9.45%	97 sf	0.11%
2:45 PM	8,819 sf	10.12%	291 sf	0.33%
3:00 PM	9,500 sf	10.90%	715 sf	0.82%
3:15 PM	10,350 sf	11.88%	1,914 sf	2.20%
3:30 PM	11,536 sf	13.24%	3,813 sf	4.38%
3:45 PM	13,493 sf	15.49%	7,533 sf	8.65%
4:00 PM	16,681 sf	19.15%	13,991 sf	16.06%
4:15 PM	22,420 sf	25.73%	20,793 sf	23.87%
4:18 PM	24,096 sf	27.66%	21,706 sf	24.92%

SHADOW/SUNLIGHT BALANCE
Relative levels of Shadow vs. Sun



PROJECT: Family Zoning Plan
OPEN SPACE: Joe DiMaggio (87,120 sf)

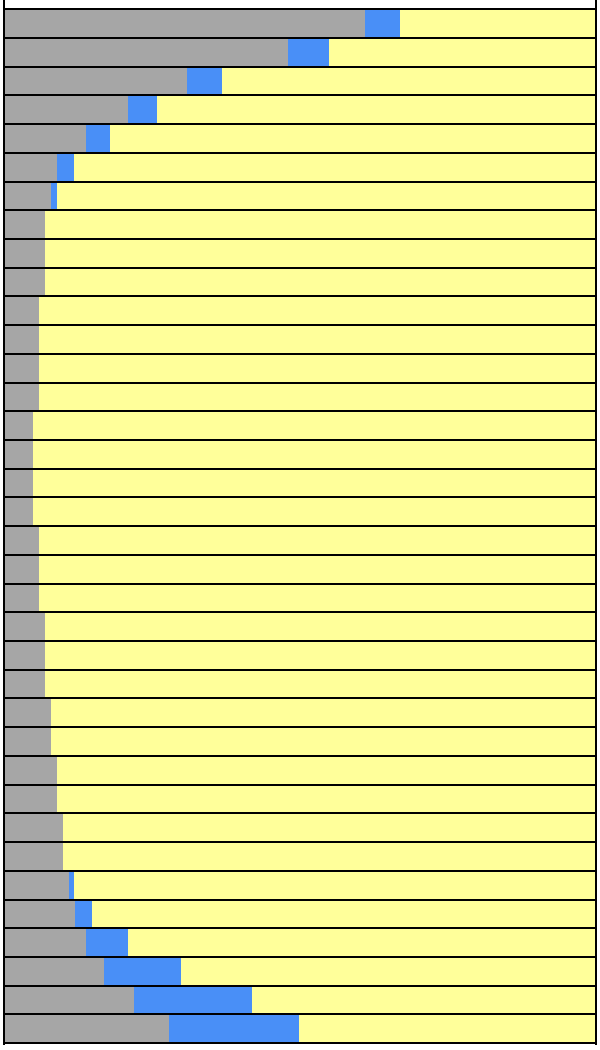
NOVEMBER 1

Mirror date: February 8
Analysis hours: 7:36 AM-4:10 PM (PST)

Shadow / Sunlight Balance Key
Existing Shadow | Project Shadow | Sunlight Remaining

Analysis Time	EXISTING SHADOW		PROJECT NET NEW SHADOW	
	Shadow Area	Coverage	Shadow Area	Coverage
7:36 AM	53,393 sf	61.29%	5,303 sf	6.09%
7:45 AM	41,612 sf	47.76%	5,811 sf	6.67%
8:00 AM	27,149 sf	31.16%	5,000 sf	5.74%
8:15 AM	17,945 sf	20.60%	4,002 sf	4.59%
8:30 AM	11,806 sf	13.55%	3,269 sf	3.75%
8:45 AM	8,030 sf	9.22%	2,706 sf	3.11%
9:00 AM	6,601 sf	7.58%	1,129 sf	1.30%
9:15 AM	6,254 sf	7.18%	0 sf	0.00%
9:30 AM	5,977 sf	6.86%	0 sf	0.00%
9:45 AM	5,727 sf	6.57%	0 sf	0.00%
10:00 AM	5,495 sf	6.31%	0 sf	0.00%
10:15 AM	5,284 sf	6.06%	0 sf	0.00%
10:30 AM	5,080 sf	5.83%	0 sf	0.00%
10:45 AM	4,898 sf	5.62%	0 sf	0.00%
11:00 AM	4,748 sf	5.45%	0 sf	0.00%
11:15 AM	4,591 sf	5.27%	0 sf	0.00%
11:30 AM	4,485 sf	5.15%	0 sf	0.00%
11:45 AM	4,705 sf	5.40%	0 sf	0.00%
12:00 PM	4,947 sf	5.68%	0 sf	0.00%
12:15 PM	5,195 sf	5.96%	0 sf	0.00%
12:30 PM	5,445 sf	6.25%	0 sf	0.00%
12:45 PM	5,714 sf	6.56%	0 sf	0.00%
1:00 PM	5,988 sf	6.87%	0 sf	0.00%
1:15 PM	6,314 sf	7.25%	0 sf	0.00%
1:30 PM	6,654 sf	7.64%	0 sf	0.00%
1:45 PM	7,036 sf	8.08%	0 sf	0.00%
2:00 PM	7,451 sf	8.55%	0 sf	0.00%
2:15 PM	7,934 sf	9.11%	28 sf	0.03%
2:30 PM	8,468 sf	9.72%	119 sf	0.14%
2:45 PM	9,107 sf	10.45%	266 sf	0.31%
3:00 PM	9,853 sf	11.31%	1,111 sf	1.27%
3:15 PM	10,863 sf	12.47%	2,800 sf	3.21%
3:30 PM	12,362 sf	14.19%	5,846 sf	6.71%
3:45 PM	14,775 sf	16.96%	11,579 sf	13.29%
4:00 PM	19,191 sf	22.03%	17,790 sf	20.42%
4:10 PM	24,483 sf	28.10%	19,556 sf	22.45%

SHADOW/SUNLIGHT BALANCE
Relative levels of Shadow vs. Sun



PROJECT: Family Zoning Plan
OPEN SPACE: Joe DiMaggio (87,120 sf)

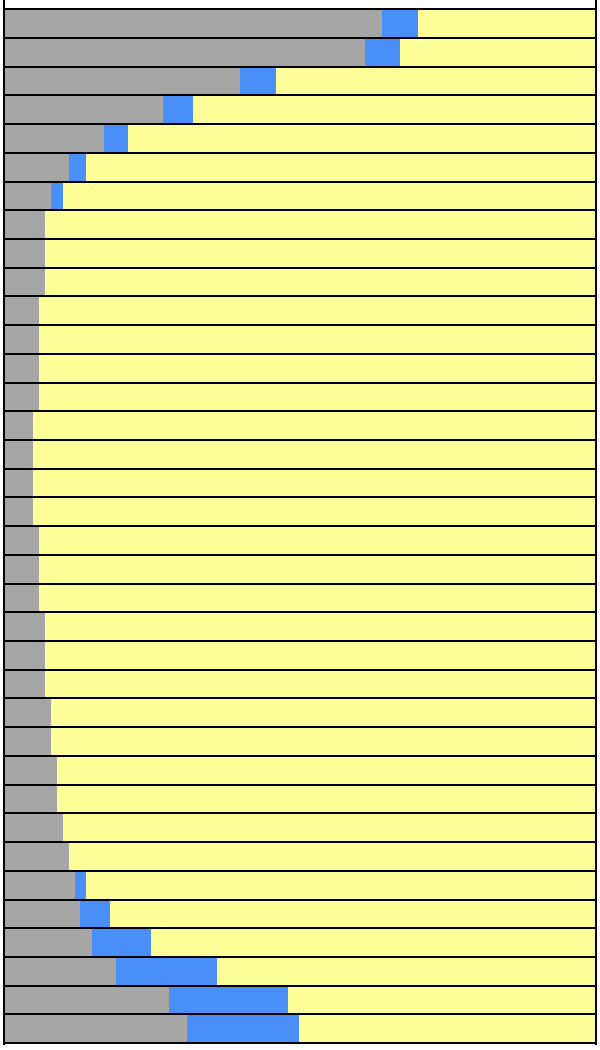
NOVEMBER 8

Mirror date: February 1
Analysis hours: 7:43 AM-4:03 PM (PST)

Shadow / Sunlight Balance Key
Existing Shadow | Project Shadow | Sunlight Remaining

Analysis Time	EXISTING SHADOW		PROJECT NET NEW SHADOW	
	Shadow Area	Coverage	Shadow Area	Coverage
7:43 AM	55,430 sf	63.63%	4,886 sf	5.61%
7:45 AM	53,511 sf	61.42%	5,070 sf	5.82%
8:00 AM	34,979 sf	40.15%	5,259 sf	6.04%
8:15 AM	23,271 sf	26.71%	4,374 sf	5.02%
8:30 AM	14,809 sf	17.00%	3,524 sf	4.05%
8:45 AM	9,424 sf	10.82%	2,883 sf	3.31%
9:00 AM	6,613 sf	7.59%	1,811 sf	2.08%
9:15 AM	6,252 sf	7.18%	25 sf	0.03%
9:30 AM	5,968 sf	6.85%	0 sf	0.00%
9:45 AM	5,720 sf	6.57%	0 sf	0.00%
10:00 AM	5,492 sf	6.30%	0 sf	0.00%
10:15 AM	5,276 sf	6.06%	0 sf	0.00%
10:30 AM	5,077 sf	5.83%	0 sf	0.00%
10:45 AM	4,901 sf	5.63%	0 sf	0.00%
11:00 AM	4,755 sf	5.46%	0 sf	0.00%
11:15 AM	4,604 sf	5.28%	0 sf	0.00%
11:30 AM	4,514 sf	5.18%	0 sf	0.00%
11:45 AM	4,744 sf	5.45%	0 sf	0.00%
12:00 PM	4,994 sf	5.73%	0 sf	0.00%
12:15 PM	5,251 sf	6.03%	0 sf	0.00%
12:30 PM	5,503 sf	6.32%	0 sf	0.00%
12:45 PM	5,784 sf	6.64%	0 sf	0.00%
1:00 PM	6,066 sf	6.96%	0 sf	0.00%
1:15 PM	6,401 sf	7.35%	0 sf	0.00%
1:30 PM	6,760 sf	7.76%	0 sf	0.00%
1:45 PM	7,173 sf	8.23%	0 sf	0.00%
2:00 PM	7,601 sf	8.72%	0 sf	0.00%
2:15 PM	8,104 sf	9.30%	16 sf	0.02%
2:30 PM	8,672 sf	9.95%	83 sf	0.10%
2:45 PM	9,355 sf	10.74%	377 sf	0.43%
3:00 PM	10,167 sf	11.67%	1,621 sf	1.86%
3:15 PM	11,341 sf	13.02%	4,143 sf	4.76%
3:30 PM	13,065 sf	15.00%	8,806 sf	10.11%
3:45 PM	16,324 sf	18.74%	14,673 sf	16.84%
4:00 PM	24,209 sf	27.79%	17,105 sf	19.63%
4:03 PM	27,281 sf	31.31%	16,856 sf	19.35%

SHADOW/SUNLIGHT BALANCE
Relative levels of Shadow vs. Sun



PROJECT: Family Zoning Plan
OPEN SPACE: Joe DiMaggio (87,120 sf)

NOVEMBER 15

Mirror date: January 25
Analysis hours: 7:51 AM-3:57 PM (PST)

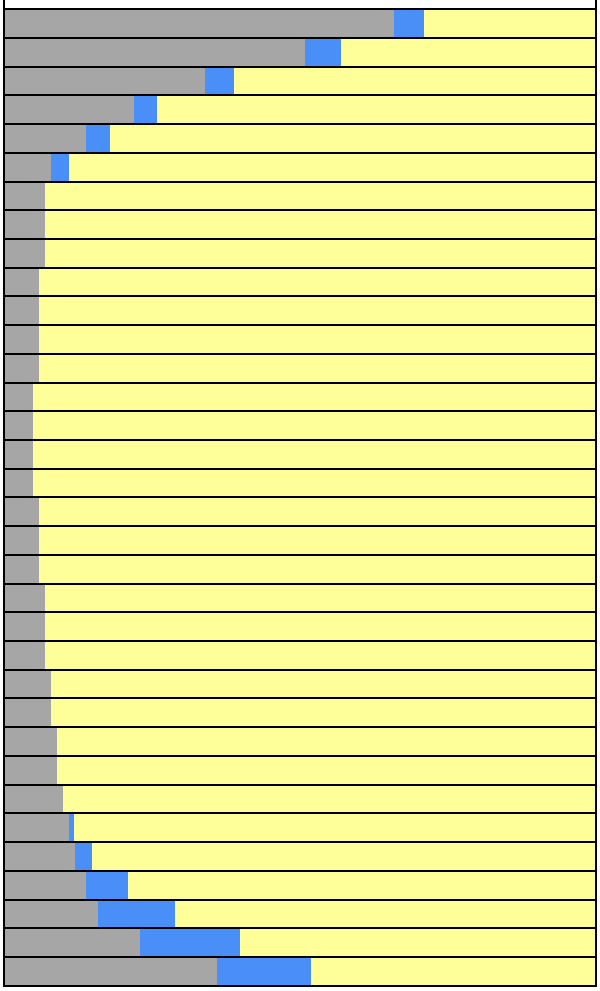
Shadow / Sunlight Balance Key

Existing Shadow | Project Shadow | Sunlight Remaining

Analysis Time	EXISTING SHADOW		PROJECT NET NEW SHADOW	
	Shadow Area	Coverage	Shadow Area	Coverage
7:51 AM	57,456 sf	65.95%	4,431 sf	5.09%
8:00 AM	44,494 sf	51.07%	5,133 sf	5.89%
8:15 AM	29,993 sf	34.43%	4,572 sf	5.25%
8:30 AM	19,421 sf	22.29%	3,823 sf	4.39%
8:45 AM	12,326 sf	14.15%	3,104 sf	3.56%
9:00 AM	7,383 sf	8.47%	2,508 sf	2.88%
9:15 AM	6,271 sf	7.20%	368 sf	0.42%
9:30 AM	5,967 sf	6.85%	0 sf	0.00%
9:45 AM	5,723 sf	6.57%	0 sf	0.00%
10:00 AM	5,494 sf	6.31%	0 sf	0.00%
10:15 AM	5,282 sf	6.06%	0 sf	0.00%
10:30 AM	5,082 sf	5.83%	0 sf	0.00%
10:45 AM	4,904 sf	5.63%	0 sf	0.00%
11:00 AM	4,764 sf	5.47%	0 sf	0.00%
11:15 AM	4,619 sf	5.30%	0 sf	0.00%
11:30 AM	4,538 sf	5.21%	0 sf	0.00%
11:45 AM	4,772 sf	5.48%	0 sf	0.00%
12:00 PM	5,029 sf	5.77%	0 sf	0.00%
12:15 PM	5,292 sf	6.07%	0 sf	0.00%
12:30 PM	5,552 sf	6.37%	0 sf	0.00%
12:45 PM	5,835 sf	6.70%	0 sf	0.00%
1:00 PM	6,127 sf	7.03%	0 sf	0.00%
1:15 PM	6,471 sf	7.43%	0 sf	0.00%
1:30 PM	6,838 sf	7.85%	0 sf	0.00%
1:45 PM	7,253 sf	8.33%	0 sf	0.00%
2:00 PM	7,709 sf	8.85%	0 sf	0.00%
2:15 PM	8,235 sf	9.45%	4 sf	0.00%
2:30 PM	8,834 sf	10.14%	54 sf	0.06%
2:45 PM	9,552 sf	10.96%	602 sf	0.69%
3:00 PM	10,422 sf	11.96%	2,338 sf	2.68%
3:15 PM	11,766 sf	13.51%	5,933 sf	6.81%
3:30 PM	13,946 sf	16.01%	11,220 sf	12.88%
3:45 PM	19,955 sf	22.91%	14,991 sf	17.21%
3:57 PM	31,138 sf	35.74%	14,108 sf	16.19%

SHADOW/SUNLIGHT BALANCE

Relative levels of Shadow vs. Sun



PROJECT: Family Zoning Plan
OPEN SPACE: Joe DiMaggio (87,120 sf)

NOVEMBER 22

Mirror date: January 18
Analysis hours: 7:57 AM-3:54 PM (PST)

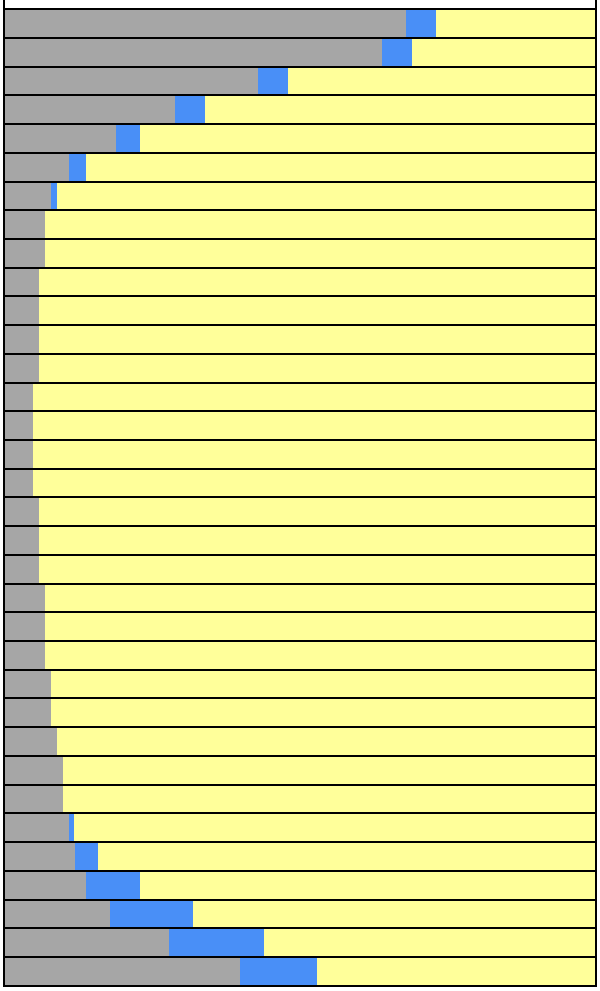
Shadow / Sunlight Balance Key

Existing Shadow | Project Shadow | Sunlight Remaining

Analysis Time	EXISTING SHADOW		PROJECT NET NEW SHADOW	
	Shadow Area	Coverage	Shadow Area	Coverage
7:57 AM	59,462 sf	68.25%	4,024 sf	4.62%
8:00 AM	56,106 sf	64.40%	4,258 sf	4.89%
8:15 AM	37,839 sf	43.43%	4,598 sf	5.28%
8:30 AM	25,145 sf	28.86%	4,022 sf	4.62%
8:45 AM	16,356 sf	18.77%	3,360 sf	3.86%
9:00 AM	9,898 sf	11.36%	2,721 sf	3.12%
9:15 AM	7,077 sf	8.12%	1,031 sf	1.18%
9:30 AM	6,019 sf	6.91%	0 sf	0.00%
9:45 AM	5,735 sf	6.58%	0 sf	0.00%
10:00 AM	5,508 sf	6.32%	0 sf	0.00%
10:15 AM	5,293 sf	6.08%	0 sf	0.00%
10:30 AM	5,094 sf	5.85%	0 sf	0.00%
10:45 AM	4,921 sf	5.65%	0 sf	0.00%
11:00 AM	4,782 sf	5.49%	0 sf	0.00%
11:15 AM	4,642 sf	5.33%	0 sf	0.00%
11:30 AM	4,551 sf	5.22%	0 sf	0.00%
11:45 AM	4,786 sf	5.49%	0 sf	0.00%
12:00 PM	5,042 sf	5.79%	0 sf	0.00%
12:15 PM	5,311 sf	6.10%	0 sf	0.00%
12:30 PM	5,580 sf	6.40%	0 sf	0.00%
12:45 PM	5,869 sf	6.74%	0 sf	0.00%
1:00 PM	6,165 sf	7.08%	0 sf	0.00%
1:15 PM	6,509 sf	7.47%	0 sf	0.00%
1:30 PM	6,887 sf	7.90%	0 sf	0.00%
1:45 PM	7,318 sf	8.40%	0 sf	0.00%
2:00 PM	7,785 sf	8.94%	0 sf	0.00%
2:15 PM	8,321 sf	9.55%	0 sf	0.00%
2:30 PM	8,937 sf	10.26%	31 sf	0.04%
2:45 PM	9,680 sf	11.11%	824 sf	0.95%
3:00 PM	10,624 sf	12.20%	3,146 sf	3.61%
3:15 PM	12,246 sf	14.06%	7,550 sf	8.67%
3:30 PM	15,814 sf	18.15%	12,449 sf	14.29%
3:45 PM	24,777 sf	28.44%	13,761 sf	15.80%
3:54 PM	34,860 sf	40.01%	11,627 sf	13.35%

SHADOW/SUNLIGHT BALANCE

Relative levels of Shadow vs. Sun



PROJECT: Family Zoning Plan
OPEN SPACE: Joe DiMaggio (87,120 sf)

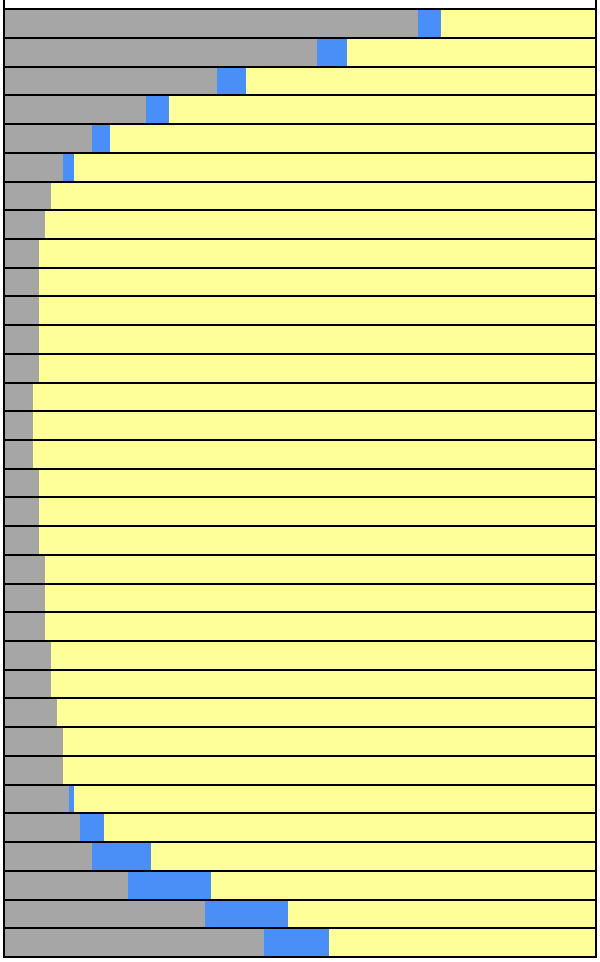
NOVEMBER 29

Mirror date: January 11
Analysis hours: 8:04 AM-3:51 PM (PST)

Shadow / Sunlight Balance Key
Existing Shadow | Project Shadow | Sunlight Remaining

Analysis Time	EXISTING SHADOW		PROJECT NET NEW SHADOW	
	Shadow Area	Coverage	Shadow Area	Coverage
8:04 AM	60,975 sf	69.99%	3,790 sf	4.35%
8:15 AM	46,327 sf	53.18%	4,521 sf	5.19%
8:30 AM	31,415 sf	36.06%	4,084 sf	4.69%
8:45 AM	20,984 sf	24.09%	3,555 sf	4.08%
9:00 AM	13,129 sf	15.07%	2,935 sf	3.37%
9:15 AM	8,485 sf	9.74%	1,824 sf	2.09%
9:30 AM	6,811 sf	7.82%	0 sf	0.00%
9:45 AM	5,872 sf	6.74%	0 sf	0.00%
10:00 AM	5,532 sf	6.35%	0 sf	0.00%
10:15 AM	5,316 sf	6.10%	0 sf	0.00%
10:30 AM	5,117 sf	5.87%	0 sf	0.00%
10:45 AM	4,940 sf	5.67%	0 sf	0.00%
11:00 AM	4,804 sf	5.51%	0 sf	0.00%
11:15 AM	4,670 sf	5.36%	0 sf	0.00%
11:30 AM	4,546 sf	5.22%	0 sf	0.00%
11:45 AM	4,759 sf	5.46%	0 sf	0.00%
12:00 PM	5,000 sf	5.74%	0 sf	0.00%
12:15 PM	5,294 sf	6.08%	0 sf	0.00%
12:30 PM	5,585 sf	6.41%	0 sf	0.00%
12:45 PM	5,879 sf	6.75%	0 sf	0.00%
1:00 PM	6,178 sf	7.09%	0 sf	0.00%
1:15 PM	6,517 sf	7.48%	0 sf	0.00%
1:30 PM	6,904 sf	7.92%	0 sf	0.00%
1:45 PM	7,335 sf	8.42%	0 sf	0.00%
2:00 PM	7,810 sf	8.96%	0 sf	0.00%
2:15 PM	8,358 sf	9.59%	0 sf	0.00%
2:30 PM	8,980 sf	10.31%	24 sf	0.03%
2:45 PM	9,745 sf	11.19%	1,069 sf	1.23%
3:00 PM	10,930 sf	12.55%	3,847 sf	4.42%
3:15 PM	13,003 sf	14.93%	8,515 sf	9.77%
3:30 PM	17,870 sf	20.51%	12,500 sf	14.35%
3:45 PM	29,585 sf	33.96%	12,017 sf	13.79%
3:51 PM	38,226 sf	43.88%	9,782 sf	11.23%

SHADOW/SUNLIGHT BALANCE
Relative levels of Shadow vs. Sun



PROJECT: Family Zoning Plan
OPEN SPACE: Joe DiMaggio (87,120 sf)

DECEMBER 6

Mirror date: January 4
Analysis hours: 8:10 AM-3:51 PM (PST)

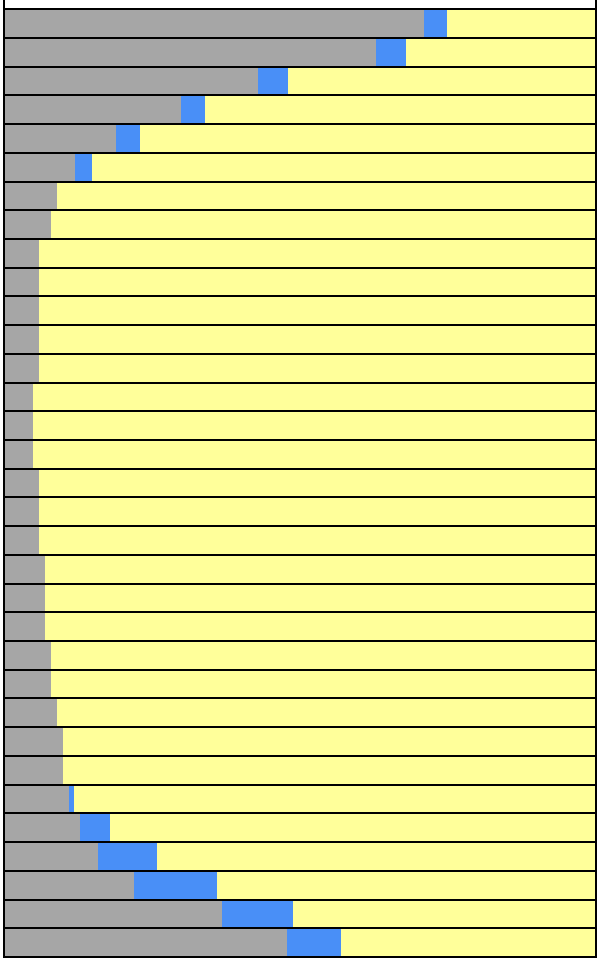
Shadow / Sunlight Balance Key

Existing Shadow | Project Shadow | Sunlight Remaining

Analysis Time	EXISTING SHADOW		PROJECT NET NEW SHADOW	
	Shadow Area	Coverage	Shadow Area	Coverage
8:10 AM	62,077 sf	71.25%	3,623 sf	4.16%
8:15 AM	55,171 sf	63.33%	3,964 sf	4.55%
8:30 AM	37,834 sf	43.43%	4,133 sf	4.74%
8:45 AM	25,717 sf	29.52%	3,623 sf	4.16%
9:00 AM	16,650 sf	19.11%	3,157 sf	3.62%
9:15 AM	10,386 sf	11.92%	2,530 sf	2.90%
9:30 AM	7,843 sf	9.00%	260 sf	0.30%
9:45 AM	6,564 sf	7.53%	0 sf	0.00%
10:00 AM	5,653 sf	6.49%	0 sf	0.00%
10:15 AM	5,348 sf	6.14%	0 sf	0.00%
10:30 AM	5,150 sf	5.91%	0 sf	0.00%
10:45 AM	4,967 sf	5.70%	0 sf	0.00%
11:00 AM	4,834 sf	5.55%	0 sf	0.00%
11:15 AM	4,701 sf	5.40%	0 sf	0.00%
11:30 AM	4,542 sf	5.21%	0 sf	0.00%
11:45 AM	4,757 sf	5.46%	0 sf	0.00%
12:00 PM	5,024 sf	5.77%	0 sf	0.00%
12:15 PM	5,298 sf	6.08%	0 sf	0.00%
12:30 PM	5,573 sf	6.40%	0 sf	0.00%
12:45 PM	5,859 sf	6.72%	0 sf	0.00%
1:00 PM	6,163 sf	7.07%	0 sf	0.00%
1:15 PM	6,497 sf	7.46%	0 sf	0.00%
1:30 PM	6,881 sf	7.90%	0 sf	0.00%
1:45 PM	7,318 sf	8.40%	0 sf	0.00%
2:00 PM	7,793 sf	8.95%	0 sf	0.00%
2:15 PM	8,341 sf	9.57%	0 sf	0.00%
2:30 PM	8,961 sf	10.29%	23 sf	0.03%
2:45 PM	9,870 sf	11.33%	1,182 sf	1.36%
3:00 PM	11,182 sf	12.83%	4,220 sf	4.84%
3:15 PM	13,645 sf	15.66%	8,831 sf	10.14%
3:30 PM	19,347 sf	22.21%	12,156 sf	13.95%
3:45 PM	32,446 sf	37.24%	10,874 sf	12.48%
3:51 PM	41,983 sf	48.19%	7,815 sf	8.97%

SHADOW/SUNLIGHT BALANCE

Relative levels of Shadow vs. Sun



PROJECT: Family Zoning Plan
OPEN SPACE: Joe DiMaggio (87,120 sf)

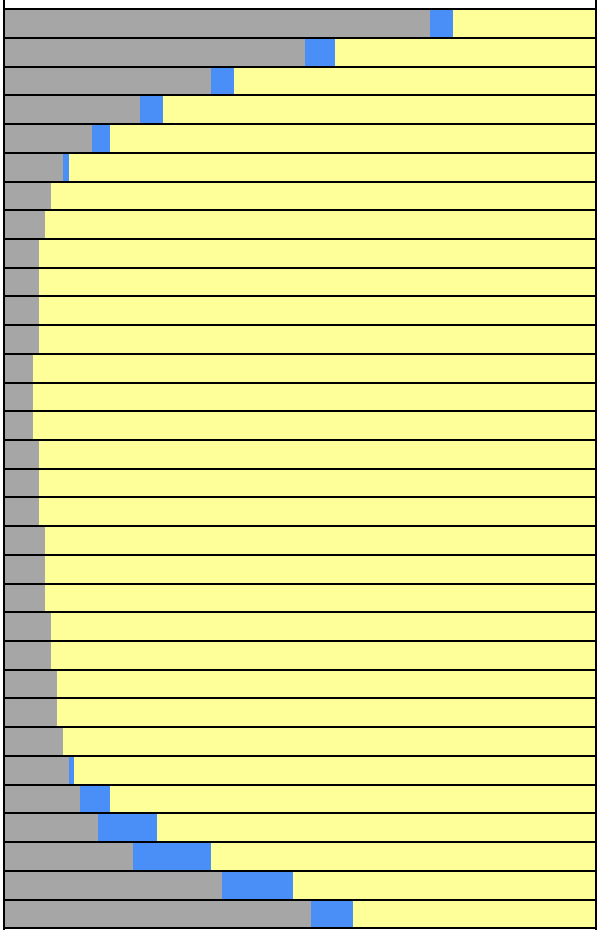
DECEMBER 13

Mirror date: December 28
Analysis hours: 8:15 AM-3:52 PM (PST)

Shadow / Sunlight Balance Key
Existing Shadow | Project Shadow | Sunlight Remaining

Analysis Time	EXISTING SHADOW		PROJECT NET NEW SHADOW	
	Shadow Area	Coverage	Shadow Area	Coverage
8:15 AM	62,797 sf	72.08%	3,498 sf	4.02%
8:30 AM	44,071 sf	50.59%	4,120 sf	4.73%
8:45 AM	30,241 sf	34.71%	3,724 sf	4.27%
9:00 AM	19,954 sf	22.90%	3,236 sf	3.71%
9:15 AM	12,851 sf	14.75%	2,723 sf	3.13%
9:30 AM	8,805 sf	10.11%	869 sf	1.00%
9:45 AM	7,255 sf	8.33%	0 sf	0.00%
10:00 AM	6,109 sf	7.01%	0 sf	0.00%
10:15 AM	5,439 sf	6.24%	0 sf	0.00%
10:30 AM	5,186 sf	5.95%	0 sf	0.00%
10:45 AM	4,998 sf	5.74%	0 sf	0.00%
11:00 AM	4,857 sf	5.58%	0 sf	0.00%
11:15 AM	4,731 sf	5.43%	0 sf	0.00%
11:30 AM	4,548 sf	5.22%	0 sf	0.00%
11:45 AM	4,709 sf	5.40%	0 sf	0.00%
12:00 PM	4,976 sf	5.71%	0 sf	0.00%
12:15 PM	5,253 sf	6.03%	0 sf	0.00%
12:30 PM	5,528 sf	6.35%	0 sf	0.00%
12:45 PM	5,821 sf	6.68%	0 sf	0.00%
1:00 PM	6,123 sf	7.03%	0 sf	0.00%
1:15 PM	6,454 sf	7.41%	0 sf	0.00%
1:30 PM	6,831 sf	7.84%	0 sf	0.00%
1:45 PM	7,258 sf	8.33%	0 sf	0.00%
2:00 PM	7,731 sf	8.87%	0 sf	0.00%
2:15 PM	8,270 sf	9.49%	0 sf	0.00%
2:30 PM	8,933 sf	10.25%	0 sf	0.00%
2:45 PM	9,859 sf	11.32%	1,062 sf	1.22%
3:00 PM	11,281 sf	12.95%	4,068 sf	4.67%
3:15 PM	13,808 sf	15.85%	8,530 sf	9.79%
3:30 PM	19,540 sf	22.43%	11,753 sf	13.49%
3:45 PM	32,452 sf	37.25%	10,549 sf	12.11%
3:52 PM	44,996 sf	51.65%	6,232 sf	7.15%

SHADOW/SUNLIGHT BALANCE
Relative levels of Shadow vs. Sun



PROJECT: Family Zoning Plan
OPEN SPACE: Joe DiMaggio (87,120 sf)

DECEMBER 20

Winter solstice (December 21 similar)
Analysis hours: 8:19 AM-3:54 PM (PST)

Shadow / Sunlight Balance Key

Existing Shadow | Project Shadow | Sunlight Remaining

Analysis Time	EXISTING SHADOW		PROJECT NET NEW SHADOW	
	Shadow Area	Coverage	Shadow Area	Coverage
8:19 AM	63,052 sf	72.37%	3,457 sf	3.97%
8:30 AM	49,142 sf	56.41%	4,080 sf	4.68%
8:45 AM	34,003 sf	39.03%	3,810 sf	4.37%
9:00 AM	22,611 sf	25.95%	3,341 sf	3.83%
9:15 AM	14,836 sf	17.03%	2,875 sf	3.30%
9:30 AM	9,679 sf	11.11%	1,488 sf	1.71%
9:45 AM	7,787 sf	8.94%	0 sf	0.00%
10:00 AM	6,454 sf	7.41%	0 sf	0.00%
10:15 AM	5,621 sf	6.45%	0 sf	0.00%
10:30 AM	5,229 sf	6.00%	0 sf	0.00%
10:45 AM	5,039 sf	5.78%	0 sf	0.00%
11:00 AM	4,883 sf	5.61%	0 sf	0.00%
11:15 AM	4,765 sf	5.47%	0 sf	0.00%
11:30 AM	4,623 sf	5.31%	0 sf	0.00%
11:45 AM	4,656 sf	5.34%	0 sf	0.00%
12:00 PM	4,923 sf	5.65%	0 sf	0.00%
12:15 PM	5,200 sf	5.97%	0 sf	0.00%
12:30 PM	5,472 sf	6.28%	0 sf	0.00%
12:45 PM	5,762 sf	6.61%	0 sf	0.00%
1:00 PM	6,064 sf	6.96%	0 sf	0.00%
1:15 PM	6,389 sf	7.33%	0 sf	0.00%
1:30 PM	6,753 sf	7.75%	0 sf	0.00%
1:45 PM	7,175 sf	8.24%	0 sf	0.00%
2:00 PM	7,635 sf	8.76%	0 sf	0.00%
2:15 PM	8,165 sf	9.37%	0 sf	0.00%
2:30 PM	8,816 sf	10.12%	0 sf	0.00%
2:45 PM	9,715 sf	11.15%	772 sf	0.89%
3:00 PM	11,060 sf	12.70%	3,478 sf	3.99%
3:15 PM	13,417 sf	15.40%	7,731 sf	8.87%
3:30 PM	18,450 sf	21.18%	11,434 sf	13.12%
3:45 PM	30,188 sf	34.65%	10,821 sf	12.42%
3:54 PM	46,296 sf	53.14%	5,558 sf	6.38%

SHADOW/SUNLIGHT BALANCE

Relative levels of Shadow vs. Sun

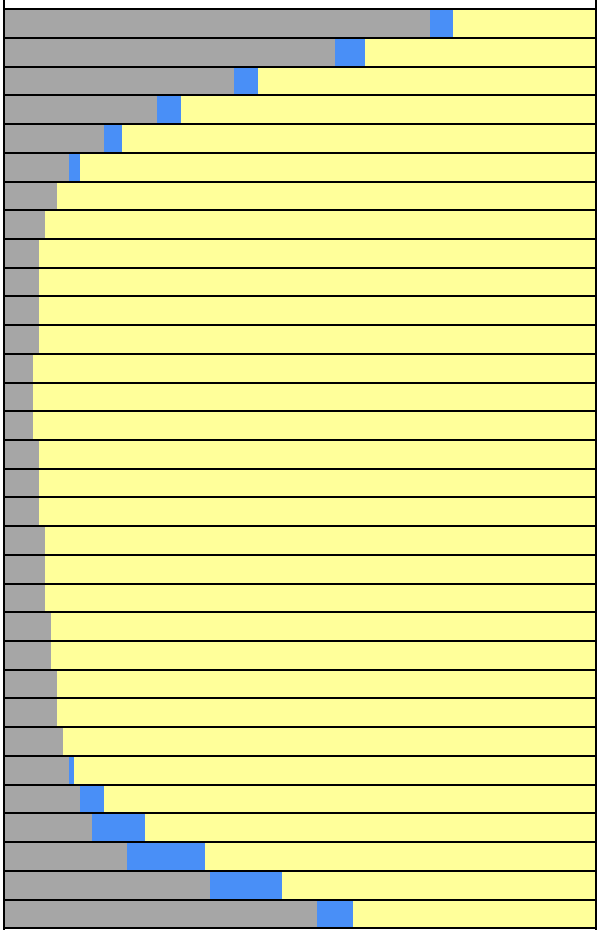


EXHIBIT E

SWAPE Technical Consultation, Data Analysis and Litigation Support for the Environment

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November 14, 2025

Richard Drury
Lozeau | Drury LLP
1939 Harrison St., Suite 150
Oakland, CA 94612

Subject: **Comments on the Family Zoning Plan – Housing Element Rezoning Program (SCH No. 2021060358)**

Dear Mr. Drury,

We have reviewed the September 2025 Addendum No. 1 to Environmental Impact Report ("Addendum") and the November 2022 Final Environmental Impact Report ("FEIR") for the Family Zoning Plan – Housing Element Rezoning Program ("Project") located in the City of San Francisco ("City"). The Addendum proposes to develop an additional 4,000 housing units to bring the total units under the Family Zoning Plan to 54,000 housing units.

Our review concludes that the Addendum fails to adequately evaluate the Project's hazards, hazardous materials, and air quality impacts. As a result, emissions and health risk impacts associated with construction and operation of the proposed Project may be underestimated and inadequately addressed. A subsequent Environmental Impact Report ("EIR") should be prepared to adequately assess and mitigate the potential hazards, hazardous materials, and air quality impacts that the project may have on the environment.

Hazards and Hazardous Materials

Inadequate Disclosure and Analysis of Impacts

The Addendum and FEIR do not mention the newly passed AB 130 which mandates that hazardous waste sites be addressed through the completion of a Phase I Environmental Site Assessments ("ESAs"). AB 130 states: [1]

> "The development can proceed as a "use by right" if, [among other provisions],

[1] "Assembly Bill No. 130." California State Legislature, 2025, *available at:* https://legiscan.com/CA/text/AB130/id/3258333

(13) (A) The development proponent completes a Phase I environmental assessment, as defined in Section 78090 of the Health and Safety Code, and a Phase II environmental assessment, as defined in subdivision (o) of Section 25403 of the Health and Safety Code, if warranted.

(B) If a recognized environmental condition is found, the development proponent shall undertake a preliminary endangerment assessment, as defined in Section 78095 of the Health and Safety Code, prepared by an environmental assessor to determine the existence of any release of a hazardous substance on the site and to determine the potential for exposure of future occupants to significant health hazards from any nearby property or activity.

(i) If a release of hazardous substance is found to exist on the site, the release shall be removed, or any significant effect of the release shall be mitigated to a level of insignificance in compliance with state and federal requirements.

(ii) If a potential for exposure to significant hazards from surrounding properties or activities is found to exist, the effects of the potential exposure shall be mitigated to a level of insignificance in compliance with current state and federal requirements."

These requirements are not mentioned in the Addendum or FEIR. There are thousands of hazardous waste sites in San Francisco. According to the FEIR, there are 2,000 Maher sites and 2,300 Cortese List sites within San Francisco (p. 4.1-219) [2]. All Maher- and Cortese-listed sites that will be subject to development under this Project will need to undergo a Phase I ESA according to the AB 130 text cited above.

Phase I ESAs are conducted to identify if any recognized environmental conditions are found that would potentially pose a health risk to construction workers or for future residents. If a recognized environmental condition is found, a more detailed preliminary endangerment assessment is required to identify any hazardous substance release.

A subsequent EIR should be prepared to include specific mitigation measures for dealing with Maher- and Cortese-listed sites in a manner consistent with AB 130. These mitigation measures must include provisions for conducting Phase I ESAs and, if recognized conditions are found, Phase II ESAs so that the health of construction workers, future occupants and workers is protected.

[2] The Hazardous Waste and Substances Sites (Cortese) List is a planning document used by the State, local agencies, and developers to comply with the California Environmental Quality Act requirements in providing information about the location of hazardous materials release sites. Government Code section 65962.5 requires the California Environmental Protection Agencyopens in a new window to develop at least annually an updated Cortese List. DTSC is responsible for a portion of the information contained in the Cortese List. Other State and local government agencies are required to provide additional hazardous material release information for the Cortese List. https://dtsc.ca.gov/dtscs-cortese-list/

Air Quality

Failure to Quantify and Adequately Evaluate Criteria Air Pollutant Emissions

The Addendum fails to quantify the criteria air pollutant emissions associated with Project construction and operation. Rather, in regard to the proposed Project's construction-related air quality impacts, the Addendum states:

> "The proposed rezoning program and subsequent development is expected to result in the same significant criteria air pollutant impacts from construction but not substantially more severe impacts than those disclosed in the EIR" (p. 93).

Similarly, in regard to the Project's operational air quality impacts, the Addendum states:

> "The conclusion in the FEIR is that total operational emissions for future development would be below the air district's thresholds of significance for all pollutants. That conclusion also applies to the proposed rezoning program. Operational emissions would not exceed any thresholds for any representative building type that would be constructed under the proposed rezoning program, and the impact would be less than significant" (p. 95).

However, relevant Bay Area Air Quality Management District ("BAAQMD") guidance supports the calculation of the Project's air pollutant emissions. The Addendum proposes to construct an additional 4,000 residential units. According to BAAQMD's screening criteria, apartments and condo-townhouse land uses must undergo further environmental review if they exceed 416 units for construction or 637/638 units for operational emissions (see table below).[3]

[3] "Screening For Criteria Air Pollutants and Precursors." BAAQMD, 2022, *available at*: https://www.baaqmd.gov/~/media/files/planning-and-research/ceqa/ceqa-guidelines-2022/ceqa-guidelines-chapter-4-screening_final-pdf.pdf?la=en, p. 4.

Land Use Category	Land Use Subcategory	Land Use Unit	Screening Level	
			Construction	Operation
Education	Worship Place	KSF	452	642
Industrial	General Heavy Industry	KSF	452	1,009
Industrial	General Light Industry	KSF	452	998
Industrial	Industrial Park	KSF	452	1,247
Industrial	Manufacturing	KSF	452	1,009
Industrial	Warehouse[1]	KSF	452	1,423
Recreational	Arena	KSF	732	600
Recreational	City Park	Acres	10	175
Recreational	Fast Food Restaurant	KSF	452	21
Recreational	Health Club	KSF	452	261
Recreational	Hotel	Rooms	312	633
Recreational	Motel	Rooms	230	767
Recreational	Movie Theater	KSF	458	80
Recreational	Restaurant – High Turnover (Sit-Down)	KSF	452	75
Recreational	Restaurant – Quality (Fine Dining)	KSF	452	105
Recreational	Racquet Club	KSF	452	457
Recreational	Recreational Swimming Pool	KSF	452	376
Residential	Apartments	DU	416	638
Residential	Condo-Townhouse	DU	416	637
Residential	Mobile Home Park	DU	377	721
Residential	Congregate Care/Retirement Community	DU	416	1,008
Residential	Single Family Housing	DU	254	421
Retail	Auto Care Center	KSF	452	356
Retail	Convenience Market	KSF	452	11
Retail	Discount Store	KSF	452	150
Retail	Home Improvement Superstore/Hardware-Paint Store	KSF	452	221
Retail	Regional Shopping Center	KSF	452	221
Retail	Strip Mall	KSF	452	204
Retail	Supermarket	KSF	452	72

Notes: DU = dwelling unit; KSF = thousand square feet.

Furthermore, the BAAQMD indicates that if a Project includes any of the listed screening criteria, "then the lead agency would need to perform a detailed assessment of the project's criteria air pollutant and precursor emissions."[4] Thus, pursuant to relevant BAAQMD guidance, a quantitative air quality analysis should be prepared in a subsequent EIR.

Without making an effort to estimate the Project's potential construction-related and operational criteria air pollutant emissions, the Addendum lacks evidence to support the conclusion that the Project's emissions would not exceed the applicable BAAQMD significance thresholds. Until further analysis is provided, we cannot verify the Project would not result in new, significant air quality impacts already addressed in the FEIR. The Project should not be approved until a subsequent EIR is prepared to adequately assess and mitigate the potential air quality impacts that Project construction and operation may have on the surrounding environment.

SWAPE's Analysis Indicates a Potentially Significant Air Quality Impact

In an effort to estimate construction-related and operational emissions that may result from development of the additional 4,000 housing units under the Addendum, we prepared a preliminary CalEEMod model. Our analysis provides a generalized evaluation of a range of potential residential building types. Specifically, we modeled accounting for 2,000 "Apartments Mid Rise" and 2,000

[4] "Screening For Criteria Air Pollutants and Precursors." BAAQMD, 2022, *available at*: https://www.baaqmd.gov/~/media/files/planning-and-research/ceqa/ceqa-guidelines-2022/ceqa-guidelines-chapter-4-screening_final-pdf.pdf?la=en, p. 4.

"Condo/Townhouse High Rise" land use subtypes. Because Project-specific details such as construction schedule, equipment types, and operating parameters are not known at this time, all other values were left as default.

Our analysis estimates that the Project's construction and operational related reactive organic gases/volatile organic compounds ("ROG/VOC") emissions exceed the BAAQMD daily threshold of 54 pounds per day ("lbs/day") (see table below).

SWAPE Criteria Air Pollutant Emissions Estimates		
	Construction ROG/VOC (lbs/day)	**Operational ROG/VOC** (lbs/day)
SWAPE	148	145
BAAQMD Threshold	**54**	**54**
Exceeds?	***Yes***	***Yes***

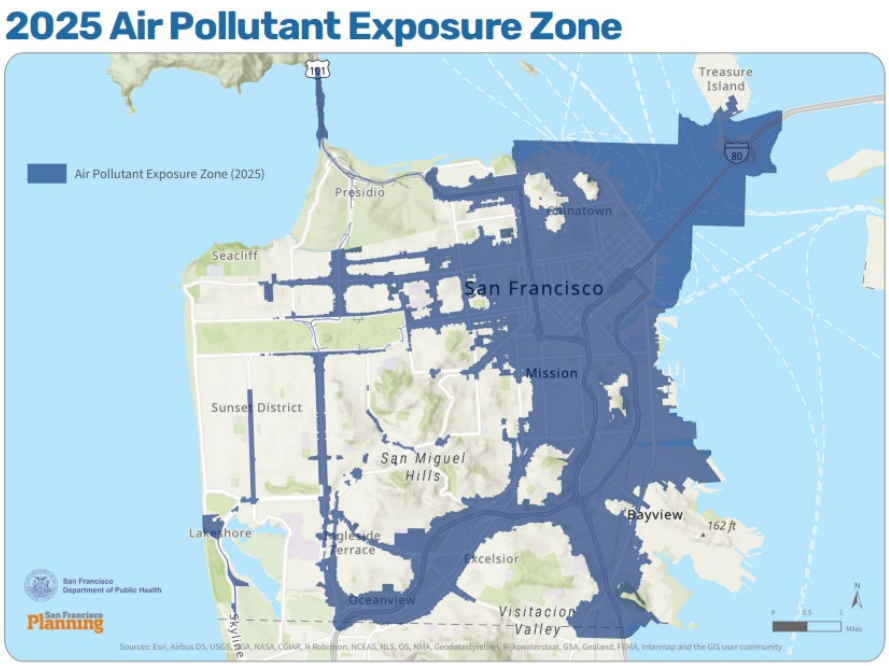
According to our analysis, the construction and operational related ROG/VOC emissions are estimated to be approximately 148 and 145 lbs/day, respectively, exceeding the BAAQMD daily threshold. This finding indicates a potentially significant air quality impact that the Addendum did not identify or address. In our opinion, a subsequent EIR should be conducted to provide a more substantial calculation of the Project's emissions and a more detailed evaluation of the Project's potential air quality impacts.

Failure to Adequately Account for Air Pollution Exposure Zones

The Addendum proposes development in the Downtown, Marina, Mission, Northeast, and Western Addition planning districts, which have areas within the City's air pollutant exposure zones ("APEZ"). The Addendum states that "the proposed rezoning program may result in a small proportion of additional rezoned parcels being in the APEZ, which could increase the number of people exposed to the generally high pollutant concentrations in the APEZ" (p. 97).

In 2025, the City identified new APEZ areas, defined as locations "where particulate matter ($PM_{2.5}$) is greater than or equal to 9 $\mu g/m^3$ or where the risk of cancer from air pollutants is greater than or equal to 100 in a million," and are displayed in the APEZ map presented below:[5]

[5] "2025 Air Pollutant Exposure Zone." San Francisco Department of Public Health, February 2025, available at: https://citypln-m-extnl.sfgov.org/SharedLinks.aspx?accesskey=216571d03e991ee3e00bc434a2415eb36eabc17a8f25a39dc8105f404b976d2f&VaultGUID=A4A7DACD-B0DC-4322-BD29-F6F07103C6E0.



According to the City:

> "Since 2008, San Francisco Health Code article 38 requires new residential construction projects in the APEZ to install enhanced ventilation in buildings to protect residents from the health effects of poor air quality. In addition, through the environmental review process, many construction projects in the APEZ are required to use the cleanest available construction equipment to reduce air quality impacts."[6][7]

As demonstrated above, residential projects are recommended to install enhanced ventilation in buildings. The Addendum and FEIR have failed to do so. Additionally, the Addendum concludes that the $PM_{2.5}$ and cancer risk impacts associated with the Project would be significant-and-unavoidable with mitigation, stating:

> "The maximum increases in $PM_{2.5}$ concentrations and cancer risks would not be meaningfully different than those found in the FEIR analysis, and the results would most likely still be above the air district's thresholds and thus significant and unavoidable with mitigation" (p. 97).

While we agree that the Project would result in significant air quality impacts, the Addendum's assertion that this impact is significant-and-unavoidable is unsupported. The Project proposed by the Addendum would allow further residential development within newly designated APEZ areas, which are already characterized by elevated $PM_{2.5}$ levels and an increased cancer risk. By facilitating new housing in these

[6] "Air Quality Review." San Francisco Planning, 2025, *available at:* https://sfplanning.org/air-quality#permit-anchor-3.
[7] "ARTICLE 38: Enhanced Ventilation for Urban Infill." City and County of San Francisco, December 2008, *available at: https://codelibrary.amlegal.com/codes/san_francisco/latest/sf_health/0-0-0-6054*.

areas without committing to additional mitigation, the Addendum could expose future residents to potentially significant health impacts. According to CEQA Guidelines §15096(g)(2):

> "When an updated EIR has been prepared for a project, the Responsible Agency shall not approve the project as proposed if the agency finds any feasible alternative or feasible mitigation measures within its powers that would substantially lessen or avoid any significant effect the project would have on the environment."[8]

As such, the Addendum is required under CEQA to implement all feasible mitigation to reduce impacts to a less-than-significant level. To reduce the Project's air quality impacts to the maximum extent possible, additional feasible mitigation measures should be incorporated, such as those suggested in the section of this letter titled "Feasible Mitigation Measures Available to Reduce Emissions." The Project should not be approved until a subsequent EIR is prepared, incorporating all feasible mitigation to reduce emissions to the maximum extent possible.

Mitigation

Feasible Mitigation Measures Available to Reduce Emissions

The Addendum is required under CEQA to implement all feasible mitigation to reduce the Project's potential impacts. As demonstrated above, the Project would result in potentially significant air quality impacts that should be mitigated further.

To reduce the VOC emissions associated with Project construction and operation, we recommend the Addendum consider incorporating the following mitigation measures:[9]

- Use super-compliant VOC-content architectural coatings (0 grams per liter to less than 10 grams per liter VOC) during Project construction application of paints and other architectural coatings.
- If paints and coatings with VOC content of 0 grams/liter to less than 10 grams/liter cannot be utilized, or they do not reduce emissions to below thresholds, the developer shall avoid application of architectural coatings during the peak smog season: July, August, and September.

While the Project is not located in Los Angeles County, the above mitigation measures would decrease emissions regardless. Further mitigation used by other land use development projects to address VOC emissions include:[10]

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[8] "Cal. Code Regs. tit. 14 § 15096." California Legislature, available at: https://casetext.com/regulation/california-code-of-regulations/title-14-natural-resources/division-6-resources-agency/chapter-3-guidelines-for-implementation-of-the-california-environmental-quality-act/article-7-eir-process/section-15096-process-for-a-responsible-agency.

[9] "Mitigation Monitoring and Reporting Program." Los Angeles County Housing Element Update Program EIR. August 2021, *available at*: https://planning.lacounty.gov/wp-content/uploads/2023/07/Housing_final-peir-mitigation-monitoring.pdf.

[10] "Banning Commerce Center Project." Kimley-Horn and Associates, Inc., June 2024, *available at*: https://ceqanet.opr.ca.gov/2022090102/2; Draft Environmental Impact Report, p. 1-7.

- Recycle leftover paint. Take any leftover paint to a household hazardous waste center; do not mix leftover water-based and oil-based paints.
- Keep lids closed on all paint containers when not in use to prevent VOC emissions and excessive odors.
- For water-based paints, clean up with water only. Whenever possible, do not rinse the cleanup water down the drain or pour it directly into the ground or the storm drain
- Use compliant low-VOC cleaning solvents to clean paint application equipment.
- Keep all paint- and solvent-laden rags in sealed containers to prevent VOC emissions.
- Contractors shall construct/build with materials that do not require painting and use pre-painted construction materials to the extent practicable.
- Use high-pressure/low-volume paint applicators with a minimum transfer efficiency of at least 50 percent or other application techniques with equivalent or higher transfer efficiency.
- Manual application using a paintbrush, hand-roller, trowel, spatula, dauber, rag, or sponge, to achieve a 100 percent application efficiency.

In order to reduce the $PM_{2.5}$ and cancer risk emissions associated with the Project and recommend the Addendum consider incorporating several mitigation measures as listed below. Incorporating these measures would also reduce cumulative exposure for future residential developments proposed within APEZ zones, where pollutant concentrations are already elevated. The Southern California Association of Governments' Certified Final Program Environmental Impact Report for Connect SoCal 2024 recommends the following Project-level air quality mitigation measures: [11]

- Installing high-efficiency or enhanced filtration units, such as Minimum Efficiency Reporting Value (MERV) 13 or better. Installation of enhanced filtration units can be verified during occupancy inspection prior to the issuance of an occupancy permit.
- Disclose potential health impacts to prospective sensitive receptors from living in close proximity to freeways or other sources of air pollution and the reduced effectiveness of air filtration systems when windows are open or residents are outside.
- Identify the responsible implementing and enforcement agency to ensure that enhanced filtration units are installed on-site before a permit of occupancy is issued.
- Identify the responsible entity such as future residents themselves, Homeowner's Association, or property managers for ensuring enhanced filtration units are replaced on time.
- Identify, provide, and disclose ongoing cost-sharing strategies, if any, for replacing the enhanced filtration units.
- Set criteria for assessing progress in installing and replacing the enhanced filtration units,
- Develop a process for evaluating the effectiveness of the enhanced filtration units.
- Diesel generators on site for more than 10 total days shall be equipped with emission control technology verified by EPA or CARB to reduce PM emissions by a minimum of 85%.

[11] "Certified Final Program Environmental Impact Report for Connect SoCal 2024." SCAG, May 2020, *available at:* https://scag.ca.gov/program-environmental-impact-report-0.

- Establish generator sites and truck-staging zones for vehicles waiting to load or unload material on site. Such zones shall be located where diesel emissions have the least impact on abutters, the general public, and especially sensitive receptors such as hospitals, schools, daycare facilities, elderly housing, and convalescent facilities.
- Obtain CARB Portable Equipment Registration with the state or a local district permit for portable engines and portable engine-driven equipment units used at the project work site, with the exception of on-road and off-road motor vehicles. Arrange appropriate consultations with CARB or the local air district to determine registration and permitting requirements prior to equipment operation at the site.
- Provide pedestrian network improvements, such as interconnected street network, narrower roadways and shorter block lengths, sidewalks, parks and public spaces, minimize pedestrian barriers.
- Create urban non-motorized zones.
- Provide bike parking in non-residential and multi-unit residential projects
- Require residential area parking permit.
- Provide ride-sharing programs:
    - Designate a certain percentage of parking spacing for ride sharing vehicles,
    - Designating adequate passenger loading and unloading and waiting areas for ride-sharing vehicles,
    - Providing a web site or messaging board for coordinating rides, and
    - Permanent transportation management association membership and finding requirement.

Provided above are several mitigation measures that would reduce Project-related VOC and $PM_{2.5}$/cancer risk emissions. These measures offer a cost-effective, feasible way to incorporate lower-emitting design features into the proposed Project, which subsequently reduces emissions released during Project construction and operation.

A subsequent EIR should be prepared that includes all feasible mitigation measures, as well as an updated air quality analysis to ensure that the necessary mitigation measures are implemented to reduce emissions to the maximum extent feasible. The subsequent EIR should also demonstrate a commitment to the implementation of these measures prior to Project approval, to ensure that the Project's potentially significant emissions are reduced to the maximum extent possible.

Disclaimer

SWAPE has received limited documentation regarding this project. Additional information may become available in the future; thus, we retain the right to revise or amend this report when additional information becomes available. Our professional services have been performed using that degree of care and skill ordinarily exercised, under similar circumstances, by reputable environmental consultants practicing in this or similar localities at the time of service. No other warranty, expressed or implied, is made as to the scope of work, work methodologies and protocols, site conditions, analytical testing results, and findings presented. This report reflects efforts which were limited to information that was

reasonably accessible at the time of the work, and may contain informational gaps, inconsistencies, or otherwise be incomplete due to the unavailability or uncertainty of information obtained or provided by third parties.

Sincerely,

Matt Hagemann, P.G., C.Hg.

Paul E. Rosenfeld, Ph.D.

Attachment A: CalEEMod Output Files
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San Francisco Housing Element Detailed Report

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1. Basic Project Information

1.1. Basic Project Information

Data Field	Value
Project Name	San Francisco Housing Element
Construction Start Date	1/1/2026
Operational Year	2050
Lead Agency	—
Land Use Scale	Plan/community
Analysis Level for Defaults	County
Windspeed (m/s)	3.9
Precipitation (days)	42
Location	San Francisco, CA, USA
County	San Francisco
City	San Francisco
Air District	Bay Area AQMD
Air Basin	San Francisco Bay Area
TAZ	1047
EDFZ	1
Electric Utility	Pacific Gas & Electric Company
Gas Utility	Pacific Gas & Electric
App Version	2022.1.1.32

1.2. Land Use Types

Land Use Subtype	Size	Unit	Lot Acreage	Building Area (sq ft)	Landscape Area (sq ft)	Special Landscape Area (sq ft)	Population	Description
Apartments Mid Rise	2,000	Dwelling Unit	53	1,920,000	—	—	4,660	—

Condo/Townhouse High Rise	2,000	Dwelling Unit	31	1,920,000	—	—	4,660	—

1.3. User-Selected Emission Reduction Measures by Emissions Sector

No measures selected

2. Emissions Summary

2.1. Construction Emissions Compared Against Thresholds

Criteria Pollutants (lb/day for daily, ton/yr for annual) and GHGs (lb/day for daily, MT/yr for annual)

Un/Mit.	TOG	ROG	NOx	CO	SO2	PM10E	PM10D	PM10T	PM2.5E	PM2.5D	PM2.5T	BCO2	NBCO2	CO2T	CH4	N2O	R	CO2e
Daily, Summer (Max)	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—
Unmit.	493	493	33	121	0.10	1.2	27	27	1.1	10	11	—	39,740	39,740	2.1	2.0	105	40,504
Daily, Winter (Max)	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—
Unmit.	493	493	35	113	0.10	1.1	27	27	1.0	6.5	6.9	—	38,384	38,384	2.3	2.8	2.7	39,270
Average Daily (Max)	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—
Unmit.	148	148	23	76	0.07	0.74	19	19	0.68	4.5	4.8	—	26,971	26,971	1.5	1.6	29	27,454
Annual (Max)	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—
Unmit.	27	27	4.2	14	0.01	0.14	3.4	3.5	0.12	0.83	0.87	—	4,465	4,465	0.25	0.26	4.8	4,545

2.2. Construction Emissions by Year, Unmitigated

Criteria Pollutants (lb/day for daily, ton/yr for annual) and GHGs (lb/day for daily, MT/yr for annual)

Year	TOG	ROG	NOx	CO	SO2	PM10E	PM10D	PM10T	PM2.5E	PM2.5D	PM2.5T	BCO2	NBCO2	CO2T	CH4	N2O	R	CO2e

Daily - Summer (Max)	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—
2026	3.8	3.2	29	29	0.06	1.2	20	21	1.1	10	11	—	6,776	6,776	0.27	0.05	0.62	6,799
2027	11	8.6	33	121	0.10	0.42	27	27	0.39	6.5	6.9	—	39,740	39,740	2.1	2.0	105	40,504
2028	11	8.4	31	116	0.10	0.38	27	27	0.36	6.5	6.8	—	38,945	38,945	2.1	1.9	94	39,672
2029	11	8.1	29	111	0.10	0.35	27	27	0.33	6.5	6.8	—	38,138	38,138	1.9	1.9	84	38,850
2030	9.5	7.8	28	107	0.10	0.34	27	27	0.32	6.5	6.8	—	37,342	37,342	1.8	1.9	74	38,018
2031	9.2	7.6	26	104	0.10	0.32	27	27	0.30	6.5	6.8	—	36,693	36,693	1.7	1.8	65	37,333
2032	8.9	7.4	24	101	0.10	0.30	27	27	0.29	6.5	6.8	—	35,954	35,954	1.6	1.8	57	36,583
2033	493	493	5.9	16	0.01	0.18	4.8	4.8	0.17	1.1	1.1	—	4,730	4,730	0.06	0.04	7.6	4,750
Daily - Winter (Max)	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—
2026	3.7	3.1	27	28	0.06	1.1	9.4	10	1.0	3.7	4.7	—	6,766	6,766	0.27	0.06	0.02	6,791
2027	11	8.5	35	113	0.10	1.0	27	27	0.96	6.5	6.9	—	38,384	38,384	2.3	2.8	2.7	39,270
2028	11	8.2	33	108	0.10	0.38	27	27	0.36	6.5	6.8	—	37,614	37,614	2.1	2.7	2.4	38,471
2029	11	7.8	31	104	0.10	0.35	27	27	0.33	6.5	6.8	—	36,830	36,830	2.0	2.7	2.2	37,685
2030	9.5	7.7	29	100	0.10	0.34	27	27	0.32	6.5	6.8	—	36,055	36,055	2.0	1.9	1.9	36,663
2031	9.1	7.4	27	97	0.10	0.32	27	27	0.30	6.5	6.8	—	35,418	35,418	1.7	1.8	1.7	35,996
2032	8.8	7.3	26	93	0.10	0.30	27	27	0.29	6.5	6.8	—	34,697	34,697	1.6	1.8	1.5	35,273
2033	493	493	25	90	0.10	0.28	27	27	0.27	6.5	6.8	—	34,007	34,007	1.5	1.7	1.3	34,556
2034	493	493	1.5	14	< 0.005	0.01	4.8	4.8	0.01	1.1	1.1	—	4,430	4,430	0.07	0.04	0.17	4,443
Average Daily	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—
2026	2.4	2.0	18	18	0.03	0.74	5.8	6.6	0.68	2.7	3.4	—	3,709	3,709	0.15	0.03	0.17	3,723
2027	6.8	5.1	23	66	0.07	0.39	16	17	0.37	4.1	4.5	—	22,553	22,553	1.3	1.6	25	23,076
2028	7.8	5.8	23	76	0.07	0.27	19	19	0.25	4.5	4.8	—	26,971	26,971	1.5	1.4	29	27,454
2029	7.5	5.6	22	73	0.07	0.25	19	19	0.24	4.5	4.7	—	26,337	26,337	1.4	1.4	26	26,813
2030	6.7	5.5	20	69	0.07	0.24	19	19	0.23	4.5	4.7	—	25,782	25,782	1.4	1.3	23	26,237

2031	6.4	5.2	19	67	0.07	0.23	19	19	0.22	4.5	4.7	—	25,327	25,327	1.2	1.3	20	25,759
2032	6.2	5.2	19	65	0.07	0.22	19	19	0.20	4.5	4.7	—	24,879	24,879	1.1	1.3	17	25,307
2033	148	148	5.0	17	0.02	0.09	4.4	4.5	0.08	1.0	1.1	—	5,689	5,689	0.21	0.21	3.4	5,760
2034	2.9	2.9	0.01	0.08	< 0.005	< 0.005	0.03	0.03	< 0.005	0.01	0.01	—	26	26	< 0.005	< 0.005	0.02	26
Annual	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—
2026	0.43	0.37	3.3	3.3	0.01	0.14	1.1	1.2	0.12	0.49	0.61	—	614	614	0.02	0.01	0.03	616
2027	1.2	0.93	4.2	12	0.01	0.07	2.9	3.0	0.07	0.75	0.82	—	3,734	3,734	0.21	0.26	4.2	3,820
2028	1.4	1.1	4.2	14	0.01	0.05	3.4	3.5	0.05	0.83	0.87	—	4,465	4,465	0.25	0.23	4.8	4,545
2029	1.4	1.0	4.0	13	0.01	0.05	3.4	3.5	0.04	0.82	0.87	—	4,360	4,360	0.23	0.23	4.3	4,439
2030	1.2	1.00	3.7	13	0.01	0.04	3.4	3.5	0.04	0.82	0.86	—	4,269	4,269	0.22	0.22	3.8	4,344
2031	1.2	0.95	3.5	12	0.01	0.04	3.4	3.5	0.04	0.82	0.86	—	4,193	4,193	0.20	0.21	3.3	4,265
2032	1.1	0.94	3.4	12	0.01	0.04	3.4	3.5	0.04	0.83	0.86	—	4,119	4,119	0.19	0.21	2.9	4,190
2033	27	27	0.91	3.1	< 0.005	0.02	0.80	0.82	0.02	0.19	0.21	—	942	942	0.03	0.03	0.56	954
2034	0.53	0.53	< 0.005	0.01	< 0.005	< 0.005	< 0.005	< 0.005	< 0.005	< 0.005	< 0.005	—	4.3	4.3	< 0.005	< 0.005	< 0.005	4.3

2.4. Operations Emissions Compared Against Thresholds

Criteria Pollutants (lb/day for daily, ton/yr for annual) and GHGs (lb/day for daily, MT/yr for annual)

Un/Mit.	TOG	ROG	NOx	CO	SO2	PM10E	PM10D	PM10T	PM2.5E	PM2.5D	PM2.5T	BCO2	NBCO2	CO2T	CH4	N2O	R	CO2e
Daily, Summer (Max)	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—
Unmit.	167	161	70	547	1.1	4.3	82	86	4.2	21	25	1,819	147,054	148,873	189	3.7	35	154,742
Daily, Winter (Max)	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—
Unmit.	146	141	71	313	1.0	4.2	82	86	4.2	21	25	1,819	143,053	144,872	189	4.0	28	150,827
Average Daily (Max)	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—
Unmit.	149	145	31	386	0.75	1.1	76	77	1.1	19	20	1,819	90,932	92,751	188	3.7	31	98,577

Annual (Max)	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—
Unmit.	27	27	5.7	70	0.14	0.20	14	14	0.20	3.5	3.7	301	15,055	15,356	31	0.61	5.1	16,321

2.5. Operations Emissions by Sector, Unmitigated

Criteria Pollutants (lb/day for daily, ton/yr for annual) and GHGs (lb/day for daily, MT/yr for annual)

Sector	TOG	ROG	NOx	CO	SO2	PM10E	PM10D	PM10T	PM2.5E	PM2.5D	PM2.5T	BCO2	NBCO2	CO2T	CH4	N2O	R	CO2e
Daily, Summer (Max)	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—
Mobile	44	41	19	298	0.75	0.27	82	82	0.25	21	21	—	76,997	76,997	3.1	2.9	7.6	77,951
Area	122	119	42	245	0.26	3.3	—	3.3	3.3	—	3.3	0.00	50,720	50,720	0.97	0.10	—	50,774
Energy	1.0	0.52	8.9	3.8	0.06	0.72	—	0.72	0.72	—	0.72	—	18,912	18,912	2.2	0.17	—	19,019
Water	—	—	—	—	—	—	—	—	—	—	—	225	425	650	23	0.56	—	1,394
Waste	—	—	—	—	—	—	—	—	—	—	—	1,594	0.00	1,594	159	0.00	—	5,577
Refrig.	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	28	28
Total	167	161	70	547	1.1	4.3	82	86	4.2	21	25	1,819	147,054	148,873	189	3.7	35	154,742
Daily, Winter (Max)	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—
Mobile	44	41	23	293	0.72	0.27	82	82	0.25	21	21	—	73,602	73,602	3.4	3.2	0.20	74,645
Area	102	99	39	17	0.25	3.2	—	3.2	3.2	—	3.2	0.00	50,113	50,113	0.94	0.09	—	50,165
Energy	1.0	0.52	8.9	3.8	0.06	0.72	—	0.72	0.72	—	0.72	—	18,912	18,912	2.2	0.17	—	19,019
Water	—	—	—	—	—	—	—	—	—	—	—	225	425	650	23	0.56	—	1,394
Waste	—	—	—	—	—	—	—	—	—	—	—	1,594	0.00	1,594	159	0.00	—	5,577
Refrig.	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	28	28
Total	146	141	71	313	1.0	4.2	82	86	4.2	21	25	1,819	143,053	144,872	189	4.0	28	150,827
Average Daily	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—
Mobile	41	38	21	269	0.69	0.26	76	76	0.24	19	20	—	70,060	70,060	3.1	3.0	3.1	71,022

Area	107	107	2.0	113	0.01	0.13	—	0.13	0.12	—	0.12	0.00	1,535	1,535	0.04	< 0.005	—	1,537
Energy	1.0	0.52	8.9	3.8	0.06	0.72	—	0.72	0.72	—	0.72	—	18,912	18,912	2.2	0.17	—	19,019
Water	—	—	—	—	—	—	—	—	—	—	—	225	425	650	23	0.56	—	1,394
Waste	—	—	—	—	—	—	—	—	—	—	—	1,594	0.00	1,594	159	0.00	—	5,577
Refrig.	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	28	28
Total	149	145	31	386	0.75	1.1	76	77	1.1	19	20	1,819	90,932	92,751	188	3.7	31	98,577
Annual	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—
Mobile	7.5	7.0	3.7	49	0.13	0.05	14	14	0.04	3.5	3.6	—	11,599	11,599	0.51	0.49	0.52	11,759
Area	20	19	0.37	21	< 0.005	0.02	—	0.02	0.02	—	0.02	0.00	254	254	0.01	< 0.005	—	255
Energy	0.19	0.09	1.6	0.69	0.01	0.13	—	0.13	0.13	—	0.13	—	3,131	3,131	0.37	0.03	—	3,149
Water	—	—	—	—	—	—	—	—	—	—	—	37	70	108	3.8	0.09	—	231
Waste	—	—	—	—	—	—	—	—	—	—	—	264	0.00	264	26	0.00	—	923
Refrig.	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	4.6	4.6
Total	27	27	5.7	70	0.14	0.20	14	14	0.20	3.5	3.7	301	15,055	15,356	31	0.61	5.1	16,321

3. Construction Emissions Details

3.1. Demolition (2026) - Unmitigated

Criteria Pollutants (lb/day for daily, ton/yr for annual) and GHGs (lb/day for daily, MT/yr for annual)

Location	TOG	ROG	NOx	CO	SO2	PM10E	PM10D	PM10T	PM2.5E	PM2.5D	PM2.5T	BCO2	NBCO2	CO2T	CH4	N2O	R	CO2e
Onsite	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—
Daily, Summer (Max)	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—
Off-Road Equipment	2.7	2.3	21	19	0.03	0.84	—	0.84	0.78	—	0.78	—	3,427	3,427	0.14	0.03	—	3,438
Demolition	—	—	—	—	—	—	0.00	0.00	—	0.00	0.00	—	—	—	—	—	—	—

Onsite truck	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	—	0.00	0.00	0.00	0.00	0.00	0.00
Daily, Winter (Max)	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—
Off-Road Equipment	2.7	2.3	21	19	0.03	0.84	—	0.84	0.78	—	0.78	—	3,427	3,427	0.14	0.03	—	3,438
Demolition	—	—	—	—	—	—	0.00	0.00	—	0.00	0.00	—	—	—	—	—	—	—
Onsite truck	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	—	0.00	0.00	0.00	0.00	0.00	0.00
Average Daily	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—
Off-Road Equipment	0.75	0.63	5.7	5.2	0.01	0.23	—	0.23	0.21	—	0.21	—	939	939	0.04	0.01	—	942
Demolition	—	—	—	—	—	—	0.00	0.00	—	0.00	0.00	—	—	—	—	—	—	—
Onsite truck	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	—	0.00	0.00	0.00	0.00	0.00	0.00
Annual	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—
Off-Road Equipment	0.14	0.11	1.0	0.95	< 0.005	0.04	—	0.04	0.04	—	0.04	—	155	155	0.01	< 0.005	—	156
Demolition	—	—	—	—	—	—	0.00	0.00	—	0.00	0.00	—	—	—	—	—	—	—
Onsite truck	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	—	0.00	0.00	0.00	0.00	0.00	0.00
Offsite	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—
Daily, Summer (Max)	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—

Worker	0.04	0.04	0.03	0.52	0.00	0.00	0.12	0.12	0.00	0.03	0.03	—	133	133	< 0.005	< 0.005	0.46	134
Vendor	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	—	0.00	0.00	0.00	0.00	0.00	0.00
Hauling	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	—	0.00	0.00	0.00	0.00	0.00	0.00
Daily, Winter (Max)	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—
Worker	0.04	0.04	0.03	0.47	0.00	0.00	0.12	0.12	0.00	0.03	0.03	—	126	126	< 0.005	< 0.005	0.01	127
Vendor	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	—	0.00	0.00	0.00	0.00	0.00	0.00
Hauling	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	—	0.00	0.00	0.00	0.00	0.00	0.00
Average Daily	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—
Worker	0.01	0.01	0.01	0.13	0.00	0.00	0.03	0.03	0.00	0.01	0.01	—	34	34	< 0.005	< 0.005	0.05	35
Vendor	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	—	0.00	0.00	0.00	0.00	0.00	0.00
Hauling	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	—	0.00	0.00	0.00	0.00	0.00	0.00
Annual	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—
Worker	< 0.005	< 0.005	< 0.005	0.02	0.00	0.00	0.01	0.01	0.00	< 0.005	< 0.005	—	5.7	5.7	< 0.005	< 0.005	0.01	5.8
Vendor	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	—	0.00	0.00	0.00	0.00	0.00	0.00
Hauling	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	—	0.00	0.00	0.00	0.00	0.00	0.00

3.3. Site Preparation (2026) - Unmitigated

Criteria Pollutants (lb/day for daily, ton/yr for annual) and GHGs (lb/day for daily, MT/yr for annual)

Location	TOG	ROG	NOx	CO	SO2	PM10E	PM10D	PM10T	PM2.5E	PM2.5D	PM2.5T	BCO2	NBCO2	CO2T	CH4	N2O	R	CO2e
Onsite	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—
Daily, Summer (Max)	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—
Off-Road Equipment	3.7	3.1	29	29	0.05	1.2	—	1.2	1.1	—	1.1	—	5,298	5,298	0.21	0.04	—	5,316

Dust From Material Movement	—	—	—	—	—	—	20	20	—	10	10	—	—	—	—	—	—	—
Onsite truck	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	—	0.00	0.00	0.00	0.00	0.00	0.00
Daily, Winter (Max)	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—
Average Daily	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—
Off-Road Equipment	0.62	0.52	4.8	4.7	0.01	0.20	—	0.20	0.19	—	0.19	—	871	871	0.04	0.01	—	874
Dust From Material Movement	—	—	—	—	—	—	3.2	3.2	—	1.7	1.7	—	—	—	—	—	—	—
Onsite truck	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	—	0.00	0.00	0.00	0.00	0.00	0.00
Annual	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—
Off-Road Equipment	0.11	0.09	0.87	0.86	< 0.005	0.04	—	0.04	0.03	—	0.03	—	144	144	0.01	< 0.005	—	145
Dust From Material Movement	—	—	—	—	—	—	0.59	0.59	—	0.30	0.30	—	—	—	—	—	—	—
Onsite truck	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	—	0.00	0.00	0.00	0.00	0.00	0.00
Offsite	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—
Daily, Summer (Max)	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—
Worker	0.05	0.04	0.03	0.61	0.00	0.00	0.14	0.14	0.00	0.03	0.03	—	155	155	< 0.005	< 0.005	0.54	156

Vendor	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	—	0.00	0.00	0.00	0.00	0.00	0.00
Hauling	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	—	0.00	0.00	0.00	0.00	0.00	0.00
Daily, Winter (Max)	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—
Average Daily	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—
Worker	0.01	0.01	0.01	0.09	0.00	0.00	0.02	0.02	0.00	0.01	0.01	—	24	24	< 0.005	< 0.005	0.04	24
Vendor	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	—	0.00	0.00	0.00	0.00	0.00	0.00
Hauling	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	—	0.00	0.00	0.00	0.00	0.00	0.00
Annual	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—
Worker	< 0.005	< 0.005	< 0.005	0.02	0.00	0.00	< 0.005	< 0.005	0.00	< 0.005	< 0.005	—	4.0	4.0	< 0.005	< 0.005	0.01	4.1
Vendor	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	—	0.00	0.00	0.00	0.00	0.00	0.00
Hauling	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	—	0.00	0.00	0.00	0.00	0.00	0.00

3.5. Grading (2026) - Unmitigated

Criteria Pollutants (lb/day for daily, ton/yr for annual) and GHGs (lb/day for daily, MT/yr for annual)

Location	TOG	ROG	NOx	CO	SO2	PM10E	PM10D	PM10T	PM2.5E	PM2.5D	PM2.5T	BCO2	NBCO2	CO2T	CH4	N2O	R	CO2e
Onsite	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—
Daily, Summer (Max)	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—
Off-Road Equipment	3.6	3.0	27	28	0.06	1.1	—	1.1	1.0	—	1.0	—	6,599	6,599	0.27	0.05	—	6,621
Dust From Material Movement	—	—	—	—	—	—	9.2	9.2	—	3.7	3.7	—	—	—	—	—	—	—
Onsite truck	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	—	0.00	0.00	0.00	0.00	0.00	0.00

Daily, Winter (Max)	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—
Off-Road Equipment	3.6	3.0	27	28	0.06	1.1	—	1.1	1.0	—	1.0	—	6,599	6,599	0.27	0.05	—	6,621
Dust From Material Movement	—	—	—	—	—	—	9.2	9.2	—	3.7	3.7	—	—	—	—	—	—	—
Onsite truck	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	—	0.00	0.00	0.00	0.00	0.00	0.00
Average Daily	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—
Off-Road Equipment	0.99	0.83	7.4	7.5	0.02	0.31	—	0.31	0.28	—	0.28	—	1,795	1,795	0.07	0.01	—	1,801
Dust From Material Movement	—	—	—	—	—	—	2.5	2.5	—	0.99	0.99	—	—	—	—	—	—	—
Onsite truck	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	—	0.00	0.00	0.00	0.00	0.00	0.00
Annual	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—
Off-Road Equipment	0.18	0.15	1.4	1.4	< 0.005	0.06	—	0.06	0.05	—	0.05	—	297	297	0.01	< 0.005	—	298
Dust From Material Movement	—	—	—	—	—	—	0.46	0.46	—	0.18	0.18	—	—	—	—	—	—	—
Onsite truck	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	—	0.00	0.00	0.00	0.00	0.00	0.00
Offsite	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—

Daily, Summer (Max)	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—
Worker	0.06	0.05	0.04	0.69	0.00	0.00	0.17	0.17	0.00	0.04	0.04	—	177	177	< 0.005	< 0.005	0.62	178
Vendor	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	—	0.00	0.00	0.00	0.00	0.00	0.00
Hauling	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	—	0.00	0.00	0.00	0.00	0.00	0.00
Daily, Winter (Max)	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—
Worker	0.06	0.05	0.04	0.63	0.00	0.00	0.17	0.17	0.00	0.04	0.04	—	168	168	< 0.005	0.01	0.02	170
Vendor	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	—	0.00	0.00	0.00	0.00	0.00	0.00
Hauling	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	—	0.00	0.00	0.00	0.00	0.00	0.00
Average Daily	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—
Worker	0.02	0.01	0.01	0.17	0.00	0.00	0.04	0.04	0.00	0.01	0.01	—	46	46	< 0.005	< 0.005	0.07	46
Vendor	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	—	0.00	0.00	0.00	0.00	0.00	0.00
Hauling	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	—	0.00	0.00	0.00	0.00	0.00	0.00
Annual	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—
Worker	< 0.005	< 0.005	< 0.005	0.03	0.00	0.00	0.01	0.01	0.00	< 0.005	< 0.005	—	7.6	7.6	< 0.005	< 0.005	0.01	7.7
Vendor	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	—	0.00	0.00	0.00	0.00	0.00	0.00
Hauling	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	—	0.00	0.00	0.00	0.00	0.00	0.00

3.7. Grading (2027) - Unmitigated

Criteria Pollutants (lb/day for daily, ton/yr for annual) and GHGs (lb/day for daily, MT/yr for annual)

Location	TOG	ROG	NOx	CO	SO2	PM10E	PM10D	PM10T	PM2.5E	PM2.5D	PM2.5T	BCO2	NBCO2	CO2T	CH4	N2O	R	CO2e
Onsite	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—
Daily, Summer (Max)	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—

Daily, Winter (Max)	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—
Off-Road Equipment	3.5	2.9	26	27	0.06	1.0	—	1.0	0.96	—	0.96	—	6,598	6,598	0.27	0.05	—	6,621
Dust From Material Movement	—	—	—	—	—	—	9.2	9.2	—	3.7	3.7	—	—	—	—	—	—	—
Onsite truck	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	—	0.00	0.00	0.00	0.00	0.00	0.00
Average Daily	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—
Off-Road Equipment	0.54	0.46	4.0	4.2	0.01	0.16	—	0.16	0.15	—	0.15	—	1,020	1,020	0.04	0.01	—	1,024
Dust From Material Movement	—	—	—	—	—	—	1.4	1.4	—	0.56	0.56	—	—	—	—	—	—	—
Onsite truck	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	—	0.00	0.00	0.00	0.00	0.00	0.00
Annual	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—
Off-Road Equipment	0.10	0.08	0.72	0.77	< 0.005	0.03	—	0.03	0.03	—	0.03	—	169	169	0.01	< 0.005	—	169
Dust From Material Movement	—	—	—	—	—	—	0.26	0.26	—	0.10	0.10	—	—	—	—	—	—	—
Onsite truck	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	—	0.00	0.00	0.00	0.00	0.00	0.00
Offsite	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—

Daily, Summer (Max)	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—
Daily, Winter (Max)	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—
Worker	0.06	0.05	0.04	0.60	0.00	0.00	0.17	0.17	0.00	0.04	0.04	—	165	165	< 0.005	0.01	0.01	167
Vendor	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	—	0.00	0.00	0.00	0.00	0.00	0.00
Hauling	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	—	0.00	0.00	0.00	0.00	0.00	0.00
Average Daily	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—
Worker	0.01	0.01	0.01	0.09	0.00	0.00	0.02	0.02	0.00	0.01	0.01	—	25	25	< 0.005	< 0.005	0.04	26
Vendor	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	—	0.00	0.00	0.00	0.00	0.00	0.00
Hauling	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	—	0.00	0.00	0.00	0.00	0.00	0.00
Annual	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—
Worker	< 0.005	< 0.005	< 0.005	0.02	0.00	0.00	< 0.005	< 0.005	0.00	< 0.005	< 0.005	—	4.2	4.2	< 0.005	< 0.005	0.01	4.3
Vendor	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	—	0.00	0.00	0.00	0.00	0.00	0.00
Hauling	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	—	0.00	0.00	0.00	0.00	0.00	0.00

3.9. Building Construction (2027) - Unmitigated

Criteria Pollutants (lb/day for daily, ton/yr for annual) and GHGs (lb/day for daily, MT/yr for annual)

Location	TOG	ROG	NOx	CO	SO2	PM10E	PM10D	PM10T	PM2.5E	PM2.5D	PM2.5T	BCO2	NBCO2	CO2T	CH4	N2O	R	CO2e
Onsite	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—
Daily, Summer (Max)	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—
Off-Road Equipment	1.2	1.0	9.4	13	0.02	0.34	—	0.34	0.31	—	0.31	—	2,397	2,397	0.10	0.02	—	2,405
Onsite truck	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	—	0.00	0.00	0.00	0.00	0.00	0.00

Daily, Winter (Max)	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—
Off-Road Equipment	1.2	1.0	9.4	13	0.02	0.34	—	0.34	0.31	—	0.31	—	2,397	2,397	0.10	0.02	—	2,405
Onsite truck	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	—	0.00	0.00	0.00	0.00	0.00	0.00
Average Daily	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—
Off-Road Equipment	0.69	0.58	5.3	7.2	0.01	0.19	—	0.19	0.17	—	0.17	—	1,342	1,342	0.05	0.01	—	1,346
Onsite truck	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	—	0.00	0.00	0.00	0.00	0.00	0.00
Annual	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—
Off-Road Equipment	0.13	0.11	0.96	1.3	< 0.005	0.03	—	0.03	0.03	—	0.03	—	222	222	0.01	< 0.005	—	223
Onsite truck	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	—	0.00	0.00	0.00	0.00	0.00	0.00
Offsite	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—
Daily, Summer (Max)	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—
Worker	8.0	7.2	5.2	94	0.00	0.00	24	24	0.00	5.6	5.6	—	25,057	25,057	0.38	0.19	80	25,204
Vendor	2.2	0.40	19	14	0.08	0.08	3.2	3.3	0.08	0.91	0.99	—	12,286	12,286	1.7	1.8	25	12,895
Hauling	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	—	0.00	0.00	0.00	0.00	0.00	0.00
Daily, Winter (Max)	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—
Worker	8.0	7.1	6.3	86	0.00	0.00	24	24	0.00	5.6	5.6	—	23,705	23,705	0.51	0.93	2.1	23,998

Vendor	2.2	0.39	20	14	0.08	0.08	3.2	3.3	0.08	0.91	0.99	—	12,282	12,282	1.7	1.8	0.65	12,866
Hauling	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	—	0.00	0.00	0.00	0.00	0.00	0.00
Average Daily	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—
Worker	4.4	3.8	3.0	47	0.00	0.00	13	13	0.00	3.0	3.0	—	13,291	13,291	0.25	0.52	19	13,472
Vendor	1.2	0.22	11	7.8	0.04	0.04	1.7	1.8	0.04	0.50	0.54	—	6,875	6,875	0.93	1.0	6.1	7,208
Hauling	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	—	0.00	0.00	0.00	0.00	0.00	0.00
Annual	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—
Worker	0.80	0.70	0.55	8.5	0.00	0.00	2.4	2.4	0.00	0.55	0.55	—	2,200	2,200	0.04	0.09	3.2	2,230
Vendor	0.22	0.04	2.0	1.4	0.01	0.01	0.32	0.33	0.01	0.09	0.10	—	1,138	1,138	0.15	0.17	1.0	1,193
Hauling	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	—	0.00	0.00	0.00	0.00	0.00	0.00

3.11. Building Construction (2028) - Unmitigated

Criteria Pollutants (lb/day for daily, ton/yr for annual) and GHGs (lb/day for daily, MT/yr for annual)

Location	TOG	ROG	NOx	CO	SO2	PM10E	PM10D	PM10T	PM2.5E	PM2.5D	PM2.5T	BCO2	NBCO2	CO2T	CH4	N2O	R	CO2e
Onsite	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—
Daily, Summer (Max)	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—
Off-Road Equipment	1.2	0.99	8.9	13	0.02	0.30	—	0.30	0.28	—	0.28	—	2,397	2,397	0.10	0.02	—	2,406
Onsite truck	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	—	0.00	0.00	0.00	0.00	0.00	0.00
Daily, Winter (Max)	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—
Off-Road Equipment	1.2	0.99	8.9	13	0.02	0.30	—	0.30	0.28	—	0.28	—	2,397	2,397	0.10	0.02	—	2,406

Onsite truck	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	—	0.00	0.00	0.00	0.00	0.00	0.00
Average Daily	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—
Off-Road Equipment	0.85	0.71	6.4	9.3	0.02	0.22	—	0.22	0.20	—	0.20	—	1,717	1,717	0.07	0.01	—	1,723
Onsite truck	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	—	0.00	0.00	0.00	0.00	0.00	0.00
Annual	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—
Off-Road Equipment	0.15	0.13	1.2	1.7	< 0.005	0.04	—	0.04	0.04	—	0.04	—	284	284	0.01	< 0.005	—	285
Onsite truck	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	—	0.00	0.00	0.00	0.00	0.00	0.00
Offsite	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—
Daily, Summer (Max)	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—
Worker	7.9	7.0	4.4	90	0.00	0.00	24	24	0.00	5.6	5.6	—	24,628	24,628	0.38	0.19	72	24,767
Vendor	2.0	0.40	17	14	0.08	0.08	3.2	3.3	0.08	0.91	0.99	—	11,919	11,919	1.6	1.7	23	12,499
Hauling	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	—	0.00	0.00	0.00	0.00	0.00	0.00
Daily, Winter (Max)	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—
Worker	7.8	6.8	5.5	81	0.00	0.00	24	24	0.00	5.6	5.6	—	23,300	23,300	0.44	0.93	1.9	23,591
Vendor	2.0	0.38	18	14	0.08	0.08	3.2	3.3	0.08	0.91	0.99	—	11,916	11,916	1.6	1.7	0.58	12,475
Hauling	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	—	0.00	0.00	0.00	0.00	0.00	0.00
Average Daily	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—
Worker	5.5	4.8	3.8	57	0.00	0.00	17	17	0.00	3.9	3.9	—	16,718	16,718	0.32	0.14	22	16,789
Vendor	1.4	0.28	13	9.7	0.06	0.06	2.2	2.3	0.06	0.64	0.70	—	8,536	8,536	1.1	1.2	7.0	8,943

Hauling	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	—	0.00	0.00	0.00	0.00	0.00	0.00
Annual	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—
Worker	1.00	0.88	0.70	10	0.00	0.00	3.0	3.0	0.00	0.71	0.71	—	2,768	2,768	0.05	0.02	3.7	2,780
Vendor	0.26	0.05	2.3	1.8	0.01	0.01	0.41	0.42	0.01	0.12	0.13	—	1,413	1,413	0.19	0.21	1.2	1,481
Hauling	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	—	0.00	0.00	0.00	0.00	0.00	0.00

3.13. Building Construction (2029) - Unmitigated

Criteria Pollutants (lb/day for daily, ton/yr for annual) and GHGs (lb/day for daily, MT/yr for annual)

Location	TOG	ROG	NOx	CO	SO2	PM10E	PM10D	PM10T	PM2.5E	PM2.5D	PM2.5T	BCO2	NBCO2	CO2T	CH4	N2O	R	CO2e
Onsite	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—
Daily, Summer (Max)	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—
Off-Road Equipment	1.2	0.97	8.6	13	0.02	0.28	—	0.28	0.25	—	0.25	—	2,397	2,397	0.10	0.02	—	2,405
Onsite truck	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	—	0.00	0.00	0.00	0.00	0.00	0.00
Daily, Winter (Max)	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—
Off-Road Equipment	1.2	0.97	8.6	13	0.02	0.28	—	0.28	0.25	—	0.25	—	2,397	2,397	0.10	0.02	—	2,405
Onsite truck	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	—	0.00	0.00	0.00	0.00	0.00	0.00
Average Daily	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—
Off-Road Equipment	0.82	0.69	6.1	9.2	0.02	0.20	—	0.20	0.18	—	0.18	—	1,712	1,712	0.07	0.01	—	1,718

Onsite truck	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	—	0.00	0.00	0.00	0.00	0.00	0.00
Annual	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—
Off-Road Equipment	0.15	0.13	1.1	1.7	< 0.005	0.04	—	0.04	0.03	—	0.03	—	283	283	0.01	< 0.005	—	284
Onsite truck	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	—	0.00	0.00	0.00	0.00	0.00	0.00
Offsite	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—
Daily, Summer (Max)	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—
Worker	7.6	6.8	4.4	85	0.00	0.00	24	24	0.00	5.6	5.6	—	24,223	24,223	0.32	0.19	64	24,352
Vendor	1.9	0.32	16	13	0.08	0.08	3.2	3.3	0.08	0.91	0.99	—	11,518	11,518	1.5	1.7	20	12,093
Hauling	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	—	0.00	0.00	0.00	0.00	0.00	0.00
Daily, Winter (Max)	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—
Worker	7.6	6.6	5.4	78	0.00	0.00	24	24	0.00	5.6	5.6	—	22,917	22,917	0.44	0.93	1.7	23,208
Vendor	1.9	0.30	17	13	0.08	0.08	3.2	3.3	0.08	0.91	0.99	—	11,517	11,517	1.5	1.7	0.51	12,073
Hauling	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	—	0.00	0.00	0.00	0.00	0.00	0.00
Average Daily	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—
Worker	5.3	4.7	3.8	54	0.00	0.00	17	17	0.00	3.9	3.9	—	16,398	16,398	0.27	0.14	20	16,465
Vendor	1.4	0.21	12	9.4	0.06	0.06	2.2	2.3	0.06	0.64	0.70	—	8,227	8,227	1.1	1.2	6.1	8,630
Hauling	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	—	0.00	0.00	0.00	0.00	0.00	0.00
Annual	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—
Worker	0.97	0.86	0.69	9.9	0.00	0.00	3.0	3.0	0.00	0.71	0.71	—	2,715	2,715	0.05	0.02	3.3	2,726
Vendor	0.25	0.04	2.1	1.7	0.01	0.01	0.40	0.41	0.01	0.12	0.13	—	1,362	1,362	0.18	0.21	1.0	1,429
Hauling	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	—	0.00	0.00	0.00	0.00	0.00	0.00

3.15. Building Construction (2030) - Unmitigated

Criteria Pollutants (lb/day for daily, ton/yr for annual) and GHGs (lb/day for daily, MT/yr for annual)

Location	TOG	ROG	NOx	CO	SO2	PM10E	PM10D	PM10T	PM2.5E	PM2.5D	PM2.5T	BCO2	NBCO2	CO2T	CH4	N2O	R	CO2e
Onsite	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—
Daily, Summer (Max)	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—
Off-Road Equipment	1.1	0.94	8.4	13	0.02	0.26	—	0.26	0.24	—	0.24	—	2,397	2,397	0.10	0.02	—	2,405
Onsite truck	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	—	0.00	0.00	0.00	0.00	0.00	0.00
Daily, Winter (Max)	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—
Off-Road Equipment	1.1	0.94	8.4	13	0.02	0.26	—	0.26	0.24	—	0.24	—	2,397	2,397	0.10	0.02	—	2,405
Onsite truck	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	—	0.00	0.00	0.00	0.00	0.00	0.00
Average Daily	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—
Off-Road Equipment	0.80	0.67	6.0	9.2	0.02	0.19	—	0.19	0.17	—	0.17	—	1,712	1,712	0.07	0.01	—	1,718
Onsite truck	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	—	0.00	0.00	0.00	0.00	0.00	0.00
Annual	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—
Off-Road Equipment	0.15	0.12	1.1	1.7	< 0.005	0.03	—	0.03	0.03	—	0.03	—	283	283	0.01	< 0.005	—	284

Onsite truck	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	—	0.00	0.00	0.00	0.00	0.00	0.00
Offsite	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—
Daily, Summer (Max)	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—
Worker	6.6	6.5	4.3	82	0.00	0.00	24	24	0.00	5.6	5.6	—	23,839	23,839	0.32	0.19	57	23,961
Vendor	1.7	0.31	15	13	0.08	0.08	3.2	3.3	0.08	0.91	0.99	—	11,106	11,106	1.4	1.7	17	11,653
Hauling	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	—	0.00	0.00	0.00	0.00	0.00	0.00
Daily, Winter (Max)	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—
Worker	6.6	6.5	5.4	74	0.00	0.00	24	24	0.00	5.6	5.6	—	22,553	22,553	0.44	0.19	1.5	22,622
Vendor	1.7	0.30	16	13	0.08	0.08	3.2	3.3	0.08	0.91	0.99	—	11,105	11,105	1.4	1.7	0.45	11,636
Hauling	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	—	0.00	0.00	0.00	0.00	0.00	0.00
Average Daily	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—
Worker	4.7	4.6	3.2	51	0.00	0.00	17	17	0.00	3.9	3.9	—	16,138	16,138	0.27	0.14	18	16,203
Vendor	1.2	0.21	11	9.1	0.06	0.06	2.2	2.3	0.06	0.64	0.70	—	7,932	7,932	1.0	1.2	5.4	8,316
Hauling	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	—	0.00	0.00	0.00	0.00	0.00	0.00
Annual	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—
Worker	0.85	0.83	0.59	9.3	0.00	0.00	3.0	3.0	0.00	0.71	0.71	—	2,672	2,672	0.05	0.02	2.9	2,683
Vendor	0.23	0.04	2.0	1.7	0.01	0.01	0.40	0.41	0.01	0.12	0.13	—	1,313	1,313	0.17	0.20	0.89	1,377
Hauling	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	—	0.00	0.00	0.00	0.00	0.00	0.00

3.17. Building Construction (2031) - Unmitigated

Criteria Pollutants (lb/day for daily, ton/yr for annual) and GHGs (lb/day for daily, MT/yr for annual)

Location	TOG	ROG	NOx	CO	SO2	PM10E	PM10D	PM10T	PM2.5E	PM2.5D	PM2.5T	BCO2	NBCO2	CO2T	CH4	N2O	R	CO2e
Onsite	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—

Daily, Summer (Max)	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—
Off-Road Equipment	1.1	0.92	8.1	13	0.02	0.24	—	0.24	0.22	—	0.22	—	2,397	2,397	0.10	0.02	—	2,405
Onsite truck	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	—	0.00	0.00	0.00	0.00	0.00	0.00
Daily, Winter (Max)	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—
Off-Road Equipment	1.1	0.92	8.1	13	0.02	0.24	—	0.24	0.22	—	0.22	—	2,397	2,397	0.10	0.02	—	2,405
Onsite truck	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	—	0.00	0.00	0.00	0.00	0.00	0.00
Average Daily	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—
Off-Road Equipment	0.78	0.66	5.8	9.2	0.02	0.17	—	0.17	0.16	—	0.16	—	1,712	1,712	0.07	0.01	—	1,718
Onsite truck	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	—	0.00	0.00	0.00	0.00	0.00	0.00
Annual	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—
Off-Road Equipment	0.14	0.12	1.1	1.7	< 0.005	0.03	—	0.03	0.03	—	0.03	—	283	283	0.01	< 0.005	—	284
Onsite truck	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	—	0.00	0.00	0.00	0.00	0.00	0.00
Offsite	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—
Daily, Summer (Max)	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—

Worker	6.5	6.3	3.5	79	0.00	0.00	24	24	0.00	5.6	5.6	—	23,605	23,605	0.32	0.19	50	23,720
Vendor	1.6	0.31	14	12	0.08	0.08	3.2	3.3	0.08	0.91	0.99	—	10,691	10,691	1.2	1.6	15	11,208
Hauling	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	—	0.00	0.00	0.00	0.00	0.00	0.00
Daily, Winter (Max)	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—
Worker	6.3	6.2	4.6	72	0.00	0.00	24	24	0.00	5.6	5.6	—	22,330	22,330	0.38	0.19	1.3	22,397
Vendor	1.6	0.30	15	12	0.08	0.08	3.2	3.3	0.08	0.91	0.99	—	10,692	10,692	1.2	1.6	0.39	11,194
Hauling	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	—	0.00	0.00	0.00	0.00	0.00	0.00
Average Daily	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—
Worker	4.5	4.3	3.2	49	0.00	0.00	17	17	0.00	3.9	3.9	—	15,978	15,978	0.27	0.14	15	16,041
Vendor	1.2	0.21	10	8.8	0.06	0.06	2.2	2.3	0.06	0.64	0.70	—	7,637	7,637	0.89	1.1	4.6	8,000
Hauling	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	—	0.00	0.00	0.00	0.00	0.00	0.00
Annual	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—
Worker	0.82	0.79	0.58	9.0	0.00	0.00	3.0	3.0	0.00	0.71	0.71	—	2,645	2,645	0.05	0.02	2.6	2,656
Vendor	0.21	0.04	1.9	1.6	0.01	0.01	0.40	0.41	0.01	0.12	0.13	—	1,264	1,264	0.15	0.19	0.76	1,324
Hauling	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	—	0.00	0.00	0.00	0.00	0.00	0.00

3.19. Building Construction (2032) - Unmitigated

Criteria Pollutants (lb/day for daily, ton/yr for annual) and GHGs (lb/day for daily, MT/yr for annual)

Location	TOG	ROG	NOx	CO	SO2	PM10E	PM10D	PM10T	PM2.5E	PM2.5D	PM2.5T	BCO2	NBCO2	CO2T	CH4	N2O	R	CO2e
Onsite	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—
Daily, Summer (Max)	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—
Off-Road Equipment	1.1	0.90	7.9	13	0.02	0.22	—	0.22	0.21	—	0.21	—	2,397	2,397	0.10	0.02	—	2,405

Onsite truck	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	—	0.00	0.00	0.00	0.00	0.00	0.00
Daily, Winter (Max)	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—
Off-Road Equipment	1.1	0.90	7.9	13	0.02	0.22	—	0.22	0.21	—	0.21	—	2,397	2,397	0.10	0.02	—	2,405
Onsite truck	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	—	0.00	0.00	0.00	0.00	0.00	0.00
Average Daily	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—
Off-Road Equipment	0.77	0.64	5.6	9.2	0.02	0.16	—	0.16	0.15	—	0.15	—	1,717	1,717	0.07	0.01	—	1,723
Onsite truck	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	—	0.00	0.00	0.00	0.00	0.00	0.00
Annual	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—
Off-Road Equipment	0.14	0.12	1.0	1.7	< 0.005	0.03	—	0.03	0.03	—	0.03	—	284	284	0.01	< 0.005	—	285
Onsite truck	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	—	0.00	0.00	0.00	0.00	0.00	0.00
Offsite	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—
Daily, Summer (Max)	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—
Worker	6.3	6.2	3.5	76	0.00	0.00	24	24	0.00	5.6	5.6	—	23,278	23,278	0.32	0.19	44	23,387
Vendor	1.5	0.31	13	12	0.08	0.08	3.1	3.2	0.08	0.91	0.99	—	10,279	10,279	1.2	1.6	13	10,791
Hauling	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	—	0.00	0.00	0.00	0.00	0.00	0.00
Daily, Winter (Max)	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—

Worker	6.3	6.1	4.5	68	0.00	0.00	24	24	0.00	5.6	5.6	—	22,020	22,020	0.38	0.19	1.1	22,087
Vendor	1.5	0.30	14	12	0.08	0.08	3.1	3.2	0.08	0.91	0.99	—	10,280	10,280	1.2	1.6	0.33	10,780
Hauling	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	—	0.00	0.00	0.00	0.00	0.00	0.00
Average Daily	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—
Worker	4.4	4.3	3.2	47	0.00	0.00	17	17	0.00	3.9	3.9	—	15,800	15,800	0.23	0.14	14	15,860
Vendor	1.1	0.21	9.7	8.5	0.06	0.06	2.2	2.2	0.06	0.64	0.70	—	7,363	7,363	0.83	1.1	3.9	7,725
Hauling	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	—	0.00	0.00	0.00	0.00	0.00	0.00
Annual	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—
Worker	0.80	0.79	0.58	8.7	0.00	0.00	3.0	3.0	0.00	0.71	0.71	—	2,616	2,616	0.04	0.02	2.2	2,626
Vendor	0.19	0.04	1.8	1.6	0.01	0.01	0.40	0.41	0.01	0.12	0.13	—	1,219	1,219	0.14	0.19	0.65	1,279
Hauling	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	—	0.00	0.00	0.00	0.00	0.00	0.00

3.21. Building Construction (2033) - Unmitigated

Criteria Pollutants (lb/day for daily, ton/yr for annual) and GHGs (lb/day for daily, MT/yr for annual)

Location	TOG	ROG	NOx	CO	SO2	PM10E	PM10D	PM10T	PM2.5E	PM2.5D	PM2.5T	BCO2	NBCO2	CO2T	CH4	N2O	R	CO2e
Onsite	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—
Daily, Summer (Max)	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—
Daily, Winter (Max)	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—
Off-Road Equipment	1.0	0.88	7.7	13	0.02	0.20	—	0.20	0.19	—	0.19	—	2,397	2,397	0.10	0.02	—	2,405
Onsite truck	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	—	0.00	0.00	0.00	0.00	0.00	0.00
Average Daily	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—

Off-Road	0.12	0.10	0.87	1.5	< 0.005	0.02	—	0.02	0.02	—	0.02	—	272	272	0.01	< 0.005	—	273
Onsite truck	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	—	0.00	0.00	0.00	0.00	0.00	0.00
Annual	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—
Off-Road Equipment	0.02	0.02	0.16	0.26	< 0.005	< 0.005	—	< 0.005	< 0.005	—	< 0.005	—	45	45	< 0.005	< 0.005	—	45
Onsite truck	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	—	0.00	0.00	0.00	0.00	0.00	0.00
Offsite	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—
Daily, Summer (Max)	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—
Daily, Winter (Max)	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—
Worker	6.1	5.9	4.4	66	0.00	0.00	24	24	0.00	5.6	5.6	—	21,738	21,738	0.38	0.19	0.99	21,805
Vendor	1.4	0.30	13	12	0.08	0.08	3.1	3.2	0.08	0.91	0.99	—	9,872	9,872	1.1	1.5	0.28	10,347
Hauling	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	—	0.00	0.00	0.00	0.00	0.00	0.00
Average Daily	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—
Worker	0.68	0.67	0.41	7.3	0.00	0.00	2.6	2.6	0.00	0.62	0.62	—	2,472	2,472	0.04	0.02	1.9	2,481
Vendor	0.16	0.03	1.4	1.3	0.01	0.01	0.34	0.35	0.01	0.10	0.11	—	1,120	1,120	0.12	0.17	0.52	1,175
Hauling	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	—	0.00	0.00	0.00	0.00	0.00	0.00
Annual	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—
Worker	0.12	0.12	0.08	1.3	0.00	0.00	0.48	0.48	0.00	0.11	0.11	—	409	409	0.01	< 0.005	0.31	411
Vendor	0.03	0.01	0.26	0.24	< 0.005	< 0.005	0.06	0.06	< 0.005	0.02	0.02	—	185	185	0.02	0.03	0.09	194
Hauling	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	—	0.00	0.00	0.00	0.00	0.00	0.00

3.23. Paving (2033) - Unmitigated

Criteria Pollutants (lb/day for daily, ton/yr for annual) and GHGs (lb/day for daily, MT/yr for annual)

Location	TOG	ROG	NOx	CO	SO2	PM10E	PM10D	PM10T	PM2.5E	PM2.5D	PM2.5T	BCO2	NBCO2	CO2T	CH4	N2O	R	CO2e
Onsite	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—
Daily, Summer (Max)	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—
Off-Road Equipment	0.70	0.59	5.9	9.8	0.01	0.18	—	0.18	0.17	—	0.17	—	1,511	1,511	0.06	0.01	—	1,516
Paving	0.00	0.00	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—
Onsite truck	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	—	0.00	0.00	0.00	0.00	0.00	0.00
Daily, Winter (Max)	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—
Off-Road Equipment	0.70	0.59	5.9	9.8	0.01	0.18	—	0.18	0.17	—	0.17	—	1,511	1,511	0.06	0.01	—	1,516
Paving	0.00	0.00	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—
Onsite truck	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	—	0.00	0.00	0.00	0.00	0.00	0.00
Average Daily	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—
Off-Road Equipment	0.21	0.18	1.8	3.0	< 0.005	0.06	—	0.06	0.05	—	0.05	—	455	455	0.02	< 0.005	—	457
Paving	0.00	0.00	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—
Onsite truck	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	—	0.00	0.00	0.00	0.00	0.00	0.00
Annual	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—

Off-Road Equipment	0.04	0.03	0.33	0.54	< 0.005	0.01	—	0.01	0.01	—	0.01	—	75	75	< 0.005	< 0.005	—	76
Paving	0.00	0.00	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—
Onsite truck	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	—	0.00	0.00	0.00	0.00	0.00	0.00
Offsite	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—
Daily, Summer (Max)	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—
Worker	0.03	0.03	0.02	0.38	0.00	0.00	0.12	0.12	0.00	0.03	0.03	—	120	120	< 0.005	< 0.005	0.20	120
Vendor	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	—	0.00	0.00	0.00	0.00	0.00	0.00
Hauling	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	—	0.00	0.00	0.00	0.00	0.00	0.00
Daily, Winter (Max)	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—
Worker	0.03	0.03	0.02	0.34	0.00	0.00	0.12	0.12	0.00	0.03	0.03	—	113	113	< 0.005	< 0.005	0.01	114
Vendor	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	—	0.00	0.00	0.00	0.00	0.00	0.00
Hauling	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	—	0.00	0.00	0.00	0.00	0.00	0.00
Average Daily	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—
Worker	0.01	0.01	0.01	0.10	0.00	0.00	0.04	0.04	0.00	0.01	0.01	—	34	34	< 0.005	< 0.005	0.03	34
Vendor	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	—	0.00	0.00	0.00	0.00	0.00	0.00
Hauling	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	—	0.00	0.00	0.00	0.00	0.00	0.00
Annual	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—
Worker	< 0.005	< 0.005	< 0.005	0.02	0.00	0.00	0.01	0.01	0.00	< 0.005	< 0.005	—	5.7	5.7	< 0.005	< 0.005	< 0.005	5.7
Vendor	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	—	0.00	0.00	0.00	0.00	0.00	0.00
Hauling	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	—	0.00	0.00	0.00	0.00	0.00	0.00

3.25. Architectural Coating (2033) - Unmitigated

Criteria Pollutants (lb/day for daily, ton/yr for annual) and GHGs (lb/day for daily, MT/yr for annual)

Location	TOG	ROG	NOx	CO	SO2	PM10E	PM10D	PM10T	PM2.5E	PM2.5D	PM2.5T	BCO2	NBCO2	CO2T	CH4	N2O	R	CO2e
Onsite	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—
Daily, Summer (Max)	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—
Off-Road Equipment	0.11	0.09	0.76	1.1	< 0.005	0.01	—	0.01	0.01	—	0.01	—	134	134	0.01	< 0.005	—	134
Architectural Coatings	492	492	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—
Onsite truck	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	—	0.00	0.00	0.00	0.00	0.00	0.00
Daily, Winter (Max)	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—
Off-Road Equipment	0.11	0.09	0.76	1.1	< 0.005	0.01	—	0.01	0.01	—	0.01	—	134	134	0.01	< 0.005	—	134
Architectural Coatings	492	492	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—
Onsite truck	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	—	0.00	0.00	0.00	0.00	0.00	0.00
Average Daily	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—
Off-Road Equipment	0.03	0.03	0.23	0.33	< 0.005	< 0.005	—	< 0.005	< 0.005	—	< 0.005	—	40	40	< 0.005	< 0.005	—	40

Architectural Coating	146	146	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—
Onsite truck	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	—	0.00	0.00	0.00	0.00	0.00	0.00
Annual	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—
Off-Road Equipment	0.01	< 0.005	0.04	0.06	< 0.005	< 0.005	—	< 0.005	< 0.005	—	< 0.005	—	6.6	6.6	< 0.005	< 0.005	—	6.6
Architectural Coatings	27	27	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—
Onsite truck	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	—	0.00	0.00	0.00	0.00	0.00	0.00
Offsite	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—
Daily, Summer (Max)	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—
Worker	1.2	1.2	0.69	15	0.00	0.00	4.8	4.8	0.00	1.1	1.1	—	4,596	4,596	0.05	0.04	7.6	4,616
Vendor	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	—	0.00	0.00	0.00	0.00	0.00	0.00
Hauling	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	—	0.00	0.00	0.00	0.00	0.00	0.00
Daily, Winter (Max)	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—
Worker	1.2	1.2	0.89	13	0.00	0.00	4.8	4.8	0.00	1.1	1.1	—	4,348	4,348	0.08	0.04	0.20	4,361
Vendor	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	—	0.00	0.00	0.00	0.00	0.00	0.00
Hauling	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	—	0.00	0.00	0.00	0.00	0.00	0.00
Average Daily	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—
Worker	0.36	0.35	0.22	3.8	0.00	0.00	1.4	1.4	0.00	0.32	0.32	—	1,296	1,296	0.02	0.01	0.98	1,300
Vendor	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	—	0.00	0.00	0.00	0.00	0.00	0.00
Hauling	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	—	0.00	0.00	0.00	0.00	0.00	0.00

Annual	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—
Worker	0.07	0.06	0.04	0.69	0.00	0.00	0.25	0.25	0.00	0.06	0.06	—	214	214	< 0.005	< 0.005	0.16	215
Vendor	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	—	0.00	0.00	0.00	0.00	0.00	0.00
Hauling	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	—	0.00	0.00	0.00	0.00	0.00	0.00

3.27. Architectural Coating (2034) - Unmitigated

Criteria Pollutants (lb/day for daily, ton/yr for annual) and GHGs (lb/day for daily, MT/yr for annual)

Location	TOG	ROG	NOx	CO	SO2	PM10E	PM10D	PM10T	PM2.5E	PM2.5D	PM2.5T	BCO2	NBCO2	CO2T	CH4	N2O	R	CO2e
Onsite	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—
Daily, Summer (Max)	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—
Daily, Winter (Max)	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—
Off-Road Equipment	0.11	0.09	0.76	1.1	< 0.005	0.01	—	0.01	0.01	—	0.01	—	134	134	0.01	< 0.005	—	134
Architectural Coatings	492	492	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—
Onsite truck	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	—	0.00	0.00	0.00	0.00	0.00	0.00
Average Daily	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—
Off-Road Equipment	< 0.005	< 0.005	< 0.005	0.01	< 0.005	< 0.005	—	< 0.005	< 0.005	—	< 0.005	—	0.78	0.78	< 0.005	< 0.005	—	0.79
Architectural Coatings	2.9	2.9	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—

Onsite truck	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	—	0.00	0.00	0.00	0.00	0.00	0.00
Annual	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—
Off-Road Equipment	< 0.005	< 0.005	< 0.005	< 0.005	< 0.005	< 0.005	—	< 0.005	< 0.005	—	< 0.005	—	0.13	0.13	< 0.005	< 0.005	—	0.13
Architectural Coatings	0.53	0.53	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—
Onsite truck	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	—	0.00	0.00	0.00	0.00	0.00	0.00
Offsite	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—
Daily, Summer (Max)	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—
Daily, Winter (Max)	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—
Worker	1.2	1.1	0.74	13	0.00	0.00	4.8	4.8	0.00	1.1	1.1	—	4,296	4,296	0.06	0.04	0.17	4,309
Vendor	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	—	0.00	0.00	0.00	0.00	0.00	0.00
Hauling	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	—	0.00	0.00	0.00	0.00	0.00	0.00
Average Daily	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—
Worker	0.01	0.01	< 0.005	0.07	0.00	0.00	0.03	0.03	0.00	0.01	0.01	—	25	25	< 0.005	< 0.005	0.02	25
Vendor	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	—	0.00	0.00	0.00	0.00	0.00	0.00
Hauling	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	—	0.00	0.00	0.00	0.00	0.00	0.00
Annual	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—
Worker	< 0.005	< 0.005	< 0.005	0.01	0.00	0.00	< 0.005	< 0.005	0.00	< 0.005	< 0.005	—	4.2	4.2	< 0.005	< 0.005	< 0.005	4.2
Vendor	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	—	0.00	0.00	0.00	0.00	0.00	0.00
Hauling	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	—	0.00	0.00	0.00	0.00	0.00	0.00

4. Operations Emissions Details

4.1. Mobile Emissions by Land Use

4.1.1. Unmitigated

Criteria Pollutants (lb/day for daily, ton/yr for annual) and GHGs (lb/day for daily, MT/yr for annual)

Land Use	TOG	ROG	NOx	CO	SO2	PM10E	PM10D	PM10T	PM2.5E	PM2.5D	PM2.5T	BCO2	NBCO2	CO2T	CH4	N2O	R	CO2e
Daily, Summer (Max)	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—
Apartments Mid Rise	22	20	9.7	149	0.38	0.13	41	41	0.13	10	11	—	38,498	38,498	1.5	1.5	3.8	38,975
Condo/Townhouse High Rise	22	20	9.7	149	0.38	0.13	41	41	0.13	10	11	—	38,498	38,498	1.5	1.5	3.8	38,975
Total	44	41	19	298	0.75	0.27	82	82	0.25	21	21	—	76,997	76,997	3.1	2.9	7.6	77,951
Daily, Winter (Max)	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—
Apartments Mid Rise	22	20	11	146	0.36	0.13	41	41	0.13	10	11	—	36,801	36,801	1.7	1.6	0.10	37,323
Condo/Townhouse High Rise	22	20	11	146	0.36	0.13	41	41	0.13	10	11	—	36,801	36,801	1.7	1.6	0.10	37,323
Total	44	41	23	293	0.72	0.27	82	82	0.25	21	21	—	73,602	73,602	3.4	3.2	0.20	74,645
Annual	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—

Apartments Mid Rise	3.7	3.5	1.9	25	0.06	0.02	6.9	7.0	0.02	1.8	1.8	—	5,800	5,800	0.26	0.25	0.26	5,879
Condo/Townhouse High Rise	3.7	3.5	1.9	25	0.06	0.02	6.9	7.0	0.02	1.8	1.8	—	5,800	5,800	0.26	0.25	0.26	5,879
Total	7.5	7.0	3.7	49	0.13	0.05	14	14	0.04	3.5	3.6	—	11,599	11,599	0.51	0.49	0.52	11,759

4.2. Energy

4.2.1. Electricity Emissions By Land Use - Unmitigated

Criteria Pollutants (lb/day for daily, ton/yr for annual) and GHGs (lb/day for daily, MT/yr for annual)

Land Use	TOG	ROG	NOx	CO	SO2	PM10E	PM10D	PM10T	PM2.5E	PM2.5D	PM2.5T	BCO2	NBCO2	CO2T	CH4	N2O	R	CO2e
Daily, Summer (Max)	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—
Apartments Mid Rise	—	—	—	—	—	—	—	—	—	—	—	—	3,813	3,813	0.62	0.07	—	3,851
Condo/Townhouse High Rise	—	—	—	—	—	—	—	—	—	—	—	—	3,813	3,813	0.62	0.07	—	3,851
Total	—	—	—	—	—	—	—	—	—	—	—	—	7,626	7,626	1.2	0.15	—	7,701
Daily, Winter (Max)	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—
Apartments Mid Rise	—	—	—	—	—	—	—	—	—	—	—	—	3,813	3,813	0.62	0.07	—	3,851

Condo/Townhouse	—	—	—	—	—	—	—	—	—	—	—	—	3,813	3,813	0.62	0.07	—	3,851
Total	—	—	—	—	—	—	—	—	—	—	—	—	7,626	7,626	1.2	0.15	—	7,701
Annual	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—
Apartments Mid Rise	—	—	—	—	—	—	—	—	—	—	—	—	631	631	0.10	0.01	—	638
Condo/Townhouse High Rise	—	—	—	—	—	—	—	—	—	—	—	—	631	631	0.10	0.01	—	638
Total	—	—	—	—	—	—	—	—	—	—	—	—	1,263	1,263	0.20	0.02	—	1,275

4.2.3. Natural Gas Emissions By Land Use - Unmitigated

Criteria Pollutants (lb/day for daily, ton/yr for annual) and GHGs (lb/day for daily, MT/yr for annual)

Land Use	TOG	ROG	NOx	CO	SO2	PM10E	PM10D	PM10T	PM2.5E	PM2.5D	PM2.5T	BCO2	NBCO2	CO2T	CH4	N2O	R	CO2e
Daily, Summer (Max)	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—
Apartments Mid Rise	0.52	0.26	4.4	1.9	0.03	0.36	—	0.36	0.36	—	0.36	—	5,643	5,643	0.50	0.01	—	5,659
Condo/Townhouse High Rise	0.52	0.26	4.4	1.9	0.03	0.36	—	0.36	0.36	—	0.36	—	5,643	5,643	0.50	0.01	—	5,659
Total	1.0	0.52	8.9	3.8	0.06	0.72	—	0.72	0.72	—	0.72	—	11,286	11,286	1.00	0.02	—	11,318
Daily, Winter (Max)	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—

Apartments Mid Rise	0.52	0.26	4.4	1.9	0.03	0.36	—	0.36	0.36	—	0.36	—	5,643	5,643	0.50	0.01	—	5,659
Condo/Townhouse High Rise	0.52	0.26	4.4	1.9	0.03	0.36	—	0.36	0.36	—	0.36	—	5,643	5,643	0.50	0.01	—	5,659
Total	1.0	0.52	8.9	3.8	0.06	0.72	—	0.72	0.72	—	0.72	—	11,286	11,286	1.00	0.02	—	11,318
Annual	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—
Apartments Mid Rise	0.09	0.05	0.81	0.35	0.01	0.07	—	0.07	0.07	—	0.07	—	934	934	0.08	< 0.005	—	937
Condo/Townhouse High Rise	0.09	0.05	0.81	0.35	0.01	0.07	—	0.07	0.07	—	0.07	—	934	934	0.08	< 0.005	—	937
Total	0.19	0.09	1.6	0.69	0.01	0.13	—	0.13	0.13	—	0.13	—	1,869	1,869	0.17	< 0.005	—	1,874

4.3. Area Emissions by Source

4.3.1. Unmitigated

Criteria Pollutants (lb/day for daily, ton/yr for annual) and GHGs (lb/day for daily, MT/yr for annual)

Source	TOG	ROG	NOx	CO	SO2	PM10E	PM10D	PM10T	PM2.5E	PM2.5D	PM2.5T	BCO2	NBCO2	CO2T	CH4	N2O	R	CO2e
Daily, Summer (Max)	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—
Hearths	4.6	2.3	39	17	0.25	3.2	—	3.2	3.2	—	3.2	0.00	50,113	50,113	0.94	0.09	—	50,165
Consumer Products	82	82	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—

Architectural Coating	15	15	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—
Landscape Equipment	21	20	2.1	228	0.01	0.10	—	0.10	0.08	—	0.08	—	607	607	0.03	0.01	—	609
Total	122	119	42	245	0.26	3.3	—	3.3	3.3	—	3.3	0.00	50,720	50,720	0.97	0.10	—	50,774
Daily, Winter (Max)	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—
Hearths	4.6	2.3	39	17	0.25	3.2	—	3.2	3.2	—	3.2	0.00	50,113	50,113	0.94	0.09	—	50,165
Consumer Products	82	82	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—
Architectural Coatings	15	15	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—
Total	102	99	39	17	0.25	3.2	—	3.2	3.2	—	3.2	0.00	50,113	50,113	0.94	0.09	—	50,165
Annual	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—
Hearths	0.02	0.01	0.18	0.08	< 0.005	0.01	—	0.01	0.01	—	0.01	0.00	205	205	< 0.005	< 0.005	—	205
Consumer Products	15	15	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—
Architectural Coatings	2.7	2.7	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—
Landscape Equipment	1.9	1.8	0.19	21	< 0.005	0.01	—	0.01	0.01	—	0.01	—	50	50	< 0.005	< 0.005	—	50
Total	20	19	0.37	21	< 0.005	0.02	—	0.02	0.02	—	0.02	0.00	254	254	0.01	< 0.005	—	255

4.4. Water Emissions by Land Use

4.4.1. Unmitigated

Criteria Pollutants (lb/day for daily, ton/yr for annual) and GHGs (lb/day for daily, MT/yr for annual)

Land Use	TOG	ROG	NOx	CO	SO2	PM10E	PM10D	PM10T	PM2.5E	PM2.5D	PM2.5T	BCO2	NBCO2	CO2T	CH4	N2O	R	CO2e
Daily, Summer (Max)	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—
Apartments Mid Rise	—	—	—	—	—	—	—	—	—	—	—	112	212	325	12	0.28	—	697
Condo/Townhouse High Rise	—	—	—	—	—	—	—	—	—	—	—	112	212	325	12	0.28	—	697
Total	—	—	—	—	—	—	—	—	—	—	—	225	425	650	23	0.56	—	1,394
Daily, Winter (Max)	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—
Apartments Mid Rise	—	—	—	—	—	—	—	—	—	—	—	112	212	325	12	0.28	—	697
Condo/Townhouse High Rise	—	—	—	—	—	—	—	—	—	—	—	112	212	325	12	0.28	—	697
Total	—	—	—	—	—	—	—	—	—	—	—	225	425	650	23	0.56	—	1,394
Annual	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—
Apartments Mid Rise	—	—	—	—	—	—	—	—	—	—	—	19	35	54	1.9	0.05	—	115

Condo/Townhouse	—	—	—	—	—	—	—	—	—	—	—	19	35	54	1.9	0.05	—	115
Total	—	—	—	—	—	—	—	—	—	—	—	37	70	108	3.8	0.09	—	231

4.5. Waste Emissions by Land Use

4.5.1. Unmitigated

Criteria Pollutants (lb/day for daily, ton/yr for annual) and GHGs (lb/day for daily, MT/yr for annual)

Land Use	TOG	ROG	NOx	CO	SO2	PM10E	PM10D	PM10T	PM2.5E	PM2.5D	PM2.5T	BCO2	NBCO2	CO2T	CH4	N2O	R	CO2e
Daily, Summer (Max)	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—
Apartments Mid Rise	—	—	—	—	—	—	—	—	—	—	—	797	0.00	797	80	0.00	—	2,789
Condo/Townhouse High Rise	—	—	—	—	—	—	—	—	—	—	—	797	0.00	797	80	0.00	—	2,789
Total	—	—	—	—	—	—	—	—	—	—	—	1,594	0.00	1,594	159	0.00	—	5,577
Daily, Winter (Max)	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—
Apartments Mid Rise	—	—	—	—	—	—	—	—	—	—	—	797	0.00	797	80	0.00	—	2,789
Condo/Townhouse High Rise	—	—	—	—	—	—	—	—	—	—	—	797	0.00	797	80	0.00	—	2,789
Total	—	—	—	—	—	—	—	—	—	—	—	1,594	0.00	1,594	159	0.00	—	5,577

Annual	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—
Apartments Mid Rise	—	—	—	—	—	—	—	—	—	—	—	132	0.00	132	13	0.00	—	462
Condo/Townhouse High Rise	—	—	—	—	—	—	—	—	—	—	—	132	0.00	132	13	0.00	—	462
Total	—	—	—	—	—	—	—	—	—	—	—	264	0.00	264	26	0.00	—	923

4.6. Refrigerant Emissions by Land Use

4.6.1. Unmitigated

Criteria Pollutants (lb/day for daily, ton/yr for annual) and GHGs (lb/day for daily, MT/yr for annual)

Land Use	TOG	ROG	NOx	CO	SO2	PM10E	PM10D	PM10T	PM2.5E	PM2.5D	PM2.5T	BCO2	NBCO2	CO2T	CH4	N2O	R	CO2e
Daily, Summer (Max)	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—
Apartments Mid Rise	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	14	14
Condo/Townhouse High Rise	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	14	14
Total	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	28	28
Daily, Winter (Max)	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—
Apartments Mid Rise	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	14	14

Condo/T High Rise	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	14	14
Total	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	28	28
Annual	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—
Apartments Mid Rise	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	2.3	2.3
Condo/Townhouse High Rise	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	2.3	2.3
Total	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	4.6	4.6

4.7. Offroad Emissions By Equipment Type

4.7.1. Unmitigated

Criteria Pollutants (lb/day for daily, ton/yr for annual) and GHGs (lb/day for daily, MT/yr for annual)

Equipment Type	TOG	ROG	NOx	CO	SO2	PM10E	PM10D	PM10T	PM2.5E	PM2.5D	PM2.5T	BCO2	NBCO2	CO2T	CH4	N2O	R	CO2e
Daily, Summer (Max)	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—
Total	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—
Daily, Winter (Max)	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—
Total	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—
Annual	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—
Total	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—

4.8. Stationary Emissions By Equipment Type

4.8.1. Unmitigated

Criteria Pollutants (lb/day for daily, ton/yr for annual) and GHGs (lb/day for daily, MT/yr for annual)

Equipment Type	TOG	ROG	NOx	CO	SO2	PM10E	PM10D	PM10T	PM2.5E	PM2.5D	PM2.5T	BCO2	NBCO2	CO2T	CH4	N2O	R	CO2e
Daily, Summer (Max)	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—
Total	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—
Daily, Winter (Max)	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—
Total	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—
Annual	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—
Total	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—

4.9. User Defined Emissions By Equipment Type

4.9.1. Unmitigated

Criteria Pollutants (lb/day for daily, ton/yr for annual) and GHGs (lb/day for daily, MT/yr for annual)

Equipment Type	TOG	ROG	NOx	CO	SO2	PM10E	PM10D	PM10T	PM2.5E	PM2.5D	PM2.5T	BCO2	NBCO2	CO2T	CH4	N2O	R	CO2e
Daily, Summer (Max)	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—
Total	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—
Daily, Winter (Max)	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—
Total	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—

Annual	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—
Total	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—

4.10. Soil Carbon Accumulation By Vegetation Type

4.10.1. Soil Carbon Accumulation By Vegetation Type - Unmitigated

Criteria Pollutants (lb/day for daily, ton/yr for annual) and GHGs (lb/day for daily, MT/yr for annual)

Vegetation	TOG	ROG	NOx	CO	SO2	PM10E	PM10D	PM10T	PM2.5E	PM2.5D	PM2.5T	BCO2	NBCO2	CO2T	CH4	N2O	R	CO2e
Daily, Summer (Max)	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—
Total	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—
Daily, Winter (Max)	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—
Total	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—
Annual	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—
Total	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—

4.10.2. Above and Belowground Carbon Accumulation by Land Use Type - Unmitigated

Criteria Pollutants (lb/day for daily, ton/yr for annual) and GHGs (lb/day for daily, MT/yr for annual)

Land Use	TOG	ROG	NOx	CO	SO2	PM10E	PM10D	PM10T	PM2.5E	PM2.5D	PM2.5T	BCO2	NBCO2	CO2T	CH4	N2O	R	CO2e
Daily, Summer (Max)	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—
Total	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—
Daily, Winter (Max)	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—
Total	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—

Annual	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—
Total	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—

4.10.3. Avoided and Sequestered Emissions by Species - Unmitigated

Criteria Pollutants (lb/day for daily, ton/yr for annual) and GHGs (lb/day for daily, MT/yr for annual)

Species	TOG	ROG	NOx	CO	SO2	PM10E	PM10D	PM10T	PM2.5E	PM2.5D	PM2.5T	BCO2	NBCO2	CO2T	CH4	N2O	R	CO2e
Daily, Summer (Max)	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—
Avoided	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—
Subtotal	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—
Sequestered	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—
Subtotal	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—
Removed	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—
Subtotal	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—
—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—
Daily, Winter (Max)	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—
Avoided	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—
Subtotal	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—
Sequestered	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—
Subtotal	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—
Removed	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—
Subtotal	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—
—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—
Annual	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—

Avoided	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—
Subtotal	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—
Sequestered	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—
Subtotal	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—
Removed	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—
Subtotal	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—
—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—

5. Activity Data

5.1. Construction Schedule

Phase Name	Phase Type	Start Date	End Date	Days Per Week	Work Days per Phase	Phase Description
Demolition	Demolition	1/1/2026	5/21/2026	5.0	100	—
Site Preparation	Site Preparation	5/22/2026	8/14/2026	5.0	60	—
Grading	Grading	8/15/2026	3/20/2027	5.0	155	—
Building Construction	Building Construction	3/21/2027	2/27/2033	5.0	1,550	—
Paving	Paving	2/28/2033	8/1/2033	5.0	110	—
Architectural Coating	Architectural Coating	8/2/2033	1/3/2034	5.0	110	—

5.2. Off-Road Equipment

5.2.1. Unmitigated

Phase Name	Equipment Type	Fuel Type	Engine Tier	Number per Day	Hours Per Day	Horsepower	Load Factor
Demolition	Rubber Tired Dozers	Diesel	Average	2.0	8.0	367	0.40
Demolition	Excavators	Diesel	Average	3.0	8.0	36	0.38
Demolition	Concrete/Industrial Saws	Diesel	Average	1.00	8.0	33	0.73

Site Preparation	Rubber Tired Dozers	Diesel	Average	3.0	8.0	367	0.40
Site Preparation	Tractors/Loaders/Back hoes	Diesel	Average	4.0	8.0	84	0.37
Grading	Graders	Diesel	Average	1.00	8.0	148	0.41
Grading	Excavators	Diesel	Average	2.0	8.0	36	0.38
Grading	Tractors/Loaders/Back hoes	Diesel	Average	2.0	8.0	84	0.37
Grading	Scrapers	Diesel	Average	2.0	8.0	423	0.48
Grading	Rubber Tired Dozers	Diesel	Average	1.00	8.0	367	0.40
Building Construction	Forklifts	Diesel	Average	3.0	8.0	82	0.20
Building Construction	Generator Sets	Diesel	Average	1.00	8.0	14	0.74
Building Construction	Cranes	Diesel	Average	1.00	7.0	367	0.29
Building Construction	Welders	Diesel	Average	1.00	8.0	46	0.45
Building Construction	Tractors/Loaders/Back hoes	Diesel	Average	3.0	7.0	84	0.37
Paving	Pavers	Diesel	Average	2.0	8.0	81	0.42
Paving	Paving Equipment	Diesel	Average	2.0	8.0	89	0.36
Paving	Rollers	Diesel	Average	2.0	8.0	36	0.38
Architectural Coating	Air Compressors	Diesel	Average	1.00	6.0	37	0.48

5.3. Construction Vehicles

5.3.1. Unmitigated

Phase Name	Trip Type	One-Way Trips per Day	Miles per Trip	Vehicle Mix
Demolition	Worker	15	12	LDA,LDT1,LDT2
Demolition	Vendor	—	8.4	HHDT,MHDT
Demolition	Hauling	0.00	20	HHDT
Demolition	Onsite truck	—	—	HHDT
Site Preparation	Worker	18	12	LDA,LDT1,LDT2

Site Preparation	Vendor	—	8.4	HHDT,MHDT
Site Preparation	Hauling	0.00	20	HHDT
Site Preparation	Onsite truck	—	—	HHDT
Grading	Worker	20	12	LDA,LDT1,LDT2
Grading	Vendor	—	8.4	HHDT,MHDT
Grading	Hauling	0.00	20	HHDT
Grading	Onsite truck	—	—	HHDT
Building Construction	Worker	2,880	12	LDA,LDT1,LDT2
Building Construction	Vendor	428	8.4	HHDT,MHDT
Building Construction	Hauling	0.00	20	HHDT
Building Construction	Onsite truck	—	—	HHDT
Paving	Worker	15	12	LDA,LDT1,LDT2
Paving	Vendor	—	8.4	HHDT,MHDT
Paving	Hauling	0.00	20	HHDT
Paving	Onsite truck	—	—	HHDT
Architectural Coating	Worker	576	12	LDA,LDT1,LDT2
Architectural Coating	Vendor	—	8.4	HHDT,MHDT
Architectural Coating	Hauling	0.00	20	HHDT
Architectural Coating	Onsite truck	—	—	HHDT

5.4. Vehicles

5.4.1. Construction Vehicle Control Strategies

Non-applicable. No control strategies activated by user.

5.5. Architectural Coatings

Phase Name	Residential Interior Area Coated (sq ft)	Residential Exterior Area Coated (sq ft)	Non-Residential Interior Area Coated (sq ft)	Non-Residential Exterior Area Coated (sq ft)	Parking Area Coated (sq ft)
Architectural Coating	7,776,000	2,592,000	0.00	0.00	—

5.6. Dust Mitigation

5.6.1. Construction Earthmoving Activities

Phase Name	Material Imported (cy)	Material Exported (cy)	Acres Graded (acres)	Material Demolished (sq. ft.)	Acres Paved (acres)
Demolition	0.00	0.00	0.00	—	0.00
Site Preparation	—	—	90	0.00	0.00
Grading	—	—	465	0.00	0.00
Paving	0.00	0.00	0.00	0.00	0.00

5.6.2. Construction Earthmoving Control Strategies

Non-applicable. No control strategies activated by user.

5.7. Construction Paving

Phase Name	Land Use	Area Paved (acres)	% Asphalt
Paving	Apartments Mid Rise	—	0%
Paving	Condo/Townhouse High Rise	—	0%

5.8. Construction Electricity Consumption and Emissions Factors

kWh per Year and Emission Factor (lb/MWh)

Year	kWh per Year	CO2	CH4	N2O
2026	0.00	204	0.03	< 0.005
2027	0.00	204	0.03	< 0.005
2028	0.00	204	0.03	< 0.005
2029	0.00	204	0.03	< 0.005
2030	0.00	204	0.03	< 0.005
2031	0.00	204	0.03	< 0.005
2032	0.00	204	0.03	< 0.005
2033	0.00	204	0.03	< 0.005

2034	0.00	204	0.03	< 0.005

5.9. Operational Mobile Sources

5.9.1. Unmitigated

Land Use Type	Trips/Weekday	Trips/Saturday	Trips/Sunday	Trips/Year	VMT/Weekday	VMT/Saturday	VMT/Sunday	VMT/Year
Apartments Mid Rise	10,880	9,820	8,180	3,775,143	57,891	52,251	43,525	20,087,074
Condo/Townhouse High Rise	10,880	9,820	8,180	3,775,143	57,891	52,251	43,525	20,087,074

5.10. Operational Area Sources

5.10.1. Hearths

Land Use	Hearth Type	Unmitigated (number)	Mitigated (number)
Apartments Mid Rise	Wood Fireplaces	0	0
Apartments Mid Rise	Gas Fireplaces	1,020	1,020
Apartments Mid Rise	Propane Fireplaces	0	0
Apartments Mid Rise	Electric Fireplaces	0	0
Apartments Mid Rise	No Fireplaces	980	980
Apartments Mid Rise	Conventional Wood Stoves	0	0
Apartments Mid Rise	Catalytic Wood Stoves	0	0
Apartments Mid Rise	Non-Catalytic Wood Stoves	0	0
Apartments Mid Rise	Pellet Wood Stoves	0	0
Condo/Townhouse High Rise	Wood Fireplaces	0	0
Condo/Townhouse High Rise	Gas Fireplaces	1,020	1,020
Condo/Townhouse High Rise	Propane Fireplaces	0	0
Condo/Townhouse High Rise	Electric Fireplaces	0	0
Condo/Townhouse High Rise	No Fireplaces	980	980

Condo/Townhouse High Rise	Conventional Wood Stoves	0	0
Condo/Townhouse High Rise	Catalytic Wood Stoves	0	0
Condo/Townhouse High Rise	Non-Catalytic Wood Stoves	0	0
Condo/Townhouse High Rise	Pellet Wood Stoves	0	0

5.10.2. Architectural Coatings

—	Residential Interior Area Coated (sq ft)	Residential Exterior Area Coated (sq ft)	Non-Residential Interior Area Coated (sq ft)	Non-Residential Exterior Area Coated (sq ft)	Parking Area Coated (sq ft)
undefined	7,776,000	2,592,000	0.00	0.00	—

5.10.3. Landscape Equipment

Season	Unit	Value
Snow Days	day/yr	0.00
Summer Days	day/yr	180

5.11. Operational Energy Consumption

5.11.1. Unmitigated

Electricity (kWh/yr) and CO2 and CH4 and N2O and Natural Gas (kBTU/yr)

Land Use	Electricity (kWh/yr)	CO2	CH4	N2O	Natural Gas (kBTU/yr)
Apartments Mid Rise	6,822,902	204	0.0330	0.0040	17,608,142
Condo/Townhouse High Rise	6,822,902	204	0.0330	0.0040	17,608,142

5.12. Operational Water and Wastewater Consumption

5.12.1. Unmitigated

Land Use	Indoor Water (gal/year)	Outdoor Water (gal/year)
Apartments Mid Rise	58,681,050	0.00

Condo/Townhouse High Rise	58,681,050	0.00

5.13. Operational Waste Generation

5.13.1. Unmitigated

Land Use	Waste (ton/year)	Cogeneration (kWh/year)
Apartments Mid Rise	1,479	0.00
Condo/Townhouse High Rise	1,479	0.00

5.14. Operational Refrigeration and Air Conditioning Equipment

5.14.1. Unmitigated

Land Use	Equipment Type	Refrigerant	GWP	Quantity (kg)	Operations Leak Rate	Service Leak Rate	Times Serviced
Apartments Mid Rise	Average room A/C & Other residential A/C and heat pumps	R-410A	2,088	< 0.005	2.5	2.5	10.0
Apartments Mid Rise	Household refrigerators and/or freezers	R-134a	1,430	0.12	0.60	0.00	1.00
Condo/Townhouse High Rise	Average room A/C & Other residential A/C and heat pumps	R-410A	2,088	< 0.005	2.5	2.5	10.0
Condo/Townhouse High Rise	Household refrigerators and/or freezers	R-134a	1,430	0.12	0.60	0.00	1.00

5.15. Operational Off-Road Equipment

5.15.1. Unmitigated

5.16. Stationary Sources

5.16.1. Emergency Generators and Fire Pumps

5.16.2. Process Boilers

5.17. User Defined

5.18. Vegetation

5.18.1. Land Use Change

5.18.1.1. Unmitigated

Vegetation Land Use Type	Vegetation Soil Type	Initial Acres	Final Acres

5.18.1. Biomass Cover Type

5.18.1.1. Unmitigated

Biomass Cover Type	Initial Acres	Final Acres

5.18.2. Sequestration

5.18.2.1. Unmitigated

Tree Type	Number	Electricity Saved (kWh/year)	Natural Gas Saved (btu/year)

6. Climate Risk Detailed Report

6.1. Climate Risk Summary

Cal-Adapt midcentury 2040–2059 average projections for four hazards are reported below for your project location. These are under Representation Concentration Pathway (RCP) 8.5 which assumes GHG emissions will continue to rise strongly through 2050 and then plateau around 2100.

Climate Hazard	Result for Project Location	Unit
Temperature and Extreme Heat	5.9	annual days of extreme heat

Extreme Precipitation	7.5	annual days with precipitation above 20 mm
Sea Level Rise	—	meters of inundation depth
Wildfire	4.4	annual hectares burned

Temperature and Extreme Heat data are for grid cell in which your project are located. The projection is based on the 98th historical percentile of daily maximum/minimum temperatures from observed historical data (32 climate model ensemble from Cal-Adapt, 2040–2059 average under RCP 8.5). Each grid cell is 6 kilometers (km) by 6 km, or 3.7 miles (mi) by 3.7 mi.
Extreme Precipitation data are for the grid cell in which your project are located. The threshold of 20 mm is equivalent to about ¾ an inch of rain, which would be light to moderate rainfall if received over a full day or heavy rain if received over a period of 2 to 4 hours. Each grid cell is 6 kilometers (km) by 6 km, or 3.7 miles (mi) by 3.7 mi.
Sea Level Rise data are for the grid cell in which your project are located. The projections are from Radke et al. (2017), as reported in Cal-Adapt (Radke et al., 2017, CEC-500-2017-008), and consider inundation location and depth for the San Francisco Bay, the Sacramento-San Joaquin River Delta and California coast resulting different increments of sea level rise coupled with extreme storm events. Users may select from four scenarios to view the range in potential inundation depth for the grid cell. The four scenarios are: No rise, 0.5 meter, 1.0 meter, 1.41 meters
Wildfire data are for the grid cell in which your project are located. The projections are from UC Davis, as reported in Cal-Adapt (2040–2059 average under RCP 8.5), and consider historical data of climate, vegetation, population density, and large (> 400 ha) fire history. Users may select from four model simulations to view the range in potential wildfire probabilities for the grid cell. The four simulations make different assumptions about expected rainfall and temperature are: Warmer/drier (HadGEM2-ES), Cooler/wetter (CNRM-CM5), Average conditions (CanESM2), Range of different rainfall and temperature possibilities (MIROC5). Each grid cell is 6 kilometers (km) by 6 km, or 3.7 miles (mi) by 3.7 mi.

6.2. Initial Climate Risk Scores

Climate Hazard	Exposure Score	Sensitivity Score	Adaptive Capacity Score	Vulnerability Score
Temperature and Extreme Heat	N/A	N/A	N/A	N/A
Extreme Precipitation	2	0	0	N/A
Sea Level Rise	1	0	0	N/A
Wildfire	1	0	0	N/A
Flooding	N/A	N/A	N/A	N/A
Drought	N/A	N/A	N/A	N/A
Snowpack Reduction	N/A	N/A	N/A	N/A
Air Quality Degradation	0	0	0	N/A

The sensitivity score reflects the extent to which a project would be adversely affected by exposure to a climate hazard. Exposure is rated on a scale of 1 to 5, with a score of 5 representing the greatest exposure.
The adaptive capacity of a project refers to its ability to manage and reduce vulnerabilities from projected climate hazards. Adaptive capacity is rated on a scale of 1 to 5, with a score of 5 representing the greatest ability to adapt.
The overall vulnerability scores are calculated based on the potential impacts and adaptive capacity assessments for each hazard. Scores do not include implementation of climate risk reduction measures.

6.3. Adjusted Climate Risk Scores

Climate Hazard	Exposure Score	Sensitivity Score	Adaptive Capacity Score	Vulnerability Score

Temperature and Extreme Heat	N/A	N/A	N/A	N/A
Extreme Precipitation	2	1	1	3
Sea Level Rise	1	1	1	2
Wildfire	1	1	1	2
Flooding	N/A	N/A	N/A	N/A
Drought	N/A	N/A	N/A	N/A
Snowpack Reduction	N/A	N/A	N/A	N/A
Air Quality Degradation	1	1	1	2

The sensitivity score reflects the extent to which a project would be adversely affected by exposure to a climate hazard. Exposure is rated on a scale of 1 to 5, with a score of 5 representing the greatest exposure.
The adaptive capacity of a project refers to its ability to manage and reduce vulnerabilities from projected climate hazards. Adaptive capacity is rated on a scale of 1 to 5, with a score of 5 representing the greatest ability to adapt.
The overall vulnerability scores are calculated based on the potential impacts and adaptive capacity assessments for each hazard. Scores include implementation of climate risk reduction measures.

6.4. Climate Risk Reduction Measures

7. Health and Equity Details

7.1. CalEnviroScreen 4.0 Scores

The maximum CalEnviroScreen score is 100. A high score (i.e., greater than 50) reflects a higher pollution burden compared to other census tracts in the state.

Indicator	Result for Project Census Tract
Exposure Indicators	—
AQ-Ozone	3.1
AQ-PM	25
AQ-DPM	99
Drinking Water	15
Lead Risk Housing	59
Pesticides	9.0
Toxic Releases	45
Traffic	53

Effect Indicators	—
CleanUp Sites	74
Groundwater	71
Haz Waste Facilities/Generators	98
Impaired Water Bodies	0.00
Solid Waste	80
Sensitive Population	—
Asthma	81
Cardio-vascular	18
Low Birth Weights	84
Socioeconomic Factor Indicators	—
Education	48
Housing	67
Linguistic	82
Poverty	65
Unemployment	54

7.2. Healthy Places Index Scores

The maximum Health Places Index score is 100. A high score (i.e., greater than 50) reflects healthier community conditions compared to other census tracts in the state.

Indicator	Result for Project Census Tract
Economic	—
Above Poverty	21.28833569
Employed	26.07468241
Median HI	16.37366868
Education	—
Bachelor's or higher	64.48094444
High school enrollment	100
Preschool enrollment	38.90671115

Transportation	—
Auto Access	0.372128834
Active commuting	99.53804697
Social	—
2-parent households	2.643397921
Voting	31.75927114
Neighborhood	—
Alcohol availability	4.516874118
Park access	38.62440652
Retail density	99.05042987
Supermarket access	94.25125112
Tree canopy	6.03105351
Housing	—
Homeownership	10.15013474
Housing habitability	0.526113178
Low-inc homeowner severe housing cost burden	32.54202489
Low-inc renter severe housing cost burden	44.3731554
Uncrowded housing	36.46862569
Health Outcomes	—
Insured adults	41.04965995
Arthritis	59.3
Asthma ER Admissions	18.9
High Blood Pressure	44.4
Cancer (excluding skin)	68.9
Asthma	37.3
Coronary Heart Disease	43.7
Chronic Obstructive Pulmonary Disease	33.2
Diagnosed Diabetes	36.9

Life Expectancy at Birth	23.5
Cognitively Disabled	4.4
Physically Disabled	1.7
Heart Attack ER Admissions	60.2
Mental Health Not Good	34.8
Chronic Kidney Disease	35.4
Obesity	39.8
Pedestrian Injuries	98.0
Physical Health Not Good	33.1
Stroke	34.3
Health Risk Behaviors	—
Binge Drinking	24.0
Current Smoker	20.2
No Leisure Time for Physical Activity	36.8
Climate Change Exposures	—
Wildfire Risk	0.0
SLR Inundation Area	0.0
Children	86.0
Elderly	54.5
English Speaking	11.2
Foreign-born	81.4
Outdoor Workers	88.7
Climate Change Adaptive Capacity	—
Impervious Surface Cover	0.2
Traffic Density	58.5
Traffic Access	87.4
Other Indices	—
Hardship	58.6

Other Decision Support	—
2016 Voting	44.8

7.3. Overall Health & Equity Scores

Metric	Result for Project Census Tract
CalEnviroScreen 4.0 Score for Project Location (a)	71
Healthy Places Index Score for Project Location (b)	20
Project Located in a Designated Disadvantaged Community (Senate Bill 535)	No
Project Located in a Low-Income Community (Assembly Bill 1550)	Yes
Project Located in a Community Air Protection Program Community (Assembly Bill 617)	No

a: The maximum CalEnviroScreen score is 100. A high score (i.e., greater than 50) reflects a higher pollution burden compared to other census tracts in the state.
b: The maximum Health Places Index score is 100. A high score (i.e., greater than 50) reflects healthier community conditions compared to other census tracts in the state.

7.4. Health & Equity Measures

No Health & Equity Measures selected.

7.5. Evaluation Scorecard

Health & Equity Evaluation Scorecard not completed.

7.6. Health & Equity Custom Measures

No Health & Equity Custom Measures created.

8. User Changes to Default Data

8.1. Justifications

Screen	Justification
Operations: Water and Waste Water	Outdoor water use set to zero.

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- **Geologic and Hydrogeologic Characterization, Investigation and Remediation Strategies**
- **Industrial Stormwater Compliance**
- **CEQA Review**
- **Expert Testimony**

Professional Certifications:
California Professional Geologist, P.G.
California Certified Hydrogeologist, C.Hg.

Education:
M.S. Degree, Geology, California State University Los Angeles, Los Angeles, CA, 1984.
B.A. Degree, Geology, Humboldt State University, Arcata, CA, 1982.

Professional Experience:
30 years of experience in environmental policy, contaminant assessment and remediation, stormwater compliance, and CEQA review. Spent nine years with the U.S. EPA in the Resource Conservation Recovery Act (RCRA) and Superfund programs and served as EPA's Senior Science Policy Advisor in the Western Regional Office where I identified emerging threats to groundwater. While with EPA, I served as a Senior Hydrogeologist in the oversight of the assessment of seven major military facilities undergoing base closure. Led numerous enforcement actions under provisions of the Resource Conservation and Recovery Act (RCRA) and directed efforts to improve hydrogeologic characterization and water quality monitoring. For the past 15 years, as a founding partner with SWAPE, I developed extensive client relationships and has managed complex projects that include consultations as an expert witness and a regulatory specialist, and managing projects ranging from industrial stormwater compliance to CEQA review of impacts from hazardous waste, air quality and greenhouse gas emissions.

Positions held include:

Government:
Senior Science Policy Advisor and Hydrogeologist, U.S. Environmental Protection Agency (1989–1998);

Hydrogeologist, National Park Service, Water Resources Division (1998 – 2000);
Geologist, U.S. Forest Service (1986 – 1998).

Educational:
Geology Instructor, Golden West College, 2010 – 2104, 2017;
Adjunct Faculty Member, San Francisco State University, Department of Geosciences (1993 – 1998);
Instructor, College of Marin, Department of Science (1990 – 1995).

Private Sector:
Founding Partner, Soil/Water/Air Protection Enterprise (SWAPE) (2003 – present);
Senior Environmental Analyst, Komex H2O Science, Inc. (2000 -- 2003);
Executive Director, Orange Coast Watch (2001 – 2004);
Geologist, Dames & Moore (1984 – 1986).

Senior Regulatory and Litigation Support Analyst:
With SWAPE, responsibilities have included:

- Lead analyst and testifying expert, for both plaintiffs and defendants, in the review of over 300 environmental impact reports and negative declarations since 2003 under CEQA that identify significant issues with regard to hazardous waste, water resources, water quality, air quality, greenhouse gas emissions, and geologic hazards.
- Recommending additional mitigation measures to lead agencies at the local and county level to include additional characterization of health risks and implementation of protective measures to reduce exposure to hazards from toxins.
- Stormwater analysis, sampling and best management practice evaluation, for both government agencies and corporate clients, at more than 150 industrial facilities.
- Serving as expert witness for both plaintiffs and defendants in cases including contamination of groundwater, CERCLAcompliance in assessment and remediation, and industrial stormwater contamination.
- Technical assistance and litigation support for vapor intrusion concerns, for both government agencies and corporate clients.
- Lead analyst and testifying expert in the review of environmental issues in license applicationsfor large solar power plants before the California Energy Commission.
- Manager of a project to evaluate numerous formerly used military sites in the western U.S.
- Manager of a comprehensive evaluation of potential sources of perchlorate contamination in Southern California drinking water wells.
- Manager and designated expert for litigation support under provisions of Proposition 65 in the review of releases of gasoline to sources drinking water at major refineries and hundreds of gas stations throughout California.

With Komex H2O Science Inc., duties included the following:

- Senior author of a report on the extent of perchlorate contamination that was used in testimony by the former U.S. EPA Administrator and General Counsel.
- Senior researcher in the development of a comprehensive, electronically interactive chronology of MTBE use, research, and regulation.
- Senior researcher in the development of a comprehensive, electronically interactive chronology of perchlorate use, research, and regulation.
- Senior researcher in a study that estimates nationwide costs for MTBE remediation and drinking

water treatment, results of which were published in newspapers nationwide and in testimony against provisions of an energy bill that would limit liability for oil companies.

- Research to support litigation to restore drinking water supplies that have been contaminated by MTBE in California and New York.
- Lead author for a multi-volume remedial investigation report for an operating school in LosAngeles that met strict Sate of California regulatory requirements.
- Development of strategic approaches for cleanup of contaminated sites in consultation withclients and regulators.

Hydrogeology:

As a Senior Hydrogeologist with the U.S. Environmental Protection Agency, led investigations to characterize and cleanup closing military bases, including Mare Island Naval Shipyard, Hunters Point Naval Shipyard, Treasure Island Naval Station, Alameda Naval Station, Moffett Field, Mather Army Airfield, and Sacramento Army Depot. Specific activities included:

- Leading efforts to model groundwater flow and contaminant transport, ensured adequacy of monitoring networks, and assessed cleanup alternatives for contaminated sediment, soil, and groundwater.
- Initiating a regional program for evaluation of groundwater sampling practices and laboratory analysis at military bases.
- Identifying emerging issues, wrote technical guidance, and assisted in policy and regulation development through work on four national U.S. EPA workgroups, including the Superfund Groundwater Technical Forum and the Federal Facilities Forum.

At the request of the State of Hawaii, developed a methodology to determine the vulnerability of groundwater to contamination on the islands of Maui and Oahu. Used analytical models and a GIS to show zones of vulnerability, and the results were adopted and published by the State of Hawaii and County of Maui.

As a hydrogeologist with the EPA Groundwater Protection Section, worked with provisions of the Safe Drinking Water Act and NEPA to prevent drinking water contamination. Specific activities included the following:

- Received an EPA Bronze Medal for contribution to the development of national guidance for the protection of drinking water.
- Managed the Sole Source Aquifer Program and protected the drinking water of two communities through designation under the Safe Drinking Water Act. Prepared geologic reports, conducted hearings, and responded to public comments from residents who were very concerned about the impact of designation.
- Reviewed a number of Environmental Impact Statements for planned major developments, including large hazardous and solid waste disposal facilities, mine reclamation, and water transfer.

Served as a hydrogeologist with the RCRA Hazardous Waste program. Duties included:

- Supervised the hydrogeologic investigation of hazardous waste sites to determine compliancewith Subtitle C requirements.
- Reviewed and wrote "part B" permits for the disposal of hazardous waste.
- Conducted RCRA Corrective Action investigations of waste sites and led inspections that formed the basis for significant enforcement actions that were developed in close coordination with U.S.EPA legal counsel.

- Wrote contract specifications and supervised contractor's investigations of waste sites.

With the National Park Service, directed service-wide investigations of contaminant sources to prevent degradation of water quality, including the following:

- Applied pertinent laws and regulations including CERCLA, RCRA, NEPA, NRDA, and the Clean Water Act to control military, mining, and landfill contaminants.
- Conducted watershed-scale investigations of contaminants at parks, including Yellowstone and Olympic National Park.
- Identified high-levels of perchlorate in soil adjacent to a national park in New Mexicoand advised park superintendent on appropriate response actions under CERCLA.
- Served as a Park Service representative on the Interagency Perchlorate Steering Committee, a national workgroup.
- Developed a program to conduct environmental compliance audits of all National Parks while serving on a national workgroup.
- Co-authored two papers on the potential for water contamination from the operation of personal watercraft and snowmobiles, these papers serving as the basis for the development of nation- wide policy on the use of these vehicles in National Parks.
- Contributed to the Federal Multi-Agency Source Water Agreement under the Clean Water Action Plan.

Policy:

Served as senior management as the Senior Science Policy Advisor with the U.S. Environmental Protection Agency, Region 9. Activities included the following:

- Advising the Regional Administrator and senior management on emerging issues such as the potential for the gasoline additive MTBE and ammonium perchlorate to contaminate drinkingwater supplies.
- Shaping EPA's national response to these threats by serving on workgroups and by contributingto guidance, including the Office of Research and Development publication, Oxygenates in Water: Critical Information and Research Needs.
- Improving the technical training of EPA's scientific and engineering staff.
- Earning an EPA Bronze Medal for representing the region's 300 scientists and engineers in negotiations with the Administrator and senior management to better integrate scientific principles into the policy-making process.
- Establishing national protocol for the peer review of scientific documents.

Geology:

With the U.S. Forest Service, led investigations to determine hillslope stability of areas proposed for timber harvest in the central Oregon Coast Range. Specific activities included:

- Mapping geology in the field, and used aerial photographic interpretation and mathematical models to determine slope stability.
- Coordinating research with community stakeholders who were concerned with natural resource protection.
- Characterizing the geology of an aquifer that serves as the sole source of drinking water for thecity of Medford, Oregon.

As a consultant with Dames and Moore, led geologic investigations of two contaminated sites (later listed on the Superfund NPL) in the Portland, Oregon, area and a large RCRA hazardous waste site in eastern Oregon.

Duties included the following:

- Supervising year-long effort for soil and groundwater sampling.
- Conducting aquifer tests.
- Investigating active faults beneath sites proposed for hazardous waste disposal.

Teaching:

From 1990 to 1998, taught at least one course per semester at the community college and university levels:

- At San Francisco State University, held an adjunct faculty position and taught courses in environmental geology, oceanography (lab and lecture), hydrogeology, and groundwater contamination.
- Served as a committee member for graduate and undergraduate students.
- Taught courses in environmental geology and oceanography at the College of Marin.
- Part time geology instructor at Golden West College in Huntington Beach, California from 2010 to 2014 and in 2017.

Summary of Testimony Experience Over Past Four Years

In Re New Jersey Department of Environmental Protection et al. vs. E.I. DuPont de Nemours and Company, in the United States District Court, District of New Jersey, Civil Action No. 1:19-cv-14766-RMB-JBC. Deposition in 2025. Representing Plaintiffs in matters regarding contamination of groundwater, wastewater, soil, and air with per- and poly-fluoroalkyl substances.

In Re Edmond Asher, et al., vs. RTX Corporation (f/k/a Raytheon Technologies Corporation, et al.) in the County of Huntington Superior Court, Indiana, Cause number 35D01-2006-CT-000338. Deposition in 2024. Representing Plaintiffs in matters regarding contamination of groundwater and soil vapor with trichlorethylene.

In Re Wright vs Consolidated Rail Corporation In the Circuit Court of Cook County, Illinois, Case No: 21L3966. Deposition in 2023, Representing Plaintiff in matters involving groundwater and drinking water contamination of perchloroethylene, trichlorethylene, 1,2-dichloroethane, and carbon tetrachloride.

In Re Behr Dayton Thermal Products LLC In the United States District Court for the Southern District of Ohio Western Division at Dayton, Case No: 08-cv-326. Deposition in 2022. Representing Plaintiff in matters regarding contamination of groundwater and indoor air with perchloroethylene and trichloethelene.

Orange County Water District vs. Sabic Innovative Plastics US, LLC, et al. In the Court of Appeal, Fourth District,

Division 1, California, Case No: D070553. Deposition in 2020. Representing Plaintiff in matters involving compliance with The Comprehensive Environmental Response, Compensation, and Liability Act (CERCLA).
Los Angeles Waterkeeper vs. AAA Plating and Inspection, Inc. In the United States District Court for the Central District of California, Case No: No. CV 18-5916 PA (GJSx). Deposition in 2019. Expert witness representing Plaintiff in matters involving contaminated stormwater runoff at an industrial facility in Compton, California.

Californians for Alternatives to Toxics vs. Schneider Dock and Intermodal Facility. In the United States District Court for the Northern District of California, Case No: 3:17-cv-05287-JST. Deposition in 2019. Expert witness representing Plaintiff in matters involving contaminated stormwater runoff at an industrial facility in Eureka, California.

Bells et al. vs. The 3M Company et al. In the United States District Court for the District of Colorado, Case No: 1:16-CV-02531-RBJ. Deposition in 2018. Expert witness representing Plaintiff on matters regarding the general hydrogeological conditions present in an area impacted by per- and poly-fluoroalkyl substances.

Ungar vs. Foundation for Affordable Housing. In the Superior Court, State of California, Los Angeles County, Case No. BC628890 Deposition in 2017. Expert witness representing defendant on matters involving alleged drinking water contamination.

Invited Testimony, Reports, Papers and Presentations:

Hagemann, M.F., 2008. Disclosure of Hazardous Waste Issues under CEQA. Presentation to the Public Environmental Law Conference, Eugene, Oregon.

Hagemann, M.F., 2008. Disclosure of Hazardous Waste Issues under CEQA. Invited presentation to U.S.EPA Region 9, San Francisco, California.

Hagemann, M.F., 2005. Use of Electronic Databases in Environmental Regulation, Policy Making andPublic Participation. Brownfields 2005, Denver, Coloradao.

Hagemann, M.F., 2004. Perchlorate Contamination of the Colorado River and Impacts to Drinking Water in Nevada and the Southwestern U.S. Presentation to a meeting of the American Groundwater Trust, Las Vegas, NV (served on conference organizing committee).

Hagemann, M.F., 2004. Invited testimony to a California Senate committee hearing on air toxins atschools in Southern California, Los Angeles.

Brown, A., Farrow, J., Gray, A. and **Hagemann, M.**, 2004. An Estimate of Costs to Address MTBEReleases from Underground Storage Tanks and the Resulting Impact to Drinking Water Wells.

Presentation to the Ground Water and Environmental Law Conference, National GroundwaterAssociation.

Hagemann, M.F., 2004. Perchlorate Contamination of the Colorado River and Impacts to Drinking Waterin Arizona and the Southwestern U.S. Presentation to a meeting of the American Groundwater Trust, Phoenix, AZ (served on conference organizing committee).

Hagemann, M.F., 2003. Perchlorate Contamination of the Colorado River and Impacts to Drinking Waterin the Southwestern U.S. Invited presentation to a special committee meeting of the National Academy of Sciences, Irvine, CA.

Hagemann, M.F., 2003. Perchlorate Contamination of the Colorado River. Invited presentation to atribal EPA meeting, Pechanga, CA.

Hagemann, M.F., 2003. Perchlorate Contamination of the Colorado River. Invited presentation to ameeting of tribal representatives, Parker, AZ.

Hagemann, M.F., 2003. Impact of Perchlorate on the Colorado River and Associated Drinking WaterSupplies. Invited presentation to the Inter-Tribal Meeting, Torres Martinez Tribe.

Hagemann, M.F., 2003. The Emergence of Perchlorate as a Widespread Drinking Water Contaminant.Invited presentation to the U.S. EPA Region 9.

Hagemann, M.F., 2003. A Deductive Approach to the Assessment of Perchlorate Contamination. Invited presentation to the California Assembly Natural Resources Committee.

Hagemann, M.F., 2003. Perchlorate: A Cold War Legacy in Drinking Water. Presentation to a meeting ofthe National Groundwater Association.

Hagemann, M.F., 2002. From Tank to Tap: A Chronology of MTBE in Groundwater. Presentation to ameeting of the National Groundwater Association.

Hagemann, M.F., 2002. A Chronology of MTBE in Groundwater and an Estimate of Costs to AddressImpacts to Groundwater. Presentation to the annual meeting of the Society of Environmental Journalists.

Hagemann, M.F., 2002. An Estimate of the Cost to Address MTBE Contamination in Groundwater(and Who Will Pay). Presentation to a meeting of the National Groundwater Association.

Hagemann, M.F., 2002. An Estimate of Costs to Address MTBE Releases from Underground Storage Tanks and the Resulting Impact to Drinking Water Wells. Presentation to a meeting of the U.S. EPA andState Underground Storage Tank Program managers.

Hagemann, M.F., 2001. From Tank to Tap: A Chronology of MTBE in Groundwater. Unpublishedreport.

Hagemann, M.F., 2001. Estimated Cleanup Cost for MTBE in Groundwater Used as Drinking Water. Unpublished report.

Hagemann, M.F., 2001. Estimated Costs to Address MTBE Releases from Leaking Underground StorageTanks.

Unpublished report.

Hagemann, M.F., and VanMouwerik, M., 1999. Potential Water Concerns Related to Snowmobile Usage. Water Resources Division, National Park Service, Technical Report.

VanMouwerik, M. and **Hagemann, M.F**. 1999, Water Quality Concerns Related to Personal WatercraftUsage. Water Resources Division, National Park Service, Technical Report.

Hagemann, M.F., 1999, Is Dilution the Solution to Pollution in National Parks? The George WrightSociety Biannual Meeting, Asheville, North Carolina.

Hagemann, M.F., 1997, The Potential for MTBE to Contaminate Groundwater. U.S. EPA Superfund Groundwater Technical Forum Annual Meeting, Las Vegas, Nevada.

Hagemann, M.F., and Gill, M., 1996, Impediments to Intrinsic Remediation, Moffett Field Naval AirStation, Conference on Intrinsic Remediation of Chlorinated Hydrocarbons, Salt Lake City.

Hagemann, M.F., Fukunaga, G.L., 1996, The Vulnerability of Groundwater to Anthropogenic Contaminants on the Island of Maui, Hawaii. Hawaii Water Works Association Annual Meeting, Maui,October 1996.

Hagemann, M. F., Fukanaga, G. L., 1996, Ranking Groundwater Vulnerability in Central Oahu, Hawaii. Proceedings, Geographic Information Systems in Environmental Resources Management, Airand Waste Management Association Publication VIP-61.

Hagemann, M.F., 1994. Groundwater Characterization and Cleanup at Closing Military Basesin California. Proceedings, California Groundwater Resources Association Meeting.

Hagemann, M.F. and Sabol, M.A., 1993. Role of the U.S. EPA in the High Plains States Groundwater Recharge Demonstration Program. Proceedings, Sixth Biennial Symposium on the Artificial Recharge of Groundwater.

Hagemann, M.F., 1993. U.S. EPA Policy on the Technical Impracticability of the Cleanup of DNAPL-contaminated Groundwater. California Groundwater Resources Association Meeting.

Hagemann, M.F., 1992. Dense Nonaqueous Phase Liquid Contamination of Groundwater: An Ounce of Prevention... Proceedings, Association of Engineering Geologists Annual Meeting, v. 35.

Other Experience:
Selected as subject matter expert for the California Professional Geologist licensing examinations,2009-2011.

SWAPE Technical Consultation, Data Analysis and Litigation Support for the Environment

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Paul Rosenfeld, Ph.D.

Chemical Fate and Transport & Air Dispersion Modeling

Principal Environmental Chemist

Risk Assessment & Remediation Specialist

Education

Ph.D. Soil Chemistry, University of Washington, 1999. Dissertation on volatile organic compound filtration.

M.S. Environmental Science, U.C. Berkeley, 1995. Thesis on organic waste economics.

B.A. Environmental Studies, U.C. Santa Barbara, 1991. Focus on wastewater treatment.

Professional Experience

Dr. Rosenfeld has over 25 years of experience conducting environmental investigations and risk assessments for evaluating impacts to human health, property, and ecological receptors. His expertise focuses on the fate and transport of environmental contaminants, human health risk, exposure assessment, and ecological restoration. Dr. Rosenfeld has evaluated and modeled emissions from oil spills, landfills, boilers and incinerators, process stacks, storage tanks, confined animal feeding operations, industrial, military and agricultural sources, unconventional oil drilling operations, and locomotive and construction engines. His project experience ranges from monitoring and modeling of pollution sources to evaluating impacts of pollution on workers at industrial facilities and residents in surrounding communities. Dr. Rosenfeld has also successfully modeled exposure to contaminants distributed by water systems and via vapor intrusion.

Dr. Rosenfeld has investigated and designed remediation programs and risk assessments for contaminated sites containing lead, heavy metals, mold, bacteria, particulate matter, petroleum hydrocarbons, chlorinated solvents, pesticides, radioactive waste, dioxins and furans, semi- and volatile organic compounds, PCBs, PAHs, creosote, perchlorate, asbestos, per- and poly-fluoroalkyl substances (PFOA/PFOS), unusual polymers, fuel oxygenates (MTBE), among other pollutants. Dr. Rosenfeld also has experience evaluating greenhouse gas emissions from various projects and is an expert on the assessment of odors from industrial and agricultural sites, as well as the evaluation of odor nuisance impacts and technologies for abatement of odorous emissions. As a principal scientist at SWAPE, Dr. Rosenfeld directs air dispersion modeling and exposure assessments. He has served as an expert witness and testified about pollution sources causing nuisance and/or personal injury at sites and has testified as an expert witness on numerous cases involving exposure to soil, water and air contaminants from industrial, railroad, agricultural, and military sources.

Professional History:

Soil Water Air Protection Enterprise (SWAPE); 2003 to present; Principal and Founding Partner
UCLA School of Public Health; 2007 to 2011; Lecturer (Assistant Researcher)
UCLA School of Public Health; 2003 to 2006; Adjunct Professor
UCLA Environmental Science and Engineering Program; 2002-2004; Doctoral Intern Coordinator
UCLA Institute of the Environment, 2001-2002; Research Associate
Komex H_2O Science, 2001 to 2003; Senior Remediation Scientist
National Groundwater Association, 2002-2004; Lecturer
San Diego State University, 1999-2001; Adjunct Professor
Anteon Corp., San Diego, 2000-2001; Remediation Project Manager
Ogden (now Amec), San Diego, 2000-2000; Remediation Project Manager
Bechtel, San Diego, California, 1999 – 2000; Risk Assessor
King County, Seattle, 1996 – 1999; Scientist
James River Corp., Washington, 1995-96; Scientist
Big Creek Lumber, Davenport, California, 1995; Scientist
Plumas Corp., California and USFS, Tahoe 1993-1995; Scientist
Peace Corps and World Wildlife Fund, St. Kitts, West Indies, 1991-1993; Scientist

Publications:

Rosenfeld, P.E., Spaeth, K.R., McCarthy, S.J. *et al.* Camp Lejeune Marine Cancer Risk Assessment for Exposure to Contaminated Drinking Water From 1955 to 1987. *Water Air Soil Pollut* **235**, 124 (2024). https://doi.org/10.1007/s11270-023-06863-y.

Rosenfeld P.E., Spaeth K.R., Remy L.L., Byers V., Muerth S.A., Hallman R,C., Summers-Evans J., Barker S. (2023) Perfluoroalkyl substances exposure in firefighters: Sources and implications, *Environmental Research*, Volume 220, https://doi.org/10.1016/j.envres.2022.115164.

Rosenfeld P.E. and Spaeth K.R., (2023) Authors' Response to Letter to the Editor from Bullock and Ramacciotti, *Water Air Soil Pollution* Volume 234, https://doi.org/10.1007/s11270-023-06165-3

Rosenfeld P. E., Spaeth K., Hallman R., Bressler R., Smith, G., (2022) Cancer Risk and Diesel Exhaust Exposure Among Railroad Workers. *Water Air Soil Pollution.* **233,** 171.

Remy, L.L., Clay T., Byers, V., **Rosenfeld P. E.** (2019) Hospital, Health, and Community Burden After Oil Refinery Fires, Richmond, California 2007 and 2012. *Environmental Health.* 18:48

Simons, R.A., Seo, Y. **Rosenfeld, P**., (2015) Modeling the Effect of Refinery Emission On Residential Property Value. *Journal of Real Estate Research*. 27(3):321-342

Chen, J. A, Zapata A. R., Sutherland A. J., Molmen, D.R., Chow, B. S., Wu, L. E., **Rosenfeld, P. E.,** Hesse, R. C., (2012) Sulfur Dioxide and Volatile Organic Compound Exposure To A Community In Texas City Texas Evaluated Using Aermod and Empirical Data. *American Journal of Environmental Science*, 8(6), 622-632.

Rosenfeld, P.E. & Feng, L. (2011). *The Risks of Hazardous Waste.* Amsterdam: Elsevier Publishing.

Cheremisinoff, N.P., & **Rosenfeld, P.E.** (2011). *Handbook of Pollution Prevention and Cleaner Production: Best Practices in the Agrochemical Industry*, Amsterdam: Elsevier Publishing.

Gonzalez, J., Feng, L., Sutherland, A., Waller, C., Sok, H., Hesse, R., **Rosenfeld, P.** (2010). PCBs and Dioxins/Furans in Attic Dust Collected Near Former PCB Production and Secondary Copper Facilities in Sauget, IL. *Procedia Environmental Sciences*. 113–125.

Feng, L., Wu, C., Tam, L., Sutherland, A.J., Clark, J.J., **Rosenfeld, P.E.** (2010). Dioxin and Furan Blood Lipid and Attic Dust Concentrations in Populations Living Near Four Wood Treatment Facilities in the United States. *Journal of Environmental Health*. 73(6), 34-46.

Cheremisinoff, N.P., & **Rosenfeld, P.E.** (2010). *Handbook of Pollution Prevention and Cleaner Production: Best Practices in the Wood and Paper Industries.* Amsterdam: Elsevier Publishing.

Cheremisinoff, N.P., & **Rosenfeld, P.E.,** (2009). *Handbook of Pollution Prevention and Cleaner Production: Best Practices in the Petroleum Industry*. Amsterdam: Elsevier Publishing.

Wu, C., Tam, L., Clark, J., **Rosenfeld, P**. (2009). Dioxin and furan blood lipid concentrations in populations living near four wood treatment facilities in the United States. *WIT Transactions on Ecology and the Environment, Air Pollution,* 123 (17), 319-327.

Cheremisinoff, N.P., **Rosenfeld, P.E.** Davletshin, A.R. (2008). ***Responsible Care***. Gulf Publishing. Texas.

Tam L. K., Wu C. D., Clark J. J. and **Rosenfeld, P.E.** (2008). A Statistical Analysis Of Attic Dust And Blood Lipid Concentrations Of Tetrachloro-p-Dibenzodioxin (TCDD) Toxicity Equivalency Quotients (TEQ) In Two Populations Near Wood Treatment Facilities. *Organohalogen Compounds*, 70, 002252-002255.

Tam L. K., Wu C. D., Clark J. J. and **Rosenfeld, P.E.** (2008). Methods For Collect Samples For Assessing Dioxins And Other Environmental Contaminants In Attic Dust: A Review. *Organohalogen Compounds*, 70, 000527-000530.

Hensley, A.R. A. Scott, J. J. J. Clark, **Rosenfeld, P.E.** (2007). Attic Dust and Human Blood Samples Collected near a Former Wood Treatment Facility. *Environmental Research*. 105, 194-197.

Rosenfeld, P.E., J. J. J. Clark, A. R. Hensley, M. Suffet. (2007). The Use of an Odor Wheel Classification for Evaluation of Human Health Risk Criteria for Compost Facilities. *Water Science & Technology* 55(5), 345-357.

Rosenfeld, P. E., M. Suffet. (2007). The Anatomy of Odour Wheels for Odours of Drinking Water, Wastewater, Compost And The Urban Environment. *Water Science & Technology* 55(5), 335-344.

Sullivan, P. J. Clark, J.J.J., Agardy, F. J., **Rosenfeld, P.E.** (2007). *Toxic Legacy, Synthetic Toxins in the Food, Water, and Air in American Cities.* Boston Massachusetts: Elsevier Publishing

Rosenfeld, P.E., and Suffet I.H. (2004). Control of Compost Odor Using High Carbon Wood Ash. *Water Science and Technology*. 49(9),171-178.

Rosenfeld P. E., J.J. Clark, I.H. (Mel) Suffet (2004). The Value of An Odor-Quality-Wheel Classification Scheme for The Urban Environment. *Water Environment Federation's Technical Exhibition and Conference (WEFTEC) 2004.* New Orleans, October 2-6, 2004.

Rosenfeld, P.E., and Suffet, I.H. (2004). Understanding Odorants Associated with Compost, Biomass Facilities, and the Land Application of Biosolids. *Water Science and Technology*. 49(9), 193-199.

Rosenfeld, P.E., and Suffet I.H. (2004). Control of Compost Odor Using High Carbon Wood Ash, *Water Science and Technology*, 49(9), 171-178.

Rosenfeld, P. E., Grey, M. A., Sellew, P. (2004). Measurement of Biosolids Odor and Odorant Emissions from Windrows, Static Pile and Biofilter. *Water Environment Research*. 76(4), 310-315.

Rosenfeld, P.E., Grey, M and Suffet, M. (2002). Compost Demonstration Project, Sacramento California Using High-Carbon Wood Ash to Control Odor at a Green Materials Composting Facility. *Integrated Waste Management Board Public Affairs Office*, Publications Clearinghouse (MS–6), Sacramento, CA Publication #442-02-008.

Rosenfeld, P.E., and C.L. Henry. (2001). Characterization of odor emissions from three different biosolids. *Water Soil and Air Pollution*. 127(1-4), 173-191.

Rosenfeld, P.E., and Henry C. L., (2000). Wood ash control of odor emissions from biosolids application. *Journal of Environmental Quality.* 29, 1662-1668.

Rosenfeld, P.E., C.L. Henry and D. Bennett. (2001). Wastewater dewatering polymer affects on biosolids odor emissions and microbial activity. *Water Environment Research*. 73(4), 363-367.

Rosenfeld, P.E., and C.L. Henry. (2001). Activated Carbon and Wood Ash Sorption of Wastewater, Compost, and Biosolids Odorants. *Water Environment Research*, 73, 388-393.

Rosenfeld, P.E., and Henry C. L., (2001). High carbon wood ash effect on biosolids microbial activity and odor. *Water Environment Research*. 131(1-4), 247-262.

Chollack, T. and **P. Rosenfeld. (**1998). Compost Amendment Handbook for Landscaping. Prepared for and distributed by the City of Redmond, Washington State.

Rosenfeld, P. E. (1992). The Mount Liamuiga Crater Trail. *Heritage Magazine of St. Kitts*, 3(2).

Rosenfeld, P. E. (1993). High School Biogas Project to Prevent Deforestation on St. Kitts. *Biomass Users Network*, 7(1).

Rosenfeld, P. E. (1998). Characterization, Quantification, and Control of Odor Emissions from Biosolids Application To Forest Soil. Doctoral Thesis. University of Washington College of Forest Resources.

Rosenfeld, P. E. (1994). Potential Utilization of Small Diameter Trees on Sierra County Public Land. Master's thesis reprinted by the Sierra County Economic Council. Sierra County, California.

Rosenfeld, P. E. (1991). How to Build a Small Rural Anaerobic Digester & Uses Of Biogas In The First And Third World. Bachelor's Thesis. University of California.

Presentations:

Rosenfeld, P.E., "The science for Perfluorinated Chemicals (PFAS): What makes remediation so hard?" Law Seminars International, (May 9-10, 2018) 800 Fifth Avenue, Suite 101 Seattle, WA.

Rosenfeld, P.E., Sutherland, A; Hesse, R.; Zapata, A. (October 3-6, 2013). Air dispersion modeling of volatile organic emissions from multiple natural gas wells in Decatur, TX. *44th Western Regional Meeting, American Chemical Society.* Lecture conducted from Santa Clara, CA.

Sok, H.L.; Waller, C.C.; Feng, L.; Gonzalez, J.; Sutherland, A.J.; Wisdom-Stack, T.; Sahai, R.K.; Hesse, R.C.; **Rosenfeld, P.E.** (June 20-23, 2010). Atrazine: A Persistent Pesticide in Urban Drinking Water. *Urban Environmental Pollution*. Lecture conducted from Boston, MA.

Feng, L.; Gonzalez, J.; Sok, H.L.; Sutherland, A.J.; Waller, C.C.; Wisdom-Stack, T.; Sahai, R.K.; La, M.; Hesse, R.C.; **Rosenfeld, P.E.** (June 20-23, 2010). Bringing Environmental Justice to East St. Louis, Illinois. *Urban Environmental Pollution.* Lecture conducted from Boston, MA.

Rosenfeld, P.E. (April 19-23, 2009). Perfluoroctanoic Acid (PFOA) and Perfluoroactane Sulfonate (PFOS) Contamination in Drinking Water From the Use of Aqueous Film Forming Foams (AFFF) at Airports in the United States. *2009 Ground Water Summit and 2009 Ground Water Protection Council Spring Meeting*, Lecture conducted from Tuscon, AZ.

Rosenfeld, P.E. (April 19-23, 2009). Cost to Filter Atrazine Contamination from Drinking Water in the United States" Contamination in Drinking Water From the Use of Aqueous Film Forming Foams (AFFF) at Airports in the United States. *2009 Ground Water Summit and 2009 Ground Water Protection Council Spring Meeting*. Lecture conducted from Tuscon, AZ.

Wu, C., Tam, L., Clark, J., **Rosenfeld, P**. (20-22 July (2009). Dioxin and furan blood lipid concentrations in populations living near four wood treatment facilities in the United States. Brebbia, C.A. and Popov, V., eds., *Air Pollution XVII: Proceedings of the Seventeenth International Conference on Modeling, Monitoring and Management of Air Pollution*. Lecture conducted from Tallinn, Estonia.

Rosenfeld, P. E. (October 15-18, 2007). Moss Point Community Exposure To Contaminants From A Releasing Facility. *The 23rd Annual International Conferences on Soils Sediment and Water.* Platform lecture conducted at University of Massachusetts, Amherst MA.

Rosenfeld, P. E. (October 15-18, 2007). The Repeated Trespass of Tritium-Contaminated Water Into A Surrounding Community Form Repeated Waste Spills From A Nuclear Power Plant. *The 23rd Annual International Conferences on Soils Sediment and Water*. Platform lecture conducted from University of Massachusetts, Amherst MA.

Rosenfeld, P. E. (October 15-18, 2007). Somerville Community Exposure To Contaminants From Wood Treatment Facility Emissions. The *23rd Annual International Conferences on Soils Sediment and Water*. Lecture conducted from University of Massachusetts, Amherst MA.

Rosenfeld P. E. (March 2007). Production, Chemical Properties, Toxicology, & Treatment Case Studies of 1,2,3-Trichloropropane (TCP). *The Association for Environmental Health and Sciences (AEHS) Annual Meeting*. Lecture conducted from San Diego, CA.

Rosenfeld P. E. (March 2007). Blood and Attic Sampling for Dioxin/Furan, PAH, and Metal Exposure in Florala, Alabama. *The AEHS Annual Meeting.* Lecture conducted from San Diego, CA.

Hensley A.R., Scott, A., **Rosenfeld P.E.,** Clark, J.J.J. (August 21 – 25, 2006). Dioxin Containing Attic Dust And Human Blood Samples Collected Near A Former Wood Treatment Facility. *The 26th International Symposium on Halogenated Persistent Organic Pollutants – DIOXIN2006*. Lecture conducted from Radisson SAS Scandinavia Hotel in Oslo Norway.

Hensley A.R., Scott, A., **Rosenfeld P.E.,** Clark, J.J.J. (November 4-8, 2006). Dioxin Containing Attic Dust And Human Blood Samples Collected Near A Former Wood Treatment Facility. *APHA 134 Annual Meeting & Exposition.* Lecture conducted from Boston Massachusetts.

Paul Rosenfeld Ph.D. (October 24-25, 2005). Fate, Transport and Persistence of PFOA and Related Chemicals. Mealey's C8/PFOA. *Science, Risk & Litigation Conference.* Lecture conducted from The Rittenhouse Hotel, Philadelphia, PA.

Paul Rosenfeld Ph.D. (September 19, 2005). Brominated Flame Retardants in Groundwater: Pathways to Human Ingestion, *Toxicology and Remediation PEMA Emerging Contaminant Conference*. Lecture conducted from Hilton Hotel, Irvine California.

Paul Rosenfeld Ph.D. (September 19, 2005). Fate, Transport, Toxicity, And Persistence of 1,2,3-TCP. *PEMA Emerging Contaminant Conference.* Lecture conducted from Hilton Hotel in Irvine, California.

Paul Rosenfeld Ph.D. (September 26-27, 2005). Fate, Transport and Persistence of PDBEs. *Mealey's Groundwater Conference.* Lecture conducted from Ritz Carlton Hotel, Marina Del Ray, California.

Paul Rosenfeld Ph.D. (June 7-8, 2005). Fate, Transport and Persistence of PFOA and Related Chemicals. *International Society of Environmental Forensics: Focus on Emerging Contaminants*. Lecture conducted from Sheraton Oceanfront Hotel, Virginia Beach, Virginia.

Paul Rosenfeld Ph.D. (July 21-22, 2005). Fate Transport, Persistence and Toxicology of PFOA and Related Perfluorochemicals. *2005 National Groundwater Association Ground Water and Environmental Law Conference*. Lecture conducted from Wyndham Baltimore Inner Harbor, Baltimore Maryland.

Paul Rosenfeld Ph.D. (July 21-22, 2005). Brominated Flame Retardants in Groundwater: Pathways to Human Ingestion, Toxicology and Remediation. *2005 National Groundwater Association Ground Water and Environmental Law Conference.* Lecture conducted from Wyndham Baltimore Inner Harbor, Baltimore Maryland.

Paul Rosenfeld, Ph.D. and James Clark Ph.D. and Rob Hesse R.G. (May 5-6, 2004). Tert-butyl Alcohol Liability and Toxicology, A National Problem and Unquantified Liability. *National Groundwater Association. Environmental Law Conference*. Lecture conducted from Congress Plaza Hotel, Chicago Illinois.

Paul Rosenfeld, Ph.D. (March 2004). Perchlorate Toxicology. *Meeting of the American Groundwater Trust*. Lecture conducted from Phoenix Arizona.

Hagemann, M.F., **Paul Rosenfeld, Ph.D.** and Rob Hesse (2004). Perchlorate Contamination of the Colorado River. *Meeting of tribal representatives*. Lecture conducted from Parker, AZ.

Paul Rosenfeld, Ph.D. (April 7, 2004). A National Damage Assessment Model for PCE and Dry Cleaners. *Drycleaner Symposium. California Ground Water Association*. Lecture conducted from Radison Hotel, Sacramento, California.

Rosenfeld, P. E., Grey, M., (June 2003) Two stage biofilter for biosolids composting odor control. *Seventh International In Situ And On Site Bioremediation Symposium Battelle Conference* Orlando, FL.

Paul Rosenfeld, Ph.D. and James Clark Ph.D. (February 20-21, 2003) Understanding Historical Use, Chemical Properties, Toxicity and Regulatory Guidance of 1,4 Dioxane. *National Groundwater Association. Southwest Focus Conference. Water Supply and Emerging Contaminants*. Lecture conducted from Hyatt Regency Phoenix Arizona.

Paul Rosenfeld, Ph.D. (February 6-7, 2003). Underground Storage Tank Litigation and Remediation. *California CUPA Forum*. Lecture conducted from Marriott Hotel, Anaheim California.

Paul Rosenfeld, Ph.D. (October 23, 2002) Underground Storage Tank Litigation and Remediation. *EPA Underground Storage Tank Roundtable*. Lecture conducted from Sacramento California.

Rosenfeld, P.E. and Suffet, M. (October 7- 10, 2002). Understanding Odor from Compost, *Wastewater and Industrial Processes. Sixth Annual Symposium on Off Flavors in the Aquatic Environment. International Water Association*. Lecture conducted from Barcelona Spain.

Rosenfeld, P.E. and Suffet, M. (October 7- 10, 2002). Using High Carbon Wood Ash to Control Compost Odor. *Sixth Annual Symposium on Off Flavors in the Aquatic Environment. International Water Association*. Lecture conducted from Barcelona Spain.

Rosenfeld, P.E. and Grey, M. A. (September 22-24, 2002). Biocycle Composting for Coastal Sage Restoration. *Northwest Biosolids Management Association*. Lecture conducted from Vancouver Washington.

Rosenfeld, P.E. and Grey, M. A. (November 11-14, 2002). Using High-Carbon Wood Ash to Control Odor at a Green Materials Composting Facility. *Soil Science Society Annual Conferenc*e. Lecture conducted from Indianapolis, Maryland.

Rosenfeld. P.E. (September 16, 2000). Two stage biofilter for biosolids composting odor control. *Water Environment Federation.* Lecture conducted from Anaheim California.

Rosenfeld. P.E. (October 16, 2000). Wood ash and biofilter control of compost odor. *Biofest.* Lecture conducted from Ocean Shores, California.

Rosenfeld, P.E. (2000). Bioremediation Using Organic Soil Amendments. *California Resource Recovery Association*. Lecture conducted from Sacramento California.

Rosenfeld, P.E., C.L. Henry, R. Harrison. (1998). Oat and Grass Seed Germination and Nitrogen and Sulfur Emissions Following Biosolids Incorporation with High-Carbon Wood-Ash. *Water Environment Federation 12th Annual Residuals and Biosolids Management Conference Proceedings*. Lecture conducted from Bellevue Washington.

Rosenfeld, P.E., and C.L. Henry. (1999). An evaluation of ash incorporation with biosolids for odor reduction. *Soil Science Society of America*. Lecture conducted from Salt Lake City Utah.

Rosenfeld, P.E., C.L. Henry, R. Harrison. (1998). Comparison of Microbial Activity and Odor Emissions from Three Different Biosolids Applied to Forest Soil. *Brown and Caldwell.* Lecture conducted from Seattle Washington.

Rosenfeld, P.E., C.L. Henry. (1998). Characterization, Quantification, and Control of Odor Emissions from Biosolids Application To Forest Soil. *Biofest.* Lecture conducted from Lake Chelan, Washington.

Rosenfeld, P.E, C.L. Henry, R. Harrison. (1998). Oat and Grass Seed Germination and Nitrogen and Sulfur Emissions Following Biosolids Incorporation with High-Carbon Wood-Ash. Water Environment Federation 12th Annual Residuals and Biosolids Management Conference Proceedings. Lecture conducted from Bellevue Washington.

Rosenfeld, P.E., C.L. Henry, R. B. Harrison, and R. Dills. (1997). Comparison of Odor Emissions from Three Different Biosolids Applied to Forest Soil. *Soil Science Society of America*. Lecture conducted from Anaheim California.

Teaching Experience:

UCLA Department of Environmental Health (Summer 2003 through 20010) Taught Environmental Health Science 100 to students, including undergrad, medical doctors, public health professionals and nurses. The course focused on the health effects of environmental contaminants.

National Ground Water Association, Successful Remediation Technologies. Custom Course in Sante Fe, New Mexico. May 21, 2002. Focused on fate and transport of fuel contaminants associated with underground storage tanks.

National Ground Water Association; Successful Remediation Technologies Course in Chicago Illinois. April 1, 2002. Focused on fate and transport of contaminants associated with Superfund and RCRA sites.

California Integrated Waste Management Board, April and May 2001. Alternative Landfill Caps Seminar in San Diego, Ventura, and San Francisco. Focused on both prescriptive and innovative landfill cover design.

UCLA Department of Environmental Engineering, February 5, 2002. Seminar on Successful Remediation Technologies focusing on Groundwater Remediation.

University Of Washington, Soil Science Program, Teaching Assistant for several courses including Soil Chemistry, Organic Soil Amendments, and Soil Stability.

U.C. Berkeley, Environmental Science Program Teaching Assistant for Environmental Science 10.

Academic Grants Awarded:

California Integrated Waste Management Board. $41,000 grant awarded to UCLA Institute of the Environment. Goal: To investigate the effect of high carbon wood ash on volatile organic emissions from compost. 2001.

Synagro Technologies, Corona California: $10,000 grant awarded to San Diego State University.
Goal: investigate the effect of biosolids for restoration and remediation of degraded coastal sage soils. 2000.

King County, Department of Research and Technology, Washington State. $100,000 grant awarded to University of Washington: Goal: To investigate odor emissions from biosolids application and the effect of polymers and ash on VOC emissions. 1998.

Northwest Biosolids Management Association, Washington State. $20,000 grant awarded to investigate the effect of polymers and ash on VOC emissions from biosolids. 1997.

James River Corporation, Oregon: $10,000 grant was awarded to investigate the success of genetically engineered Poplar trees with resistance to round-up. 1996.

United State Forest Service, Tahoe National Forest: $15,000 grant was awarded to investigating fire ecology of the Tahoe National Forest. 1995.

Kellogg Foundation, Washington D.C. $500 grant was awarded to construct a large anaerobic digester on St. Kitts in West Indies. 1993

Deposition and/or Trial Testimony:

In the District Court of Harris County Texas
Mt Davis Interest, Inc v Sesco Cement Corp
Cause No 2023-26512
Trial 6-6-2-25

In the United States Southern District of New York
Gallo vs Avon Products Inc., et al
Civil Action No.: 1:23-cv-2023
Deposition 4-24-2025

In Vanderburgh Superior Court 5, County of Vanderburgh, Indiana
Markello v CSX
Civil Action No 82D05-2011-CT-004962
Deposition 3-26-25

Iin the Circuit Court of Cook County Illinois
Jarosiewicz v Northeast Regional Railroad
Case No 2023 L 002290
Deposition 2-27-25

In the District Court 191st Judicial District Dallas County
Acklin v Poly America International
Cause No DC-22-08610
Deposition 1-8-2025

United States District Court, Norther District of California
Asustin Vs Monsanto
Case No 2:23-cv-272
Deposition 12-20-25

In Jefferson Circuit Court Division One, Louisville, Kentucky
Stafford vs, CSX
Case No. 18-CI-001790

Deposition: 8-27-24

In the Twenty-Second Judicial Circuit of St. Louis. State of Missouri
Patricia Godfrey vs, Amtrak
Case No. 2122-CC-00525
Deposition: 7-17-24

In the Circuit Court of Jefferson County Alabama
Linda Early Vs. CSX
Case number CV-2021-00241
Deposition 6-24-24

In the Court of Common Please Lucas County, Ohio
Brenda Conkright vs. CSX
Case No. G-4801-CI-0202102664-000
Deposition: 6-4-24

In the Commonwealth of Kentucky, Greenup Circuit Court
Patsy Sue Napier vs. CSX
Case No. 19-CI-0012
Deposition: 5-8-2-24

In United States District Court of Hawaii
Patrick Feindt, Jr. et al. vs. The United States of America
Case No. 1:22-cv-LEK-KJM
Trial 3-29-24 and 4-5-24

In the District Court of Hood County State of Texas
Artie Gray vs. Exxon Mobil
Case No. C-2018047
Rosenfeld Deposition:4-22-2024

In the Elkhart Superior Court State of Indiana
Estate of Clark Stacy vs. Penn Central Corporation
Cause No 2D01-2001-CT-00007
Rosenfeld Deposition 1-25-2024 and 3-7-2024

In the Circuit Court of Trempealeau County, State of Wisconsin
Michael J. Sylla et al. vs. High-Crush Whitehall LLC
Case No. 2019-CV-63, 2019-CV-64, 2019-CV-65, 2019-CV-66
Rosenfeld Deposition: 3-5-2024

In the Circuit Court of Trempealeau County, State of Wisconsin
Leland Drangstveit vs. High-Crush Blair LLC
Case No. 19-CV-66
Rosenfeld Deposition 3-5-2024

In the Circuit Court of Jefferson County Alabama
Donald Lee Ashworth vs. CSX Transportation Inc.
Case No CV-2021-901261
Rosenfeld Deposition 1-23-2024

In the United States District Court for the Eastern District of Wisconsin
Gary L Siepe vs. Soo Line Railroad
Case No. 2:21-cv-00919
Rosenfeld Deposition 1-19-2024

In the United States District Court for the Western District of Louisiana
Ricky Bush v. Clean Harbors Colfax LLC
Case No. 1:22-cv-02026-DDD-JPM
Rosenfeld Deposition 12-18-2023 and 1-15-2024

In United States District Court of Hawaii
Patrick Feindt, Jr. et al. vs. The United States of America
Case No. 1:22-cv-LEK-KJM
Rosenfeld Deposition 11-29-2023

In the Circuit Court for the Twentieth Judicial Circuit St. Clair County, Illinois
Timothy Gray vs. Rural King et al.
Case No 2022-LA-355
Rosenfeld Deposition 9-26-2023

In United States District Court Eastern District of Wisconsin
Gary L. Siepe vs. Soo Line Railroad Company
Case No. 2:21-cv-00919
Rosenfeld Deposition 9-15-2023

In the Circuit Court of Cook County Illinois
Donald Fox vs. BNSF
Case No. 2021 L12
Rosenfeld Deposition 9-12-2023

In the Court of Common Please Cuyahoga County, Ohio
Thomas Schleich vs. Penn Central Corporation
Lead Case No. CV-20-939184
Rosenfeld Deposition 8-27-2023

In the Circuit Court of Jackson County Missouri at Kansas City
Timothy Dalsing vs. BNSF
Case No. No. 2216-cv06539
Rosenfeld Deposition 7-28-2023

In the United States District Court for the Southern District of Texas Houston Division
International Terminals Company LLC Deer Park Fire Litigation
Lead Case No. 4:19-cv-01460
Rosenfeld Deposition 7-25-2023

In the Circuit Court of Livingston County Missouri
Shirley Ralls vs. Canadian Pacific Railway and Soo Lind Railroad
Case No. 28LV-CV0020
Rosenfeld Daubert Hearing 7-18-2023 Trial Testimony 7-19-2023

In the Circuit Court of Cook County Illinois
Brenda Wright vs. Penn Central and Conrail
Case No. No. 2032L003966
Rosenfeld Deposition 6-13-2023

In the Circuit Court Common Please Philadelphia of Jefferson County Alabama
Frank Belle vs. Birmingham Southern Railroad Company et al.
Case No. 01-cv-2021-900901.00
Rosenfeld Deposition 4-6-2023

In the Circuit Court of Jefferson County Alabama
Linda De Gregorio vs. Penn Central
Case No. 002278
Rosenfeld Deposition 3-27-20203

In the United States District Court Eastern District of New York
Rosalie Romano et al. vs. Northrup Grumman Corporation
Case No. 16-cv-5760
Rosenfeld Deposition 3-16-2023

In the Superior Court of Washington, Spokane County
Judy Cundy vs. BNSF
Case No. 21-2-03718-32
Rosenfeld Deposition 3-9-2023

In The Court of Common Pleas of Philadelphia County, PA Civil Trial Division
Feaster v Conrail
Case No. 001075
Rosenfeld Deposition 2-1-2023

In United States District Court for the Central District of Illinois
Sherman vs. BNSF
Case No. 3:17-cv-01192
Rosenfeld Deposition 1-18-2023

In United States District Court District of Colorado
Gonzales vs. BNSF
Case No. 1:21-cv-01690
Rosenfeld Deposition 1-17-2023

In United States District Court District of Colorado
Abeyta vs. BNSF
Case No. 1:21-cv-01689-KMT
Rosenfeld Deposition 1-3-2023

In United States District Court For The Easter District of Louisiana
Nathaniel Smith vs. Illinois Central Railroad
Case No. 2:21-cv-01235
Rosenfeld Deposition 11-30-2022

In the Superior Court of the State of California, County of San Bernardino
Billy Wildrick, Plaintiff vs. BNSF Railway Company
Case No. CIVDS1711810
Rosenfeld Deposition 10-17-2022

In the State Court of Bibb County, State of Georgia
Richard Hutcherson, Plaintiff vs Norfolk Southern Railway Company
Case No. 10-SCCV-092007
Rosenfeld Deposition 10-6-2022

In the Civil District Court of the Parish of Orleans, State of Louisiana
Millard Clark, Plaintiff vs. Dixie Carriers, Inc. et al.
Case No. 2020-03891
Rosenfeld Deposition 9-15-2022

In The Circuit Court of Livingston County, State of Missouri, Circuit Civil Division

Shirley Ralls, Plaintiff vs. Canadian Pacific Railway and Soo Line Railroad
Case No. 18-LV-CC0020
Rosenfeld Deposition 9-7-2022

In The Circuit Court of the 13th Judicial Circuit Court, Hillsborough County, Florida Civil Division
Jonny C. Daniels, Plaintiff vs. CSX Transportation Inc.
Case No. 20-CA-5502
Rosenfeld Deposition 9-1-2022

In The Circuit Court of St. Louis County, State of Missouri
Kieth Luke et. al. Plaintiff vs. Monsanto Company et. al.
Case No. 19SL-CC03191
Rosenfeld Deposition 8-25-2022

In The Circuit Court of the 13th Judicial Circuit Court, Hillsborough County, Florida Civil Division
Jeffery S. Lamotte, Plaintiff vs. CSX Transportation Inc.
Case No. NO. 20-CA-0049
Rosenfeld Deposition 8-22-2022

In State of Minnesota District Court, County of St. Louis Sixth Judicial District
Greg Bean, Plaintiff vs. Soo Line Railroad Company
Case No. 69-DU-CV-21-760
Rosenfeld Deposition 8-17-2022

In United States District Court Western District of Washington at Tacoma, Washington
John D. Fitzgerald Plaintiff vs. BNSF
Case No. 3:21-cv-05288-RJB
Rosenfeld Deposition 8-11-2022

In Circuit Court of the Sixth Judicial Circuit, Macon Illinois
Rocky Bennyhoff Plaintiff vs. Norfolk Southern
Case No. 20-L-56
Rosenfeld Deposition 8-3-2022, Trial 1-10-2023

In Court of Common Pleas, Hamilton County Ohio
Joe Briggins Plaintiff vs. CSX
Case No. A2004464
Rosenfeld Deposition 6-17-2022

In the Superior Court of the State of California, County of Kern
George LaFazia vs. BNSF Railway Company.
Case No. BCV-19-103087
Rosenfeld Deposition 5-17-2022

In the Circuit Court of Cook County Illinois
Bobby Earles vs. Penn Central et. al.
Case No. 2020-L-000550
Rosenfeld Deposition 4-16-2022

In United States District Court Easter District of Florida
Albert Hartman Plaintiff vs. Illinois Central
Case No. 2:20-cv-1633
Rosenfeld Deposition 4-4-2022

In the Circuit Court of the 4th Judicial Circuit, in and For Duval County, Florida
Barbara Steele vs. CSX Transportation

Case No.16-219-Ca-008796
Rosenfeld Deposition 3-15-2022

In United States District Court Easter District of New York
Romano et al. vs. Northrup Grumman Corporation
Case No. 16-cv-5760
Rosenfeld Deposition 3-10-2022

In the Circuit Court of Cook County Illinois
Linda Benjamin vs. Illinois Central
Case No. No. 2019 L 007599
Rosenfeld Deposition 1-26-2022

In the Circuit Court of Cook County Illinois
Donald Smith vs. Illinois Central
Case No. No. 2019 L 003426
Rosenfeld Deposition 1-24-2022

In the Circuit Court of Cook County Illinois
Jan Holeman vs. BNSF
Case No. 2019 L 000675
Rosenfeld Deposition 1-18-2022

In the State Court of Bibb County State of Georgia
Dwayne B. Garrett vs. Norfolk Southern
Case No. 20-SCCV-091232
Rosenfeld Deposition 11-10-2021

In the Circuit Court of Cook County Illinois
Joseph Ruepke vs. BNSF
Case No. 2019 L 007730
Rosenfeld Deposition 11-5-2021

In the United States District Court For the District of Nebraska
Steven Gillett vs. BNSF
Case No. 4:20-cv-03120
Rosenfeld Deposition 10-28-2021

In the Montana Thirteenth District Court of Yellowstone County
James Eadus vs. Soo Line Railroad and BNSF
Case No. DV 19-1056
Rosenfeld Deposition 10-21-2021

In the Circuit Court Of The Twentieth Judicial Circuit, St Clair County, Illinois
Martha Custer et al. vs Cerro Flow Products, Inc.
Case No. 0i9-L-2295
Rosenfeld Deposition 5-14-2021
Trial October 8-4-2021

In the Circuit Court of Cook County Illinois
Joseph Rafferty vs. Consolidated Rail Corporation and National Railroad Passenger Corporation d/b/a AMTRAK,
Case No. 18-L-6845
Rosenfeld Deposition 6-28-2021

In the United States District Court For the Northern District of Illinois

Theresa Romcoe vs. Northeast Illinois Regional Commuter Railroad Corporation d/b/a METRA Rail
Case No. 17-cv-8517
Rosenfeld Deposition 5-25-2021

In the Superior Court of the State of Arizona In and For the Cunty of Maricopa
Mary Tryon et al. vs. The City of Pheonix v. Cox Cactus Farm, L.L.C., Utah Shelter Systems, Inc.
Case No. CV20127-094749
Rosenfeld Deposition 5-7-2021

In the United States District Court for the Eastern District of Texas Beaumont Division
Robinson, Jeremy et al vs. CNA Insurance Company et al.
Case No. 1:17-cv-000508
Rosenfeld Deposition 3-25-2021

In the Superior Court of the State of California, County of San Bernardino
Gary Garner, Personal Representative for the Estate of Melvin Garner vs. BNSF Railway Company.
Case No. 1720288
Rosenfeld Deposition 2-23-2021

In the Superior Court of the State of California, County of Los Angeles, Spring Street Courthouse
Benny M Rodriguez vs. Union Pacific Railroad, A Corporation, et al.
Case No. 18STCV01162
Rosenfeld Deposition 12-23-2020

In the Circuit Court of Jackson County, Missouri
Karen Cornwell, Plaintiff, vs. Marathon Petroleum, LP, Defendant.
Case No. 1716-CV10006
Rosenfeld Deposition 8-30-2019

In the United States District Court For The District of New Jersey
Duarte et al, Plaintiffs, vs. United States Metals Refining Company et. al. Defendant.
Case No. 2:17-cv-01624-ES-SCM
Rosenfeld Deposition 6-7-2019

In the United States District Court of Southern District of Texas Galveston Division
M/T Carla Maersk vs. Conti 168., Schiffahrts-GMBH & Co. Bulker KG MS "Conti Perdido" Defendant.
Case No. 3:15-CV-00106 consolidated with 3:15-CV-00237
Rosenfeld Deposition 5-9-2019

In The Superior Court of the State of California In And For The County Of Los Angeles – Santa Monica
Carole-Taddeo-Bates et al., vs. Ifran Khan et al., Defendants
Case No. BC615636
Rosenfeld Deposition 1-26-2019

In The Superior Court of the State of California In And For The County Of Los Angeles – Santa Monica
The San Gabriel Valley Council of Governments et al. vs El Adobe Apts. Inc. et al., Defendants
Case No. BC646857
Rosenfeld Deposition 10-6-2018; Trial 3-7-19

In United States District Court For The District of Colorado
Bells et al. Plaintiffs vs. The 3M Company et al., Defendants
Case No. 1:16-cv-02531-RBJ
Rosenfeld Deposition 3-15-2018 and 4-3-2018

In The District Court Of Regan County, Texas, 112th Judicial District
Phillip Bales et al., Plaintiff vs. Dow Agrosciences, LLC, et al., Defendants

Cause No. 1923
Rosenfeld Deposition 11-17-2017

In The Superior Court of the State of California In And For The County Of Contra Costa
Simons et al., Plaintifs vs. Chevron Corporation, et al., Defendants
Cause No. C12-01481
Rosenfeld Deposition 11-20-2017

In The Circuit Court of The Twentieth Judicial Circuit, St Clair County, Illinois
Martha Custer et al., Plaintiff vs. Cerro Flow Products, Inc., Defendants
Case No.: No. 0i9-L-2295
Rosenfeld Deposition 8-23-2017

In United States District Court For The Southern District of Mississippi
Guy Manuel vs. The BP Exploration et al., Defendants
Case No. 1:19-cv-00315-RHW
Rosenfeld Deposition 4-22-2020

In The Superior Court of the State of California, For The County of Los Angeles
Warrn Gilbert and Penny Gilber, Plaintiff vs. BMW of North America LLC
Case No. LC102019 (c/w BC582154)
Rosenfeld Deposition 8-16-2017, Trail 8-28-2018

In the Northern District Court of Mississippi, Greenville Division
Brenda J. Cooper, et al., Plaintifs, vs. Meritor Inc., et al., Defendants
Case No. 4:16-cv-52-DMB-JVM
Rosenfeld Deposition July 2017

In The Superior Court of the State of Washington, County of Snohomish
Michael Davis and Julie Davis et al., Plaintiff vs. Cedar Grove Composting Inc., Defendants
Case No. 13-2-03987-5
Rosenfeld Deposition, February 2017
Trial March 2017

In The Superior Court of the State of California, County of Alameda
Charles Spain., Plaintiff vs. Thermo Fisher Scientific, et al., Defendants
Case No. RG14711115
Rosenfeld Deposition September 2015

In The Iowa District Court In And For Poweshiek County
Russell D. Winburn, et al., Plaintiffs vs. Doug Hoksbergen, et al., Defendants
Case No. LALA002187
Rosenfeld Deposition August 2015

In The Circuit Court of Ohio County, West Virginia
Robert Andrews, et al. vs. Antero, et al.
Civil Action No. 14-C-30000
Rosenfeld Deposition June 2015

In The Iowa District Court for Muscatine County
Laurie Freeman et. al. Plaintiffs vs. Grain Processing Corporation, Defendant
Case No. 4980
Rosenfeld Deposition May 2015

In the Circuit Court of the 17th Judicial Circuit, in and For Broward County, Florida
Walter Hinton, et. al. Plaintiff, vs. City of Fort Lauderdale, Florida, a Municipality, Defendant.

Case No. CACE07030358 (26)
Rosenfeld Deposition December 2014

In the United States District Court Western District of Oklahoma
Tommy McCarty, et al., Plaintiffs, vs. Oklahoma City Landfill, LLC d/b/a Southeast Oklahoma City Landfill, et al. Defendants.
Case No. 5:12-cv-01152-C
Rosenfeld Deposition: July 2014

In the County Court of Dallas County Texas
Lisa Parr et al, *Plaintiff*, vs. Aruba et al, *Defendant.*
Case Number cc-11-01650-E
Rosenfeld Deposition: March and September 2013
Rosenfeld Trial: April 2014

In the County of Kern, Unlimited Jurisdiction
Rose Propagation Services vs. Heppe Enterprises
Case No. S-1500-CV-278190, LHB
Rosenfeld Deposition: May 2014

In the Circuit Court of Baltimore County Maryland
Philip E. Cvach, II et al., *Plaintiffs* vs. Two Farms, Inc. d/b/a Royal Farms, Defendants
Case Number: 03-C-12-012487 OT
Rosenfeld Deposition: September 2013

In the Court of Galveston County, Texas 56th Judicial District
MDL Litigation Regarding Texas City Refinery Ultracracker Emission Event Litigation
Cause No. 10-UC-0001
Rosenfeld Deposition: March 2013
Rosenfeld Trial: September 2013

In the United States District Court of Southern District of Texas Galveston Division
Kyle Cannon, Eugene Donovan, Genaro Ramirez, Carol Sassler, and Harvey Walton, each Individually and on behalf of those similarly situated, *Plaintiffs,* vs. BP Products North America, Inc., *Defendant.*
Case 3:10-cv-00622
Rosenfeld Deposition: February 2012
Rosenfeld Trial: April 2013

In the United States District court of Southern District of California
United States of America, Plaintiff vs. 2,560 Acres of Land, more or less, located in Imperial County, State of California; and Donald L. Crawford, et. al.
Civil No. 3:11-cv-02258-IEG-RBB
Rosenfeld Deposition: December 2012, January 2013

In the Court of Common Pleas of Tuscarawas County Ohio
John Michael Abicht, et al., Plaintiffs, vs. Republic Services, Inc., et al., Defendants
Case No. 2008 CT 10 0741 (Cons. w/ 2009 CV 10 0987)
Rosenfeld Deposition October 2012

In the Court of Common Pleas of Tuscarawas County Ohio
John Michael Abicht, et al., *Plaintiffs,* vs. Republic Services, Inc., et al., *Defendants*
Case Number: 2008 CT 10 0741 (Cons. w/ 2009 CV 10 0987)
Rosenfeld Deposition: October 2012

In the United States District Court for the Middle District of Alabama, Northern Division
James K. Benefield, et al., Plaintiffs, vs. International Paper Company, Defendant.

From:	David Harrison
To:	Board of Supervisors (BOS); Calvillo, Angela (BOS); Board of Supervisors (BOS)
Subject:	Coalition Letter Supporting Family Zoning Plan: File No. 250966
Date:	Monday, December 1, 2025 12:42:42 PM
Attachments:	Outlook-A black an.png Full BOS Coalition Letter of Support for San Francisco's Family Zoning Plan.pdf

This message is from outside the City email system. Do not open links or attachments from untrusted sources.

Hello,

Please find the attached letter on behalf of our undersigned organizations in support of the Family Zoning Plan, File No. 250966. Thank you.

All the best,

David Harrison *(He/Him)*
Director of Public Policy
(O) 415-352-8803 (C) 202-262-5860
San Francisco Chamber of Commerce
235 Montgomery Street, Suite 760
San Francisco, CA 94104

December 1, 2025

San Francisco Board of Supervisors
1 Dr. Carlton B. Goodlett Place
San Francisco, CA 94102-4689

RE: Business Community Support for San Francisco's Family Zoning Plan

Dear Supervisors,

As leaders in the San Francisco business community, representing employers of all sizes and industries, we know that a strong economy depends on sufficient housing for workers and families. We, the undersigned organizations, write to express our strong support for Mayor Daniel Lurie's Family Zoning Plan.

San Francisco continues to face a severe housing shortage that impacts workers, families, and businesses across the city. Too many employees who power our economy are forced to live far from their jobs, enduring long commutes that strain families, limit career opportunities, and weaken connections to our neighborhoods. The Family Zoning Plan helps address this challenge by expanding opportunities for family sized housing in more neighborhoods while providing safeguards for small businesses and keeping San Francisco eligible for critical state housing and infrastructure funding.

Economic Benefits for Businesses of All Sizes

Building enough housing to meet our city's needs could generate nearly $5.6 billion dollars in new spending at local businesses. By concentrating new homes near commercial corridors, this plan will increase foot traffic, create opportunities for ground floor retail, and provide a stable customer base for neighborhood serving businesses. These benefits extend across industries,

strengthen our ability to attract and retain talent, and help ensure that San Francisco remains a competitive place to grow jobs.

Protecting and Supporting Small Businesses

We recognize that land use changes can raise important questions for small businesses. Importantly, the vast majority of future housing under this plan will be built on underutilized sites such as parking lots, gas stations, or vacant buildings. This will preserve existing storefronts while revitalizing parcels that present the best opportunities for redevelopment.

In the limited cases where relocation may be necessary, the Family Zoning Plan now includes adopted safeguards that give small businesses greater clarity and support. Supervisor Myrna Melgar's Small Business Displacement Program, which has now passed first reading, provides relocation payments, waived permit fees, and dedicated support to small and legacy businesses that may be affected by redevelopment related to the plan. The plan also requires early notification to commercial tenants as soon as a permit is pulled, giving businesses more predictability and time to plan for any potential changes.

In addition, the Planning Department has developed new incentives to ensure that ground floor retail in new buildings is functional, economically viable, and designed to support vibrant commercial corridors. These tools help facilitate tenant buildouts and encourage activated storefronts that strengthen neighborhood vitality.

Shared Vision for San Francisco's Future

The Family Zoning Plan is a critical step toward addressing our city's housing needs while ensuring that small businesses, large employers, and working families all have a path to thrive. By making it possible for more workers to live near their jobs, San Francisco will strengthen its workforce, reduce congestion and pollution from long commutes, and create a healthier and more equitable city for everyone. When our workforce can afford to live in our city, employers are better able to retain talent, reduce turnover, and build a stronger, more stable workforce.

We appreciate your leadership in approving the Family Zoning Plan and the accompanying small business protections. We stand ready to work alongside you in building a more economically inclusive, vibrant, and strong San Francisco.

Thank you for your consideration.

Sincerely,

San Francisco Chamber of Commerce
Rodney Fong, President & CEO

Bay Area Council
Matt Regan, Senior Vice President, Public Policy

SPUR
Sujata Srivastava, Chief Policy Officer

Advance SF
Wade Rose, President and CEO

Hospital Council Northern and Central California
Michon Coleman, Regional Vice President, San Francisco Section

Golden Gate Restaurant Association
Laurie Thomas, Executive Director

Building Owners & Managers Association San Francisco
John Bryant, CEO

SF New Deal
Simon Bertrang, Executive Director

San Francisco Apartment Association
Janan New, Executive Director

East Cut Community Benefit District
Andrew Robinson, Executive Director

Kate Robinson
Chair, San Francisco Benefit District Alliance

Ben Blieman
President, California Nightlife Association

Cynthia Huie
President, Small Business Commission

Sharky Laguana
Former President, Small Business Commission & CEO, Bandago

Teddy Kramer
CEO and Founder, NEON

Manny Yekutiel
Owner, Manny's

From:	Richard Drury
To:	Board of Supervisors (BOS); MandelmanStaff (BOS); ChanStaff (BOS); SherrillStaff; SauterStaff; MelgarStaff (BOS); ChenStaff; MahmoodStaff; DorseyStaff (BOS); FielderStaff; Waltonstaff (BOS); Carroll, John (BOS); CPC.SF.Housing.Choice; CPC.FamilyZoningCEQA; Shum, Ryan (CPC)
Cc:	Lori Brooke
Subject:	Family Zoning Plan Board File Nos. 250966, 250700, 251071, 250701, 251073 and 250985
Date:	Tuesday, December 2, 2025 9:02:59 AM
Attachments:	2025.12.02.SF Rezone Supoplemental BOS ComLtr-PDF w Exhibit.pdf

This message is from outside the City email system. Do not open links or attachments from untrusted sources.

Dear Board of Supervisors:
Attached please find the supplemental comments of Neighborhoods United SF concerning the San Francisco "Family Zoning Plan." Board of Supervisors December 2, 2025. Board File Nos. 250966, 250700, 251071, 250701, 251073 and 250985.
Thank you for considering our comments, and please include these comments in the record for this matter.
Richard Drury

--
Richard Drury
Lozeau Drury LLP
1939 Harrison Street, Suite 150
Oakland, CA 94612
(510) 836-4200
richard@lozeaudrury.com

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T 510.836.4200
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1939 Harrison Street, Ste. 150
Oakland, CA 94612
www.lozeaudrury.com
richard@lozeaudrury.com

BY E-MAIL

December 2, 2025

Board President Rafael Mandelman and
Honorable Supervisors
San Francisco Board of Supervisors
Attn: Angela Calvillo, Clerk of the Board
Land Use and Transportation Committee c/o Clerk John Carroll
1 Dr. Carlton B. Goodlett Place, Room 244
San Francisco, CA 94102
Board.of.Supervisors@sfgov.org
mandelmanstaff@sfgov.org
ChanStaff@sfgov.org
SherrillStaff@sfgov.org
SauterStaff@sfgov.org
MelgarStaff@sfgov.org
ChenStaff@sfgov.org
MahmoodStaff@sfgov.org
DorseyStaff@sfgov.org
FielderStaff@sfgov.org
waltonstaff@sfgov.org
John.Carroll@sfgov.org
Lisa Chen, sf.housing.choice@sfgov.org
Ryan Shum, CPC, cpc.FamilyZoningCEQA@sfgov.org; ryan.shum@sfgov.org

RE: Comment on CEQA Addendum for San Francisco "Family Zoning Plan."
Board of Supervisors December 2, 2025.
Board File Nos. 250966, 250700, 251071, 250701, 251073 and 250985

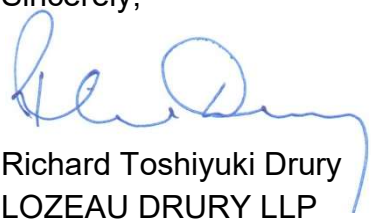
President Mandelman and Honorable Supervisors:

I am writing on behalf of Neighborhoods United SF, a consortium of San Francisco neighborhood and community groups representing thousands of San Francisco residents, concerning the so-called San Francisco "Family Zoning Plan" ("Rezone"). This letter supplements our filing yesterday in which we requested that the Board defer any decision on the Rezone until the City Planning Department prepares a Supplemental Environmental Impact Report ("SEIR").

We attach hereto the shadow "heat map" prepared by Adam Noble of FastCast showing that the Rezone will have dramatic shadow impacts on Joe DiMaggio Park. This is a zero-tolerance park under the City's Prop M (Planning Code Section 295). This is a new significant impact of the Rezone that must be analyzed in an SEIR, along with the

impacts discussed in yesterday's letter. We urge the City to prepare a SEIR to consider feasible mitigation measures to reduce the Rezone's impacts, and also to consider feasible alternatives, such as placing the proposed 4,000 additional units in specific locations, rather than upzoning entire swaths of the city in hopes that the 4,000 units will be built somewhere within the upzoned areas. We do not need to destroy the City to save it. Instead, the necessary new development can be place in areas of the City where it will not destroy rent-controlled housing and where it will not destroy functional, urban communities.

Sincerely,

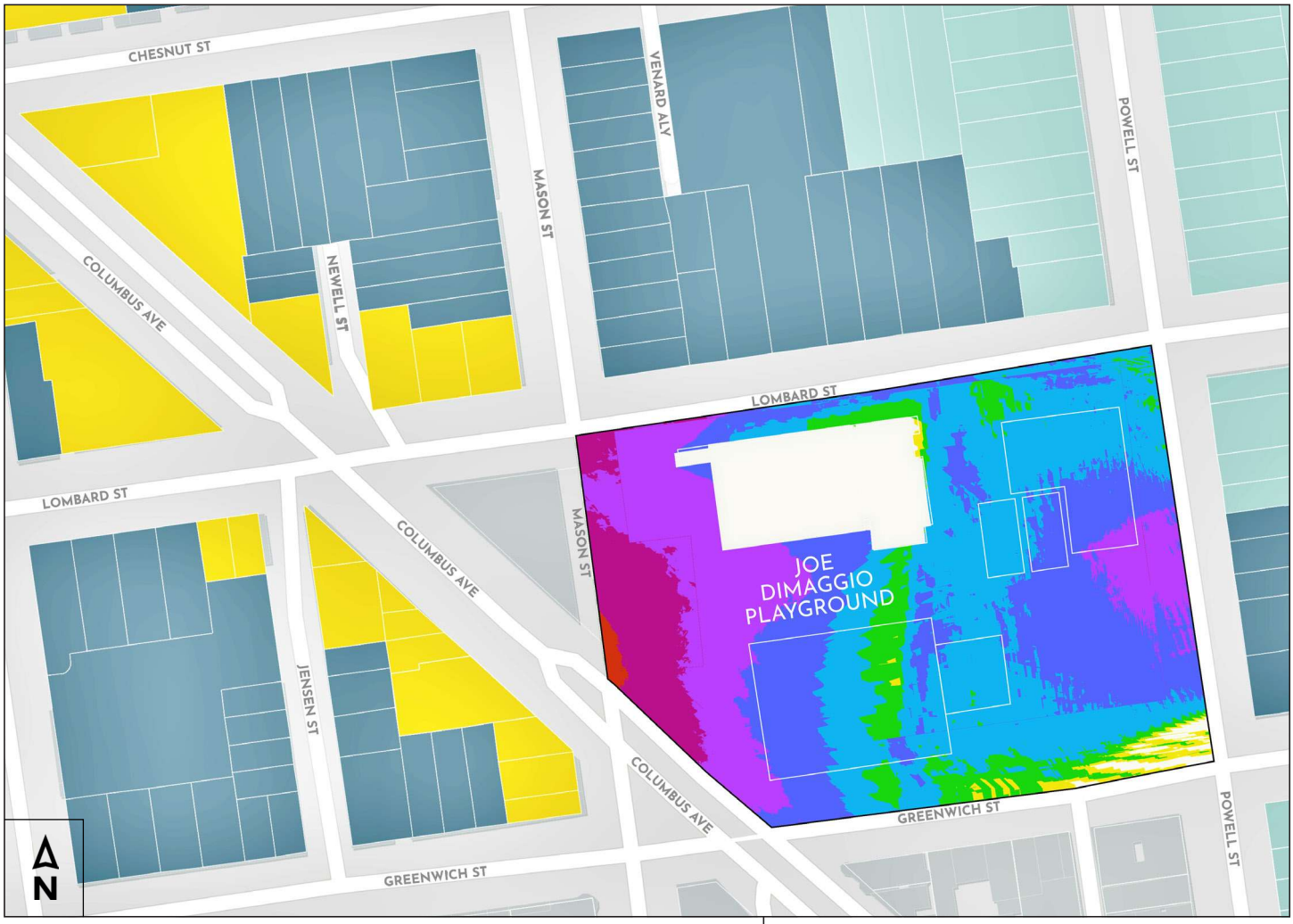


Richard Toshiyuki Drury
LOZEAU DRURY LLP

FAMILY ZONING SHADOW ANALYSIS

Joe DiMaggio Playground, Single Day

EXHIBIT B



NET NEW SHADOW LOCATIONS & DURATIONS

Full Year Distribution

Duration Range of Net New Shadow

Under 2 min/day	(under 13 hrs/year)
2 - 4 min/day	(13 - 25 hrs/year)
4 - 8 min/day	(25 - 49 hrs/year)
8 - 16 min/day	(49 - 98 hrs/year)
16 - 32 min/day	(98 - 195 hrs/year)
32 - 64 min/day	(195 - 390 hrs/year)
64 - 128 min/day	(390 - 779 hrs/year)
Over 128 min/day	(over 779 hrs/year)

FULL YEAR

SHADOW FAN ANALYSIS

Rec & Park Open Spaces

Joe DiMaggio Playground*

Proposed Local Program Height Limits

40’

50’

65’

Shadow Fan is cropped to park boundaries

FAMILY ZONING SHADOW ANALYSIS

Joe DiMaggio Playground, Single Day

NET NEW SHADOW LOCATIONS & DURATIONS

Single Day Distribution

Duration Range of Net New Shadow

- Over 16 hr
- 8 hr - 16 hr
- 4 hr - 8 hr
- 2 hr - 4 hr
- 1 hr - 2 hr
- 30 min - 1 hr
- 15 min - 30 min
- 1 min - 15 min

JUNE 21

SHADOW FAN ANALYSIS

Rec & Park Open Spaces

- Joe DiMaggio Playground

Proposed Local Program Height Limits

- 40’
- 50’
- 65’

FAMILY ZONING SHADOW ANALYSIS

Joe DiMaggio Playground, Single Day

NET NEW SHADOW LOCATIONS & DURATIONS

Single Day Distribution

Duration Range of Net New Shadow

- Over 16 hr
- 8 hr - 16 hr
- 4 hr - 8 hr
- 2 hr - 4 hr
- 1 hr - 2 hr
- 30 min - 1 hr
- 15 min - 30 min
- 1 min - 15 min

JUNE 28

SHADOW FAN ANALYSIS

Rec & Park Open Spaces

- Joe DiMaggio Playground

Proposed Local Program Height Limits

- 40’
- 50’
- 65’

FAMILY ZONING SHADOW ANALYSIS

Joe DiMaggio Playground, Single Day

NET NEW SHADOW LOCATIONS & DURATIONS

Single Day Distribution

Duration Range of Net New Shadow

- Over 16 hr
- 8 hr - 16 hr
- 4 hr - 8 hr
- 2 hr - 4 hr
- 1 hr - 2 hr
- 30 min - 1 hr
- 15 min - 30 min
- 1 min - 15 min

JULY 5

SHADOW FAN ANALYSIS

Rec & Park Open Spaces

- Joe DiMaggio Playground

Proposed Local Program Height Limits

- 40’
- 50’
- 65’

FAMILY ZONING SHADOW ANALYSIS

Joe DiMaggio Playground, Single Day

NET NEW SHADOW LOCATIONS & DURATIONS

Single Day Distribution

Duration Range of Net New Shadow

- Over 16 hr
- 8 hr - 16 hr
- 4 hr - 8 hr
- 2 hr - 4 hr
- 1 hr - 2 hr
- 30 min - 1 hr
- 15 min - 30 min
- 1 min - 15 min

JULY 12

SHADOW FAN ANALYSIS

Rec & Park Open Spaces

- Joe DiMaggio Playground

Proposed Local Program Height Limits

- 40’
- 50’
- 65’

FAMILY ZONING SHADOW ANALYSIS

Joe DiMaggio Playground, Single Day

NET NEW SHADOW LOCATIONS & DURATIONS

Single Day Distribution

Duration Range of Net New Shadow

- Over 16 hr
- 8 hr - 16 hr
- 4 hr - 8 hr
- 2 hr - 4 hr
- 1 hr - 2 hr
- 30 min - 1 hr
- 15 min - 30 min
- 1 min - 15 min

JULY 19

SHADOW FAN ANALYSIS

Rec & Park Open Spaces

- Joe DiMaggio Playground

Proposed Local Program Height Limits

- 40’
- 50’
- 65’

FAMILY ZONING SHADOW ANALYSIS

Joe DiMaggio Playground, Single Day

NET NEW SHADOW LOCATIONS & DURATIONS

Single Day Distribution

Duration Range of Net New Shadow

- Over 16 hr
- 8 hr - 16 hr
- 4 hr - 8 hr
- 2 hr - 4 hr
- 1 hr - 2 hr
- 30 min - 1 hr
- 15 min - 30 min
- 1 min - 15 min

JULY 26

SHADOW FAN ANALYSIS

Rec & Park Open Spaces

- Joe DiMaggio Playground

Proposed Local Program Height Limits

- 40’
- 50’
- 65’

FAMILY ZONING SHADOW ANALYSIS

Joe DiMaggio Playground, Single Day

NET NEW SHADOW LOCATIONS & DURATIONS

Single Day Distribution

Duration Range of Net New Shadow

- Over 16 hr
- 8 hr - 16 hr
- 4 hr - 8 hr
- 2 hr - 4 hr
- 1 hr - 2 hr
- 30 min - 1 hr
- 15 min - 30 min
- 1 min - 15 min

AUGUST 2

SHADOW FAN ANALYSIS

Rec & Park Open Spaces

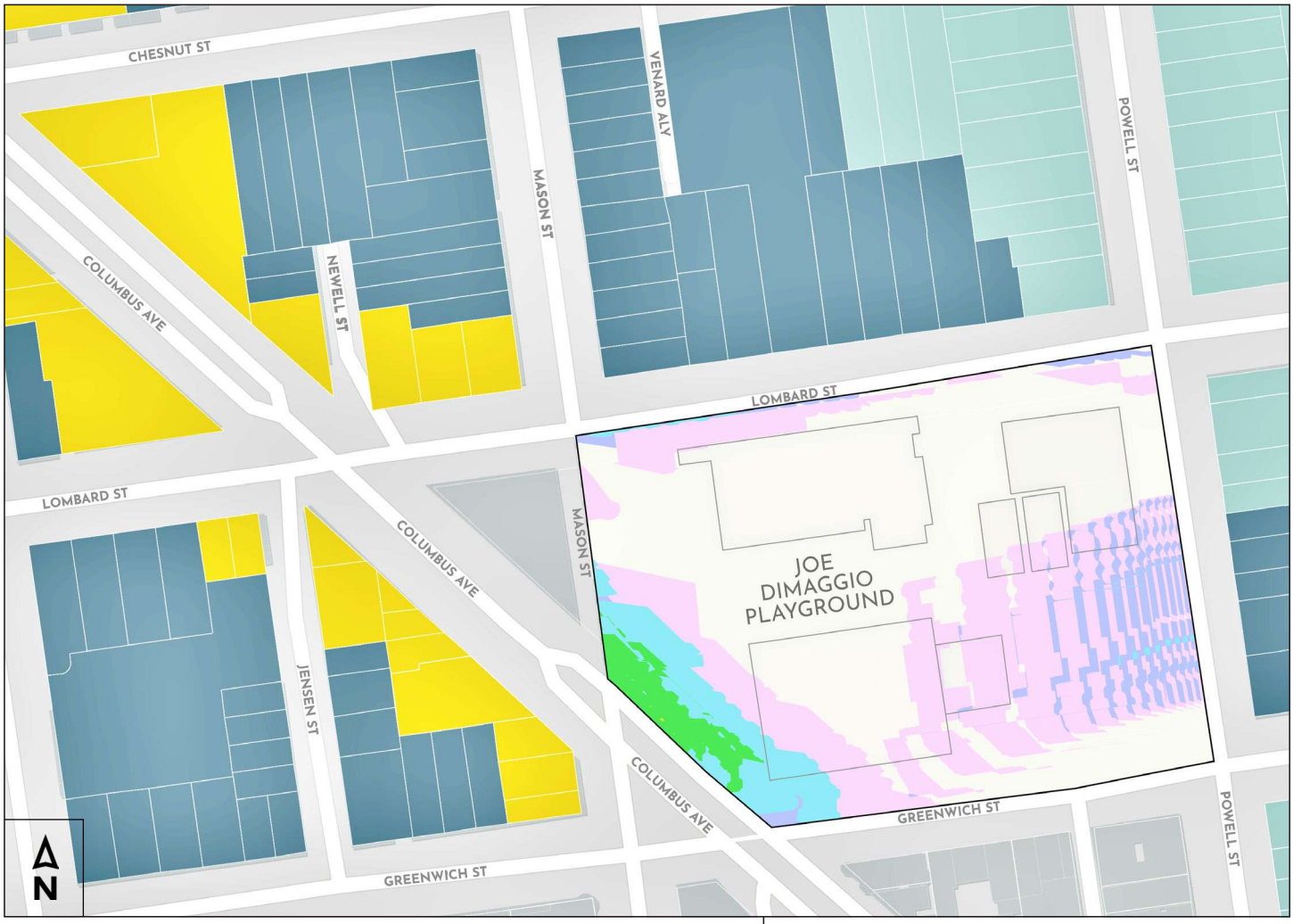
- Joe DiMaggio Playground

Proposed Local Program Height Limits

- 40’
- 50’
- 65’

FAMILY ZONING SHADOW ANALYSIS

Joe DiMaggio Playground, Single Day



NET NEW SHADOW LOCATIONS & DURATIONS

Single Day Distribution

Duration Range of Net New Shadow

- Over 16 hr
- 8 hr - 16 hr
- 4 hr - 8 hr
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- 1 hr - 2 hr
- 30 min - 1 hr
- 15 min - 30 min
- 1 min - 15 min

AUGUST 9

SHADOW FAN ANALYSIS

Rec & Park Open Spaces

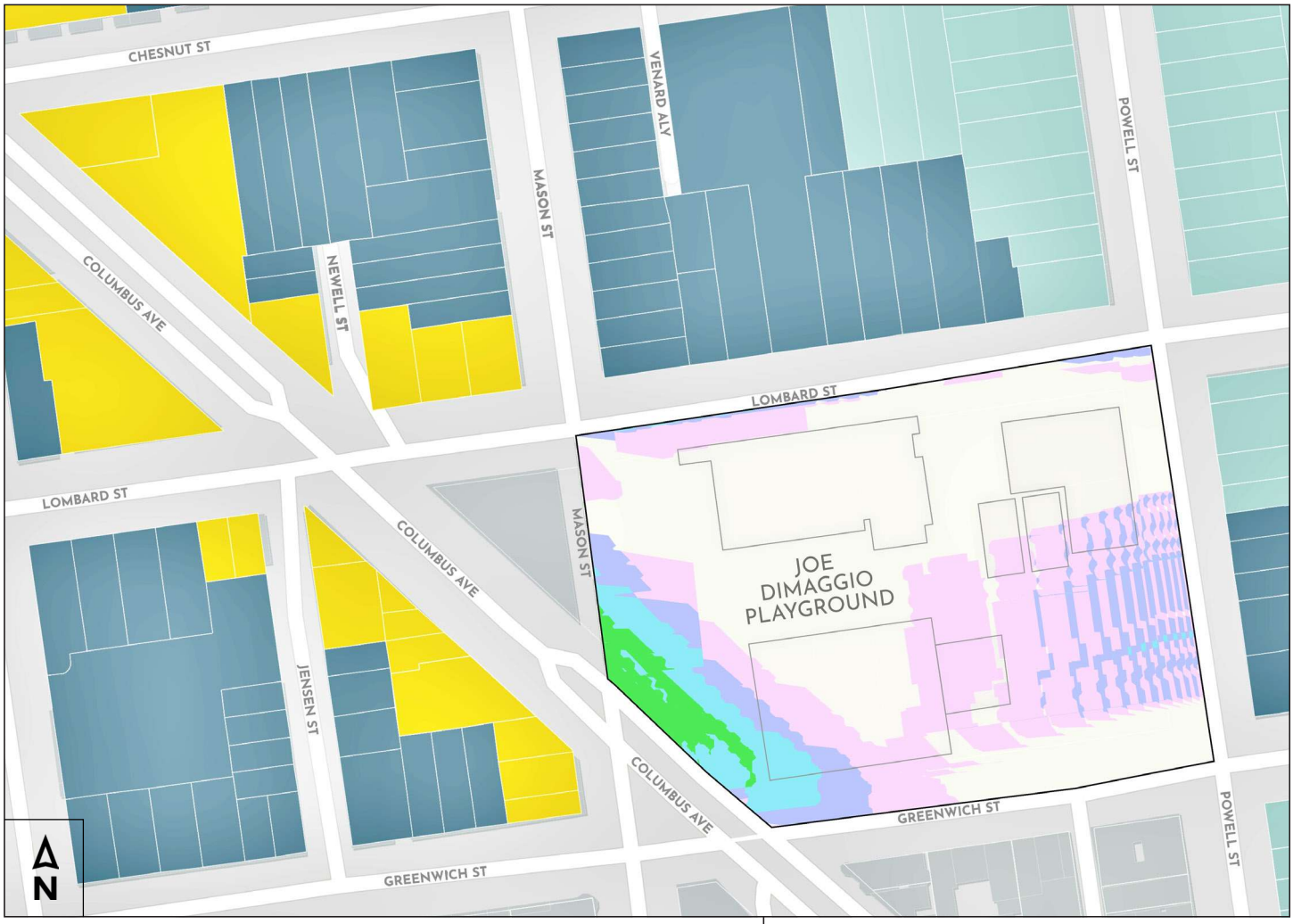
- Joe DiMaggio Playground

Proposed Local Program Height Limits

- 40’
- 50’
- 65’

FAMILY ZONING SHADOW ANALYSIS

Joe DiMaggio Playground, Single Day



NET NEW SHADOW LOCATIONS & DURATIONS

Single Day Distribution

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- Over 16 hr
- 8 hr - 16 hr
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- 30 min - 1 hr
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- 1 min - 15 min

AUGUST 16

SHADOW FAN ANALYSIS

Rec & Park Open Spaces

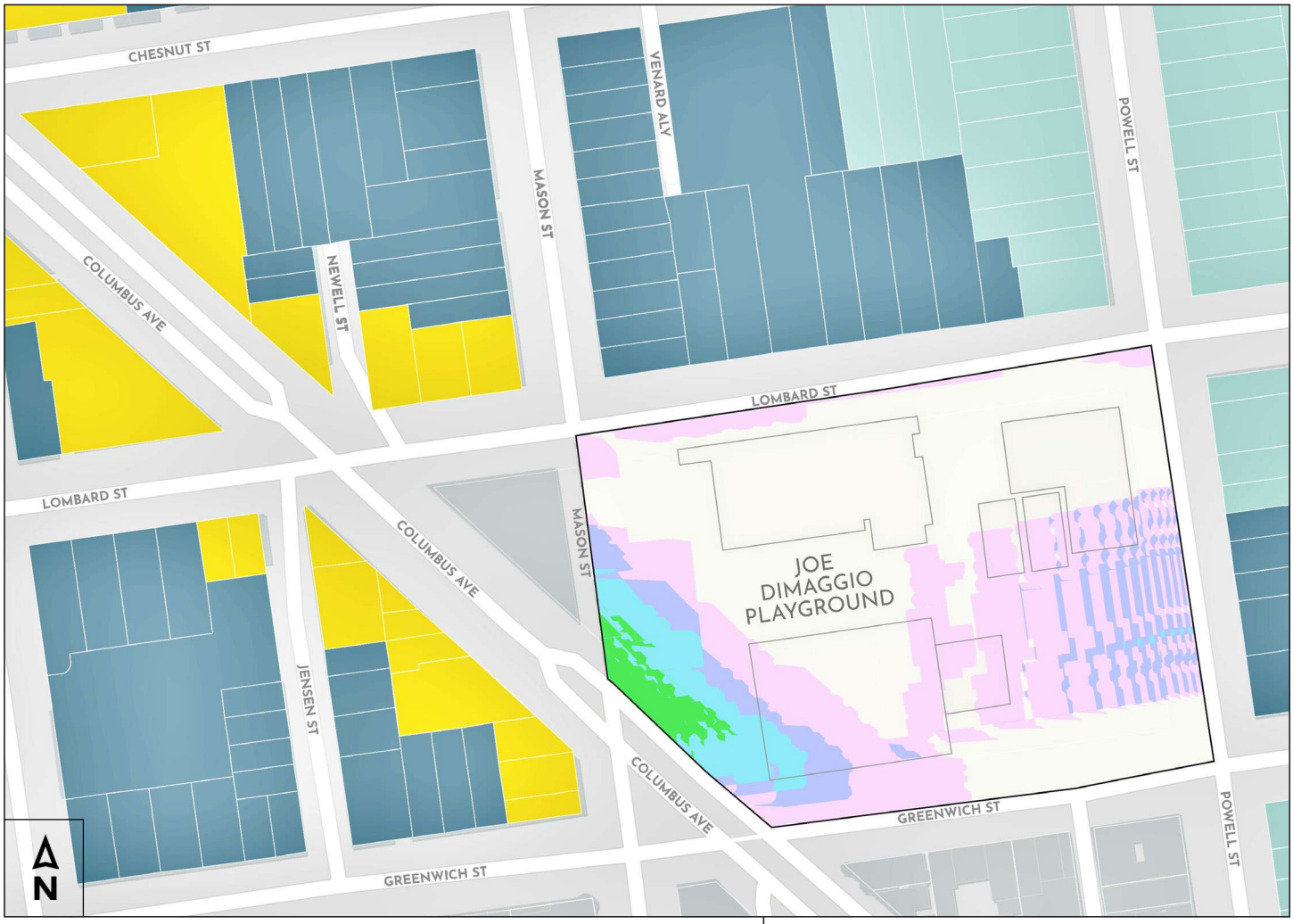
- Joe DiMaggio Playground

Proposed Local Program Height Limits

- 40’
- 50’
- 65’

FAMILY ZONING SHADOW ANALYSIS

Joe DiMaggio Playground, Single Day



NET NEW SHADOW LOCATIONS & DURATIONS

Single Day Distribution

Duration Range of Net New Shadow

- Over 16 hr
- 8 hr - 16 hr
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- 1 hr - 2 hr
- 30 min - 1 hr
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AUGUST 23

SHADOW FAN ANALYSIS

Rec & Park Open Spaces

- Joe DiMaggio Playground

Proposed Local Program Height Limits

- 40’
- 50’
- 65’

FAMILY ZONING SHADOW ANALYSIS

Joe DiMaggio Playground, Single Day

NET NEW SHADOW LOCATIONS & DURATIONS

Single Day Distribution

Duration Range of Net New Shadow

- Over 16 hr
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AUGUST 30

SHADOW FAN ANALYSIS

Rec & Park Open Spaces

- Joe DiMaggio Playground

Proposed Local Program Height Limits

- 40’
- 50’
- 65’

FAMILY ZONING SHADOW ANALYSIS

Joe DiMaggio Playground, Single Day

NET NEW SHADOW LOCATIONS & DURATIONS

Single Day Distribution

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SEPTEMBER 6

SHADOW FAN ANALYSIS

Rec & Park Open Spaces

- Joe DiMaggio Playground

Proposed Local Program Height Limits

- 40’
- 50’
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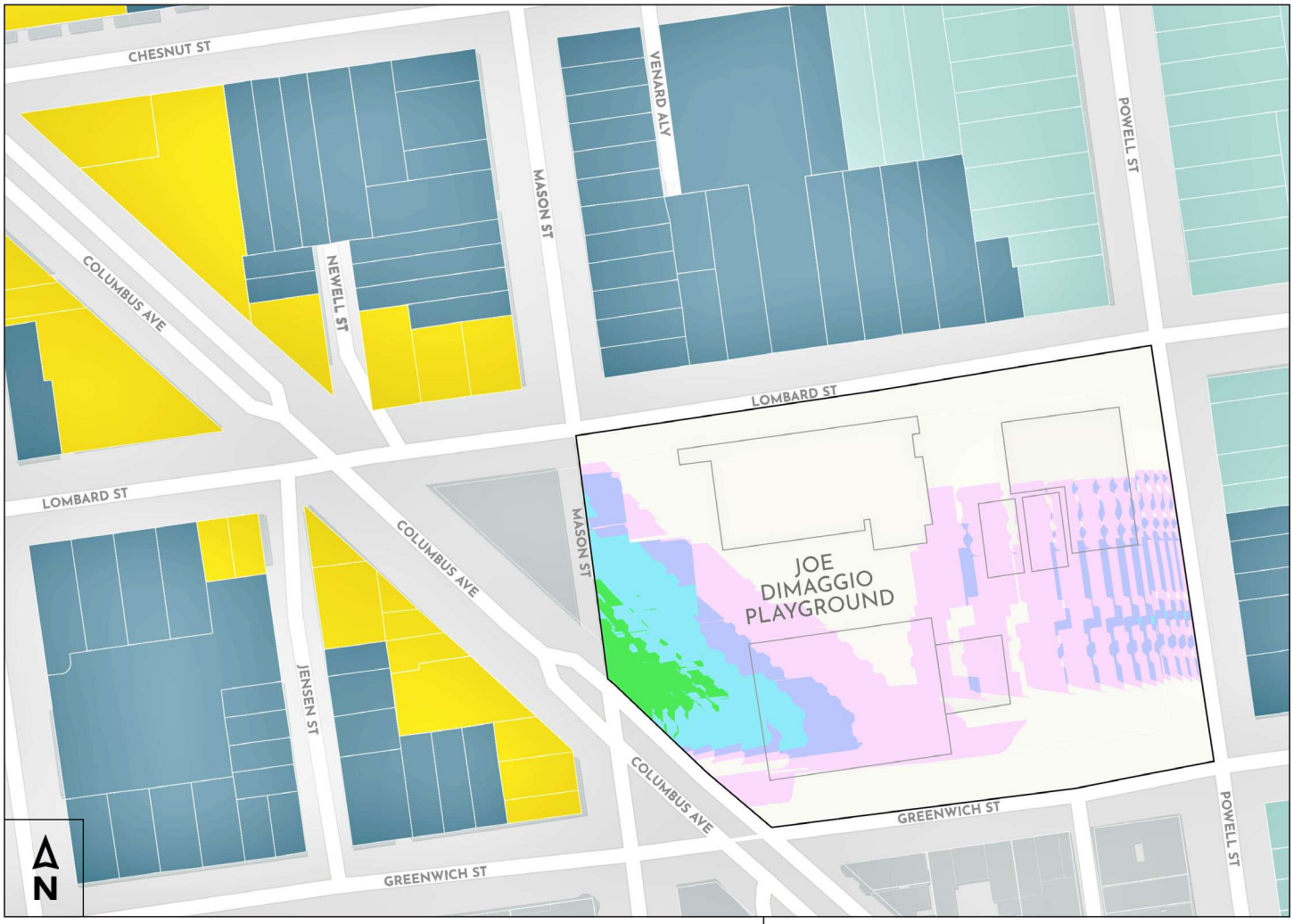
FAMILY ZONING SHADOW ANALYSIS

Joe DiMaggio Playground, Single Day



NET NEW SHADOW LOCATIONS & DURATIONS

Single Day Distribution

Duration Range of Net New Shadow

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SEPTEMBER 13

SHADOW FAN ANALYSIS

Rec & Park Open Spaces

- Joe DiMaggio Playground

Proposed Local Program Height Limits

- 40’
- 50’
- 65’

FAMILY ZONING SHADOW ANALYSIS

Joe DiMaggio Playground, Single Day

NET NEW SHADOW LOCATIONS & DURATIONS

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SEPTEMBER 20

SHADOW FAN ANALYSIS

Rec & Park Open Spaces

- Joe DiMaggio Playground

Proposed Local Program Height Limits

- 40’
- 50’
- 65’

FAMILY ZONING SHADOW ANALYSIS

Joe DiMaggio Playground, Single Day

NET NEW SHADOW LOCATIONS & DURATIONS

Single Day Distribution

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- 8 hr - 16 hr
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- 30 min - 1 hr
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- 1 min - 15 min

SEPTEMBER 27

SHADOW FAN ANALYSIS

Rec & Park Open Spaces

- Joe DiMaggio Playground

Proposed Local Program Height Limits

- 40’
- 50’
- 65’

FAMILY ZONING SHADOW ANALYSIS

Joe DiMaggio Playground, Single Day

NET NEW SHADOW LOCATIONS & DURATIONS

Single Day Distribution

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OCTOBER 4

SHADOW FAN ANALYSIS

Rec & Park Open Spaces

- Joe DiMaggio Playground

Proposed Local Program Height Limits

- 40’
- 50’
- 65’

FAMILY ZONING SHADOW ANALYSIS

Joe DiMaggio Playground, Single Day

NET NEW SHADOW LOCATIONS & DURATIONS

Single Day Distribution

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OCTOBER 11

SHADOW FAN ANALYSIS

Rec & Park Open Spaces

- Joe DiMaggio Playground

Proposed Local Program Height Limits

- 40’
- 50’
- 65’

FAMILY ZONING SHADOW ANALYSIS

Joe DiMaggio Playground, Single Day

NET NEW SHADOW LOCATIONS & DURATIONS

Single Day Distribution

Duration Range of Net New Shadow

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- 1 min - 15 min

OCTOBER 18

SHADOW FAN ANALYSIS

Rec & Park Open Spaces

- Joe DiMaggio Playground

Proposed Local Program Height Limits

- 40’
- 50’
- 65’

FAMILY ZONING SHADOW ANALYSIS

Joe DiMaggio Playground, Single Day

NET NEW SHADOW LOCATIONS & DURATIONS

Single Day Distribution

Duration Range of Net New Shadow

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- 1 hr - 2 hr
- 30 min - 1 hr
- 15 min - 30 min
- 1 min - 15 min

OCTOBER 25

SHADOW FAN ANALYSIS

Rec & Park Open Spaces

- Joe DiMaggio Playground

Proposed Local Program Height Limits

- 40’
- 50’
- 65’

FAMILY ZONING SHADOW ANALYSIS

Joe DiMaggio Playground, Single Day

NET NEW SHADOW LOCATIONS & DURATIONS

Single Day Distribution

Duration Range of Net New Shadow

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- 1 min - 15 min

NOVEMBER 1

SHADOW FAN ANALYSIS

Rec & Park Open Spaces

- Joe DiMaggio Playground

Proposed Local Program Height Limits

- 40’
- 50’
- 65’

FAMILY ZONING SHADOW ANALYSIS

Joe DiMaggio Playground, Single Day

NET NEW SHADOW LOCATIONS & DURATIONS

Single Day Distribution

Duration Range of Net New Shadow

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- 1 min - 15 min

NOVEMBER 8

SHADOW FAN ANALYSIS

Rec & Park Open Spaces

- Joe DiMaggio Playground

Proposed Local Program Height Limits

- 40’
- 50’
- 65’

FAMILY ZONING SHADOW ANALYSIS

Joe DiMaggio Playground, Single Day

NET NEW SHADOW LOCATIONS & DURATIONS

Single Day Distribution

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- 8 hr - 16 hr
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- 1 min - 15 min

NOVEMBER 15

SHADOW FAN ANALYSIS

Rec & Park Open Spaces

- Joe DiMaggio Playground

Proposed Local Program Height Limits

- 40’
- 50’
- 65’

FAMILY ZONING SHADOW ANALYSIS

Joe DiMaggio Playground, Single Day

NET NEW SHADOW LOCATIONS & DURATIONS

Single Day Distribution

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- 1 hr - 2 hr
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- 1 min - 15 min

NOVEMBER 22

SHADOW FAN ANALYSIS

Rec & Park Open Spaces

- Joe DiMaggio Playground

Proposed Local Program Height Limits

- 40’
- 50’
- 65’

FAMILY ZONING SHADOW ANALYSIS

Joe DiMaggio Playground, Single Day

NET NEW SHADOW LOCATIONS & DURATIONS

Single Day Distribution

Duration Range of Net New Shadow

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- 8 hr - 16 hr
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- 15 min - 30 min
- 1 min - 15 min

NOVEMBER 29

SHADOW FAN ANALYSIS

Rec & Park Open Spaces

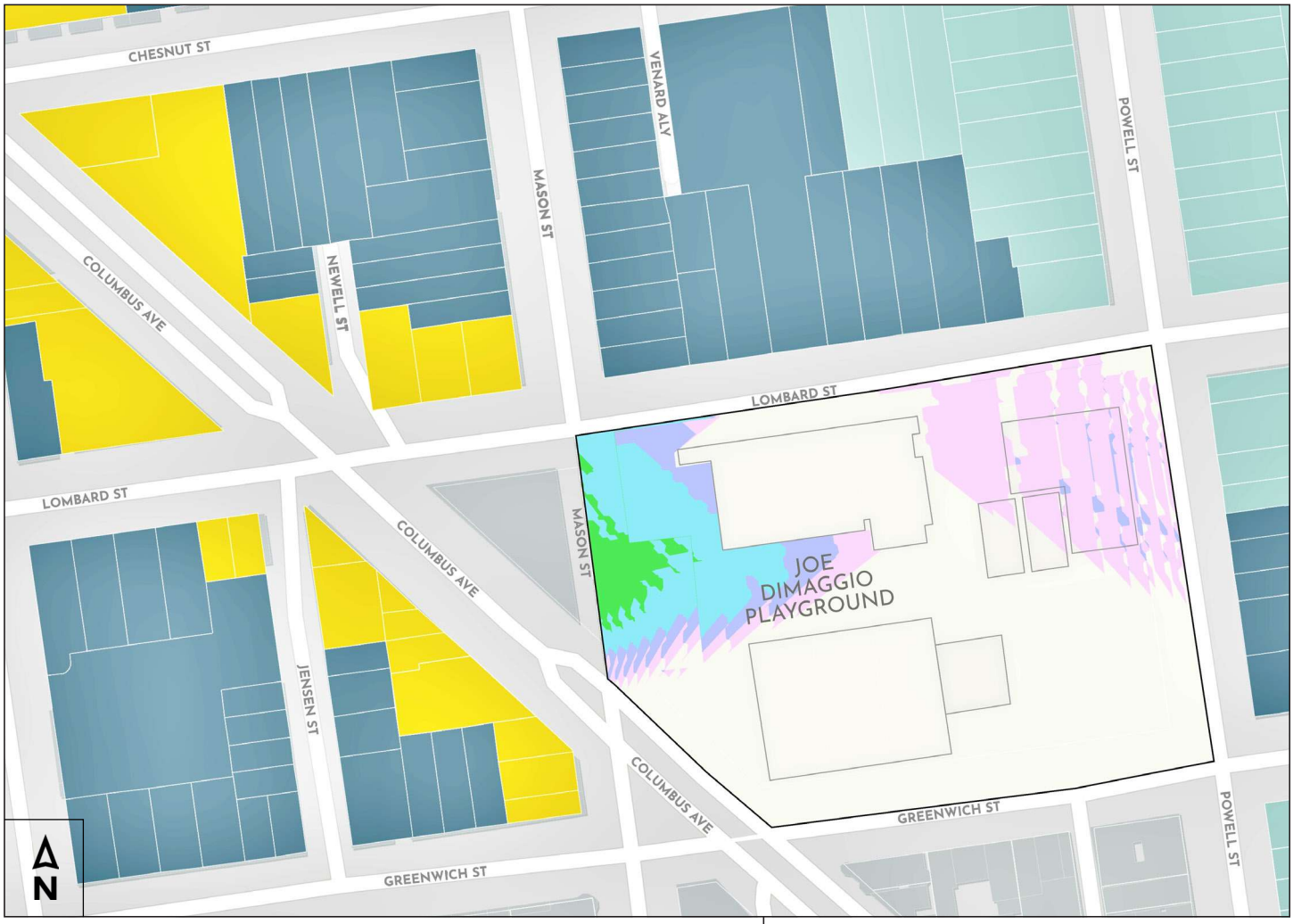
- Joe DiMaggio Playground

Proposed Local Program Height Limits

- 40’
- 50’
- 65’

FAMILY ZONING SHADOW ANALYSIS

Joe DiMaggio Playground, Single Day



NET NEW SHADOW LOCATIONS & DURATIONS

Single Day Distribution

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- Over 16 hr
- 8 hr - 16 hr
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- 1 min - 15 min

DECEMBER 6

SHADOW FAN ANALYSIS

Rec & Park Open Spaces

- Joe DiMaggio Playground

Proposed Local Program Height Limits

- 40’
- 50’
- 65’

FAMILY ZONING SHADOW ANALYSIS

Joe DiMaggio Playground, Single Day

NET NEW SHADOW LOCATIONS & DURATIONS

Single Day Distribution

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DECEMBER 13

SHADOW FAN ANALYSIS

Rec & Park Open Spaces

- Joe DiMaggio Playground

Proposed Local Program Height Limits

- 40’
- 50’
- 65’

FAMILY ZONING SHADOW ANALYSIS

Joe DiMaggio Playground, Single Day

NET NEW SHADOW LOCATIONS & DURATIONS

Single Day Distribution

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- 1 min - 15 min

DECEMBER 20

SHADOW FAN ANALYSIS

Rec & Park Open Spaces

- Joe DiMaggio Playground

Proposed Local Program Height Limits

- 40’
- 50’
- 65’

From:	Bruce Agid
To:	Melgar, Myrna (BOS); Mahmood, Bilal (BOS); Chen, Chyanne (BOS); Sherrill, Stephen (BOS); Walton, Shamann (BOS); Chan, Connie (BOS); Sauter, Danny (BOS); Dorsey, Matt (BOS); Fielder, Jackie (BOS); Alan.Wong1@sfgov.org; Mandelman, Rafael (BOS)
Cc:	Meaghan Mitchell; Tyra Fennell; Sean Karlin; Amerika Sanchez; Charley Goss; Derek Lee; Kurt Grimes; Chris Chang; Maika Pinkston; Latoya Pitcher; Spencer Lam; Eric Dew; Mark Malouf; Alan Tsui; Rachael Tanner; Gary Pegueros; Chanel Blackwell; Elijah Ball; Courtney Sid; sliubettencourt@gmail.com; JiLon Li; Rupali Singhal; Carroll, John (BOS); Calvillo, Angela (BOS); Herrera, Ana (BOS); Burch, Percy (BOS); Yan, Calvin (BOS); Andrews, Michelle (BOS); Tam, Madison (BOS); Rosas, Lorenzo (BOS); Low, Jen (BOS); Fieber, Jennifer (BOS); Cooper, Raynell (BOS); Sciammas, Charlie (BOS); Ho, Calvin (BOS); DorseyStaff (BOS); Waltonstaff (BOS); Mathew Castillon; Lurie, Daniel (MYR); Thongsavat, Adam (MYR); Zou, Han (MYR)
Subject:	San Francisco Eastern Neighborhoods Democratic Club (SFENDC) Support for Mayor Lurie"s Family Zoning Plan
Date:	Tuesday, December 2, 2025 9:01:55 AM

This message is from outside the City email system. Do not open links or attachments from untrusted sources.

December 2, 2025

RE: Support Mayor Lurie’s Family Zoning Plan

Dear Members of the Board of Supervisors,

The Board of the Eastern Neighborhoods Democratic Club (ENDC) supports the passage and adoption of Mayor Lurie’s Family Zoning Plan.

This proposal plans to build more housing for San Franciscans while ensuring we can control our own destiny by maintaining local land use controls. Without the Family Zoning Plan, San Francisco will face the Builder’s Remedy as well as fines and loss of ~$100 million in funding for transit and housing. Furthermore, this plan incentivizes family-sized homes of at least two, three, or more bedrooms. These types of homes help more families stay in San Francisco.

The plan aligns with ENDC's Mission & Vision. The San Francisco Eastern Neighborhoods Democratic Club (ENDC) was established by residents of San Francisco’s Supervisorial Districts 3, 6, and 10 to organize voters and provide a discussion and educational forum to address the most pressing issues facing the eastern neighborhoods of our City.

The ENDC provides a Democratic political voice to advocate an urbanist-equity platform (a focus on creating complete communities) with twin goals of keeping current residents and families in San Francisco while welcoming newcomers. The Family Zoning Plan aligns firmly with these values.

We are proud to support the Family Zoning Plan, which incorporates many important accepted amendments, and urge the Board of Supervisors to adopt the plan without delay.

Thanks in advance,

Bruce Agid
President, ENDC on behalf of the Board of ENDC

From:	Howard
To:	Carroll, John (BOS); Chen, Lisa (CPC); Shum, Ryan (CPC); CPC.SF.Housing.Choice; FamilyZoningCEQA@sfgov.org
Subject:	UPZONING: ANALYSIS: PERFECT PLANNING = ICONIC BEAUTY + HOUSING
Date:	Tuesday, December 2, 2025 7:28:54 AM
Attachments:	~~~~PERFECT PLANNING = ICONIC BEAUTY + HOUSING 12-25.pdf

This message is from outside the City email system. Do not open links or attachments from untrusted sources.

FOR HEARINGS ON UPZONING PLAN
TO: Board of Supervisors
CC: Mayor Lurie/ Office, Planning Commission/ Staff
ATTACHED: PERFECT PLANNING = ICONIC BEAUTY + HOUSING

An entertaining and informative analysis of the history of Waterfront Land-Use Battles, development fights, upzoning, housing options, affordable housing around the world and photos.
Best Regards, Howard Wong, AIA
P.S.: Please include in Board Package---online and printed (if possible) for public education.

PERFECT PLANNING = ICONIC BEAUTY + HOUSING

OPPOSE WATERFRONT UPZONING *Please share this!*

SEE BELOW: HISTORY OF SF WATERFRONT LAND-USE BATTLES:

PROTECT WATERFRONT BEAUTY AND HISTORIC NEIGHBORHOODS AS ECONOMIC ASSETS
San Francisco's waterfront/ hilltop beauty is priceless. Environmental capital, like physical/ visual links to the Bay, has quantifiable value. The City's Mediterranean beauty differentiates it from most cities. Tourism attracts 23 million visitors and $9 billion/ year. Public vistas fuel a real estate industry of up to $10 billion/ year. Conservatively, waterfront beauty has a $2 billion valuation/ year---for perpetuity.

History makes the case for Voter Approval of waterfront development/ height increases
Generations of San Franciscans have fought to protect the beauty and scale of the northern waterfront. Upzoning at the northern waterfront would override General Plans, urban design/ environmental elements, planning priorities, design guidelines, settled law, ballot measures, legislation, codes, and voter advocacy for a Mediterranean scale---with building heights tapering gently upward to hilltops.

Planning codes have reinforced the waterfront's 40-foot height limit as a benchmark for tapering heights---protecting visual corridors to the bay. Public and legal directives have elevated environmental beauty as a priority, aspiring to the beauty of Venice, Florence, Santorini, Paris and great places that have protected their timeless treasures and World Heritage Sites---actual and potential.

HOUSING: SUPERLATIVE OPTIONS *Please share this!*

INSTEAD OF PLANNERS, HIRE MATHEMATICIANS AND FINANCIERS TO CREATE NEW HOUSING.
San Francisco's Chief Economist deems the SF Upzoning Plan as unrealistic. ***Why approve a deleterious upzoning plan, harming neighborhoods and waterfronts, when better options exist?*** Throughout the world, cities/ countries/ people have built vast amounts of affordable housing for their growing populations. Besides, San Francisco has already built, entitled more projects, and forecasts more development than almost any city in the region and state.

Mathematicians can finetune hypotheses and calculate housing construction accurately.
Depending on the timeline, completed projects, in-progress projects, entitled projects, proposed projects (more every day), untapped zoning capacity, infill development, availability of public land, new financing plans, new area/ neighborhood plans, and revised incentives/ housing types/ unit sizes/ densification, San Francisco can likely meet its RHNA (Regional Housing Needs Allocation)---without flailing citywide upzoning. Rather than number of housing units, the focus should be on the number of people housed.

Financiers can coalesce all funding to effectively build housing: $20 billion MTC Regional Affordable Housing Bond (2028 as a revolving fund), local/ state housing bonds, grants, trust funds, tax credits, tax increment financing, low-interest loans, public banks, nonprofits, philanthropy, partnerships, rent subsidies, and more. Many countries have affordable housing strategies and programs---worth emulating. ***Affordable housing is not for lack of zoning, but lack of comprehensive planning.***

DO THE MATH: HOUSING TAKES MANY FORMS: After the 1906 Earthquake, 250,000 San Franciscans were homeless (60% of the population)---quickly housed in tens/t camps and tiny redwood cottages. Today, the homeless instinctively gather in encampments, RV/ car clusters, for community and self-support. As seen throughout the world, affordable housing can take the form of cooperative housing, micro-housing, shared housing, land trusts, accessory units, modular dwellings, single-room occupancies, boarding houses, public housing, dual-use spaces, and informal communities (at least for the near/ short term). Rio de Janeiro's favelas are naturally-occurring low-income squatter housing---a normal human response to homelessness. 35% of Lima's population live in squatter settlements and 50% are employed in informal jobs. Around the world, 1 billion people live in slums or other informal settlements.

AFFORDABLE HOUSING IS A PUBLIC POLICY CHOICE. Government has economic tools to invest in land, utilize public property, zone for public benefits, provide public services, incentivize smaller/ plentiful dwellings, provide flexibility in housing, give tax incentives, prioritize approvals and permitting. Not inconceivable, like China and forty other countries, government can build new cities and towns---on public land. China has built hundreds of new cities, including many with one million residents. ***The region and the state can carry its housing fair share, not just the 49 square miles of San Francisco.***

RENTCHAMBER: The Top 10 Countries with Exceptional Housing Policies
https://rentchamber.com/the-top-10-countries-with-exceptional-housing-policies/
WIKIPEDIA: Affordable Housing by Country:
https://en.wikipedia.org/wiki/Affordable_housing_by_country

GUARDIAN: The social housing secret: how Vienna became the world's most livable city
https://www.theguardian.com/lifeandstyle/2024/jan/10/the-social-housing-secret-how-vienna-became-the-worlds-most-livable-city
NPR: Could this city be the model for how to tackle the housing crisis and climate change?
https://www.npr.org/2025/06/15/nx-s1-5400642/affordable-housing-environment-vienna-climate-change
HOUSING PERSPECTIVES: What Can We Learn from the Dutch Social Housing System?
https://www.jchs.harvard.edu/blog/what-can-we-learn-dutch-social-housing-system
ASSEMBLE PAPERS: A primer on social housing in Amsterdam
https://assemblepapers.com.au/2018/12/13/amsterdam-social-housing-a-primer/
ROUTE FIFTY: Hungry for affordable housing, communities turn to land trusts **https://www.route-fifty.com/management/2024/09/hungry-affordable-housing-communities-turn-land-trusts/399784/?oref=rf-today-nl&utm_source=Sailthru&utm_medium=email&utm_campaign=Route%20Fifty%20Today:%20September%2025%2C%202024&utm_term=newsletter_rf_today**
BLOOMBERG: Why Singapore Has One of the Highest Home Ownership Rates
https://www.bloomberg.com/news/articles/2020-07-08/behind-the-design-of-singapore-s-low-cost-housing?cmpid=BBD102120_CITYLAB&utm_medium=email&utm_source=newsletter&utm_term=201021&utm_campaign=citylabdaily

WATERFRONT BEAUTY = BEST ECONOMICS ***Please share this!***

HISTORY: SF WATERFRONT LAND-USE BATTLES

Over time, by tapering heights downward towards the waterfront, public vistas and San Francisco's hills/ beauty will be preserved for all---an economic asset that attracts 23 million visitors and $9 billion per year.

SAN FRANCISCO HAS THWARTED DARWINIAN MARKET FORCES, which threaten prime waterfront sites for obstructive development. Big money is spent to push projects by the few who benefit financially---developers, contractors, consultants, public relations firms, city staff, politicians, and groups that reap donations, fees, payments, and wages. Instead, citizens/ height limits/ codes have protected our Mediterranean village-like character for all.

SAN FRANCISCO'S WATERFRONT BATTLES led to protective tapering height limits, which preserve public vistas and a Mediterranean village-like beauty for everyone. Powerful special interests attempt to override codes---to gain extraordinary favors. Each code exemption is used to justify subsequent height increases----a never-ending ratcheting upward. Learning from history, we can better appreciate the waterfront's esthetic and economic value.

The Fontana Towers led to the 40-foot height limit on the waterfront.

The Fontana Towers battle stopped five other high-rises at Aquatic Park.

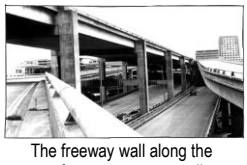
San Francisco's Freeway Revolt started a national movement.

The Embarcadero Freeway was stopped at Broadway---in mid-construction.

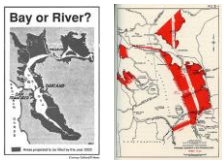
The Embarcadero Freeways demolition opened the waterfront.

Freeway plans wrapped around the entire waterfront and throughout the city.

WPA Freeway Plan, around northern waterfront---and over Columbus Ave.



The freeway wall along the waterfront was a near reality.



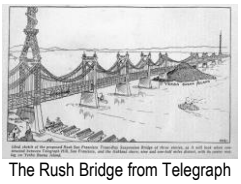
"Save The Bay" map and Reber Plan for bay infill.

Citizen activists and founders of "Save The Bay": Esther Gulick, Sylvia McLaughlin, Catherine Kerr.

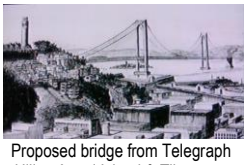
HISTORY TEACHES US that many design options exist for any site---like fully code-compliant alternatives or open space. After contentious debates, better designs often result.
FOUNDSF: The Fontana Towers and Waterfront Battle.
http://foundsf.org/index.php?title=Height_Limit_Revolt_Saves_Waterfront_Vistas
Residents of Russian Hill and Attorney Casper Weinberger (a Republican conservationist) stopped towers along the waterfront. A coalition fought for the waterfront 40-foot height limits. Later, height limits on Russian Hill were passed.

Bridge and large development proposed adjacent to Telegraph Hill---through North Beach.

Bridge and freeways proposed atop Telegraph Hill.

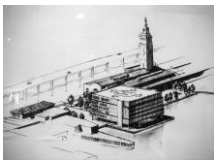


The Rush Bridge from Telegraph Hill had three stories of traffic lanes.



Proposed bridge from Telegraph Hill to Angel Island & Tiburon---stopped by Washington officials.

Russian Hill: Ten years after 40-foot height limit.

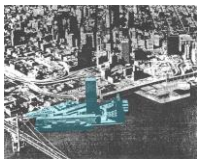


Ferry Building Project (1968) with helipad atop roof.

World Trade Center (1950) demolishes Ferry Building.

World Trade Center's terraced high-rises at waterfront.

Proposed 30-story skyscraper at waterfront.



U.S. Steel Building Complex---South of Ferry Building.

Embarcadero Crescent (1961): Ferry Building to Aquatic Park.

Embarcadero Crescent (1961): Bay development east of Telegraph Hill.

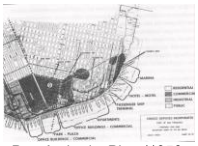
The 1963 Downtown Plan had two high-rises flanking the saved Ferry Building's tower.

Old Produce Market's tenants fought and were displaced by the Golden Gateway towers.

Instead of more Golden Gateway towers, activists fought for the low-rise Golden Gateway Commons.

ENVIRONMENTAL CAPITAL: A long-term economic measure includes incorporating "natural capital"---the value of such things as esthetics, nature, and generic diversity---into economic decision-making. From a long-range perspective, waterfront beauty has incalculable economic value---for regional drawing power and people's happiness quotient.

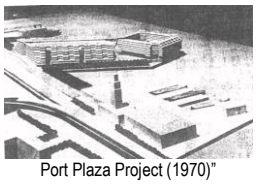
Russian Hill Towers (1958): Mies van der Rohe proposal with block-long parking garage.



Port Authority Plan (1959: Office buildings, hotel, commercial, terminal….

International Market Place (1968): Multiblock complex at foot of Telegraph Hill.

Ferry Building Plans (1968): Northern Waterfront Plan.



Port Plaza Project (1970)" Ferry Building and Pier 1.

Villamarina Project (1974): The piers and area around Aquatic Park developed.

Pei-Cobb-Fried Proposal (1980)" Office and commercial at Ferry Building and Pier 1.

Koll's Sailing Center (1980)" Piers at Bay Bridge---Hotel, restaurant, retail, marina….

SWL 330 Condo Tower (2006) built though Pier 30-32 cruise terminal cancelled.

Arena/ Condo Project (2014): Entertainment venue and condo towers around Pier 30-32---moved.

THE DEVELOPER-POLITICAL COMPLEX of financial interests works to heighten development, to escalate land values and to transfer public assets to private interests. Freeways and subways are regional escalators of real estate values by promoting well-heeled commuters. The Developer-Political Complex is a network of financial self-interests --- developers, realtors, contractors, consultants, public relations firms, politicians, city staff, nonprofits, and groups who receive donations, fees, payments, and wages. Citizens have rightfully fought for their assets.

> FOUNDSF: "The Freeway Revolt" **http://foundsf.org/index.php?title=The_Freeway_Revolt**
> **O**n November 2, 1956 the *San Francisco Chronicle* graciously published a map of the proposed and actual freeway routes through San Francisco even though its accompanying editorial was already chastising protestors: "The remarkable aspect of these protests and claims of injury is their tardiness. They concern projects that have for years been set forth in master plans, surveys, and expensive traffic studies. They have been ignored or overlooked by citizens and public official alike—until the time was at hand for concrete pouring and when revision had become either impossible or extremely costly. The evidence indicates that the citizenry never did know or had forgotten what freeways the planners had in mind for them."

WE ARE ON LIFE'S STAGE EVER SO BRIEFLY relative to the timeless beauty of the waterfront environment. It is the responsibility of each generation to protect natural assets for all.

Howard Wong, AIA

From:	Kathryn Hyde
To:	Press Office, Mayor (MYR); Severiano.Christian@sen.ca.gov; Raayan.Mohtashemi@sen.ca.gov
Cc:	Carroll, John (BOS); Chan, Connie (BOS); MelgarStaff (BOS); Board of Supervisors (BOS); Hsieh, Frances (BOS); Mandelman, Rafael (BOS); Walton, Shamann (BOS); Andrews, Michelle (BOS); radhika.gawde@sen.ca.gov
Subject:	Re: housing SF
Date:	Monday, December 1, 2025 6:51:15 PM

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Dear Supervisors,

The City Economist's report shows clearly that Lurie's plan will not work and will trigger the State to hijack San Francisco's housing decisions. This is because zoning changes don't produce new affordable housing.

- We do not have the infrastructure, police force, roads, parking and water to support this plan.
- Structures should be limited to 5 stories to preserve lighting and wind

- Much of the new construction is poorly designed - i,e, Haight and Stanyan

- We are only 7 x 7 square miles. SF is not like cities that have space
- Concerns about earthquakes
- There is space to build on vacant lots, Walgreens sites, 7/11 on Clment/9th Ave., etc.
- No buildings close to the shoreline
- We still have 2 months to replace the Mayor's plan with one that will work. Here's a real strategy to solve the City's affordable housing crisis.

I favor producing housing out of existing vacancies and empty office space as much as possible, instead of building new units. New construction uses massive amounts of cement, wood, and diesel construction equipment, releasing more greenhouse gas emissions.

The Mayor's plan would build more excess housing for the wealthy, create more homelessness, and is an environmentally destructive giveaway to rapacious Wall Street and corporate real estate speculators.

Thank you!

Kathryn Hyde
130 Frederick St SF 94117

From:	Dwyer, Debra (CPC)
To:	BOS Legislation, (BOS)
Cc:	Shum, Ryan (CPC); Gibson, Lisa (CPC); Chen, Lisa (CPC); Switzky, Joshua (CPC); Tanner, Rachael (CPC); Lew, Lisa (BOS); Carroll, John (BOS)
Subject:	Letter submitted 12/1 by Lozeau Drury law firm re Family Zoning Plan
Date:	Monday, December 1, 2025 3:27:42 PM
Importance:	High

Hello,

In the Land Use committee hearing today, a speaker indicated that a letter was submitted around 12:45 pm today from the law firm Lozeau Drury regarding the environmental review for the Family Zoning Plan, files 250700 and 250701.

Please forward a copy of this letter to Planning as soon as possible - to Planning staff on this email. We need to review it before the full board hearing tomorrow, 12/2.

Thank you very much for your attention to this matter.

Debra Dwyer

Debra Dwyer (she/her/hers)
Principal Environmental Planner
Environmental Planning Division
San Francisco Planning
49 South Van Ness Avenue, Suite 1400, San Francisco, CA 94103
Direct: 628.652.7576 | www.sfplanning.org
San Francisco Property Information Map

From:	Richard Drury
To:	Board of Supervisors (BOS); MandelmanStaff (BOS); ChanStaff (BOS); SherrillStaff; SauterStaff; MelgarStaff (BOS); ChenStaff; MahmoodStaff; DorseyStaff (BOS); FielderStaff; Waltonstaff (BOS); Carroll, John (BOS); FamilyZoningCEQA@sfgov.org
Subject:	CEQA comments for Family Zoning Plan (Board File Nos. 250966, 250700, 251071, 250701, 251073 and 250985)
Date:	Monday, December 1, 2025 12:44:54 PM
Attachments:	2025.12.01.SF Rezone BOS ComLtr-PDF w exhibits.pdf

This message is from outside the City email system. Do not open links or attachments from untrusted sources.

Dear Board of Supervisors and Land Use and Transportation Committee:
Attached please find the comments of Neighbors United SF concerning the Family Zoning Plan, (Board File Nos. 250966, 250700, 251071, 250701, 251073 and 250985).
Thank you for considering these comments. Please include these comments in the record for this matter.
Richard Drury

--
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Lozeau Drury LLP
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Oakland, CA 94612
(510) 836-4200
richard@lozeaudrury.com

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richard@lozeaudrury.com

BY E-MAIL

December 1, 2025

Board President Rafael Mandelman and
Honorable Supervisors
San Francisco Board of Supervisors
Attn: Angela Calvillo, Clerk of the Board
Land Use and Transportation Committee c/o Clerk John Carroll
1 Dr. Carlton B. Goodlett Place, Room 244
San Francisco, CA 94102
Board.of.Supervisors@sfgov.org
mandelmanstaff@sfgov.org
ChanStaff@sfgov.org
SherrillStaff@sfgov.org
SauterStaff@sfgov.org
MelgarStaff@sfgov.org
ChenStaff@sfgov.org
MahmoodStaff@sfgov.org
DorseyStaff@sfgov.org
FielderStaff@sfgov.org
waltonstaff@sfgov.org
John.Carroll@sfgov.org
Lisa Chen, sf.housing.choice@sfgov.org
Ryan Shum, CPC, FamilyZoningCEQA@sfgov.org

RE: Comment on CEQA Addendum for San Francisco "Family Zoning Plan."
Board of Supervisors December 2, 2025.
Board File Nos. 250966, 250700, 251071, 250701, 251073 and 250985

President Mandelman and Honorable Supervisors:

I am writing on behalf of Neighborhoods United SF, a consortium of San Francisco neighborhood and community groups representing thousands of San Francisco residents, concerning the so-called San Francisco "Family Zoning Plan" ("Rezone"). We request that the Board defer any decision on the Rezone until the City Planning Department prepares a Supplemental Environmental Impact Report ("SEIR"). CEQA review would force the City to consider feasible mitigation measures to reduce the Rezone's impacts, and also to consider feasible alternatives, such as placing the proposed 4,000 additional units in specific locations (such as Park Merced, Stonestown, Treasure Island, Hunters Point, etc.), rather than upzoning entire swaths of the city in hopes that the 4,000 units will be built somewhere within the upzoned areas.

I. INTRODUCTION

The Rezone will forever change the face of the City. It will allow new development to accommodate 54,000 new housing units in so-called "well-resourced" areas of the City.[1] While the City prepared an environmental impact report ("EIR") for its Housing Element in 2022 (2022 EIR), the proposed Rezone is vastly different from the zoning studied in the 2022 Housing Element and its associated 2022 EIR. Nevertheless, the Planning Department proposes to rely on the 2022 EIR.

A rezoning of this magnitude requires thorough environmental review under the California Environmental Quality Act ("CEQA") so that the City's residents and decision-makers can be aware of its impacts, can consider all feasible mitigation measures and alternatives, and can have a robust and open discussion prior to making irreversible changes to San Francisco's landscape for all time. The California Court of Appeal recently held that a supplemental EIR ("SEIR") is required for a general plan amendment that allows taller buildings than allowed by a prior plan (as here), and that the SEIR must analyze all of the increased impacts caused by the taller buildings. (*Save Our Access v. City of San Diego*, 2025 WL 2945714, 115 Cal.App.5th 388 (Cal. Ct. App. Oct. 17, 2025) (*Save Our Access II*); *Save Our Access v. City of San Diego*, 92 Cal.App.5th 819 (2023) (*Save Our Access I*).) Under the *Save Our Access* line of cases, an SEIR is clearly required for the Rezone since it allows vastly taller building heights, and includes different geographic areas than the 2022 Plan.

The Rezone will have myriad significant new impacts that were not analyzed in the 2022 EIR or included in the Housing Element.

- HISTORIC RESOURCES: The Rezone, unlike the Housing Element, will allow new, high-rise development in the historic northeast neighborhoods of North Beach and the Northern Waterfront, including Fisherman's Wharf– something not allowed or analyzed the 2022 EIR or Housing Element.
- HEIGHT LIMITS INCREASED: The Rezone, unlike the Housing Element, includes amendments to base zoning and base height limits, and creating new zoning for many areas. The Rezone will allow the construction of buildings up to 350-feet taller than anything analyzed in the 2022 EIR, resulting in new wind, aesthetic, biological and shadow impacts not analyzed in the 2022 EIR.

---

[1] While the Rezone purports to address racial disparities in the City by targeting "well-resourced" areas, the Rezone seems to focus on largely Asian "well-resourced" areas, such as the Sunset District, Richmond District, and Northeast, while leaving largely untouched predominantly Caucasian "well-resourced" area such as Pacific Heights, Marina and Seacliff. As such, the Rezone may have discriminatory impacts, much like the development of the Western Addition, or the City's historic bans on wood-framed buildings that targeted Chinese-owned businesses. (See, *Yick Wo v. Hopkins*, 118 U.S. 356, 6 S. Ct. 1064, 1065, 30 L. Ed. 220 (1886).) The City should analyze the potentially racially discriminatory impacts of the Rezone.

- HOUSING SUSTAINABILITY DISTRICT: The Rezone, unlike the Housing Element, establishes a housing sustainability district.
- WIND: The Rezone will create significant new wind impacts from vastly taller buildings, while at the same time the Rezone ordinance proposes to weaken the City's wind ordinance to eliminate the requirement for mandatory wind mitigation, and to redefine significant wind impacts from 1-hour to 9-hours – all of which will conspire to create significant new wind impacts far greater than anything analyzed or contemplated in the 2022 EIR.
- DISPLACEMENT OF RENT-CONTROLLED HOUSING: The Rezone will result in the displacement of rent-controlled tenants and legacy businesses, by replacing rent-controlled and existing affordable units with luxury, high-rise condos and allowing development in the areas within the Priority Equity Geographies Special Use District – something avoided in the 2022 Housing Element.
- AIR POLLUTION: The Rezone will create significant airborne cancer risks in newly identified APEZ zones (air pollutant exposure zones), and will result in criteria air pollution far above CEQA significance threshold set by the Bay Area Air District .
- SHADOW: The Rezone will create significant new shadow impacts due to much taller buildings.
- CONTAMINATED SITES: The Rezone will allow development on contaminated sites not analyzed in the 2022 EIR.
- TRAFFIC: The Rezone will create new significant air quality impacts from increased vehicle miles travelled (VMT), and from construction emissions.
- SEWAGE TREATMENT PLANT: The Rezone will allow development on the site of the North Point Wet Weather Sewage Treatment Facility, which will require either a replacement facility or vast amounts of infrastructure to transport sewage to other plants.
- NORTH BEACH SUD: The Rezone will have cumulative impacts with the recent repeal of the North Beach Special Use District, which removes protections for almost all historic resources in the North Beach area.
- GREAT HIGHWAY CLOSURE CUMULATIVE IMPACTS: The City has failed to analyze new changed circumstances, particularly the closure of the Great Highway, which will exacerbate significant traffic and public transit impacts on the Rezone, which adds thousands of new residential units to the Sunset and Richmond neighborhoods.

It is legally improper for the City to bypass CEQA review for the Rezone. Addenda are only allowed where '(2) Only **minor technical changes** or additions are necessary to make the EIR under consideration adequate under CEQA." (CEQA Guidelines §15164, subd. (a); *Save Our Heritage Organization v. City of San Diego*, 28

Cal. App. 5th 656, 664–65 (2018) (emphasis added). The Proposed Rezone in this case allows **increased height of up to 350-feet above those analyzed in the 2022 EIR**. (Addendum No. 1 to 2022 Housing Element Environmental Impact Report, ("Addendum") at p. 11). The 2022 EIR analyzed building heights of up to 300 feet for proposed buildings, which the Rezone allows building heights of up to 500 to 650 feet – 350 feet taller than anything analyzed in the 2022 EIR. (Addendum 11). These are not "minor technical changes," but rather major substantive changes with significant environmental impacts.

For these reasons, we ask the City to prepare a Supplement EIR to analyze the Rezone, and to consider feasible mitigation measures and alternative to reduce its myriad impacts.

II. PROJECT DESCRIPTION

The Rezone proposes to add 54,000 new housing units to San Francisco, above levels that would occur without rezoning. The City contends that the Rezone is necessary to meet state-mandated Regional Housing Needs Assessment (RHNA) goals of 36,200 additional housing units. The 2022 Housing Element provided for 50,000 new units of housing, so the Rezone allows for significantly more housing – 4,000 additional units. The Rezone moves the proposed housing to different areas of the city where it will have far greater impacts to historic resources, air quality, transportation, displacement and other resources.

We are commenting on the version of the Rezone that has been provided to the public. However, we are aware that the Rezone is in a state of flux, as new amendments are being proposed on an almost daily basis. The Rezone is a moving target, which makes meaningful public comment all but impossible. "An accurate, stable and finite project description is the sine qua non of an informative and legally adequate EIR." (*County of Inyo v. City of Los Angeles* (1977) 71 Cal.App.3d 185, 192.) "[A] curtailed or distorted project description," on the other hand, "may stultify the objectives of the reporting process. Only through an accurate view of the project may affected outsiders and public decision-makers balance the proposal's benefit against its environmental costs, consider mitigation measures, assess the advantage of terminating the proposal (i.e., the "no project" alternative) and weigh other alternatives in the balance." (*Id.* See also, CEQA section 15124.) The City has abjectly failed to provide the public with an accurate and stable project description that would allow meaningful comment. At the very least, the City should allow a 30-day public comment period between the first reading of the Rezone Ordinance at the Board of Supervisors, anticipated to occur on December 2, 2025 and the second reading. The Project description will not be stable until the December 2, 2025 vote. This will allow a 30-day period for the public to review and comment on the stable project description.

The Project description in the 2022 EIR simply does not accurately describe the Rezone project. As such, the City may not rely on the 2022 EIR, which describes a very different Project. Some courts have allowed agencies to rely on prior EIRs when the revised project has the same footprint or the same or reduced environmental impacts.

(*Sw. Reg'l Council of Carpenters v. City of Los Angeles* (2022) 76 Cal. App. 5th 1154). However, when, as here, the project's footprint is expanded, the project's height is increased, and/or the project's impacts are increased, a supplemental EIR is required. (*Save Our Access I and II*).

The City largely ignores or mischaracterizes the Rezone's environmental impacts. For example, the Addendum does not even mention the fact that the Rezone (unlike the 2022 Housing Element) will allow redevelopment in the northeast districts of Telegraph Hill, North Beach and the Northern Waterfront, including Fisherman's Wharf. The City also ignores the fact that it has already approved 71,772 new units of housing that have yet to be built. The City' RHNA goal is 82,069. Therefore, the City only needs another 10,297 units to meet its RHNA goal – not 36,200, or 54,000.[2] Nor does the City discuss the fact that the Rezone is likely to displace low-income residents from rent-controlled units, while constructing new market-rate units without rent-control. The Rezone does not require any affordable housing and allows rent-controlled units to be replaced with luxury housing. The net result is likely to be less affordable housing – not more. The City's own calculations show that the Rezone will abjectly fail to meet RHNA's affordable housing goals.

The City fails to accurately describe the Rezone project. The City calculates that the "realistic" projected build-out as a result of the Rezone will be 54,000 additional housing units – 4,000 more than analyzed in the 2022 EIR. However, the Rezone actually creates a capacity for an additional 800,000 housing units. Full build-out would more than double the population of the City. Even the City's own calculations estimate that the Rezone could result in a range of additional housing ranging from 64,000 units (soft sites method); 39,000 units (citywide capacity method); to 19,000 units (financial feasibility method). (SF Planning Dept., Family Zoning Plan Rezoning Capacity Calculations Fact Sheet). Since the City's own staff admits that these are all realistic scenarios, a CEQA document should be prepared to compare the environmental impacts of these feasible outcomes, as well as the full build-out scenario.

The Rezone is vastly different from the Housing Element analyzed in the 2022 EIR. Supplemental CEQA review is required to analyze the impacts created by these vast changes to the Housing Element. These major modifications are discussed in the attached letter from Certified Urban Planner, Deborah Holley. (Exhibit A). Ms. Holley provides a map showing that the Rezone adds massive amounts of new development to District 3 (North Beach, Fisherman's Warf), and District 8 (Mission/Noe Valley), none of which was even mentioned in the 2022 EIR.

- The 2025 Rezone adds 6,938 parcels and 12,150 units, that were not in the 2022 Housing Element.

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[2] Housing and Community Development barely accounted for the capacity created by the 4-plex and 6-plex legislation passed in 2023. Roughly 120,000 parcels are eligible, and even a fraction of those converting to 4–6 units would generate hundreds of thousands of potential homes.

- The Rezone increases height on 7,580 parcels and 10,009 units, above heights analyzed in the 2022 EIR.
- The Rezone increases density on 16,135 parcels, with 16,135 units currently on those parcels.
- The Rezone adds 30,653 parcels with 38,692 units that were not analyzed in the 2022 EIR – mostly in District 3 and District 8.
- The Rezone almost doubles the square footage of developable land, increasing the amount by 254,211,574 square feet.

The Rezone opens up thousands of rent-controlled units for high density, market rate development, virtually ensuring that thousands of low-income residents will be displaced to make way for luxury housing. The Rezone includes 3,481 two-unit rent-controlled parcels with 32,237 units, increases height on 4,345 rent-controlled parcels with 26,784 units, an increases density on 1,341 rent-controlled parcels with 20,691 units. While the Board of Supervisors is considering amendments to protect rent-controlled units with 3 or more units, this leaves about 20,564 two-unit rent-controlled units (10,282 parcels) with absolutely no protection from displacement and redevelopment.

None of these impacts were proposed, discussed or analyzed in the 2022 EIR, and must be analyzed and mitigated in a supplemental EIR.

III. LEGAL STANDARD.

A. CEQA Addendum (Pub. Res. Code section 21166).

The City Planning Department proposes to approve the Rezone based on an Addendum to the 2022 Housing Element EIR. This is entirely inappropriate since, as discussed above, the Rezone adds 30,653 parcels that were not analyzed in the 2022 EIR. The proposed Rezone is vastly different from the project analyzed in the 2022 EIR, and will have significant new environmental impacts that must be analyzed in a Supplemental EIR. (SEIR).

The court of appeal has stated, "The addendum is the other side of the coin from the supplement to an EIR. This section provides an interpretation with a label and an explanation of the kind of document that does not need additional public review." "It must be remembered that an addendum is prepared where '(2) **Only minor technical changes or additions are necessary to make the EIR under consideration adequate under CEQA; and (3) The changes to the EIR made by the addendum do not raise important new issues about the significant effects on the environment.**' (CEQA Guidelines §15164 (a); *Save Our Heritage Organization v. City of San Diego*, 28 Cal. App. 5th 656, 664–65 (2018) (emphasis added).) Even a 15-foot increase in height for a residential building (increasing height from 75 feet to 90 feet) requires a supplemental EIR, not an addendum. "Accordingly, the appropriate protocol is to have the county draft and recirculate a focused supplemental EIR, limited solely to analysis of height and profile-related impacts of the medical clinic, as built and where built to a height of ninety feet." *Ventura Foothills Neighbors v. Cty. of Ventura*, 232 Cal. App. 4th 429, 434, (2014).

Section 15164(a) of the CEQA Guidelines states that "the lead agency or a responsible agency shall prepare an addendum to a previously certified EIR if some changes or additions are necessary, but none of the conditions described in Section 15162 calling for preparation of a subsequent EIR have occurred." Pursuant to Section 15162(a) of the State CEQA Guidelines, a subsequent EIR or Negative Declaration is only required when:

(1) Substantial changes are proposed in the project which will require major revisions of the previous EIR or negative declaration due to the involvement of new significant environmental effects or a substantial increase in the severity of previously identified significant effects;
(2) Substantial changes occur with respect to the circumstances under which the project is undertaken which will require major revisions of the previous EIR or Negative Declaration due to the involvement of new significant environmental effects or a substantial increase in the severity of previously identified significant effects; or
(3) New information of substantial importance, which was not known and could not have been known with the exercise of reasonable diligence at the time the previous EIR was certified as complete or the negative declaration was adopted, shows any of the following:

    (A) The project will have one or more significant effects not discussed in the previous EIR or negative declaration;
    (B) Significant effects previously examined will be substantially more severe than shown in the previous EIR;
    (C) Mitigation measures or alternatives previously found not to be feasible would, in fact, be feasible and would substantially reduce one or more significant effects of the project, but the project proponents decline to adopt the mitigation measure or alternative; or
    (D) Mitigation measures or alternatives which are considerably different from those analyzed in the previous EIR would substantially reduce one or more significant effects on the environment, but the project proponents decline to adopt the mitigation measure or alternative.

The "fair argument" standard applies to analysis under Section 21166 when the proposed project is outside the scope of the prior EIR. As the Court of Appeal recently held:

> We similarly apply the **fair argument** test to review an agency's determination whether to prepare a **new** or **supplemental EIR** in a later **new project** following certification of a **program EIR**. [Citation.] The Legislature's use of similar language in sections 21151 and 21094 indicate "it intended to establish a similar **low threshold** for an agency's determination **whether to prepare a new EIR** on a later new project that follows certification of a program or plan EIR. In other words, **if** there is **substantial evidence** in the record that the **later project may arguably have** a **significant adverse effect** on the environment

> which was **not examined in the prior program EIR, doubts must be resolved in favor of environmental review** and the agency **must prepare** a **new tiered EIR, notwithstanding** the existence of **contrary evidence**." [Citation.]
>
> (*Save Our Access I*, 92 Cal.App.5th at 860 [citing *Sierra Club v. County of Sonoma* (1992) 6 Cal.App.4th 1307, 1320–1321] [emph. added].)

As the court held in *Save Our Access I*, a project that allows development of a greater height than analyzed in a prior programmatic EIR, is outside the scope of the prior EIR. (*Save Our Access I*, 92 Cal.App.5th at 845.) Therefore, the "fair argument" standard applies to subsequent projects that exceed the height limits in the program EIR. (*Id*. at 860). A project that includes geographic areas outside the scope of the prior program EIR is also subject to the fair argument standard. (*Sierra Club v. County of Sonoma* (1992) 6 Cal.App.4th 1307, 1320–1321). A subsequent project is not within the scope of a previous Program EIR if it is inconsistent with the plan addressed in the Program EIR. (14 CCR § 15168(c)(2); *see* PRC § 21094(b).) "**If the subsequent project is not consistent with the program or plan, it is treated as a new project and must be fully analyzed in a project—or another tiered EIR if it may have a significant effect on the environment.**" (*Friends of College of San Mateo Gardens v. San Mateo County Community College Dist*. (2016) 1 Cal.5th 937, 960 [emph. added]; *Save Our Access I,* 92 Cal.App.5th at 845.)

Since the Rezone allows vast swaths of development outside of geographic areas analyzed in the 2022 EIR, allows building heights of up to 350 taller than analyzed in the 2022 EIR, and allows development of historic resources and contaminated sites not analyzed in the 2022 EIR, the "fair argument" standard applies to the City's use of an Addendum. Under the fair argument standard, an EIR is required if there is a "fair argument" based on substantial evidence that the project may have any significant adverse environmental impacts. Pub. Res. Code § 21080(d).

B. SB 131.

The Addendum briefly argues that the recently passed SB 131 applies to some, but not all, of the Rezone. (Addendum 8). SB 131 exempts from CEQA review "a rezoning that implements the schedule of actions contained in an approved housing element pursuant to subdivision (c) of section 65583 of the Government Code." The City argues that this exemption applies to all but 3.4 percent of the parcels in the Rezone, which are excluded from SB 131 as "natural and protected lands." (Addendum 8).

The City misinterprets SB 131. First, the Rezone does not implement the approved 2022 Housing Element. In fact, the Rezone is flatly inconsistent with the 2022 Housing Element. Most obviously, the 2022 Housing Element included almost no new development in the historic Northeast sector of the city (800 units), while the Rezone allows 5,900 units in that area. (Addendum 19). The 2022 Housing Element provided for negative 1,800 units in Downtown, while the Rezone placed 500 units in the Downtown area. (Id.). The Rezone placed 2,800 additional units in the Western Addition. Also, the

Rezone allows construction of buildings up to 350 taller than allowed by the Housing Element. As discussed above, the Rezone adds 30,653 parcels that were not analyzed in the 2022 EIR. Since the Rezone is inconsistent with the 2022 Housing Element, SB 131 does not apply at all.

Second, SB 131 provides that it does not apply to "natural and protected lands," and the Rezone admittedly includes numerous parcels that meet this definition. (Pub. Res. Code § 21080.085).

> (a) This division does not apply to a rezoning that implements the schedule of actions contained in an approved housing element pursuant to subdivision (c) of Section 65583 of the Government Code.
> (b) (1) Subdivision (a) does not apply to either of the following:
> (B) A rezoning that would allow for construction to occur within the boundaries of any natural and protected lands as defined pursuant to Section 21067.5.
> (2) (A) (i) Subdivision (a) applies to a rezoning that contains within its boundaries any natural and protected lands as defined pursuant to Section 21067.5 if those natural and protected lands are excluded from the rezoning.
> (ii) The definition of "natural and protected lands" described in clause (i) does not include the lands described in subdivision (p) of Section 21067.5.
> (B) The rezoning of any parcel or portions of a parcel that is excluded from a rezoning under this paragraph shall be a separate project that is subject to this division.
>
> Public Resources Code §21067.5 defines "natural and protected land" as follows:
>
> "Natural and protected lands" means sites located within any of the following locations:
> (a) The state park system, as described in Article 1 (commencing with Section 5001) of Chapter 1 of Division 5.
> …
> (i) A hazardous waste site that is listed pursuant to Section 65962.5 of the Government Code or a hazardous waste site designated by the Department of Toxic Substances Control pursuant to Section 25356 of the Health and Safety Code, unless either of the following apply:
> (1) The site is an underground storage tank site that received a uniform closure letter issued pursuant to subdivision (g) of Section 25296.10 of the Health and Safety Code based on closure criteria established by the State Water Resources Control Board for the use proposed by the project. This paragraph does not alter or change the conditions to remove a site from the list of hazardous waste sites listed pursuant to Section 65962.5 of the Government Code.
> (2) The State Department of Public Health, State Water Resources Control Board, Department of Toxic Substances Control, or a local agency making a determination pursuant to subdivision (c) of Section 25296.10 of the Health and Safety Code has otherwise determined that the site is suitable for the use proposed by the project.

> (j) Within a regulatory floodway as determined by the Federal Emergency Management Agency in any official maps published by the Federal Emergency Management Agency, unless the development has received a no-rise certification in accordance with Section 60.3(d)(3) of Title 44 of the Code of Federal Regulations.
> …
> (m) An environmentally sensitive area within the coastal zone, as defined in Section 30107.5…

The Addendum admits that at least 3.4 percent of the Rezone area are "natural and protected lands," within the meaning of SB 131. The Upzoning Plan includes several Cortese List contaminated sites. Several of these sites are "active," meaning that they have not be remediated. We have retained a hazardous materials expert to identify all of the Cortese List sites covered by the Upzoning. But we have already identified at least nine active Cortese List sites in our informal review, including 1100 JUNIPERO SERRA BLVD; and 300 W PORTAL AVE. The Rezone also includes parcels in listed flood zones. The Rezone also includes environmentally sensitive areas in the Coastal zone. These areas are expressly excluded from SB 131 and render the entire Rezone project ineligible for an SB 131 exemption.[3]

IV. CEQA ANALYSIS.

A. HISTORIC RESOURCES.

The Rezone will have significant historic resources impacts that were not analyzed in the 2022 EIR. The 2022 EIR found significant and unmitigated impacts to historic resources, (Addendum 60), but the Rezone's impacts are far greater and also significant and unmitigated. (Addendum 61). Since "significant effects previously examined will be substantially more severe than shown in the previous EIR," a Supplemental EIR is required. (CEQA Guidelines 15162(a)(1)(3)(B).)

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[3] The Addendum suggests that it can review the Rezone using a hybrid approach – reviewing the natural and protected lands under CEQA section 21166, and the remainder of the Project under SB 131. However, CEQA prohibits such a schizophrenic analysis. Under CEQA, the agency must review the "whole of the action" in a single document. A "project" is "the whole of an action" directly undertaken, supported, or authorized by a public agency "which may cause either a direct physical change in the environment, or a reasonably foreseeable ***indirect*** physical change in the environment." (PRC § 21065; CEQA Guidelines, 14 CCR § 15378(a).) A public agency is not permitted to subdivide a single project into smaller individual subprojects in order to avoid the responsibility of considering the environmental impact of the project as a whole. "The requirements of CEQA, 'cannot be avoided by chopping up proposed projects into bite-size pieces which, individually considered, might be found to have no significant effect on the environment or to be only ministerial.' [Citation.]" (*Topanga Beach Renters Assn.* v. *Department of General Services* (1976) 58 Cal.App.3d 188, 195-196 [129 Cal.Rptr. 739].)

We submit herewith the comments of Architectural Historian Bridget Maley, former President of the San Francisco Landmarks Advisory Board. (Exhibit B). She states:

> The Rezone would result in a myriad of significant new impacts that were not analyzed in the 2022 EIR or included in the Housing Element, not the least of which are impacts to historic resources. The Rezone will have significant historic resources impacts that were not analyzed in the 2022 EIR. The 2022 EIR found significant and unmitigated impacts to historic resources, but the Rezone's impacts are far greater, with significant and unmitigated impacts. Since "significant effects previously examined will be substantially more severe than shown in the previous EIR," a Supplemental EIR is required. (CEQA Guidelines 15162(a)(1)(3)(B).)
>
> The Rezone allows high-rise development on, near, or within areas that contain historic resources. Many of these areas were not included for development in the 2022 Housing Element, and the impacts of this potential development on historic resources was not analyzed in the 2022 EIR.
>
> Further, the Rezone includes the following language related to Bonuses for "Historic Preservation." However, these bonuses, as shown below, encourage height increases, facadism, and other over-scaled additions that would result in diminished historic fabric and result in unintended impacts to historic resources. Additionally, this proposed legislation added at the last minute in the September 11, 2025 version of the legislation, and has not been evaluated in the Addendum or in a SEIR.
>
> (Maley at 2-3).

Maley goes on to discuss provisions of the Rezone that encourage development of historic buildings. She states, "This late addition to the legislation has the great potential to cause impacts to historic resources, instead of preserving them, as it would allow large sections of historic buildings to be demolished and over scaled additions and height increases to be implemented as bonuses. For the reasons listed above, it is my professional opinion that the Rezone, if approved, would have potentially significant environmental impacts that must be analyzed and mitigated under the California Environmental Quality Act ("CEQA") through a full recirculated SEIR." (Id. at 4).

The 2022 EIR assumed that historic buildings (Category A resources) would not be redeveloped for housing. (2022 EIR, App. C, pp. 10, 17). The 2022 EIR stated, "The department's housing growth projection factored in the locations of known historic districts in San Francisco and assumed that future development would primarily occur outside those districts." (2022 EIR p. 4.2-82). The HE EIR conceded that its "analysis cannot anticipate the exact manner in which future construction may be designed or whether such projects will propose altering or demolishing historic resources." (2022 EIR p. 4.2-85.) The 2022 EIR stated:

> The representative pattern of growth depicted in the department's projection of future housing units under the Housing Element 2022 Update takes into account

> the presence of individual built-environment historic resources and historic districts identified as of 2021 (including resources designated or found eligible for listing in local, state, and federal historic resource registers). Specifically, the projection assumes future housing construction would be less likely to occur on parcels that currently contain Category A resources (i.e., properties that are already known to qualify as historic resources)... This assumption reflects that Category A resource status would act as a development constraint for future housing development construction. Additionally, the planning department did not increase height limits in historic districts identified in [the Planning Code]. (2022 EIR, App. C, pp. 10, 17.)

However, the Rezone now identifies numerous historic resources for upzoning for residential development, contrary to the analysis in the 2022 EIR.

The 2022 EIR concluded that any impacts to historic resources would be significant even after mitigation. By increasing impacts to historic resource, the 2025 Rezone will have "significant effects previously examined will be substantially more severe than shown in the previous EIR," and a Supplemental EIR is required. (CEQA Guidelines 15162(a)(1)(3)(B).) The 2022 EIR concluded that even with the implementation of mitigation, impacts to "project-level and cumulative: built-environment historic resources" would be significant and unmitigated. (2022 EIR p. S-4.) "Because demolition of built-environment historic resources or alteration in an adverse manner could still occur, the impact would be significant and unavoidable with mitigation." (2022 EIR, p. 4.2-100.)

In *Communities for a Better Environ. v. Calif. Resources Agency* (2002) 103 Cal.App.4th 98 at 122-125 (*CBE v. CRA*), the court held that when a "first tier" EIR admits a significant, unavoidable environmental impact, a lead agency must prepare second tier EIRs for later projects to ensure that those unmitigated impacts are "mitigated or avoided." (Id.) The court reasoned that the unmitigated impacts were not "adequately addressed" in the first tier EIR since they were not "mitigated or avoided." (Id.) Thus, significant effects disclosed in first tier EIRs will trigger second tier EIRs unless such effects have been "adequately addressed," in a way that ensures the effects will be "mitigated or avoided." (Id.) Such a second tier EIR is required even if the impact still cannot be fully mitigated and a statement of overriding considerations will be required. The court explained, "The requirement of a statement of overriding considerations is central to CEQA's role as a public accountability statute; it requires public officials, in approving environmentally detrimental projects, to justify their decisions based on counterbalancing social, economic or other benefits, and to point to substantial evidence in support." (Id. at 124-125.) Since the 2022 EIR determined that impacts to historic resources would be significant and unmitigated, supplemental CEQA review is required for the 2025 Rezone, which increases impacts to historic resources.

The Rezone allows high-rise development in the Northeast Sector of the City, including in the historic district of North Beach. These areas were not included for development in the 2022 Housing Element, and the impacts of this development on historic resources was not analyzed in the 2022 EIR. By moving over 5000 units of new housing to this area, the Rezone exacerbates the impact on historic resources. Since this

is “one or more significant effects not discussed in the previous EIR,” (CEQA Guidelines 15162(a)(3)(A)), a supplemental EIR is required to analyze and mitigate this impact. Since this impact is beyond the scope of the 2022 EIR, it is subject to the fair argument standard.

The Housing Element EIR Addendum fails to analyze impacts of additional height and density increases, as well as changes in zoning use districts, on designated historic resources or historic districts or areas with known concentrations of “A” rated historic resources, but not yet designated as historic districts. Bridget Maley’s letter includes a listing of historic resources adversely affected by the Rezone. Impacts to these historic resources were not analyzed in the 2022 EIR and must be analyzed in a Supplemental EIR. That list included herein by reference. It includes, but is not limited to:

- Fully documented North Beach National Register Historic District submitted to the State Historic Preservation Office and awaiting hearing by the State Historical Resource Commission was not included in the 2022 Housing Element or analyzed in the 2022 EIR .The Rezone could have significant impacts to this identified historic district, including heights rezoned from 40 feet to 50 feet in block Block 0076.
- Designated Northeast Waterfront Article 10 Historic District.
- Eligible Washington Square Historic District, an eligible California Register Historic District. This area was not included in the 2022 Housing Element or analyzed in the 2022 EIR.
- Eligible Upper Grant Avenue Historic District, an eligible California Register Historic District. This area was not included in the 2022 Housing Element or analyzed in the 2022 EIR .
- Designated Otis Elevator Company National Register No. 99001265 (1 Beach Street; Parcel 0018/001).
- Designated Grabhorn Press Building National Register No. 97000349 (1335 Sutter Street; Parcel 0690/012A).
- Designated Thomas Payne House National Register No. 80000847 (1409 Sutter Street; Parcel 0689/025). This parcel is rezoned from its existing height limit of 130 feet to 500 feet.
- Designated Washington Square Article 10 Landmark No. 226 (1651 Stockton Street and Filbert Street; 0102/022001) . The parcels on the northern edge of Washington Square are now within the Rezone but were not included in the 2022 Housing Element or analyzed in the 2022 EIR . This could result in significant impacts to this park.
- Temple Sherith Israel National Register #10000114 (2266 California St., Parcel 0637/011).

- Designated Cable Car National Register Historic District No. 66000233. The Cable Car lines located within areas being upzoned and/or density decontrolled by the Upzone Plan could be significantly impacted.
- Designated Grace Cathedral Article 10 Landmark No. 170 (1100 California Street; Parcel 0246/001). This parcel and area of Nob Hill are now within the Rezone but were not included in the 2022 Housing Element or analyzed in the EIR.
- Designated Old Flood Mansion, Pacific Union Club, both Article 10 Landmark No. 64 and National Register No. 66000230 (1000 California Street; Parcel 0245/001).
- Historic Category "A" rated buildings across the city would be impacted by the Rezone as it affords no protection for these previously identified but not designated historic resources. The City of San Francisco Planning Department has previously required full Historic Resource Evaluations for projects involving Category "A" rated buildings. This policy change was not included in the 2022 Housing Element or analyzed in the 2022 EIR.
- Casebolt House Article 10 Landmark No 51 (2727 Pierce Street, Parcel 0560/005). The Rezone includes this parcel, which was not included in the 2022 Housing Element or analyzed in the 2022 EIR.
- Spreckels Residence Article 10 Landmark No. 197 (2080 Washington Street, Parcel 0601/005. The Rezone includes this parcel, which was not included in the 2022 Housing Element or analyzed in the EIR.
- Haas-Lilienthal House Article 10 Landmark No. 69 and National Register No 730000438 (2007 Franklin St. 0600/002). The Rezone includes this parcel, which was not included in the 2022 Housing Element or analyzed in the EIR.
- Sacred Heart Parish Complex Article 10 Landmark No.316 and National Register 10000112 (660 Oak Street, Parcel 0828/012; 735 Fell Street, Parcel 0828/022A; 554 Filmore Street, Parcel 0828/22; and 546-548 Filmore Street, Parcel 0828/21). The Rezone includes these parcels, which were not included in the 2022 Housing Element or analyzed in the EIR.
- Many other historic buildings listed in letter of Bridget Maley.

B. HEIGHT AND RELATED IMPACTS.

The Rezone will allow construction of buildings up to 350-feet taller than analyzed in the 2022 EIR. The 2022 EIR analyzed building height ranging from 55 feet to 300 feet high. (Addendum 11). The Rezone allows building heights up to 500 feet high, and up to 650 feet high in two areas. (Addendum 11). These taller buildings are beyond the scope of the 2022 EIR, triggering the fair argument standard of review, as in the *Save Our Access* cases, discussed above. As the court of appeal held in *Save Our Access II*, supplemental CEQA review is required to analyze all of the impacts stemming from the greater building heights allowed by the Rezone.

1. Biological Impacts.

The Addendum admits that taller buildings may have biological impacts by obstructing flight paths of birds and impacting movement of special status species. (Addendum 48-49). The 2022 EIR found biological impacts to be less than significant. Since the Rezone will have significant biological impacts, the project will have "one or more significant effects not discussed in the previous EIR," (CEQA Guidelines 15162(a)(3)(A),) and a supplemental EIR is required.

The 2022 EIR did not analyze biological impacts since it found the impact to be less than significant. (2022 EIR, p. 4.1-1.) Since the EIR found biological impacts to be less than significant, it imposed no mitigation measures. (2022 EIR, p. 4.1-149.) Since biological impacts were not examined as significant effects in the 2022 EIR, CEQA review is now mandated because the project will have one or more significant effects not discussed in the previous EIR or negative declaration. (CEQA Guildelines 15163(a)(3)(A)).

Expert wildlife biologist Dr. Smallwood, Ph.D., concludes that the 2025 Rezone will have significant biological impacts not analyzed in the 2022 EIR. (Exhibit C). Dr. Smallwood concludes that by adding 4,000 additional residential units, changing the spatial distribution of the buildings, and increasing building heights, that the Rezone will have greater impacts on birds than the 2022 Plan. In particular, he concludes that the Rezone will have greater impacts on bird-window collisions, and that these impacts will not be adequately mitigated by the City's bird-safe window requirements. (Smallwood at 2-3). Dr. Smallwood states, "the additional 4,000 residential units could result in very large numbers of collision fatalities despite implementation of the City's Standards for Bird-Safe Buildings." (Id. at 3).

Dr. Smallwood notes that San Francisco includes areas in the Pacific Flyway and areas that are rich in biological diversity. He states, "San Francisco is situated within the Pacific Flyway, which is one of the most intensely used bird migration pathways in the world." (Id. at 13). He states that "there are 147 special-status species of wildlife documented near enough to the project site to warrant a closer look at their occurrence likelihoods for the purpose of predicting potential project impacts." (Id.at 3). Dr. Smallwood concludes that the 2025 Rezone will result in 7,095 additional bird fatalities each year compared to the 2022 Plan, to a 95% confidence level. (Id. at 12). Dr. Smallwood concludes:

> Nearly all predicted deaths would be of birds protected under the Migratory Bird Treaty Act and under the California Migratory Bird Protection Act, thus causing significant impacts. Given the predicted level of bird-window collision mortality, it is my opinion that the proposed project would result in potentially significant adverse biological impacts, including the unmitigated take of aerial habitats of birds, bats and other volant wildlife. Not only would the project take habitat of rare and sensitive species of birds, but it would transform the building's airspace into a lethal collision trap to birds. (Id. at 13).

Dr. Smallwood concludes that CEQA review is required to analyze patterns of bird movement through the City and to propose feasible mitigation measures and alternatives to avoid impacts. (Id. at 17).

2. Wind.

The 2022 EIR concluded that the Housing Element would have significant and unmitigated wind impacts. (Addendum 99). The 2022 EIR did not analyze the impacts of the taller buildings allowed in the 2025 Rezone. The 2022 EIR assumed that projects would "stay within existing height limits." (2022 EIR, App. C, p. 17, 3.)

The Addendum admits that the Rezone will have significant unmitigated wind impacts. (Addendum 108). It concluded that buildings over 85-feet tall would have significant wind impacts. (Addendum 104). The Rezone will add taller buildings over 85-feet to more areas of the City, resulting in much greater wind impacts. Since "significant effects previously examined will be substantially more severe than shown in the previous EIR," (CEQA Guidelines 15162(a)(3)(B)), a supplemental EIR is required.

The Rezone allows buildings of up to 650-feet tall in certain areas. It allows increased heights along Market Street between Castro and Van Ness. Up to 160 feet. (Addendum 100). The Rezone allows 85-feet heights along Geary, and up to 300 feet at Geary and Masonic. (Addendum 101). The height difference between the rezoned blocks and the surrounding blocks with low heights would result in wind speeds that would likely exceed the hazard criteria. (Addendum 102).

The 2022 EIR stated, "Wind impacts are generally caused by large building masses that are substantially taller than their surroundings." (2022 EIR, p. 4.7-2.) The 2022 EIR states, "All projects greater than 85 feet In height would require a screening-level assessment conducted by a qualified wind expert in consultation with the department to determine their potential to result in a new wind hazard exceedance or aggravate an existing pedestrian-level wind hazard exceedance defined as the one-hour wind hazard criterion with a 26 mph equivalent wind speed." (2022 EIR, p. 4.7-11.) Since the Rezone will allow much taller buildings, well over 85-feet tall and up to 650-feet tall, it will have significant wind impacts under the standards set forth in the 2022 EIR, and an SEIR is required to analyze and mitigate these impacts.

The Rezone includes a change to the City's wind ordinance that requires CEQA review for buildings over 85 feet. The Rezone proposes to change the hazard criterion such that proposed development must not create any net new exceedance of 26 MPH wind speed for nine hours or more in a year, rather than one hour. (Addendum 104). In other words, after the Rezone, a building may cause hazardous wind conditions for a full workday, which is not currently allowed. The Rezone also eliminates an existing code requirement for "landscaping and/or wind baffling measure shall be installed on the windward side .. of the areas of concern.:" (Addendum 109).

By allowing vastly greater building heights, and eliminating previously existing mitigation standards and mitigation measures, the Rezone will have much greater wind

impacts that were never analyzed in the 2022 EIR. A supplemental EIR is required to analyze these wind impacts because "significant effects previously examined will be substantially more severe than shown in the previous EIR," (CEQA Guidelines section 15162(a)(3)(B)), and "Mitigation measures or alternatives which are considerably different from those analyzed in the previous EIR would substantially reduce one or more significant effects on the environment, but the project proponents decline to adopt the mitigation measure or alternative." (CEQA Guidelines section 15162(a)(3)(D)).

3. Shadow.

The vastly taller buildings allowed by the Rezone will have significant shadow impacts exceeding the City's CEQA significance thresholds. The 2022 Housing Element had significant unmitigated shadow impacts on Duboce Park, Larsen Playgrond, and Laurel Hill Playground.(Addendum 110-111). The Rezone creates new significant unmitigated shadow impacts on public parks including but not limited to, Noe Valley Town Square and Helen Wills Park, (Addendum 111, 113, 119) and on other parks and open spaces in areas added by the Rezone to the Northeast District including Washington Square, Joe DiMaggio Playground, and Levi Plazza Park. A supplemental EIR is required to analyze these impacts because "significant effects previously examined will be substantially more severe than shown in the previous EIR," (CEQA Guidelines section 15162(a)(3)(B))

We submit herewith the analysis of shadow expert Adam Noble of the consulting firm FastCast. (Exhibit D). Mr. Noble concludes that the Rezone will result in net new shadow impacts on Joe DiMaggio Playground not analyzed in the 2022 EIR. This is a zero-tolerance park, not allowed to have any additional shadow under CEQA and Measure M (Planning Code Section 295). Mr. Noble's analysis shows that on certain periods of the year and times of day, the Rezone will more than double the amount of shadow on Joe DiMaggio Park.

The City contends that a project that adds new shadow to sidewalks or a publicly accessible open space (whether subject to Section 295 or not) does not necessarily result in a significant impact under CEQA. The shadow impact analysis described in the city's Initial Study CEQA Checklist examines whether a project would "***create new shadow that substantially and adversely affects the use and enjoyment of publicly accessible open spaces***".

Under planning code section 295 and the joint Planning Commission/Recreation and Park Commission criterion, the impact of any amount of shadow cast by a project on public parks, open spaces, or recreational facilities under the jurisdiction of SFRPD would be considered "significant" if it would affect a facility with an established quantitative limit.

Joe DiMaggio Playground has an established quantitative limit of zero, and as detailed below, the proposed rezoning would have a net increase in shadow cast on the playground, and would therefore, result in a significant impact.

In assessing impacts per the City's CEQA significance criterion, the environmental review requires evaluation of quantitative and qualitative factors but requires ***use and enjoyment of the park or public space to be substantially and adversely affected for the impact to be "significant."*** Therefore, the City contends that in certain situations, new shadow effects on an open space might not be a significant environmental impact under CEQA but could be found to be significant under planning code section 295. (Housing Element EIR p 4.8-17)[4]

Because Joe DiMaggio playground is heavily used throughout all periods of the day throughout the year by residents from the neighborhood and nearby neighborhoods, as well as schools for P.E. classes, the additional shadow would adversely and substantially impact the use and enjoyment of the park.

As detailed in Mr. Noble's analysis, this would be particularly true for fall periods when shadow impacts would be the most significant and lower temperatures create a greater need for sunlight to be able to enjoy the park.

C. DISPLACEMENT.

The Addendum admits that the Rezone will result in displacement of low-income residents, small businesses, and legacy businesses. (Addendum 37-38). The Addendum states, "new market-rate housing development may contribute to indirect displacement of lower-income communities in San Francisco." (Addendum 37). It continues, "there could be a connection between market rate housing development and displacement." (Addendum 38). By allowing more market rate housing in the Rezone than in the 2022

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[4] Commenter disputes the City's shadow impacts methodology because it conflicts with well-established court of appeal precedent. Where a local or regional policy of general applicability, such as an ordinance, is adopted in order to avoid or mitigate environmental effects, a conflict with that policy in itself indicates a potentially significant impact on the environment. (*Pocket Protectors v. Sacramento* (2005) 124 Cal.App.4th 903.) Indeed, any inconsistencies between a proposed project and applicable plans must be discussed in an EIR. (14 CCR § 15125(d); *City of Long Beach v. Los Angeles Unif. School Dist.* (2009) 176 Cal. App. 4th 889, 918*; Friends of the Eel River v. Sonoma County Water* Agency (2003) 108 Cal. App. 4th 859, 874 (EIR inadequate when Lead Agency failed to identify relationship of project to relevant local plans).) A Project's inconsistencies with local plans and policies constitute significant impacts under CEQA. (*Endangered Habitats League, Inc. v. County of Orange* (2005) 131 Cal.App.4th 777, 783-4; *Georgetown Preservation Society v. County of El Dorado* (2018) 30 Cal.App.5th 358.) Since the Rezone Project has significant impacts under Prop M (Section 295), it also has significant impacts under CEQA. However, because the Rezone Project has significant shadow impacts even under the City's improperly narrow interpretation of the law, the issue is moot.

Housing Element, this displacement impact will be exacerbated. According to an economic analysis prepared by the San Francisco Office of the Controller, as a result of Rezone 500 to 1,000 additional units would be demolished over 20 years. Many of these units will be rent-controlled (pre-1979) units since these properties will have the lowest land value. This is very different than the 2022 Housing Element, which avoided Priority Equity Geographies (PEGs), where lower income residents live. By contrast, the Rezone includes large PEG areas, where displacement is inevitable.

While the Supervisors are considering measures to provide some protection for rent-controlled properties with 3 or more units, this does nothing to protect the thousands of duplex rent-controlled properties found throughout the Richmond and Sunset Districts and elsewhere in the City. Ms. Holley calculates that the Rezone will affect 3,838 2-unit rent-controlled parcels with 7,676 rent-controlled units. Holley states (Exhibit A):

> under the rezoning, there are a significant number of two-unit rent-controlled buildings on parcels with an existing height limit of 40 feet that would be rezoned to allow heights of 50', 65' and 85', and would no longer require setbacks, creating greater incentives and likelihood that they would be redeveloped under the proposed rezoning.

Also, the Rezone allows increased development in North Beach and the Western Addition (Addendum 19), which include high levels of rent-controlled units and Priority Equity Geographies, which were excluded from development in the 2022 Housing Element. San Francisco Planning Code states that "The Priority Equity Geographies SUD is comprised of areas or neighborhoods with a higher density of vulnerable populations" and that the 2022 Update of the Housing Element of the General Plan ((2022 Housing Element) identifies them as "areas…where zoning changes must be tailored to serve the specific needs of the communities that live there; and where programs that stabilize communities and meet community needs need to be prioritized."

The Rezone shifts 5,100 units of housing to the Northeast District, (Addendum 19) which is home to the highest percentage of rent-controlled units in the City. The Rezone adds 939 parcels in PEG areas, with 2,321 units, including 70 two-unit rent-controlled buildings with 140 units.

Urban Planner Deborah Holley states, "The inclusion of parcels in the Priority Equity Geographies SUD and the associated displacement impacts need to be identified and assessed in a supplemental EIR."

Allowing this development and displacement in the Priority Equity Geographies SUD is flatly inconsistent with the 2022 EIR and the 2022 Plan since the stated purpose of the 2022 Plan was to focus development on "well-resourced areas" and away from Priority Equity Geographies. The 2025 Rezone does the exact opposite of the stated goal of the 2022 Plan, which is an obvious inconsistency requiring supplemental CEQA review.

Ms. Holley also points out that the Rezone for the first time adds Laguna Honda Hospital. Redevelopment of this parcel would result in massive displacement. Ms. Holley

states, "The 62-acre Laguna Honda hospital and rehabilitation center located 375 Laguna Honda Boulevard was added to the rezoning plan, and if redeveloped would result in significant displacement impacts for the long-term nursing home residents. Laguna Honda has 769 beds and offers short-term rehab and long-term nursing care…The FEIR did not address the impacts of redevelopment of Laguna Honda with housing because this site was not designated for rezoning. The rezoning program changes the allowable height limit on this site from 40' which covers the majority of the 62 acres under existing height limits, to 85' for the entire site, and increases the likelihood that it would be redeveloped with housing."

Displacement is an environmental issue under CEQA. (*Save Berkeley Neighborhoods v. Regents* (2020) 51 Cal.App.5th 226, 233 (displacement of tenants is a CEQA impact)). CEQA requires the lead agency to determine whether the "environmental effects of a project will cause substantial adverse effects on human beings, either directly or indirectly," (PRC § 21083(b)(3), (d)). CEQA Guidelines Appendix G, Section XII provides that a project will have significant impacts where it will:

- Induce substantial population growth or concentration of population in an area, either directly (for example, by proposing new housing or businesses), or indirectly (for example, through extension of roads or other infrastructure);
- Displace substantial numbers of existing housing necessitating the construction of replacement housing elsewhere; or
- Displace substantial numbers of people, necessitating the construction of replacement housing elsewhere. See CEQA Guidelines Appendix G, Section XII.

The Addendum suggests vague mitigation measures such as "advancing equitable housing access, promoting racial and social equity, and eliminating displacement with strategies such as tenant protections, preservation of affordability, production of affordable housing, and advancing equitable access to housing resources and affordable units." However, these are vague and unenforceable measures. The Addendum fails to propose any binding and enforceable mitigation measures, such as requiring the mandatory construction of affordable housing, requiring payment for the construction of affordable housing, or requiring public lands to be used for 100% affordable housing. In fact, the city is reversing or weakening all of these requirements. The 2025 Rezone requires absolutely no affordable housing.

A public agency may not rely on mitigation measures of uncertain efficacy or feasibility. (*Kings County Farm Bureau v. City of Hanford* (1990) 221 Cal.App.3d 692, 727.) "Feasible" means capable of being accomplished in a successful manner within a reasonable period of time, taking into account economic, environmental, legal, social and technological factors. (14 CCR § 15364.) Mitigation measures must be fully enforceable through permit conditions, agreements or other legally binding instruments. (14 CCR § 15126.4(a)(2).) In fact, proposals to provide benefits to legacy businesses, may not be legally allowable, let alone, legally enforceable. (*City of Santa Barbara v. Adamson* (1980) 27 Cal.3d 123, 134.)

The Rezone is reminiscent of the City's "urban renewal" of the Western Addition in the 1960s and 1970s, which wiped out what was at that time one of the most ethnically diverse communities in the United States and displaced much of the City's African-American community. Like the current "Family Zoning Plan," the urban renewal of the Western Addition was justified by the alleged need for more affordable housing. However, to make way for the new housing, the City destroyed a thriving African-American, Latino and Asian-American community, which never fully recovered, and the new housing was occupied largely by wealthier, white residents. The main difference is that the 2025 Family Zoning Plan is now targeting the City's Chinese Community, in the Richmond and Sunset Districts, which will undoubtedly face widescale displacement under the Rezone. This form of "White Urbanism" is now well-documented. (See, e.g,, Goetz, Whiteness and Urban Planning, *Journal of the American Planning Association*, Vol 86 (2020).)

The Federal Reserve Bank has concluded that supply-side constraints such as zoning and environmental regulation have absolutely no impact on housing costs. The single most significant factors driving high housing costs are extreme wealth disparities, and remote work. (Federal Reserve Bank of San Francisco, J. Mondragon, Supply Constraints Do Not Explain House Price and Quantity Growth Across U.S. Cities (2025), https://www.frbsf.org/research-and-insights/publications/working-papers/2025/03/supply-constraints-do-not-explain-house-price-and-quantity-growth-across-u-s-cities/); Federal Reserve Bank, J. Mondragon, Housing Demand and Remote Work (2025), https://www.nber.org/papers/w30041). Building more luxury housing does not decrease housing costs and in fact often leads to gentrification of previously affordable neighborhoods. Trickle-down economics did not work in the Reagan Administration and it will not work now.

Since the Rezone will displace both existing housing and people, it will have a significant impact that must be analyzed in a supplemental EIR. The SEIR must consider mitigation measures and feasible alternatives to reduce this impact.

D. AIR QUALITY AND CANCER RISK.

The Addendum admits that the Rezone will create significant air quality impacts, including additional cancer risk from fine particulate matter, known as PM-2.5. (Addendum 95). The Housing Element EIR admitted significant unmitigated PM-2.5 cancer risk (Addendum 90), but the Rezone will have even greater air quality and cancer risks since it allows more development and taller buildings, and will result in more vehicle miles traveled (VMT). (Addendum 90, 92-93).

The 2022 EIR concluded that buildings under 240-feet and 495 units would have less than significant construction air quality impacts. (Addendum 89). Taller buildings have significant PM-2.5 and nitrogen oxide impacts. (Addendum 94). But allowing taller and larger buildings, the Rezone will create more significant construction air quality impacts, including emissions of cancer-cause PM-2.5. The Rezone will have significant unmitigated cancer risk from PM-2.5 and the Rezone will change the distribution of those risks compared to the Housing Element. (Addendum 95).

The 2022 EIR concluded that even with the implementation of mitigation, air quality impacts would be significant and unmitigated. (2022 EIR, p. S-4, 4.6-56, 4,6-70.) By adding another 4,000 housing units, the 2025 Rezone will have "Significant effects previously examined will be substantially more severe than shown in the previous EIR." (CEQA Guidelines §15164(a)(3)(B).)

Attached hereto are the comments of Dr. Paul Rosenfeld and Matthew Hagemann, P.G., C. Hg., of the environmental consulting firm Soil, Water, Air Protection Enterprise (SWAPE). (Exhibit E). SWAPE notes that the Addendum erroneously states, "The proposed rezoning program and subsequent development is expected to result in the same significant criteria air pollutant impacts from construction but not substantially more severe impacts than those disclosed in the EIR" (Addendum 93). However, SWAPE points out that by adding 4,000 additional residential units, the Rezone vastly exceeds air quality significance threshold set by the Bay Area Air District ("BAAD").

The Bay Area Air District has published screening thresholds to determine whether proposed projects will have significant impacts to air quality. (https://www.baaqmd.gov/~/media/files/planning-and-research/ceqa/ceqa-guidelines-2022/ceqa-guidelines-chapter-4-screening_final-pdf.pdf?rev=ac551d35a52d479dad475e7d4c57afa6&sc_lang=en) Under the official BAAQMD thresholds, construction of 416 apartments is expected to have significant air quality impacts from the construction phase, and 638 apartments are expected to have significant operational air quality impacts. The addition of 4,000 residential units will vastly exceed these significance thresholds, and will therefore have a significant impacts on air quality that must be analyzed under CEQA. (SWAPE at 4).

SWAPE calculates that the additional 4,000 units of housing will create emissions of Reactive Organic Gases (ROGs) of 148 pounds per day (ppd) for the construction phase (far above the CEQA significance threshold of 54 ppd) and 145 ppd of operation ROG emissions (far above the CEQA significance threshold of 54 ppd). (SWAPE at 5). SWAPE concludes, "This finding indicates a potentially significant air quality impact that the Addendum did not identify or address. In our opinion, a subsequent EIR should be conducted to provide a more substantial calculation of the Project's emissions and a more detailed evaluation of the Project's potential air quality impacts." (SWAPE at 5).

When a project exceeds an Air District CEQA significance threshold, as here, this alone establishes substantial evidence that the project will have a significant adverse environmental impact. Indeed, in many instances, such air quality thresholds are the only criteria reviewed and treated as dispositive in evaluating the significance of a project's air quality impacts. (See, e.g. *Schenck v. County of Sonoma* (2011) 198 Cal.App.4th 949, 960 [County applies Air District's "published CEQA quantitative criteria" and "threshold level of cumulative significance"]; see also *Communities for a Better Environment v. California Resources Agency* (2002) 103 Cal.App.4th 98, 110-11 ["A 'threshold of significance' for a given environmental effect is simply that level at which the lead agency finds the effects of the project to be significant"].) The California Supreme Court has shown the importance an air district significance threshold has in providing substantial

evidence of a significant adverse impact. (*Communities for a Better Environment v. South Coast Air Quality Management Dist*. (2010) 48 Cal.4th 310, 327 [estimated emissions in excess of air district's significance thresholds "constitute substantial evidence supporting a fair argument for a significant adverse impact"].)

Also, in 2025 city released a new APEZ (air pollutant exposure zone) map showing areas with high cancer risk. The Rezone allows development in some of these newly identified areas. This is a significant new information and a changed circumstance that was not known at the time of the 2022 EIR. (Addendum 95). The new APEZ areas include Sunset Blvd, and Lake Merced. These areas will receive significant development under the Rezone. This impact must be analyzed. (Addendum 96). The Addendum admits that the cancer risks created by the Rezone in the new APEZ areas are significant and unmitigated. (Addendum 97). The Northeast District is within the APEZ area. By moving over 5000 units of new housing to this area, the Rezone exacerbates cancer risks from airborne pollutants.

A supplemental EIR is required because "significant effects previously examined will be substantially more severe than shown in the previous EIR." (CEQA Guidelines section 15162(a)(3)(B).) Also, the new APEZ map constitutes, "new information of substantial importance, which was not known and could not have been known with the exercise of reasonable diligence at the time the previous EIR was certified as complete." (CEQA Guidelines section 15162(a)(3).)

SWAPE states,

> The Addendum proposes development in the Downtown, Marina, Mission, Northeast, and Western Addition planning districts, which have areas within the City's air pollutant exposure zones ("APEZ"). The Addendum states that "the proposed rezoning program may result in a small proportion of additional rezoned parcels being in the APEZ, which could increase the number of people exposed to the generally high pollutant concentrations in the APEZ" (p. 97).
>
> In 2025, the City identified new APEZ areas, defined as locations "where particulate matter (PM2.5) is greater than or equal to 9 µg/m3 or where the risk of cancer from air pollutants is greater than or equal to 100 in a million." (SWAPE at 5).

The Addendum concludes that this impact is "significant and unavoidable." (Addendum 97). SWAPE disagrees with this conclusion and proposes numerous feasible mitigation measures to reduce air pollution impacts that should be analyzed in a supplemental EIR. (SWAPE at 7-9). Among the mitigation measures suggested by SWAPE are requiring the use of ultra-low VOC paints, advanced air filtration units, emissions controls on backup generators, and many other measures. These mitigation measures should all be analyzed and imposed through a supplemental EIR process.

E. TRANSIT DELAY.

The Addendum admits that the Rezone will create significant impacts related to public transit delay, particularly along the busy 19th Avenue corridor, and on the 38-Geary and 19-Polk lines. (Addendum 71, 78, 84). The Addendum concludes that Rezone would contribute considerably to significant and unavoidable bus loading impacts. (Addendum 84). These impacts, particularly along the 19th Avenue corridor, will be exacerbated by the recent closure of the Great Highway, which has caused congestion on 19th Avenue by closing a major thoroughfare in the Western side of the City. The closure of the Great Highway is a changed circumstance that was unknown at the time of the 2022 EIR.

A supplemental EIR is required because "substantial changes [have] occur[ed] with respect to the circumstances under which the project is undertaken which will require major revisions of the previous EIR or Negative Declaration due to the involvement of new significant environmental effects or a substantial increase in the severity of previously identified significant effects." (CEQA Guidelines §15162(a)(2).) The closure of the Great Highway is clearly a significant changed circumstance that was not analyzed in the 2022 EIR and that will impact the Transportation analysis for the Rezone.

F. PUBLIC SERVICES.

The Rezone will allow residential development on the site of the North Point Wet Weather Sewage Treatment Facility. This site was not slated for development in the 2022 Plan. This amendment will require either a replacement facility or vast amounts of infrastructure to transport sewage to other plants. The sewage currently treated by the North Point Plant must go somewhere. Urban Planner Deborah Holley states, "This City-owned and -operated sewage treatment plant is one of three facilities in San Francisco that treats wastewater. It is only active during wet weather and treats up to 150 million gallons a day (MGD) during rainstorms, or 26 percent of the wastewater treated on a rainy day." She continues, "The FEIR did not address the impacts of redevelopment of this treatment plant with housing because this site was not designated for rezoning. The rezoning program changes the allowable height limit on this site from 40' to 85' and increases the likelihood that it would be redeveloped with housing. The site is in the P (Public) District where residential uses in 100 percent Affordable Housing Projects and Educator Housing Projects are permitted, and other residential uses are conditional. There is no reason the City would include this site in the rezoning program other than the fact that the City believes rezoning this site will increase the likelihood of housing development at this location. Since it is inconceivable that a developer would build housing on top of a sewage treatment plant, the City needs to analyze the impacts associated with elimination of the sewage treatment plant." Ms. Holley states:

> Elimination of the sewage treatment plant would result in reduced sewage treatment capacity during wet weather. This would require (a) the construction of a new sewage treatment facility in this area of the city, or (b) the construction of new infrastructure to convey wastewater from the northeast quadrant of the city to the Oceanside Treatment Plant or the Southeast Treatment Plant in Bayview/Hunters

Point and expansion of one of these facilities to expand the treatment capacity by 150 MGD to compensate for the loss of the North Point facility.

The potential public health and hazardous materials impacts of redeveloping the site with housing must be identified and analyzed and mitigation measures must be identified in a supplemental EIR. This includes but would not be limited to testing and classification of contaminants, calculations of health risk, specific remediation measures, associated secondary impacts due to the excavation of contaminated soil, transportation and disposal of infrastructure, and treatment and disposal of contaminated water and soil.

CEQA does not allow the City to defer analysis of obvious sewage treatment needs. When a project will require construction of additional sewage treatment infrastructure, the CEQA document must analyze and mitigate the impacts of that necessary new construction. (*Sundstrom v. Cnty. of Mendocino* (1988) 202 Cal. App. 3d 296; *San Joaquin Raptor/Wildlife Rescue Ctr. v. Cnty. of Stanislaus* (1994) 27 Cal. App. 4th 713 (EIR was also inadequate with respect to project description by its lack of reference to wastewater treatment plant which was necessary element of project).)

V. GENERAL PLAN ANALYSIS.

The Rezone is legally prohibited because it is inconsistent with the General Plan. "The Legislature has mandated that every county and city must adopt a 'comprehensive, long-term general plan for the physical development of the county or city, and of any land outside its boundaries which in the planning agency's judgment bears relation to its planning.'" (*Citizens of Goleta Valley v. Bd. of Sups*. (1990) 52 Cal.3d 553, 570 (quoting Gov. Code §65300).) The Supreme Court has described the general plan as "the constitution for all future developments within the city or county." *Id*. (internal quotation marks omitted). The "propriety of virtually any local decision affecting land use and development depends upon consistency with the applicable general plan and its elements." (*Id. DeVita v. Cty. of Napa*, 9 Cal. 4th 763, 803 (1995).) The "propriety of virtually any local decision affecting land use and development depends upon consistency with the applicable general plan and its elements." (*Citizens of Goleta Valley v. Bd. of Sups.* (1990) 52 C.3d 553, 570.)

The Rezone is flatly inconsistent with the adopted General Plan, and its adopted Housing Element. The Rezone allows development in historic districts, such as North Beach and Telegraph Hill, which were protected from development in the General Plan. The Rezone allows development in Priority Equity Geographies that were protected from development in the General Plan. The Rezone allows building heights and density throughout the City that vastly exceed limits set forth in the General Plan. As such, the Rezone is legally prohibited unless and until the City amends its General Plan.

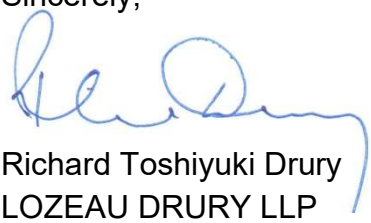
In addition, each of these General Plan inconsistencies is a significant impact that must be analyzed in an EIR. Any inconsistencies between a proposed project and applicable plans must be discussed in an EIR. (14 CCR § 15125(d); *City of Long Beach v. Los Angeles Unif. School Dist*. (2009) 176 Cal. App. 4th 889, 918; *Friends of the Eel*

River v. Sonoma County Water Agency (2003) 108 Cal. App. 4th 859, 874 (EIR inadequate when Lead Agency failed to identify relationship of project to relevant local plans).) A Project's inconsistencies with local plans and policies constitute significant impacts under CEQA. (*Endangered Habitats League, Inc. v. County of Orange* (2005) 131 Cal.App.4th 777, 783-4.)

VI. CONCLUSION.

For the foregoing reasons, we respectfully request that the Planning Commission direct the Planning Staff to prepare a Supplement EIR to analyze the Rezone and to consider feasible mitigation measures and alternatives to reduce its significant environmental impacts that were not analyzed in the 2022 EIR for the Housing Element. We further request that the Planning Commission conclude that the Rezone is prohibited since it is inconsistent with the City's General Plan.

Sincerely,



Richard Toshiyuki Drury
LOZEAU DRURY LLP

EXHIBIT A

December 1, 2025

Richard Drury
Lozeau | Drury LLP
1939 Harrison St., Suite 150
Oakland, CA 94612

RE: Adequacy of the San Francisco Housing Element 2022 Update FEIR Addendum

Dear Mr. Drury,

The San Francisco Planning Department published an Addendum to the Final Environmental Impact Report for the 2022 Housing Element ("Housing Element FEIR") on September 3, 2025, stating that no supplemental or subsequent environmental review was required for the Family Housing Rezoning Program ("proposed rezoning program, Family Zoning Plan, FZP, rezoning plan").

Because there are potential new or more severe environmental impacts that would result from the proposed rezoning program that were not identified and analyzed in the Housing Element FEIR, a supplemental EIR should have been prepared instead of an Addendum.

Such impacts include, but are not limited to the following:

A. The rezoning plan would result in new impacts associated with the potential redevelopment of the North Point Wet Weather Sewage Treatment Facility which was not included and therefore not analyzed in the Housing Element FEIR but which, as a result of the rezoning plan, is now designated as a site for the development of housing.

B. The rezoning plan would result in more severe displacement impacts, particularly those associated with the addition of numerous parcels within the Priority Equity Geographies SUD that were added to the rezoning plan but not included, and therefore not analyzed, in the Housing Element FEIR.

My qualifications for preparing this analysis include over 25 years of professional experience in land use and environmental planning, including the management and preparation of CEQA documents, and a Master of Science degree in Urban Planning

from Columbia University. My resume can be accessed via this link: https://www.holleyconsulting.com/resume/.

The Addendum to the Housing Element FEIR maintains that no supplemental or subsequent environmental review is required for the proposed rezoning program because the environmental impacts were adequately identified and analyzed in the Housing Element FEIR, and the rezoning program "…would not result in any new or more severe environmental impacts than were identified previously."

Specifically, the Addendum states that "…no additional environmental review is required under CEQA Section 21166 and CEQA Guideline Sections 15162-15164 for the following reasons:

(1) the Family Housing Rezoning Program would not involve new significant environmental effects or a substantial increase in the severity of significant effects previously identified in the Housing Element EIR;
(2) no substantial changes have occurred that would require major revisions to the Final EIR due to the involvement of new environmental effects or a substantial increase in the severity of effects identified in the Housing Element EIR; and
(3) no new information of substantial importance has become available which would indicate that (i) the Family Housing Rezoning Program will have significant effects not discussed in the Final EIR; (ii) significant environmental effects will be substantially more severe; (iii) mitigation measure or alternatives found not feasible that would reduce one or more significant effects have become feasible, or (iv) mitigation measures or alternatives that are considerably different from those in the Housing Element EIR would substantially reduce one or more significant effects on the environment."

2022 FEIR compared to Proposed Rezoning

Baseline Map. In order to understand what was analyzed in the 2022 FEIR, and what was added in subsequent policy changes, I reconstructed "Figure 2-7 Projected Heights and Density Controls Under the Proposed Action" from page 2-25 of Vol. 1 of the FEIR. ***Figure 1***, below, provides the most detailed description of the parcel-level impacts of the proposed rezoning for parcels analyzed in the 2022 Final EIR.

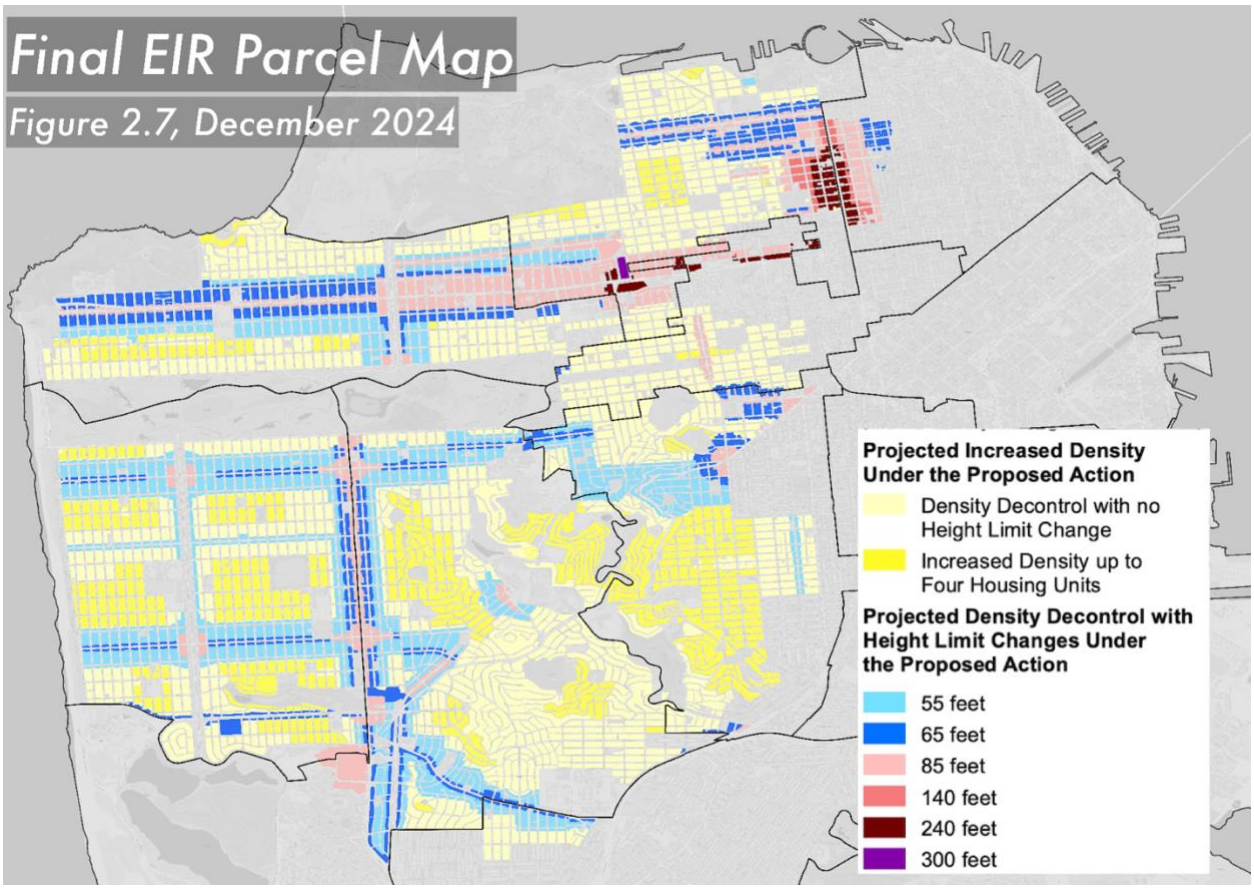


Figure 1. Baseline Map: 2022 FER Map Compared to the September 2025 Map, plus removing 3-unit+ Rent-Controlled Buildings and Hotels

The September 2025 map, based on the rezoning legislation introduced in board file 250700, was the most recent parcel-level map released by the Planning Department. The most significant amendments passed include exempting rent-controlled buildings of three units or larger from the local program, and exempting hotel parcels. *Planning recently released a November 17th map but it is not accurate as it does not yet exclude three-units+ rent controlled buildings.*

Figure 2 below shows that 6,938 new parcels were added in the proposed rezoning plan, 7,580 parcels have increased heights, and 16,135 parcels allow for greater densities. Associated unit counts were also estimated and are provided in the table following Figure 2.

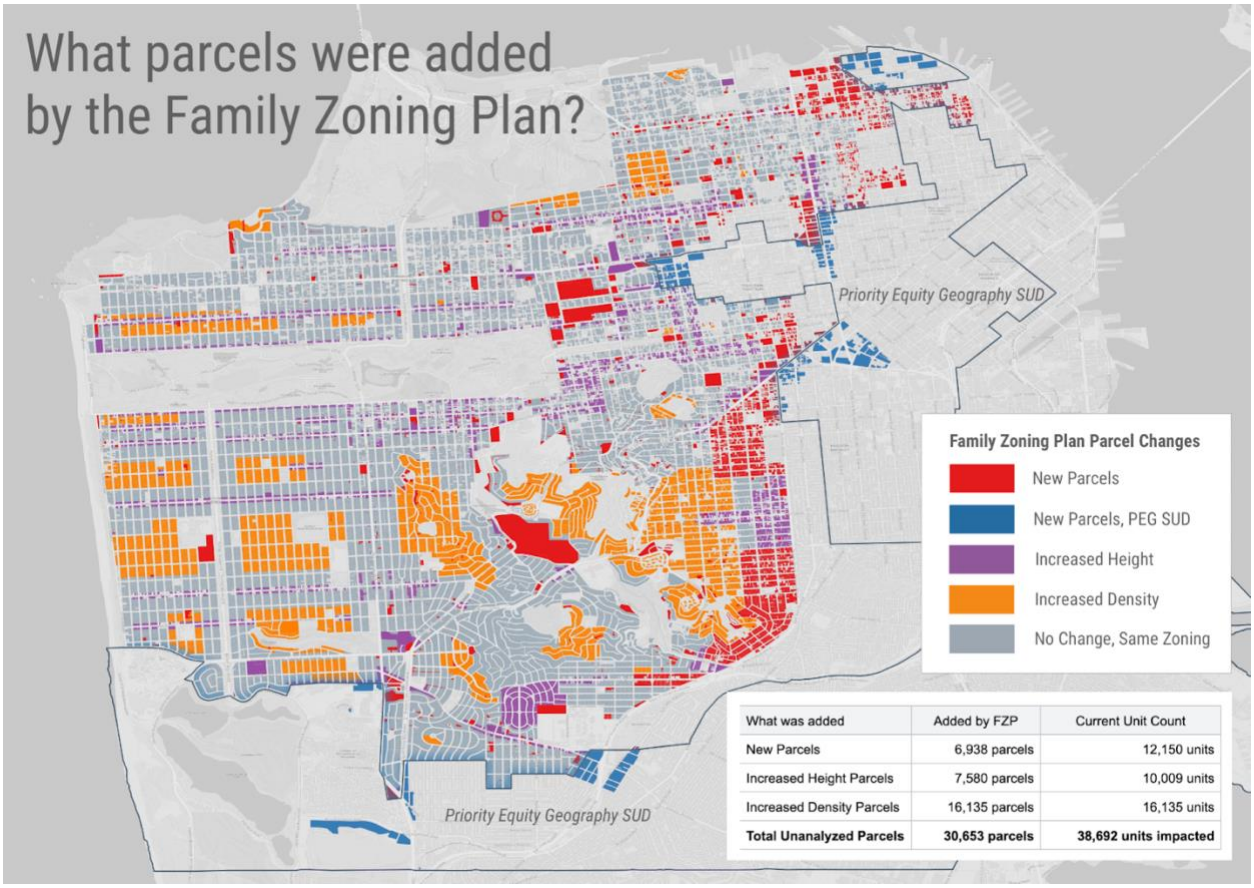


Figure 2. Parcels added and parcels with increased heights and densities under the rezoning

1. **What was added to the Family Zoning Plan from the FEIR?**

What was added	Added by FZP	Current Unit Count
New Parcels	6,938 parcels	12,150 units
Increased Height Parcels	7,580 parcels	10,009 units
Increased Density Parcels	16,135 parcels	16,135 units
Total Unanalyzed Parcels	**30,653 parcels**	**38,692 units impacted**

2) Scope of Family Zoning Plan vs. 2022 Final EIR

Total Count	Final EIR - 2022	Family Zoning Plan - 2025
Parcel Count	82,834	79,932
Current Units Count*	150,031	94,281
Area Added (sq ft)	257,461,954	254,211,574

** Residential and non-residential "units" (commercial spaces) impacted*

3. **Existing Parcels with increased height limits**

a. **7,580 parcels** with increased height limits
b. **10,009 currently existing units** in parcels with increased height limits
c. **31,424,690 sq ft** of total lot area in parcels with increased height limits

Height Limit Increase	Parcels	Current Unit Count
100' +	73	201
60' - 100'	34	31
40' - 60'	667	823
20' - 40'	3,244	4,906
< 20'	3,562	4,048

The following discussion describes potential impacts that were not analyzed in the CEQA document for the rezoning project. The Addendum is inadequate under CEQA and a supplemental EIR must be prepared to identify and analyze the potentially new and more severe impacts described below.

A. Rezoning of the North Point Wet Weather Sewage Treatment Facility

There are new potentially significant impacts associated with the proposed rezoning plan that were not identified and assessed in the Housing Element EIR or Addendum including impacts associated with development of the North Point Wet Weather Facility located at Bay Street and the Embarcadero. This City-owned and -operated sewage treatment plant is one of three facilities in San Francisco that treats wastewater. It is only active during wet weather and treats up to 150 million gallons a day (MGD) during rainstorms, or 26 percent of the wastewater treated on a rainy day.

The 2022 FEIR did not address the impacts of redevelopment of this treatment plant with housing because this site was not designated for rezoning at that time. The rezoning program changes the allowable height limit on this site from 40' to 85' and increases the likelihood that it would be redeveloped with housing. The site is in the P (Public) District where residential uses in 100 percent Affordable Housing Projects and Educator Housing Projects are permitted, and other residential uses are conditional.

There is no reason the City would include this site in the rezoning program other than the fact that the City believes rezoning this site will increase the likelihood of housing development at this location. Since it is inconceivable that a developer would build housing on top of a sewage treatment plant, the City needs to analyze the impacts associated with elimination of the sewage treatment plant.

Moreover, although the Addendum states that "It is likely that the Oceanside Water Pollution Control Plant would experience reduced pollutant loads under the proposed rezoning program compared to the adopted housing element because housing growth distribution under the proposed rezoning program would be more evenly distributed in the western and northern parts of the city and along transit corridors, instead of heavily concentrated in the Inner Sunset, Outer Sunset, and Richmond planning districts as assumed under the adopted housing element; thus pollutant load generation, would be more evenly distributed throughout the city rather than concentrated in the western portion of the city," there is no mention at all of the North Point treatment plant. (See pages 127-128 of the Addendum.)

Potentially significant impacts that should have been identified and analyzed in a supplemental EIR include, but are not limited to the following:

1. Elimination of the sewage treatment plant would result in reduced sewage treatment capacity during wet weather. This would require (a) the construction of a new sewage treatment facility in this area of the city, or (b) the construction of new infrastructure to convey wastewater from the northeast quadrant of the city to the Oceanside Treatment Plant or the Southeast Treatment Plant in Bayview/Hunters Point and expansion of one of these facilities to expand the treatment capacity by 150 MGD to compensate for the loss of the North Point facility.

2. The potential public health and hazardous materials impacts of redeveloping the site with housing must be identified and analyzed and mitigation measures must be identified in a supplemental EIR. This includes but would not be limited to

testing and classification of contaminants, calculations of health risk, specific remediation measures, associated secondary impacts due to the excavation of contaminated soil, transportation and disposal of infrastructure, and treatment and disposal of contaminated water and soil.

B. More severe displacement Impacts would result from the proposed rezoning program than were assumed in the Housing Element FEIR

Potentially significant displacement impacts that should have been identified and analyzed in a supplemental EIR include, but are not limited to the following:

1. ***Rezoning and displacement of tenants in two-unit rent-controlled buildings***. As shown below, under the proposed rezoning, there are a significant number of two-unit rent-controlled buildings on parcels with an existing height limit of 40 feet that would be rezoned to allow heights of 50', 65' and 85', and would no longer require setbacks, creating greater incentives and likelihood that they would be redeveloped under the proposed rezoning. In other words, it is reasonably foreseeable that they would be redeveloped and therefore should have been considered in the CEQA review for the project.

<u>Rent Controlled Parcels</u>

What was added	Parcels affected	Existing units affected
New Parcels	1,237 parcels	2,474 units
Increased Height Parcels	1,818 parcels	3,636 units
Increased Density Parcels	783 parcels	1,566 units
Total Rent Controlled Parcels	3,838 parcels	7,676 units

It is widely accepted that tenants of two-unit rent-controlled buildings already have fewer protections than tenants who live in buildings with three or more units because a two-unit building can more easily be converted into condos. In two-unit buildings, all an owner needs to do is move in, and they can evict a tenant to do so.

The inclusion of parcels with two-unit rent controlled buildings in the rezoning plan and the associated displacement impacts need to be identified and assessed in a supplemental EIR.

2. ***Rezoning and displacement in the Priority Equity Geographies Special Use District.*** Section 249.97 (b) of the San Francisco Planning Code states that "The Priority Equity Geographies SUD is comprised of areas or neighborhoods with a higher density of vulnerable populations" and that the 2022 Update of the Housing Element of the General Plan ((2022 Housing Element) identifies them as "***areas***…***where zoning changes must be tailored to serve the specific needs of the communities that live there; and where programs that stabilize communities and meet community needs need to be prioritized***."

   As shown in ***Figure 2*** above and quantified below, close to 1,000 parcels in the proposed rezoning program that were not analyzed in the Housing Element FEIR are located within the PEG SUD. Displacement impacts for residents in these areas are more severe than for residents outside of the SUD.

   New Priority Equity Geography Parcels
   a. 939 parcels
   b. 2,321 current existing units (including RC and non-RC)
   c. 70 two-unit RC buildings, 140 units

   The inclusion of parcels in the Priority Equity Geographies SUD and the associated displacement impacts need to be identified and assessed in a supplemental EIR.

3. ***Rezoning and displacement of Laguna Hospital and Rehabilitation Center occupants***. As shown in ***Figure, 2*** above, the 62-acre Laguna Honda hospital and rehabilitation center located 375 Laguna Honda Boulevard was added to the rezoning plan, and if redeveloped would result in significant displacement impacts for the long-term nursing home residents.

   Laguna Honda has 769 beds and offers short-term rehab and long-term nursing care. in the Forest Hill neighborhood of San Francisco.

   The FEIR did not address the impacts of redevelopment of Laguna Honda with housing because this site was not designated for rezoning. The rezoning program changes the allowable height limit on this site from 40' which covers the majority of the 62 acres under existing height limits, to 85' for the entire site, and increases the likelihood that it would be redeveloped with housing. The site is in the P (Public) District where residential uses in 100 percent Affordable Housing Projects and Educator Housing Projects are permitted, and other residential uses are conditional.

There is no reason the City would include this site in the rezoning program other than the fact that the City believes rezoning this site will increase the likelihood of housing development there.

Because the impacts of redevelopment of Laguna Honda Hospital and Rehabilitation Center was not analyzed in the Housing Element FEIR, a supplemental EIR is needed to determine the impacts and required mitigation measures.

EXHIBIT B

November 30, 2025

Mr. Richard Drury
Lozeau | Drury LLP
1939 Harrison St., Suite 150
Oakland, CA 94612

RE: Family Zoning Plan (Rezone) – Impacts on Historic Resources

Dear Mr. Drury,

This letter sets forth my professional opinion concerning the impacts on historic resources from the proposed San Francisco Rezoning Plan ("Rezone"), also known as the "Family Zoning Plan."

As a professional with 32 years of experience in historic preservation and with the California Environmental Quality Act (CEQA), I meet the Secretary of the Interior's Professional Qualification Standards in History and Architectural History. I also have the following credentials: received a Master of Arts Degree in Architectural History from the University of Virginia's School of Architecture; previously served as president of the San Francisco Landmarks Advisory Board (appointed by Mayor Newsom); since 2012 have continuously been on the City of San Francisco Planning Department's approved consultant pool for historic resources consultants; and certified by the San Francsico Contract Monitoring Division (CMD) as a woman-owned Local Business Enterprise (LBE). I have written innumerable historic resource and historic district designation and evaluation reports throughout the course of my career.

While the City of San Francisco (City) prepared and certified an Environmental Impact Report (EIR) for its 2022 Housing Element, the proposed Rezone is vastly different from the rezoning scenarios studied in the 2022 EIR. Nevertheless, the Planning Department proposes to rely on an Addendum (September 3, 2022) to the previously certified EIR. A rezoning of this magnitude requires thorough environmental review under CEQA so that the City's residents and decision-makers can be aware of its impacts, can consider all feasible mitigation measures and alternatives, and can have a robust and open discussion prior to making irreversible changes to San Francisco's landscape for all time.

The Rezone would result in a myriad of significant new impacts that were not analyzed in the 2022 EIR or included in the Housing Element, not the least of which are impacts to historic resources. The Rezone would result in significant impacts to historic resources that have not yet been analyzed. The 2022 EIR found significant and unmitigated impacts to historic resources, but the Rezone's impacts are far greater and substantially more severe than shown in the previous EIR, with significant and unmitigated impacts. Since "significant effects previously examined will be substantially more severe than shown in the previous EIR," a Supplemental EIR is required. (CEQA Guidelines 15162(a)(1)(3)(B).)

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As set forth in the Attachments to this letter, the Rezone would allow the demolition and redevelopment on, near, or within areas containing historic resources. Many known and designated, either locally under Article 10 of the Planning Code, or through state or federal historic designation programs, are within areas that were not included for rezoning in the 2022 Housing Element or analyzed in the 2022 EIR, while others were included in the analysis, but have since been upzoned or changed to form based density or have significantly higher heights on or around them by the Upzone. None of the potentially significant impacts that could result from redevelopment of these historic resources were analyzed in the 2022 EIR. See the following attachments for further analysis: Attachment 1 - Historic Resource Impact Analysis of Rezone and Attachment 2 - North Beach National Register of Historic Places Historic District Parcel Analysis.

Since this new information provided in the Attachments constitute significant and substantially more severe effects not discussed in the 2022 EIR, a Supplemental EIR is required to analyze and mitigate these impacts. The newly identified impacts are beyond the scope of the 2022 EIR. The Addendum barely mentions additional historic resources impacts and fails to analyze impacts of the drastically additional height and density increases as they relate to known historic resources. Further, the Addendum fails to analyze changes in zoning use districts on designated historic resources or historic districts or areas with known concentrations of "A" rated historic resources, which are identified, but not yet designated resources.

Further, the Rezone now includes the following language related to Bonuses for "Historic Preservation." However, these bonuses, as shown below, encourage height increases, facadism, and other over-scaled additions that would result in diminished historic fabric and result in unintended impacts to historic resources. Additionally, this proposed legislation, added in the September 11, 2025 version of the legislation, has not been evaluated for its potentially significant impacts on historic resources.

The following language has been added to Section 206.10(e) of the Rezone legislation providing additional height and square footage bonuses for the "preservation" of Historic Building.

> *(e)* ***Additional Height, Square Footage, and Other Bonuses.*** *HC-SF Projects that contain certain uses, amenities, or other building features are eligible for additional bonuses and code modifications, as described below.*

****

(6) ***Preservation of Historic Buildings.*** *In districts other than Residential districts, projects proposing an alteration to a Historic Building and/or constructing new buildings on sites that contain a Historic Building shall be permitted to include additional square footage, as provided below:*

(A) up to 1.5 times the gross floor area foregone by retaining the Historic Building and complying with Objective Standards pertaining to Historic Buildings, including through setting back building additions and/or new construction in relation to the Historic Building. For the purposes of this subsection (e)(56)(A), the foregone gross floor area shall be equal to the gross floor area within the volume that would otherwise be permitted under the Planning Code and all applicable Objective Standards, inclusive of modifications allowed pursuant to this Section 206.10, but is not being constructed in order to accommodate a reduced building mass above or around a Historic Building and that complies with or exceeds the setbacks or mass reductions required by the Objective Standards pertaining to Historic Buildings. The Zoning Administrator may publish further guidance on the calculation of foregone gross floor area; and

(B) for Historic Buildings with storefronts that contain character-defining features, an additional 0.25 square feet for every square foot of space in the storefront, provided that the project preserves the storefront in compliance with Objective Standards pertaining to Historic Buildings; and

(C) *horizontal or vertical additions to accommodate this extra square footage, except that any such additions shall not:*

(i) exceed 20 feet above the Housing Choice-SF height limit (Section 263.19); or

(ii) reduce the required rear yard above the ground floor to less than 15 feet where the site abuts the rear yard of adjacent parcels containing residential uses.

(D*) The Historic Building* and/or historic storefront *shall be maintained in compliance with the Preservation Design Standards for the life of the project, and the requirement shall be recorded in a Notice of Special Restrictions.*

This late addition of the above language to the legislation has the great potential to cause impacts to historic resources, instead of preserving them, as it would allow large sections of historic buildings to be demolished and over scaled additions and height increases to be implemented as bonuses.

For the reasons listed above, and as set forth in the Attachments, it is my professional opinion that the Rezone, if approved, would have additional and substantially more severe impacts to historic resources than were analyzed in the certified EIR. These potentially significant environmental impacts must be analyzed and mitigated under the California Environmental Quality Act ("CEQA") through a full recirculated Supplemental EIR.

Sincerely,

Bridget Maley
Principal

Attachment 1: Historic Resource Impact Analysis of Rezone
Attachment 2: North Beach National Register of Historic Places Historic District Parcel Analysis

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Attachment 1: Historic Resource Impact Analysis of Family Zoning Plan (Rezone)
November 30, 2025
Compiled by Bridget Maley, architecture + history, llc

The Family Zoning Plan (Rezone) would result in significant new impacts on historic resources that were not included in the 2022 Housing Element or analyzed in its associated Environmental Impact Report (2022 EIR). The area of the Rezone is significantly larger than the area included in the 2022 Housing Element and analyzed in the 2022 EIR.

It should be noted that all projects using the Rezone would be subject to form-based density (i.e. density decontrol) regardless of height limit or underlying zoning district. These height and density changes would encourage demolition of smaller-scale historic resources throughout the Rezone area.

In addition, for many parcels within the Rezone area, increases to the existing base height limits and/or changes from density limited to form based density (i.e. density decontrol) would be allowed for projects NOT using the Rezone, which would encourage demolition and development using the State Density Bonus or other State programs that provide density or development bonuses.

The Housing Element EIR Addendum No. 1 (September 3, 2025) fails to analyze impacts of additional height and density increases described above, as well as changes in zoning use districts, on designated historic resources and historic districts or on areas with known concentrations of “A” rated historic resources, but not yet designated as historic districts, including, but not limited to those resources listed below.

The list below includes landmarks and contributors to historic districts designated pursuant to Article 10 of the San Francisco Planning Code that may be removed from the Upzone by a pending amendment to the Upzone legislation.

Historic Resources Not Evaluated in 2022 Housing Element EIR

The following districts and individual historic resources were not included in the 2022 Housing Element or analyzed in the 2022 EIR, but are now included in the Rezone as of November 2025.

- Fully documented North Beach National Register Historic District submitted to the State Historic Preservation Office and awaiting hearing by the State Historical Resource Commission was not included in the 2022 Housing Element or analyzed in the 2022 EIR. The Rezone could have significant impacts to this identified historic district, including heights rezoned from 40 feet to 50 feet in block Block 0076. (See Attachment 2: List of Historic Resources in North Beach Historic District in Rezone.)

- Designated Northeast Waterfront Article 10 Historic District. Sansome Street Area Revision contained in “Appendix D: Memorandum Regarding Potential Zoning Map Changes in Supervisor District 3” disclosed the intent to include in the Rezone Plan areas within this Historic District centered along Sansome Street include the following seventeen parcels: Block 0085/Lots 005 and 048; Block 0106/Lots 001, 002, 003, 004, and 042; Block 0112/Lots 008 and 009; Block 0113/Lots 006, 041, 040, and 063; Block 0134/Lot 001; and Block 0135/Lots 007, 008, and 009. This area was not included in the

2022 Housing Element or analyzed in the 2022 EIR and could result in significant impacts to this Historic District.

- Eligible Washington Square Historic District, an eligible California Register Historic District. This area was not included in the 2022 Housing Element or analyzed in the 2022 EIR. The Rezone now includes six parcels on Filbert Street between Powell Street and Stockton Street, including the Church of Saints Peter and Paul and the Priests' Residence, which could result in significant impacts to this Historic District.

- Eligible Upper Grant Avenue Historic District, an eligible California Register Historic District. This area was not included in the 2022 Housing Element or analyzed in the 2022 EIR. The Rezone now includes seven contributory buildings in this District along Filbert Street, Medau Place, and Grant Avenue (Blk 0088/Lots 5, 41-57, and 9), which could result in significant impacts to this Historic District.

- Designated Otis Elevator Company National Register No. 99001265 (1 Beach Street; Parcel 0018/001). This parcel is rezoned from its existing height limit of 40 feet to 65 feet. This was not included in the 2022 Housing Element or analyzed in the 2022 EIR and could result in significant impacts to this historic site.

- Designated Grabhorn Press Building National Register No. 97000349 (1335 Sutter Street; Parcel 0690/012A). This parcel was rezoned from its existing height limit of 130 feet to to 500 feet. The Rezone also increases the base height limit from 130 feet to 200 feet and changes the density to form-based, which would encourage demolition and development using the State Density Bonus or other State programs that provide density or development bonuses.This drastic upzoning was not included in the 2022 Housing Element or analyzed in the 2022 EIR and could result in significant impacts to this historic site.

- Designated Thomas Payne House National Register No. 80000847 (1409 Sutter Street; Parcel 0689/025). This parcel is rezoned from its existing height limit of 130 feet to 500 feet. The Rezone also increases the base height limit from 130 feet to 200 feet and changes the density to form-based, which would encourage demolition and development using the State Density Bonus or other State programs that provide density or development bonuses. This drastic upzoning was not included in the 2022 Housing Element or analyzed in the 2022 EIR and could result in significant impacts to this historic site.

- Designated Myrtle Street Flats Building, both National Register No. 76000520 and Article 10 Landmark No. 71 (234-248 Myrtle Street; Parcel 0714/020), sometimes referred to as part of the Goodman Building. This parcel is rezoned from its existing height limit of 130 feet to 650 feet. The Rezone also increases the base height limit from 130 feet to 260 feet and changes the density to form-based, which would encourage demolition and development using the State Density Bonus or other State programs that provide density or development bonuses.This was not included in the 2022 Housing Element or analyzed in the 2022 EIR and could result in significant impacts to this historic site.

- Designated Washington Square Article 10 Landmark No. 226 (1651 Stockton Street and Filbert Street; 0102/022001). The parcels on the northern edge of Washington Square are now within the Rezone but were not included in the 2022 Housing Element or analyzed in the 2022 EIR. This could result in significant impacts to this park.
- Designated Article 10 "Structure of Merit" The Cannery (600 Beach Street; Parcel 0010/001). This parcel is rezoned from its existing height limit of 40 feet to 65 feet. As the density is form-based, the use of the State Density Bonus or other State programs that provide development bonuses would be allowed. This was not included in the 2022 Housing Element or analyzed in the 2022 EIR and could result in significant impacts to this site.
- Designated Building at 1840-1842 Eddy Street National Register No. 73000437 (1840-1842 Eddy Street, Parcel 1127/015). This parcel is rezoned from its existing height limit of 65 feet to 85 feet and changed to form-based density (density decontrol). This was not included in the 2022 Housing Element or analyzed in the 2022 EIR and could result in significant impacts to this historic site.
- Designated Building at 45-57 Beideman Place National Register No. 73000436 (45-57 Beideman Place, Parcel 1100/118). This parcel is included in the Rezone and changed to form-based density (density decontrol) and rezoned from RM-1 to RTO-C which allows commercial uses on the ground floor. These changes were not included in the 2022 Housing Element or analyzed in the 2022 EIR and could result in significant impacts to this historic site.
- Designated Building at 33-35 Beideman Place National Register No. 73000435 (33-35 Beideman Place, Parcel 1100/095). This parcel is included in the Rezone and changed to form-based density (density decontrol) and rezoned from RM-1 to RTO-C which allows commercial uses on the ground floor. These changes were not included in the 2022 Housing Element or analyzed in the 2022 EIR and could result in significant impacts to this historic site.
- Designated House at 1331-1335 Scott Street National Register No. 73000440 (1331-35 Scott Street, Parcel 1100/120). This parcel is included in the Rezone and changed to form-based density (density decontrol) and rezoned from RM-1 to RTO-C which allows commercial uses on the ground floor. These changes were not included in the 2022 Housing Element or analyzed in the 2022 EIR and could result in significant impacts to this historic site.
- Designated House at 1321 Scott Street National Register No. 7300439 (1321 Scott Street, Parcel 1100/049). This parcel is included in the Rezone and changed to form-based density (density decontrol) and rezoned from RM-1 to RTO-C which allows commercial uses on the ground floor. These changes were not included in the 2022 Housing Element or analyzed in the 2022 EIR and could result in significant impacts to this historic site.

- Designated House at 1249-1251 Scott Street National Register No. 73000442 (1249-51 Scott Street, Parcel 1127/035). This parcel now included in the Rezone and changed to form-based density (density decontrol) and rezoned from RM-1 to RTO-C which allows commercial uses on the ground floor. These changes were not included in the 2022 Housing Element or analyzed in the 2022 EIR and could result in significant impacts to this historic site.
- Designated House at 1239-1245 Scott Street National Register No. 7300441 (1239-45 Scott Street, Parcel 1127/043). This parcel now included in the Rezone and changed to form-based density (density decontrol) and rezoned from RM-1 to RTO-C which allows commercial uses on the ground floor. These changes were not included in the 2022 Housing Element or analyzed in the 2022 EIR and could result in significant impacts to this historic site.
- Temple Sherith Israel National Register #10000114 (2266 California St., Parcel 0637/011). Now included in the Rezone, this parcel is being upzoned from its existing 40 feet to 85 feet with a new base height of 50 feet. It is also changed to form based density and rezoned to RTO-C which allows commercial uses on the ground floor. These changes were not included in the 2022 Housing Element or analyzed in the 2022 EIR and could result in significant impacts to this historic site.
- Dallam-Merritt House National Register #84001185 (2355 Washington Street, Parcel 0613/021). Now in the Rezone, this parcel was not included in the 2022 Housing Element or analyzed in the 2022 EIR.
- Designated site of Third Baptist Church California Registered Historical Landmark No. 1010 (483 Greenwich Street, Parcel 0087047). Now in the Rezone, this parcel was not included in the 2022 Housing Element or analyzed in the 2022 EIR.
- Designated Fillmore-Pine Building National Landmark No. 82002247 (1940-1946 Fillmore Street, Parcel 0660/023). Now in the Rezone, this parcel is being rezoned from its existing height limit of 40 feet to 65 feet. This parcel was not included in the 2022 Housing Element or analyzed in the 2022 EIR and could result in significant impacts to this historic site.
- Designated Park View Hotel National Register No. 83001235 (750 Stanyan Street, Parcel 1250/025). Now in the Rezone, this parcel is being rezoned from its existing height limit of 50 feet to 65 feet. This parcel was not included in the 2022 Housing Element or analyzed in the 2022 EIR and could result in significant impacts to this historic site.
- Designated Delane House National Register No. 82000984 (70 Buena Vista Terrace, Parcel 2608/013). Now in the Rezone, this parcel was not included in the 2022 Housing Element or analyzed in the 2022 EIR and could result in significant impacts to this historic site.

- Designated House at 584 Page Street National Register No. 85002195 (584 Page Street, Parcel 0842/017). Now in the Rezone, this parcel was not included in the 2022 Housing Element or analyzed in the 2022 EIR and could result in significant impacts to this historic site.

- Designated Moss Beach House National Register No. 83001232 (1626 Great Highway, Parcel 1895/038). Now in the Rezone, this parcel was not included in the 2022 Housing Element or analyzed in the 2022 EIR and could result in significant impacts to this historic site.

- Designated Real Estate Associates (TREA) Houses National Register No. 85000705 (2503, 2524, 2530 and 2536 Clay Street (Parcel 0630/032, 0611/008, 0611/009 and 0611/010). Now in the Rezone, the house at 2503 Clay is upzoned from 40 feet to 65 feet. These 4 historic houses were not included in the 2022 Housing Element or analyzed in the 2022 EIR.

- Wilford Houses National Register No.85001914 (2121 & 2127 Vallejo Street, Parcels 0565/021and 0565/022). Now in the Rezone, these parcels adjoin parcels upzoned to 65 feet. These 2 historic houses were not included in the 2022 Housing Element or analyzed in the 2022 EIR.

- Sinton House National Register No. 11000944(1020 Francisco Street, Parcel 0476002C).Now in the Rezone, this parcel was not included in the 2022 Housing Element or analyzed in the 2022 EIR.

- Designated Russian Hill Paris Block Architectural Historic District National Register of Historic Places Historic District No. 87002288. The Rezone includes four parcels in this District between Green Street and Macondray Lane (Block 0121/Lots 005, 006, 049, and 056), which were not included in the 2022 Housing Element or analyzed in the 2022 EIR. This could result in significant impacts to this Historic District.

- Designated Russian Hill Macondray Lane National Register Historic District No. 87002286. The Rezone includes this entire Historic District, which was not included in the 2022 Housing Element or analyzed in the 2022 EIR. This could result in significant impacts to this Historic District, especially corner parcels that could be up to 65 feet in height in this residential district.

- Designated Port of San Francisco Embarcadero National Register Historic District No. 06000372. The Rezone includes increased height and density along the Embarcadero, especially on Bay, North Point, Beach and Jefferson Streets, which could impact this Historic District. These heights, not included in the 2022 Housing Element or analyzed in the 2022 EIR, could result in significant impacts to this Historic District.

- Designated Golden Gate Park National Register Historic District No. 04001137. The Rezone includes height increases along Fulton Street and Lincoln Boulevard bordering the north and south sides of Golden Gate Park and Stanyon Street bordering the east side. The heights along Fulton Street are increased from 40 feet to 85 feet and along

Lincoln from 40 feet to 65 feet, both streets are changed to form-based density (density decontrol) and rezoned to RTO-C that allows commercial uses on the ground floors. Heights along a portion of Stanyan Street are rezoned from 50 feet to 65 feet. Heights are also increased in places along Fell and Oak Streets in the Panhandle of the Park. These proposed height, density, and use changes in the Rezone were not included in the 2022 Housing Element or analyzed in the 2022 EIR and would have significant impacts on this designated historic district.

- Designated Presidio of San Francisco National Historic Landmark Historic District No. 66000232. Development proposed in the Rezone adjacent to the Presidio of San Francisco at 300 Lake Street; Parcel No. 1354/001, upzoned from 40 feet to 65 and from 65 feet to 85 feet. Also upzoned at the Lombard Gate from 40 feet to 65 feet. Additionally, development in the residential zoned areas of Presidio Terrace and Sea Cliff heights would be allowed to 65 feet on 8,000 square foot parcels. These Rezone heights were not included in the 2022 Housing Element or analyzed in the 2022 EIR.

- Designated Lower Nob Hill Apartment Hotel National Register Historic District No. 91000957. Height increases along the edges would impact this designated Historic District. The increased heights at Bush and Leavenworth Streets from the existing height limit of 65 feet to 120 feet and Polk Street between Geary and Sutter Streets from the existing height limit of 80 feet to 240 feet. These heights were not included in the 2022 Housing Element or analyzed in the 2022 EIR and could impact this Historic District.

- Designated Veterans Affairs Medical Center National Register Historic District No. 05001112 (4150 Clement Street). Along the southern edge of this District the Rezone includes increases from the existing height limit of 40 feet to 65 feet on Clement Street. This was not included in the 2022 Housing Element or analyzed in the 2022 EIR and could impact this Historic District.

- Designated Cable Car National Register Historic District No. 66000233. The Cable Car lines located within areas being upzoned and/or density decontrolled by the Upzone Plan could be significantly impacted. These include, without limitation, those lines along the following routes: Hyde between Beach and Washington, Washington between Hyde and Mason, Jackson between Leavenworth and Hyde, California between Van Ness and Mason, Mason between Green and Columbus, Columbus between Mason and Taylor, and Taylor between Chestnut and Francisco. Height increases adjacent to these streets could impact these linear transit historic resources, and construction activities resulting from development incentivized by the Upzone could cause extensive service interruptions. Impacts to the Cable Car National Register Historic District were not included in the 2022 Housing Element or analyzed in the 2022 EIR.

- Designated Geneva Office Building and Power House (S.F. & San Mateo Railroad Co.Office Building), both National Register No. 10000111 and Article 10 Landmark No. 180 (500 Geneva; Parcel 6972/036). The Rezone Plan upzones this publicly owned site from the existing height of 40 feet to 85 feet and includes it in the Non-Contiguous SFMTA Special Use District, which allows the site to be developed for mixed use residential development. The Rezone Plan also increases the base height limit from 40

feet to 50 feet and changes the density to form-based, which would allow development using the State Density Bonus or other State programs that provide density or development bonuses. New development on and adjacent to this historic site could result in significant impacts. These changes were not included in the 2022 Housing Element or analyzed in the 2022 EIR.

- Eligible Hayes Valley Residential Historic District, an eligible California Register Historic District. The current Rezone includes a significant portion of the District. This area of Hayes Valley was not included in the 2022 Housing Element or analyzed in the 2022 EIR and could result in significant impacts to this Historic District.

- Eligible Northpoint Sewage Treatment Plant Historic District, an eligible National Register and California Historic District. The District includes 101 North Point (Parcel 0033/005), 66 Bay Street (0034/002) and 160 Bay Street (0033/003). This entire site is increased from the existing height limit of 40 feet to 85 feet. The Rezone of this eligible district was not included in the 2022 Housing Element or analyzed in the 2022 EIR and could have significant impacts to this District.

- Designated Dietle Residence Article 10 Landmark No.48 (294 Page Street, Parcel 0839/017). Located within and adjacent to the Hayes Valley Residential Historic District, an eligible California Register Historic District, the Rezone includes this parcel which is rezoned to RTO-1.This parcel was not included in the 2022 Housing Element or analyzed in the 2022 EIR and could result in significant impacts to this Historic District.

- Designated Nightingale House Article 10 Landmark No. 47 (201 Buchanan Street, Parcel 0858/002). Located within and adjacent to the Hayes Valley Residential Historic District, an eligible California Register Historic District, the Rezone includes this parcel which is rezoned to RTO-1.This parcel was not included in the 2022 Housing Element or analyzed in the 2022 EIR and could result in significant impacts to this Historic District.

- Designated McMorry-Lagan Building Article 10 Landmark No.164 (188-198 Haight Street, Parcels 0852/033 and 0852/034). Located within and adjacent to the Hayes Valley Residential Historic District, an eligible California Register Historic District, the Rezone includes this parcel which is rezoned to RTO-1.This parcel was not included in the 2022 Housing Element or analyzed in the 2022 EIR and could result in significant impacts to this Historic District.

- Designated Duboce Park Article 10 Historic District, specifically the contributory buildings located along Waller and Steiner Streets being rezoned RTO-1. Although certain parcels within the Duboce Park Historic District are proposed for removal from the Rezone by a pending amendment to the Upzone legislation (see list below), the contributory buildings located along Waller and Steiner Streets would remain in the Rezone. This Historic District was not included in the 2022 Housing Element or analyzed in the 2022 EIR.

Historic Resources Evaluated in 2022 Housing Element and 2022 EIR, But Now with Significant Height Increases

- Designated St. Luke's Episcopal Church, National Register No. 100009644 (1755 Clay; Parcel 0622/013). Included in the 2022 EIR as being upzoned from its existing height limit of 80 feet to 240 feet, but height increased by the Rezone to 350 feet with a base height of 140 feet. These increased heights were not studied in the 2022 EIR and could have significant impacts to this historic site. Further, as the density is form-based, the use of the State Density Bonus or other State programs that provide development bonuses would be allowed from the new base height.

- Designated Paige Motor Company National Register No. 83001234 (1699 Van Ness Parcel 0642/001). Included in the 2022 EIR as being upzoned from existing height limit of 80 feet to 240 feet, but height increased by the Rezone to 350 feet with a base height of 140 feet. These increased heights were not studied in the 2022 EIR and could have significant impacts to this historic site. Further, as the density is form-based, the use of the State Density Bonus or other State programs that provide development bonuses would be allowed from the new base height.

- Eligible Ocean Avenue Commercial Historic District, a documented eligible California Register Historic District under review by the Planning Department. The EIR analyzed the height along Ocean Avenue at a height of 65 feet, which was increased by the Rezone to 85 feet. This increased height was not studied in the 2022 EIR and could have significant impacts to this Historic District.

- Eligible fully documented Ingleside Terraces National Register Historic District submitted to the State Historic Preservation Office and awaiting hearing by the State Historical Resource Commission. The EIR analyzed the height along Ocean Avenue, Block 6915, with a height of 65 feet, which was increased by the Rezone to both 85 feet and 140 feet. These increased heights were not included in the 2022 Housing Element or analyzed in the 2022 EIR and could have significant impacts on this fully documented historic district.

- Designated St. Francis Wood National Register Historic District No. 100007846 was listed on June 30, 2022. This historic district was not included in the 2022 Housing Element or analyzed in the 2022 EIR. The Rezone could have significant impacts on this historic district.

- *The Gardens in the City; San Francisco Residence Parks, 1906-1940, Historic Context Statement* identified 8 residence parks neighborhoods as eligible historic districts. Since this was last heard by the Historic Preservation Commission in April 2021, St. Francis Wood has been listed on the National Register of Historic Place No. 100007846 and Ingleside Terraces has been fully documented as a National Register Historic District and submitted to the State Historic Preservation Office. Six other neighborhoods Jordan Park, West Clay Park, Forest Hill and Forest Hill Extension, Sea Cliff, Lincoln Manor and

Balboa Terrace are identified as potential historic districts. These six neighborhoods would be impacted by upzoning in and along the edges.

- Historic Category "A" rated buildings across the city would be impacted by the Rezone as it affords no protection for these previously identified, but not designated historic resources. The City of San Francisco Planning Department has previously required full Historic Resource Evaluations for projects involving Category "A" rated buildings. This policy change was not included in the 2022 Housing Element or analyzed in the 2022 EIR.

The following landmarks and contributors to historic districts designated pursuant to Article 10 of the San Francisco Planning Code may be removed from the Upzone by a pending amendment to the Upzone legislation:

- Designated Telegraph Hill Article 10 Historic District. The Rezone includes this entire Historic District, which was not in the 2022 Housing Element or analyzed in the 2022 EIR.
- Designated Alamo Square Article 10 Historic District. The Rezone includes most of this Historic District, including increased heights from 40 feet to 50 feet along Scott Street. This District was not in the 2022 Housing Element or analyzed in the EIR and could result in significant impacts to the District.
- Designated Webster Street Article 10 Historic District. The Rezone includes this entire Historic District, which was not in the 2022 Housing Element or analyzed in the EIR.
- Designated Haslett Warehouse, both National Register No. 75000172 and Article 10 Landmark No. 57 (680 Beach Street; Parcel 0010/002). he Rezone includes this parcel, owned by the United States National Park Service, upzoning it from its existing height of 40 feet to 65 feet. This was not included in the 2022 Housing Element or analyzed in the EIR.
- Designated San Francisco Art Institute Article 10 Landmark No 85 including the Diego Rivera Gallery Landmark No 284 (800 Chestnut Street; Parcel 0049/001). This parcel is rezoned from its existing height of 40 feet to 50 feet. This was not included in the 2022 Housing Element or analyzed in the EIR.
- Designated Ghiradelli Square, both National Register No. 82002249 and Article 10 Landmark No. 36 (920 North Point; Parcel 0452/002). This parcel is rezoned from its existing height limit of 40 feet to 65 feet. This was not included in the 2022 Housing Element or analyzed in the EIR.
- Designated Goodman Building/Emeric Building, both National Register No. 75000473 and Article 10 Landmark No. 71 (1117 Geary Blvd; Parcel 0714/018). This parcel is rezoned from its existing height limit of 130 feet to 650 feet. The Rezone also increases the base height limit from 130 feet to 260 feet and changes the density to form-based, which would encourage demolition and development using the State Density Bonus or

other State programs that provide density or development bonuses. This was not included in the 2022 Housing Element or analyzed in the EIR and could result in significant impacts to this historic site. Even if this parcel is removed from the Rezone, it is surrounded by parcels zoned to 650 feet, which could result in significant impacts to this historic resource.

- Designated First Unitarian Church Article 10 Landmark No. 40 (1187 Franklin Street; Parcel 0713/034). This parcel is rezoned from its existing height limit of 130 feet to 500 feet. The Rezone also increases the base height limit from 130 feet to 200 feet and, as the density is form-based, use of the State Density Bonus or other State programs that provide development bonuses would be encouraged. This was not included in the 2022 Housing Element or analyzed in the EIR and could result in significant impacts to this historic site. Even if this parcel is removed from the Rezone, it is surrounded by parcels zoned to 650 feet, which could result in significant impacts to this historic resource.

- Designated Earl C. Anthony Packard Showroom Article 10 Landmark No. 153 (901 Van Ness Avenue; Parcel 0719/002). The parcel is rezoned from its existing height limit of 130 feet to 500 feet. The Rezone also increases the base height limit from 130 feet to 200 feet and, as the density is form-based, use of the State Density Bonus or other State programs that provide development bonuses would be encouraged. This was not included in the 2022 Housing Element or analyzed in the EIR and could result in significant impacts to this historic site. Even if this parcel is removed from the Rezone, it is surrounded by parcels zoned to 500 feet and 350 feet, which could result in significant impacts to this historic resource.

- Designated Don Lee Auto Showroom, both National Register No. 01001179 and Article 10 Landmark No.152 (1000 Van Ness Avenue; Parcel 0715/014). This parcel is rezoned from its existing height limit of 130 feet to 500 feet. The Rezone also increases the base height limit from 130 feet to 200 feet and as the density is form-based, use of the State Density Bonus or other State programs that provide development bonuses would be encouraged. This was not included in the 2022 Housing Element or analyzed in the EIR and could result in significant impacts to this historic site. Even if this parcel is removed from the Rezone, it is surrounded by parcels zoned to 500 feet and 650 feet, which could result in significant impacts to this historic resource.

- Designated Stradtmuller House, both National Register No. 76000523 and Article 10 Landmark No. 35 (819 Eddy Street; Parcel 0743/015). This parcel is rezoned from its existing height limit of 130 feet to 300 feet. This was not included in the 2022 Housing Element or analyzed in the EIR and could result in significant impacts to this historic site. Even if this parcel is removed from the Rezone, it is surrounded by parcels zoned to 350 feet, which could result in significant impacts to this historic resource.

- Designated Engine Company Number 31 Fire House Article 10 Landmark No. 220 (1088 Green St (0121/010). This parcel is now within the Rezone but was not included in the 2022 Housing Element or analyzed in the EIR and could result in significant impacts to this historic building.

- Designated Clay Theater Article 10 Landmark No. 302 (2261 Fillmore Street; Parcel 0630/002). This parcel and area of Fillmore Street are rezoned from their existing height limit of 40 feet to 65 feet. This was not included in the 2022 Housing Element or analyzed in the EIR and this could result in significant impacts to this historic site. Even if this parcel is removed from the Rezone, it is surrounded by parcels zoned to 65 feet, which could result in significant impacts to this historic resource.
- Designated Calvary Presbyterian Church National Register No 78000755 and Article 10 Landmark No. 103 (2501 Fillmore Street; Parcel 0587/027). This parcel and area of Fillmore are now within the Rezone but were not included in the 2022 Housing Element or analyzed in the 2022 EIR. This could result in significant impacts to this historic site.
- Designated Grace Cathedral Article 10 Landmark No. 170 (1100 California Street; Parcel 0246/001). This parcel and area of Nob Hill are now within the Rezone but were not included in the 2022 Housing Element or analyzed in the EIR. This could result in significant impacts to this site.
- Designated Chambord Apartments, both Article 10 Landmark No. 106 and National Register No. 84001184 (1298 Sacramento Street; Parcel 0221/125). This parcel and area of Nob Hill are now within the Rezone but were not included in the 2022 Housing Element or analyzed in the EIR. This could result in significant impacts to this site.
- Designated Old Flood Mansion, Pacific Union Club, both Article 10 Landmark No. 64 and National Register No. 66000230 (1000 California Street; Parcel 0245/001). This parcel and area of Nob Hill are now within the Rezone but were not included in the 2022 Housing Element or analyzed in the EIR. This could result in significant impacts to this site.
- Designated Westfield House Article 10 Landmark No. 135 (1198 Fulton Street, Parcel 0777/015) located in the Alamo Square Article 10 Historic District. The Rezone includes this parcel, which was not included in the 2022 Housing Element or analyzed in the EIR. The Rezone could result in significant impacts to this historic site and the Alamo Square Historic District.
- Designated Third Baptist Church Complex Article 10 Landmark No. 275 (1399 McAllister Street, Parcel 0778/013). The Rezone includes this parcel, which was not included in the 2022 Housing Element or analyzed in the EIR. The Rezone could result in significant impacts to this historic site.
- Designated Archbishop's Mansion Article 10 Landmark No. 151 (1000 Fulton Street, Parcel 0778/006) located in the Alamo Square Article 10 Historic District. The Rezone includes this parcel, which was not included in the 2022 Housing Element or analyzed in the 2022 EIR. The Rezone could result in significant impacts to this historic site and the Alamo Square Historic District.
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- Designated Abner Phelps House, both National Register No. 71000187 and Article 10 Landmark No. 32 (1111 Oak Street; Parcel 1218/050). This parcel is rezoned from its existing height limit of 40 feet to 50 feet. This was not included in the 2022 Housing Element or analyzed in the 2022 EIR and could result in significant impacts to this historic site. Even if this parcel is removed from the Rezone, because it is adjacent to parcels zoned up to 85 feet, this could result in significant impacts to this historic resource.

- Designated Sarah Mish House, both National Register No. 79000534 and Article 10 Landmark No. 62 (1153 Oak Street; Parcel 1218/029). This parcel is rezoned from its existing height limit of 40 feet to 50 feet. This was not included in the 2022 Housing Element or analyzed in the 2022 EIR and could result in significant impacts to this historic site.

- Designated Firehouse Engine Company No. 2, both Article 10 Landmark No. 89 (1152 Oak Street, Parcel 1215/010) and a contributor to the Buena Vista North Historic District, an eligible California Register Historic District. The inclusion of this parcel in the Rezone was not included in the 2022 Housing Element or analyzed in the EIR and could result in significant impacts to this historic site. Even if this parcel is removed from the Rezone, because it is surrounded by parcels zoned 65 feet and 85 feet, this could result in significant impacts to this historic resource.

- Designated Richard Doolan/Norman Larson Residence Article 10 Landmark No. 253 (557 Ashbury Street, Parcel 1231/009). As the density is form-based, the use of the State Density Bonus or other State programs that provide development bonuses would be allowed. Even if this parcel is removed from the Rezone, because it is surrounded by parcels zoned to 65 feet with form-based density and rezoned to RTO-C, this could result in significant impacts to this historic resource.

- Designated Theodore Green Apothecary Article 10 Landmark No. 182 (500 Divisadero Street, Parcel 1203/017A). This parcel is rezoned from its existing height limit of 65 feet to 85 feet. This was not included in the 2022 Housing Element or analyzed in the EIR and could result in significant impacts to this historic site. Even if this parcel is removed from the Rezone, because it is surrounded by parcels zoned up to 85 feet, this could result in significant impacts to this historic resource.

- Designated Charles L. Hinkel House and Carriage House Article 10 Landmark No. 190 (280 Divisadero Street; Parcel 1238/023). This parcel is rezoned from its existing height limit of 40 feet to 85 feet. This was not included in the 2022 Housing Element or analyzed in the EIR and could result in significant impacts to this historic site. Even if this parcel is removed from the Rezone, because it is adjacent to parcels zoned up to 85 feet, this could result in significant impacts to this historic resource.

- Designated Old Saint Patrick's Church Article 10 Landmark No. 6 (1820 Eddy Street, Parcel 1127/007A). This parcel now included in the Rezone and changed to form-based density (density decontrol) and rezoned from RM-3 to RTO-C which allows commercial uses on the ground floor. These changes were not included in the 2022 Housing

Element or analyzed in the EIR and could result in significant impacts to this historic site. Even if this parcel is removed from the Rezone, because it is surrounded by parcels zoned to 65 feet with form-based density and rezoned to RTO-C, this could result in significant impacts to this historic resource.

- Glazer-Keating House Article 10 Landmark No. 251 (1110 Taylor Street, Parcel 0222/018). The Rezone now includes this parcel, which was not included in the 2022 Housing Element or analyzed in the EIR.

- Merryvale Antiques (S.F. Gas Light Co.) Article 10 Landmark No 58 (3640 Buchanan Street, Parcel 0459/003) This parcel is included in the Rezone and changed to form-based density (density decontrol). The Rezone now includes this parcel, which was not included in the 2022 Housing Element or analyzed in the EIR.

- Ladies Protection and Relief Society Article 10 Landmark No 320 (3400 Laguna Street, Parcel 0471/003). The Rezone now includes this parcel, which was not included in the 2022 Housing Element or analyzed in the EIR.

- Blackstone Court Article 10 Historic District (30 Blackstone Court, 1545 Lombard Street, and 1549 Lombard Street (Parcels 0504/003, 0504/003H & 0504/019). The Rezone increases the height of two of the parcels in this District from 40 feet to140 feet and the density is changed to form-based. This Historic District was not included in the 2022 Housing Element or analyzed in the EIR. Even if this parcel is removed from the Rezone, because it is surrounded by parcels zoned to 140 feet with form-based density, this could result in significant impacts to this historic resource.

- North End Police Station and Garage Article 10 Landmark No. 218 (2475 Greenwich, Parcel 0513/015). The Rezone includes this parcel, which was not included in the 2022 Housing Element or analyzed in the 2022 EIR.

- Filbert Street Cottages Article 10 Landmark No 232 (1338 Lombard Street, Parcel 0524/031). This parcel is rezoned from its existing height limit of 40 feet to 85 feet. This was not included in the 2022 Housing Element or analyzed in the 2022 EIR and could result in significant impacts to this historic site. Even if this parcel is removed from the Rezone, because it is adjacent to parcels zoned up to 85 feet, this could result in significant impacts to this historic resource.

- Metro Theater Article 10 Landmark No 261 (2055 Union Street, Parcel 0541/018. The Rezone includes this parcel, which is upzoned from its existing height limit of 40 feet to 65 feet. This site was not included in the 2022 Housing Element or analyzed in the 2022 EIR.

- The Colonial Dames (McElroy) Octagon House Article 10 Landmark No. 17 and National Register No 720000250 (2645 Gough Street, Parcels 0544/001 and 0544/001C. This historic site, included in the Upzone, is rezoned from its existing height limit of 40 feet to 65 feet and its density changed to form-based. This was not included in the 2022 Housing Element or analyzed in the 2022 EIR.

- Alhambra Theater Article 10 Landmark No. 21 (2320-366 Polk Street, Parcel 0548/022). The Rezone includes this parcel, which is upzoned from its existing height limit of 65 to 85 and now form-based. This was not included in the 2022 Housing Element or analyzed in the 2022 EIR.

- The Burr Mansion Article 10 Landmark No.31 and National Register #14000967 (1772 Vallejo Street, Parcel 0552/029). The Rezone includes this parcel, which is upzoned from its existing height limit of 40 feet to 85 feet. This was not included in the 2022 Housing Element or analyzed in the 2022 EIR. Even if this parcel is removed from the Rezone, because it is adjacent to parcels zoned up to 85 feet, this could result in significant impacts to this historic resource.

- Golden Gate Valley Carnegie Library Article 10 Landmark No. 300 (1801 Green Street, Parcel 0554/001). The Rezone includes this parcel, which was not included in the 2022 Housing Element or analyzed in the 2022 EIR.

- Casebolt House Article 10 Landmark No 51 (2727 Pierce Street, Parcel 0560/005). The Rezone includes this parcel, which was not included in the 2022 Housing Element or analyzed in the 2022 EIR.

- Church For The Fellowship of All People Article 10 Landmark No. 309 (2041 Larkin Street, Parcel 0572/003). The Rezone includes this parcel, which is upzoned from its existing height limit of 40 feet to 65 feet. This was not included in the 2022 Housing Element or analyzed in the 2022 EIR. Even if this parcel is removed from the Rezone, because it is adjacent to parcels zoned up to 85 feet, this could result in significant impacts to this historic resource.

- Engine Company No. 8 Truck No. 4 Article 10 Landmark No. 188 (1648 Pacific St., Parcel 0574/011). The Rezone includes this parcel, which is upzoned from its existing height limit of 65 feet to 350 feet. This extreme upzoning was not included in the 2022 Housing Element or analyzed in the 2022 EIR. Even if this parcel is removed from the Rezone, because it is adjacent to parcels zoned up to 350 feet, this could result in significant impacts to this historic resource.

- Talbot-Dutton House Article 10 Landmark No. 57 (2200 Franklin/1782 Pacific Avenue, Parcel 0575/010). The Rezone includes this parcel, which is upzoned from its existing height limit of 80 feet to 240 feet, its density is changed form-based, and rezoned from residential to RTO-C. This extreme rezoning was not included in the 2022 Housing Element or analyzed in the2022 EIR. Even if this parcel is removed from the Rezone, because it is adjacent to parcels zoned up to 240 feet to 350 feet, this could result in significant impacts to this historic resource.

- St. Brigid's Church Article 10 Landmark No. 252 (2151 Van Ness Avenue, Parcel 575/015). The Rezone includes this parcel, which is upzoned from its existing height limit of 80 feet to 350. Even if this parcel is removed from the Rezone, because it is adjacent to parcels zoned up to 240 feet to 350 feet, this could result in significant impacts to this historic resource.

- Bourne Mansion Article 10 Landmark No 38 (2550 Webster Street, Parcel 0580/013). The Rezone includes this parcel, which is upzoned from its existing height limit of 40 feet to 65 feet, and rezoned from residential to RTO-C. Even if this parcel is removed from the Rezone, because it is adjacent to parcels zoned up to 65 feet, this could result in significant impacts to this historic resource.

- Leale House Article 10 Landmark No. 45 (2475 Pacific Avenue, Parcel 0587/018). The Rezone includes this parcel, which was not included in the 2022 Housing Element or analyzed in the EIR.

- Whittier Mansion Article 10 Landmark No. 75 and National Register No 76000524 (2090 Jackson St, Parcel 0591/007). The Rezone includes this parcel, which was not included in the 2022 Housing Element or analyzed in the EIR.

- Haas-Lilienthal House Article 10 Landmark No. 69 and National Register No 730000438 (2007 Franklin St. 0600/002). The Rezone includes this parcel, which was not included in the 2022 Housing Element or analyzed in the EIR.

- Spreckels Residence Article 10 Landmark No. 197 (2080 Washington Street, Parcel 0601/005. The Rezone includes this parcel, which was not included in the 2022 Housing Element or analyzed in the EIR.

- Sacred Heart Parish Complex Article 10 Landmark No.316 and National Register 10000112 (660 Oak Street, Parcel 0828/012; 735 Fell Street, Parcel 0828/022A; 554 Filmore Street, Parcel 0828/22; and 546-548 Filmore Street, Parcel 0828/21). The Rezone includes these parcels, which were not included in the 2022 Housing Element or analyzed in the EIR.

- Market Street Masonry Historic District Article 10 Historic District and listed in the California Register of Historical Resources (7 non-contiguous historic buildings on Market Street Between Franklin Street and Valencia Street, including Parcels 3504/038, 3504/040, 3504/046, 3504/001, 0854/004 and 0854/005, and the Miramar Apartments at 1582 Market Street, Parcel 0836/010. The Rezone includes the parcels in this District, which are upzoned from their existing height limit of 85 feet to 140 feet. Even if these parcels are removed from the Upzone, because they are surrounded by parcels rezoned to 140 feet, this could result in significant impacts to this historic resource.

- Health Sciences Library Article 10 Landmark No. 115 (2395 Sacramento Street, Parcel 0637/016). The Rezone includes this parcel, which was not included in the 2022 Housing Element or analyzed in the 2022 EIR.

- William Vale House Article 10 Landmark No. 168 (2226 California Street, Parcel 0637/040). The Rezone includes this parcel, which is upzoned from its existing height limit of 40 feet to 85 feet, and the density is changed to form-based. Even if this parcel is removed from the Upzone, because it is surrounded by parcels rezoned to 85 feet, this could result in significant impacts to this historic resource.

- Chambers Mansion Article 10 Landmark No.119 (2220-2222 Sacramento Street, Parcel 0627/054). The Rezone includes this parcel, which was not included in the 2022 Housing Element or analyzed in the 2022 EIR.

- Richard E. Queen House Article 10 Landmark No. 198 (2212 Sacramento Street, Parcel 0627/004). The Rezone includes this parcel, which was not included in the 2022 Housing Element or analyzed in the 2022 EIR.

- Atherton House Article 10 Landmark No. 70 and National Register No. 79000527 (1990 California Street, Parcel 0640/010). The Rezone includes this parcel, which is upzoned from its existing height limit of 40 feet to 85 feet, and rezoned from residential to RTO-C. Even if this parcel is removed from the Upzone, because it is surrounded by parcels rezoned to 85 feet, this could result in significant impacts to this historic resource.

- Isaac Wormser House/John C. Coleman House Article 10 Landmark No. 53 (1834 California Street, Parcel 0641/005). The Rezone includes this parcel, which was not included in the 2022 Housing Element or analyzed in the 2022 EIR.

- Lilienthal-Orville Pratt House Article 10 Landmark No. 55 (1818-1820 California Street, Parcel 0641/004). The Rezone includes this parcel, which was not included in the 2022 Housing Element or analyzed in the 2022 EIR.

- Golden Gate Commandery of the Knights Templar (Macedonia Missionary Baptist Church Article 10 Landmark No. 202 (2135 Sutter Street, Parcel 0682/006). The Rezone includes this parcel, which is upzoned from its existing height limit of 50 feet to 85 feet and is now form-based. This was not included in the 2022 Housing Element or analyzed in the 2022 EIR.

- Richardson Hall Article 10 Landmark Nos. 256, 257, and 258 (55 Laguna Street, Parcel 0870/001). The Rezone includes these Landmarks, which are upzoned from their existing height limits to 85 feet and their density has been changed to form-based. These buildings were not included in the 2022 Housing Element or analyzed in the 2022 EIR.

- Carmel Fallon Building Article 10 Landmark No. 223 and Contributor to the designated Hayes Valley Residential Historic District listed on the California Register of Historic Resources (1800-1806 Market Street, Parcel 0871/014). The Rezone includes this parcel, which is upzoned from its existing height limit of 85 feet to 120 feet and its density has been changed to form-based. This was not included in the 2022 Housing Element or analyzed in the 2022 EIR. Even if this parcel is removed from the Upzone,

because it is surrounded by parcels rezoned to 140 feet, this could result in significant impacts to this historic resource.

- Roos Residence both Article 10 Landmark No. 56 and National Register 09000805 (3500 Jackson Street, Parcel 0970/002). The Rezone includes this parcel, which was not included in the 2022 Housing Element or analyzed in the 2022 EIR.
- Ellingwood House Article 10 Landmark No. 207 (2799 Pacific Ave, Parcel 0978/010) and within the California Register eligible Presidio Heights Historic District. The Rezone includes this parcel, which was not included in the 2022 Housing Element or analyzed in the 2022 EIR.
- Koshland House Article 10 Landmark No. 95 and National Register No. 84001186, within the CA eligible Presidio Heights Historic District. (3800 Washington, Parcel 0989/028). The Rezone includes this parcel, which was not included in the 2022 Housing Element or analyzed in the 2022 EIR.
- Ortman-Shumate House Article 10 Landmark No. 98 (1901 Scott Street, Parcel 1027/003). The Rezone includes this parcel, which was not included in the 2022 Housing Element or analyzed in the 2022 EIR.
- Theodore Roosevelt Jr. High School Article 10 Landmark No. 285 (460 Arguello Street, Parcel 1061/049). The Rezone includes this parcel, which was not included in the 2022 Housing Element or analyzed in the 2022 EIR.
- San Francisco Memorial Columbarium Article 10 Landmark No. 209 (1 Loraine Court, Parcel 1084/002).The Rezone includes this parcel, which was not included in the 2022 Housing Element or analyzed in the 2022 EIR.
- Clunie House Article 10 Landmark No. 128 (301 Lyon Street, Parcel 1207/008). The Rezone includes this parcel, which was not included in the 2022 Housing Element or analyzed in the 2022 EIR.
- Alfred G. Hanson Residence Article 10 Landmark No. 196 (128 27th Avenue, Parcel 1332/049). The Rezone includes this parcel, which was not included in the 2022 Housing Element or analyzed in the 2022 EIR.
- St. John's Presbyterian Church Article 10 Landmark No. 83 (201 Arguello Boulevard, Parcel 1361/001). The Rezone includes this parcel, which was not included in the 2022 Housing Element or analyzed in the 2022 EIR.
- Campfire Girls Building Article 10 Landmark No. 169 (325 Arguello Boulevard), Parcel 1432/003). The Rezone includes this parcel, which was not included in the 2022 Housing Element or analyzed in the 2022 EIR.
- Richmond Branch Library Article 10 Landmark No. 247 (351 9th Avenue, Parcel 1441/007). The Rezone includes this parcel, which was not included in the 2022 Housing Element or analyzed in the 2022 EIR.

- Refugee Shack Article 10 Landmark No. 171 (1227 24th Avenue, Parcel 1726/004). The Rezone includes this parcel, which was not included in the 2022 Housing Element or analyzed in the 2022 EIR.
- Doelger Building Article 10 Landmark No.265 (320-26 Judah Street, Parcel 1763/020). The Rezone includes this parcel, which is upzoned from its existing height limit of 40 feet to 85 feet and its density has been changed to form-based. This was not included in the 2022 Housing Element or analyzed in the 2022 EIR. Even if this parcel is removed from the Upzone, because it is surrounded by parcels rezoned to 85 feet, this could result in significant impacts to this historic resource.
- Old Fire House Article 10 Landmark No.29 (1348 10th Avenue, Parcel 1764/031). The Rezone includes this parcel, which was not included in the 2022 Housing Element or analyzed in the 2022 EIR.
- Sunset Branch Library Article 10 Landmark No. 239 (1305-49 18th Street, Parcel 1773/001). The Rezone includes this parcel, which was not included in the 2022 Housing Element or analyzed in the 2022 EIR. Even if this parcel is removed from the Upzone, because it is surrounded by parcels rezoned to 65, 85 and 140 feet, this could result in significant impacts to this historic resource.
- Shriners' Hospital for Crippled Children Article 10 Landmark No.221 (1601 19th Avenue, Parcel 1924/004). The Rezone includes this parcel, which was not included in the 2022 Housing Element or analyzed in the 2022 EIR.
- San Francisco Conservatory of Music Article 10 Landmark No. 242 (1201 Ortega Street, Parcel 2115/037). The Rezone includes this parcel, which was not included in the 2022 Housing Element or analyzed in the 2022 EIR.
- The McCormick House Article 10 Landmark No. 208 (4040-4042 17th Street, Parcel 2623/012). The Rezone includes this parcel, which is upzoned from its existing height limit of 40 feet to 120 feet, its density is changed form-based, and it is rezoned from residential to RTO-C. Even if this parcel is removed from the Upzone, because it is surrounded by parcels rezoned to 140 feet with form based density, this could result in significant impacts to this historic resource.
- Alfred E. (Nobby) Clarke Mansion Article 10 Landmark No. 80 (250 Douglass St., Parcel 2700/001). The Rezone includes this parcel, which was not included in the 2022 Housing Element or analyzed in the 2022 EIR.
- Miller-Joost House Article 10 Landmark No. 79 (3224 Market Street, Parcel 2704/040). The Rezone includes this parcel, which was not included in the 2022 Housing Element or analyzed in the 2022 EIR.
- David Lewis House Article 10 Landmark No.186 (4143 23rd Street, Parcel 2804/040). The Rezone includes this parcel, which was not included in the 2022 Housing Element or analyzed in the 2022 EIR.

- 171 San Marcos Avenue (aka Cowell House) Article 10 Landmark No. 270 (171 San Marcos Avenue, Parcel 2882/035). The Rezone includes this parcel, which was not included in the 2022 Housing Element or analyzed in the 2022 EIR.
- El Rey Theater Article 10 Landmark No.274 (1970 Ocean Avenue, Parcel 3280/018). The Rezone includes this parcel, which is upzoned from its existing height limit of 40 feet to 85 feet. This was not included in the 2022 Housing Element or analyzed in the 2022 EIR.
- Juvenile Court and Detention Center Article 10 Landmark No. 248 (170 Otis Street, Parcel 3513/207). The Rezone includes this parcel, which is upzoned from its existing height limit of 125 feet to 160 feet. This was not included in the 2022 Housing Element or analyzed in the 2022 EIR.
- 396-398 12th Street (aka San Francisco Eagle Bar) Article 10 Landmark No. 295 (396-398 12th Street, Parcel 3522/014). The Rezone includes this parcel, which is upzoned from its existing height limit of 55 feet to 85 feet. This was not included in the 2022 Housing Element or analyzed in the 2022 EIR.
- Saint Francis Lutheran Church Article 10 Landmark No. 39 (152 Church Street, Parcel 3537010). The Rezone includes this parcel, which is upzoned from its existing height limit of 40 feet to 85 feet. This was not included in the 2022 Housing Element or analyzed in the 2022 EIR.
- Swedish American Hall Building Article 10 Landmark No. 267 (2168-2174 Market Street, Parcel 3542/062). The Rezone includes this parcel, which is upzoned from its existing height limit of 40-50 feet to 120 feet. This upzoning was not included in the 2022 Housing Element or analyzed in the 2022 EIR. Even if this parcel is removed from the Upzone, because it is surrounded by parcels rezoned to 120 feet and 160 feet with form based density, this could result in significant impacts to this historic resource.
- 2117-2123 Market Street (aka New Era Hall) Article 10 Landmark No. 277 (2117-2123 Market Street, Parcel 3543/012). The Rezone includes this parcel, which is upzoned from its existing height limit of 40-50 feet to 120 feet. This upzoning was not included in the 2022 Housing Element or analyzed in the 2022 EIR. Even if this parcel is removed from the Upzone, because it is surrounded by parcels rezoned to 120 feet and 160 feet with form based density, this could result in significant impacts to this historic resource.
- 22 Beaver Street (aka Benedict-Gieling House) Article 10 Landmark No. 284 (22 Beaver Street, Parcel 3561060). The Rezone includes this parcel, which is upzoned from its existing height limit of 40 feet to 50 feet. This upzoning was not included in the 2022 Housing Element or analyzed in the 2022 EIR.
- The Jose Theater/Names Project Building Article 10 Landmark No. 241 (2362 Market Street, Parcel 3562/011). The Rezone includes this parcel, which is upzoned from its existing height limit of 65 feet to 120 feet. This upzoning was not included in the 2022 Housing Element or analyzed in the 2022 EIR. Even if this parcel is removed from the

Upzone, because it is surrounded by parcels rezoned to 120 feet and 160 feet with form based density, this could result in significant impacts to this historic resource.

- Mission Dolores Article 10 Landmark No. 1 and National Register No.72000251 (310-20 Dolores Street, Parcel 3566/001). The Rezone includes this parcel, which is upzoned from its existing height limit of 40 feet to 50 feet. This upzoning was not included in the 2022 Housing Element or analyzed in the EIR.
- Mission High School Article 10 Landmark No. 255 (3750 18th Street, Parcel 3579/006). The Rezone includes this parcel, which was not included in the 2022 Housing Element or analyzed in the EIR.
- Twin Peaks Tavern Article 10 Landmark No. 264 (3997 17th Street, Parcel 3582/071). The Rezone includes this parcel as being upzoned from its existing height limit of 65 feet to 160 feet and its density is changed to form-based. While this site was included in the 2022 Housing Element and the 2022 EIR as upzoned to 85 feet, the Rezone upzones it to 160 feet. Even if this parcel is removed from the Upzone, because it is surrounded by parcels rezoned to 160 feet with form based density, this could result in significant impacts to this historic resource.
- Castro Theater Article 10 Landmark No. 100 (429-431 Castro Street, Parcel 3582/085). The Rezone includes this parcel, which is upzoned from its existing height limit of 65 feet to 85 feet and its density is changed to form-based. This upzoning was not included in the 2022 Housing Element or analyzed in the 2022 EIR. Even if this parcel is removed from the Upzone, because it is adjacent to parcels rezoned to 160 feet with form based density, this could result in significant impacts to this historic resource.
- Castro Camera Article 10 Landmark No. 227 (573-75 Castro Street, Parcel 3583/061). The Rezone includes this parcel, which is upzoned from its existing height limit of 40 feet to 50 feet. This upzoning was not included in the 2022 Housing Element or analyzed in the 2022 EIR.
- Axford House Article 10 Landmark No. 133 (1190 Noe Street, Parcel 6538/048). The Rezone includes this parcel, which was not included in the 2022 Housing Element or analyzed in the 2022 EIR.
- Carnegie Noe Valley/Sally Brunn Branch Library Article 10 Landmark No. 259 (451 Jersey Street, Parcel 6539/034). The Rezone includes this parcel, which was not included in the 2022 Housing Element or analyzed in the 2022 EIR.
- 651 Duncan Street (aka Lyon-Martin House) Article 10 Landmark No. 292 (651 Duncan Street, Parcel 6604/036). The Rezone includes this parcel, which was not included in the 2022 Housing Element or analyzed in the 2022 EIR.
- Sunnyside Conservatory Article 10 Landmark No. 78 (236 Monterey Blvd, Parcel 6770/057). The Rezone includes this parcel, which was not included in the 2022 Housing Element or analyzed in the 2022 EIR.

- Joseph Leonard/Cecil F. Poole House Article 10 Landmark No. 213 (90 Cedro Avenue, Parcel 6908/016). The Rezone includes this parcel, which was not included in the 2022 Housing Element or analyzed in the 2022 EIR.

- 1345 Ocean Ave (aka Ingleside Presbyterian Church and the Great Cloud of Witnesses) Article 10 Landmark No. 273 (1345 Ocean Avenue, Parcel 6942/050). The Rezone includes this parcel, which is upzoned from its existing height limit of 50 feet to 85 feet.

- This upzoning was not included in the 2022 Housing Element or analyzed in the 2022 EIR.

- Sherman House Article 10 Landmark No. 49 (2160 Green Street, Parcels 0540/030 and 0540/028). The Rezone includes this parcel, which was not included in the 2022 Housing Element or analyzed in the 2022 EIR.

- Gibbs Residence and Caretaker's Cottage Article 10 Landmark 203 (2622-24 Jackson Street and 2624-29 Pacific Avenue, Parcels 0585/008, 0585/009 and 0585/010). The Rezone includes these parcels, which were not included in the 2022 Housing Element or analyzed in the 2022 EIR.
  .
- Southern Pacific Co. Hospital Complex Article 10 Landmark No. 192 and National Register 89000319 (1400-1599 Fell Street & 1509-1599 Hayes Street, Parcels 1206/002 and 1206/003). Also within the Panhandle Historic District, an eligible California Register Historic District. The Rezone includes these parcels, which were not included in the 2022 Housing Element or analyzed in the 2022 EIR.

- Edward Coleman House Article 10 Landmark No. 54 (1701 Franklin Street, Parcels 0641/014 and 0641/015). The Rezone includes this parcel, which was not included in the 2022 Housing Element or analyzed in the 2022 EIR.

- Designated Duboce Park Article 10 Historic District, is proposed for removal from the Rezone except for the contributory buildings located along Waller and Steiner Streets are proposed to be rezoned RTO-1, remaining in the Rezone. This Historic District was not included in the 2022 Housing Element or analyzed in the 2022 EIR.

Attachment 2: North Beach National Register of Historic Places Historic District Parcel Analysis Within Rezone
November 30, 2025
Compiled by Bridget Maley, architecture + history, llc

Address	APN Number	Year Built	District Status
490 Lombard St	0062017B	1926	C
1916-18 Stockton St	0062017C	1940	C
1922-24 Stockton St	0062017D	1940	C
1934-36 Stockton St	0062017E	1940	C
1946-48 Stockton St	0062019	1908	C
1952-56 Stockton St	0062020	1908	C
1958-60 Stockton St	0062021	1906	C
379-99 Chestnut St/1952-56 Stockton	0062022	1906	C
1940 Stockton St	0062052-058	1980	NC
401 Chestnut St/1957-61 Stockton	0063001	c. 1906	C
1951-55 Stockton St	0063002	1906	C
1943-47 Stockton St	0063003	1907	C
1935-41 Stockton St	0063004	1907	C
1929-33 Stockton St	0063005	1907	C
1923-25 Stockton St	0063006	1908	C
1915-17 Stockton St	0063007	1907	C
1901-05 Stockton St	0063009	1906	C
520-24 Lombard St	0063010	1911	C
526-30 Lombard St	0063011	1909	C
532-36 Lombard St	0063012	1912	C
538-42 Lombard St	0063013	1912	C
544-46 Lombard St	0063014	1916	C
548 Lombard St	0063015	1926	NC
566-76 Lombard St	0063017	1908	C
590-94 Lombard St	0063018	1925	C
2006-08 Powell St	0063018A	1924	C

Address	APN Number	Year Built	District Status
2018-20 Powell St	0063018C	1924	NC
2024-30 Powell St	0063019	1906	C
2038-40 Powell St	0063021	1956	NC
2044-48 Powell St	0063022	1909	C
2050-64 Powell St	0063023	1907	C
475 Chestnut St	0063024	1946	C
461-67 Chestnut St	0063025	c. 1907	C
455-59 Chestnut St	0063025A	1908	C
449-53 Chestnut St	0063026	1912	C
443-47 Chestnut St	0063027	1908	C
437-41 Chestnut St	0063027A	1908	C
427 Chestnut St	0063028	1932	C
421-23 Chestnut St	0063029	1907	C
1907-13 Stockton St	0063030-033	1906	C
560-64A Lombard St	0063034-036 & 16A	1907	C
2032-34 Powell St	0063037-038	1912	C
2061-65 Powell St	0064001	1906	C
2055-59 Powell St	0064002	1908	C
2049-53 Powell St	0064003	1909	C
2043-47 Powell St	0064004	1909	C
2035-41 Powell St	0064005	1909	C
2027-31 Powell St	0064006	1907	C
2017-21 Powell St	0064007	1912	C
602-04 Lombard St	0064009	1926	C
616-18 Lombard St	0064032	1922	C
2011-15 Powell St	0064033-035	c. 1912	C
513-19 Lombard St	0076001	1917	C

Address	APN Number	Year Built	District Status
1847-57 Stockton St	0076003	1910	C
1843 Stockton St	0076004	1906	NC
1815-25 Stockton St	0076006	1907	C
1807-09 Stockton St	0076007	1907	C
1801-03 Stockton St	0076008	1908	C
622-24 Greenwich St	0076009	1908	C
628-30 Greenwich St	0076010	1908	C
638-42 Greenwich St & 632A Greenwich	0076011	1906	C
644-46 Greenwich St	0076012	1925	C
652-56 Greenwich St	0076013	1906	C
658-64 Greenwich St	0076014	1907	C
666-76 Greenwich St	0076015	1906	C
678-80 Greenwich St	0076016	1906	C
1906 Powell St & 690-92 Greenwich	0076017	1923	C
1918-22 Powell St	0076020	1906	C
1930-34 Powell St	0076022	1912	C
1936-38 Powell St	0076023	1906	C
1942-46 Powell St	0076024	1912	C
1948-54 Powell St	0076025	1914	C
1956-66 Powell St	0076025A	1914	C
585-87 Lombard St	0076025B	1908	C
567-79 Lombard St	0076026	1914	C
563-65 Lombard St	0076027	1906	C
551-61 Lombard St	0076027A	1914	C
547-49 Lombard St	0076028	1913	C
537-39 Lombard St	0076030	1907	C

Address	APN Number	Year Built	District Status
1 Tuscany Alley	0076032	1906	C
529-31 Lombard St	0076033	1925	C
525-27 Lombard St	0076033A	1925	C
543-45 Lombard St	0076034-035	1925	C
1839-41 Stockton St	0076054-055	c. 2014	NC
1924-26 Powell St	0076056-057	1922	C
1865-76 Stockton St	0076058-059	1906	C
5-11 Edith St/1721-25 Grant	0077008	1913	C
1707-09 Grant Ave	0077009	1907	NC
1703-05 Grant Ave	0077010	1909	NC
500-12 Greenwich St	0077011	1908	C
514-16 Greenwich St & 15-17 Edith	0077012	1924	C
520-22 Greenwich St & 19-21 Edith	0077013	1910	C
528-30 Greenwich St & 25-27 Edith	0077014	1909	C
532-34 Greenwich St	0077015	1908	C
540 Greenwich St & 33-35 Edith	0077016	1931	C
544-46 Greenwich St & 43-45 Edith	0077017	1912	C
550-52 Greenwich St & 49-51 Edith	0077018	1912	C
558-60 Greenwich St	0077019	1911	C
562-64 Greenwich St	0077020	1908	C
568-70 Greenwich St	0077021	1908	C
586-90 Greenwich St	0077023	1908	C
1800-04 Stockton St	0077023A	1907	C
1814 Stockton St	0077024	1966	C
1816-20 Stockton St	0077025	1911	C
1822-26 Stockton St	0077026	1915	C
1828-32 Stockton St	0077027	1914	C

Address	APN Number	Year Built	District Status
1848 Stockton St	0077030	1907	C
1852-56 Stockton St	0077031	1906	C
1858-60 Stockton St	0077032	1914	C
1864-66 Stockton St	0077032A	1915	C
576-80 Greenwich St	0077049-051	1997	NC
1840-44 Stockton St	0077052-054	1911	C
1653-67 Grant Ave	0088001	1908	C
1647-51 Grant Ave	0088002	1908	C
1639-45 Grant Ave	0088003	1913	C
1635-37 Grant Ave	0088004	1908	C
12-26 Medau Place & 1615-33 Grant	0088005	1908	C
1601 Grant Ave	0088006	1965	NC
540-50 Filbert St & 51-61 Medau	0088009	1909	C
552-56 Filbert St & 63-65 Medau	0088010	1906	C
558-62A Filbert St	0088011	1907	C
566 Filbert St	0088012	c. 1907	C
570-74 Filbert St & 12-18 Krausgrill	0088013	1907	C
579-81 Greenwich St	0088023	1908	C
561 Greenwich St	0088025	1961	C
551-57 Greenwich St	0088026	1911	C
547-49 Greenwich St	0088027	1911	C
533-57 Greenwich St	0088029	1912	C
517-23 Greenwich St	0088031	1912	C
1-3 Kramer Place	0088034	1910	C
577 Greenwich St	0088036	1909	C
567-69 Greenwich St	0088037	1906	C
19-33 Medau Place	0088041-048	1909	C

Address	APN Number	Year Built	District Status
526-30 Filbert St	0088052-054	1912	C
532-36 Filbert St	0088055-057	c. 1986	NC
539-45 Greenwich St	0088058-061	1913	C
525-31 Greenwich St	0088071-072	1914	C
7-9 Kramer Place	0088073-074	1910	C
608-20 Filbert St	0089011	1951	C
622-26 Filbert St	0089013	1913	C
630-34 Filbert St	0089014	1910	C
650-60 Filbert St	0089015	1912-1939	C
666 Filbert St	0089016	1917	C
673-77 Greenwich St	0089022A	1915	C
667-71 Greenwich St	0089022B	1914	NC
695-99 Greenwich St	0089022C	1925	C
659-59BGreenwich St	0089024	1907/2002	C/NC
651-55 Greenwich St	0089025	1908	C
643 Greenwich St	0089026	1907	C
637-41 Greenwich St	0089027	1911	C
637A-641A Greenwich St	0089027	unknown	C
619-21 Greenwich St	0089029	1961	C
1856-60 Powell St	0089031-036	1934	C
625-27 Greenwich St	0089038	1908	C
631A-C Greenwich St	0089039-041	1983	NC
1850-52 Powell St	0089042-043	1933	C
661-65 Greenwich St	0089044-046	1906	C
680 Filbert St	0089048-049	1971	NC
690 Filbert St	0089050-051	1961	NC

EXHIBIT C

Shawn Smallwood, PhD
3108 Finch Street
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Richard Drury
Lozeau | Drury LLP
1939 Harrison St., Suite 150
Oakland, CA 94612

24 October 2025

RE: San Francisco Housing Element 2022 Update FEIR Addendum

Dear Mr. Drury,

I write to comment on potential impacts on biological resources from the proposed Addendum to the San Francisco Housing Element 2022 Update Final Environmental Impact Report (FEIR). The FEIR, which was adopted by the Board of Supervisors and later signed by the Mayor on 31 January 2023, evaluated the impacts on the environment that could result from adoption and implementation of the San Francisco Housing Element 2022 Update. According to the Addendum, the FEIR anticipated "future actions, such as San Francisco Planning Code … amendments, designation of housing sustainability districts, and approval of development projects consistent with the goals, policies, and actions of the housing element update." The Addendum characterizes the proposed actions as "reasonably foreseeable changes," and states that its purpose "is to evaluate the environmental impacts of the rezoning program and document the San Francisco Planning Department's … determination that these impacts are adequately addressed in the FEIR." I am concerned that the proposed actions in the Addendum have not been adequately addressed, and that the action's impacts on wildlife would be excessive and highly significant.

My qualifications for preparing expert comments are the following. I hold a Ph.D. degree in Ecology from University of California at Davis, where I also worked as a post-graduate researcher in the Department of Agronomy and Range Sciences. My research has been on animal density and distribution, habitat selection, wildlife interactions with the anthrosphere, and conservation of rare and endangered species. I authored many papers on these and other topics. I served as Chair of the Conservation Affairs Committee for The Wildlife Society – Western Section. I am a member of The Wildlife Society and Raptor Research Foundation, and I've lectured part-time at California State University, Sacramento. I was Associate Editor of wildlife biology's premier scientific journal, The Journal of Wildlife Management, as well as of Biological Conservation, and I was on the Editorial Board of Environmental Management. I have performed wildlife surveys in California for thirty-seven years. My CV is attached.

POTENTIAL IMPACTS ON THE WILDLIFE COMMUNITY

The Addendum claims that the FEIR's analysis of wildlife impacts potentially caused by the originally planned 50,000 residential units have already addressed the impacts of the additionally proposed of 4,000 residential units. It further claims that the change in

outlay of the height and density of the originally planned 50,000 residential units are irrelevant to the analysis of potential impacts on wildlife. Deemed in no need of additional environmental review is the planned addition of 4,000 residential units, major shifts in the spatial distribution of the original 50,000 units, and increases in maximum building heights from 300 feet to 650 feet.

The Addendum (p. 48) points out that the FEIR had determined that future development associated with the adopted housing element would not adversely affect candidate, sensitive, or special-status species or sensitive natural communities, nor would it interfere with wildlife movement. I disagree with these determinations as they applied to the originally planned 50,000 residential units, as these determinations were simply not credible in the face of this much change to the environment. Here and now the City attempts to extend these same claims to the development associated with an additional 4,000 residential units and to substantial shifts in the spatial and vertical outlay of all 54,000 residential units.

One rationalization for the determinations was that special-status species such as peregrine falcon are adapted to the structural environment of San Francisco. Another was that compliance with existing state and federal regulations would ensure less-than-significant impacts to nesting birds. And for bats, the rationale was that compliance with the open space element of the general plan (Chapter 8 of the San Francisco Environment Code), would avoid potential impacts. These rationalizations, however, were speculative, having cited no evidence in their support. There was no citation of any comparative study of peregrine falcon population performance within the City versus in natural areas. There was no citation of monitoring data that would support the notion that existing state and federal regulations have been preventing significant impacts to nesting birds in the face of development pressure. There was no citation of monitoring data that would support the notion that Chapter 8 of the San Francisco Environment Code has managed to avoid development impacts on bats. Instead of relying on scientific inference, each argument leading to less-than-significant impact determinations was speculative. And this same strategy is carried forward in the Addendum with respect to the added 4,000 residential units and the changes in lateral and vertical outlay.

In fact, the evidence is overwhelming that overall bird abundance is on the decline, having declined 29% across North America over the past half-century (Rosenberg et al. 2019). In fact, all but three of the bat species in California are special-status species, indicating that bats as a taxonomic group are of serious conservation concern in California. And in fact, along with my co-investigator I have measured substantial declines in birds and special-status species as results of development projects (Smallwood and Smallwood 2023). The Addendum selects Peregrine falcon as an anecdote to imply that all birds simply adapt to the cityscape, but even the Peregrine falcon is vulnerable to window collisions. As another anecdote to the Addendum's, I happened to be in a meeting with attorneys of the California Attorney General's Office and agents with the U.S. Fish and Wildlife Service when we observed a Peregrine falcon nearly collide with our 14th story window as it chased after a rock pigeon in Oakland. And yet another anecdote from a few years ago, a Peregrine falcon fledgling fatally

collided with a window on the same UC Berkely building where it attempted its first flight from the nest. Peregrine falcons are vulnerable to window collision mortality just like any other bird, and perhaps even more so.

The Addendum does not consider the potential loss and fragmentation of the aerosphere in which these species travel and forage. The aerosphere is that part of the gaseous atmosphere where birds and bats and other volant animals with wings migrate, disperse, forage, perform courtship and where some of them mate (Davy et al. 2017, Diehl et al. 2017). Nor does the Addendum give any consideration to the potential loss and fragmentation of aerohabitat, which is that portion of the aerosphere used by each species (Kunz et al. 2008), and usually within 1,000 feet of the ground. Although both the peregrine falcon and bats often take prey on the ground, these animals are known for taking prey largely on the wing. These animals hunt other volant wildlife, which means that both these hunters and their prey perform vital life functions and interact with each other within the aerosphere. As for nesting birds, there would be no nesting birds without the birds' access to the aerosphere. Despite the vital importance of the aerosphere to peregrine falcons, nesting birds, and to bats, the Addendum fails to recognize the aerosphere as essential habitat to volant wildlife.

The Addendum does recognize that the new buildings would pose barriers to movement and collision hazards to birds. At page 49, the Addendum warns, "Changes to building heights could result in new impacts on migratory species if they result in flight paths being obstructed, more bird strikes, or impacts on falcon nesting habitat." The Addendum then dismisses these potential impacts by citing the adoption in the Aesthetics section of the FEIR of planning code section 139's Standards for Bird-Safe Buildings. However, there exist major logic problems with this purported solution. First, the standards for bird-safe buildings do not avoid the barrier effects of buildings, and in fact the strategic objective of bird-safe building guidelines is to increase the visibility of buildings as barriers to bird movement so that birds less often collide with the structural glass on the exteriors of the buildings. Second, the Standards for Bird-Safe Buildings, while meritorious as a first step toward reducing bird-window collision mortality, are of unmeasured efficacy. While it is great that the City adopted the Bird-Safe Guidelines, the City has yet to follow up with any study of whether or to what degree the Standards truly minimize or reduce bird-window collision mortality. In the face of this uncertainty, the additional 4,000 residential units, greater building heights, and revised spatial distribution could result in significantly larger numbers of collision fatalities compared to the 2022 plan, despite implementation of the City's Standards for Bird-Safe Buildings.

In my assessment, there are 147 special-status species of wildlife documented near enough to the project site to warrant a closer look at their occurrence likelihoods for the purpose of predicting potential project impacts (Table 1). Of these 147 special-status species, 14 are bats that, if they truly occur where construction would take place, would be at risk of losing aerohabitat in which they travel and forage. Another 112 special-status species of wildlife would be birds, 49 of which have been documented throughout the project area, eight of which are known to be centrally located, six are known to Golden Gate Park or Lake Merced, and 19 of which have been documented as generally

coastal. All these bird species would be vulnerable to collision mortality and greater expenditures of indispensable energy to negotiate the structural hazards of another 4,000 residential units and the reallocation of vertical building heights across the planning area.

All the birds represented in Table 1 can quickly fly from wherever they have been documented to any of the new buildings that would be part of the added project, so they would all be within brief flights to the proposed project's windows. At the California Academy of Sciences, the glass facades facing adjacent gardens killed 0.077 and 0.086 birds per m^2 of glass per year (Kahle et al. 2016), which might look like small numbers at first read, but which translate to large numbers of dead birds when projected to the extent of glass in the project (see below).

Window collisions are often characterized as either the second or third largest source or human-caused bird mortality. The numbers behind these characterizations are often attributed to Klem's (1990) and Dunn's (1993) estimates of about 100 million to 1 billion bird fatalities in the USA, or more recently by Loss et al.'s (2014) estimate of 365-988 million bird fatalities in the USA or Calvert et al.'s (2013) and Machtans et al.'s (2013) estimates of 22.4 million and 25 million bird fatalities in Canada, respectively. The proposed project would impose windows in the airspace normally used by birds.

Glass-façades of buildings intercept and kill many birds, but they are differentially hazardous to birds based on spatial extent, contiguity, orientation, and other factors. At Washington State University, Johnson and Hudson (1976) found 266 bird fatalities of 41 species within 73 months of monitoring of a three-story glass walkway (no fatality adjustments attempted). Prior to marking the windows to warn birds of the collision hazard, the collision rate was 84.7 per year. At that rate, and not attempting to adjust the fatality estimate for the proportion of fatalities not found, 4,574 birds were likely killed over the 54 years since the start of their study, and that's at a relatively small building façade. Accounting for the proportion of fatalities not found, the number of birds killed by this walkway over the last 54 years would have been about 14,270. And this is just for one 3-story, glass-sided walkway between two college campus buildings.

Klem's (1990) estimate was based on speculation that 1 to 10 birds are killed per building per year, and this speculated range was extended to the number of buildings estimated by the US Census Bureau in 1986. Klem's speculation was supported by fatality monitoring at only two houses, one in Illinois and the other in New York. Also, the basis of his fatality rate extension has changed greatly since 1986. Whereas his estimate served the need to alert the public of the possible magnitude of the bird-window collision issue, it was highly uncertain at the time and undoubtedly outdated more than three decades hence. Indeed, by 2010 Klem (2010) characterized the upper end of his estimated range – 1 billion bird fatalities – as conservative. Furthermore, the estimate lumped species together as if all birds are the same and the loss of all birds to windows has the same level of impact.

Table 1. *Occurrence likelihoods of special-status bird species at or near the proposed project site, according to eBird/iNaturalist records (https://eBird.org, https://www.inaturalist.org) and on-site survey findings, where 'Very close' indicates within 1.5 miles of the site, "nearby" indicates within 1.5 and 4 miles, and "in region" indicates within 4 and 30 miles, and 'in range' means the species' geographic range overlaps the site.*

Common name	***Species name***	**Status**[1]	**Occurrence records**	**Locations of On-site and Very-close records**
San Bruno elfin butterfly	*Callophrys mossii bayensis*	FE	In region	iNat obscured points
Monarch	*Danaus plexippus*	FC	On site	Throughout
Bay checkerspot butterfly	*Euphydryas editha bayensis*	FT	In region	iNat obscured points
Mission blue butterfly	*Icaricia icarioides missionensis*	FE	In region	iNat obscured points
Callippe silverspot butterfly	*Speyeria callippe callippe*	FE	In region	iNat obscured points
Myrtle's silverspot butterfly	*Speyeria zerene myrtleae*	FE	In region	
Crotch's bumble bee	*Bombus crotchii*	CCE	In region	
Western bumble bee	*Bombus occidentalis*	CCE	Very close	
Longfin smelt	*Spirinchus thaleichthys*	CT	In region	
Delta Smelt	*Hypomesus transpacificus*	FT, CE	In region	
Tidewater goby	*Eucyclogobius newberryi*	FE, SSC	In region	iNat obscured points
California giant salamander	*Dicamptodon ensatus*	SSC	In region	Obscured
Foothill yellow-legged frog	*Rana boylii*	FT, CE	In region	
California red-legged frog	*Rana draytonii*	FT, SSC	In region	iNat obscured points
Green sea turtle	*Chelonia mydas*	FT	In region	
Northwestern pond turtle	*Actinemys marmorata*	FC, SSC	On site	West and SW
San Francisco garter snake	*Thamnophis sirtalis tetrataenia*	FE, CE, CFP	In region	iNat obscured points
Brant	*Branta bernicla*	SSC2	On site	West and NE, along shores
Cackling goose (Aleutian)	*Branta hutchinsii leucopareia*	WL	On site	Generally throughout
Redhead	*Aythya americana*	SSC2	On site	North
Harlequin duck	*Histrionicus histrionicus*	SSC2	Very close	Presidio
Barrow's goldeneye	*Bucephala islandica*	SSC	On site	NW
Short-tailed albatross	*Phoebastria albatrus*	FE, SSC	In region	
Fork-tailed storm petrel		SSC	Very close	North and west shores
Ashy storm-petrel	*Hydrobates homochroa*	BCC, SSC	Very close	Lake Merced
Black storm-petrel	*Hydrobates melania*	SSC, BCC	Very close	NW corner of peninsula
Western grebe	*Aechmophorus occidentalis*	BCC	On site	Throughout

Common name	***Species name***	**Status[1]**	**Occurrence records**	**Locations of On-site and Very-close records**
Clark's grebe	*Aechmophorus clarkii*	BCC	On site	Throughout
Western yellow-billed cuckoo	*Coccyzus americanus occidentalis*	FT, CE	In region	
Black swift	*Cypseloides niger*	SSC3, BCC	On site	Central
Vaux's swift	*Chaetura vauxi*	SSC2	On site	Throughout
Calliope hummingbird	*Selasphorus calliope*	BCC	On site	Central/South
Rufous hummingbird	*Selasphorus rufus*	BCC	On site	Throughout
Allen's hummingbird	*Selasphorus sasin*	BCC	On site	Throughout
Yellow rail	*Coturnicops noveboracensis*	BCC, SSC	In region	
Ridgway's rail (San Francisco Bay)	*Rallus obsoletus obsoletus*	FE, CE, CFP	On site	North
California black rail			In range	
Black oystercatcher	*Haematopus bachmani*	BCC	On site	Throughout, mostly shoreines
Mountain plover	*Charadrius montanus*	SSC2, BCC	Very close	San Francisco Zoo
Snowy plover	*Charadrius nivosus*	BCC	On site	North and west shores, 1 central
Western snowy plover	*Charadrius nivosus nivosus*	FT, SSC	Very close	West along shore
Long-billed curlew	*Numenius americanus*	WL	On site	Throughout
Marbled godwit	*Limosa fedoa*	BCC	On site	Throughout
Black turnstone	*Arenaria melanocephala*	BCC	On site	Mostly along north, west shores
Red knot (Pacific)	*Calidris canutus*	BCC	On site	West along coast
Pectoral sandpiper	*Calidris melanotos*	BCC	Very close	Lake Merced and Presidio
Short-billed dowitcher	*Limnodromus griseus*	BCC	On site	West, North, and central
Wandering tattler	*Tringa incana*	BCC	On site	North and W, mostly shores
Lesser yellowlegs	*Tringa flavipes*	BCC	On site	North /central (Richmond)
Willet	*Tringa semipalmata*	BCC	On site	Throughout
Marbled murrelet	*Brachyramphus marmoratus*	FT, CE	On site	West and N/central (Richmond)
Rhinoceros auklet	*Cerorhinca monocerata*	WL	On site	North and W, along shores
Cassin's auklet	*Ptychoramphus aleuticus*	SSC	Very close	North and W of along shores
Scripps' murrelet	*Synthliboramphus scrippsi*	CT, BCC	Very close	NW of site along shore
Tufted puffin			Very close	West along shore

Common name	***Species name***	**Status[1]**	**Occurrence records**	**Locations of On-site and Very-close records**
Laughing gull	*Leucophaeus atricilla*	WL	Very close	Presidio, West shore, Lake Merced
Franklin's gull	*Leucophaeus pipixcan*	BCC	Very close	West shore, Golden Gate Park, Lake Merced
Heermann's gull	*Larus heermanni*	BCC	On site	Throughout
Western gull	*Larus occidentalis*	BCC	On site	Throughout
California gull	*Larus californicus*	BCC, WL	On site	Throughout
California least tern	*Sternula antillarum browni*	FE, CE, CFP	Very close	North and Lake Merced
Black tern	*Chlidonias niger*	SSC2, BCC	Very close	Golden Gate Park, North and west aspects
Elegant tern	*Thalasseus elegans*	BCC, WL	On site	Throughout
Black skimmer	*Rynchops niger*	BCC, SSC3	On site	North shore
Common loon	*Gavia immer*	SSC	On site	Throughout
Brandt's cormorant	*Urile penicillatus*	BCC	On site	Throughout, mostly along North and west shores
Double-crested cormorant	*Phalacrocorax auritus*	WL	On site	Throughout
American white pelican	*Pelacanus erythrorhynchos*	SSC1	On site	Throughout, mostly North, central
Least bittern	*Ixobrychus exilis*	SSC2	Very close	Golden Gate Park, Lake Merced
White-faced ibis	*Plegadis chihi*	WL	On site	West side
Turkey vulture	*Cathartes aura*	BOP	On site	Throughout
Osprey	*Pandion haliaetus*	WL, BOP	On site	Throughout
White-tailed kite	*Elanus luecurus*	CFP, BOP	On site	Throughout
Golden eagle	*Aquila chrysaetos*	BGEPA, CFP, BOP, WL	On site	Throughout, mostly central
Northern harrier	*Circus cyaneus*	BCC, SSC3, BOP	On site	Throughout
Sharp-shinned hawk	*Accipiter striatus*	WL, BOP	On site	Throughout
Cooper's hawk	*Accipiter cooperii*	WL, BOP	On site	Throughout
American goshawk	*Accipiter atricapillus*	SSC2, BOP	On site	North

Common name	***Species name***	**Status[1]**	**Occurrence records**	**Locations of On-site and Very-close records**
Bald eagle	*Haliaeetus leucocephalus*	CE, BGEPA, BOP	On site	Throughout
Red-shouldered hawk	*Buteo lineatus*	BOP	On site	Throughout
Swainson's hawk	*Buteo swainsoni*	CT, BOP	On site	Throughout
Red-tailed hawk	*Buteo jamaicensis*	BOP	On site	Throughout
Ferruginous hawk	*Buteo regalis*	WL, BOP	On site	Throughout
Rough-legged hawk	*Buteo lagopus*	BOP	On site	Central
American barn owl	*Tyto furcata*	BOP	On site	Throughout
Northern spotted owl	*Strix occidentalis caurina*	FT, CT, BOP	In range	
Western screech-owl	*Megascops kennicotti*	BOP	Very close	Presidio, Golden Gate Park
Great horned owl	*Bubo virginianus*	BOP	On site	Throughout
Burrowing owl	*Athene cunicularia*	BCC, SSC2, BOP, CCE	On site	Throughout
Long-eared owl	*Asio otus*	BCC, SSC3, BOP	In region	
Short-eared owl	*Asia flammeus*	BCC, SSC3, BOP	On site	Central
Northern saw-whet owl	*Aegolius acadicus*	BOP	On site	North
Northern pygmy-owl	*Glaucidium gnoma*	BOP	Very close	Lake Merced
Lewis's woodpecker	*Melanerpes lewis*	BCC	On site	North and central
Nuttall's woodpecker	*Picoides nuttallii*	BCC	On site	Throughout
American kestrel	*Falco sparverius*	BOP	On site	Throughout
Merlin	*Falco columbarius*	WL, BOP	On site	Throughout
Peregrine falcon	*Falco peregrinus*	BOP	On site	Throughout
Prairie falcon	*Falco mexicanus*	WL, BOP	On site	Throughout
Olive-sided flycatcher	*Contopus cooperi*	BCC, SSC2	On site	Throughout
Willow flycatcher	*Empidonax trailii*	CE	On site	Throughout
Vermilion flycatcher	*Pyrocephalus rubinus*	SSC2	On site	North /central (Richmond)
Least Bell's vireo	*Vireo bellii pusillus*	FE, CE	In region	
Loggerhead shrike	*Lanius ludovicianus*	SSC2	Very close	Presidio, Lake Merced, Golden Gate Park, SE of site

Common name	***Species name***	**Status[1]**	**Occurrence records**	**Locations of On-site and Very-close records**
Yellow-billed magpie	*Pica nuttalli*	BCC	On site	Central/South
Oak titmouse	*Baeolophus inornatus*	BCC	On site	North and central
California horned lark	*Eremophila alpestris actia*	WL	On site	North and central
Bank swallow	*Riparia riparia*	CT	On site	Throughout
Purple martin	*Progne subis*	SSC2	On site	Throughout
Wrentit	*Chamaea fasciata*	BCC	On site	Throughout
California thrasher	*Toxostoma redivivum*	BCC	On site	N and central
Cassin's finch	*Haemorhous cassinii*	BCC	On site	N and central
Lawrence's goldfinch	*Spinus lawrencei*	BCC	On site	N and central
Grasshopper sparrow	*Ammodramus savannarum*	SSC2	On site	N and central
Black-chinned sparrow	*Spizella atrogularis*	BCC	In region	
Bell's sparrow	*Amphispiza b. belli*	WL	On site	South
Large-billed savannah sparrow	*Passerculus sandwichensis rostratus*	SSC2	In region	
Yellow-breasted chat	*Icteria virens*	SSC3	On site	Throughout
Yellow-headed blackbird	*Xanthocephalus xanthocephalus*	SSC3	On site	North and central
Bullock's oriole	*Icterus bullockii*	BCC	On site	Throughout
Tricolored blackbird	*Agelaius tricolor*	CT, BCC, SSC1	On site	Throughout
Lucy's warbler	*Leiothlypis luciae*	SSC3	On site	SW and North
Virginia's warbler	*Leiothlypis virginiae*	WL, BCC	On site	Throughout
San Francisco common yellowthroat	*Geothlypis trichas sinuosa*	SSC3, BCC	In range	
Prothonotary warbler	*Protonotaria citrea*	BCC	On site	Central and West
Prairie warbler	*Setophaga discolor*	BCC	On site	Central
Yellow warbler	*Setophaga petechia*	SSC2	On site	Throughout
Hepatic tanager	*Piranga flava*	WL	On site	Central/South
Summer tanager	*Piranga rubra*	SSC1	On site	Throughout
Little brown bat	*Myotis lucifugus*	WBWG: M	In region	
Yuma myotis	*Myotis yumanensis*	WBWG: LM	Very close	In golden gate park

Common name	*Species name*	Status[1]	Occurrence records	Locations of On-site and Very-close records
Long-eared myotis	*Myotis evotis*	WBWG: M	In region	
Fringed myotis	*Myotis thysanodes*	WBWG: H	In range	
Long-legged myotis	*Myotis volans*	WBWG: H	In range	
California myotis	*Myotis californicus*	WBWG:L	Very close	In golden gate park
Canyon bat	*Parastrellus hesperus*	WBWG: M	In range	
Big brown bat	*Episticus fuscus*	WBWG: L	Very close	In golden gate park
Silver-haired bat	*Lasionycteris noctivagans*	WBWG: M	On site	North
Hoary bat	*Lasiurus cinereus*	WBWG: M	Very close	In golden gate park
Western red bat	*Lasiurus blossevillii*	SSC, WBWG: H	Very close	In golden gate park
Townsend's big-eared bat	*Corynorhinus townsendii*	SSC, WBWG: H	In region	
Pallid bat	*Antrozous pallidus*	SSC, WBWG: H	In region	
Mexican free-tailed bat	*Tadarida brasiliensis*	WBWG: L	Very close	Golden Gate Park
San Francisco dusky-footed woodrat	*Neotoma fuscipes annectens*	SSC	In region	
Southern sea otter	*nhydra lutris nereis*	FT, CFP, SSC	In region	
Salt-marsh harvest mouse	*Reithrodontomys raviventris*	FE, CE, CFP	In region	
American badger	*Taxidea taxus*	SSC	Nearby	

[1] Listed on CDFW's Special Animals List (https://nrm.dfg.ca.gov/FileHandler.ashx?DocumentID=109406) as FT or FE = federal threatened or endangered; FC = federal candidate for listing; BGEPA = Bald and Golden Eagle Protection Act; CT or CE = California threatened or endangered; CCT or CCE = Candidate California threatened or endangered; CFP = California Fully Protected (California Fish and Game Code 3511); SSC = California Species of Special Concern, and SSC1, SSC2 and SSC3 = California Bird Species of Special Concern priorities 1, 2 and 3, respectively); WL = CDFW's Taxa to Watch List; WBWG = Western Bat Working Group with priority rankings, of low (L), moderate (M), and high (H); BCC = U.S. Fish and Wildlife Service's Bird of Conservation Concern (https://www.fws.gov/sites/default/files/documents/birds-of-conservation-concern-2021.pdf); and BOP = protected by Birds of Prey (California Fish and Game Code 3503.5, see https://wildlife.ca.gov/Conservation/Birds/Raptors).

By the time Loss et al. (2014) performed their effort to estimate annual USA bird-window fatalities, many more fatality monitoring studies had been reported or were underway. Loss et al. (2014) incorporated many more fatality rates based on scientific monitoring, and they were more careful about which fatality rates to include. However, they included estimates based on fatality monitoring by homeowners, which in one study were found to detect only 38% of the available window fatalities (Bracey et al. 2016). Loss et al. (2014) excluded all fatality records lacking a dead bird in hand, such as injured birds or feather or blood spots on windows. Loss et al.'s (2014) fatality metric was the number of fatalities per building (where in this context a building can include a house, low-rise, or high-rise structure), but they assumed that this metric was based on window collisions. Because most of the bird-window collision studies were limited to migration seasons, Loss et al. (2014) developed an admittedly assumption-laden correction factor for making annual estimates. Also, only 2 of the studies included adjustments for carcass persistence and searcher detection error, and it was unclear how and to what degree fatality rates were adjusted for these factors. Although Loss et al. (2014) attempted to account for some biases as well as for large sources of uncertainty mostly resulting from an opportunistic rather than systematic sampling data source, their estimated annual fatality rate across the USA was highly uncertain and vulnerable to multiple biases, most of which would have resulted in fatality estimates biased low.

In my review of bird-window collision monitoring, I found that the search radius around homes and buildings was very narrow, usually 2 meters. Based on my experience with bird collisions in other contexts, I would expect that a large portion of bird-window collision victims would end up farther than 2 m from the windows, especially when the windows are higher up on tall buildings. In my experience, searcher detection rates tend to be low for small birds deposited on ground with vegetation cover or woodchips or other types of organic matter. Also, vertebrate scavengers entrain on anthropogenic sources of mortality and quickly remove many of the carcasses, thereby preventing the fatality searcher from detecting these fatalities. Adjusting fatality rates for these factors – search radius bias, searcher detection error, and carcass persistence rates – would greatly increase nationwide estimates of bird-window collision fatalities.

Buildings can intercept many nocturnal migrants as well as birds flying in daylight. As mentioned above, Johnson and Hudson (1976) found 266 bird fatalities of 41 species within 73 months of monitoring of a four-story glass walkway at Washington State University (no adjustments attempted for undetected fatalities). Somerlot (2003) found 21 bird fatalities among 13 buildings on a university campus within only 61 days. Monitoring twice per week, Hager at al. (2008) found 215 bird fatalities of 48 species, or 55 birds/building/year, and at another site they found 142 bird fatalities of 37 species for 24 birds/building/year. Gelb and Delacretaz (2009) recorded 5,400 bird fatalities under buildings in New York City, based on a decade of monitoring only during migration periods, and some of the high-rises were associated with hundreds of fatalities each. Klem et al. (2009) monitored 73 building façades in New York City during 114 days of two migratory periods, tallying 549 collision victims, nearly 5 birds per day. Borden et al. (2010) surveyed a 1.8 km route 3 times per week during 12-month period and found 271 bird fatalities of 50 species. Parkins et al. (2015) found 35 bird fatalities of 16 species within only 45 days of monitoring under 4 building façades. From

24 days of survey over a 48-day span, Porter and Huang (2015) found 47 fatalities under 8 buildings on a university campus. Sabo et al. (2016) found 27 bird fatalities over 61 days of searches under 31 windows. In San Francisco, Kahle et al. (2016) found 355 collision victims within 1,762 days under a 5-story building. Ocampo-Peñuela et al. (2016) searched the perimeters of 6 buildings on a university campus, finding 86 fatalities after 63 days of surveys. One of these buildings produced 61 of the 86 fatalities, and another building with collision-deterrent glass caused only 2 of the fatalities, thereby indicating a wide range in impacts likely influenced by various factors. There is ample evidence available to support my prediction that the proposed project would result in many collision fatalities of birds.

Project Impact Prediction

By the time of these comments, I had reviewed and processed results of bird collision monitoring at 213 buildings and façades for which bird collisions per m^2 of glass per year could be calculated and averaged (Johnson and Hudson 1976, O'Connell 2001, Somerlot 2003, Hager et al. 2008, Borden et al. 2010, Hager et al. 2013, Porter and Huang 2015, Parkins et al. 2015, Kahle et al. 2016, Ocampo-Peñuela et al. 2016, Sabo et al. 2016, Barton et al. 2017, Gomez-Moreno et al. 2018, Schneider et al. 2018, Loss et al. 2019, Brown et al. 2020, City of Portland Bureau of Environmental Services and Portland Audubon 2020, Riding et al. 2020). These study results averaged 0.073 bird deaths per m^2 of glass per year (95% CI: 0.042-0.102). This average and its 95% confidence interval provide a robust basis for predicting fatality rates at a proposed new project.

The Addendum includes an increase of 4,000 residential units. The floorspace per residential unit of condominiums, townhouses and apartments among the projects I have reviewed as an expert have averaged 1,296.3 square feet per unit. The average square footage of the apartments that contributed to this average was consistent with the floorspace reported in the Addendum as an example 590-foot-tall apartment building in the project, which itself would average 949 sf per unit with 60,700 sf of retail space. I estimate the total square footage of 4,000 residential units would be 5,185,251 sf.

Among the 45 residential projects I have reviewed as an expert and for which I was able to measure the extent of structural glass on proposed building facades depicted in renderings provided in the environmental review documents, I measured an average 0.01872 (95% confidence interval: 0.00989–0.02754) m^2 per square foot of floorspace. This rate multiplied by the total square footage of 4,000 additional residential units would predict 97,060 (95% CI: 51,300–142,821) m^2 of additional structural glass on the facades of new buildings in the City. The mean window area multiplied against the mean collision mortality measured across North America predicts 7,095 (aggregate[1] 95% CI: 2,226–14,82) bird fatalities per year. More than seven thousand additional fatalities per

[1] What I mean by aggregate CI is that the lower bound estimate of the window area is multiplied by the lower bound estimate of collision mortality, and the upper bound estimate of the window area is multiplied by the upper bound estimate of collision mortality.

year above the level that would be expected under the 2022 plan would be a substantial number, and it should easily qualify as a highly significant impact.

Nearly all predicted deaths would be of birds protected under the Migratory Bird Treaty Act and under the California Migratory Bird Protection Act, thus causing significant impacts. Given the predicted level of bird-window collision mortality, it is my opinion that the proposed project would result in potentially significant adverse biological impacts, including the unmitigated take of aerial habitats of birds, bats and other volant wildlife. Not only would the project take habitat of rare and sensitive species of birds, but it would transform the building's airspace into a lethal collision trap to birds.

SPATIAL DISTRIBUTION OF PREDICTED AVIAN COLLISION MORTALITY

San Francisco is situated within the Pacific Flyway, which is one of the most intensely used bird migration pathways in the world. It is also known that birds migrate along the coast and across Hawk Hill and the Marin Headlands, many headed to or from the Altamont Pass where I spent thousands of hours observing migrants during both day and night over about 20 years. Between Hawk Hill and the Altamont Pass is San Francisco, which must be visited by many thousands of migrating birds. Knowing which species of birds and how many birds move across San Francisco, and knowing specific flight paths that are disproportionately used by season would be useful for predicting where increases in building heights would pose greater risks to birds. Unfortunately, the data on bird movement through San Francisco are sparse.

There *are* data on bird species richness. Golden Gate Audubon Society ("GGAS") (2020), tallied 47 species of birds on Mount Sutro Open Space Reserve in about 54 hours of surveys between 16 March and 29 December 2019. On the same Reserve on 20 August 2020, I detected 23 species of birds over a much shorter time, but a model I fit to my data predicts that I would have detected the same number of bird species as GGAS (2020) had I surveyed for 11 hours and 40 minutes, and that I would have detected 117 species of birds had I surveyed for 54 hours (Figure 1).

I repeated my survey on Mount Sutro Open Space Reserve on 16 July 2021, and I implemented the same survey methods such as start time, duration, and survey route. The second survey yielded even more species detections and at a faster rate (red circles in Figure 2). Between both surveys I detected 37 species of birds, but adding the results of GGAS (2021) brings the total number of bird species to 71. With additional surveys, this number would surely increase. The evidence is that many birds find and use aerohabitat in San Francisco.

Kahle et al. (2016) detected 40 species of birds at the California Academy of Sciences building in Golden Gatee Park (Table 2). More importantly, members of 34 (85%) of these species were also recorded as window collision fatalities, and members of 37 (93%) of these species appear in the scientific literature as window collision fatalities. Killed disproportionately relative to their observed abundances were special-status species such as Allen's hummingbird and yellow warbler (Figure 3). Both these species are found in abundance in San Francisco (Photo 1).

Figure 1. *Cumulative number of bird species detected as a power function of the number of minutes devoted to the survey. The model explained 98% of the variation, with a root mean square error of 17.71. Had I been able to commit more time to the survey, I am confident a different model would have better fit the resulting data – a model more expressive of an asymptote.*

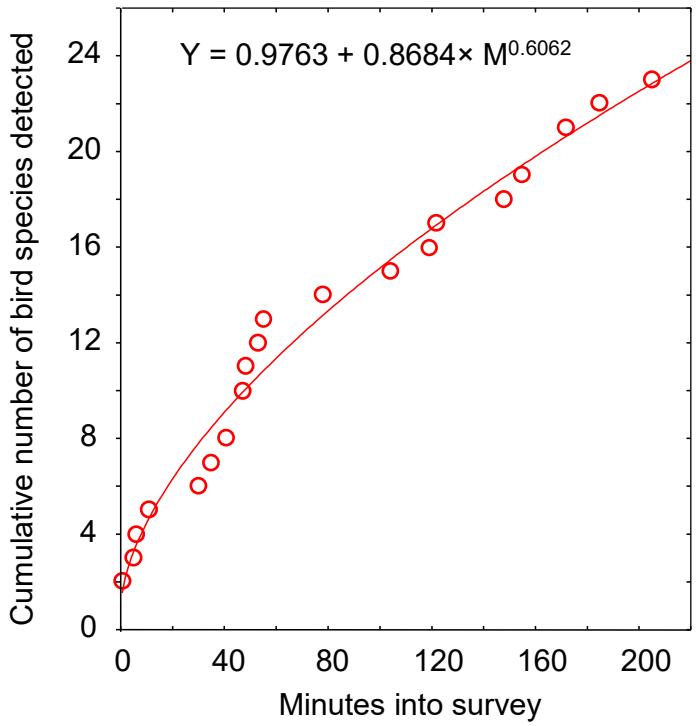

Figure 2. *Actual and predicted relationships between the number of vertebrate wildlife species (all but 2 were birds) detected and the elapsed survey time based on my visual-scan surveys on 20 August 2020 and 16 July 2021.*

$$Y_{2020} = \frac{1}{0.001559 + 0.935847(X+1)^{-0.580731}}$$

$$Y_{2021} = \frac{1}{0.0016586 + 0.459981(X+1)^{-0.543857}}$$

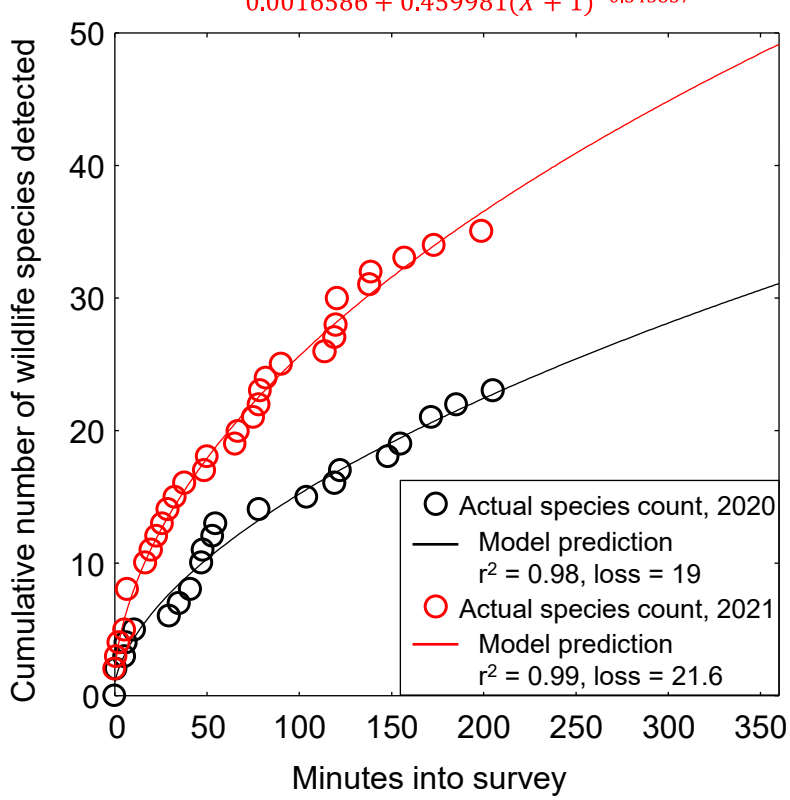

Table 2. *Species observed on site or reported as window-collision victims at the California Academy of Sciences (CAS) buildings (Kahle et al. 2016).*

Species	Scientific name	Status[1]	Number counted at CAS study		Known window deaths in North America
			As window deaths	Alive in survey plots	
Western gull	*Larus occidentalis*	BCC		4	
Red-tailed hawk	*Buteo jamaicensis*	BOP		1	Yes
Red-shouldered hawk	*Buteo lineatus*	BOP		1	Yes
Mourning dove	*Zenaida macroura*		6	3	Yes
Great-horned owl	*Bubo virginianus*	BOP		1	Yes
Anna's hummingbird	*Calypte anna*		131	256	Yes
Allen's hummingbird	*Selasphorus sasin*	BCC	37	29	Yes
Costa's hummingbird	*Calypte costae*	BCC	1	0	Yes
Rufous hummingbird	*Selasphorus rufus*	BCC	4	0	Yes
Nuttall's woodpecker	*Picoides nuttallii*	BCC		13	
Pacific-slope flycatcher	*Empidonax difficilis*		1	5	Yes
Black phoebe	*Sayornis nigricans*		3	34	Yes
Chestnut-backed chickadee	*Poecile rufescens*		1	203	Yes
Bushtit	*Psaltriparus minimus*		1	399	Yes
Brown creeper	*Certhia americana*		1	52	Yes
Pygmy nuthatch	*Sitta pygmaea*		1	242	Yes
Swainson's thrush	*Catharus ustulatus*		1	1	Yes
Hermit thrush	*Catharus guttatus*		8	82	Yes
American robin	*Turdus vulvaris*		3	389	Yes
Warbling vireo	*Vireo gilvus*		1	5	Yes
Yellow-rumped warbler	*Setophaga coronata*		7	92	Yes
Orange-crowned warbler	*Oreothlypis celata*		2	29	Yes
Townsend's warbler	*Setophaga townsendi*		3	101	Yes
Wilson's warbler	*Cardellina pusilla*		3	11	Yes
Yellow warbler	*Setophaga petechia*	SSC2, BCC	7	18	Yes
San Francisco common yellowthroat	*Geothlypis trichas sinuosa*	SSC3, BCC	3	0	Yes
Song sparrow	*Melospiza melodia*		5	435	Yes
Golden-crowned sparrow	*Zonotrichia atricapilla*		3	230	Yes
White-crowned sparrow	*Zonotrichia leucophrys*		1	249	Yes
Savannah sparrow	*Passerculus sandwichensis*		2	0	Yes
Lincoln's sparrow	*Melospiza lincolnii*		3	35	Yes
Fox sparrow	*Passerella iliaca*		6	152	Yes

Species	Scientific name	Status[1]	Number counted at CAS study		Known window deaths in North America
			As window deaths	Alive in survey plots	
Dark-eyed junco	*Junco hyemalis*		22	510	Yes
California towhee	*Melozone crissalis*		1	92	Yes
Brown-headed cowbird	*Molothrus ater*		1	39	Yes
Red-winged blackbird	*Agelaius phoeniceus*		1	261	Yes
Brewer's blackbird	*Euphagus cyanocephalus*		25	1027	Yes
Tricolored blackbird	*Agelaius tricolor*	CT, BCC		15	
House finch	*Haemorhous mexicanus*		5	213	Yes
Lesser goldfinch	*Spinus psaltria*		1	44	Yes

[1] Listed as BCC = U.S. Fish and Wildlife Service Bird Species of Conservation Concern, CT = California threatened, BOP = California Fish and Game Code 3503.5 (Birds of Prey), and SSC1, SSC2 and SSC3 = California Bird Species of Special Concern priorities 1, 2 and 3, respectively.

Figure 3. *Window collision fatalities as a proportion of those observed in visual-scan surveys at the California Academy of Sciences building (data from Kahle et al. 2016).*

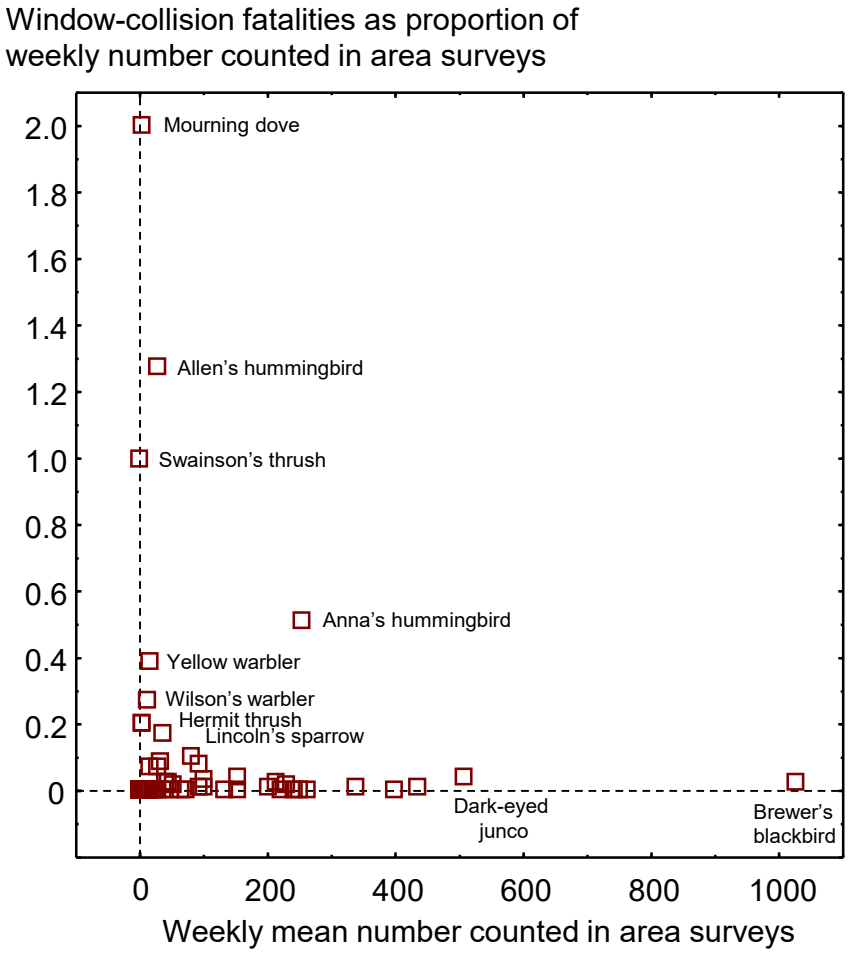

Photo 1. *Allen's hummingbird in Mount Sutro Open Space Reserve, 16 July 2021. As found at the nearby California Academy of Sciences Building, this species is highly vulnerable to window collision mortality (Kahle et al. 2016).*

What is needed is a study of bird movement through San Francisco. Needed are data on species occurrences, numbers of birds, heights above ground, flight direction, specific behaviors and timing of flights across the City. These same types of data were collected in the nearby Altamont Pass Wind Resource Area to acquire an understanding of bird flight traffic for the purposed of guiding the sitings of new wind turbines as part of repowering (Smallwood 2017, Smallwood et al. 2017). The data could be acquired by performing periodic surveys from stations established systematically or randomly across the City, covering all times of day and night (using thermal imaging cameras) and lasting at least one year to characterize seasonality of bird movement. Based on such data, the City could more carefully plan the vertical and lateral outlay of new buildings to minimize the encounter frequencies of birds with buildings. This is important because the existing Bird-Safe Building Guidelines can accomplish only so much, and the efficacy of these Guidelines remains unmeasured and unknown. Therefore, what is also needed is a program to measure the efficacy of the Guidelines by designing an experiment to search for and count bird-window collision victims along with the implementation of carcass detection trials. The San Francisco guidelines should have also covered scientific monitoring of impacts as well as compensatory mitigation for impacts that could not be avoided, minimized or reduced. Until these types of bird movement data are in hand, the City can only speculate as to the magnitude of bird-window collision mortality and whether the mortality can be minimized or reduced via Bird-Safe Building Guidelines.

In the face of such a large increase in the number of residential units, as well as a major shift in the lateral and vertical layout of 54,000 residential units, another need is for an update in the Bird-Safe Building Guidelines (San Francisco Planning Department 2011). Much has been learned about causal factors and mitigation solutions (e.g., Sheppard and Phillips 2015). The American Bird Conservancy (ABC) produced an excellent set of

guidelines recommending actions to: (1) Minimize use of glass; (2) Placing glass behind some type of screening (grilles, shutters, exterior shades); (3) Using glass with inherent properties to reduce collisions, such as patterns, window films, decals or tape; and (4) Turning off lights during migration seasons (Sheppard and Phillips 2015).

New research results inform of the efficacy of marking windows. Whereas Klem (1990) found no deterrent effect from decals on windows, Johnson and Hudson (1976) reported a fatality reduction of about 69% after placing decals on windows. In an experiment of opportunity, Ocampo-Peñuela et al. (2016) found only 2 of 86 fatalities at one of 6 buildings – the only building with windows treated with a bird deterrent film. At the building with fritted glass, bird collisions were 82% lower than at other buildings with untreated windows. Kahle et al. (2016) added external window shades to some windowed façades to reduce fatalities 82% and 95%. Brown et al. (2020) reported an 84% lower collision probability among fritted glass windows and windows treated with ORNILUX R UV. City of Portland Bureau of Environmental Services and Portland Audubon (2020) reduced bird collision fatalities 94% by affixing marked Solyx window film to existing glass panels of Portland's Columbia Building. Many external and internal glass markers have been tested experimentally, some showing no effect and some showing strong deterrent effects (Klem 1989, 1990, 2009, 2011; Klem and Saenger 2013; Rössler et al. 2015).

Van Doren et al. (2021) found that nocturnal migrants contributed most of the collision fatalities in their study, and the largest predictors of fatalities were peak migration and lit windows. Van Doren et al. (2021) predicted that a light-out mitigation measure could reduce bird-window collision mortality by 60%.

Monitoring and the use of compensatory mitigation should be incorporated at any new building project because the measures recommended in the available guidelines remain of uncertain efficacy, and even if these measures are effective, they will not reduce collision fatalities to zero. The only way to assess mitigation efficacy and to quantify post-construction fatalities is to monitor the project for fatalities.

The Addendum (p. 49) concludes, "In summary, the proposed rezoning program would not result in new significant biological resources impacts that were not previously identified in the FEIR, nor would it result in more severe impacts than those previously identified. No new mitigation measures or changes to existing mitigation measures are required." However, the FEIR did not identify the loss of aerohabitat of birds and bats as any sort of project impact, and neither does the Addendum. Furthermore, the FEIR did not identify as an impact my predicted mean mortality of 7,095 birds per year just from the additional 4,000 residential units, and an upper bound CI prediction of 14,082 birds per year.

Thank you for your consideration,

Shawn Smallwood, Ph.D.

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Kenneth Shawn Smallwood
Curriculum Vitae

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Born May 3, 1963 in Sacramento, California.
Married, father of two.

Ecologist

Expertise

- Finding solutions to controversial problems related to wildlife interactions with human industry, infrastructure, and activities;
- Wildlife monitoring and field study using GPS, thermal imaging, behavior surveys;
- Using systems analysis and experimental design principles to identify meaningful ecological patterns that inform management decisions.

Education

Ph.D. Ecology, University of California, Davis. September 1990.
M.S. Ecology, University of California, Davis. June 1987.
B.S. Anthropology, University of California, Davis. June 1985.
Corcoran High School, Corcoran, California. June 1981.

Experience

- 762 professional reports, including:
- 90 peer reviewed publications
- 24 in non-reviewed proceedings
- 646 reports, declarations, posters and book reviews
- 8 in mass media outlets
- 92 public presentations of research results

Editing for scientific journals: Guest Editor, *Wildlife Society Bulletin*, 2012-2013, of invited papers representing international views on the impacts of wind energy on wildlife and how to mitigate the impacts. Associate Editor, *Journal of Wildlife Management*, March 2004 to 30 June 2007. Editorial Board Member, *Environmental Management*, 10/1999 to 8/2004. Associate Editor, *Biological Conservation*, 9/1994 to 9/1995.

Member, Alameda County Scientific Review Committee (SRC), August 2006 to April 2011. The five-member committee investigated causes of bird and bat collisions in the Altamont Pass Wind Resource Area, and recommended mitigation and monitoring measures. The SRC reviewed the science underlying the Alameda County Avian Protection Program, and advised

the County on how to reduce wildlife fatalities.

Consulting Ecologist, 2004-2007, California Energy Commission (CEC). Provided consulting services as needed to the CEC on renewable energy impacts, monitoring and research, and produced several reports. Also collaborated with Lawrence-Livermore National Lab on research to understand and reduce wind turbine impacts on wildlife.

Consulting Ecologist, 1999-2013, U.S. Navy. Performed endangered species surveys, hazardous waste site monitoring, and habitat restoration for the endangered San Joaquin kangaroo rat, California tiger salamander, California red-legged frog, California clapper rail, western burrowing owl, salt marsh harvest mouse, and other species at Naval Air Station Lemoore; Naval Weapons Station, Seal Beach, Detachment Concord; Naval Security Group Activity, Skaggs Island; National Radio Transmitter Facility, Dixon; and, Naval Outlying Landing Field Imperial Beach.

Part-time Lecturer, 1998-2005, California State University, Sacramento. Instructed Mammalogy, Behavioral Ecology, and Ornithology Lab, Contemporary Environmental Issues, Natural Resources Conservation.

Senior Ecologist, 1999-2005, BioResource Consultants. Designed and implemented research and monitoring studies related to avian fatalities at wind turbines, avian electrocutions on electric distribution poles across California, and avian fatalities at transmission lines.

Chairman, Conservation Affairs Committee, The Wildlife Society--Western Section, 1999-2001. Prepared position statements and led efforts directed toward conservation issues, including travel to Washington, D.C. to lobby Congress for more wildlife conservation funding.

Systems Ecologist, 1995-2000, Institute for Sustainable Development. Headed ISD's program on integrated resources management. Developed indicators of ecological integrity for large areas, using remotely sensed data, local community involvement and GIS.

Associate, 1997-1998, Department of Agronomy and Range Science, University of California, Davis. Worked with Shu Geng and Mingua Zhang on several studies related to wildlife interactions with agriculture and patterns of fertilizer and pesticide residues in groundwater across a large landscape.

Lead Scientist, 1996-1999, National Endangered Species Network. Informed academic scientists and environmental activists about emerging issues regarding the Endangered Species Act and other environmental laws. Testified at public hearings on endangered species issues.

Ecologist, 1997-1998, Western Foundation of Vertebrate Zoology. Conducted field research to determine the impact of past mercury mining on the status of California red-legged frogs in Santa Clara County, California.

Senior Systems Ecologist, 1994-1995, EIP Associates, Sacramento, California. Provided consulting services in environmental planning, and quantitative assessment of land units for their conservation and restoration opportunities basedon ecological resource requirements of 29 special-status species. Developed ecological indicators for prioritizing areas within Yolo County

to receive mitigation funds for habitat easements and restoration.

Post-Graduate Researcher, 1990-1994, Department of Agronomy and Range Science, *U.C. Davis*. Under Dr. Shu Geng's mentorship, studied landscape and management effects on temporal and spatial patterns of abundance among pocket gophers and species of Falconiformes and Carnivora in the Sacramento Valley. Managed and analyzed a data base of energy use in California agriculture. Assisted with landscape (GIS) study of groundwater contamination across Tulare County, California.

Work experience in graduate school: Co-taught Conservation Biology with Dr. Christine Schonewald, 1991 & 1993, UC Davis Graduate Group in Ecology; Reader for Dr. Richard Coss's course on Psychobiology in 1990, UC Davis Department of Psychology; Research Assistant to Dr. Walter E. Howard, 1988-1990, UC Davis Department of Wildlife and Fisheries Biology, testing durable baits for pocket gopher management in forest clearcuts; Research Assistant to Dr. Terrell P. Salmon, 1987-1988, UC Wildlife Extension, Department of Wildlife and Fisheries Biology, developing empirical models of mammal and bird invasions in North America, and a rating system for priority research and control of exotic species based on economic, environmental and human health hazards in California. Student Assistant to Dr. E. Lee Fitzhugh, 1985-1987, UC Cooperative Extension, Department of Wildlife and Fisheries Biology, developing and implementing statewide mountain lion track count for long-term monitoring.

Fulbright Research Fellow, Indonesia, 1988. Tested use of new sampling methods for numerical monitoring of Sumatran tiger and six other species of endemic felids, and evaluated methods used by other researchers.

Projects

Repowering wind energy projects through careful siting of new wind turbines using map-based collision hazard models to minimize impacts to volant wildlife. Funded by wind companies (principally NextEra Renewable Energy, Inc.), California Energy Commission and East Bay Regional Park District, I have collaborated with a GIS analyst and managed a crew of five field biologists performing golden eagle behavior surveys and nocturnal surveys on bats and owls. The goal is to quantify flight patterns for development of predictive models to more carefully site new wind turbines in repowering projects. Focused behavior surveys began May 2012 and continue. Collision hazard models have been prepared for seven wind projects, three of which were built. Planning for additional repowering projects is underway.

Test avian safety of new mixer-ejector wind turbine (MEWT). Designed and implemented a before-after, control-impact experimental design to test the avian safety of a new, shrouded wind turbine developed by Ogin Inc. (formerly known as FloDesign Wind Turbine Corporation). Supported by a $718,000 grant from the California Energy Commission's Public Interest Energy Research program and a 20% match share contribution from Ogin, I managed a crew of seven field biologists who performed periodic fatality searches and behavior surveys, carcass detection trials, nocturnal behavior surveys using a thermal camera, and spatial analyses with the collaboration of a GIS analyst. Field work began 1 April 2012 and ended 30 March 2015 without Ogin installing its MEWTs, but we still achieved multiple important scientific advances.

Reduce avian mortality due to wind turbines at Altamont Pass. Studied wildlife impacts caused by 5,400 wind turbines at the world's most notorious wind resource area. Studied how impacts are perceived by monitoring and how they are affected by terrain, wind patterns, food resources, range management practices, wind turbine operations, seasonal patterns, population cycles, infrastructure management such as electric distribution, animal behavior and social interactions.

Reduce avian mortality on electric distribution poles. Directed research toward reducing bird electrocutions on electric distribution poles, 2000-2007. Oversaw 5 founds of fatality searches at 10,000 poles from Orange County to Glenn County, California, and produced two large reports.

Cook *et al*. v. Rockwell International *et al*., No. 90-K-181 (D. Colorado). Provided expert testimony on the role of burrowing animals in affecting the fate of buried and surface-deposited radioactive and hazardous chemical wastes at the Rocky Flats Plant, Colorado. Provided expert reports based on four site visits and an extensive document review of burrowing animals. Conducted transect surveys for evidence of burrowing animals and other wildlife on and around waste facilities. Discovered substantial intrusion of waste structures by burrowing animals. I testified in federal court in November 2005, and my clients were subsequently awarded a $553,000,000 judgment by a jury. After appeals the award was increased to two billion dollars.

Hanford Nuclear Reservation Litigation. Provided expert testimony on the role of burrowing animals in affecting the fate of buried radioactive wastes at the Hanford Nuclear Reservation, Washington. Provided three expert reports based on three site visits and extensive document review. Predicted and verified a certain population density of pocket gophers on buried waste structures, as well as incidence of radionuclide contamination in body tissue. Conducted transect surveys for evidence of burrowing animals and other wildlife on and around waste facilities. Discovered substantial intrusion of waste structures by burrowing animals.

Expert testimony and declarations on proposed residential and commercial developments, gas-fired power plants, wind, solar and geothermal projects, water transfers and water transfer delivery systems, endangered species recovery plans, Habitat Conservation Plans and Natural Communities Conservation Programs. Testified before multiple government agencies, Tribunals, Boards of Supervisors and City Councils, and participated with press conferences and depositions. Prepared expert witness reports and court declarations, which are summarized under Reports (below).

Protocol-level surveys for special-status species. Used California Department of Fish and Wildlife and US Fish and Wildlife Service protocols to search for California red-legged frog, California tiger salamander, arroyo southwestern toad, blunt-nosed leopard lizard, western pond turtle, giant kangaroo rat, San Joaquin kangaroo rat, San Joaquin kit fox, western burrowing owl, Swainson's hawk, Valley elderberry longhorn beetle and other special-status species.

Conservation of San Joaquin kangaroo rat. Performed research to identify factors responsible for the decline of this endangered species at Lemoore Naval Air Station, 2000-2013, and implemented habitat enhancements designed to reverse the trend and expand the population.

Impact of West Nile Virus on yellow-billed magpies. Funded by Sacramento-Yolo Mosquito and Vector Control District, 2005-2008, compared survey results pre- and post-West Nile Virus epidemic for multiple bird species in the Sacramento Valley, particularly on yellow-billed magpie and American crow due to susceptibility to WNV.

Workshops on HCPs. Assisted Dr. Michael Morrison with organizing and conducting a 2-day workshop on Habitat Conservation Plans, sponsored by Southern California Edison, and another 1-day workshop sponsored by PG&E. These Workshops were attended by academics, attorneys, and consultants with HCP experience. We guest-edited a Proceedings published in Environmental Management.

Mapping of biological resources along Highways 101, 46 and 41. Used GPS and GIS to delineate vegetation complexes and locations of special-status species along 26 miles of highway in San Luis Obispo County, 14 miles of highway and roadway in Monterey County, and in a large area north of Fresno, including within reclaimed gravel mining pits.

GPS mapping and monitoring at restoration sites and at Caltrans mitigation sites. Monitored the success of elderberry shrubs at one location, the success of willows at another location, and the response of wildlife to the succession of vegetation at both sites. Also used GPS to monitor the response of fossorial animals to yellow star-thistle eradication and natural grassland restoration efforts at Bear Valley in Colusa County and at the decommissioned Mather Air Force Base in Sacramento County.

Mercury effects on Red-legged Frog. Assisted Dr. Michael Morrison and US Fish and Wildlife Service in assessing the possible impacts of historical mercury mining on the federally listed California red-legged frog in Santa Clara County. Also measured habitat variables in streams.

Opposition to proposed No Surprises rule. Wrote a white paper and summary letter explaining scientific grounds for opposing the incidental take permit (ITP) rules providing ITP applicants and holders with general assurances they will be free of compliance with the Endangered Species Act once they adhere to the terms of a "properly functioning HCP." Submitted 188 signatures of scientists and environmental professionals concerned about No Surprises rule US Fish and Wildlife Service, National Marine Fisheries Service, all US Senators.

Natomas Basin Habitat Conservation Plan alternative. Designed narrow channel marsh to increase the likelihood of survival and recovery in the wild of giant garter snake, Swainson's hawk and Valley Elderberry Longhorn Beetle. The design included replication and interspersion of treatments for experimental testing of critical habitat elements. I provided a report to Northern Territories, Inc.

Assessments of agricultural production system and environmental technology transfer to China. Twice visited China and interviewed scientists, industrialists, agriculturalists, and the Directors of the Chinese Environmental Protection Agency and the Department of Agriculture to assess the need and possible pathways for environmental clean-up technologies and trade opportunities between the US and China.

Yolo County Habitat Conservation Plan. Conducted landscape ecology study of Yolo County to spatially prioritize allocation of mitigation efforts to improve ecosystem functionality within the County from the perspective of 29 special-status species of wildlife and plants. Used a hierarchically structured indicators approach to apply principles of landscape and ecosystem ecology, conservation biology, and local values in rating land units. Derived GIS maps to help guide the conservation area design, and then developed implementation strategies.

Mountain lion track count. Developed and conducted a carnivore monitoring program throughout California since 1985. Species counted include mountain lion, bobcat, black bear, coyote, red and gray fox, raccoon, striped skunk, badger, and black-tailed deer. Vegetation and land use are also monitored. Track survey transect was established on dusty, dirt roads within randomly selected quadrats.

Sumatran tiger and other felids. Upon award of Fulbright Research Fellowship, I designed and initiated track counts for seven species of wild cats in Sumatra, including Sumatran tiger, fishing cat, and golden cat. Spent four months on Sumatra and Java in 1988, and learned Bahasa Indonesia, the official Indonesian language.

Wildlife in agriculture. Beginning as post-graduate research, I studied pocket gophers and other wildlife in 40 alfalfa fields throughout the Sacramento Valley, and I surveyed for wildlife along a 200 mile road transect since 1989 with a hiatus of 1996-2004. The data are analyzed using GIS and methods from landscape ecology, and the results published and presented orally to farming groups in California and elsewhere. I also conducted the first study of wildlife in cover crops used on vineyards and orchards.

Agricultural energy use and Tulare County groundwater study. Developed and analyzed a data base of energy use in California agriculture, and collaborated on a landscape (GIS) study of groundwater contamination across Tulare County, California.

Pocket gopher damage in forest clear-cuts. Developed gopher sampling methods and tested various poison baits and baiting regimes in the largest-ever field study of pocket gopher management in forest plantations, involving 68 research plots in 55 clear-cuts among 6 National Forests in northern California.

Risk assessment of exotic species in North America. Developed empirical models of mammal and bird species invasions in North America, as well as a rating system for assigning priority research and control to exotic species in California, based on economic, environmental, and human health hazards.

Peer Reviewed Publications

Smallwood, K. S. 2022. Utility-scale solar impacts to volant wildlife. Journal of Wildlife Management: e22216. https://doi.org/10.1002/jwmg.22216

Smallwood, K. S., and N. L. Smallwood. 2021. Breeding Density and Collision Mortality of Loggerhead Shrike (*Lanius ludovicianus*) in the Altamont Pass Wind Resource Area. Diversity 13, 540. https://doi.org/10.3390/d13110540.

Smallwood, K. S. 2020. USA wind energy-caused bat fatalities increase with shorter fatality search intervals. Diversity 12(98); https://doi.org/10.3390/d12030098

Smallwood, K. S., D. A. Bell, and S. Standish. 2020. Dogs detect larger wind energy impacts on bats and birds. Journal of Wildlife Management 84:852-864. DOI: 10.1002/jwmg.21863.

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EXHIBIT D

FASTCAST

Deborah Holley

Cc/ Richard Drurey

December 1, 2025

PRELIMINARY SHADOW ANALYSIS: **PROPOSED FAMILY ZONING 2025**, JOE DIMAGGIO PLAYGROUND, SAN FRANCISCO

Fastcast is hereby submitting the results of a **programmatic shadow analysis** prepared for the proposed **Family Zoning Plan**. This analysis is intended to quantify the **generalized potential change in shadow on Joe DiMaggio Playground** under a scenario in which the proposed height increases on surrounding parcels are fully utilized.

As part of the methodology, **City building footprint data** was used to define both the **existing zoning height extrusions** and the **Family Zoning Plan height extrusions** using the **same building footprints**. In this area, the **existing zoning envelope (generally 40 feet in height)** is treated as an **existing shadow-casting condition**, and the Family Zoning scenario adds only the **incremental height above this existing zoning envelope**. The **proposed shadows are therefore based solely on the height increase introduced by the Family Zoning Plan**, and **net new shadow** on Joe DiMaggio Playground is calculated only for this **incremental zoning height increase**.

The analysis applies **methodologies and data models consistent with San Francisco Planning Department and Planning Code Section 295 ("Shadow Ordinance") standards and procedures**, as outlined in the July 2014 memorandum *"Shadow Analysis Procedures and Scope Requirements"* and as refined by subsequent written directives issued by the San Francisco Planning Department.

I. INTRODUCTION

This memorandum documents **preliminary quantitative shadow results** for **Joe DiMaggio Playground** associated with proposed height increases under the **San Francisco Family Zoning Plan (FZP)** in the North Beach area.

The purpose is to:

1. Summarize the **Family Zoning Plan objectives**,
2. Describe the **objective of the shadow analysis** for Joe DiMaggio Playground, and
3. Present a **neutral, scientific summary** of the **net new shadow** on the playground and the **times of day/season** when this potential shadow increase overlaps with typical playground activities.

No conclusions are offered regarding policy, compliance, or adequacy; this memo is limited to **description and quantification**.

II. FAMILY ZONING PLAN – CONTEXT & OBJECTIVES

According to the **Family Zoning Plan "Five Fast Facts"** document:

- The Plan is intended to create capacity for **over 36,000 homes** on San Francisco's north and west sides.
- In most areas, existing building heights remain **40 feet (approximately four stories)**.
- The Plan allows **two to four additional stories** in select locations, mainly **near shopping, transit, and on major streets**, with high-rise buildings permitted only in limited areas.
- The Plan uses a **form-based approach**, regulating height, bulk, and setbacks, and is paired with **objective design standards**.
- The stated goals include meeting state housing requirements, maintaining local control over land use decisions, and strengthening tenant protections by directing growth toward underused and vacant sites.

Within this framework, the North Beach area surrounding **Joe DiMaggio Playground** is identified for **increased maximum building heights**, which in turn has the potential to increase shadow on the playground.

III. OBJECTIVE OF THE SHADOW ANALYSIS

The objective of the shadow analysis is to **quantify net new shadow** that could occur on **Joe DiMaggio Playground** as a result of the **proposed Family Zoning height increases**, using standard methods applied in San Francisco shadow studies.

Specifically, the analysis aims to:

1. Measure **annual shadow load** on Joe DiMaggio Playground under:
    - Existing conditions, and
    - A scenario with Family Zoning Plan height increases.
2. Determine:
    - **Net new annual shadow** (in square foot hours, sfh),
    - **Percent of available sunlight time** affected,
    - **Maximum area of net new shadow** and **percentage of the playground covered**, and
    - **Dates, times of day, and seasons** when net new shadow occurs.

These results are summarized in the City's **"PROPOSED FAMILY ZONING HEIGHT INCREASE – JOE DIMAGGIO ANNUAL SHADOW LOADS / SQUARE FOOT HOURS (sfh)"** sheet, which is the primary quantitative source referenced here.

FASTCAST

IV. QUANTITATIVE SHADOW RESULTS – JOE DIMAGGIO PLAYGROUND

All values below are taken directly from the **Joe DiMaggio Playground shadow summary** unless otherwise noted. Note: Existing shadow is based on Data SF Building Footprints : https://data.sfgov.org/Geographic-Locations-and-Boundaries/Building-Footprints/ynuv-fyni/about_data and Zoning heights derived from Proposed zoning interactive map: https://experience.arcgis.com/experience/6e0e399f9c82456dbda233eacebc433d/

PROPOSED FAMILY ZONING HEIGHT INCREASE JOE DIMAGGIO ANNUAL SHADOW LOADS / SQUARE FOOT HOURS (sfh)			
Existing / Current Shadow	Project Net New Shadow	Existing + Project Shadow	Remaining Sunlight
9.63%	**1.485%**	**11.115%**	**88.89%**
31,210,748 sfh	4,814,888 sfh	36,025,636 sfh	288,182,732 sfh

Joe DiMaggio Annual Shadow Load with Project (sfh)	36,025,636 sfh

EXISTING SHADOW DETAILS	
Range in existing shadow area coverage throughout the year	Between 2% - 72%
Time of year / time of day most affected by existing shadow	Fall / Early Morning (before 8:00 AM)

NET NEW SHADOW DETAILS	
Days net new shadow would occur (date range)	Year-round
Date(s) with most sfh net new shadow	October 11 & March 1
Season / Time of day most affected by net new shadow	Winter / Late Afternoon (after 4:30 PM)
Area of largest net new shadow (date and time)	23,682 sf (October 11 & March 1 @ 5:37 PM)
Percentage of Joe DiMaggio covered by largest shadow	27.18%
Range in shadow coverage throughout the year (area range)	Between 0% - 27% (0 - 23,682 sf)
Average shadow size across affected dates (percent coverage)	4,488 sf (5.15%)
Date(s) with the longest duration of net new shadow (duration)	October 11 & March 1 (4 hr 6 min +/- 14 min)
Range in daily net new shadow duration across affected dates	Between zero minutes up to 4 hr 6 min (+/- 14 min)
Average daily net new shadow duration across affected dates	3 hr 22 min

Timing and Seasonal Pattern of Net New Shadow

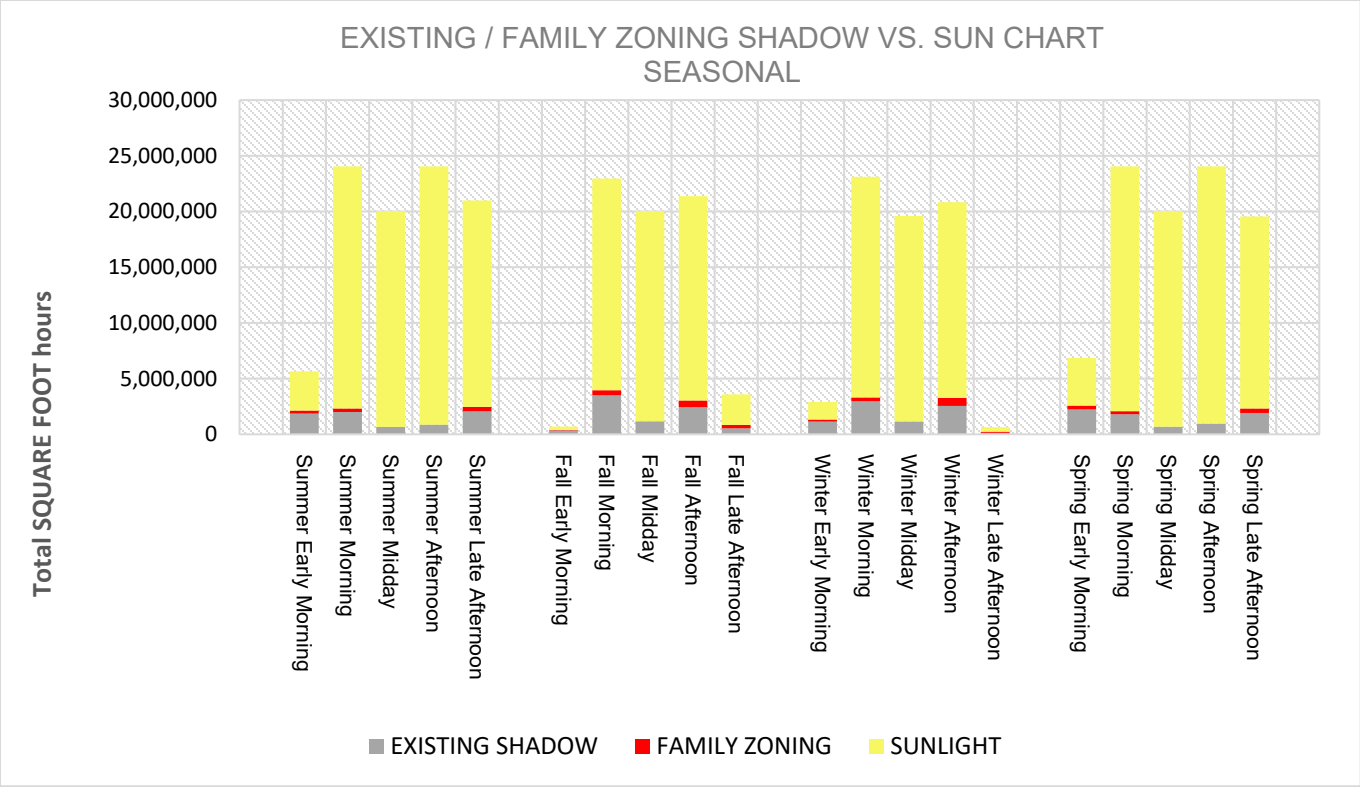
Also from the shadow summary:

- **Days net new shadow would occur:**
  - **Year-round**
- **Date(s) with most sfh net new shadow:**
  - **October 11 & March 1**
  - **Season / Time of day most affected by net new shadow: Winter / Late Afternoon (after 4:30 PM)**

Existing Shadow Context

For reference, the summary characterizes **existing shadow** as:

- **Range in existing shadow area coverage throughout the year: 2% – 72%** of the playground area
- **Time of year / time of day most affected by existing shadow: Fall / Early Morning (before 8:00 AM)**



V. QUALITATIVE CONTEXT: PLAYGROUND ACTIVITIES & TIME OF USE

This section does **not** evaluate impact or significance. It is limited to describing **typical types of activities** that commonly occur in neighborhood playgrounds like Joe DiMaggio during the times identified in the shadow summary.

A. Typical Playground Use Patterns

Based on the nature of Joe DiMaggio Playground as a neighborhood-serving facility (with play equipment, courts/fields, and open space), typical use patterns can reasonably be described as including:

- **Morning hours:**
  - Caregivers with young children,
  - Individual exercise and walking.
- **Midday / Early afternoon:**
  - Younger children and caregivers,
  - Some daytime recreation by residents and visitors.
- **Afternoon / Late afternoon (after school):**
  - **School-aged children and teens** using play areas and courts,
  - Potential **organized or informal sports activities**,
  - Families visiting after school pick-up.
- **Early evening (seasonally):**
  - Adults and families using the space after work,
  - Light recreation, socializing, and play until dusk.

These patterns are typical of urban playgrounds serving nearby residential neighborhoods with families.

B. Alignment with Net New Shadow Timing

The **shadow summary** identifies the **season and time of day most affected by net new shadow** as **"Winter / Late Afternoon (after 4:30 PM)"**, with net new shadow occurring **year-round** and the **longest durations and largest footprints** occurring around **October 11 and March 1 in the late afternoon (e.g., 5:37 PM for the largest single footprint).**
That time window generally overlaps with:

- **After-school hours** for school-aged children and teens, and
- **After-work hours** when adults and families may visit the playground.

The **existing shadow** is described as being most pronounced in **"Fall / Early Morning (before 8:00 AM)"**, which is a different part of the day than the late-afternoon period identified for net new shadow. This indicates that, under the Family Zoning scenario, the **distribution of shadow over the day** changes, with **additional shadow present during late-afternoon hours** when playground use often involves family and youth activities.
Again, this section is descriptive only and does not characterize these changes as beneficial or adverse.

VI. SUMMARY

- The Family Zoning Plan allows **increased building heights** in select areas, including near Joe DiMaggio Playground, in order to support housing production goals and apply form-based, objective design standards.
- The City's **Joe DiMaggio shadow summary** quantifies **net new annual shadow load, coverage, and timing** for the playground under the Family Zoning height scenario, showing:
    - Net new shadow of **4,814,888 sfh (1.485% of available sunlight time)**,
    - A combined total shadow load of **36,025,636 sfh (11.115%)**,
    - Maximum net new momentary coverage of **23,682 square feet (27.18% of the playground)** on specific dates and times, and
    - Concentration of net new shadow in **winter late afternoons (after 4:30 PM)**, with **year-round occurrence**.
- Typical playground use during late afternoons includes **after-school and after-work** activities by children, teens, and families, which may coincide in time with the **period identified as most affected by net new shadow**.

This concludes the **descriptive, non-evaluative summary** of the Family Zoning Plan context and the associated shadow analysis results for Joe DiMaggio Playground.

Conclusion

Fastcast has determined, based on the 3D digital zoning-based massing model and related design information provided by DataSF and the proposed Family Zoning Plan that the height increase would introduce net new shadow on Joe DiMaggio Playground relative to existing zoning conditions. The results presented herein reflect a programmatic, zoning-based analysis; as individual development proposals are advanced and more detailed building designs become available, additional project-specific shadow studies can be prepared using the same methodologies to further refine these findings.

Please direct any question to Adam Noble. adam@fastcastcity.com

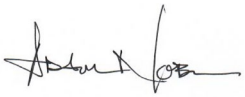


EXHIBIT A

PROJECT: Family Zoning Plan
OPEN SPACE: Joe DiMaggio (87,120 sf)

FASTCAST

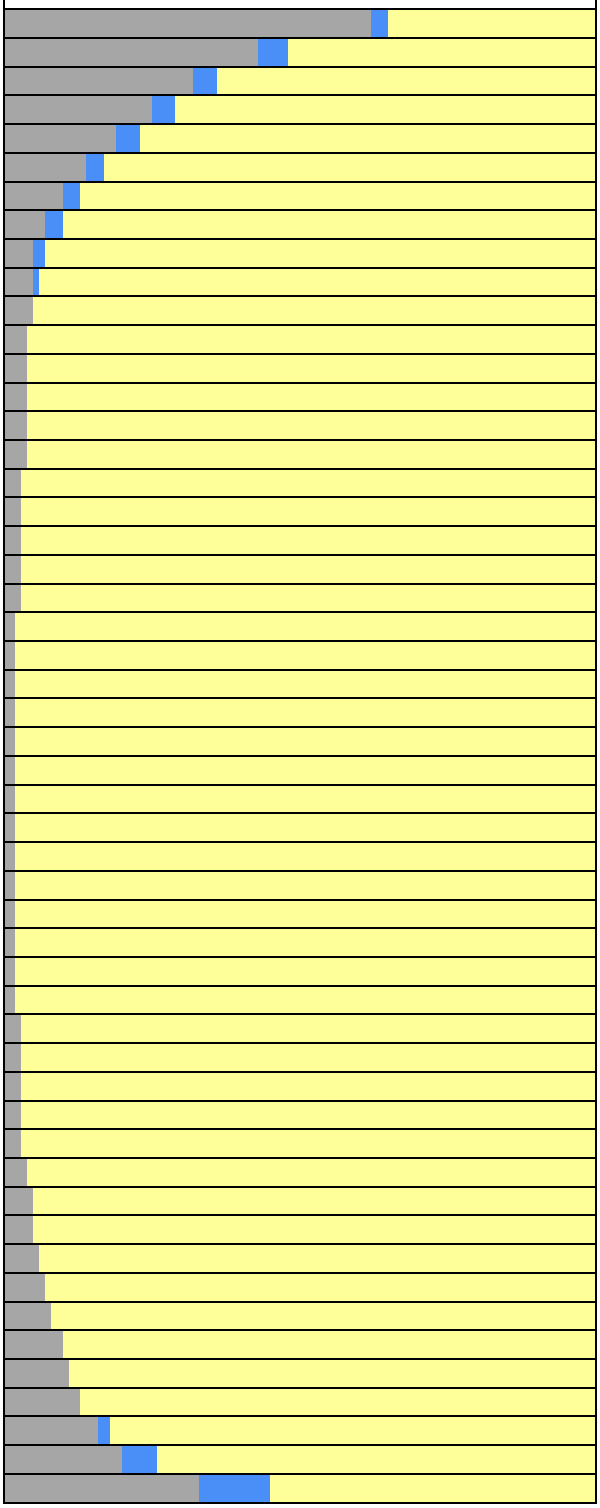
JUNE 21

Summer solstice
Analysis hours: 6:46 AM-7:36 PM (PDT)

Shadow / Sunlight Balance Key
Existing Shadow | Project Shadow | Sunlight Remaining

Analysis Time	EXISTING SHADOW		PROJECT NET NEW SHADOW	
	Shadow Area	Coverage	Shadow Area	Coverage
6:46 AM	54,298 sf	62.33%	2,884 sf	3.31%
7:00 AM	37,059 sf	42.54%	4,008 sf	4.60%
7:15 AM	27,564 sf	31.64%	3,779 sf	4.34%
7:30 AM	21,585 sf	24.78%	3,408 sf	3.91%
7:45 AM	16,695 sf	19.16%	3,117 sf	3.58%
8:00 AM	12,478 sf	14.32%	2,829 sf	3.25%
8:15 AM	8,935 sf	10.26%	2,548 sf	2.92%
8:30 AM	5,965 sf	6.85%	2,316 sf	2.66%
8:45 AM	4,408 sf	5.06%	1,881 sf	2.16%
9:00 AM	4,173 sf	4.79%	730 sf	0.84%
9:15 AM	3,995 sf	4.59%	6 sf	0.01%
9:30 AM	3,816 sf	4.38%	0 sf	0.00%
9:45 AM	3,655 sf	4.20%	0 sf	0.00%
10:00 AM	3,476 sf	3.99%	0 sf	0.00%
10:15 AM	3,299 sf	3.79%	0 sf	0.00%
10:30 AM	3,114 sf	3.57%	0 sf	0.00%
10:45 AM	2,951 sf	3.39%	0 sf	0.00%
11:00 AM	2,772 sf	3.18%	0 sf	0.00%
11:15 AM	2,615 sf	3.00%	0 sf	0.00%
11:30 AM	2,434 sf	2.79%	0 sf	0.00%
11:45 AM	2,277 sf	2.61%	0 sf	0.00%
12:00 PM	2,094 sf	2.40%	0 sf	0.00%
12:15 PM	1,940 sf	2.23%	0 sf	0.00%
12:30 PM	1,737 sf	1.99%	0 sf	0.00%
12:45 PM	1,578 sf	1.81%	0 sf	0.00%
1:00 PM	1,344 sf	1.54%	0 sf	0.00%
1:15 PM	1,442 sf	1.66%	0 sf	0.00%
1:30 PM	1,521 sf	1.75%	0 sf	0.00%
1:45 PM	1,658 sf	1.90%	0 sf	0.00%
2:00 PM	1,721 sf	1.98%	0 sf	0.00%
2:15 PM	1,841 sf	2.11%	0 sf	0.00%
2:30 PM	1,898 sf	2.18%	0 sf	0.00%
2:45 PM	1,995 sf	2.29%	0 sf	0.00%
3:00 PM	2,049 sf	2.35%	0 sf	0.00%
3:15 PM	2,132 sf	2.45%	0 sf	0.00%
3:30 PM	2,186 sf	2.51%	0 sf	0.00%
3:45 PM	2,248 sf	2.58%	0 sf	0.00%
4:00 PM	2,241 sf	2.57%	0 sf	0.00%
4:15 PM	2,472 sf	2.84%	0 sf	0.00%
4:30 PM	3,013 sf	3.46%	0 sf	0.00%
4:45 PM	3,530 sf	4.05%	0 sf	0.00%
5:00 PM	4,110 sf	4.72%	0 sf	0.00%
5:15 PM	4,753 sf	5.46%	0 sf	0.00%
5:30 PM	5,486 sf	6.30%	0 sf	0.00%
5:45 PM	6,314 sf	7.25%	0 sf	0.00%
6:00 PM	7,287 sf	8.36%	0 sf	0.00%
6:15 PM	8,437 sf	9.68%	0 sf	0.00%
6:30 PM	9,878 sf	11.34%	0 sf	0.00%
6:45 PM	11,730 sf	13.46%	295 sf	0.34%
7:00 PM	14,222 sf	16.33%	1,770 sf	2.03%
7:15 PM	17,809 sf	20.44%	5,586 sf	6.41%
7:36 PM	29,084 sf	33.38%	10,652 sf	12.23%

SHADOW/SUNLIGHT BALANCE
Relative levels of Shadow vs. Sun



PROJECT: Family Zoning Plan
OPEN SPACE: Joe DiMaggio (87,120 sf)

JUNE 28

Mirror date: June 14
Analysis hours: 6:48 AM-7:36 PM (PDT)

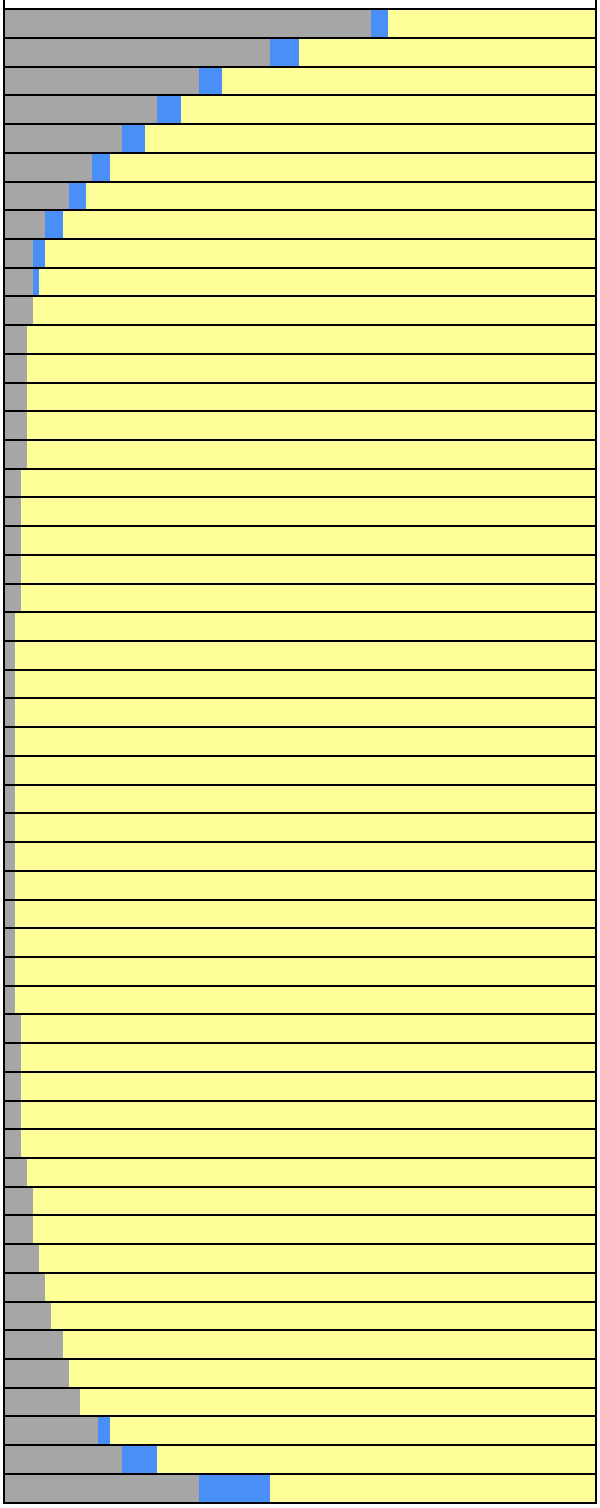
Shadow / Sunlight Balance Key

Existing Shadow | Project Shadow | Sunlight Remaining

Analysis Time	EXISTING SHADOW		PROJECT NET NEW SHADOW	
	Shadow Area	Coverage	Shadow Area	Coverage
6:48 AM	54,172 sf	62.18%	2,814 sf	3.23%
7:00 AM	38,856 sf	44.60%	4,046 sf	4.64%
7:15 AM	28,513 sf	32.73%	3,845 sf	4.41%
7:30 AM	22,279 sf	25.57%	3,463 sf	3.97%
7:45 AM	17,311 sf	19.87%	3,154 sf	3.62%
8:00 AM	12,968 sf	14.88%	2,875 sf	3.30%
8:15 AM	9,336 sf	10.72%	2,593 sf	2.98%
8:30 AM	6,273 sf	7.20%	2,353 sf	2.70%
8:45 AM	4,507 sf	5.17%	2,014 sf	2.31%
9:00 AM	4,222 sf	4.85%	875 sf	1.00%
9:15 AM	4,036 sf	4.63%	30 sf	0.03%
9:30 AM	3,857 sf	4.43%	0 sf	0.00%
9:45 AM	3,694 sf	4.24%	0 sf	0.00%
10:00 AM	3,516 sf	4.04%	0 sf	0.00%
10:15 AM	3,340 sf	3.83%	0 sf	0.00%
10:30 AM	3,152 sf	3.62%	0 sf	0.00%
10:45 AM	2,989 sf	3.43%	0 sf	0.00%
11:00 AM	2,807 sf	3.22%	0 sf	0.00%
11:15 AM	2,650 sf	3.04%	0 sf	0.00%
11:30 AM	2,469 sf	2.83%	0 sf	0.00%
11:45 AM	2,308 sf	2.65%	0 sf	0.00%
12:00 PM	2,127 sf	2.44%	0 sf	0.00%
12:15 PM	1,973 sf	2.26%	0 sf	0.00%
12:30 PM	1,769 sf	2.03%	0 sf	0.00%
12:45 PM	1,612 sf	1.85%	0 sf	0.00%
1:00 PM	1,364 sf	1.57%	0 sf	0.00%
1:15 PM	1,451 sf	1.67%	0 sf	0.00%
1:30 PM	1,523 sf	1.75%	0 sf	0.00%
1:45 PM	1,661 sf	1.91%	0 sf	0.00%
2:00 PM	1,728 sf	1.98%	0 sf	0.00%
2:15 PM	1,848 sf	2.12%	0 sf	0.00%
2:30 PM	1,902 sf	2.18%	0 sf	0.00%
2:45 PM	2,006 sf	2.30%	0 sf	0.00%
3:00 PM	2,063 sf	2.37%	0 sf	0.00%
3:15 PM	2,146 sf	2.46%	0 sf	0.00%
3:30 PM	2,197 sf	2.52%	0 sf	0.00%
3:45 PM	2,264 sf	2.60%	0 sf	0.00%
4:00 PM	2,230 sf	2.56%	0 sf	0.00%
4:15 PM	2,455 sf	2.82%	0 sf	0.00%
4:30 PM	2,953 sf	3.39%	0 sf	0.00%
4:45 PM	3,470 sf	3.98%	0 sf	0.00%
5:00 PM	4,046 sf	4.64%	0 sf	0.00%
5:15 PM	4,679 sf	5.37%	0 sf	0.00%
5:30 PM	5,407 sf	6.21%	0 sf	0.00%
5:45 PM	6,230 sf	7.15%	0 sf	0.00%
6:00 PM	7,192 sf	8.26%	0 sf	0.00%
6:15 PM	8,321 sf	9.55%	0 sf	0.00%
6:30 PM	9,741 sf	11.18%	0 sf	0.00%
6:45 PM	11,553 sf	13.26%	223 sf	0.26%
7:00 PM	13,976 sf	16.04%	1,556 sf	1.79%
7:15 PM	17,471 sf	20.05%	5,228 sf	6.00%
7:36 PM	28,841 sf	33.10%	10,732 sf	12.32%

SHADOW/SUNLIGHT BALANCE

Relative levels of Shadow vs. Sun



PROJECT: Family Zoning Plan
OPEN SPACE: Joe DiMaggio (87,120 sf)

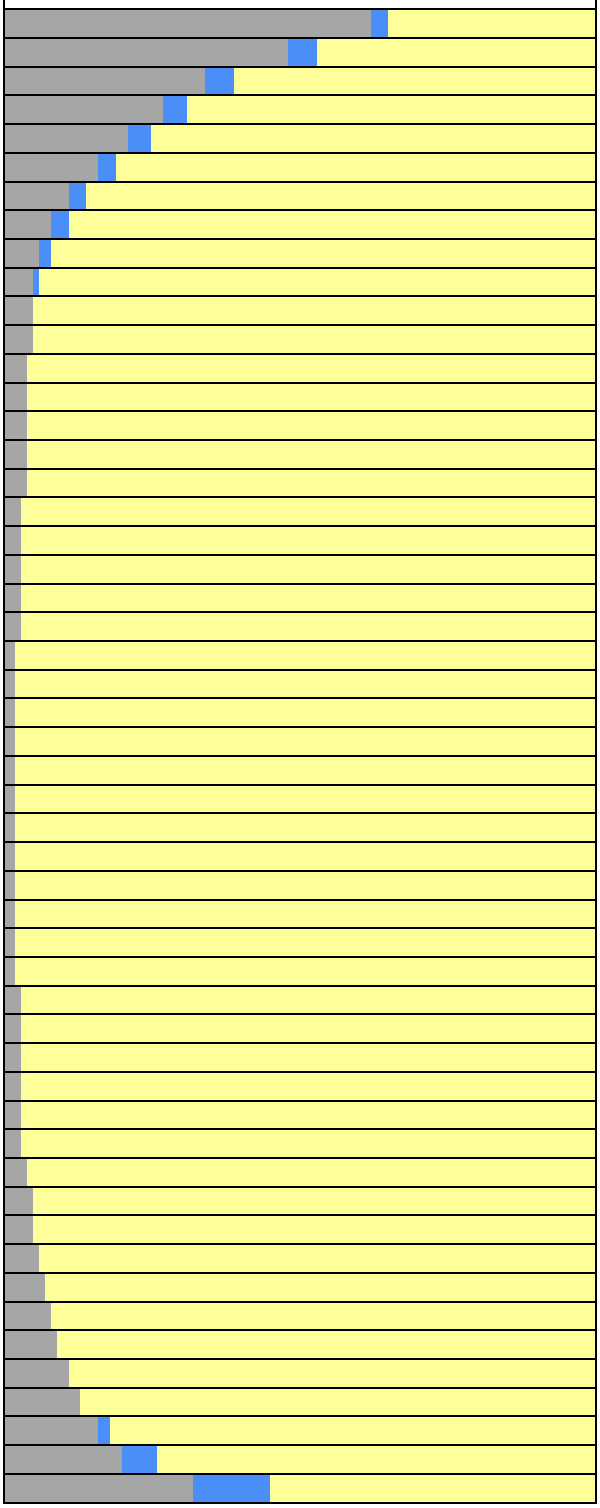
JULY 5

Mirror date: June 7
Analysis hours: 6:52 AM-7:36 PM (PDT)

Shadow / Sunlight Balance Key
Existing Shadow | Project Shadow | Sunlight Remaining

Analysis Time	EXISTING SHADOW		PROJECT NET NEW SHADOW	
	Shadow Area	Coverage	Shadow Area	Coverage
6:52 AM	53,801 sf	61.75%	2,547 sf	2.92%
7:00 AM	41,891 sf	48.08%	4,088 sf	4.69%
7:15 AM	29,973 sf	34.40%	3,979 sf	4.57%
7:30 AM	23,337 sf	26.79%	3,577 sf	4.11%
7:45 AM	18,182 sf	20.87%	3,252 sf	3.73%
8:00 AM	13,674 sf	15.70%	2,949 sf	3.39%
8:15 AM	9,879 sf	11.34%	2,662 sf	3.06%
8:30 AM	6,755 sf	7.75%	2,412 sf	2.77%
8:45 AM	4,826 sf	5.54%	2,115 sf	2.43%
9:00 AM	4,330 sf	4.97%	1,079 sf	1.24%
9:15 AM	4,139 sf	4.75%	107 sf	0.12%
9:30 AM	3,954 sf	4.54%	0 sf	0.00%
9:45 AM	3,782 sf	4.34%	0 sf	0.00%
10:00 AM	3,600 sf	4.13%	0 sf	0.00%
10:15 AM	3,421 sf	3.93%	0 sf	0.00%
10:30 AM	3,230 sf	3.71%	0 sf	0.00%
10:45 AM	3,063 sf	3.52%	0 sf	0.00%
11:00 AM	2,880 sf	3.31%	0 sf	0.00%
11:15 AM	2,722 sf	3.12%	0 sf	0.00%
11:30 AM	2,539 sf	2.91%	0 sf	0.00%
11:45 AM	2,377 sf	2.73%	0 sf	0.00%
12:00 PM	2,192 sf	2.52%	0 sf	0.00%
12:15 PM	2,041 sf	2.34%	0 sf	0.00%
12:30 PM	1,835 sf	2.11%	0 sf	0.00%
12:45 PM	1,675 sf	1.92%	0 sf	0.00%
1:00 PM	1,424 sf	1.63%	0 sf	0.00%
1:15 PM	1,483 sf	1.70%	0 sf	0.00%
1:30 PM	1,568 sf	1.80%	0 sf	0.00%
1:45 PM	1,705 sf	1.96%	0 sf	0.00%
2:00 PM	1,776 sf	2.04%	0 sf	0.00%
2:15 PM	1,894 sf	2.17%	0 sf	0.00%
2:30 PM	1,956 sf	2.24%	0 sf	0.00%
2:45 PM	2,062 sf	2.37%	0 sf	0.00%
3:00 PM	2,117 sf	2.43%	0 sf	0.00%
3:15 PM	2,204 sf	2.53%	0 sf	0.00%
3:30 PM	2,256 sf	2.59%	0 sf	0.00%
3:45 PM	2,337 sf	2.68%	0 sf	0.00%
4:00 PM	2,358 sf	2.71%	0 sf	0.00%
4:15 PM	2,466 sf	2.83%	0 sf	0.00%
4:30 PM	2,885 sf	3.31%	0 sf	0.00%
4:45 PM	3,408 sf	3.91%	0 sf	0.00%
5:00 PM	3,984 sf	4.57%	0 sf	0.00%
5:15 PM	4,615 sf	5.30%	0 sf	0.00%
5:30 PM	5,340 sf	6.13%	0 sf	0.00%
5:45 PM	6,165 sf	7.08%	0 sf	0.00%
6:00 PM	7,127 sf	8.18%	0 sf	0.00%
6:15 PM	8,255 sf	9.48%	0 sf	0.00%
6:30 PM	9,671 sf	11.10%	0 sf	0.00%
6:45 PM	11,478 sf	13.17%	170 sf	0.20%
7:00 PM	13,898 sf	15.95%	1,396 sf	1.60%
7:15 PM	17,367 sf	19.94%	4,992 sf	5.73%
7:36 PM	28,122 sf	32.28%	10,951 sf	12.57%

SHADOW/SUNLIGHT BALANCE
Relative levels of Shadow vs. Sun



PROJECT: Family Zoning Plan
OPEN SPACE: Joe DiMaggio (87,120 sf)

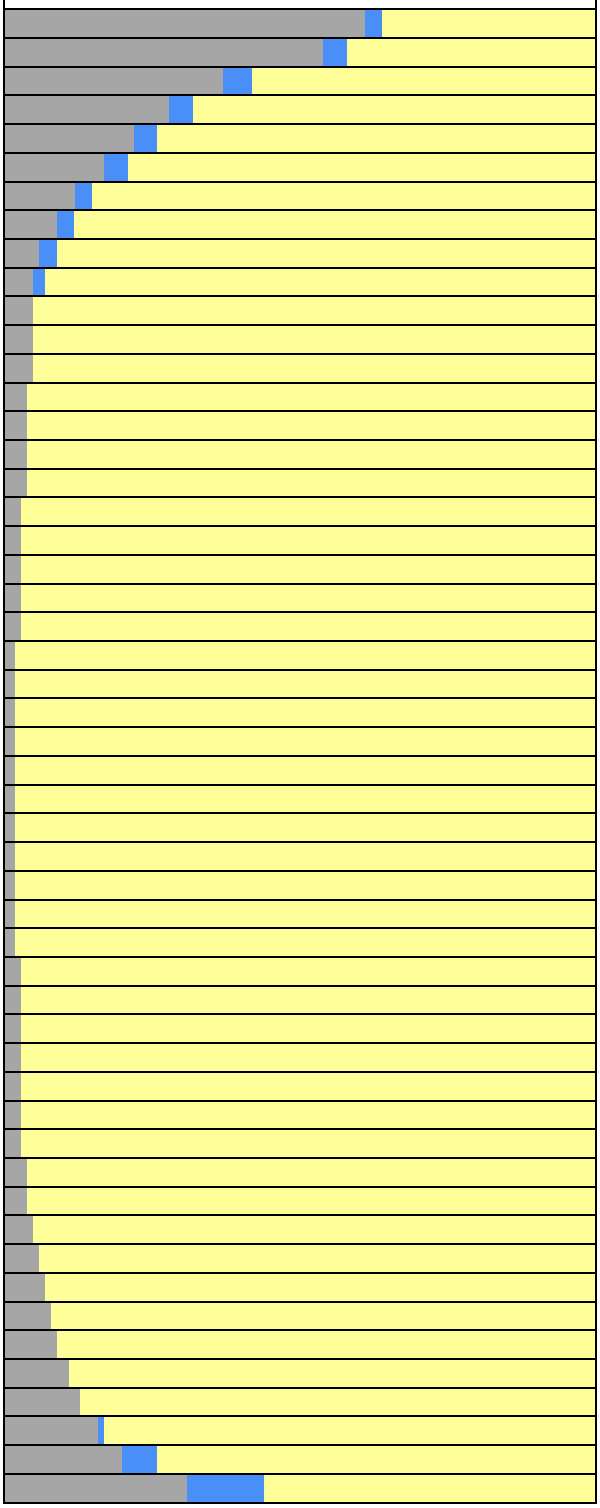
JULY 12

Mirror date: May 31
Analysis hours: 6:56 AM-7:33 PM (PDT)

Shadow / Sunlight Balance Key
Existing Shadow | Project Shadow | Sunlight Remaining

Analysis Time	EXISTING SHADOW		PROJECT NET NEW SHADOW	
	Shadow Area	Coverage	Shadow Area	Coverage
6:56 AM	53,097 sf	60.95%	2,408 sf	2.76%
7:00 AM	47,045 sf	54.00%	3,395 sf	3.90%
7:15 AM	32,076 sf	36.82%	4,194 sf	4.81%
7:30 AM	24,775 sf	28.44%	3,764 sf	4.32%
7:45 AM	19,251 sf	22.10%	3,412 sf	3.92%
8:00 AM	14,578 sf	16.73%	3,072 sf	3.53%
8:15 AM	10,583 sf	12.15%	2,769 sf	3.18%
8:30 AM	7,405 sf	8.50%	2,490 sf	2.86%
8:45 AM	5,297 sf	6.08%	2,234 sf	2.56%
9:00 AM	4,503 sf	5.17%	1,333 sf	1.53%
9:15 AM	4,299 sf	4.93%	244 sf	0.28%
9:30 AM	4,099 sf	4.71%	0 sf	0.00%
9:45 AM	3,921 sf	4.50%	0 sf	0.00%
10:00 AM	3,732 sf	4.28%	0 sf	0.00%
10:15 AM	3,545 sf	4.07%	0 sf	0.00%
10:30 AM	3,347 sf	3.84%	0 sf	0.00%
10:45 AM	3,178 sf	3.65%	0 sf	0.00%
11:00 AM	2,989 sf	3.43%	0 sf	0.00%
11:15 AM	2,825 sf	3.24%	0 sf	0.00%
11:30 AM	2,640 sf	3.03%	0 sf	0.00%
11:45 AM	2,482 sf	2.85%	0 sf	0.00%
12:00 PM	2,290 sf	2.63%	0 sf	0.00%
12:15 PM	2,134 sf	2.45%	0 sf	0.00%
12:30 PM	1,930 sf	2.22%	0 sf	0.00%
12:45 PM	1,769 sf	2.03%	0 sf	0.00%
1:00 PM	1,511 sf	1.73%	0 sf	0.00%
1:15 PM	1,552 sf	1.78%	0 sf	0.00%
1:30 PM	1,648 sf	1.89%	0 sf	0.00%
1:45 PM	1,788 sf	2.05%	0 sf	0.00%
2:00 PM	1,857 sf	2.13%	0 sf	0.00%
2:15 PM	1,980 sf	2.27%	0 sf	0.00%
2:30 PM	2,043 sf	2.34%	0 sf	0.00%
2:45 PM	2,144 sf	2.46%	0 sf	0.00%
3:00 PM	2,204 sf	2.53%	0 sf	0.00%
3:15 PM	2,300 sf	2.64%	0 sf	0.00%
3:30 PM	2,352 sf	2.70%	0 sf	0.00%
3:45 PM	2,434 sf	2.79%	0 sf	0.00%
4:00 PM	2,473 sf	2.84%	0 sf	0.00%
4:15 PM	2,494 sf	2.86%	0 sf	0.00%
4:30 PM	2,739 sf	3.14%	0 sf	0.00%
4:45 PM	3,340 sf	3.83%	0 sf	0.00%
5:00 PM	3,920 sf	4.50%	0 sf	0.00%
5:15 PM	4,559 sf	5.23%	0 sf	0.00%
5:30 PM	5,289 sf	6.07%	0 sf	0.00%
5:45 PM	6,121 sf	7.03%	0 sf	0.00%
6:00 PM	7,093 sf	8.14%	0 sf	0.00%
6:15 PM	8,235 sf	9.45%	0 sf	0.00%
6:30 PM	9,661 sf	11.09%	0 sf	0.00%
6:45 PM	11,496 sf	13.20%	125 sf	0.14%
7:00 PM	13,972 sf	16.04%	1,296 sf	1.49%
7:15 PM	17,555 sf	20.15%	5,128 sf	5.89%
7:33 PM	26,959 sf	30.95%	11,312 sf	12.98%

SHADOW/SUNLIGHT BALANCE
Relative levels of Shadow vs. Sun



PROJECT: Family Zoning Plan
OPEN SPACE: Joe DiMaggio (87,120 sf)

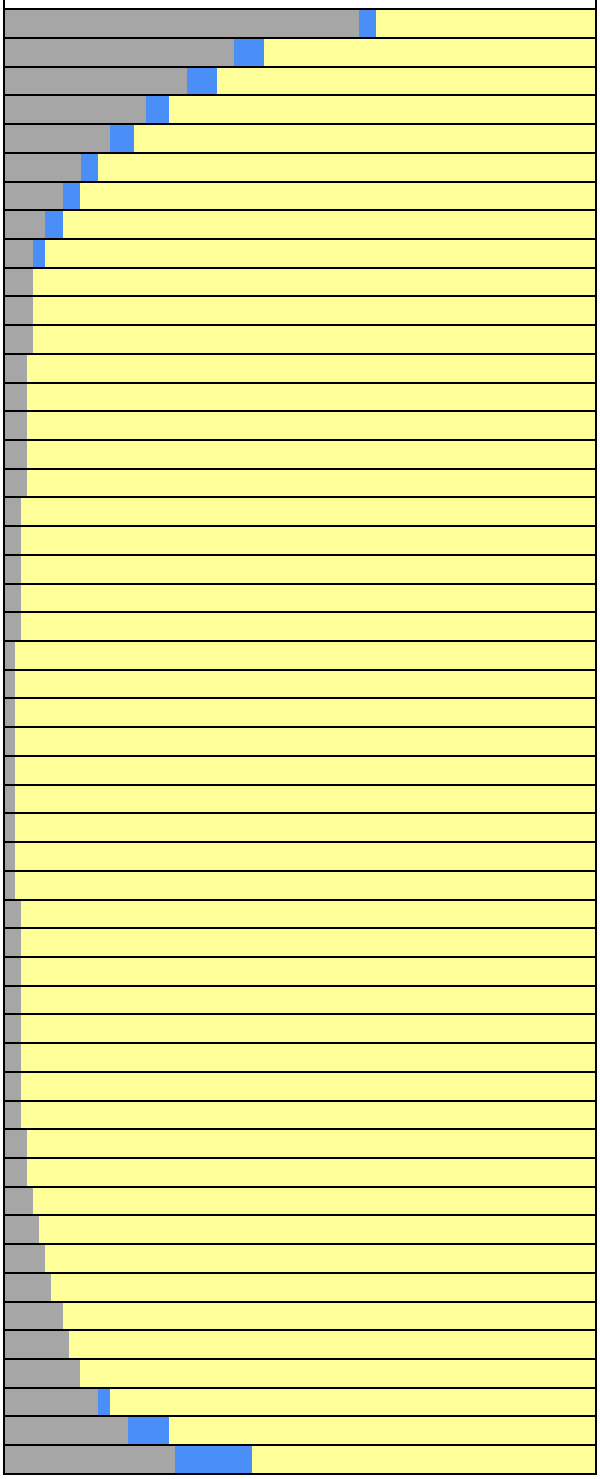
JULY 19

Mirror date: May 24
Analysis hours: 7:01 AM-7:30 PM (PDT)

Shadow / Sunlight Balance Key
Existing Shadow | Project Shadow | Sunlight Remaining

Analysis Time	EXISTING SHADOW		PROJECT NET NEW SHADOW	
	Shadow Area	Coverage	Shadow Area	Coverage
7:01 AM	52,271 sf	60.00%	2,281 sf	2.62%
7:16 AM	33,985 sf	39.01%	4,487 sf	5.15%
7:30 AM	26,609 sf	30.54%	4,026 sf	4.62%
7:45 AM	20,576 sf	23.62%	3,616 sf	4.15%
8:00 AM	15,675 sf	17.99%	3,246 sf	3.73%
8:15 AM	11,348 sf	13.03%	2,894 sf	3.32%
8:30 AM	8,334 sf	9.57%	2,614 sf	3.00%
8:45 AM	5,925 sf	6.80%	2,348 sf	2.69%
9:00 AM	4,748 sf	5.45%	1,645 sf	1.89%
9:15 AM	4,521 sf	5.19%	435 sf	0.50%
9:30 AM	4,297 sf	4.93%	0 sf	0.00%
9:45 AM	4,101 sf	4.71%	0 sf	0.00%
10:00 AM	3,908 sf	4.49%	0 sf	0.00%
10:15 AM	3,712 sf	4.26%	0 sf	0.00%
10:30 AM	3,506 sf	4.02%	0 sf	0.00%
10:45 AM	3,328 sf	3.82%	0 sf	0.00%
11:00 AM	3,134 sf	3.60%	0 sf	0.00%
11:15 AM	2,966 sf	3.40%	0 sf	0.00%
11:30 AM	2,777 sf	3.19%	0 sf	0.00%
11:45 AM	2,612 sf	3.00%	0 sf	0.00%
12:00 PM	2,418 sf	2.78%	0 sf	0.00%
12:15 PM	2,259 sf	2.59%	0 sf	0.00%
12:30 PM	2,055 sf	2.36%	0 sf	0.00%
12:45 PM	1,889 sf	2.17%	0 sf	0.00%
1:00 PM	1,634 sf	1.88%	0 sf	0.00%
1:15 PM	1,667 sf	1.91%	0 sf	0.00%
1:30 PM	1,764 sf	2.03%	0 sf	0.00%
1:45 PM	1,906 sf	2.19%	0 sf	0.00%
2:00 PM	1,976 sf	2.27%	0 sf	0.00%
2:15 PM	2,103 sf	2.41%	0 sf	0.00%
2:30 PM	2,169 sf	2.49%	0 sf	0.00%
2:45 PM	2,279 sf	2.62%	0 sf	0.00%
3:00 PM	2,341 sf	2.69%	0 sf	0.00%
3:15 PM	2,433 sf	2.79%	0 sf	0.00%
3:30 PM	2,495 sf	2.86%	0 sf	0.00%
3:45 PM	2,579 sf	2.96%	0 sf	0.00%
4:00 PM	2,632 sf	3.02%	0 sf	0.00%
4:15 PM	2,708 sf	3.11%	0 sf	0.00%
4:30 PM	2,796 sf	3.21%	0 sf	0.00%
4:45 PM	3,271 sf	3.75%	0 sf	0.00%
5:00 PM	3,867 sf	4.44%	0 sf	0.00%
5:15 PM	4,521 sf	5.19%	0 sf	0.00%
5:30 PM	5,258 sf	6.04%	0 sf	0.00%
5:45 PM	6,110 sf	7.01%	0 sf	0.00%
6:00 PM	7,108 sf	8.16%	0 sf	0.00%
6:15 PM	8,283 sf	9.51%	0 sf	0.00%
6:30 PM	9,748 sf	11.19%	0 sf	0.00%
6:45 PM	11,658 sf	13.38%	95 sf	0.11%
7:00 PM	14,252 sf	16.36%	1,311 sf	1.50%
7:15 PM	18,041 sf	20.71%	5,948 sf	6.83%
7:30 PM	25,516 sf	29.29%	11,670 sf	13.39%

SHADOW/SUNLIGHT BALANCE
Relative levels of Shadow vs. Sun



PROJECT: Family Zoning Plan
OPEN SPACE: Joe DiMaggio (87,120 sf)

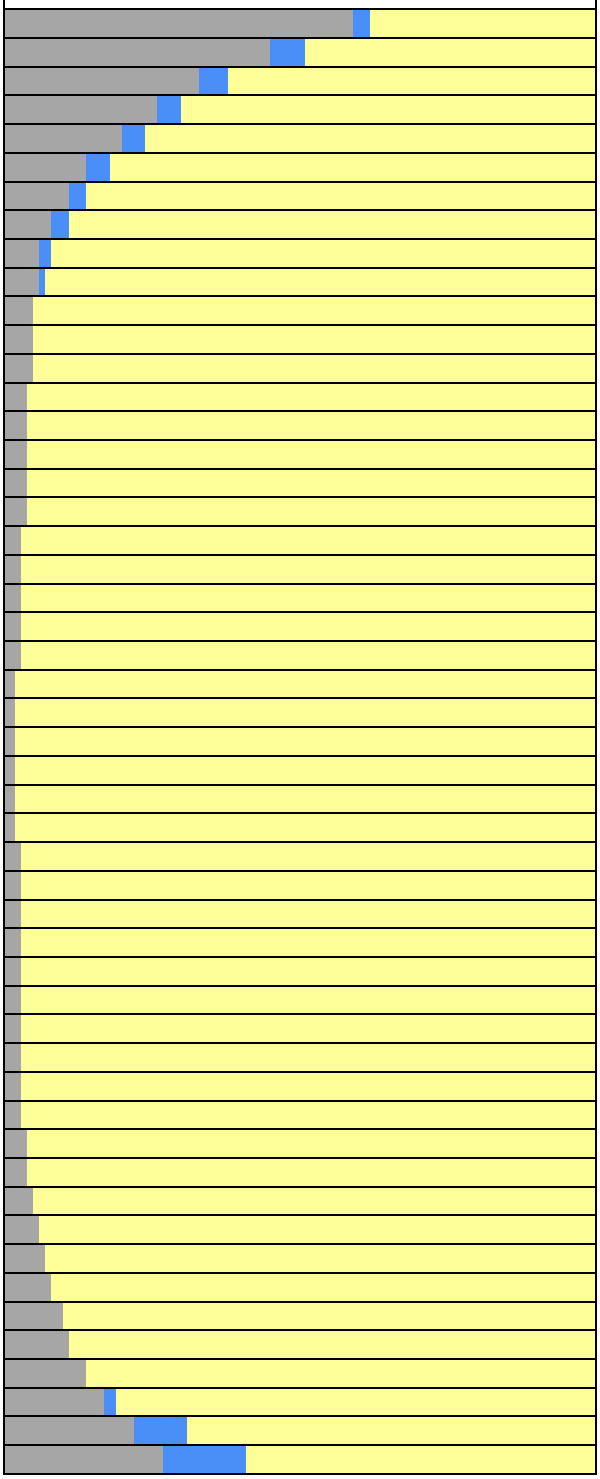
JULY 26

Mirror date: May 17
Analysis hours: 7:07 AM-7:25 PM (PDT)

Shadow / Sunlight Balance Key
Existing Shadow | Project Shadow | Sunlight Remaining

Analysis Time	EXISTING SHADOW		PROJECT NET NEW SHADOW	
	Shadow Area	Coverage	Shadow Area	Coverage
7:07 AM	51,090 sf	58.64%	2,572 sf	2.95%
7:15 AM	38,869 sf	44.62%	4,946 sf	5.68%
7:30 AM	29,015 sf	33.30%	4,396 sf	5.05%
7:45 AM	22,226 sf	25.51%	3,892 sf	4.47%
8:00 AM	17,041 sf	19.56%	3,464 sf	3.98%
8:15 AM	12,600 sf	14.46%	3,080 sf	3.54%
8:30 AM	9,453 sf	10.85%	2,749 sf	3.16%
8:45 AM	6,765 sf	7.77%	2,461 sf	2.82%
9:00 AM	5,085 sf	5.84%	1,979 sf	2.27%
9:15 AM	4,794 sf	5.50%	709 sf	0.81%
9:30 AM	4,553 sf	5.23%	0 sf	0.00%
9:45 AM	4,336 sf	4.98%	0 sf	0.00%
10:00 AM	4,121 sf	4.73%	0 sf	0.00%
10:15 AM	3,918 sf	4.50%	0 sf	0.00%
10:30 AM	3,704 sf	4.25%	0 sf	0.00%
10:45 AM	3,517 sf	4.04%	0 sf	0.00%
11:00 AM	3,313 sf	3.80%	0 sf	0.00%
11:15 AM	3,139 sf	3.60%	0 sf	0.00%
11:30 AM	2,940 sf	3.37%	0 sf	0.00%
11:45 AM	2,774 sf	3.18%	0 sf	0.00%
12:00 PM	2,575 sf	2.96%	0 sf	0.00%
12:15 PM	2,411 sf	2.77%	0 sf	0.00%
12:30 PM	2,204 sf	2.53%	0 sf	0.00%
12:45 PM	2,039 sf	2.34%	0 sf	0.00%
1:00 PM	1,783 sf	2.05%	0 sf	0.00%
1:15 PM	1,826 sf	2.10%	0 sf	0.00%
1:30 PM	1,921 sf	2.21%	0 sf	0.00%
1:45 PM	2,063 sf	2.37%	0 sf	0.00%
2:00 PM	2,139 sf	2.45%	0 sf	0.00%
2:15 PM	2,261 sf	2.60%	0 sf	0.00%
2:30 PM	2,336 sf	2.68%	0 sf	0.00%
2:45 PM	2,452 sf	2.81%	0 sf	0.00%
3:00 PM	2,518 sf	2.89%	0 sf	0.00%
3:15 PM	2,619 sf	3.01%	0 sf	0.00%
3:30 PM	2,681 sf	3.08%	0 sf	0.00%
3:45 PM	2,775 sf	3.19%	0 sf	0.00%
4:00 PM	2,839 sf	3.26%	0 sf	0.00%
4:15 PM	2,913 sf	3.34%	0 sf	0.00%
4:30 PM	2,900 sf	3.33%	0 sf	0.00%
4:45 PM	3,172 sf	3.64%	0 sf	0.00%
5:00 PM	3,822 sf	4.39%	0 sf	0.00%
5:15 PM	4,489 sf	5.15%	0 sf	0.00%
5:30 PM	5,251 sf	6.03%	0 sf	0.00%
5:45 PM	6,127 sf	7.03%	0 sf	0.00%
6:00 PM	7,164 sf	8.22%	0 sf	0.00%
6:15 PM	8,391 sf	9.63%	0 sf	0.00%
6:30 PM	9,922 sf	11.39%	0 sf	0.00%
6:45 PM	11,942 sf	13.71%	76 sf	0.09%
7:00 PM	14,750 sf	16.93%	2,024 sf	2.32%
7:15 PM	18,880 sf	21.67%	7,511 sf	8.62%
7:25 PM	23,869 sf	27.40%	11,981 sf	13.75%

SHADOW/SUNLIGHT BALANCE
Relative levels of Shadow vs. Sun



PROJECT: Family Zoning Plan
OPEN SPACE: Joe DiMaggio (87,120 sf)

AUGUST 2

Mirror date: May 10
Analysis hours: 7:12 AM-7:18 PM (PDT)

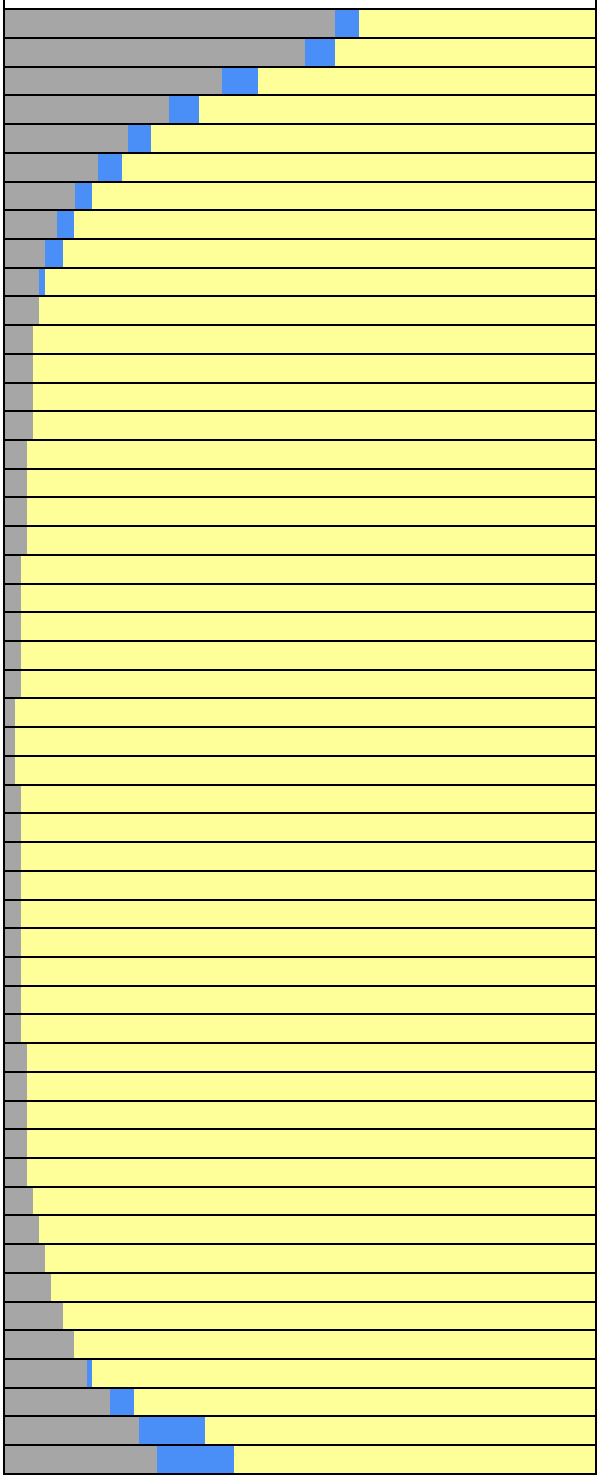
Shadow / Sunlight Balance Key

Existing Shadow | Project Shadow | Sunlight Remaining

Analysis Time	EXISTING SHADOW		PROJECT NET NEW SHADOW	
	Shadow Area	Coverage	Shadow Area	Coverage
7:12 AM	48,899 sf	56.13%	3,210 sf	3.68%
7:15 AM	44,825 sf	51.45%	4,215 sf	4.84%
7:30 AM	31,918 sf	36.64%	4,868 sf	5.59%
7:45 AM	24,175 sf	27.75%	4,263 sf	4.89%
8:00 AM	18,553 sf	21.30%	3,728 sf	4.28%
8:15 AM	14,279 sf	16.39%	3,295 sf	3.78%
8:30 AM	10,743 sf	12.33%	2,923 sf	3.36%
8:45 AM	7,817 sf	8.97%	2,600 sf	2.98%
9:00 AM	5,672 sf	6.51%	2,244 sf	2.58%
9:15 AM	5,131 sf	5.89%	1,027 sf	1.18%
9:30 AM	4,852 sf	5.57%	31 sf	0.04%
9:45 AM	4,613 sf	5.30%	0 sf	0.00%
10:00 AM	4,376 sf	5.02%	0 sf	0.00%
10:15 AM	4,168 sf	4.78%	0 sf	0.00%
10:30 AM	3,937 sf	4.52%	0 sf	0.00%
10:45 AM	3,739 sf	4.29%	0 sf	0.00%
11:00 AM	3,523 sf	4.04%	0 sf	0.00%
11:15 AM	3,342 sf	3.84%	0 sf	0.00%
11:30 AM	3,133 sf	3.60%	0 sf	0.00%
11:45 AM	2,962 sf	3.40%	0 sf	0.00%
12:00 PM	2,757 sf	3.16%	0 sf	0.00%
12:15 PM	2,591 sf	2.97%	0 sf	0.00%
12:30 PM	2,382 sf	2.73%	0 sf	0.00%
12:45 PM	2,210 sf	2.54%	0 sf	0.00%
1:00 PM	1,959 sf	2.25%	0 sf	0.00%
1:15 PM	2,024 sf	2.32%	0 sf	0.00%
1:30 PM	2,120 sf	2.43%	0 sf	0.00%
1:45 PM	2,258 sf	2.59%	0 sf	0.00%
2:00 PM	2,339 sf	2.69%	0 sf	0.00%
2:15 PM	2,465 sf	2.83%	0 sf	0.00%
2:30 PM	2,542 sf	2.92%	0 sf	0.00%
2:45 PM	2,661 sf	3.05%	0 sf	0.00%
3:00 PM	2,738 sf	3.14%	0 sf	0.00%
3:15 PM	2,844 sf	3.26%	0 sf	0.00%
3:30 PM	2,912 sf	3.34%	0 sf	0.00%
3:45 PM	3,018 sf	3.46%	0 sf	0.00%
4:00 PM	3,086 sf	3.54%	0 sf	0.00%
4:15 PM	3,193 sf	3.67%	0 sf	0.00%
4:30 PM	3,263 sf	3.74%	0 sf	0.00%
4:45 PM	3,320 sf	3.81%	0 sf	0.00%
5:00 PM	3,739 sf	4.29%	0 sf	0.00%
5:15 PM	4,484 sf	5.15%	0 sf	0.00%
5:30 PM	5,284 sf	6.06%	0 sf	0.00%
5:45 PM	6,195 sf	7.11%	0 sf	0.00%
6:00 PM	7,291 sf	8.37%	0 sf	0.00%
6:15 PM	8,600 sf	9.87%	0 sf	0.00%
6:30 PM	10,238 sf	11.75%	20 sf	0.02%
6:45 PM	12,439 sf	14.28%	571 sf	0.66%
7:00 PM	15,579 sf	17.88%	3,668 sf	4.21%
7:15 PM	20,473 sf	23.50%	9,975 sf	11.45%
7:18 PM	22,329 sf	25.63%	11,739 sf	13.47%

SHADOW/SUNLIGHT BALANCE

Relative levels of Shadow vs. Sun



PROJECT: Family Zoning Plan
OPEN SPACE: Joe DiMaggio (87,120 sf)

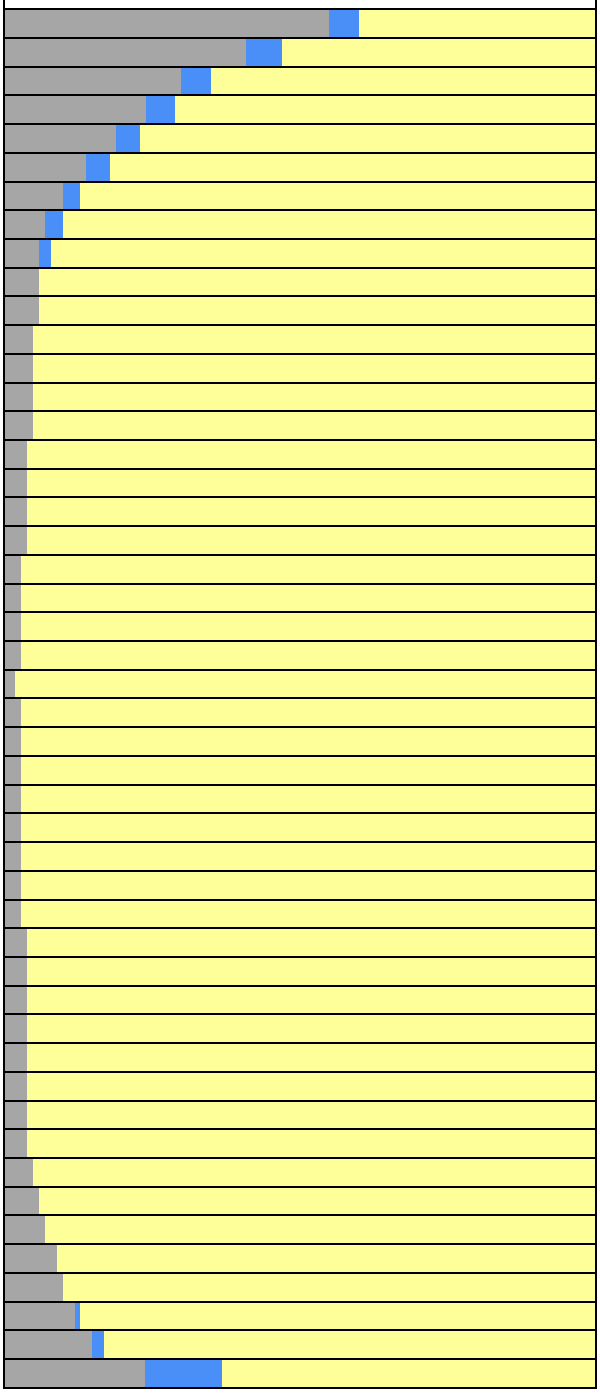
AUGUST 9

Mirror date: May 3
Analysis hours: 7:19 AM-7:10 PM (PDT)

Shadow / Sunlight Balance Key
Existing Shadow | Project Shadow | Sunlight Remaining

Analysis Time	EXISTING SHADOW		PROJECT NET NEW SHADOW	
	Shadow Area	Coverage	Shadow Area	Coverage
7:19 AM	47,564 sf	54.60%	3,935 sf	4.52%
7:30 AM	35,705 sf	40.98%	5,440 sf	6.24%
7:45 AM	26,531 sf	30.45%	4,730 sf	5.43%
8:00 AM	20,849 sf	23.93%	4,088 sf	4.69%
8:15 AM	16,239 sf	18.64%	3,560 sf	4.09%
8:30 AM	12,269 sf	14.08%	3,131 sf	3.59%
8:45 AM	9,041 sf	10.38%	2,768 sf	3.18%
9:00 AM	6,489 sf	7.45%	2,425 sf	2.78%
9:15 AM	5,524 sf	6.34%	1,383 sf	1.59%
9:30 AM	5,210 sf	5.98%	162 sf	0.19%
9:45 AM	4,940 sf	5.67%	0 sf	0.00%
10:00 AM	4,678 sf	5.37%	0 sf	0.00%
10:15 AM	4,449 sf	5.11%	0 sf	0.00%
10:30 AM	4,206 sf	4.83%	0 sf	0.00%
10:45 AM	3,993 sf	4.58%	0 sf	0.00%
11:00 AM	3,769 sf	4.33%	0 sf	0.00%
11:15 AM	3,570 sf	4.10%	0 sf	0.00%
11:30 AM	3,356 sf	3.85%	0 sf	0.00%
11:45 AM	3,181 sf	3.65%	0 sf	0.00%
12:00 PM	2,969 sf	3.41%	0 sf	0.00%
12:15 PM	2,796 sf	3.21%	0 sf	0.00%
12:30 PM	2,582 sf	2.96%	0 sf	0.00%
12:45 PM	2,405 sf	2.76%	0 sf	0.00%
1:00 PM	2,161 sf	2.48%	0 sf	0.00%
1:15 PM	2,255 sf	2.59%	0 sf	0.00%
1:30 PM	2,348 sf	2.69%	0 sf	0.00%
1:45 PM	2,489 sf	2.86%	0 sf	0.00%
2:00 PM	2,572 sf	2.95%	0 sf	0.00%
2:15 PM	2,707 sf	3.11%	0 sf	0.00%
2:30 PM	2,790 sf	3.20%	0 sf	0.00%
2:45 PM	2,916 sf	3.35%	0 sf	0.00%
3:00 PM	2,993 sf	3.44%	0 sf	0.00%
3:15 PM	3,113 sf	3.57%	0 sf	0.00%
3:30 PM	3,195 sf	3.67%	0 sf	0.00%
3:45 PM	3,308 sf	3.80%	0 sf	0.00%
4:00 PM	3,388 sf	3.89%	0 sf	0.00%
4:15 PM	3,499 sf	4.02%	0 sf	0.00%
4:30 PM	3,591 sf	4.12%	0 sf	0.00%
4:45 PM	3,715 sf	4.26%	0 sf	0.00%
5:00 PM	3,848 sf	4.42%	0 sf	0.00%
5:15 PM	4,499 sf	5.16%	0 sf	0.00%
5:30 PM	5,347 sf	6.14%	0 sf	0.00%
5:45 PM	6,322 sf	7.26%	0 sf	0.00%
6:00 PM	7,490 sf	8.60%	0 sf	0.00%
6:15 PM	8,906 sf	10.22%	38 sf	0.04%
6:30 PM	10,707 sf	12.29%	646 sf	0.74%
6:45 PM	13,191 sf	15.14%	1,973 sf	2.26%
7:10 PM	20,827 sf	23.91%	11,528 sf	13.23%

SHADOW/SUNLIGHT BALANCE
Relative levels of Shadow vs. Sun



PROJECT: Family Zoning Plan
OPEN SPACE: Joe DiMaggio (87,120 sf)

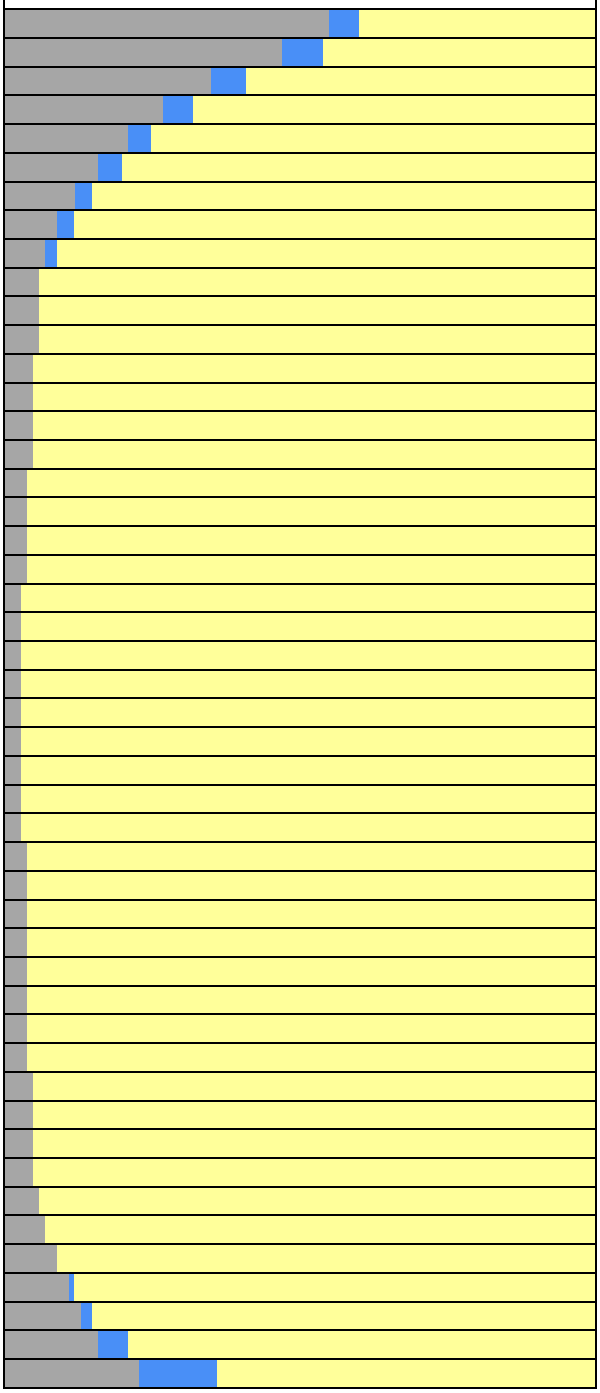
AUGUST 16

Mirror date: April 26
Analysis hours: 7:25 AM-7:02 PM (PDT)

Shadow / Sunlight Balance Key
Existing Shadow | Project Shadow | Sunlight Remaining

Analysis Time	EXISTING SHADOW		PROJECT NET NEW SHADOW	
	Shadow Area	Coverage	Shadow Area	Coverage
7:25 AM	47,761 sf	54.82%	4,668 sf	5.36%
7:30 AM	41,320 sf	47.43%	5,845 sf	6.71%
7:45 AM	30,535 sf	35.05%	5,324 sf	6.11%
8:00 AM	23,646 sf	27.14%	4,536 sf	5.21%
8:15 AM	18,585 sf	21.33%	3,889 sf	4.46%
8:30 AM	14,077 sf	16.16%	3,376 sf	3.88%
8:45 AM	10,458 sf	12.00%	2,964 sf	3.40%
9:00 AM	7,514 sf	8.62%	2,604 sf	2.99%
9:15 AM	5,982 sf	6.87%	1,796 sf	2.06%
9:30 AM	5,623 sf	6.45%	383 sf	0.44%
9:45 AM	5,318 sf	6.10%	0 sf	0.00%
10:00 AM	5,027 sf	5.77%	0 sf	0.00%
10:15 AM	4,774 sf	5.48%	0 sf	0.00%
10:30 AM	4,509 sf	5.18%	0 sf	0.00%
10:45 AM	4,281 sf	4.91%	0 sf	0.00%
11:00 AM	4,052 sf	4.65%	0 sf	0.00%
11:15 AM	3,842 sf	4.41%	0 sf	0.00%
11:30 AM	3,612 sf	4.15%	0 sf	0.00%
11:45 AM	3,421 sf	3.93%	0 sf	0.00%
12:00 PM	3,203 sf	3.68%	0 sf	0.00%
12:15 PM	3,026 sf	3.47%	0 sf	0.00%
12:30 PM	2,811 sf	3.23%	0 sf	0.00%
12:45 PM	2,630 sf	3.02%	0 sf	0.00%
1:00 PM	2,394 sf	2.75%	0 sf	0.00%
1:15 PM	2,524 sf	2.90%	0 sf	0.00%
1:30 PM	2,617 sf	3.00%	0 sf	0.00%
1:45 PM	2,760 sf	3.17%	0 sf	0.00%
2:00 PM	2,850 sf	3.27%	0 sf	0.00%
2:15 PM	2,986 sf	3.43%	0 sf	0.00%
2:30 PM	3,074 sf	3.53%	0 sf	0.00%
2:45 PM	3,210 sf	3.68%	0 sf	0.00%
3:00 PM	3,298 sf	3.79%	0 sf	0.00%
3:15 PM	3,431 sf	3.94%	0 sf	0.00%
3:30 PM	3,519 sf	4.04%	0 sf	0.00%
3:45 PM	3,645 sf	4.18%	0 sf	0.00%
4:00 PM	3,749 sf	4.30%	0 sf	0.00%
4:15 PM	3,879 sf	4.45%	0 sf	0.00%
4:30 PM	3,999 sf	4.59%	0 sf	0.00%
4:45 PM	4,134 sf	4.75%	0 sf	0.00%
5:00 PM	4,283 sf	4.92%	0 sf	0.00%
5:15 PM	4,533 sf	5.20%	0 sf	0.00%
5:30 PM	5,442 sf	6.25%	0 sf	0.00%
5:45 PM	6,492 sf	7.45%	0 sf	0.00%
6:00 PM	7,765 sf	8.91%	81 sf	0.09%
6:15 PM	9,339 sf	10.72%	840 sf	0.96%
6:30 PM	11,363 sf	13.04%	2,115 sf	2.43%
6:45 PM	14,244 sf	16.35%	3,921 sf	4.50%
7:02 PM	19,740 sf	22.66%	11,497 sf	13.20%

SHADOW/SUNLIGHT BALANCE
Relative levels of Shadow vs. Sun



PROJECT: Family Zoning Plan
OPEN SPACE: Joe DiMaggio (87,120 sf)

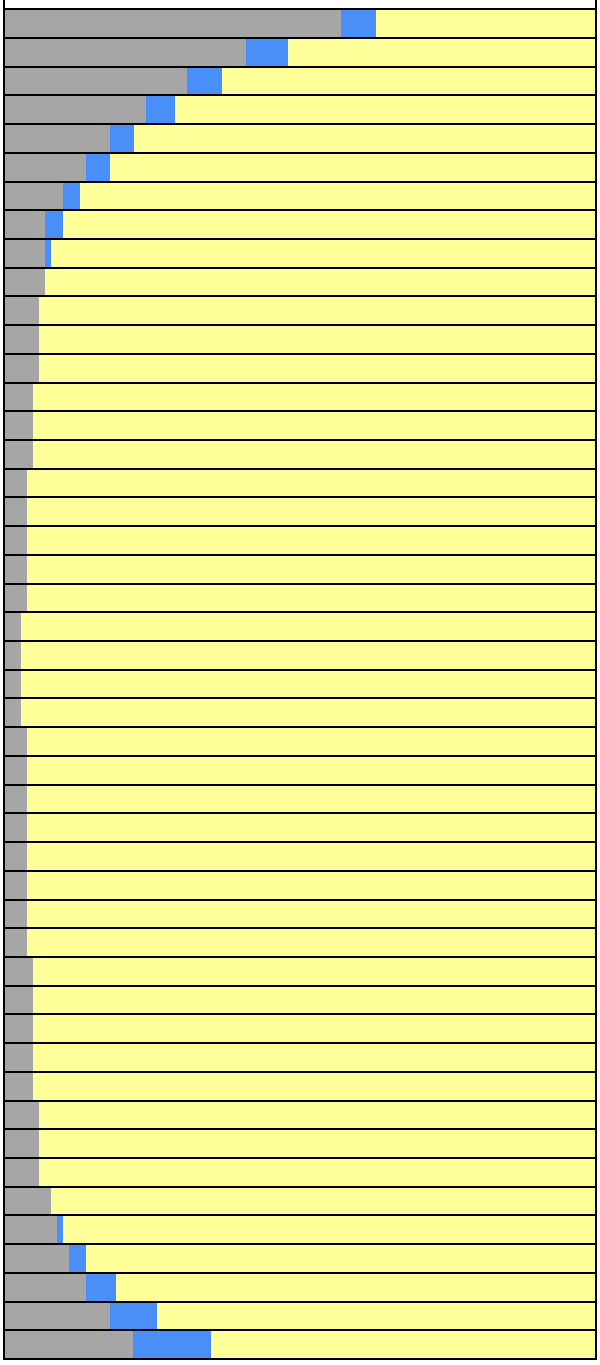
AUGUST 23

Mirror date: April 19
Analysis hours: 7:31 AM-6:52 PM (PDT)

Shadow / Sunlight Balance Key
Existing Shadow | Project Shadow | Sunlight Remaining

Analysis Time	EXISTING SHADOW		PROJECT NET NEW SHADOW	
	Shadow Area	Coverage	Shadow Area	Coverage
7:31 AM	49,794 sf	57.16%	5,555 sf	6.38%
7:45 AM	35,845 sf	41.14%	5,990 sf	6.88%
8:00 AM	26,999 sf	30.99%	5,084 sf	5.84%
8:15 AM	21,114 sf	24.24%	4,292 sf	4.93%
8:30 AM	16,082 sf	18.46%	3,674 sf	4.22%
8:45 AM	12,020 sf	13.80%	3,182 sf	3.65%
9:00 AM	8,672 sf	9.95%	2,776 sf	3.19%
9:15 AM	6,533 sf	7.50%	2,192 sf	2.52%
9:30 AM	6,083 sf	6.98%	646 sf	0.74%
9:45 AM	5,739 sf	6.59%	0 sf	0.00%
10:00 AM	5,409 sf	6.21%	0 sf	0.00%
10:15 AM	5,131 sf	5.89%	0 sf	0.00%
10:30 AM	4,843 sf	5.56%	0 sf	0.00%
10:45 AM	4,602 sf	5.28%	0 sf	0.00%
11:00 AM	4,341 sf	4.98%	0 sf	0.00%
11:15 AM	4,132 sf	4.74%	0 sf	0.00%
11:30 AM	3,892 sf	4.47%	0 sf	0.00%
11:45 AM	3,696 sf	4.24%	0 sf	0.00%
12:00 PM	3,471 sf	3.98%	0 sf	0.00%
12:15 PM	3,284 sf	3.77%	0 sf	0.00%
12:30 PM	3,059 sf	3.51%	0 sf	0.00%
12:45 PM	2,867 sf	3.29%	0 sf	0.00%
1:00 PM	2,667 sf	3.06%	0 sf	0.00%
1:15 PM	2,825 sf	3.24%	0 sf	0.00%
1:30 PM	2,926 sf	3.36%	0 sf	0.00%
1:45 PM	3,069 sf	3.52%	0 sf	0.00%
2:00 PM	3,164 sf	3.63%	0 sf	0.00%
2:15 PM	3,304 sf	3.79%	0 sf	0.00%
2:30 PM	3,407 sf	3.91%	0 sf	0.00%
2:45 PM	3,551 sf	4.08%	0 sf	0.00%
3:00 PM	3,655 sf	4.20%	0 sf	0.00%
3:15 PM	3,794 sf	4.35%	0 sf	0.00%
3:30 PM	3,904 sf	4.48%	0 sf	0.00%
3:45 PM	4,052 sf	4.65%	0 sf	0.00%
4:00 PM	4,165 sf	4.78%	0 sf	0.00%
4:15 PM	4,327 sf	4.97%	0 sf	0.00%
4:30 PM	4,458 sf	5.12%	0 sf	0.00%
4:45 PM	4,647 sf	5.33%	0 sf	0.00%
5:00 PM	4,824 sf	5.54%	0 sf	0.00%
5:15 PM	5,061 sf	5.81%	0 sf	0.00%
5:30 PM	5,505 sf	6.32%	0 sf	0.00%
5:45 PM	6,760 sf	7.76%	168 sf	0.19%
6:00 PM	8,184 sf	9.39%	1,072 sf	1.23%
6:15 PM	9,975 sf	11.45%	2,417 sf	2.77%
6:30 PM	12,345 sf	14.17%	4,204 sf	4.83%
6:45 PM	16,012 sf	18.38%	7,130 sf	8.18%
6:52 PM	19,022 sf	21.83%	11,173 sf	12.82%

SHADOW/SUNLIGHT BALANCE
Relative levels of Shadow vs. Sun



PROJECT: Family Zoning Plan
OPEN SPACE: Joe DiMaggio (87,120 sf)

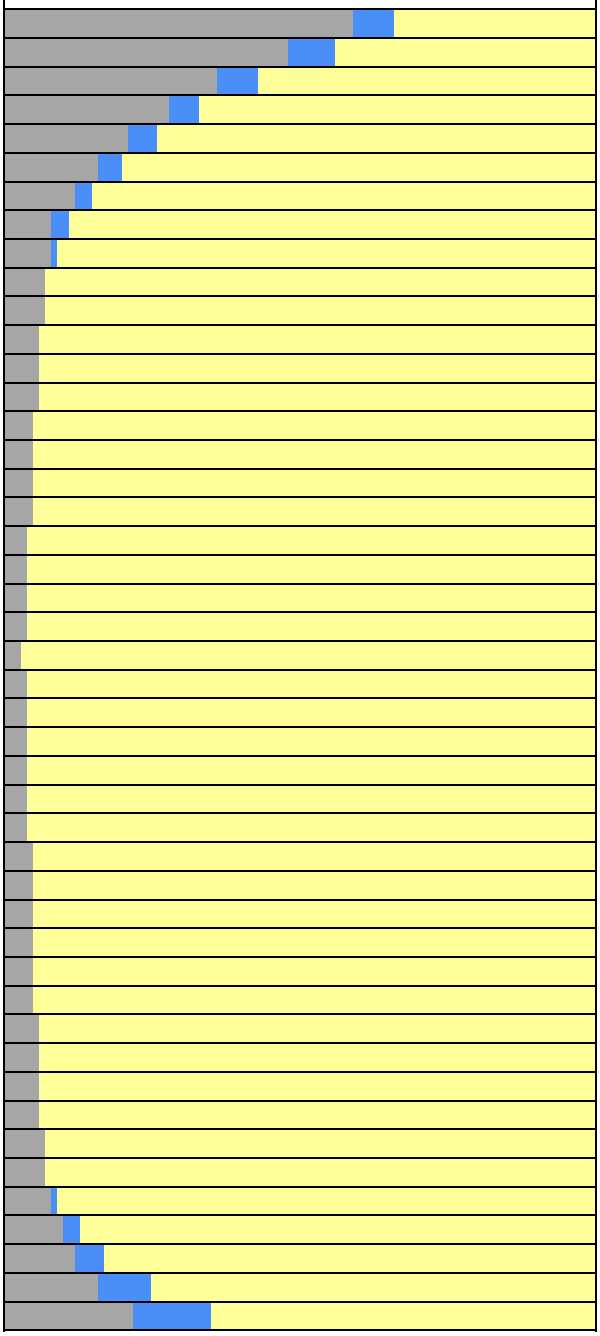
AUGUST 30

Mirror date: April 12
Analysis hours: 7:37 AM-6:42 PM (PDT)

Shadow / Sunlight Balance Key
Existing Shadow | Project Shadow | Sunlight Remaining

Analysis Time	EXISTING SHADOW		PROJECT NET NEW SHADOW	
	Shadow Area	Coverage	Shadow Area	Coverage
7:37 AM	51,378 sf	58.97%	6,128 sf	7.03%
7:45 AM	42,077 sf	48.30%	6,569 sf	7.54%
8:00 AM	31,050 sf	35.64%	5,750 sf	6.60%
8:15 AM	23,975 sf	27.52%	4,748 sf	5.45%
8:30 AM	18,431 sf	21.16%	3,986 sf	4.58%
8:45 AM	13,812 sf	15.85%	3,398 sf	3.90%
9:00 AM	10,078 sf	11.57%	2,926 sf	3.36%
9:15 AM	7,344 sf	8.43%	2,468 sf	2.83%
9:30 AM	6,600 sf	7.58%	976 sf	1.12%
9:45 AM	6,204 sf	7.12%	0 sf	0.00%
10:00 AM	5,837 sf	6.70%	0 sf	0.00%
10:15 AM	5,526 sf	6.34%	0 sf	0.00%
10:30 AM	5,216 sf	5.99%	0 sf	0.00%
10:45 AM	4,950 sf	5.68%	0 sf	0.00%
11:00 AM	4,674 sf	5.37%	0 sf	0.00%
11:15 AM	4,450 sf	5.11%	0 sf	0.00%
11:30 AM	4,196 sf	4.82%	0 sf	0.00%
11:45 AM	3,989 sf	4.58%	0 sf	0.00%
12:00 PM	3,759 sf	4.32%	0 sf	0.00%
12:15 PM	3,567 sf	4.09%	0 sf	0.00%
12:30 PM	3,338 sf	3.83%	0 sf	0.00%
12:45 PM	3,147 sf	3.61%	0 sf	0.00%
1:00 PM	2,985 sf	3.43%	0 sf	0.00%
1:15 PM	3,168 sf	3.64%	0 sf	0.00%
1:30 PM	3,268 sf	3.75%	0 sf	0.00%
1:45 PM	3,418 sf	3.92%	0 sf	0.00%
2:00 PM	3,516 sf	4.04%	0 sf	0.00%
2:15 PM	3,673 sf	4.22%	0 sf	0.00%
2:30 PM	3,782 sf	4.34%	0 sf	0.00%
2:45 PM	3,934 sf	4.52%	0 sf	0.00%
3:00 PM	4,052 sf	4.65%	0 sf	0.00%
3:15 PM	4,215 sf	4.84%	0 sf	0.00%
3:30 PM	4,340 sf	4.98%	0 sf	0.00%
3:45 PM	4,507 sf	5.17%	0 sf	0.00%
4:00 PM	4,653 sf	5.34%	0 sf	0.00%
4:15 PM	4,844 sf	5.56%	0 sf	0.00%
4:30 PM	5,019 sf	5.76%	0 sf	0.00%
4:45 PM	5,239 sf	6.01%	0 sf	0.00%
5:00 PM	5,496 sf	6.31%	0 sf	0.00%
5:15 PM	5,783 sf	6.64%	0 sf	0.00%
5:30 PM	6,102 sf	7.00%	265 sf	0.30%
5:45 PM	7,111 sf	8.16%	1,248 sf	1.43%
6:00 PM	8,743 sf	10.04%	2,673 sf	3.07%
6:15 PM	10,847 sf	12.45%	4,619 sf	5.30%
6:30 PM	13,976 sf	16.04%	7,537 sf	8.65%
6:42 PM	18,780 sf	21.56%	10,984 sf	12.61%

SHADOW/SUNLIGHT BALANCE
Relative levels of Shadow vs. Sun



PROJECT: Family Zoning Plan
OPEN SPACE: Joe DiMaggio (87,120 sf)

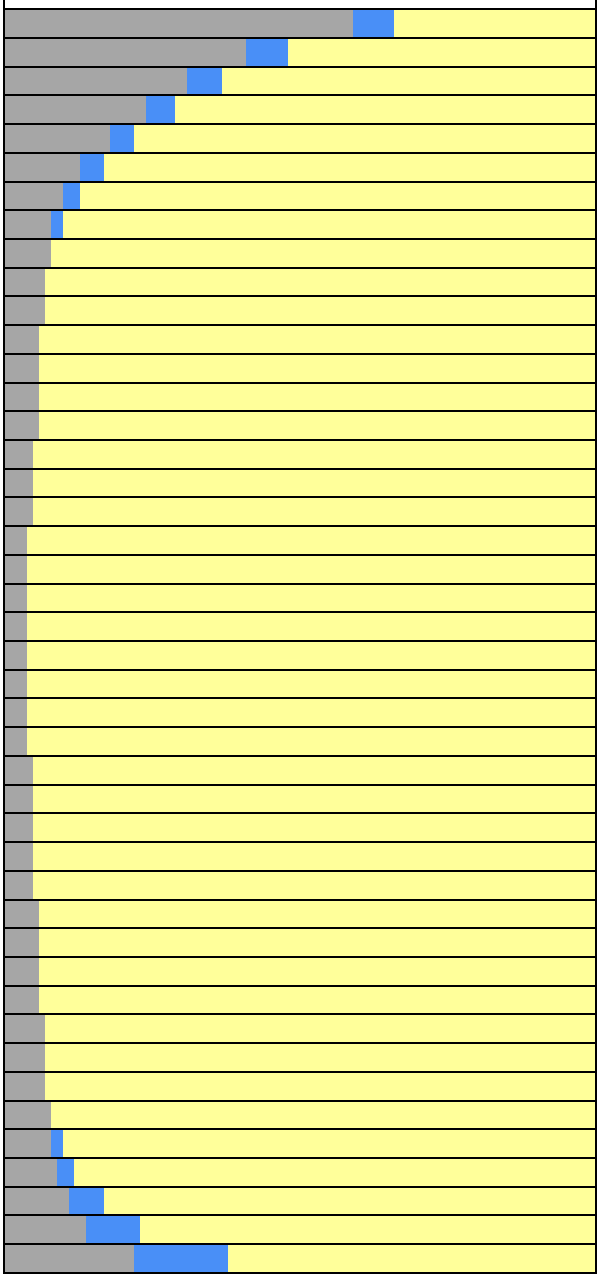
SEPTEMBER 6

Mirror date: April 5
Analysis hours: 7:44 AM-6:31 PM (PDT)

Shadow / Sunlight Balance Key
Existing Shadow | Project Shadow | Sunlight Remaining

Analysis Time	EXISTING SHADOW		PROJECT NET NEW SHADOW	
	Shadow Area	Coverage	Shadow Area	Coverage
7:44 AM	51,583 sf	59.21%	6,349 sf	7.29%
8:00 AM	35,558 sf	40.82%	6,199 sf	7.12%
8:15 AM	27,140 sf	31.15%	5,098 sf	5.85%
8:30 AM	21,004 sf	24.11%	4,222 sf	4.85%
8:45 AM	15,770 sf	18.10%	3,569 sf	4.10%
9:00 AM	11,600 sf	13.32%	3,055 sf	3.51%
9:15 AM	8,406 sf	9.65%	2,619 sf	3.01%
9:30 AM	7,169 sf	8.23%	1,322 sf	1.52%
9:45 AM	6,717 sf	7.71%	35 sf	0.04%
10:00 AM	6,300 sf	7.23%	0 sf	0.00%
10:15 AM	5,963 sf	6.84%	0 sf	0.00%
10:30 AM	5,617 sf	6.45%	0 sf	0.00%
10:45 AM	5,334 sf	6.12%	0 sf	0.00%
11:00 AM	5,043 sf	5.79%	0 sf	0.00%
11:15 AM	4,802 sf	5.51%	0 sf	0.00%
11:30 AM	4,538 sf	5.21%	0 sf	0.00%
11:45 AM	4,315 sf	4.95%	0 sf	0.00%
12:00 PM	4,074 sf	4.68%	0 sf	0.00%
12:15 PM	3,874 sf	4.45%	0 sf	0.00%
12:30 PM	3,640 sf	4.18%	0 sf	0.00%
12:45 PM	3,403 sf	3.91%	0 sf	0.00%
1:00 PM	3,367 sf	3.86%	0 sf	0.00%
1:15 PM	3,544 sf	4.07%	0 sf	0.00%
1:30 PM	3,646 sf	4.18%	0 sf	0.00%
1:45 PM	3,800 sf	4.36%	0 sf	0.00%
2:00 PM	3,913 sf	4.49%	0 sf	0.00%
2:15 PM	4,072 sf	4.67%	0 sf	0.00%
2:30 PM	4,193 sf	4.81%	0 sf	0.00%
2:45 PM	4,370 sf	5.02%	0 sf	0.00%
3:00 PM	4,501 sf	5.17%	0 sf	0.00%
3:15 PM	4,683 sf	5.37%	0 sf	0.00%
3:30 PM	4,830 sf	5.54%	0 sf	0.00%
3:45 PM	5,036 sf	5.78%	0 sf	0.00%
4:00 PM	5,217 sf	5.99%	0 sf	0.00%
4:15 PM	5,444 sf	6.25%	0 sf	0.00%
4:30 PM	5,666 sf	6.50%	0 sf	0.00%
4:45 PM	5,950 sf	6.83%	0 sf	0.00%
5:00 PM	6,254 sf	7.18%	0 sf	0.00%
5:15 PM	6,630 sf	7.61%	396 sf	0.45%
5:30 PM	7,134 sf	8.19%	1,335 sf	1.53%
5:45 PM	7,737 sf	8.88%	2,848 sf	3.27%
6:00 PM	9,498 sf	10.90%	4,921 sf	5.65%
6:15 PM	12,376 sf	14.21%	8,246 sf	9.46%
6:31 PM	18,770 sf	21.54%	13,560 sf	15.56%

SHADOW/SUNLIGHT BALANCE
Relative levels of Shadow vs. Sun



PROJECT: Family Zoning Plan
OPEN SPACE: Joe DiMaggio (87,120 sf)

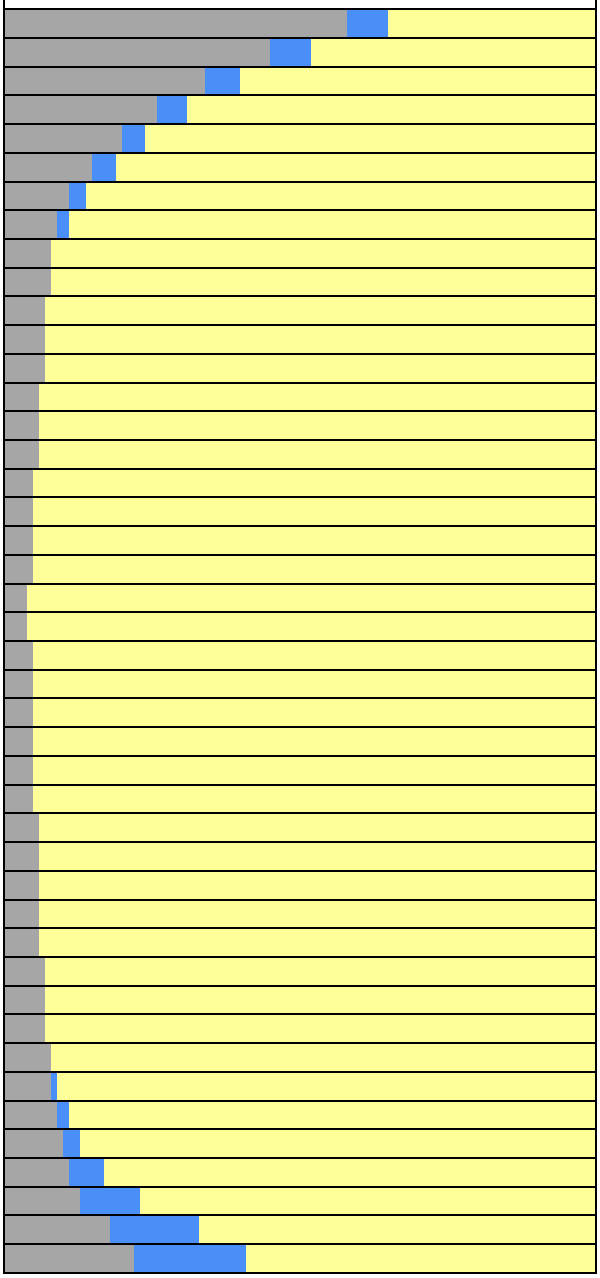
SEPTEMBER 13

Mirror date: March 29
Analysis hours: 7:50 AM-6:21 PM (PDT)

Shadow / Sunlight Balance Key
Existing Shadow | Project Shadow | Sunlight Remaining

Analysis Time	EXISTING SHADOW		PROJECT NET NEW SHADOW	
	Shadow Area	Coverage	Shadow Area	Coverage
7:50 AM	50,273 sf	57.71%	6,355 sf	7.29%
8:00 AM	39,499 sf	45.34%	6,482 sf	7.44%
8:15 AM	29,502 sf	33.86%	5,471 sf	6.28%
8:30 AM	22,804 sf	26.18%	4,477 sf	5.14%
8:45 AM	17,204 sf	19.75%	3,746 sf	4.30%
9:00 AM	12,773 sf	14.66%	3,183 sf	3.65%
9:15 AM	9,286 sf	10.66%	2,730 sf	3.13%
9:30 AM	7,542 sf	8.66%	1,693 sf	1.94%
9:45 AM	7,088 sf	8.14%	170 sf	0.19%
10:00 AM	6,704 sf	7.69%	0 sf	0.00%
10:15 AM	6,361 sf	7.30%	0 sf	0.00%
10:30 AM	6,063 sf	6.96%	0 sf	0.00%
10:45 AM	5,761 sf	6.61%	0 sf	0.00%
11:00 AM	5,448 sf	6.25%	0 sf	0.00%
11:15 AM	5,181 sf	5.95%	0 sf	0.00%
11:30 AM	4,898 sf	5.62%	0 sf	0.00%
11:45 AM	4,672 sf	5.36%	0 sf	0.00%
12:00 PM	4,420 sf	5.07%	0 sf	0.00%
12:15 PM	4,214 sf	4.84%	0 sf	0.00%
12:30 PM	3,970 sf	4.56%	0 sf	0.00%
12:45 PM	3,751 sf	4.31%	0 sf	0.00%
1:00 PM	3,791 sf	4.35%	0 sf	0.00%
1:15 PM	3,956 sf	4.54%	0 sf	0.00%
1:30 PM	4,063 sf	4.66%	0 sf	0.00%
1:45 PM	4,226 sf	4.85%	0 sf	0.00%
2:00 PM	4,346 sf	4.99%	0 sf	0.00%
2:15 PM	4,524 sf	5.19%	0 sf	0.00%
2:30 PM	4,658 sf	5.35%	0 sf	0.00%
2:45 PM	4,847 sf	5.56%	0 sf	0.00%
3:00 PM	5,003 sf	5.74%	0 sf	0.00%
3:15 PM	5,213 sf	5.98%	0 sf	0.00%
3:30 PM	5,394 sf	6.19%	0 sf	0.00%
3:45 PM	5,629 sf	6.46%	0 sf	0.00%
4:00 PM	5,852 sf	6.72%	0 sf	0.00%
4:15 PM	6,139 sf	7.05%	0 sf	0.00%
4:30 PM	6,418 sf	7.37%	0 sf	0.00%
4:45 PM	6,788 sf	7.79%	36 sf	0.04%
5:00 PM	7,188 sf	8.25%	518 sf	0.59%
5:15 PM	7,717 sf	8.86%	1,419 sf	1.63%
5:30 PM	8,362 sf	9.60%	2,769 sf	3.18%
5:45 PM	9,273 sf	10.64%	5,045 sf	5.79%
6:00 PM	10,898 sf	12.51%	8,608 sf	9.88%
6:15 PM	16,029 sf	18.40%	13,134 sf	15.08%
6:21 PM	18,876 sf	21.67%	16,664 sf	19.13%

SHADOW/SUNLIGHT BALANCE
Relative levels of Shadow vs. Sun



PROJECT: Family Zoning Plan
OPEN SPACE: Joe DiMaggio (87,120 sf)

SEPTEMBER 20

Fall equinox (Spring equinox on March 22 similar)
Analysis hours: 7:57 AM-6:09 PM (PDT)

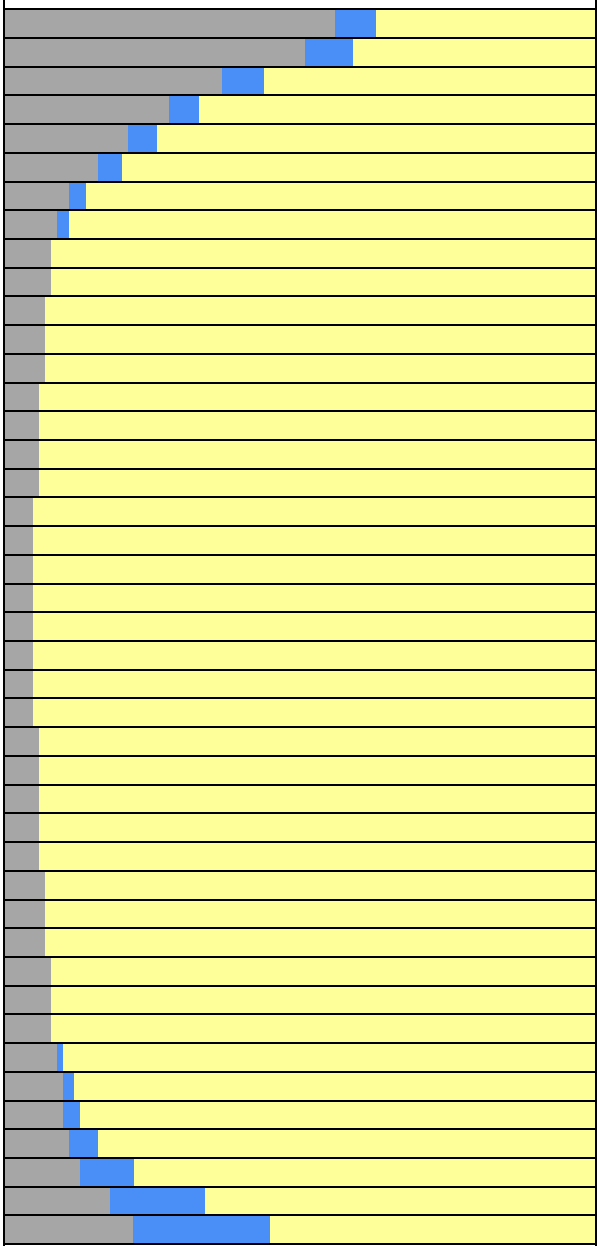
Shadow / Sunlight Balance Key

Existing Shadow | Project Shadow | Sunlight Remaining

Analysis Time	EXISTING SHADOW		PROJECT NET NEW SHADOW	
	Shadow Area	Coverage	Shadow Area	Coverage
7:57 AM	48,971 sf	56.21%	6,393 sf	7.34%
8:00 AM	44,700 sf	51.31%	6,801 sf	7.81%
8:15 AM	32,008 sf	36.74%	5,865 sf	6.73%
8:30 AM	24,397 sf	28.00%	4,773 sf	5.48%
8:45 AM	18,510 sf	21.25%	3,953 sf	4.54%
9:00 AM	13,724 sf	15.75%	3,317 sf	3.81%
9:15 AM	9,958 sf	11.43%	2,829 sf	3.25%
9:30 AM	7,589 sf	8.71%	2,092 sf	2.40%
9:45 AM	7,131 sf	8.19%	396 sf	0.45%
10:00 AM	6,763 sf	7.76%	0 sf	0.00%
10:15 AM	6,427 sf	7.38%	0 sf	0.00%
10:30 AM	6,131 sf	7.04%	0 sf	0.00%
10:45 AM	5,854 sf	6.72%	0 sf	0.00%
11:00 AM	5,600 sf	6.43%	0 sf	0.00%
11:15 AM	5,362 sf	6.15%	0 sf	0.00%
11:30 AM	5,141 sf	5.90%	0 sf	0.00%
11:45 AM	4,939 sf	5.67%	0 sf	0.00%
12:00 PM	4,746 sf	5.45%	0 sf	0.00%
12:15 PM	4,570 sf	5.25%	0 sf	0.00%
12:30 PM	4,334 sf	4.97%	0 sf	0.00%
12:45 PM	4,138 sf	4.75%	0 sf	0.00%
1:00 PM	4,241 sf	4.87%	0 sf	0.00%
1:15 PM	4,404 sf	5.06%	0 sf	0.00%
1:30 PM	4,516 sf	5.18%	0 sf	0.00%
1:45 PM	4,690 sf	5.38%	0 sf	0.00%
2:00 PM	4,822 sf	5.54%	0 sf	0.00%
2:15 PM	5,015 sf	5.76%	0 sf	0.00%
2:30 PM	5,166 sf	5.93%	0 sf	0.00%
2:45 PM	5,381 sf	6.18%	0 sf	0.00%
3:00 PM	5,564 sf	6.39%	0 sf	0.00%
3:15 PM	5,805 sf	6.66%	0 sf	0.00%
3:30 PM	6,023 sf	6.91%	0 sf	0.00%
3:45 PM	6,309 sf	7.24%	0 sf	0.00%
4:00 PM	6,577 sf	7.55%	0 sf	0.00%
4:15 PM	6,934 sf	7.96%	0 sf	0.00%
4:30 PM	7,307 sf	8.39%	99 sf	0.11%
4:45 PM	7,784 sf	8.93%	546 sf	0.63%
5:00 PM	8,321 sf	9.55%	1,360 sf	1.56%
5:15 PM	9,028 sf	10.36%	2,637 sf	3.03%
5:30 PM	9,912 sf	11.38%	4,651 sf	5.34%
5:45 PM	11,638 sf	13.36%	8,117 sf	9.32%
6:00 PM	15,343 sf	17.61%	13,814 sf	15.86%
6:09 PM	19,013 sf	21.82%	20,103 sf	23.08%

SHADOW/SUNLIGHT BALANCE

Relative levels of Shadow vs. Sun



PROJECT: Family Zoning Plan
OPEN SPACE: Joe DiMaggio (87,120 sf)

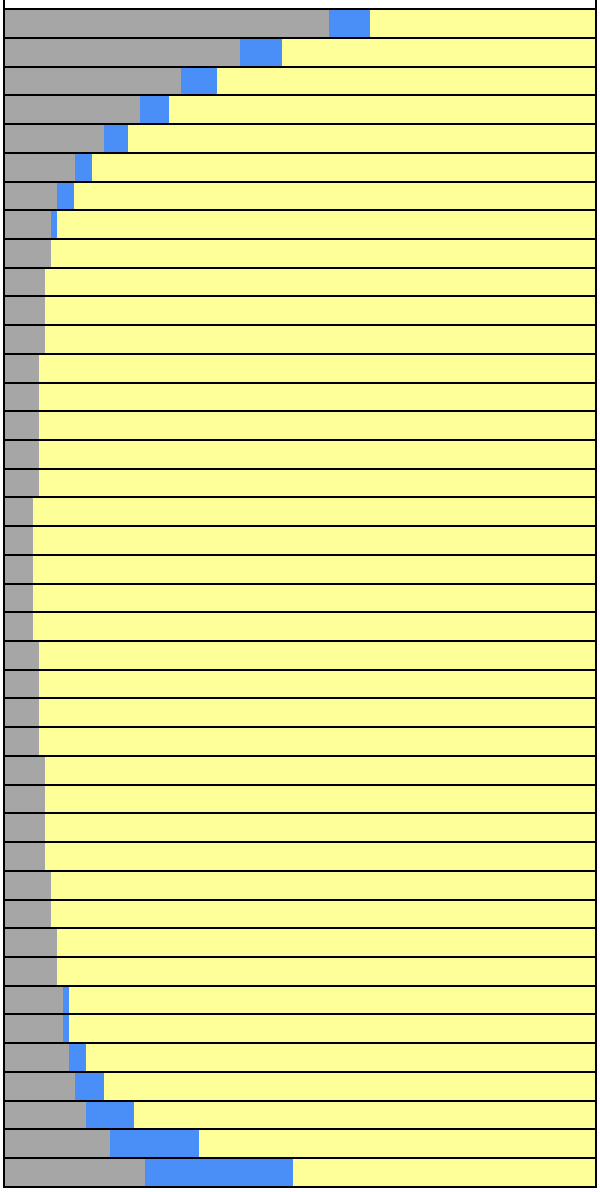
SEPTEMBER 27

Mirror date: March 15
Analysis hours: 8:03 AM-5:58 PM (PDT)

Shadow / Sunlight Balance Key
Existing Shadow | Project Shadow | Sunlight Remaining

Analysis Time	EXISTING SHADOW		PROJECT NET NEW SHADOW	
	Shadow Area	Coverage	Shadow Area	Coverage
8:03 AM	47,524 sf	54.55%	6,398 sf	7.34%
8:15 AM	35,019 sf	40.20%	6,254 sf	7.18%
8:30 AM	26,112 sf	29.97%	5,127 sf	5.89%
8:45 AM	19,923 sf	22.87%	4,186 sf	4.80%
9:00 AM	14,724 sf	16.90%	3,480 sf	3.99%
9:15 AM	10,705 sf	12.29%	2,948 sf	3.38%
9:30 AM	7,691 sf	8.83%	2,458 sf	2.82%
9:45 AM	7,111 sf	8.16%	685 sf	0.79%
10:00 AM	6,725 sf	7.72%	0 sf	0.00%
10:15 AM	6,401 sf	7.35%	0 sf	0.00%
10:30 AM	6,116 sf	7.02%	0 sf	0.00%
10:45 AM	5,852 sf	6.72%	0 sf	0.00%
11:00 AM	5,614 sf	6.44%	0 sf	0.00%
11:15 AM	5,384 sf	6.18%	0 sf	0.00%
11:30 AM	5,178 sf	5.94%	0 sf	0.00%
11:45 AM	4,985 sf	5.72%	0 sf	0.00%
12:00 PM	4,796 sf	5.51%	0 sf	0.00%
12:15 PM	4,613 sf	5.30%	0 sf	0.00%
12:30 PM	4,431 sf	5.09%	0 sf	0.00%
12:45 PM	4,341 sf	4.98%	0 sf	0.00%
1:00 PM	4,541 sf	5.21%	0 sf	0.00%
1:15 PM	4,738 sf	5.44%	0 sf	0.00%
1:30 PM	4,926 sf	5.65%	0 sf	0.00%
1:45 PM	5,135 sf	5.89%	0 sf	0.00%
2:00 PM	5,340 sf	6.13%	0 sf	0.00%
2:15 PM	5,552 sf	6.37%	0 sf	0.00%
2:30 PM	5,727 sf	6.57%	0 sf	0.00%
2:45 PM	5,966 sf	6.85%	0 sf	0.00%
3:00 PM	6,182 sf	7.10%	0 sf	0.00%
3:15 PM	6,460 sf	7.42%	0 sf	0.00%
3:30 PM	6,727 sf	7.72%	0 sf	0.00%
3:45 PM	7,066 sf	8.11%	0 sf	0.00%
4:00 PM	7,407 sf	8.50%	0 sf	0.00%
4:15 PM	7,852 sf	9.01%	143 sf	0.16%
4:30 PM	8,332 sf	9.56%	511 sf	0.59%
4:45 PM	8,956 sf	10.28%	1,221 sf	1.40%
5:00 PM	9,677 sf	11.11%	2,395 sf	2.75%
5:15 PM	10,670 sf	12.25%	4,275 sf	4.91%
5:30 PM	12,408 sf	14.24%	7,222 sf	8.29%
5:45 PM	15,944 sf	18.30%	12,848 sf	14.75%
5:58 PM	21,172 sf	24.30%	22,202 sf	25.48%

SHADOW/SUNLIGHT BALANCE
Relative levels of Shadow vs. Sun



PROJECT: Family Zoning Plan
OPEN SPACE: Joe DiMaggio (87,120 sf)

OCTOBER 4

Mirror date: March 8
Analysis hours: 8:09 AM-5:47 PM (PDT)

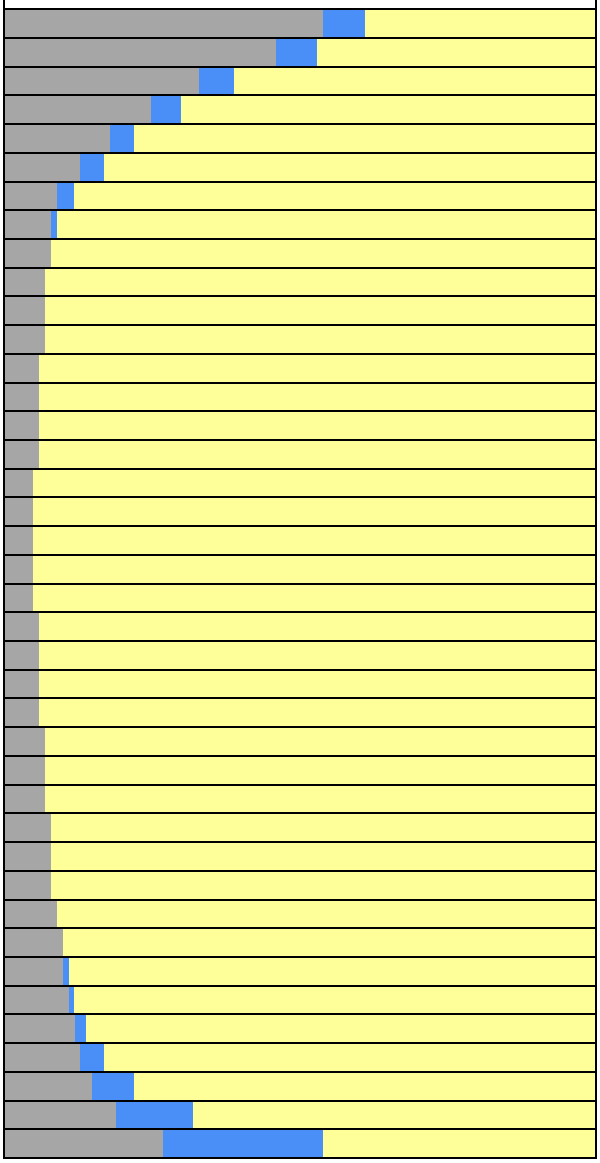
Shadow / Sunlight Balance Key

Existing Shadow | Project Shadow | Sunlight Remaining

Analysis Time	EXISTING SHADOW		PROJECT NET NEW SHADOW	
	Shadow Area	Coverage	Shadow Area	Coverage
8:09 AM	46,677 sf	53.58%	6,434 sf	7.39%
8:15 AM	40,180 sf	46.12%	6,501 sf	7.46%
8:30 AM	28,410 sf	32.61%	5,559 sf	6.38%
8:45 AM	21,439 sf	24.61%	4,472 sf	5.13%
9:00 AM	15,853 sf	18.20%	3,693 sf	4.24%
9:15 AM	11,527 sf	13.23%	3,094 sf	3.55%
9:30 AM	8,163 sf	9.37%	2,599 sf	2.98%
9:45 AM	7,075 sf	8.12%	1,070 sf	1.23%
10:00 AM	6,698 sf	7.69%	0 sf	0.00%
10:15 AM	6,372 sf	7.31%	0 sf	0.00%
10:30 AM	6,088 sf	6.99%	0 sf	0.00%
10:45 AM	5,824 sf	6.69%	0 sf	0.00%
11:00 AM	5,583 sf	6.41%	0 sf	0.00%
11:15 AM	5,360 sf	6.15%	0 sf	0.00%
11:30 AM	5,154 sf	5.92%	0 sf	0.00%
11:45 AM	4,957 sf	5.69%	0 sf	0.00%
12:00 PM	4,789 sf	5.50%	0 sf	0.00%
12:15 PM	4,620 sf	5.30%	0 sf	0.00%
12:30 PM	4,443 sf	5.10%	0 sf	0.00%
12:45 PM	4,424 sf	5.08%	0 sf	0.00%
1:00 PM	4,643 sf	5.33%	0 sf	0.00%
1:15 PM	4,875 sf	5.60%	0 sf	0.00%
1:30 PM	5,088 sf	5.84%	0 sf	0.00%
1:45 PM	5,312 sf	6.10%	0 sf	0.00%
2:00 PM	5,537 sf	6.36%	0 sf	0.00%
2:15 PM	5,795 sf	6.65%	0 sf	0.00%
2:30 PM	6,050 sf	6.94%	0 sf	0.00%
2:45 PM	6,350 sf	7.29%	0 sf	0.00%
3:00 PM	6,654 sf	7.64%	0 sf	0.00%
3:15 PM	7,007 sf	8.04%	0 sf	0.00%
3:30 PM	7,384 sf	8.48%	0 sf	0.00%
3:45 PM	7,820 sf	8.98%	0 sf	0.00%
4:00 PM	8,307 sf	9.53%	119 sf	0.14%
4:15 PM	8,892 sf	10.21%	440 sf	0.51%
4:30 PM	9,517 sf	10.92%	1,000 sf	1.15%
4:45 PM	10,337 sf	11.87%	2,078 sf	2.38%
5:00 PM	11,321 sf	12.99%	3,797 sf	4.36%
5:15 PM	13,160 sf	15.11%	6,402 sf	7.35%
5:30 PM	16,396 sf	18.82%	11,567 sf	13.28%
5:47 PM	23,202 sf	26.63%	23,546 sf	27.03%

SHADOW/SUNLIGHT BALANCE

Relative levels of Shadow vs. Sun



PROJECT: Family Zoning Plan
OPEN SPACE: Joe DiMaggio (87,120 sf)

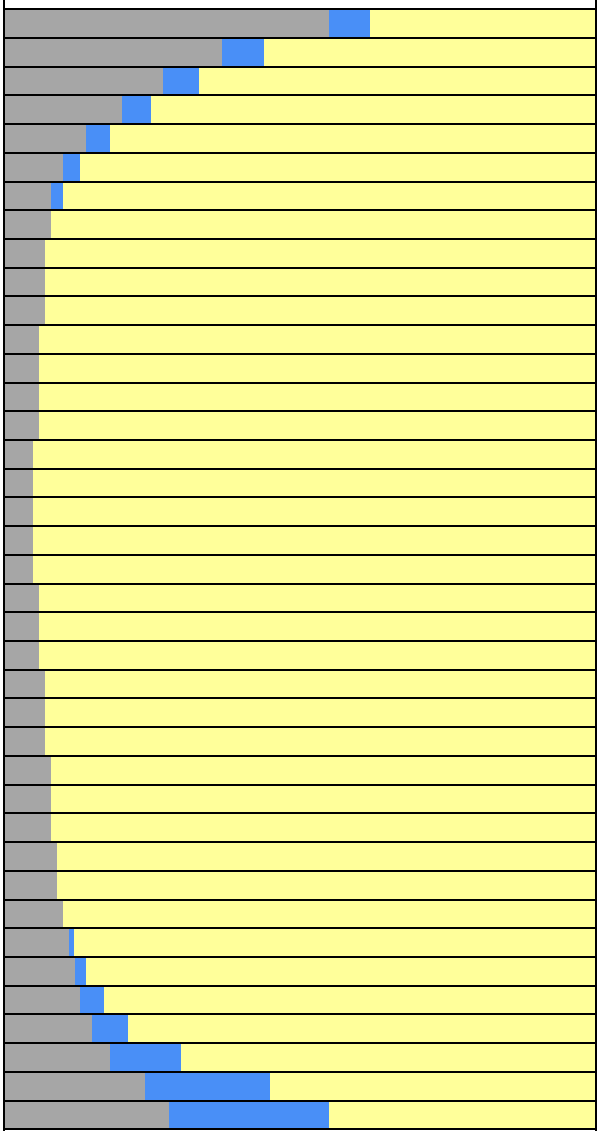
OCTOBER 11

Mirror date: March 1
Analysis hours: 8:16 AM-5:37 PM (PDT)

Shadow / Sunlight Balance Key
Existing Shadow | Project Shadow | Sunlight Remaining

Analysis Time	EXISTING SHADOW		PROJECT NET NEW SHADOW	
	Shadow Area	Coverage	Shadow Area	Coverage
8:16 AM	47,593 sf	54.63%	6,445 sf	7.40%
8:30 AM	31,988 sf	36.72%	5,996 sf	6.88%
8:45 AM	23,183 sf	26.61%	4,817 sf	5.53%
9:00 AM	17,155 sf	19.69%	3,926 sf	4.51%
9:15 AM	12,468 sf	14.31%	3,266 sf	3.75%
9:30 AM	8,774 sf	10.07%	2,746 sf	3.15%
9:45 AM	7,044 sf	8.09%	1,531 sf	1.76%
10:00 AM	6,662 sf	7.65%	24 sf	0.03%
10:15 AM	6,337 sf	7.27%	0 sf	0.00%
10:30 AM	6,058 sf	6.95%	0 sf	0.00%
10:45 AM	5,801 sf	6.66%	0 sf	0.00%
11:00 AM	5,559 sf	6.38%	0 sf	0.00%
11:15 AM	5,335 sf	6.12%	0 sf	0.00%
11:30 AM	5,131 sf	5.89%	0 sf	0.00%
11:45 AM	4,938 sf	5.67%	0 sf	0.00%
12:00 PM	4,769 sf	5.47%	0 sf	0.00%
12:15 PM	4,596 sf	5.28%	0 sf	0.00%
12:30 PM	4,406 sf	5.06%	0 sf	0.00%
12:45 PM	4,524 sf	5.19%	0 sf	0.00%
1:00 PM	4,743 sf	5.44%	0 sf	0.00%
1:15 PM	4,969 sf	5.70%	0 sf	0.00%
1:30 PM	5,188 sf	5.96%	0 sf	0.00%
1:45 PM	5,424 sf	6.23%	0 sf	0.00%
2:00 PM	5,675 sf	6.51%	0 sf	0.00%
2:15 PM	5,950 sf	6.83%	0 sf	0.00%
2:30 PM	6,247 sf	7.17%	0 sf	0.00%
2:45 PM	6,560 sf	7.53%	0 sf	0.00%
3:00 PM	6,900 sf	7.92%	0 sf	0.00%
3:15 PM	7,286 sf	8.36%	0 sf	0.00%
3:30 PM	7,703 sf	8.84%	1 sf	0.00%
3:45 PM	8,189 sf	9.40%	73 sf	0.08%
4:00 PM	8,745 sf	10.04%	319 sf	0.37%
4:15 PM	9,415 sf	10.81%	762 sf	0.87%
4:30 PM	10,214 sf	11.72%	1,657 sf	1.90%
4:45 PM	11,226 sf	12.89%	3,291 sf	3.78%
5:00 PM	12,880 sf	14.78%	5,580 sf	6.41%
5:15 PM	15,792 sf	18.13%	10,343 sf	11.87%
5:30 PM	20,669 sf	23.72%	18,729 sf	21.50%
5:37 PM	24,126 sf	27.69%	23,682 sf	27.18%

SHADOW/SUNLIGHT BALANCE
Relative levels of Shadow vs. Sun



PROJECT: Family Zoning Plan
OPEN SPACE: Joe DiMaggio (87,120 sf)

OCTOBER 18

Mirror date: February 22
Analysis hours: 8:22 AM-5:27 PM (PDT)

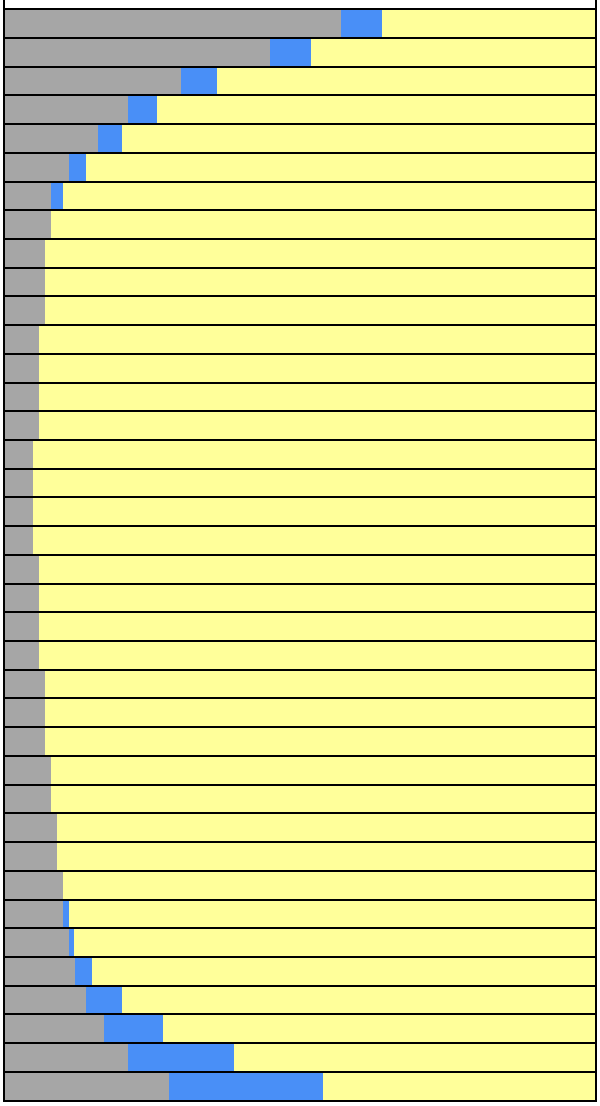
Shadow / Sunlight Balance Key

Existing Shadow | Project Shadow | Sunlight Remaining

Analysis Time	EXISTING SHADOW		PROJECT NET NEW SHADOW	
	Shadow Area	Coverage	Shadow Area	Coverage
8:22 AM	49,356 sf	56.65%	6,407 sf	7.35%
8:30 AM	39,444 sf	45.28%	6,313 sf	7.25%
8:45 AM	26,211 sf	30.09%	5,247 sf	6.02%
9:00 AM	18,682 sf	21.44%	4,215 sf	4.84%
9:15 AM	13,562 sf	15.57%	3,469 sf	3.98%
9:30 AM	9,551 sf	10.96%	2,890 sf	3.32%
9:45 AM	7,027 sf	8.07%	2,062 sf	2.37%
10:00 AM	6,625 sf	7.60%	188 sf	0.22%
10:15 AM	6,299 sf	7.23%	0 sf	0.00%
10:30 AM	6,024 sf	6.91%	0 sf	0.00%
10:45 AM	5,767 sf	6.62%	0 sf	0.00%
11:00 AM	5,537 sf	6.36%	0 sf	0.00%
11:15 AM	5,315 sf	6.10%	0 sf	0.00%
11:30 AM	5,111 sf	5.87%	0 sf	0.00%
11:45 AM	4,923 sf	5.65%	0 sf	0.00%
12:00 PM	4,755 sf	5.46%	0 sf	0.00%
12:15 PM	4,595 sf	5.27%	0 sf	0.00%
12:30 PM	4,416 sf	5.07%	0 sf	0.00%
12:45 PM	4,591 sf	5.27%	0 sf	0.00%
1:00 PM	4,820 sf	5.53%	0 sf	0.00%
1:15 PM	5,051 sf	5.80%	0 sf	0.00%
1:30 PM	5,281 sf	6.06%	0 sf	0.00%
1:45 PM	5,528 sf	6.35%	0 sf	0.00%
2:00 PM	5,787 sf	6.64%	0 sf	0.00%
2:15 PM	6,079 sf	6.98%	0 sf	0.00%
2:30 PM	6,391 sf	7.34%	0 sf	0.00%
2:45 PM	6,728 sf	7.72%	0 sf	0.00%
3:00 PM	7,097 sf	8.15%	0 sf	0.00%
3:15 PM	7,511 sf	8.62%	0 sf	0.00%
3:30 PM	7,978 sf	9.16%	15 sf	0.02%
3:45 PM	8,511 sf	9.77%	190 sf	0.22%
4:00 PM	9,128 sf	10.48%	492 sf	0.57%
4:15 PM	9,887 sf	11.35%	1,215 sf	1.39%
4:30 PM	10,804 sf	12.40%	2,651 sf	3.04%
4:45 PM	12,255 sf	14.07%	4,803 sf	5.51%
5:00 PM	14,625 sf	16.79%	8,955 sf	10.28%
5:15 PM	18,254 sf	20.95%	15,624 sf	17.93%
5:27 PM	24,202 sf	27.78%	22,907 sf	26.29%

SHADOW/SUNLIGHT BALANCE

Relative levels of Shadow vs. Sun



PROJECT: Family Zoning Plan
OPEN SPACE: Joe DiMaggio (87,120 sf)

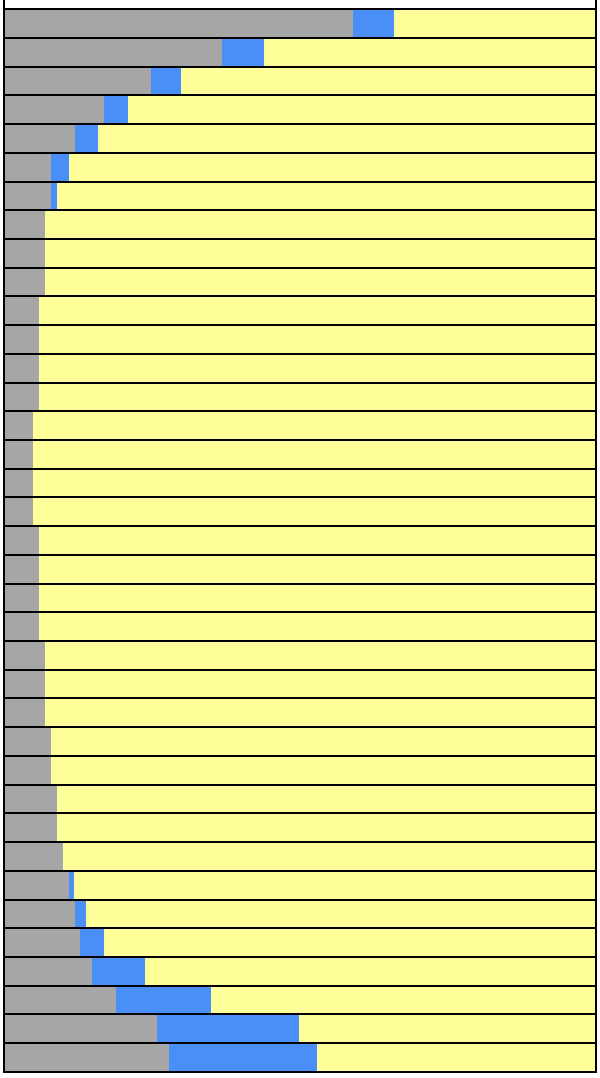
OCTOBER 25

Mirror date: February 15
Analysis hours: 7:30 AM-4:18 PM (PST)

Shadow / Sunlight Balance Key
Existing Shadow | Project Shadow | Sunlight Remaining

Analysis Time	EXISTING SHADOW		PROJECT NET NEW SHADOW	
	Shadow Area	Coverage	Shadow Area	Coverage
7:30 AM	51,336 sf	58.93%	5,893 sf	6.76%
7:45 AM	32,576 sf	37.39%	5,790 sf	6.65%
8:00 AM	21,547 sf	24.73%	4,568 sf	5.24%
8:15 AM	14,922 sf	17.13%	3,712 sf	4.26%
8:30 AM	10,530 sf	12.09%	3,061 sf	3.51%
8:45 AM	7,289 sf	8.37%	2,511 sf	2.88%
9:00 AM	6,606 sf	7.58%	571 sf	0.66%
9:15 AM	6,272 sf	7.20%	0 sf	0.00%
9:30 AM	6,002 sf	6.89%	0 sf	0.00%
9:45 AM	5,744 sf	6.59%	0 sf	0.00%
10:00 AM	5,513 sf	6.33%	0 sf	0.00%
10:15 AM	5,299 sf	6.08%	0 sf	0.00%
10:30 AM	5,090 sf	5.84%	0 sf	0.00%
10:45 AM	4,910 sf	5.64%	0 sf	0.00%
11:00 AM	4,749 sf	5.45%	0 sf	0.00%
11:15 AM	4,593 sf	5.27%	0 sf	0.00%
11:30 AM	4,439 sf	5.10%	0 sf	0.00%
11:45 AM	4,654 sf	5.34%	0 sf	0.00%
12:00 PM	4,885 sf	5.61%	0 sf	0.00%
12:15 PM	5,128 sf	5.89%	0 sf	0.00%
12:30 PM	5,367 sf	6.16%	0 sf	0.00%
12:45 PM	5,624 sf	6.46%	0 sf	0.00%
1:00 PM	5,896 sf	6.77%	0 sf	0.00%
1:15 PM	6,202 sf	7.12%	0 sf	0.00%
1:30 PM	6,528 sf	7.49%	0 sf	0.00%
1:45 PM	6,893 sf	7.91%	0 sf	0.00%
2:00 PM	7,282 sf	8.36%	0 sf	0.00%
2:15 PM	7,731 sf	8.87%	0 sf	0.00%
2:30 PM	8,229 sf	9.45%	97 sf	0.11%
2:45 PM	8,819 sf	10.12%	291 sf	0.33%
3:00 PM	9,500 sf	10.90%	715 sf	0.82%
3:15 PM	10,350 sf	11.88%	1,914 sf	2.20%
3:30 PM	11,536 sf	13.24%	3,813 sf	4.38%
3:45 PM	13,493 sf	15.49%	7,533 sf	8.65%
4:00 PM	16,681 sf	19.15%	13,991 sf	16.06%
4:15 PM	22,420 sf	25.73%	20,793 sf	23.87%
4:18 PM	24,096 sf	27.66%	21,706 sf	24.92%

SHADOW/SUNLIGHT BALANCE
Relative levels of Shadow vs. Sun



PROJECT: Family Zoning Plan
OPEN SPACE: Joe DiMaggio (87,120 sf)

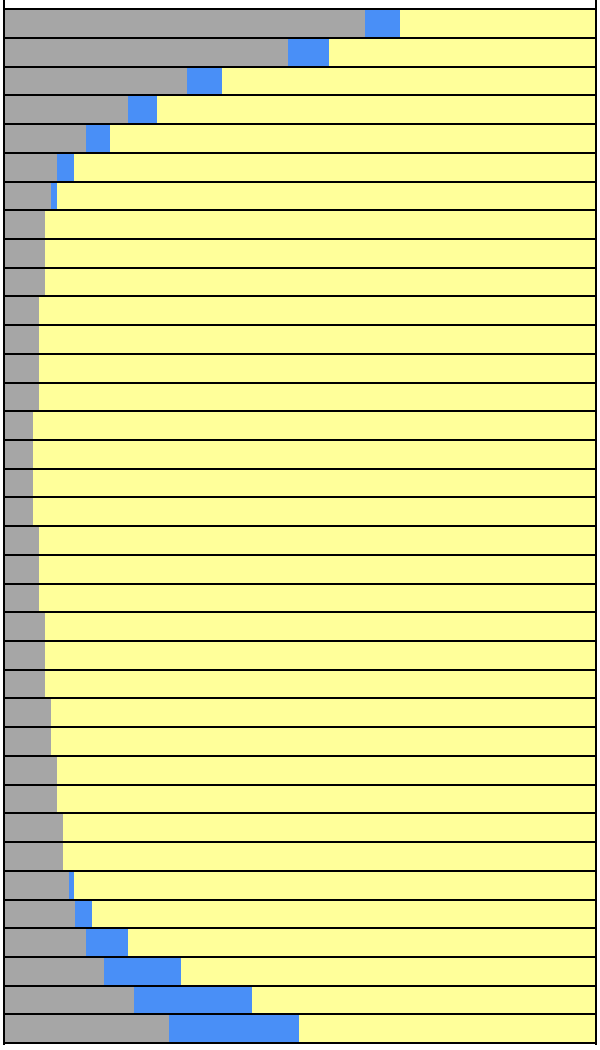
NOVEMBER 1

Mirror date: February 8
Analysis hours: 7:36 AM-4:10 PM (PST)

Shadow / Sunlight Balance Key
Existing Shadow | Project Shadow | Sunlight Remaining

Analysis Time	EXISTING SHADOW		PROJECT NET NEW SHADOW	
	Shadow Area	Coverage	Shadow Area	Coverage
7:36 AM	53,393 sf	61.29%	5,303 sf	6.09%
7:45 AM	41,612 sf	47.76%	5,811 sf	6.67%
8:00 AM	27,149 sf	31.16%	5,000 sf	5.74%
8:15 AM	17,945 sf	20.60%	4,002 sf	4.59%
8:30 AM	11,806 sf	13.55%	3,269 sf	3.75%
8:45 AM	8,030 sf	9.22%	2,706 sf	3.11%
9:00 AM	6,601 sf	7.58%	1,129 sf	1.30%
9:15 AM	6,254 sf	7.18%	0 sf	0.00%
9:30 AM	5,977 sf	6.86%	0 sf	0.00%
9:45 AM	5,727 sf	6.57%	0 sf	0.00%
10:00 AM	5,495 sf	6.31%	0 sf	0.00%
10:15 AM	5,284 sf	6.06%	0 sf	0.00%
10:30 AM	5,080 sf	5.83%	0 sf	0.00%
10:45 AM	4,898 sf	5.62%	0 sf	0.00%
11:00 AM	4,748 sf	5.45%	0 sf	0.00%
11:15 AM	4,591 sf	5.27%	0 sf	0.00%
11:30 AM	4,485 sf	5.15%	0 sf	0.00%
11:45 AM	4,705 sf	5.40%	0 sf	0.00%
12:00 PM	4,947 sf	5.68%	0 sf	0.00%
12:15 PM	5,195 sf	5.96%	0 sf	0.00%
12:30 PM	5,445 sf	6.25%	0 sf	0.00%
12:45 PM	5,714 sf	6.56%	0 sf	0.00%
1:00 PM	5,988 sf	6.87%	0 sf	0.00%
1:15 PM	6,314 sf	7.25%	0 sf	0.00%
1:30 PM	6,654 sf	7.64%	0 sf	0.00%
1:45 PM	7,036 sf	8.08%	0 sf	0.00%
2:00 PM	7,451 sf	8.55%	0 sf	0.00%
2:15 PM	7,934 sf	9.11%	28 sf	0.03%
2:30 PM	8,468 sf	9.72%	119 sf	0.14%
2:45 PM	9,107 sf	10.45%	266 sf	0.31%
3:00 PM	9,853 sf	11.31%	1,111 sf	1.27%
3:15 PM	10,863 sf	12.47%	2,800 sf	3.21%
3:30 PM	12,362 sf	14.19%	5,846 sf	6.71%
3:45 PM	14,775 sf	16.96%	11,579 sf	13.29%
4:00 PM	19,191 sf	22.03%	17,790 sf	20.42%
4:10 PM	24,483 sf	28.10%	19,556 sf	22.45%

SHADOW/SUNLIGHT BALANCE
Relative levels of Shadow vs. Sun



PROJECT: Family Zoning Plan
OPEN SPACE: Joe DiMaggio (87,120 sf)

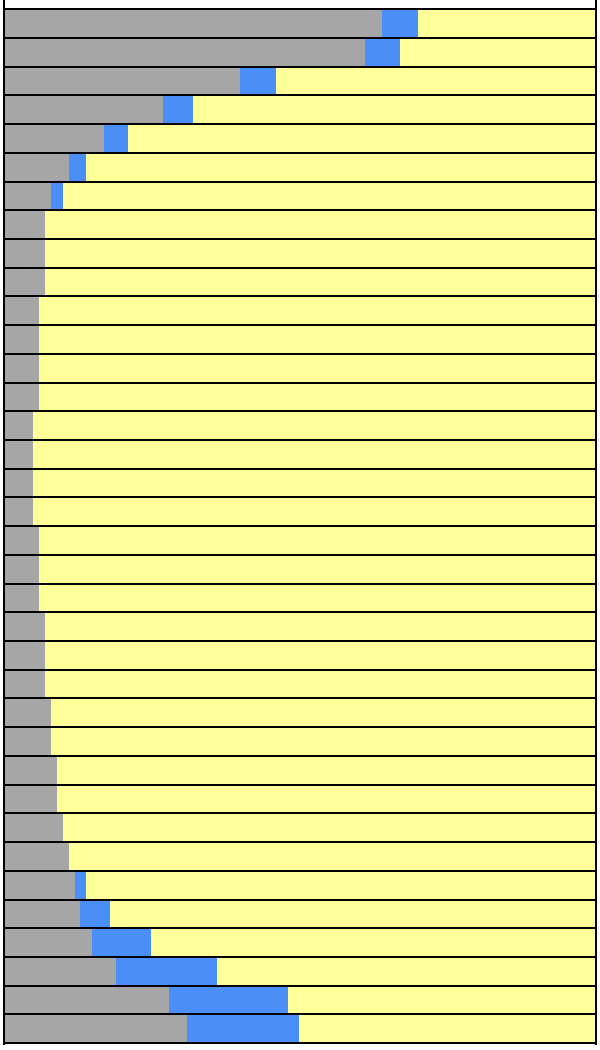
NOVEMBER 8

Mirror date: February 1
Analysis hours: 7:43 AM-4:03 PM (PST)

Shadow / Sunlight Balance Key
Existing Shadow | Project Shadow | Sunlight Remaining

Analysis Time	EXISTING SHADOW		PROJECT NET NEW SHADOW	
	Shadow Area	Coverage	Shadow Area	Coverage
7:43 AM	55,430 sf	63.63%	4,886 sf	5.61%
7:45 AM	53,511 sf	61.42%	5,070 sf	5.82%
8:00 AM	34,979 sf	40.15%	5,259 sf	6.04%
8:15 AM	23,271 sf	26.71%	4,374 sf	5.02%
8:30 AM	14,809 sf	17.00%	3,524 sf	4.05%
8:45 AM	9,424 sf	10.82%	2,883 sf	3.31%
9:00 AM	6,613 sf	7.59%	1,811 sf	2.08%
9:15 AM	6,252 sf	7.18%	25 sf	0.03%
9:30 AM	5,968 sf	6.85%	0 sf	0.00%
9:45 AM	5,720 sf	6.57%	0 sf	0.00%
10:00 AM	5,492 sf	6.30%	0 sf	0.00%
10:15 AM	5,276 sf	6.06%	0 sf	0.00%
10:30 AM	5,077 sf	5.83%	0 sf	0.00%
10:45 AM	4,901 sf	5.63%	0 sf	0.00%
11:00 AM	4,755 sf	5.46%	0 sf	0.00%
11:15 AM	4,604 sf	5.28%	0 sf	0.00%
11:30 AM	4,514 sf	5.18%	0 sf	0.00%
11:45 AM	4,744 sf	5.45%	0 sf	0.00%
12:00 PM	4,994 sf	5.73%	0 sf	0.00%
12:15 PM	5,251 sf	6.03%	0 sf	0.00%
12:30 PM	5,503 sf	6.32%	0 sf	0.00%
12:45 PM	5,784 sf	6.64%	0 sf	0.00%
1:00 PM	6,066 sf	6.96%	0 sf	0.00%
1:15 PM	6,401 sf	7.35%	0 sf	0.00%
1:30 PM	6,760 sf	7.76%	0 sf	0.00%
1:45 PM	7,173 sf	8.23%	0 sf	0.00%
2:00 PM	7,601 sf	8.72%	0 sf	0.00%
2:15 PM	8,104 sf	9.30%	16 sf	0.02%
2:30 PM	8,672 sf	9.95%	83 sf	0.10%
2:45 PM	9,355 sf	10.74%	377 sf	0.43%
3:00 PM	10,167 sf	11.67%	1,621 sf	1.86%
3:15 PM	11,341 sf	13.02%	4,143 sf	4.76%
3:30 PM	13,065 sf	15.00%	8,806 sf	10.11%
3:45 PM	16,324 sf	18.74%	14,673 sf	16.84%
4:00 PM	24,209 sf	27.79%	17,105 sf	19.63%
4:03 PM	27,281 sf	31.31%	16,856 sf	19.35%

SHADOW/SUNLIGHT BALANCE
Relative levels of Shadow vs. Sun



PROJECT: Family Zoning Plan
OPEN SPACE: Joe DiMaggio (87,120 sf)

NOVEMBER 15

Mirror date: January 25
Analysis hours: 7:51 AM-3:57 PM (PST)

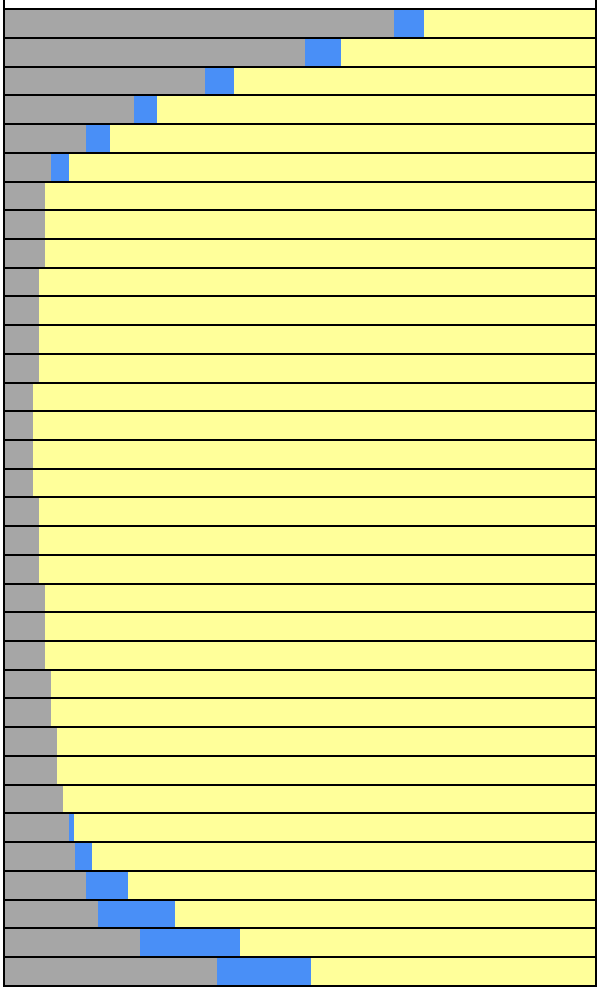
Shadow / Sunlight Balance Key

Existing Shadow | Project Shadow | Sunlight Remaining

Analysis Time	EXISTING SHADOW		PROJECT NET NEW SHADOW	
	Shadow Area	Coverage	Shadow Area	Coverage
7:51 AM	57,456 sf	65.95%	4,431 sf	5.09%
8:00 AM	44,494 sf	51.07%	5,133 sf	5.89%
8:15 AM	29,993 sf	34.43%	4,572 sf	5.25%
8:30 AM	19,421 sf	22.29%	3,823 sf	4.39%
8:45 AM	12,326 sf	14.15%	3,104 sf	3.56%
9:00 AM	7,383 sf	8.47%	2,508 sf	2.88%
9:15 AM	6,271 sf	7.20%	368 sf	0.42%
9:30 AM	5,967 sf	6.85%	0 sf	0.00%
9:45 AM	5,723 sf	6.57%	0 sf	0.00%
10:00 AM	5,494 sf	6.31%	0 sf	0.00%
10:15 AM	5,282 sf	6.06%	0 sf	0.00%
10:30 AM	5,082 sf	5.83%	0 sf	0.00%
10:45 AM	4,904 sf	5.63%	0 sf	0.00%
11:00 AM	4,764 sf	5.47%	0 sf	0.00%
11:15 AM	4,619 sf	5.30%	0 sf	0.00%
11:30 AM	4,538 sf	5.21%	0 sf	0.00%
11:45 AM	4,772 sf	5.48%	0 sf	0.00%
12:00 PM	5,029 sf	5.77%	0 sf	0.00%
12:15 PM	5,292 sf	6.07%	0 sf	0.00%
12:30 PM	5,552 sf	6.37%	0 sf	0.00%
12:45 PM	5,835 sf	6.70%	0 sf	0.00%
1:00 PM	6,127 sf	7.03%	0 sf	0.00%
1:15 PM	6,471 sf	7.43%	0 sf	0.00%
1:30 PM	6,838 sf	7.85%	0 sf	0.00%
1:45 PM	7,253 sf	8.33%	0 sf	0.00%
2:00 PM	7,709 sf	8.85%	0 sf	0.00%
2:15 PM	8,235 sf	9.45%	4 sf	0.00%
2:30 PM	8,834 sf	10.14%	54 sf	0.06%
2:45 PM	9,552 sf	10.96%	602 sf	0.69%
3:00 PM	10,422 sf	11.96%	2,338 sf	2.68%
3:15 PM	11,766 sf	13.51%	5,933 sf	6.81%
3:30 PM	13,946 sf	16.01%	11,220 sf	12.88%
3:45 PM	19,955 sf	22.91%	14,991 sf	17.21%
3:57 PM	31,138 sf	35.74%	14,108 sf	16.19%

SHADOW/SUNLIGHT BALANCE

Relative levels of Shadow vs. Sun



PROJECT: Family Zoning Plan
OPEN SPACE: Joe DiMaggio (87,120 sf)

NOVEMBER 22

Mirror date: January 18
Analysis hours: 7:57 AM-3:54 PM (PST)

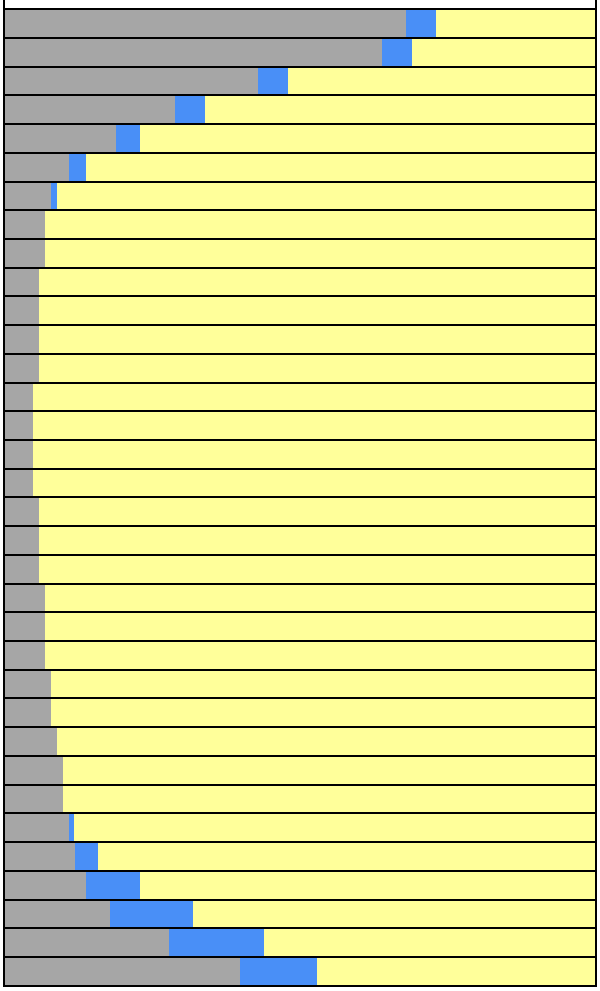
Shadow / Sunlight Balance Key

Existing Shadow | Project Shadow | Sunlight Remaining

Analysis Time	EXISTING SHADOW		PROJECT NET NEW SHADOW	
	Shadow Area	Coverage	Shadow Area	Coverage
7:57 AM	59,462 sf	68.25%	4,024 sf	4.62%
8:00 AM	56,106 sf	64.40%	4,258 sf	4.89%
8:15 AM	37,839 sf	43.43%	4,598 sf	5.28%
8:30 AM	25,145 sf	28.86%	4,022 sf	4.62%
8:45 AM	16,356 sf	18.77%	3,360 sf	3.86%
9:00 AM	9,898 sf	11.36%	2,721 sf	3.12%
9:15 AM	7,077 sf	8.12%	1,031 sf	1.18%
9:30 AM	6,019 sf	6.91%	0 sf	0.00%
9:45 AM	5,735 sf	6.58%	0 sf	0.00%
10:00 AM	5,508 sf	6.32%	0 sf	0.00%
10:15 AM	5,293 sf	6.08%	0 sf	0.00%
10:30 AM	5,094 sf	5.85%	0 sf	0.00%
10:45 AM	4,921 sf	5.65%	0 sf	0.00%
11:00 AM	4,782 sf	5.49%	0 sf	0.00%
11:15 AM	4,642 sf	5.33%	0 sf	0.00%
11:30 AM	4,551 sf	5.22%	0 sf	0.00%
11:45 AM	4,786 sf	5.49%	0 sf	0.00%
12:00 PM	5,042 sf	5.79%	0 sf	0.00%
12:15 PM	5,311 sf	6.10%	0 sf	0.00%
12:30 PM	5,580 sf	6.40%	0 sf	0.00%
12:45 PM	5,869 sf	6.74%	0 sf	0.00%
1:00 PM	6,165 sf	7.08%	0 sf	0.00%
1:15 PM	6,509 sf	7.47%	0 sf	0.00%
1:30 PM	6,887 sf	7.90%	0 sf	0.00%
1:45 PM	7,318 sf	8.40%	0 sf	0.00%
2:00 PM	7,785 sf	8.94%	0 sf	0.00%
2:15 PM	8,321 sf	9.55%	0 sf	0.00%
2:30 PM	8,937 sf	10.26%	31 sf	0.04%
2:45 PM	9,680 sf	11.11%	824 sf	0.95%
3:00 PM	10,624 sf	12.20%	3,146 sf	3.61%
3:15 PM	12,246 sf	14.06%	7,550 sf	8.67%
3:30 PM	15,814 sf	18.15%	12,449 sf	14.29%
3:45 PM	24,777 sf	28.44%	13,761 sf	15.80%
3:54 PM	34,860 sf	40.01%	11,627 sf	13.35%

SHADOW/SUNLIGHT BALANCE

Relative levels of Shadow vs. Sun



PROJECT: Family Zoning Plan
OPEN SPACE: Joe DiMaggio (87,120 sf)

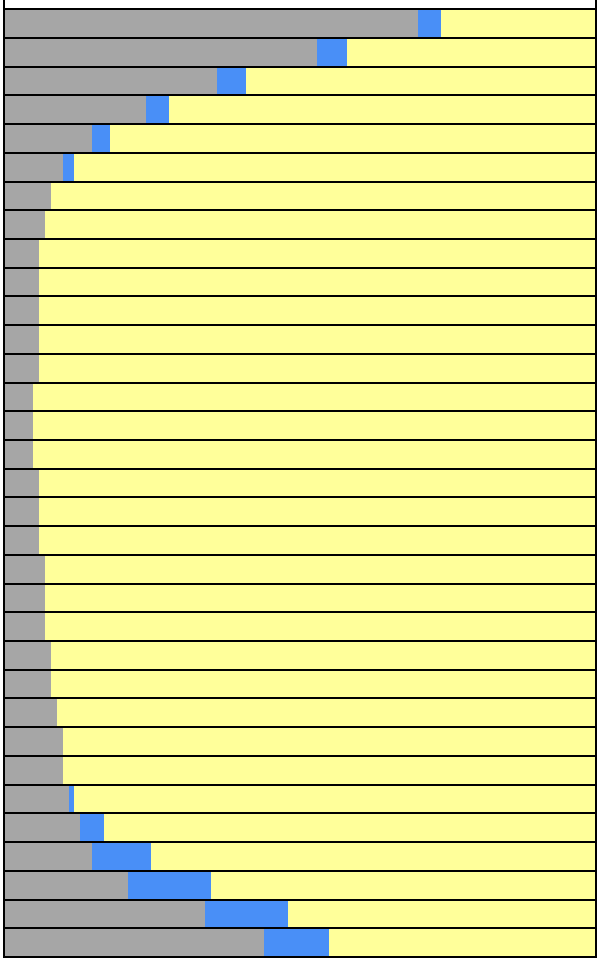
NOVEMBER 29

Mirror date: January 11
Analysis hours: 8:04 AM-3:51 PM (PST)

Shadow / Sunlight Balance Key
Existing Shadow | Project Shadow | Sunlight Remaining

Analysis Time	EXISTING SHADOW		PROJECT NET NEW SHADOW	
	Shadow Area	Coverage	Shadow Area	Coverage
8:04 AM	60,975 sf	69.99%	3,790 sf	4.35%
8:15 AM	46,327 sf	53.18%	4,521 sf	5.19%
8:30 AM	31,415 sf	36.06%	4,084 sf	4.69%
8:45 AM	20,984 sf	24.09%	3,555 sf	4.08%
9:00 AM	13,129 sf	15.07%	2,935 sf	3.37%
9:15 AM	8,485 sf	9.74%	1,824 sf	2.09%
9:30 AM	6,811 sf	7.82%	0 sf	0.00%
9:45 AM	5,872 sf	6.74%	0 sf	0.00%
10:00 AM	5,532 sf	6.35%	0 sf	0.00%
10:15 AM	5,316 sf	6.10%	0 sf	0.00%
10:30 AM	5,117 sf	5.87%	0 sf	0.00%
10:45 AM	4,940 sf	5.67%	0 sf	0.00%
11:00 AM	4,804 sf	5.51%	0 sf	0.00%
11:15 AM	4,670 sf	5.36%	0 sf	0.00%
11:30 AM	4,546 sf	5.22%	0 sf	0.00%
11:45 AM	4,759 sf	5.46%	0 sf	0.00%
12:00 PM	5,000 sf	5.74%	0 sf	0.00%
12:15 PM	5,294 sf	6.08%	0 sf	0.00%
12:30 PM	5,585 sf	6.41%	0 sf	0.00%
12:45 PM	5,879 sf	6.75%	0 sf	0.00%
1:00 PM	6,178 sf	7.09%	0 sf	0.00%
1:15 PM	6,517 sf	7.48%	0 sf	0.00%
1:30 PM	6,904 sf	7.92%	0 sf	0.00%
1:45 PM	7,335 sf	8.42%	0 sf	0.00%
2:00 PM	7,810 sf	8.96%	0 sf	0.00%
2:15 PM	8,358 sf	9.59%	0 sf	0.00%
2:30 PM	8,980 sf	10.31%	24 sf	0.03%
2:45 PM	9,745 sf	11.19%	1,069 sf	1.23%
3:00 PM	10,930 sf	12.55%	3,847 sf	4.42%
3:15 PM	13,003 sf	14.93%	8,515 sf	9.77%
3:30 PM	17,870 sf	20.51%	12,500 sf	14.35%
3:45 PM	29,585 sf	33.96%	12,017 sf	13.79%
3:51 PM	38,226 sf	43.88%	9,782 sf	11.23%

SHADOW/SUNLIGHT BALANCE
Relative levels of Shadow vs. Sun



PROJECT: Family Zoning Plan
OPEN SPACE: Joe DiMaggio (87,120 sf)

DECEMBER 6

Mirror date: January 4
Analysis hours: 8:10 AM-3:51 PM (PST)

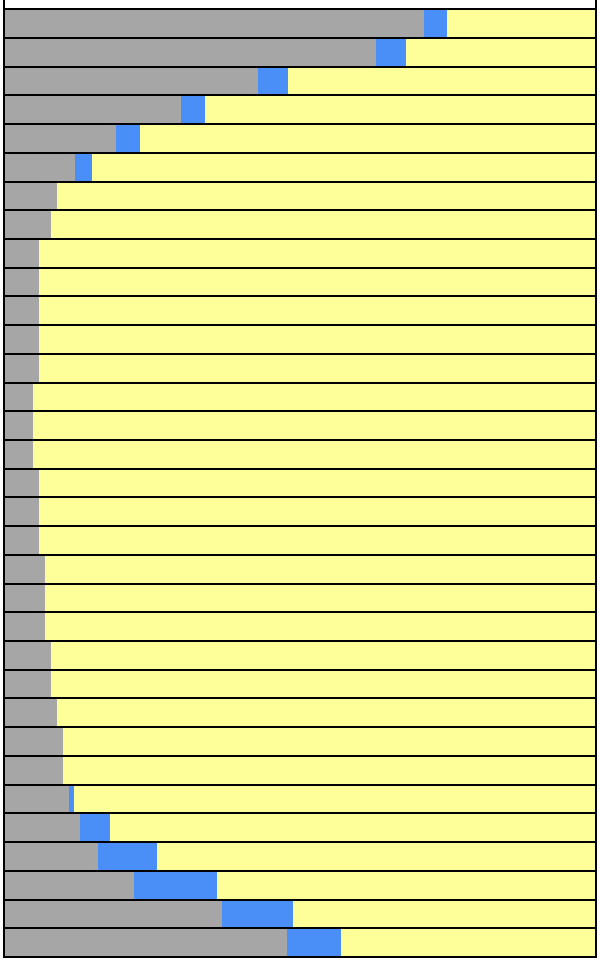
Shadow / Sunlight Balance Key

Existing Shadow | Project Shadow | Sunlight Remaining

Analysis Time	EXISTING SHADOW		PROJECT NET NEW SHADOW	
	Shadow Area	Coverage	Shadow Area	Coverage
8:10 AM	62,077 sf	71.25%	3,623 sf	4.16%
8:15 AM	55,171 sf	63.33%	3,964 sf	4.55%
8:30 AM	37,834 sf	43.43%	4,133 sf	4.74%
8:45 AM	25,717 sf	29.52%	3,623 sf	4.16%
9:00 AM	16,650 sf	19.11%	3,157 sf	3.62%
9:15 AM	10,386 sf	11.92%	2,530 sf	2.90%
9:30 AM	7,843 sf	9.00%	260 sf	0.30%
9:45 AM	6,564 sf	7.53%	0 sf	0.00%
10:00 AM	5,653 sf	6.49%	0 sf	0.00%
10:15 AM	5,348 sf	6.14%	0 sf	0.00%
10:30 AM	5,150 sf	5.91%	0 sf	0.00%
10:45 AM	4,967 sf	5.70%	0 sf	0.00%
11:00 AM	4,834 sf	5.55%	0 sf	0.00%
11:15 AM	4,701 sf	5.40%	0 sf	0.00%
11:30 AM	4,542 sf	5.21%	0 sf	0.00%
11:45 AM	4,757 sf	5.46%	0 sf	0.00%
12:00 PM	5,024 sf	5.77%	0 sf	0.00%
12:15 PM	5,298 sf	6.08%	0 sf	0.00%
12:30 PM	5,573 sf	6.40%	0 sf	0.00%
12:45 PM	5,859 sf	6.72%	0 sf	0.00%
1:00 PM	6,163 sf	7.07%	0 sf	0.00%
1:15 PM	6,497 sf	7.46%	0 sf	0.00%
1:30 PM	6,881 sf	7.90%	0 sf	0.00%
1:45 PM	7,318 sf	8.40%	0 sf	0.00%
2:00 PM	7,793 sf	8.95%	0 sf	0.00%
2:15 PM	8,341 sf	9.57%	0 sf	0.00%
2:30 PM	8,961 sf	10.29%	23 sf	0.03%
2:45 PM	9,870 sf	11.33%	1,182 sf	1.36%
3:00 PM	11,182 sf	12.83%	4,220 sf	4.84%
3:15 PM	13,645 sf	15.66%	8,831 sf	10.14%
3:30 PM	19,347 sf	22.21%	12,156 sf	13.95%
3:45 PM	32,446 sf	37.24%	10,874 sf	12.48%
3:51 PM	41,983 sf	48.19%	7,815 sf	8.97%

SHADOW/SUNLIGHT BALANCE

Relative levels of Shadow vs. Sun



PROJECT: Family Zoning Plan
OPEN SPACE: Joe DiMaggio (87,120 sf)

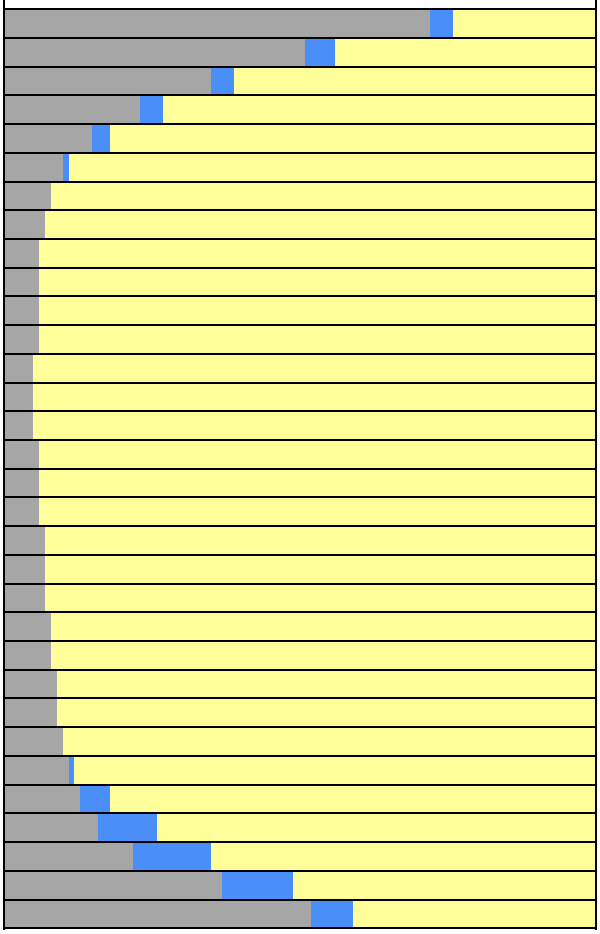
DECEMBER 13

Mirror date: December 28
Analysis hours: 8:15 AM-3:52 PM (PST)

Shadow / Sunlight Balance Key
Existing Shadow | Project Shadow | Sunlight Remaining

Analysis Time	EXISTING SHADOW		PROJECT NET NEW SHADOW	
	Shadow Area	Coverage	Shadow Area	Coverage
8:15 AM	62,797 sf	72.08%	3,498 sf	4.02%
8:30 AM	44,071 sf	50.59%	4,120 sf	4.73%
8:45 AM	30,241 sf	34.71%	3,724 sf	4.27%
9:00 AM	19,954 sf	22.90%	3,236 sf	3.71%
9:15 AM	12,851 sf	14.75%	2,723 sf	3.13%
9:30 AM	8,805 sf	10.11%	869 sf	1.00%
9:45 AM	7,255 sf	8.33%	0 sf	0.00%
10:00 AM	6,109 sf	7.01%	0 sf	0.00%
10:15 AM	5,439 sf	6.24%	0 sf	0.00%
10:30 AM	5,186 sf	5.95%	0 sf	0.00%
10:45 AM	4,998 sf	5.74%	0 sf	0.00%
11:00 AM	4,857 sf	5.58%	0 sf	0.00%
11:15 AM	4,731 sf	5.43%	0 sf	0.00%
11:30 AM	4,548 sf	5.22%	0 sf	0.00%
11:45 AM	4,709 sf	5.40%	0 sf	0.00%
12:00 PM	4,976 sf	5.71%	0 sf	0.00%
12:15 PM	5,253 sf	6.03%	0 sf	0.00%
12:30 PM	5,528 sf	6.35%	0 sf	0.00%
12:45 PM	5,821 sf	6.68%	0 sf	0.00%
1:00 PM	6,123 sf	7.03%	0 sf	0.00%
1:15 PM	6,454 sf	7.41%	0 sf	0.00%
1:30 PM	6,831 sf	7.84%	0 sf	0.00%
1:45 PM	7,258 sf	8.33%	0 sf	0.00%
2:00 PM	7,731 sf	8.87%	0 sf	0.00%
2:15 PM	8,270 sf	9.49%	0 sf	0.00%
2:30 PM	8,933 sf	10.25%	0 sf	0.00%
2:45 PM	9,859 sf	11.32%	1,062 sf	1.22%
3:00 PM	11,281 sf	12.95%	4,068 sf	4.67%
3:15 PM	13,808 sf	15.85%	8,530 sf	9.79%
3:30 PM	19,540 sf	22.43%	11,753 sf	13.49%
3:45 PM	32,452 sf	37.25%	10,549 sf	12.11%
3:52 PM	44,996 sf	51.65%	6,232 sf	7.15%

SHADOW/SUNLIGHT BALANCE
Relative levels of Shadow vs. Sun



PROJECT: Family Zoning Plan
OPEN SPACE: Joe DiMaggio (87,120 sf)

DECEMBER 20

Winter solstice (December 21 similar)
Analysis hours: 8:19 AM-3:54 PM (PST)

Shadow / Sunlight Balance Key

Existing Shadow | Project Shadow | Sunlight Remaining

Analysis Time	EXISTING SHADOW		PROJECT NET NEW SHADOW	
	Shadow Area	Coverage	Shadow Area	Coverage
8:19 AM	63,052 sf	72.37%	3,457 sf	3.97%
8:30 AM	49,142 sf	56.41%	4,080 sf	4.68%
8:45 AM	34,003 sf	39.03%	3,810 sf	4.37%
9:00 AM	22,611 sf	25.95%	3,341 sf	3.83%
9:15 AM	14,836 sf	17.03%	2,875 sf	3.30%
9:30 AM	9,679 sf	11.11%	1,488 sf	1.71%
9:45 AM	7,787 sf	8.94%	0 sf	0.00%
10:00 AM	6,454 sf	7.41%	0 sf	0.00%
10:15 AM	5,621 sf	6.45%	0 sf	0.00%
10:30 AM	5,229 sf	6.00%	0 sf	0.00%
10:45 AM	5,039 sf	5.78%	0 sf	0.00%
11:00 AM	4,883 sf	5.61%	0 sf	0.00%
11:15 AM	4,765 sf	5.47%	0 sf	0.00%
11:30 AM	4,623 sf	5.31%	0 sf	0.00%
11:45 AM	4,656 sf	5.34%	0 sf	0.00%
12:00 PM	4,923 sf	5.65%	0 sf	0.00%
12:15 PM	5,200 sf	5.97%	0 sf	0.00%
12:30 PM	5,472 sf	6.28%	0 sf	0.00%
12:45 PM	5,762 sf	6.61%	0 sf	0.00%
1:00 PM	6,064 sf	6.96%	0 sf	0.00%
1:15 PM	6,389 sf	7.33%	0 sf	0.00%
1:30 PM	6,753 sf	7.75%	0 sf	0.00%
1:45 PM	7,175 sf	8.24%	0 sf	0.00%
2:00 PM	7,635 sf	8.76%	0 sf	0.00%
2:15 PM	8,165 sf	9.37%	0 sf	0.00%
2:30 PM	8,816 sf	10.12%	0 sf	0.00%
2:45 PM	9,715 sf	11.15%	772 sf	0.89%
3:00 PM	11,060 sf	12.70%	3,478 sf	3.99%
3:15 PM	13,417 sf	15.40%	7,731 sf	8.87%
3:30 PM	18,450 sf	21.18%	11,434 sf	13.12%
3:45 PM	30,188 sf	34.65%	10,821 sf	12.42%
3:54 PM	46,296 sf	53.14%	5,558 sf	6.38%

SHADOW/SUNLIGHT BALANCE

Relative levels of Shadow vs. Sun

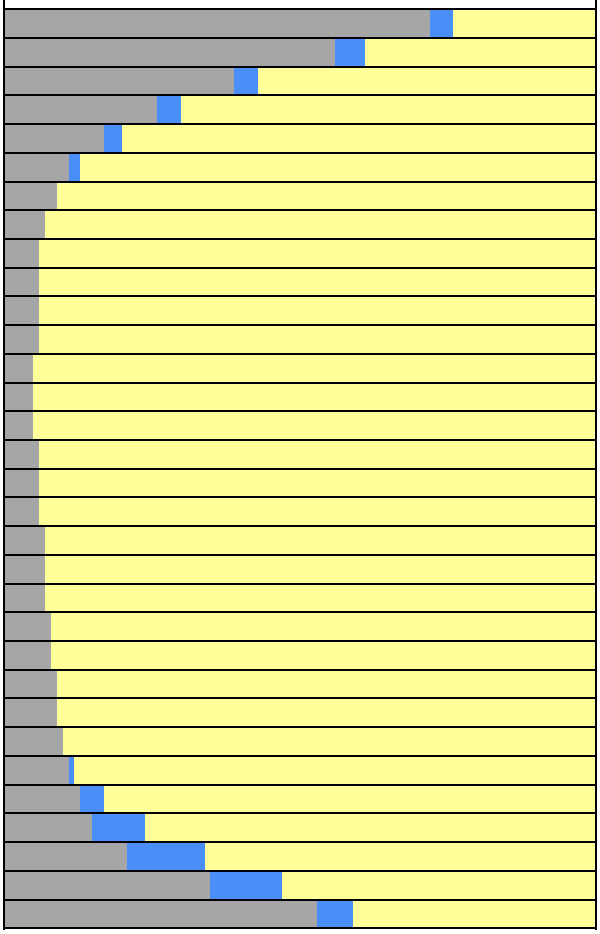


EXHIBIT E

SWAPE Technical Consultation, Data Analysis and Litigation Support for the Environment

2656 29th Street, Suite 201
Santa Monica, CA 90405

Matt Hagemann, P.G, C.Hg.
(949) 887-9013
mhagemann@swape.com

November 14, 2025

Richard Drury
Lozeau | Drury LLP
1939 Harrison St., Suite 150
Oakland, CA 94612

Subject: **Comments on the Family Zoning Plan – Housing Element Rezoning Program (SCH No. 2021060358)**

Dear Mr. Drury,

We have reviewed the September 2025 Addendum No. 1 to Environmental Impact Report ("Addendum") and the November 2022 Final Environmental Impact Report ("FEIR") for the Family Zoning Plan – Housing Element Rezoning Program ("Project") located in the City of San Francisco ("City"). The Addendum proposes to develop an additional 4,000 housing units to bring the total units under the Family Zoning Plan to 54,000 housing units.

Our review concludes that the Addendum fails to adequately evaluate the Project's hazards, hazardous materials, and air quality impacts. As a result, emissions and health risk impacts associated with construction and operation of the proposed Project may be underestimated and inadequately addressed. A subsequent Environmental Impact Report ("EIR") should be prepared to adequately assess and mitigate the potential hazards, hazardous materials, and air quality impacts that the project may have on the environment.

Hazards and Hazardous Materials

Inadequate Disclosure and Analysis of Impacts

The Addendum and FEIR do not mention the newly passed AB 130 which mandates that hazardous waste sites be addressed through the completion of a Phase I Environmental Site Assessments ("ESAs"). AB 130 states: [1]

> "The development can proceed as a "use by right" if, [among other provisions],

[1] "Assembly Bill No. 130." California State Legislature, 2025, *available at:* https://legiscan.com/CA/text/AB130/id/3258333

(13) (A) The development proponent completes a Phase I environmental assessment, as defined in Section 78090 of the Health and Safety Code, and a Phase II environmental assessment, as defined in subdivision (o) of Section 25403 of the Health and Safety Code, if warranted.

(B) If a recognized environmental condition is found, the development proponent shall undertake a preliminary endangerment assessment, as defined in Section 78095 of the Health and Safety Code, prepared by an environmental assessor to determine the existence of any release of a hazardous substance on the site and to determine the potential for exposure of future occupants to significant health hazards from any nearby property or activity.

(i) If a release of hazardous substance is found to exist on the site, the release shall be removed, or any significant effect of the release shall be mitigated to a level of insignificance in compliance with state and federal requirements.

(ii) If a potential for exposure to significant hazards from surrounding properties or activities is found to exist, the effects of the potential exposure shall be mitigated to a level of insignificance in compliance with current state and federal requirements."

These requirements are not mentioned in the Addendum or FEIR. There are thousands of hazardous waste sites in San Francisco. According to the FEIR, there are 2,000 Maher sites and 2,300 Cortese List sites within San Francisco (p. 4.1-219) [2]. All Maher- and Cortese-listed sites that will be subject to development under this Project will need to undergo a Phase I ESA according to the AB 130 text cited above.

Phase I ESAs are conducted to identify if any recognized environmental conditions are found that would potentially pose a health risk to construction workers or for future residents. If a recognized environmental condition is found, a more detailed preliminary endangerment assessment is required to identify any hazardous substance release.

A subsequent EIR should be prepared to include specific mitigation measures for dealing with Maher- and Cortese-listed sites in a manner consistent with AB 130. These mitigation measures must include provisions for conducting Phase I ESAs and, if recognized conditions are found, Phase II ESAs so that the health of construction workers, future occupants and workers is protected.

[2] The Hazardous Waste and Substances Sites (Cortese) List is a planning document used by the State, local agencies, and developers to comply with the California Environmental Quality Act requirements in providing information about the location of hazardous materials release sites. Government Code section 65962.5 requires the California Environmental Protection Agencyopens in a new window to develop at least annually an updated Cortese List. DTSC is responsible for a portion of the information contained in the Cortese List. Other State and local government agencies are required to provide additional hazardous material release information for the Cortese List. https://dtsc.ca.gov/dtscs-cortese-list/

Air Quality

Failure to Quantify and Adequately Evaluate Criteria Air Pollutant Emissions

The Addendum fails to quantify the criteria air pollutant emissions associated with Project construction and operation. Rather, in regard to the proposed Project's construction-related air quality impacts, the Addendum states:

> "The proposed rezoning program and subsequent development is expected to result in the same significant criteria air pollutant impacts from construction but not substantially more severe impacts than those disclosed in the EIR" (p. 93).

Similarly, in regard to the Project's operational air quality impacts, the Addendum states:

> "The conclusion in the FEIR is that total operational emissions for future development would be below the air district's thresholds of significance for all pollutants. That conclusion also applies to the proposed rezoning program. Operational emissions would not exceed any thresholds for any representative building type that would be constructed under the proposed rezoning program, and the impact would be less than significant" (p. 95).

However, relevant Bay Area Air Quality Management District ("BAAQMD") guidance supports the calculation of the Project's air pollutant emissions. The Addendum proposes to construct an additional 4,000 residential units. According to BAAQMD's screening criteria, apartments and condo-townhouse land uses must undergo further environmental review if they exceed 416 units for construction or 637/638 units for operational emissions (see table below).[3]

[3] "Screening For Criteria Air Pollutants and Precursors." BAAQMD, 2022, *available at*: https://www.baaqmd.gov/~/media/files/planning-and-research/ceqa/ceqa-guidelines-2022/ceqa-guidelines-chapter-4-screening_final-pdf.pdf?la=en, p. 4.

Land Use Category	Land Use Subcategory	Land Use Unit	Screening Level	
			Construction	Operation
Education	Worship Place	KSF	452	642
Industrial	General Heavy Industry	KSF	452	1,009
Industrial	General Light Industry	KSF	452	998
Industrial	Industrial Park	KSF	452	1,247
Industrial	Manufacturing	KSF	452	1,009
Industrial	Warehouse[1]	KSF	452	1,423
Recreational	Arena	KSF	732	600
Recreational	City Park	Acres	10	175
Recreational	Fast Food Restaurant	KSF	452	21
Recreational	Health Club	KSF	452	261
Recreational	Hotel	Rooms	312	633
Recreational	Motel	Rooms	230	767
Recreational	Movie Theater	KSF	458	80
Recreational	Restaurant – High Turnover (Sit-Down)	KSF	452	75
Recreational	Restaurant – Quality (Fine Dining)	KSF	452	105
Recreational	Racquet Club	KSF	452	457
Recreational	Recreational Swimming Pool	KSF	452	376
Residential	Apartments	DU	416	638
Residential	Condo-Townhouse	DU	416	637
Residential	Mobile Home Park	DU	377	721
Residential	Congregate Care/Retirement Community	DU	416	1,008
Residential	Single Family Housing	DU	254	421
Retail	Auto Care Center	KSF	452	356
Retail	Convenience Market	KSF	452	11
Retail	Discount Store	KSF	452	150
Retail	Home Improvement Superstore/Hardware-Paint Store	KSF	452	221
Retail	Regional Shopping Center	KSF	452	221
Retail	Strip Mall	KSF	452	204
Retail	Supermarket	KSF	452	72

Notes: DU = dwelling unit; KSF = thousand square feet.

Furthermore, the BAAQMD indicates that if a Project includes any of the listed screening criteria, "then the lead agency would need to perform a detailed assessment of the project's criteria air pollutant and precursor emissions."[4] Thus, pursuant to relevant BAAQMD guidance, a quantitative air quality analysis should be prepared in a subsequent EIR.

Without making an effort to estimate the Project's potential construction-related and operational criteria air pollutant emissions, the Addendum lacks evidence to support the conclusion that the Project's emissions would not exceed the applicable BAAQMD significance thresholds. Until further analysis is provided, we cannot verify the Project would not result in new, significant air quality impacts already addressed in the FEIR. The Project should not be approved until a subsequent EIR is prepared to adequately assess and mitigate the potential air quality impacts that Project construction and operation may have on the surrounding environment.

SWAPE's Analysis Indicates a Potentially Significant Air Quality Impact

In an effort to estimate construction-related and operational emissions that may result from development of the additional 4,000 housing units under the Addendum, we prepared a preliminary CalEEMod model. Our analysis provides a generalized evaluation of a range of potential residential building types. Specifically, we modeled accounting for 2,000 "Apartments Mid Rise" and 2,000

[4] "Screening For Criteria Air Pollutants and Precursors." BAAQMD, 2022, *available at*: https://www.baaqmd.gov/~/media/files/planning-and-research/ceqa/ceqa-guidelines-2022/ceqa-guidelines-chapter-4-screening_final-pdf.pdf?la=en, p. 4.

"Condo/Townhouse High Rise" land use subtypes. Because Project-specific details such as construction schedule, equipment types, and operating parameters are not known at this time, all other values were left as default.

Our analysis estimates that the Project's construction and operational related reactive organic gases/volatile organic compounds ("ROG/VOC") emissions exceed the BAAQMD daily threshold of 54 pounds per day ("lbs/day") (see table below).

SWAPE Criteria Air Pollutant Emissions Estimates		
	Construction ROG/VOC (lbs/day)	**Operational ROG/VOC** (lbs/day)
SWAPE	148	145
BAAQMD Threshold	**54**	**54**
Exceeds?	***Yes***	***Yes***

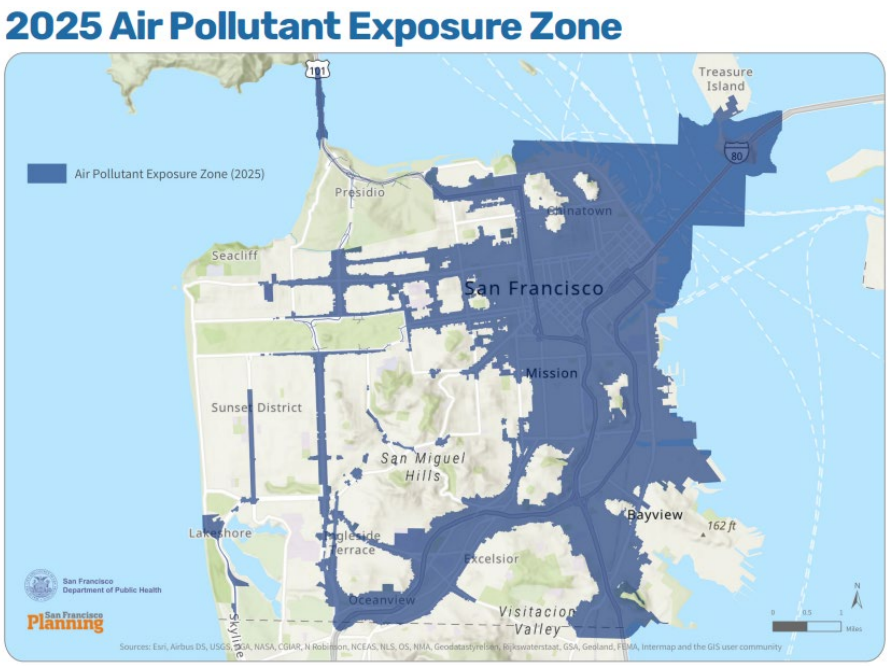
According to our analysis, the construction and operational related ROG/VOC emissions are estimated to be approximately 148 and 145 lbs/day, respectively, exceeding the BAAQMD daily threshold. This finding indicates a potentially significant air quality impact that the Addendum did not identify or address. In our opinion, a subsequent EIR should be conducted to provide a more substantial calculation of the Project's emissions and a more detailed evaluation of the Project's potential air quality impacts.

Failure to Adequately Account for Air Pollution Exposure Zones

The Addendum proposes development in the Downtown, Marina, Mission, Northeast, and Western Addition planning districts, which have areas within the City's air pollutant exposure zones ("APEZ"). The Addendum states that "the proposed rezoning program may result in a small proportion of additional rezoned parcels being in the APEZ, which could increase the number of people exposed to the generally high pollutant concentrations in the APEZ" (p. 97).

In 2025, the City identified new APEZ areas, defined as locations "where particulate matter ($PM_{2.5}$) is greater than or equal to 9 $\mu g/m^3$ or where the risk of cancer from air pollutants is greater than or equal to 100 in a million," and are displayed in the APEZ map presented below:[5]

[5] "2025 Air Pollutant Exposure Zone." San Francisco Department of Public Health, February 2025, available at: https://citypln-m-extnl.sfgov.org/SharedLinks.aspx?accesskey=216571d03e991ee3e00bc434a2415eb36eabc17a8f25a39dc8105f404b976d2f&VaultGUID=A4A7DACD-B0DC-4322-BD29-F6F07103C6E0.



According to the City:

> "Since 2008, San Francisco Health Code article 38 requires new residential construction projects in the APEZ to install enhanced ventilation in buildings to protect residents from the health effects of poor air quality. In addition, through the environmental review process, many construction projects in the APEZ are required to use the cleanest available construction equipment to reduce air quality impacts."[6][7]

As demonstrated above, residential projects are recommended to install enhanced ventilation in buildings. The Addendum and FEIR have failed to do so. Additionally, the Addendum concludes that the $PM_{2.5}$ and cancer risk impacts associated with the Project would be significant-and-unavoidable with mitigation, stating:

> "The maximum increases in $PM_{2.5}$ concentrations and cancer risks would not be meaningfully different than those found in the FEIR analysis, and the results would most likely still be above the air district's thresholds and thus significant and unavoidable with mitigation" (p. 97).

While we agree that the Project would result in significant air quality impacts, the Addendum's assertion that this impact is significant-and-unavoidable is unsupported. The Project proposed by the Addendum would allow further residential development within newly designated APEZ areas, which are already characterized by elevated $PM_{2.5}$ levels and an increased cancer risk. By facilitating new housing in these

[6] "Air Quality Review." San Francisco Planning, 2025, *available at:* https://sfplanning.org/air-quality#permit-anchor-3.
[7] "ARTICLE 38: Enhanced Ventilation for Urban Infill." City and County of San Francisco, December 2008, *available at: https://codelibrary.amlegal.com/codes/san_francisco/latest/sf_health/0-0-0-6054*.

areas without committing to additional mitigation, the Addendum could expose future residents to potentially significant health impacts. According to CEQA Guidelines §15096(g)(2):

> "When an updated EIR has been prepared for a project, the Responsible Agency shall not approve the project as proposed if the agency finds any feasible alternative or feasible mitigation measures within its powers that would substantially lessen or avoid any significant effect the project would have on the environment."[8]

As such, the Addendum is required under CEQA to implement all feasible mitigation to reduce impacts to a less-than-significant level. To reduce the Project's air quality impacts to the maximum extent possible, additional feasible mitigation measures should be incorporated, such as those suggested in the section of this letter titled "Feasible Mitigation Measures Available to Reduce Emissions." The Project should not be approved until a subsequent EIR is prepared, incorporating all feasible mitigation to reduce emissions to the maximum extent possible.

Mitigation

Feasible Mitigation Measures Available to Reduce Emissions

The Addendum is required under CEQA to implement all feasible mitigation to reduce the Project's potential impacts. As demonstrated above, the Project would result in potentially significant air quality impacts that should be mitigated further.

To reduce the VOC emissions associated with Project construction and operation, we recommend the Addendum consider incorporating the following mitigation measures:[9]

- Use super-compliant VOC-content architectural coatings (0 grams per liter to less than 10 grams per liter VOC) during Project construction application of paints and other architectural coatings.
- If paints and coatings with VOC content of 0 grams/liter to less than 10 grams/liter cannot be utilized, or they do not reduce emissions to below thresholds, the developer shall avoid application of architectural coatings during the peak smog season: July, August, and September.

While the Project is not located in Los Angeles County, the above mitigation measures would decrease emissions regardless. Further mitigation used by other land use development projects to address VOC emissions include:[10]

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[8] "Cal. Code Regs. tit. 14 § 15096." California Legislature, available at: https://casetext.com/regulation/california-code-of-regulations/title-14-natural-resources/division-6-resources-agency/chapter-3-guidelines-for-implementation-of-the-california-environmental-quality-act/article-7-eir-process/section-15096-process-for-a-responsible-agency.

[9] "Mitigation Monitoring and Reporting Program." Los Angeles County Housing Element Update Program EIR. August 2021, *available at*: https://planning.lacounty.gov/wp-content/uploads/2023/07/Housing_final-peir-mitigation-monitoring.pdf.

[10] "Banning Commerce Center Project." Kimley-Horn and Associates, Inc., June 2024, *available at*: https://ceqanet.opr.ca.gov/2022090102/2; Draft Environmental Impact Report, p. 1-7.

- Recycle leftover paint. Take any leftover paint to a household hazardous waste center; do not mix leftover water-based and oil-based paints.
- Keep lids closed on all paint containers when not in use to prevent VOC emissions and excessive odors.
- For water-based paints, clean up with water only. Whenever possible, do not rinse the cleanup water down the drain or pour it directly into the ground or the storm drain
- Use compliant low-VOC cleaning solvents to clean paint application equipment.
- Keep all paint- and solvent-laden rags in sealed containers to prevent VOC emissions.
- Contractors shall construct/build with materials that do not require painting and use pre-painted construction materials to the extent practicable.
- Use high-pressure/low-volume paint applicators with a minimum transfer efficiency of at least 50 percent or other application techniques with equivalent or higher transfer efficiency.
- Manual application using a paintbrush, hand-roller, trowel, spatula, dauber, rag, or sponge, to achieve a 100 percent application efficiency.

In order to reduce the $PM_{2.5}$ and cancer risk emissions associated with the Project and recommend the Addendum consider incorporating several mitigation measures as listed below. Incorporating these measures would also reduce cumulative exposure for future residential developments proposed within APEZ zones, where pollutant concentrations are already elevated. The Southern California Association of Governments' Certified Final Program Environmental Impact Report for Connect SoCal 2024 recommends the following Project-level air quality mitigation measures: [11]

- Installing high-efficiency or enhanced filtration units, such as Minimum Efficiency Reporting Value (MERV) 13 or better. Installation of enhanced filtration units can be verified during occupancy inspection prior to the issuance of an occupancy permit.
- Disclose potential health impacts to prospective sensitive receptors from living in close proximity to freeways or other sources of air pollution and the reduced effectiveness of air filtration systems when windows are open or residents are outside.
- Identify the responsible implementing and enforcement agency to ensure that enhanced filtration units are installed on-site before a permit of occupancy is issued.
- Identify the responsible entity such as future residents themselves, Homeowner's Association, or property managers for ensuring enhanced filtration units are replaced on time.
- Identify, provide, and disclose ongoing cost-sharing strategies, if any, for replacing the enhanced filtration units.
- Set criteria for assessing progress in installing and replacing the enhanced filtration units,
- Develop a process for evaluating the effectiveness of the enhanced filtration units.
- Diesel generators on site for more than 10 total days shall be equipped with emission control technology verified by EPA or CARB to reduce PM emissions by a minimum of 85%.

[11] "Certified Final Program Environmental Impact Report for Connect SoCal 2024." SCAG, May 2020, *available at:* https://scag.ca.gov/program-environmental-impact-report-0.

- Establish generator sites and truck-staging zones for vehicles waiting to load or unload material on site. Such zones shall be located where diesel emissions have the least impact on abutters, the general public, and especially sensitive receptors such as hospitals, schools, daycare facilities, elderly housing, and convalescent facilities.
- Obtain CARB Portable Equipment Registration with the state or a local district permit for portable engines and portable engine-driven equipment units used at the project work site, with the exception of on-road and off-road motor vehicles. Arrange appropriate consultations with CARB or the local air district to determine registration and permitting requirements prior to equipment operation at the site.
- Provide pedestrian network improvements, such as interconnected street network, narrower roadways and shorter block lengths, sidewalks, parks and public spaces, minimize pedestrian barriers.
- Create urban non-motorized zones.
- Provide bike parking in non-residential and multi-unit residential projects
- Require residential area parking permit.
- Provide ride-sharing programs:
    - Designate a certain percentage of parking spacing for ride sharing vehicles,
    - Designating adequate passenger loading and unloading and waiting areas for ride-sharing vehicles,
    - Providing a web site or messaging board for coordinating rides, and
    - Permanent transportation management association membership and finding requirement.

Provided above are several mitigation measures that would reduce Project-related VOC and $PM_{2.5}$/cancer risk emissions. These measures offer a cost-effective, feasible way to incorporate lower-emitting design features into the proposed Project, which subsequently reduces emissions released during Project construction and operation.

A subsequent EIR should be prepared that includes all feasible mitigation measures, as well as an updated air quality analysis to ensure that the necessary mitigation measures are implemented to reduce emissions to the maximum extent feasible. The subsequent EIR should also demonstrate a commitment to the implementation of these measures prior to Project approval, to ensure that the Project's potentially significant emissions are reduced to the maximum extent possible.

Disclaimer

SWAPE has received limited documentation regarding this project. Additional information may become available in the future; thus, we retain the right to revise or amend this report when additional information becomes available. Our professional services have been performed using that degree of care and skill ordinarily exercised, under similar circumstances, by reputable environmental consultants practicing in this or similar localities at the time of service. No other warranty, expressed or implied, is made as to the scope of work, work methodologies and protocols, site conditions, analytical testing results, and findings presented. This report reflects efforts which were limited to information that was

reasonably accessible at the time of the work, and may contain informational gaps, inconsistencies, or otherwise be incomplete due to the unavailability or uncertainty of information obtained or provided by third parties.

Sincerely,

Matt Hagemann, P.G., C.Hg.

Paul E. Rosenfeld, Ph.D.

Attachment A: CalEEMod Output Files
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San Francisco Housing Element Detailed Report

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1. Basic Project Information

1.1. Basic Project Information

Data Field	Value
Project Name	San Francisco Housing Element
Construction Start Date	1/1/2026
Operational Year	2050
Lead Agency	—
Land Use Scale	Plan/community
Analysis Level for Defaults	County
Windspeed (m/s)	3.9
Precipitation (days)	42
Location	San Francisco, CA, USA
County	San Francisco
City	San Francisco
Air District	Bay Area AQMD
Air Basin	San Francisco Bay Area
TAZ	1047
EDFZ	1
Electric Utility	Pacific Gas & Electric Company
Gas Utility	Pacific Gas & Electric
App Version	2022.1.1.32

1.2. Land Use Types

Land Use Subtype	Size	Unit	Lot Acreage	Building Area (sq ft)	Landscape Area (sq ft)	Special Landscape Area (sq ft)	Population	Description
Apartments Mid Rise	2,000	Dwelling Unit	53	1,920,000	—	—	4,660	—

Condo/Townhouse High Rise	2,000	Dwelling Unit	31	1,920,000	—	—	4,660	—

1.3. User-Selected Emission Reduction Measures by Emissions Sector

No measures selected

2. Emissions Summary

2.1. Construction Emissions Compared Against Thresholds

Criteria Pollutants (lb/day for daily, ton/yr for annual) and GHGs (lb/day for daily, MT/yr for annual)

Un/Mit.	TOG	ROG	NOx	CO	SO2	PM10E	PM10D	PM10T	PM2.5E	PM2.5D	PM2.5T	BCO2	NBCO2	CO2T	CH4	N2O	R	CO2e
Daily, Summer (Max)	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—
Unmit.	493	493	33	121	0.10	1.2	27	27	1.1	10	11	—	39,740	39,740	2.1	2.0	105	40,504
Daily, Winter (Max)	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—
Unmit.	493	493	35	113	0.10	1.1	27	27	1.0	6.5	6.9	—	38,384	38,384	2.3	2.8	2.7	39,270
Average Daily (Max)	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—
Unmit.	148	148	23	76	0.07	0.74	19	19	0.68	4.5	4.8	—	26,971	26,971	1.5	1.6	29	27,454
Annual (Max)	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—
Unmit.	27	27	4.2	14	0.01	0.14	3.4	3.5	0.12	0.83	0.87	—	4,465	4,465	0.25	0.26	4.8	4,545

2.2. Construction Emissions by Year, Unmitigated

Criteria Pollutants (lb/day for daily, ton/yr for annual) and GHGs (lb/day for daily, MT/yr for annual)

Year	TOG	ROG	NOx	CO	SO2	PM10E	PM10D	PM10T	PM2.5E	PM2.5D	PM2.5T	BCO2	NBCO2	CO2T	CH4	N2O	R	CO2e

Daily - Summer (Max)	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—
2026	3.8	3.2	29	29	0.06	1.2	20	21	1.1	10	11	—	6,776	6,776	0.27	0.05	0.62	6,799
2027	11	8.6	33	121	0.10	0.42	27	27	0.39	6.5	6.9	—	39,740	39,740	2.1	2.0	105	40,504
2028	11	8.4	31	116	0.10	0.38	27	27	0.36	6.5	6.8	—	38,945	38,945	2.1	1.9	94	39,672
2029	11	8.1	29	111	0.10	0.35	27	27	0.33	6.5	6.8	—	38,138	38,138	1.9	1.9	84	38,850
2030	9.5	7.8	28	107	0.10	0.34	27	27	0.32	6.5	6.8	—	37,342	37,342	1.8	1.9	74	38,018
2031	9.2	7.6	26	104	0.10	0.32	27	27	0.30	6.5	6.8	—	36,693	36,693	1.7	1.8	65	37,333
2032	8.9	7.4	24	101	0.10	0.30	27	27	0.29	6.5	6.8	—	35,954	35,954	1.6	1.8	57	36,583
2033	493	493	5.9	16	0.01	0.18	4.8	4.8	0.17	1.1	1.1	—	4,730	4,730	0.06	0.04	7.6	4,750
Daily - Winter (Max)	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—
2026	3.7	3.1	27	28	0.06	1.1	9.4	10	1.0	3.7	4.7	—	6,766	6,766	0.27	0.06	0.02	6,791
2027	11	8.5	35	113	0.10	1.0	27	27	0.96	6.5	6.9	—	38,384	38,384	2.3	2.8	2.7	39,270
2028	11	8.2	33	108	0.10	0.38	27	27	0.36	6.5	6.8	—	37,614	37,614	2.1	2.7	2.4	38,471
2029	11	7.8	31	104	0.10	0.35	27	27	0.33	6.5	6.8	—	36,830	36,830	2.0	2.7	2.2	37,685
2030	9.5	7.7	29	100	0.10	0.34	27	27	0.32	6.5	6.8	—	36,055	36,055	2.0	1.9	1.9	36,663
2031	9.1	7.4	27	97	0.10	0.32	27	27	0.30	6.5	6.8	—	35,418	35,418	1.7	1.8	1.7	35,996
2032	8.8	7.3	26	93	0.10	0.30	27	27	0.29	6.5	6.8	—	34,697	34,697	1.6	1.8	1.5	35,273
2033	493	493	25	90	0.10	0.28	27	27	0.27	6.5	6.8	—	34,007	34,007	1.5	1.7	1.3	34,556
2034	493	493	1.5	14	< 0.005	0.01	4.8	4.8	0.01	1.1	1.1	—	4,430	4,430	0.07	0.04	0.17	4,443
Average Daily	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—
2026	2.4	2.0	18	18	0.03	0.74	5.8	6.6	0.68	2.7	3.4	—	3,709	3,709	0.15	0.03	0.17	3,723
2027	6.8	5.1	23	66	0.07	0.39	16	17	0.37	4.1	4.5	—	22,553	22,553	1.3	1.6	25	23,076
2028	7.8	5.8	23	76	0.07	0.27	19	19	0.25	4.5	4.8	—	26,971	26,971	1.5	1.4	29	27,454
2029	7.5	5.6	22	73	0.07	0.25	19	19	0.24	4.5	4.7	—	26,337	26,337	1.4	1.4	26	26,813
2030	6.7	5.5	20	69	0.07	0.24	19	19	0.23	4.5	4.7	—	25,782	25,782	1.4	1.3	23	26,237

2031	6.4	5.2	19	67	0.07	0.23	19	19	0.22	4.5	4.7	—	25,327	25,327	1.2	1.3	20	25,759
2032	6.2	5.2	19	65	0.07	0.22	19	19	0.20	4.5	4.7	—	24,879	24,879	1.1	1.3	17	25,307
2033	148	148	5.0	17	0.02	0.09	4.4	4.5	0.08	1.0	1.1	—	5,689	5,689	0.21	0.21	3.4	5,760
2034	2.9	2.9	0.01	0.08	< 0.005	< 0.005	0.03	0.03	< 0.005	0.01	0.01	—	26	26	< 0.005	< 0.005	0.02	26
Annual	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—
2026	0.43	0.37	3.3	3.3	0.01	0.14	1.1	1.2	0.12	0.49	0.61	—	614	614	0.02	0.01	0.03	616
2027	1.2	0.93	4.2	12	0.01	0.07	2.9	3.0	0.07	0.75	0.82	—	3,734	3,734	0.21	0.26	4.2	3,820
2028	1.4	1.1	4.2	14	0.01	0.05	3.4	3.5	0.05	0.83	0.87	—	4,465	4,465	0.25	0.23	4.8	4,545
2029	1.4	1.0	4.0	13	0.01	0.05	3.4	3.5	0.04	0.82	0.87	—	4,360	4,360	0.23	0.23	4.3	4,439
2030	1.2	1.00	3.7	13	0.01	0.04	3.4	3.5	0.04	0.82	0.86	—	4,269	4,269	0.22	0.22	3.8	4,344
2031	1.2	0.95	3.5	12	0.01	0.04	3.4	3.5	0.04	0.82	0.86	—	4,193	4,193	0.20	0.21	3.3	4,265
2032	1.1	0.94	3.4	12	0.01	0.04	3.4	3.5	0.04	0.83	0.86	—	4,119	4,119	0.19	0.21	2.9	4,190
2033	27	27	0.91	3.1	< 0.005	0.02	0.80	0.82	0.02	0.19	0.21	—	942	942	0.03	0.03	0.56	954
2034	0.53	0.53	< 0.005	0.01	< 0.005	< 0.005	< 0.005	< 0.005	< 0.005	< 0.005	< 0.005	—	4.3	4.3	< 0.005	< 0.005	< 0.005	4.3

2.4. Operations Emissions Compared Against Thresholds

Criteria Pollutants (lb/day for daily, ton/yr for annual) and GHGs (lb/day for daily, MT/yr for annual)

Un/Mit.	TOG	ROG	NOx	CO	SO2	PM10E	PM10D	PM10T	PM2.5E	PM2.5D	PM2.5T	BCO2	NBCO2	CO2T	CH4	N2O	R	CO2e
Daily, Summer (Max)	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—
Unmit.	167	161	70	547	1.1	4.3	82	86	4.2	21	25	1,819	147,054	148,873	189	3.7	35	154,742
Daily, Winter (Max)	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—
Unmit.	146	141	71	313	1.0	4.2	82	86	4.2	21	25	1,819	143,053	144,872	189	4.0	28	150,827
Average Daily (Max)	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—
Unmit.	149	145	31	386	0.75	1.1	76	77	1.1	19	20	1,819	90,932	92,751	188	3.7	31	98,577

Annual (Max)	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—
Unmit.	27	27	5.7	70	0.14	0.20	14	14	0.20	3.5	3.7	301	15,055	15,356	31	0.61	5.1	16,321

2.5. Operations Emissions by Sector, Unmitigated

Criteria Pollutants (lb/day for daily, ton/yr for annual) and GHGs (lb/day for daily, MT/yr for annual)

Sector	TOG	ROG	NOx	CO	SO2	PM10E	PM10D	PM10T	PM2.5E	PM2.5D	PM2.5T	BCO2	NBCO2	CO2T	CH4	N2O	R	CO2e
Daily, Summer (Max)	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—
Mobile	44	41	19	298	0.75	0.27	82	82	0.25	21	21	—	76,997	76,997	3.1	2.9	7.6	77,951
Area	122	119	42	245	0.26	3.3	—	3.3	3.3	—	3.3	0.00	50,720	50,720	0.97	0.10	—	50,774
Energy	1.0	0.52	8.9	3.8	0.06	0.72	—	0.72	0.72	—	0.72	—	18,912	18,912	2.2	0.17	—	19,019
Water	—	—	—	—	—	—	—	—	—	—	—	225	425	650	23	0.56	—	1,394
Waste	—	—	—	—	—	—	—	—	—	—	—	1,594	0.00	1,594	159	0.00	—	5,577
Refrig.	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	28	28
Total	167	161	70	547	1.1	4.3	82	86	4.2	21	25	1,819	147,054	148,873	189	3.7	35	154,742
Daily, Winter (Max)	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—
Mobile	44	41	23	293	0.72	0.27	82	82	0.25	21	21	—	73,602	73,602	3.4	3.2	0.20	74,645
Area	102	99	39	17	0.25	3.2	—	3.2	3.2	—	3.2	0.00	50,113	50,113	0.94	0.09	—	50,165
Energy	1.0	0.52	8.9	3.8	0.06	0.72	—	0.72	0.72	—	0.72	—	18,912	18,912	2.2	0.17	—	19,019
Water	—	—	—	—	—	—	—	—	—	—	—	225	425	650	23	0.56	—	1,394
Waste	—	—	—	—	—	—	—	—	—	—	—	1,594	0.00	1,594	159	0.00	—	5,577
Refrig.	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	28	28
Total	146	141	71	313	1.0	4.2	82	86	4.2	21	25	1,819	143,053	144,872	189	4.0	28	150,827
Average Daily	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—
Mobile	41	38	21	269	0.69	0.26	76	76	0.24	19	20	—	70,060	70,060	3.1	3.0	3.1	71,022

Area	107	107	2.0	113	0.01	0.13	—	0.13	0.12	—	0.12	0.00	1,535	1,535	0.04	< 0.005	—	1,537
Energy	1.0	0.52	8.9	3.8	0.06	0.72	—	0.72	0.72	—	0.72	—	18,912	18,912	2.2	0.17	—	19,019
Water	—	—	—	—	—	—	—	—	—	—	—	225	425	650	23	0.56	—	1,394
Waste	—	—	—	—	—	—	—	—	—	—	—	1,594	0.00	1,594	159	0.00	—	5,577
Refrig.	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	28	28
Total	149	145	31	386	0.75	1.1	76	77	1.1	19	20	1,819	90,932	92,751	188	3.7	31	98,577
Annual	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—
Mobile	7.5	7.0	3.7	49	0.13	0.05	14	14	0.04	3.5	3.6	—	11,599	11,599	0.51	0.49	0.52	11,759
Area	20	19	0.37	21	< 0.005	0.02	—	0.02	0.02	—	0.02	0.00	254	254	0.01	< 0.005	—	255
Energy	0.19	0.09	1.6	0.69	0.01	0.13	—	0.13	0.13	—	0.13	—	3,131	3,131	0.37	0.03	—	3,149
Water	—	—	—	—	—	—	—	—	—	—	—	37	70	108	3.8	0.09	—	231
Waste	—	—	—	—	—	—	—	—	—	—	—	264	0.00	264	26	0.00	—	923
Refrig.	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	4.6	4.6
Total	27	27	5.7	70	0.14	0.20	14	14	0.20	3.5	3.7	301	15,055	15,356	31	0.61	5.1	16,321

3. Construction Emissions Details

3.1. Demolition (2026) - Unmitigated

Criteria Pollutants (lb/day for daily, ton/yr for annual) and GHGs (lb/day for daily, MT/yr for annual)

Location	TOG	ROG	NOx	CO	SO2	PM10E	PM10D	PM10T	PM2.5E	PM2.5D	PM2.5T	BCO2	NBCO2	CO2T	CH4	N2O	R	CO2e
Onsite	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—
Daily, Summer (Max)	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—
Off-Road Equipment	2.7	2.3	21	19	0.03	0.84	—	0.84	0.78	—	0.78	—	3,427	3,427	0.14	0.03	—	3,438
Demolition	—	—	—	—	—	—	0.00	0.00	—	0.00	0.00	—	—	—	—	—	—	—

Onsite truck	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	—	0.00	0.00	0.00	0.00	0.00	0.00
Daily, Winter (Max)	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—
Off-Road Equipment	2.7	2.3	21	19	0.03	0.84	—	0.84	0.78	—	0.78	—	3,427	3,427	0.14	0.03	—	3,438
Demolition	—	—	—	—	—	—	0.00	0.00	—	0.00	0.00	—	—	—	—	—	—	—
Onsite truck	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	—	0.00	0.00	0.00	0.00	0.00	0.00
Average Daily	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—
Off-Road Equipment	0.75	0.63	5.7	5.2	0.01	0.23	—	0.23	0.21	—	0.21	—	939	939	0.04	0.01	—	942
Demolition	—	—	—	—	—	—	0.00	0.00	—	0.00	0.00	—	—	—	—	—	—	—
Onsite truck	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	—	0.00	0.00	0.00	0.00	0.00	0.00
Annual	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—
Off-Road Equipment	0.14	0.11	1.0	0.95	< 0.005	0.04	—	0.04	0.04	—	0.04	—	155	155	0.01	< 0.005	—	156
Demolition	—	—	—	—	—	—	0.00	0.00	—	0.00	0.00	—	—	—	—	—	—	—
Onsite truck	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	—	0.00	0.00	0.00	0.00	0.00	0.00
Offsite	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—
Daily, Summer (Max)	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—

Worker	0.04	0.04	0.03	0.52	0.00	0.00	0.12	0.12	0.00	0.03	0.03	—	133	133	< 0.005	< 0.005	0.46	134
Vendor	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	—	0.00	0.00	0.00	0.00	0.00	0.00
Hauling	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	—	0.00	0.00	0.00	0.00	0.00	0.00
Daily, Winter (Max)	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—
Worker	0.04	0.04	0.03	0.47	0.00	0.00	0.12	0.12	0.00	0.03	0.03	—	126	126	< 0.005	< 0.005	0.01	127
Vendor	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	—	0.00	0.00	0.00	0.00	0.00	0.00
Hauling	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	—	0.00	0.00	0.00	0.00	0.00	0.00
Average Daily	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—
Worker	0.01	0.01	0.01	0.13	0.00	0.00	0.03	0.03	0.00	0.01	0.01	—	34	34	< 0.005	< 0.005	0.05	35
Vendor	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	—	0.00	0.00	0.00	0.00	0.00	0.00
Hauling	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	—	0.00	0.00	0.00	0.00	0.00	0.00
Annual	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—
Worker	< 0.005	< 0.005	< 0.005	0.02	0.00	0.00	0.01	0.01	0.00	< 0.005	< 0.005	—	5.7	5.7	< 0.005	< 0.005	0.01	5.8
Vendor	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	—	0.00	0.00	0.00	0.00	0.00	0.00
Hauling	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	—	0.00	0.00	0.00	0.00	0.00	0.00

3.3. Site Preparation (2026) - Unmitigated

Criteria Pollutants (lb/day for daily, ton/yr for annual) and GHGs (lb/day for daily, MT/yr for annual)

Location	TOG	ROG	NOx	CO	SO2	PM10E	PM10D	PM10T	PM2.5E	PM2.5D	PM2.5T	BCO2	NBCO2	CO2T	CH4	N2O	R	CO2e
Onsite	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—
Daily, Summer (Max)	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—
Off-Road Equipment	3.7	3.1	29	29	0.05	1.2	—	1.2	1.1	—	1.1	—	5,298	5,298	0.21	0.04	—	5,316

Dust From Material Movement	—	—	—	—	—	—	20	20	—	10	10	—	—	—	—	—	—	—
Onsite truck	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	—	0.00	0.00	0.00	0.00	0.00	0.00
Daily, Winter (Max)	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—
Average Daily	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—
Off-Road Equipment	0.62	0.52	4.8	4.7	0.01	0.20	—	0.20	0.19	—	0.19	—	871	871	0.04	0.01	—	874
Dust From Material Movement	—	—	—	—	—	—	3.2	3.2	—	1.7	1.7	—	—	—	—	—	—	—
Onsite truck	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	—	0.00	0.00	0.00	0.00	0.00	0.00
Annual	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—
Off-Road Equipment	0.11	0.09	0.87	0.86	< 0.005	0.04	—	0.04	0.03	—	0.03	—	144	144	0.01	< 0.005	—	145
Dust From Material Movement	—	—	—	—	—	—	0.59	0.59	—	0.30	0.30	—	—	—	—	—	—	—
Onsite truck	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	—	0.00	0.00	0.00	0.00	0.00	0.00
Offsite	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—
Daily, Summer (Max)	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—
Worker	0.05	0.04	0.03	0.61	0.00	0.00	0.14	0.14	0.00	0.03	0.03	—	155	155	< 0.005	< 0.005	0.54	156

Vendor	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	—	0.00	0.00	0.00	0.00	0.00	0.00
Hauling	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	—	0.00	0.00	0.00	0.00	0.00	0.00
Daily, Winter (Max)	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—
Average Daily	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—
Worker	0.01	0.01	0.01	0.09	0.00	0.00	0.02	0.02	0.00	0.01	0.01	—	24	24	< 0.005	< 0.005	0.04	24
Vendor	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	—	0.00	0.00	0.00	0.00	0.00	0.00
Hauling	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	—	0.00	0.00	0.00	0.00	0.00	0.00
Annual	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—
Worker	< 0.005	< 0.005	< 0.005	0.02	0.00	0.00	< 0.005	< 0.005	0.00	< 0.005	< 0.005	—	4.0	4.0	< 0.005	< 0.005	0.01	4.1
Vendor	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	—	0.00	0.00	0.00	0.00	0.00	0.00
Hauling	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	—	0.00	0.00	0.00	0.00	0.00	0.00

3.5. Grading (2026) - Unmitigated

Criteria Pollutants (lb/day for daily, ton/yr for annual) and GHGs (lb/day for daily, MT/yr for annual)

Location	TOG	ROG	NOx	CO	SO2	PM10E	PM10D	PM10T	PM2.5E	PM2.5D	PM2.5T	BCO2	NBCO2	CO2T	CH4	N2O	R	CO2e
Onsite	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—
Daily, Summer (Max)	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—
Off-Road Equipment	3.6	3.0	27	28	0.06	1.1	—	1.1	1.0	—	1.0	—	6,599	6,599	0.27	0.05	—	6,621
Dust From Material Movement	—	—	—	—	—	—	9.2	9.2	—	3.7	3.7	—	—	—	—	—	—	—
Onsite truck	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	—	0.00	0.00	0.00	0.00	0.00	0.00

Daily, Winter (Max)	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—
Off-Road Equipment	3.6	3.0	27	28	0.06	1.1	—	1.1	1.0	—	1.0	—	6,599	6,599	0.27	0.05	—	6,621
Dust From Material Movement	—	—	—	—	—	—	9.2	9.2	—	3.7	3.7	—	—	—	—	—	—	—
Onsite truck	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	—	0.00	0.00	0.00	0.00	0.00	0.00
Average Daily	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—
Off-Road Equipment	0.99	0.83	7.4	7.5	0.02	0.31	—	0.31	0.28	—	0.28	—	1,795	1,795	0.07	0.01	—	1,801
Dust From Material Movement	—	—	—	—	—	—	2.5	2.5	—	0.99	0.99	—	—	—	—	—	—	—
Onsite truck	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	—	0.00	0.00	0.00	0.00	0.00	0.00
Annual	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—
Off-Road Equipment	0.18	0.15	1.4	1.4	< 0.005	0.06	—	0.06	0.05	—	0.05	—	297	297	0.01	< 0.005	—	298
Dust From Material Movement	—	—	—	—	—	—	0.46	0.46	—	0.18	0.18	—	—	—	—	—	—	—
Onsite truck	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	—	0.00	0.00	0.00	0.00	0.00	0.00
Offsite	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—

Daily, Summer (Max)	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—
Worker	0.06	0.05	0.04	0.69	0.00	0.00	0.17	0.17	0.00	0.04	0.04	—	177	177	< 0.005	< 0.005	0.62	178
Vendor	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	—	0.00	0.00	0.00	0.00	0.00	0.00
Hauling	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	—	0.00	0.00	0.00	0.00	0.00	0.00
Daily, Winter (Max)	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—
Worker	0.06	0.05	0.04	0.63	0.00	0.00	0.17	0.17	0.00	0.04	0.04	—	168	168	< 0.005	0.01	0.02	170
Vendor	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	—	0.00	0.00	0.00	0.00	0.00	0.00
Hauling	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	—	0.00	0.00	0.00	0.00	0.00	0.00
Average Daily	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—
Worker	0.02	0.01	0.01	0.17	0.00	0.00	0.04	0.04	0.00	0.01	0.01	—	46	46	< 0.005	< 0.005	0.07	46
Vendor	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	—	0.00	0.00	0.00	0.00	0.00	0.00
Hauling	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	—	0.00	0.00	0.00	0.00	0.00	0.00
Annual	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—
Worker	< 0.005	< 0.005	< 0.005	0.03	0.00	0.00	0.01	0.01	0.00	< 0.005	< 0.005	—	7.6	7.6	< 0.005	< 0.005	0.01	7.7
Vendor	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	—	0.00	0.00	0.00	0.00	0.00	0.00
Hauling	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	—	0.00	0.00	0.00	0.00	0.00	0.00

3.7. Grading (2027) - Unmitigated

Criteria Pollutants (lb/day for daily, ton/yr for annual) and GHGs (lb/day for daily, MT/yr for annual)

Location	TOG	ROG	NOx	CO	SO2	PM10E	PM10D	PM10T	PM2.5E	PM2.5D	PM2.5T	BCO2	NBCO2	CO2T	CH4	N2O	R	CO2e
Onsite	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—
Daily, Summer (Max)	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—

Daily, Winter (Max)	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—
Off-Road Equipment	3.5	2.9	26	27	0.06	1.0	—	1.0	0.96	—	0.96	—	6,598	6,598	0.27	0.05	—	6,621
Dust From Material Movement	—	—	—	—	—	—	9.2	9.2	—	3.7	3.7	—	—	—	—	—	—	—
Onsite truck	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	—	0.00	0.00	0.00	0.00	0.00	0.00
Average Daily	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—
Off-Road Equipment	0.54	0.46	4.0	4.2	0.01	0.16	—	0.16	0.15	—	0.15	—	1,020	1,020	0.04	0.01	—	1,024
Dust From Material Movement	—	—	—	—	—	—	1.4	1.4	—	0.56	0.56	—	—	—	—	—	—	—
Onsite truck	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	—	0.00	0.00	0.00	0.00	0.00	0.00
Annual	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—
Off-Road Equipment	0.10	0.08	0.72	0.77	< 0.005	0.03	—	0.03	0.03	—	0.03	—	169	169	0.01	< 0.005	—	169
Dust From Material Movement	—	—	—	—	—	—	0.26	0.26	—	0.10	0.10	—	—	—	—	—	—	—
Onsite truck	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	—	0.00	0.00	0.00	0.00	0.00	0.00
Offsite	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—

Daily, Summer (Max)	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—
Daily, Winter (Max)	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—
Worker	0.06	0.05	0.04	0.60	0.00	0.00	0.17	0.17	0.00	0.04	0.04	—	165	165	< 0.005	0.01	0.01	167
Vendor	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	—	0.00	0.00	0.00	0.00	0.00	0.00
Hauling	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	—	0.00	0.00	0.00	0.00	0.00	0.00
Average Daily	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—
Worker	0.01	0.01	0.01	0.09	0.00	0.00	0.02	0.02	0.00	0.01	0.01	—	25	25	< 0.005	< 0.005	0.04	26
Vendor	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	—	0.00	0.00	0.00	0.00	0.00	0.00
Hauling	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	—	0.00	0.00	0.00	0.00	0.00	0.00
Annual	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—
Worker	< 0.005	< 0.005	< 0.005	0.02	0.00	0.00	< 0.005	< 0.005	0.00	< 0.005	< 0.005	—	4.2	4.2	< 0.005	< 0.005	0.01	4.3
Vendor	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	—	0.00	0.00	0.00	0.00	0.00	0.00
Hauling	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	—	0.00	0.00	0.00	0.00	0.00	0.00

3.9. Building Construction (2027) - Unmitigated

Criteria Pollutants (lb/day for daily, ton/yr for annual) and GHGs (lb/day for daily, MT/yr for annual)

Location	TOG	ROG	NOx	CO	SO2	PM10E	PM10D	PM10T	PM2.5E	PM2.5D	PM2.5T	BCO2	NBCO2	CO2T	CH4	N2O	R	CO2e
Onsite	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—
Daily, Summer (Max)	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—
Off-Road Equipment	1.2	1.0	9.4	13	0.02	0.34	—	0.34	0.31	—	0.31	—	2,397	2,397	0.10	0.02	—	2,405
Onsite truck	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	—	0.00	0.00	0.00	0.00	0.00	0.00

Daily, Winter (Max)	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—
Off-Road Equipment	1.2	1.0	9.4	13	0.02	0.34	—	0.34	0.31	—	0.31	—	2,397	2,397	0.10	0.02	—	2,405
Onsite truck	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	—	0.00	0.00	0.00	0.00	0.00	0.00
Average Daily	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—
Off-Road Equipment	0.69	0.58	5.3	7.2	0.01	0.19	—	0.19	0.17	—	0.17	—	1,342	1,342	0.05	0.01	—	1,346
Onsite truck	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	—	0.00	0.00	0.00	0.00	0.00	0.00
Annual	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—
Off-Road Equipment	0.13	0.11	0.96	1.3	< 0.005	0.03	—	0.03	0.03	—	0.03	—	222	222	0.01	< 0.005	—	223
Onsite truck	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	—	0.00	0.00	0.00	0.00	0.00	0.00
Offsite	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—
Daily, Summer (Max)	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—
Worker	8.0	7.2	5.2	94	0.00	0.00	24	24	0.00	5.6	5.6	—	25,057	25,057	0.38	0.19	80	25,204
Vendor	2.2	0.40	19	14	0.08	0.08	3.2	3.3	0.08	0.91	0.99	—	12,286	12,286	1.7	1.8	25	12,895
Hauling	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	—	0.00	0.00	0.00	0.00	0.00	0.00
Daily, Winter (Max)	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—
Worker	8.0	7.1	6.3	86	0.00	0.00	24	24	0.00	5.6	5.6	—	23,705	23,705	0.51	0.93	2.1	23,998

Vendor	2.2	0.39	20	14	0.08	0.08	3.2	3.3	0.08	0.91	0.99	—	12,282	12,282	1.7	1.8	0.65	12,866
Hauling	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	—	0.00	0.00	0.00	0.00	0.00	0.00
Average Daily	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—
Worker	4.4	3.8	3.0	47	0.00	0.00	13	13	0.00	3.0	3.0	—	13,291	13,291	0.25	0.52	19	13,472
Vendor	1.2	0.22	11	7.8	0.04	0.04	1.7	1.8	0.04	0.50	0.54	—	6,875	6,875	0.93	1.0	6.1	7,208
Hauling	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	—	0.00	0.00	0.00	0.00	0.00	0.00
Annual	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—
Worker	0.80	0.70	0.55	8.5	0.00	0.00	2.4	2.4	0.00	0.55	0.55	—	2,200	2,200	0.04	0.09	3.2	2,230
Vendor	0.22	0.04	2.0	1.4	0.01	0.01	0.32	0.33	0.01	0.09	0.10	—	1,138	1,138	0.15	0.17	1.0	1,193
Hauling	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	—	0.00	0.00	0.00	0.00	0.00	0.00

3.11. Building Construction (2028) - Unmitigated

Criteria Pollutants (lb/day for daily, ton/yr for annual) and GHGs (lb/day for daily, MT/yr for annual)

Location	TOG	ROG	NOx	CO	SO2	PM10E	PM10D	PM10T	PM2.5E	PM2.5D	PM2.5T	BCO2	NBCO2	CO2T	CH4	N2O	R	CO2e
Onsite	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—
Daily, Summer (Max)	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—
Off-Road Equipment	1.2	0.99	8.9	13	0.02	0.30	—	0.30	0.28	—	0.28	—	2,397	2,397	0.10	0.02	—	2,406
Onsite truck	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	—	0.00	0.00	0.00	0.00	0.00	0.00
Daily, Winter (Max)	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—
Off-Road Equipment	1.2	0.99	8.9	13	0.02	0.30	—	0.30	0.28	—	0.28	—	2,397	2,397	0.10	0.02	—	2,406

Onsite truck	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	—	0.00	0.00	0.00	0.00	0.00	0.00
Average Daily	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—
Off-Road Equipment	0.85	0.71	6.4	9.3	0.02	0.22	—	0.22	0.20	—	0.20	—	1,717	1,717	0.07	0.01	—	1,723
Onsite truck	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	—	0.00	0.00	0.00	0.00	0.00	0.00
Annual	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—
Off-Road Equipment	0.15	0.13	1.2	1.7	< 0.005	0.04	—	0.04	0.04	—	0.04	—	284	284	0.01	< 0.005	—	285
Onsite truck	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	—	0.00	0.00	0.00	0.00	0.00	0.00
Offsite	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—
Daily, Summer (Max)	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—
Worker	7.9	7.0	4.4	90	0.00	0.00	24	24	0.00	5.6	5.6	—	24,628	24,628	0.38	0.19	72	24,767
Vendor	2.0	0.40	17	14	0.08	0.08	3.2	3.3	0.08	0.91	0.99	—	11,919	11,919	1.6	1.7	23	12,499
Hauling	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	—	0.00	0.00	0.00	0.00	0.00	0.00
Daily, Winter (Max)	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—
Worker	7.8	6.8	5.5	81	0.00	0.00	24	24	0.00	5.6	5.6	—	23,300	23,300	0.44	0.93	1.9	23,591
Vendor	2.0	0.38	18	14	0.08	0.08	3.2	3.3	0.08	0.91	0.99	—	11,916	11,916	1.6	1.7	0.58	12,475
Hauling	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	—	0.00	0.00	0.00	0.00	0.00	0.00
Average Daily	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—
Worker	5.5	4.8	3.8	57	0.00	0.00	17	17	0.00	3.9	3.9	—	16,718	16,718	0.32	0.14	22	16,789
Vendor	1.4	0.28	13	9.7	0.06	0.06	2.2	2.3	0.06	0.64	0.70	—	8,536	8,536	1.1	1.2	7.0	8,943

Hauling	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	—	0.00	0.00	0.00	0.00	0.00	0.00
Annual	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—
Worker	1.00	0.88	0.70	10	0.00	0.00	3.0	3.0	0.00	0.71	0.71	—	2,768	2,768	0.05	0.02	3.7	2,780
Vendor	0.26	0.05	2.3	1.8	0.01	0.01	0.41	0.42	0.01	0.12	0.13	—	1,413	1,413	0.19	0.21	1.2	1,481
Hauling	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	—	0.00	0.00	0.00	0.00	0.00	0.00

3.13. Building Construction (2029) - Unmitigated

Criteria Pollutants (lb/day for daily, ton/yr for annual) and GHGs (lb/day for daily, MT/yr for annual)

Location	TOG	ROG	NOx	CO	SO2	PM10E	PM10D	PM10T	PM2.5E	PM2.5D	PM2.5T	BCO2	NBCO2	CO2T	CH4	N2O	R	CO2e
Onsite	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—
Daily, Summer (Max)	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—
Off-Road Equipment	1.2	0.97	8.6	13	0.02	0.28	—	0.28	0.25	—	0.25	—	2,397	2,397	0.10	0.02	—	2,405
Onsite truck	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	—	0.00	0.00	0.00	0.00	0.00	0.00
Daily, Winter (Max)	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—
Off-Road Equipment	1.2	0.97	8.6	13	0.02	0.28	—	0.28	0.25	—	0.25	—	2,397	2,397	0.10	0.02	—	2,405
Onsite truck	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	—	0.00	0.00	0.00	0.00	0.00	0.00
Average Daily	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—
Off-Road Equipment	0.82	0.69	6.1	9.2	0.02	0.20	—	0.20	0.18	—	0.18	—	1,712	1,712	0.07	0.01	—	1,718

Onsite truck	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	—	0.00	0.00	0.00	0.00	0.00	0.00
Annual	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—
Off-Road Equipment	0.15	0.13	1.1	1.7	< 0.005	0.04	—	0.04	0.03	—	0.03	—	283	283	0.01	< 0.005	—	284
Onsite truck	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	—	0.00	0.00	0.00	0.00	0.00	0.00
Offsite	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—
Daily, Summer (Max)	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—
Worker	7.6	6.8	4.4	85	0.00	0.00	24	24	0.00	5.6	5.6	—	24,223	24,223	0.32	0.19	64	24,352
Vendor	1.9	0.32	16	13	0.08	0.08	3.2	3.3	0.08	0.91	0.99	—	11,518	11,518	1.5	1.7	20	12,093
Hauling	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	—	0.00	0.00	0.00	0.00	0.00	0.00
Daily, Winter (Max)	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—
Worker	7.6	6.6	5.4	78	0.00	0.00	24	24	0.00	5.6	5.6	—	22,917	22,917	0.44	0.93	1.7	23,208
Vendor	1.9	0.30	17	13	0.08	0.08	3.2	3.3	0.08	0.91	0.99	—	11,517	11,517	1.5	1.7	0.51	12,073
Hauling	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	—	0.00	0.00	0.00	0.00	0.00	0.00
Average Daily	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—
Worker	5.3	4.7	3.8	54	0.00	0.00	17	17	0.00	3.9	3.9	—	16,398	16,398	0.27	0.14	20	16,465
Vendor	1.4	0.21	12	9.4	0.06	0.06	2.2	2.3	0.06	0.64	0.70	—	8,227	8,227	1.1	1.2	6.1	8,630
Hauling	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	—	0.00	0.00	0.00	0.00	0.00	0.00
Annual	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—
Worker	0.97	0.86	0.69	9.9	0.00	0.00	3.0	3.0	0.00	0.71	0.71	—	2,715	2,715	0.05	0.02	3.3	2,726
Vendor	0.25	0.04	2.1	1.7	0.01	0.01	0.40	0.41	0.01	0.12	0.13	—	1,362	1,362	0.18	0.21	1.0	1,429
Hauling	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	—	0.00	0.00	0.00	0.00	0.00	0.00

3.15. Building Construction (2030) - Unmitigated

Criteria Pollutants (lb/day for daily, ton/yr for annual) and GHGs (lb/day for daily, MT/yr for annual)

Location	TOG	ROG	NOx	CO	SO2	PM10E	PM10D	PM10T	PM2.5E	PM2.5D	PM2.5T	BCO2	NBCO2	CO2T	CH4	N2O	R	CO2e
Onsite	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—
Daily, Summer (Max)	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—
Off-Road Equipment	1.1	0.94	8.4	13	0.02	0.26	—	0.26	0.24	—	0.24	—	2,397	2,397	0.10	0.02	—	2,405
Onsite truck	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	—	0.00	0.00	0.00	0.00	0.00	0.00
Daily, Winter (Max)	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—
Off-Road Equipment	1.1	0.94	8.4	13	0.02	0.26	—	0.26	0.24	—	0.24	—	2,397	2,397	0.10	0.02	—	2,405
Onsite truck	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	—	0.00	0.00	0.00	0.00	0.00	0.00
Average Daily	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—
Off-Road Equipment	0.80	0.67	6.0	9.2	0.02	0.19	—	0.19	0.17	—	0.17	—	1,712	1,712	0.07	0.01	—	1,718
Onsite truck	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	—	0.00	0.00	0.00	0.00	0.00	0.00
Annual	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—
Off-Road Equipment	0.15	0.12	1.1	1.7	< 0.005	0.03	—	0.03	0.03	—	0.03	—	283	283	0.01	< 0.005	—	284

Onsite truck	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	—	0.00	0.00	0.00	0.00	0.00	0.00
Offsite	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—
Daily, Summer (Max)	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—
Worker	6.6	6.5	4.3	82	0.00	0.00	24	24	0.00	5.6	5.6	—	23,839	23,839	0.32	0.19	57	23,961
Vendor	1.7	0.31	15	13	0.08	0.08	3.2	3.3	0.08	0.91	0.99	—	11,106	11,106	1.4	1.7	17	11,653
Hauling	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	—	0.00	0.00	0.00	0.00	0.00	0.00
Daily, Winter (Max)	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—
Worker	6.6	6.5	5.4	74	0.00	0.00	24	24	0.00	5.6	5.6	—	22,553	22,553	0.44	0.19	1.5	22,622
Vendor	1.7	0.30	16	13	0.08	0.08	3.2	3.3	0.08	0.91	0.99	—	11,105	11,105	1.4	1.7	0.45	11,636
Hauling	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	—	0.00	0.00	0.00	0.00	0.00	0.00
Average Daily	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—
Worker	4.7	4.6	3.2	51	0.00	0.00	17	17	0.00	3.9	3.9	—	16,138	16,138	0.27	0.14	18	16,203
Vendor	1.2	0.21	11	9.1	0.06	0.06	2.2	2.3	0.06	0.64	0.70	—	7,932	7,932	1.0	1.2	5.4	8,316
Hauling	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	—	0.00	0.00	0.00	0.00	0.00	0.00
Annual	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—
Worker	0.85	0.83	0.59	9.3	0.00	0.00	3.0	3.0	0.00	0.71	0.71	—	2,672	2,672	0.05	0.02	2.9	2,683
Vendor	0.23	0.04	2.0	1.7	0.01	0.01	0.40	0.41	0.01	0.12	0.13	—	1,313	1,313	0.17	0.20	0.89	1,377
Hauling	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	—	0.00	0.00	0.00	0.00	0.00	0.00

3.17. Building Construction (2031) - Unmitigated

Criteria Pollutants (lb/day for daily, ton/yr for annual) and GHGs (lb/day for daily, MT/yr for annual)

Location	TOG	ROG	NOx	CO	SO2	PM10E	PM10D	PM10T	PM2.5E	PM2.5D	PM2.5T	BCO2	NBCO2	CO2T	CH4	N2O	R	CO2e
Onsite	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—

Daily, Summer (Max)	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—
Off-Road Equipment	1.1	0.92	8.1	13	0.02	0.24	—	0.24	0.22	—	0.22	—	2,397	2,397	0.10	0.02	—	2,405
Onsite truck	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	—	0.00	0.00	0.00	0.00	0.00	0.00
Daily, Winter (Max)	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—
Off-Road Equipment	1.1	0.92	8.1	13	0.02	0.24	—	0.24	0.22	—	0.22	—	2,397	2,397	0.10	0.02	—	2,405
Onsite truck	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	—	0.00	0.00	0.00	0.00	0.00	0.00
Average Daily	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—
Off-Road Equipment	0.78	0.66	5.8	9.2	0.02	0.17	—	0.17	0.16	—	0.16	—	1,712	1,712	0.07	0.01	—	1,718
Onsite truck	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	—	0.00	0.00	0.00	0.00	0.00	0.00
Annual	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—
Off-Road Equipment	0.14	0.12	1.1	1.7	< 0.005	0.03	—	0.03	0.03	—	0.03	—	283	283	0.01	< 0.005	—	284
Onsite truck	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	—	0.00	0.00	0.00	0.00	0.00	0.00
Offsite	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—
Daily, Summer (Max)	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—

Worker	6.5	6.3	3.5	79	0.00	0.00	24	24	0.00	5.6	5.6	—	23,605	23,605	0.32	0.19	50	23,720
Vendor	1.6	0.31	14	12	0.08	0.08	3.2	3.3	0.08	0.91	0.99	—	10,691	10,691	1.2	1.6	15	11,208
Hauling	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	—	0.00	0.00	0.00	0.00	0.00	0.00
Daily, Winter (Max)	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—
Worker	6.3	6.2	4.6	72	0.00	0.00	24	24	0.00	5.6	5.6	—	22,330	22,330	0.38	0.19	1.3	22,397
Vendor	1.6	0.30	15	12	0.08	0.08	3.2	3.3	0.08	0.91	0.99	—	10,692	10,692	1.2	1.6	0.39	11,194
Hauling	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	—	0.00	0.00	0.00	0.00	0.00	0.00
Average Daily	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—
Worker	4.5	4.3	3.2	49	0.00	0.00	17	17	0.00	3.9	3.9	—	15,978	15,978	0.27	0.14	15	16,041
Vendor	1.2	0.21	10	8.8	0.06	0.06	2.2	2.3	0.06	0.64	0.70	—	7,637	7,637	0.89	1.1	4.6	8,000
Hauling	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	—	0.00	0.00	0.00	0.00	0.00	0.00
Annual	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—
Worker	0.82	0.79	0.58	9.0	0.00	0.00	3.0	3.0	0.00	0.71	0.71	—	2,645	2,645	0.05	0.02	2.6	2,656
Vendor	0.21	0.04	1.9	1.6	0.01	0.01	0.40	0.41	0.01	0.12	0.13	—	1,264	1,264	0.15	0.19	0.76	1,324
Hauling	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	—	0.00	0.00	0.00	0.00	0.00	0.00

3.19. Building Construction (2032) - Unmitigated

Criteria Pollutants (lb/day for daily, ton/yr for annual) and GHGs (lb/day for daily, MT/yr for annual)

Location	TOG	ROG	NOx	CO	SO2	PM10E	PM10D	PM10T	PM2.5E	PM2.5D	PM2.5T	BCO2	NBCO2	CO2T	CH4	N2O	R	CO2e
Onsite	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—
Daily, Summer (Max)	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—
Off-Road Equipment	1.1	0.90	7.9	13	0.02	0.22	—	0.22	0.21	—	0.21	—	2,397	2,397	0.10	0.02	—	2,405

Onsite truck	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	—	0.00	0.00	0.00	0.00	0.00	0.00
Daily, Winter (Max)	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—
Off-Road Equipment	1.1	0.90	7.9	13	0.02	0.22	—	0.22	0.21	—	0.21	—	2,397	2,397	0.10	0.02	—	2,405
Onsite truck	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	—	0.00	0.00	0.00	0.00	0.00	0.00
Average Daily	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—
Off-Road Equipment	0.77	0.64	5.6	9.2	0.02	0.16	—	0.16	0.15	—	0.15	—	1,717	1,717	0.07	0.01	—	1,723
Onsite truck	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	—	0.00	0.00	0.00	0.00	0.00	0.00
Annual	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—
Off-Road Equipment	0.14	0.12	1.0	1.7	< 0.005	0.03	—	0.03	0.03	—	0.03	—	284	284	0.01	< 0.005	—	285
Onsite truck	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	—	0.00	0.00	0.00	0.00	0.00	0.00
Offsite	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—
Daily, Summer (Max)	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—
Worker	6.3	6.2	3.5	76	0.00	0.00	24	24	0.00	5.6	5.6	—	23,278	23,278	0.32	0.19	44	23,387
Vendor	1.5	0.31	13	12	0.08	0.08	3.1	3.2	0.08	0.91	0.99	—	10,279	10,279	1.2	1.6	13	10,791
Hauling	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	—	0.00	0.00	0.00	0.00	0.00	0.00
Daily, Winter (Max)	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—

Worker	6.3	6.1	4.5	68	0.00	0.00	24	24	0.00	5.6	5.6	—	22,020	22,020	0.38	0.19	1.1	22,087
Vendor	1.5	0.30	14	12	0.08	0.08	3.1	3.2	0.08	0.91	0.99	—	10,280	10,280	1.2	1.6	0.33	10,780
Hauling	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	—	0.00	0.00	0.00	0.00	0.00	0.00
Average Daily	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—
Worker	4.4	4.3	3.2	47	0.00	0.00	17	17	0.00	3.9	3.9	—	15,800	15,800	0.23	0.14	14	15,860
Vendor	1.1	0.21	9.7	8.5	0.06	0.06	2.2	2.2	0.06	0.64	0.70	—	7,363	7,363	0.83	1.1	3.9	7,725
Hauling	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	—	0.00	0.00	0.00	0.00	0.00	0.00
Annual	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—
Worker	0.80	0.79	0.58	8.7	0.00	0.00	3.0	3.0	0.00	0.71	0.71	—	2,616	2,616	0.04	0.02	2.2	2,626
Vendor	0.19	0.04	1.8	1.6	0.01	0.01	0.40	0.41	0.01	0.12	0.13	—	1,219	1,219	0.14	0.19	0.65	1,279
Hauling	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	—	0.00	0.00	0.00	0.00	0.00	0.00

3.21. Building Construction (2033) - Unmitigated

Criteria Pollutants (lb/day for daily, ton/yr for annual) and GHGs (lb/day for daily, MT/yr for annual)

Location	TOG	ROG	NOx	CO	SO2	PM10E	PM10D	PM10T	PM2.5E	PM2.5D	PM2.5T	BCO2	NBCO2	CO2T	CH4	N2O	R	CO2e
Onsite	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—
Daily, Summer (Max)	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—
Daily, Winter (Max)	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—
Off-Road Equipment	1.0	0.88	7.7	13	0.02	0.20	—	0.20	0.19	—	0.19	—	2,397	2,397	0.10	0.02	—	2,405
Onsite truck	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	—	0.00	0.00	0.00	0.00	0.00	0.00
Average Daily	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—

Off-Road	0.12	0.10	0.87	1.5	< 0.005	0.02	—	0.02	0.02	—	0.02	—	272	272	0.01	< 0.005	—	273
Onsite truck	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	—	0.00	0.00	0.00	0.00	0.00	0.00
Annual	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—
Off-Road Equipment	0.02	0.02	0.16	0.26	< 0.005	< 0.005	—	< 0.005	< 0.005	—	< 0.005	—	45	45	< 0.005	< 0.005	—	45
Onsite truck	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	—	0.00	0.00	0.00	0.00	0.00	0.00
Offsite	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—
Daily, Summer (Max)	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—
Daily, Winter (Max)	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—
Worker	6.1	5.9	4.4	66	0.00	0.00	24	24	0.00	5.6	5.6	—	21,738	21,738	0.38	0.19	0.99	21,805
Vendor	1.4	0.30	13	12	0.08	0.08	3.1	3.2	0.08	0.91	0.99	—	9,872	9,872	1.1	1.5	0.28	10,347
Hauling	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	—	0.00	0.00	0.00	0.00	0.00	0.00
Average Daily	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—
Worker	0.68	0.67	0.41	7.3	0.00	0.00	2.6	2.6	0.00	0.62	0.62	—	2,472	2,472	0.04	0.02	1.9	2,481
Vendor	0.16	0.03	1.4	1.3	0.01	0.01	0.34	0.35	0.01	0.10	0.11	—	1,120	1,120	0.12	0.17	0.52	1,175
Hauling	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	—	0.00	0.00	0.00	0.00	0.00	0.00
Annual	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—
Worker	0.12	0.12	0.08	1.3	0.00	0.00	0.48	0.48	0.00	0.11	0.11	—	409	409	0.01	< 0.005	0.31	411
Vendor	0.03	0.01	0.26	0.24	< 0.005	< 0.005	0.06	0.06	< 0.005	0.02	0.02	—	185	185	0.02	0.03	0.09	194
Hauling	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	—	0.00	0.00	0.00	0.00	0.00	0.00

3.23. Paving (2033) - Unmitigated

Criteria Pollutants (lb/day for daily, ton/yr for annual) and GHGs (lb/day for daily, MT/yr for annual)

Location	TOG	ROG	NOx	CO	SO2	PM10E	PM10D	PM10T	PM2.5E	PM2.5D	PM2.5T	BCO2	NBCO2	CO2T	CH4	N2O	R	CO2e
Onsite	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—
Daily, Summer (Max)	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—
Off-Road Equipment	0.70	0.59	5.9	9.8	0.01	0.18	—	0.18	0.17	—	0.17	—	1,511	1,511	0.06	0.01	—	1,516
Paving	0.00	0.00	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—
Onsite truck	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	—	0.00	0.00	0.00	0.00	0.00	0.00
Daily, Winter (Max)	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—
Off-Road Equipment	0.70	0.59	5.9	9.8	0.01	0.18	—	0.18	0.17	—	0.17	—	1,511	1,511	0.06	0.01	—	1,516
Paving	0.00	0.00	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—
Onsite truck	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	—	0.00	0.00	0.00	0.00	0.00	0.00
Average Daily	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—
Off-Road Equipment	0.21	0.18	1.8	3.0	< 0.005	0.06	—	0.06	0.05	—	0.05	—	455	455	0.02	< 0.005	—	457
Paving	0.00	0.00	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—
Onsite truck	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	—	0.00	0.00	0.00	0.00	0.00	0.00
Annual	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—

Off-Road Equipment	0.04	0.03	0.33	0.54	< 0.005	0.01	—	0.01	0.01	—	0.01	—	75	75	< 0.005	< 0.005	—	76
Paving	0.00	0.00	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—
Onsite truck	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	—	0.00	0.00	0.00	0.00	0.00	0.00
Offsite	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—
Daily, Summer (Max)	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—
Worker	0.03	0.03	0.02	0.38	0.00	0.00	0.12	0.12	0.00	0.03	0.03	—	120	120	< 0.005	< 0.005	0.20	120
Vendor	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	—	0.00	0.00	0.00	0.00	0.00	0.00
Hauling	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	—	0.00	0.00	0.00	0.00	0.00	0.00
Daily, Winter (Max)	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—
Worker	0.03	0.03	0.02	0.34	0.00	0.00	0.12	0.12	0.00	0.03	0.03	—	113	113	< 0.005	< 0.005	0.01	114
Vendor	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	—	0.00	0.00	0.00	0.00	0.00	0.00
Hauling	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	—	0.00	0.00	0.00	0.00	0.00	0.00
Average Daily	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—
Worker	0.01	0.01	0.01	0.10	0.00	0.00	0.04	0.04	0.00	0.01	0.01	—	34	34	< 0.005	< 0.005	0.03	34
Vendor	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	—	0.00	0.00	0.00	0.00	0.00	0.00
Hauling	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	—	0.00	0.00	0.00	0.00	0.00	0.00
Annual	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—
Worker	< 0.005	< 0.005	< 0.005	0.02	0.00	0.00	0.01	0.01	0.00	< 0.005	< 0.005	—	5.7	5.7	< 0.005	< 0.005	< 0.005	5.7
Vendor	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	—	0.00	0.00	0.00	0.00	0.00	0.00
Hauling	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	—	0.00	0.00	0.00	0.00	0.00	0.00

3.25. Architectural Coating (2033) - Unmitigated

Criteria Pollutants (lb/day for daily, ton/yr for annual) and GHGs (lb/day for daily, MT/yr for annual)

Location	TOG	ROG	NOx	CO	SO2	PM10E	PM10D	PM10T	PM2.5E	PM2.5D	PM2.5T	BCO2	NBCO2	CO2T	CH4	N2O	R	CO2e
Onsite	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—
Daily, Summer (Max)	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—
Off-Road Equipment	0.11	0.09	0.76	1.1	< 0.005	0.01	—	0.01	0.01	—	0.01	—	134	134	0.01	< 0.005	—	134
Architectural Coatings	492	492	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—
Onsite truck	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	—	0.00	0.00	0.00	0.00	0.00	0.00
Daily, Winter (Max)	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—
Off-Road Equipment	0.11	0.09	0.76	1.1	< 0.005	0.01	—	0.01	0.01	—	0.01	—	134	134	0.01	< 0.005	—	134
Architectural Coatings	492	492	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—
Onsite truck	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	—	0.00	0.00	0.00	0.00	0.00	0.00
Average Daily	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—
Off-Road Equipment	0.03	0.03	0.23	0.33	< 0.005	< 0.005	—	< 0.005	< 0.005	—	< 0.005	—	40	40	< 0.005	< 0.005	—	40

Architectural Coating	146	146	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—
Onsite truck	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	—	0.00	0.00	0.00	0.00	0.00	0.00
Annual	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—
Off-Road Equipment	0.01	< 0.005	0.04	0.06	< 0.005	< 0.005	—	< 0.005	< 0.005	—	< 0.005	—	6.6	6.6	< 0.005	< 0.005	—	6.6
Architectural Coatings	27	27	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—
Onsite truck	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	—	0.00	0.00	0.00	0.00	0.00	0.00
Offsite	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—
Daily, Summer (Max)	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—
Worker	1.2	1.2	0.69	15	0.00	0.00	4.8	4.8	0.00	1.1	1.1	—	4,596	4,596	0.05	0.04	7.6	4,616
Vendor	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	—	0.00	0.00	0.00	0.00	0.00	0.00
Hauling	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	—	0.00	0.00	0.00	0.00	0.00	0.00
Daily, Winter (Max)	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—
Worker	1.2	1.2	0.89	13	0.00	0.00	4.8	4.8	0.00	1.1	1.1	—	4,348	4,348	0.08	0.04	0.20	4,361
Vendor	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	—	0.00	0.00	0.00	0.00	0.00	0.00
Hauling	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	—	0.00	0.00	0.00	0.00	0.00	0.00
Average Daily	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—
Worker	0.36	0.35	0.22	3.8	0.00	0.00	1.4	1.4	0.00	0.32	0.32	—	1,296	1,296	0.02	0.01	0.98	1,300
Vendor	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	—	0.00	0.00	0.00	0.00	0.00	0.00
Hauling	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	—	0.00	0.00	0.00	0.00	0.00	0.00

Annual	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—
Worker	0.07	0.06	0.04	0.69	0.00	0.00	0.25	0.25	0.00	0.06	0.06	—	214	214	< 0.005	< 0.005	0.16	215
Vendor	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	—	0.00	0.00	0.00	0.00	0.00	0.00
Hauling	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	—	0.00	0.00	0.00	0.00	0.00	0.00

3.27. Architectural Coating (2034) - Unmitigated

Criteria Pollutants (lb/day for daily, ton/yr for annual) and GHGs (lb/day for daily, MT/yr for annual)

Location	TOG	ROG	NOx	CO	SO2	PM10E	PM10D	PM10T	PM2.5E	PM2.5D	PM2.5T	BCO2	NBCO2	CO2T	CH4	N2O	R	CO2e
Onsite	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—
Daily, Summer (Max)	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—
Daily, Winter (Max)	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—
Off-Road Equipment	0.11	0.09	0.76	1.1	< 0.005	0.01	—	0.01	0.01	—	0.01	—	134	134	0.01	< 0.005	—	134
Architectural Coatings	492	492	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—
Onsite truck	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	—	0.00	0.00	0.00	0.00	0.00	0.00
Average Daily	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—
Off-Road Equipment	< 0.005	< 0.005	< 0.005	0.01	< 0.005	< 0.005	—	< 0.005	< 0.005	—	< 0.005	—	0.78	0.78	< 0.005	< 0.005	—	0.79
Architectural Coatings	2.9	2.9	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—

Onsite truck	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	—	0.00	0.00	0.00	0.00	0.00	0.00
Annual	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—
Off-Road Equipment	< 0.005	< 0.005	< 0.005	< 0.005	< 0.005	< 0.005	—	< 0.005	< 0.005	—	< 0.005	—	0.13	0.13	< 0.005	< 0.005	—	0.13
Architectural Coatings	0.53	0.53	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—
Onsite truck	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	—	0.00	0.00	0.00	0.00	0.00	0.00
Offsite	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—
Daily, Summer (Max)	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—
Daily, Winter (Max)	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—
Worker	1.2	1.1	0.74	13	0.00	0.00	4.8	4.8	0.00	1.1	1.1	—	4,296	4,296	0.06	0.04	0.17	4,309
Vendor	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	—	0.00	0.00	0.00	0.00	0.00	0.00
Hauling	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	—	0.00	0.00	0.00	0.00	0.00	0.00
Average Daily	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—
Worker	0.01	0.01	< 0.005	0.07	0.00	0.00	0.03	0.03	0.00	0.01	0.01	—	25	25	< 0.005	< 0.005	0.02	25
Vendor	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	—	0.00	0.00	0.00	0.00	0.00	0.00
Hauling	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	—	0.00	0.00	0.00	0.00	0.00	0.00
Annual	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—
Worker	< 0.005	< 0.005	< 0.005	0.01	0.00	0.00	< 0.005	< 0.005	0.00	< 0.005	< 0.005	—	4.2	4.2	< 0.005	< 0.005	< 0.005	4.2
Vendor	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	—	0.00	0.00	0.00	0.00	0.00	0.00
Hauling	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	—	0.00	0.00	0.00	0.00	0.00	0.00

4. Operations Emissions Details

4.1. Mobile Emissions by Land Use

4.1.1. Unmitigated

Criteria Pollutants (lb/day for daily, ton/yr for annual) and GHGs (lb/day for daily, MT/yr for annual)

Land Use	TOG	ROG	NOx	CO	SO2	PM10E	PM10D	PM10T	PM2.5E	PM2.5D	PM2.5T	BCO2	NBCO2	CO2T	CH4	N2O	R	CO2e
Daily, Summer (Max)	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—
Apartments Mid Rise	22	20	9.7	149	0.38	0.13	41	41	0.13	10	11	—	38,498	38,498	1.5	1.5	3.8	38,975
Condo/Townhouse High Rise	22	20	9.7	149	0.38	0.13	41	41	0.13	10	11	—	38,498	38,498	1.5	1.5	3.8	38,975
Total	44	41	19	298	0.75	0.27	82	82	0.25	21	21	—	76,997	76,997	3.1	2.9	7.6	77,951
Daily, Winter (Max)	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—
Apartments Mid Rise	22	20	11	146	0.36	0.13	41	41	0.13	10	11	—	36,801	36,801	1.7	1.6	0.10	37,323
Condo/Townhouse High Rise	22	20	11	146	0.36	0.13	41	41	0.13	10	11	—	36,801	36,801	1.7	1.6	0.10	37,323
Total	44	41	23	293	0.72	0.27	82	82	0.25	21	21	—	73,602	73,602	3.4	3.2	0.20	74,645
Annual	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—

Apartments Mid Rise	3.7	3.5	1.9	25	0.06	0.02	6.9	7.0	0.02	1.8	1.8	—	5,800	5,800	0.26	0.25	0.26	5,879
Condo/Townhouse High Rise	3.7	3.5	1.9	25	0.06	0.02	6.9	7.0	0.02	1.8	1.8	—	5,800	5,800	0.26	0.25	0.26	5,879
Total	7.5	7.0	3.7	49	0.13	0.05	14	14	0.04	3.5	3.6	—	11,599	11,599	0.51	0.49	0.52	11,759

4.2. Energy

4.2.1. Electricity Emissions By Land Use - Unmitigated

Criteria Pollutants (lb/day for daily, ton/yr for annual) and GHGs (lb/day for daily, MT/yr for annual)

Land Use	TOG	ROG	NOx	CO	SO2	PM10E	PM10D	PM10T	PM2.5E	PM2.5D	PM2.5T	BCO2	NBCO2	CO2T	CH4	N2O	R	CO2e
Daily, Summer (Max)	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—
Apartments Mid Rise	—	—	—	—	—	—	—	—	—	—	—	—	3,813	3,813	0.62	0.07	—	3,851
Condo/Townhouse High Rise	—	—	—	—	—	—	—	—	—	—	—	—	3,813	3,813	0.62	0.07	—	3,851
Total	—	—	—	—	—	—	—	—	—	—	—	—	7,626	7,626	1.2	0.15	—	7,701
Daily, Winter (Max)	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—
Apartments Mid Rise	—	—	—	—	—	—	—	—	—	—	—	—	3,813	3,813	0.62	0.07	—	3,851

Condo/Townhouse	—	—	—	—	—	—	—	—	—	—	—	—	3,813	3,813	0.62	0.07	—	3,851
Total	—	—	—	—	—	—	—	—	—	—	—	—	7,626	7,626	1.2	0.15	—	7,701
Annual	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—
Apartments Mid Rise	—	—	—	—	—	—	—	—	—	—	—	—	631	631	0.10	0.01	—	638
Condo/Townhouse High Rise	—	—	—	—	—	—	—	—	—	—	—	—	631	631	0.10	0.01	—	638
Total	—	—	—	—	—	—	—	—	—	—	—	—	1,263	1,263	0.20	0.02	—	1,275

4.2.3. Natural Gas Emissions By Land Use - Unmitigated

Criteria Pollutants (lb/day for daily, ton/yr for annual) and GHGs (lb/day for daily, MT/yr for annual)

Land Use	TOG	ROG	NOx	CO	SO2	PM10E	PM10D	PM10T	PM2.5E	PM2.5D	PM2.5T	BCO2	NBCO2	CO2T	CH4	N2O	R	CO2e
Daily, Summer (Max)	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—
Apartments Mid Rise	0.52	0.26	4.4	1.9	0.03	0.36	—	0.36	0.36	—	0.36	—	5,643	5,643	0.50	0.01	—	5,659
Condo/Townhouse High Rise	0.52	0.26	4.4	1.9	0.03	0.36	—	0.36	0.36	—	0.36	—	5,643	5,643	0.50	0.01	—	5,659
Total	1.0	0.52	8.9	3.8	0.06	0.72	—	0.72	0.72	—	0.72	—	11,286	11,286	1.00	0.02	—	11,318
Daily, Winter (Max)	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—

Apartments Mid Rise	0.52	0.26	4.4	1.9	0.03	0.36	—	0.36	0.36	—	0.36	—	5,643	5,643	0.50	0.01	—	5,659
Condo/Townhouse High Rise	0.52	0.26	4.4	1.9	0.03	0.36	—	0.36	0.36	—	0.36	—	5,643	5,643	0.50	0.01	—	5,659
Total	1.0	0.52	8.9	3.8	0.06	0.72	—	0.72	0.72	—	0.72	—	11,286	11,286	1.00	0.02	—	11,318
Annual	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—
Apartments Mid Rise	0.09	0.05	0.81	0.35	0.01	0.07	—	0.07	0.07	—	0.07	—	934	934	0.08	< 0.005	—	937
Condo/Townhouse High Rise	0.09	0.05	0.81	0.35	0.01	0.07	—	0.07	0.07	—	0.07	—	934	934	0.08	< 0.005	—	937
Total	0.19	0.09	1.6	0.69	0.01	0.13	—	0.13	0.13	—	0.13	—	1,869	1,869	0.17	< 0.005	—	1,874

4.3. Area Emissions by Source

4.3.1. Unmitigated

Criteria Pollutants (lb/day for daily, ton/yr for annual) and GHGs (lb/day for daily, MT/yr for annual)

Source	TOG	ROG	NOx	CO	SO2	PM10E	PM10D	PM10T	PM2.5E	PM2.5D	PM2.5T	BCO2	NBCO2	CO2T	CH4	N2O	R	CO2e
Daily, Summer (Max)	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—
Hearths	4.6	2.3	39	17	0.25	3.2	—	3.2	3.2	—	3.2	0.00	50,113	50,113	0.94	0.09	—	50,165
Consumer Products	82	82	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—

Architectural Coating	15	15	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—
Landscape Equipment	21	20	2.1	228	0.01	0.10	—	0.10	0.08	—	0.08	—	607	607	0.03	0.01	—	609
Total	122	119	42	245	0.26	3.3	—	3.3	3.3	—	3.3	0.00	50,720	50,720	0.97	0.10	—	50,774
Daily, Winter (Max)	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—
Hearths	4.6	2.3	39	17	0.25	3.2	—	3.2	3.2	—	3.2	0.00	50,113	50,113	0.94	0.09	—	50,165
Consumer Products	82	82	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—
Architectural Coatings	15	15	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—
Total	102	99	39	17	0.25	3.2	—	3.2	3.2	—	3.2	0.00	50,113	50,113	0.94	0.09	—	50,165
Annual	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—
Hearths	0.02	0.01	0.18	0.08	< 0.005	0.01	—	0.01	0.01	—	0.01	0.00	205	205	< 0.005	< 0.005	—	205
Consumer Products	15	15	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—
Architectural Coatings	2.7	2.7	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—
Landscape Equipment	1.9	1.8	0.19	21	< 0.005	0.01	—	0.01	0.01	—	0.01	—	50	50	< 0.005	< 0.005	—	50
Total	20	19	0.37	21	< 0.005	0.02	—	0.02	0.02	—	0.02	0.00	254	254	0.01	< 0.005	—	255

4.4. Water Emissions by Land Use

4.4.1. Unmitigated

Criteria Pollutants (lb/day for daily, ton/yr for annual) and GHGs (lb/day for daily, MT/yr for annual)

Land Use	TOG	ROG	NOx	CO	SO2	PM10E	PM10D	PM10T	PM2.5E	PM2.5D	PM2.5T	BCO2	NBCO2	CO2T	CH4	N2O	R	CO2e
Daily, Summer (Max)	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—
Apartments Mid Rise	—	—	—	—	—	—	—	—	—	—	—	112	212	325	12	0.28	—	697
Condo/Townhouse High Rise	—	—	—	—	—	—	—	—	—	—	—	112	212	325	12	0.28	—	697
Total	—	—	—	—	—	—	—	—	—	—	—	225	425	650	23	0.56	—	1,394
Daily, Winter (Max)	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—
Apartments Mid Rise	—	—	—	—	—	—	—	—	—	—	—	112	212	325	12	0.28	—	697
Condo/Townhouse High Rise	—	—	—	—	—	—	—	—	—	—	—	112	212	325	12	0.28	—	697
Total	—	—	—	—	—	—	—	—	—	—	—	225	425	650	23	0.56	—	1,394
Annual	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—
Apartments Mid Rise	—	—	—	—	—	—	—	—	—	—	—	19	35	54	1.9	0.05	—	115

Condo/Townhouse	—	—	—	—	—	—	—	—	—	—	—	19	35	54	1.9	0.05	—	115
Total	—	—	—	—	—	—	—	—	—	—	—	37	70	108	3.8	0.09	—	231

4.5. Waste Emissions by Land Use

4.5.1. Unmitigated

Criteria Pollutants (lb/day for daily, ton/yr for annual) and GHGs (lb/day for daily, MT/yr for annual)

Land Use	TOG	ROG	NOx	CO	SO2	PM10E	PM10D	PM10T	PM2.5E	PM2.5D	PM2.5T	BCO2	NBCO2	CO2T	CH4	N2O	R	CO2e
Daily, Summer (Max)	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—
Apartments Mid Rise	—	—	—	—	—	—	—	—	—	—	—	797	0.00	797	80	0.00	—	2,789
Condo/Townhouse High Rise	—	—	—	—	—	—	—	—	—	—	—	797	0.00	797	80	0.00	—	2,789
Total	—	—	—	—	—	—	—	—	—	—	—	1,594	0.00	1,594	159	0.00	—	5,577
Daily, Winter (Max)	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—
Apartments Mid Rise	—	—	—	—	—	—	—	—	—	—	—	797	0.00	797	80	0.00	—	2,789
Condo/Townhouse High Rise	—	—	—	—	—	—	—	—	—	—	—	797	0.00	797	80	0.00	—	2,789
Total	—	—	—	—	—	—	—	—	—	—	—	1,594	0.00	1,594	159	0.00	—	5,577

Annual	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—
Apartments Mid Rise	—	—	—	—	—	—	—	—	—	—	—	132	0.00	132	13	0.00	—	462
Condo/Townhouse High Rise	—	—	—	—	—	—	—	—	—	—	—	132	0.00	132	13	0.00	—	462
Total	—	—	—	—	—	—	—	—	—	—	—	264	0.00	264	26	0.00	—	923

4.6. Refrigerant Emissions by Land Use

4.6.1. Unmitigated

Criteria Pollutants (lb/day for daily, ton/yr for annual) and GHGs (lb/day for daily, MT/yr for annual)

Land Use	TOG	ROG	NOx	CO	SO2	PM10E	PM10D	PM10T	PM2.5E	PM2.5D	PM2.5T	BCO2	NBCO2	CO2T	CH4	N2O	R	CO2e
Daily, Summer (Max)	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—
Apartments Mid Rise	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	14	14
Condo/Townhouse High Rise	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	14	14
Total	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	28	28
Daily, Winter (Max)	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—
Apartments Mid Rise	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	14	14

Condo/T High Rise	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	14	14
Total	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	28	28
Annual	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—
Apartments Mid Rise	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	2.3	2.3
Condo/Townhouse High Rise	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	2.3	2.3
Total	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	4.6	4.6

4.7. Offroad Emissions By Equipment Type

4.7.1. Unmitigated

Criteria Pollutants (lb/day for daily, ton/yr for annual) and GHGs (lb/day for daily, MT/yr for annual)

Equipment Type	TOG	ROG	NOx	CO	SO2	PM10E	PM10D	PM10T	PM2.5E	PM2.5D	PM2.5T	BCO2	NBCO2	CO2T	CH4	N2O	R	CO2e
Daily, Summer (Max)	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—
Total	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—
Daily, Winter (Max)	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—
Total	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—
Annual	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—
Total	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—

4.8. Stationary Emissions By Equipment Type

4.8.1. Unmitigated

Criteria Pollutants (lb/day for daily, ton/yr for annual) and GHGs (lb/day for daily, MT/yr for annual)

Equipment Type	TOG	ROG	NOx	CO	SO2	PM10E	PM10D	PM10T	PM2.5E	PM2.5D	PM2.5T	BCO2	NBCO2	CO2T	CH4	N2O	R	CO2e
Daily, Summer (Max)	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—
Total	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—
Daily, Winter (Max)	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—
Total	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—
Annual	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—
Total	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—

4.9. User Defined Emissions By Equipment Type

4.9.1. Unmitigated

Criteria Pollutants (lb/day for daily, ton/yr for annual) and GHGs (lb/day for daily, MT/yr for annual)

Equipment Type	TOG	ROG	NOx	CO	SO2	PM10E	PM10D	PM10T	PM2.5E	PM2.5D	PM2.5T	BCO2	NBCO2	CO2T	CH4	N2O	R	CO2e
Daily, Summer (Max)	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—
Total	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—
Daily, Winter (Max)	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—
Total	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—

Annual	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—
Total	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—

4.10. Soil Carbon Accumulation By Vegetation Type

4.10.1. Soil Carbon Accumulation By Vegetation Type - Unmitigated

Criteria Pollutants (lb/day for daily, ton/yr for annual) and GHGs (lb/day for daily, MT/yr for annual)

Vegetation	TOG	ROG	NOx	CO	SO2	PM10E	PM10D	PM10T	PM2.5E	PM2.5D	PM2.5T	BCO2	NBCO2	CO2T	CH4	N2O	R	CO2e
Daily, Summer (Max)	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—
Total	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—
Daily, Winter (Max)	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—
Total	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—
Annual	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—
Total	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—

4.10.2. Above and Belowground Carbon Accumulation by Land Use Type - Unmitigated

Criteria Pollutants (lb/day for daily, ton/yr for annual) and GHGs (lb/day for daily, MT/yr for annual)

Land Use	TOG	ROG	NOx	CO	SO2	PM10E	PM10D	PM10T	PM2.5E	PM2.5D	PM2.5T	BCO2	NBCO2	CO2T	CH4	N2O	R	CO2e
Daily, Summer (Max)	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—
Total	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—
Daily, Winter (Max)	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—
Total	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—

Annual	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—
Total	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—

4.10.3. Avoided and Sequestered Emissions by Species - Unmitigated

Criteria Pollutants (lb/day for daily, ton/yr for annual) and GHGs (lb/day for daily, MT/yr for annual)

Species	TOG	ROG	NOx	CO	SO2	PM10E	PM10D	PM10T	PM2.5E	PM2.5D	PM2.5T	BCO2	NBCO2	CO2T	CH4	N2O	R	CO2e
Daily, Summer (Max)	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—
Avoided	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—
Subtotal	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—
Sequestered	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—
Subtotal	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—
Removed	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—
Subtotal	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—
—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—
Daily, Winter (Max)	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—
Avoided	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—
Subtotal	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—
Sequestered	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—
Subtotal	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—
Removed	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—
Subtotal	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—
—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—
Annual	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—

Avoided	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—
Subtotal	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—
Sequestered	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—
Subtotal	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—
Removed	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—
Subtotal	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—
—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—

5. Activity Data

5.1. Construction Schedule

Phase Name	Phase Type	Start Date	End Date	Days Per Week	Work Days per Phase	Phase Description
Demolition	Demolition	1/1/2026	5/21/2026	5.0	100	—
Site Preparation	Site Preparation	5/22/2026	8/14/2026	5.0	60	—
Grading	Grading	8/15/2026	3/20/2027	5.0	155	—
Building Construction	Building Construction	3/21/2027	2/27/2033	5.0	1,550	—
Paving	Paving	2/28/2033	8/1/2033	5.0	110	—
Architectural Coating	Architectural Coating	8/2/2033	1/3/2034	5.0	110	—

5.2. Off-Road Equipment

5.2.1. Unmitigated

Phase Name	Equipment Type	Fuel Type	Engine Tier	Number per Day	Hours Per Day	Horsepower	Load Factor
Demolition	Rubber Tired Dozers	Diesel	Average	2.0	8.0	367	0.40
Demolition	Excavators	Diesel	Average	3.0	8.0	36	0.38
Demolition	Concrete/Industrial Saws	Diesel	Average	1.00	8.0	33	0.73

Site Preparation	Rubber Tired Dozers	Diesel	Average	3.0	8.0	367	0.40
Site Preparation	Tractors/Loaders/Back hoes	Diesel	Average	4.0	8.0	84	0.37
Grading	Graders	Diesel	Average	1.00	8.0	148	0.41
Grading	Excavators	Diesel	Average	2.0	8.0	36	0.38
Grading	Tractors/Loaders/Back hoes	Diesel	Average	2.0	8.0	84	0.37
Grading	Scrapers	Diesel	Average	2.0	8.0	423	0.48
Grading	Rubber Tired Dozers	Diesel	Average	1.00	8.0	367	0.40
Building Construction	Forklifts	Diesel	Average	3.0	8.0	82	0.20
Building Construction	Generator Sets	Diesel	Average	1.00	8.0	14	0.74
Building Construction	Cranes	Diesel	Average	1.00	7.0	367	0.29
Building Construction	Welders	Diesel	Average	1.00	8.0	46	0.45
Building Construction	Tractors/Loaders/Back hoes	Diesel	Average	3.0	7.0	84	0.37
Paving	Pavers	Diesel	Average	2.0	8.0	81	0.42
Paving	Paving Equipment	Diesel	Average	2.0	8.0	89	0.36
Paving	Rollers	Diesel	Average	2.0	8.0	36	0.38
Architectural Coating	Air Compressors	Diesel	Average	1.00	6.0	37	0.48

5.3. Construction Vehicles

5.3.1. Unmitigated

Phase Name	Trip Type	One-Way Trips per Day	Miles per Trip	Vehicle Mix
Demolition	Worker	15	12	LDA,LDT1,LDT2
Demolition	Vendor	—	8.4	HHDT,MHDT
Demolition	Hauling	0.00	20	HHDT
Demolition	Onsite truck	—	—	HHDT
Site Preparation	Worker	18	12	LDA,LDT1,LDT2

Site Preparation	Vendor	—	8.4	HHDT,MHDT
Site Preparation	Hauling	0.00	20	HHDT
Site Preparation	Onsite truck	—	—	HHDT
Grading	Worker	20	12	LDA,LDT1,LDT2
Grading	Vendor	—	8.4	HHDT,MHDT
Grading	Hauling	0.00	20	HHDT
Grading	Onsite truck	—	—	HHDT
Building Construction	Worker	2,880	12	LDA,LDT1,LDT2
Building Construction	Vendor	428	8.4	HHDT,MHDT
Building Construction	Hauling	0.00	20	HHDT
Building Construction	Onsite truck	—	—	HHDT
Paving	Worker	15	12	LDA,LDT1,LDT2
Paving	Vendor	—	8.4	HHDT,MHDT
Paving	Hauling	0.00	20	HHDT
Paving	Onsite truck	—	—	HHDT
Architectural Coating	Worker	576	12	LDA,LDT1,LDT2
Architectural Coating	Vendor	—	8.4	HHDT,MHDT
Architectural Coating	Hauling	0.00	20	HHDT
Architectural Coating	Onsite truck	—	—	HHDT

5.4. Vehicles

5.4.1. Construction Vehicle Control Strategies

Non-applicable. No control strategies activated by user.

5.5. Architectural Coatings

Phase Name	Residential Interior Area Coated (sq ft)	Residential Exterior Area Coated (sq ft)	Non-Residential Interior Area Coated (sq ft)	Non-Residential Exterior Area Coated (sq ft)	Parking Area Coated (sq ft)
Architectural Coating	7,776,000	2,592,000	0.00	0.00	—

5.6. Dust Mitigation

5.6.1. Construction Earthmoving Activities

Phase Name	Material Imported (cy)	Material Exported (cy)	Acres Graded (acres)	Material Demolished (sq. ft.)	Acres Paved (acres)
Demolition	0.00	0.00	0.00	—	0.00
Site Preparation	—	—	90	0.00	0.00
Grading	—	—	465	0.00	0.00
Paving	0.00	0.00	0.00	0.00	0.00

5.6.2. Construction Earthmoving Control Strategies

Non-applicable. No control strategies activated by user.

5.7. Construction Paving

Phase Name	Land Use	Area Paved (acres)	% Asphalt
Paving	Apartments Mid Rise	—	0%
Paving	Condo/Townhouse High Rise	—	0%

5.8. Construction Electricity Consumption and Emissions Factors

kWh per Year and Emission Factor (lb/MWh)

Year	kWh per Year	CO2	CH4	N2O
2026	0.00	204	0.03	< 0.005
2027	0.00	204	0.03	< 0.005
2028	0.00	204	0.03	< 0.005
2029	0.00	204	0.03	< 0.005
2030	0.00	204	0.03	< 0.005
2031	0.00	204	0.03	< 0.005
2032	0.00	204	0.03	< 0.005
2033	0.00	204	0.03	< 0.005

2034	0.00	204	0.03	< 0.005

5.9. Operational Mobile Sources

5.9.1. Unmitigated

Land Use Type	Trips/Weekday	Trips/Saturday	Trips/Sunday	Trips/Year	VMT/Weekday	VMT/Saturday	VMT/Sunday	VMT/Year
Apartments Mid Rise	10,880	9,820	8,180	3,775,143	57,891	52,251	43,525	20,087,074
Condo/Townhouse High Rise	10,880	9,820	8,180	3,775,143	57,891	52,251	43,525	20,087,074

5.10. Operational Area Sources

5.10.1. Hearths

Land Use	Hearth Type	Unmitigated (number)	Mitigated (number)
Apartments Mid Rise	Wood Fireplaces	0	0
Apartments Mid Rise	Gas Fireplaces	1,020	1,020
Apartments Mid Rise	Propane Fireplaces	0	0
Apartments Mid Rise	Electric Fireplaces	0	0
Apartments Mid Rise	No Fireplaces	980	980
Apartments Mid Rise	Conventional Wood Stoves	0	0
Apartments Mid Rise	Catalytic Wood Stoves	0	0
Apartments Mid Rise	Non-Catalytic Wood Stoves	0	0
Apartments Mid Rise	Pellet Wood Stoves	0	0
Condo/Townhouse High Rise	Wood Fireplaces	0	0
Condo/Townhouse High Rise	Gas Fireplaces	1,020	1,020
Condo/Townhouse High Rise	Propane Fireplaces	0	0
Condo/Townhouse High Rise	Electric Fireplaces	0	0
Condo/Townhouse High Rise	No Fireplaces	980	980

Condo/Townhouse High Rise	Conventional Wood Stoves	0	0
Condo/Townhouse High Rise	Catalytic Wood Stoves	0	0
Condo/Townhouse High Rise	Non-Catalytic Wood Stoves	0	0
Condo/Townhouse High Rise	Pellet Wood Stoves	0	0

5.10.2. Architectural Coatings

—	Residential Interior Area Coated (sq ft)	Residential Exterior Area Coated (sq ft)	Non-Residential Interior Area Coated (sq ft)	Non-Residential Exterior Area Coated (sq ft)	Parking Area Coated (sq ft)
undefined	7,776,000	2,592,000	0.00	0.00	—

5.10.3. Landscape Equipment

Season	Unit	Value
Snow Days	day/yr	0.00
Summer Days	day/yr	180

5.11. Operational Energy Consumption

5.11.1. Unmitigated

Electricity (kWh/yr) and CO2 and CH4 and N2O and Natural Gas (kBTU/yr)

Land Use	Electricity (kWh/yr)	CO2	CH4	N2O	Natural Gas (kBTU/yr)
Apartments Mid Rise	6,822,902	204	0.0330	0.0040	17,608,142
Condo/Townhouse High Rise	6,822,902	204	0.0330	0.0040	17,608,142

5.12. Operational Water and Wastewater Consumption

5.12.1. Unmitigated

Land Use	Indoor Water (gal/year)	Outdoor Water (gal/year)
Apartments Mid Rise	58,681,050	0.00

Condo/Townhouse High Rise	58,681,050	0.00

5.13. Operational Waste Generation

5.13.1. Unmitigated

Land Use	Waste (ton/year)	Cogeneration (kWh/year)
Apartments Mid Rise	1,479	0.00
Condo/Townhouse High Rise	1,479	0.00

5.14. Operational Refrigeration and Air Conditioning Equipment

5.14.1. Unmitigated

Land Use	Equipment Type	Refrigerant	GWP	Quantity (kg)	Operations Leak Rate	Service Leak Rate	Times Serviced
Apartments Mid Rise	Average room A/C & Other residential A/C and heat pumps	R-410A	2,088	< 0.005	2.5	2.5	10.0
Apartments Mid Rise	Household refrigerators and/or freezers	R-134a	1,430	0.12	0.60	0.00	1.00
Condo/Townhouse High Rise	Average room A/C & Other residential A/C and heat pumps	R-410A	2,088	< 0.005	2.5	2.5	10.0
Condo/Townhouse High Rise	Household refrigerators and/or freezers	R-134a	1,430	0.12	0.60	0.00	1.00

5.15. Operational Off-Road Equipment

5.15.1. Unmitigated

5.16. Stationary Sources

5.16.1. Emergency Generators and Fire Pumps

5.16.2. Process Boilers

5.17. User Defined

5.18. Vegetation

5.18.1. Land Use Change

5.18.1.1. Unmitigated

Vegetation Land Use Type	Vegetation Soil Type	Initial Acres	Final Acres

5.18.1. Biomass Cover Type

5.18.1.1. Unmitigated

Biomass Cover Type	Initial Acres	Final Acres

5.18.2. Sequestration

5.18.2.1. Unmitigated

Tree Type	Number	Electricity Saved (kWh/year)	Natural Gas Saved (btu/year)

6. Climate Risk Detailed Report

6.1. Climate Risk Summary

Cal-Adapt midcentury 2040–2059 average projections for four hazards are reported below for your project location. These are under Representation Concentration Pathway (RCP) 8.5 which assumes GHG emissions will continue to rise strongly through 2050 and then plateau around 2100.

Climate Hazard	Result for Project Location	Unit
Temperature and Extreme Heat	5.9	annual days of extreme heat

Extreme Precipitation	7.5	annual days with precipitation above 20 mm
Sea Level Rise	—	meters of inundation depth
Wildfire	4.4	annual hectares burned

Temperature and Extreme Heat data are for grid cell in which your project are located. The projection is based on the 98th historical percentile of daily maximum/minimum temperatures from observed historical data (32 climate model ensemble from Cal-Adapt, 2040–2059 average under RCP 8.5). Each grid cell is 6 kilometers (km) by 6 km, or 3.7 miles (mi) by 3.7 mi.
Extreme Precipitation data are for the grid cell in which your project are located. The threshold of 20 mm is equivalent to about ¾ an inch of rain, which would be light to moderate rainfall if received over a full day or heavy rain if received over a period of 2 to 4 hours. Each grid cell is 6 kilometers (km) by 6 km, or 3.7 miles (mi) by 3.7 mi.
Sea Level Rise data are for the grid cell in which your project are located. The projections are from Radke et al. (2017), as reported in Cal-Adapt (Radke et al., 2017, CEC-500-2017-008), and consider inundation location and depth for the San Francisco Bay, the Sacramento-San Joaquin River Delta and California coast resulting different increments of sea level rise coupled with extreme storm events. Users may select from four scenarios to view the range in potential inundation depth for the grid cell. The four scenarios are: No rise, 0.5 meter, 1.0 meter, 1.41 meters
Wildfire data are for the grid cell in which your project are located. The projections are from UC Davis, as reported in Cal-Adapt (2040–2059 average under RCP 8.5), and consider historical data of climate, vegetation, population density, and large (> 400 ha) fire history. Users may select from four model simulations to view the range in potential wildfire probabilities for the grid cell. The four simulations make different assumptions about expected rainfall and temperature are: Warmer/drier (HadGEM2-ES), Cooler/wetter (CNRM-CM5), Average conditions (CanESM2), Range of different rainfall and temperature possibilities (MIROC5). Each grid cell is 6 kilometers (km) by 6 km, or 3.7 miles (mi) by 3.7 mi.

6.2. Initial Climate Risk Scores

Climate Hazard	Exposure Score	Sensitivity Score	Adaptive Capacity Score	Vulnerability Score
Temperature and Extreme Heat	N/A	N/A	N/A	N/A
Extreme Precipitation	2	0	0	N/A
Sea Level Rise	1	0	0	N/A
Wildfire	1	0	0	N/A
Flooding	N/A	N/A	N/A	N/A
Drought	N/A	N/A	N/A	N/A
Snowpack Reduction	N/A	N/A	N/A	N/A
Air Quality Degradation	0	0	0	N/A

The sensitivity score reflects the extent to which a project would be adversely affected by exposure to a climate hazard. Exposure is rated on a scale of 1 to 5, with a score of 5 representing the greatest exposure.
The adaptive capacity of a project refers to its ability to manage and reduce vulnerabilities from projected climate hazards. Adaptive capacity is rated on a scale of 1 to 5, with a score of 5 representing the greatest ability to adapt.
The overall vulnerability scores are calculated based on the potential impacts and adaptive capacity assessments for each hazard. Scores do not include implementation of climate risk reduction measures.

6.3. Adjusted Climate Risk Scores

Climate Hazard	Exposure Score	Sensitivity Score	Adaptive Capacity Score	Vulnerability Score

Temperature and Extreme Heat	N/A	N/A	N/A	N/A
Extreme Precipitation	2	1	1	3
Sea Level Rise	1	1	1	2
Wildfire	1	1	1	2
Flooding	N/A	N/A	N/A	N/A
Drought	N/A	N/A	N/A	N/A
Snowpack Reduction	N/A	N/A	N/A	N/A
Air Quality Degradation	1	1	1	2

The sensitivity score reflects the extent to which a project would be adversely affected by exposure to a climate hazard. Exposure is rated on a scale of 1 to 5, with a score of 5 representing the greatest exposure.
The adaptive capacity of a project refers to its ability to manage and reduce vulnerabilities from projected climate hazards. Adaptive capacity is rated on a scale of 1 to 5, with a score of 5 representing the greatest ability to adapt.
The overall vulnerability scores are calculated based on the potential impacts and adaptive capacity assessments for each hazard. Scores include implementation of climate risk reduction measures.

6.4. Climate Risk Reduction Measures

7. Health and Equity Details

7.1. CalEnviroScreen 4.0 Scores

The maximum CalEnviroScreen score is 100. A high score (i.e., greater than 50) reflects a higher pollution burden compared to other census tracts in the state.

Indicator	Result for Project Census Tract
Exposure Indicators	—
AQ-Ozone	3.1
AQ-PM	25
AQ-DPM	99
Drinking Water	15
Lead Risk Housing	59
Pesticides	9.0
Toxic Releases	45
Traffic	53

Effect Indicators	—
CleanUp Sites	74
Groundwater	71
Haz Waste Facilities/Generators	98
Impaired Water Bodies	0.00
Solid Waste	80
Sensitive Population	—
Asthma	81
Cardio-vascular	18
Low Birth Weights	84
Socioeconomic Factor Indicators	—
Education	48
Housing	67
Linguistic	82
Poverty	65
Unemployment	54

7.2. Healthy Places Index Scores

The maximum Health Places Index score is 100. A high score (i.e., greater than 50) reflects healthier community conditions compared to other census tracts in the state.

Indicator	Result for Project Census Tract
Economic	—
Above Poverty	21.28833569
Employed	26.07468241
Median HI	16.37366868
Education	—
Bachelor's or higher	64.48094444
High school enrollment	100
Preschool enrollment	38.90671115

Transportation	—
Auto Access	0.372128834
Active commuting	99.53804697
Social	—
2-parent households	2.643397921
Voting	31.75927114
Neighborhood	—
Alcohol availability	4.516874118
Park access	38.62440652
Retail density	99.05042987
Supermarket access	94.25125112
Tree canopy	6.03105351
Housing	—
Homeownership	10.15013474
Housing habitability	0.526113178
Low-inc homeowner severe housing cost burden	32.54202489
Low-inc renter severe housing cost burden	44.3731554
Uncrowded housing	36.46862569
Health Outcomes	—
Insured adults	41.04965995
Arthritis	59.3
Asthma ER Admissions	18.9
High Blood Pressure	44.4
Cancer (excluding skin)	68.9
Asthma	37.3
Coronary Heart Disease	43.7
Chronic Obstructive Pulmonary Disease	33.2
Diagnosed Diabetes	36.9

Life Expectancy at Birth	23.5
Cognitively Disabled	4.4
Physically Disabled	1.7
Heart Attack ER Admissions	60.2
Mental Health Not Good	34.8
Chronic Kidney Disease	35.4
Obesity	39.8
Pedestrian Injuries	98.0
Physical Health Not Good	33.1
Stroke	34.3
Health Risk Behaviors	—
Binge Drinking	24.0
Current Smoker	20.2
No Leisure Time for Physical Activity	36.8
Climate Change Exposures	—
Wildfire Risk	0.0
SLR Inundation Area	0.0
Children	86.0
Elderly	54.5
English Speaking	11.2
Foreign-born	81.4
Outdoor Workers	88.7
Climate Change Adaptive Capacity	—
Impervious Surface Cover	0.2
Traffic Density	58.5
Traffic Access	87.4
Other Indices	—
Hardship	58.6

Other Decision Support	—
2016 Voting	44.8

7.3. Overall Health & Equity Scores

Metric	Result for Project Census Tract
CalEnviroScreen 4.0 Score for Project Location (a)	71
Healthy Places Index Score for Project Location (b)	20
Project Located in a Designated Disadvantaged Community (Senate Bill 535)	No
Project Located in a Low-Income Community (Assembly Bill 1550)	Yes
Project Located in a Community Air Protection Program Community (Assembly Bill 617)	No

a: The maximum CalEnviroScreen score is 100. A high score (i.e., greater than 50) reflects a higher pollution burden compared to other census tracts in the state.
b: The maximum Health Places Index score is 100. A high score (i.e., greater than 50) reflects healthier community conditions compared to other census tracts in the state.

7.4. Health & Equity Measures

No Health & Equity Measures selected.

7.5. Evaluation Scorecard

Health & Equity Evaluation Scorecard not completed.

7.6. Health & Equity Custom Measures

No Health & Equity Custom Measures created.

8. User Changes to Default Data

8.1. Justifications

Screen	Justification
Operations: Water and Waste Water	Outdoor water use set to zero.

SWAPE Technical Consultation, Data Analysis and Litigation Support for the Environment

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- **Geologic and Hydrogeologic Characterization, Investigation and Remediation Strategies**
- **Industrial Stormwater Compliance**
- **CEQA Review**
- **Expert Testimony**

Professional Certifications:
California Professional Geologist, P.G.
California Certified Hydrogeologist, C.Hg.

Education:
M.S. Degree, Geology, California State University Los Angeles, Los Angeles, CA, 1984.
B.A. Degree, Geology, Humboldt State University, Arcata, CA, 1982.

Professional Experience:
30 years of experience in environmental policy, contaminant assessment and remediation, stormwater compliance, and CEQA review. Spent nine years with the U.S. EPA in the Resource Conservation Recovery Act (RCRA) and Superfund programs and served as EPA's Senior Science Policy Advisor in the Western Regional Office where I identified emerging threats to groundwater. While with EPA, I served as a Senior Hydrogeologist in the oversight of the assessment of seven major military facilities undergoing base closure. Led numerous enforcement actions under provisions of the Resource Conservation and Recovery Act (RCRA) and directed efforts to improve hydrogeologic characterization and water quality monitoring. For the past 15 years, as a founding partner with SWAPE, I developed extensive client relationships and has managed complex projects that include consultations as an expert witness and a regulatory specialist, and managing projects ranging from industrial stormwater compliance to CEQA review of impacts from hazardous waste, air quality and greenhouse gas emissions.

Positions held include:

Government:
Senior Science Policy Advisor and Hydrogeologist, U.S. Environmental Protection Agency (1989–1998);

Hydrogeologist, National Park Service, Water Resources Division (1998 – 2000);
Geologist, U.S. Forest Service (1986 – 1998).

Educational:
Geology Instructor, Golden West College, 2010 – 2104, 2017;
Adjunct Faculty Member, San Francisco State University, Department of Geosciences (1993 – 1998);
Instructor, College of Marin, Department of Science (1990 – 1995).

Private Sector:
Founding Partner, Soil/Water/Air Protection Enterprise (SWAPE) (2003 – present);
Senior Environmental Analyst, Komex H2O Science, Inc. (2000 -- 2003);
Executive Director, Orange Coast Watch (2001 – 2004);
Geologist, Dames & Moore (1984 – 1986).

Senior Regulatory and Litigation Support Analyst:
With SWAPE, responsibilities have included:

- Lead analyst and testifying expert, for both plaintiffs and defendants, in the review of over 300 environmental impact reports and negative declarations since 2003 under CEQA that identify significant issues with regard to hazardous waste, water resources, water quality, air quality, greenhouse gas emissions, and geologic hazards.
- Recommending additional mitigation measures to lead agencies at the local and county level to include additional characterization of health risks and implementation of protective measures to reduce exposure to hazards from toxins.
- Stormwater analysis, sampling and best management practice evaluation, for both government agencies and corporate clients, at more than 150 industrial facilities.
- Serving as expert witness for both plaintiffs and defendants in cases including contamination of groundwater, CERCLAcompliance in assessment and remediation, and industrial stormwater contamination.
- Technical assistance and litigation support for vapor intrusion concerns, for both government agencies and corporate clients.
- Lead analyst and testifying expert in the review of environmental issues in license applicationsfor large solar power plants before the California Energy Commission.
- Manager of a project to evaluate numerous formerly used military sites in the western U.S.
- Manager of a comprehensive evaluation of potential sources of perchlorate contamination in Southern California drinking water wells.
- Manager and designated expert for litigation support under provisions of Proposition 65 in the review of releases of gasoline to sources drinking water at major refineries and hundreds of gas stations throughout California.

With Komex H2O Science Inc., duties included the following:

- Senior author of a report on the extent of perchlorate contamination that was used in testimony by the former U.S. EPA Administrator and General Counsel.
- Senior researcher in the development of a comprehensive, electronically interactive chronology of MTBE use, research, and regulation.
- Senior researcher in the development of a comprehensive, electronically interactive chronology of perchlorate use, research, and regulation.
- Senior researcher in a study that estimates nationwide costs for MTBE remediation and drinking

water treatment, results of which were published in newspapers nationwide and in testimony against provisions of an energy bill that would limit liability for oil companies.

- Research to support litigation to restore drinking water supplies that have been contaminated by MTBE in California and New York.
- Lead author for a multi-volume remedial investigation report for an operating school in LosAngeles that met strict Sate of California regulatory requirements.
- Development of strategic approaches for cleanup of contaminated sites in consultation withclients and regulators.

Hydrogeology:

As a Senior Hydrogeologist with the U.S. Environmental Protection Agency, led investigations to characterize and cleanup closing military bases, including Mare Island Naval Shipyard, Hunters Point Naval Shipyard, Treasure Island Naval Station, Alameda Naval Station, Moffett Field, Mather Army Airfield, and Sacramento Army Depot. Specific activities included:

- Leading efforts to model groundwater flow and contaminant transport, ensured adequacy of monitoring networks, and assessed cleanup alternatives for contaminated sediment, soil, and groundwater.
- Initiating a regional program for evaluation of groundwater sampling practices and laboratory analysis at military bases.
- Identifying emerging issues, wrote technical guidance, and assisted in policy and regulation development through work on four national U.S. EPA workgroups, including the Superfund Groundwater Technical Forum and the Federal Facilities Forum.

At the request of the State of Hawaii, developed a methodology to determine the vulnerability of groundwater to contamination on the islands of Maui and Oahu. Used analytical models and a GIS to show zones of vulnerability, and the results were adopted and published by the State of Hawaii and County of Maui.

As a hydrogeologist with the EPA Groundwater Protection Section, worked with provisions of the Safe Drinking Water Act and NEPA to prevent drinking water contamination. Specific activities included the following:

- Received an EPA Bronze Medal for contribution to the development of national guidance for the protection of drinking water.
- Managed the Sole Source Aquifer Program and protected the drinking water of two communities through designation under the Safe Drinking Water Act. Prepared geologic reports, conducted hearings, and responded to public comments from residents who were very concerned about the impact of designation.
- Reviewed a number of Environmental Impact Statements for planned major developments, including large hazardous and solid waste disposal facilities, mine reclamation, and water transfer.

Served as a hydrogeologist with the RCRA Hazardous Waste program. Duties included:

- Supervised the hydrogeologic investigation of hazardous waste sites to determine compliancewith Subtitle C requirements.
- Reviewed and wrote "part B" permits for the disposal of hazardous waste.
- Conducted RCRA Corrective Action investigations of waste sites and led inspections that formed the basis for significant enforcement actions that were developed in close coordination with U.S.EPA legal counsel.

- Wrote contract specifications and supervised contractor's investigations of waste sites.

With the National Park Service, directed service-wide investigations of contaminant sources to prevent degradation of water quality, including the following:

- Applied pertinent laws and regulations including CERCLA, RCRA, NEPA, NRDA, and the Clean Water Act to control military, mining, and landfill contaminants.
- Conducted watershed-scale investigations of contaminants at parks, including Yellowstone and Olympic National Park.
- Identified high-levels of perchlorate in soil adjacent to a national park in New Mexicoand advised park superintendent on appropriate response actions under CERCLA.
- Served as a Park Service representative on the Interagency Perchlorate Steering Committee, a national workgroup.
- Developed a program to conduct environmental compliance audits of all National Parks while serving on a national workgroup.
- Co-authored two papers on the potential for water contamination from the operation of personal watercraft and snowmobiles, these papers serving as the basis for the development of nation- wide policy on the use of these vehicles in National Parks.
- Contributed to the Federal Multi-Agency Source Water Agreement under the Clean Water Action Plan.

Policy:

Served as senior management as the Senior Science Policy Advisor with the U.S. Environmental Protection Agency, Region 9. Activities included the following:

- Advising the Regional Administrator and senior management on emerging issues such as the potential for the gasoline additive MTBE and ammonium perchlorate to contaminate drinkingwater supplies.
- Shaping EPA's national response to these threats by serving on workgroups and by contributingto guidance, including the Office of Research and Development publication, Oxygenates in Water: Critical Information and Research Needs.
- Improving the technical training of EPA's scientific and engineering staff.
- Earning an EPA Bronze Medal for representing the region's 300 scientists and engineers in negotiations with the Administrator and senior management to better integrate scientific principles into the policy-making process.
- Establishing national protocol for the peer review of scientific documents.

Geology:

With the U.S. Forest Service, led investigations to determine hillslope stability of areas proposed for timber harvest in the central Oregon Coast Range. Specific activities included:

- Mapping geology in the field, and used aerial photographic interpretation and mathematical models to determine slope stability.
- Coordinating research with community stakeholders who were concerned with natural resource protection.
- Characterizing the geology of an aquifer that serves as the sole source of drinking water for thecity of Medford, Oregon.

As a consultant with Dames and Moore, led geologic investigations of two contaminated sites (later listed on the Superfund NPL) in the Portland, Oregon, area and a large RCRA hazardous waste site in eastern Oregon.

Duties included the following:

- Supervising year-long effort for soil and groundwater sampling.
- Conducting aquifer tests.
- Investigating active faults beneath sites proposed for hazardous waste disposal.

Teaching:

From 1990 to 1998, taught at least one course per semester at the community college and university levels:

- At San Francisco State University, held an adjunct faculty position and taught courses in environmental geology, oceanography (lab and lecture), hydrogeology, and groundwater contamination.
- Served as a committee member for graduate and undergraduate students.
- Taught courses in environmental geology and oceanography at the College of Marin.
- Part time geology instructor at Golden West College in Huntington Beach, California from 2010 to 2014 and in 2017.

Summary of Testimony Experience Over Past Four Years

In Re New Jersey Department of Environmental Protection et al. vs. E.I. DuPont de Nemours and Company, in the United States District Court, District of New Jersey, Civil Action No. 1:19-cv-14766-RMB-JBC. Deposition in 2025. Representing Plaintiffs in matters regarding contamination of groundwater, wastewater, soil, and air with per- and poly-fluoroalkyl substances.

In Re Edmond Asher, et al., vs. RTX Corporation (f/k/a Raytheon Technologies Corporation, et al.) in the County of Huntington Superior Court, Indiana, Cause number 35D01-2006-CT-000338. Deposition in 2024. Representing Plaintiffs in matters regarding contamination of groundwater and soil vapor with trichlorethylene.

In Re Wright vs Consolidated Rail Corporation In the Circuit Court of Cook County, Illinois, Case No: 21L3966. Deposition in 2023, Representing Plaintiff in matters involving groundwater and drinking water contamination of perchloroethylene, trichlorethylene, 1,2-dichloroethane, and carbon tetrachloride.

In Re Behr Dayton Thermal Products LLC In the United States District Court for the Southern District of Ohio Western Division at Dayton, Case No: 08-cv-326. Deposition in 2022. Representing Plaintiff in matters regarding contamination of groundwater and indoor air with perchloroethylene and trichloethelene.

Orange County Water District vs. Sabic Innovative Plastics US, LLC, et al. In the Court of Appeal, Fourth District,

Division 1, California, Case No: D070553. Deposition in 2020. Representing Plaintiff in matters involving compliance with The Comprehensive Environmental Response, Compensation, and Liability Act (CERCLA).
Los Angeles Waterkeeper vs. AAA Plating and Inspection, Inc. In the United States District Court for the Central District of California, Case No: No. CV 18-5916 PA (GJSx). Deposition in 2019. Expert witness representing Plaintiff in matters involving contaminated stormwater runoff at an industrial facility in Compton, California.

Californians for Alternatives to Toxics vs. Schneider Dock and Intermodal Facility. In the United States District Court for the Northern District of California, Case No: 3:17-cv-05287-JST. Deposition in 2019. Expert witness representing Plaintiff in matters involving contaminated stormwater runoff at an industrial facility in Eureka, California.

Bells et al. vs. The 3M Company et al. In the United States District Court for the District of Colorado, Case No: 1:16-CV-02531-RBJ. Deposition in 2018. Expert witness representing Plaintiff on matters regarding the general hydrogeological conditions present in an area impacted by per- and poly-fluoroalkyl substances.

Ungar vs. Foundation for Affordable Housing. In the Superior Court, State of California, Los Angeles County, Case No. BC628890 Deposition in 2017. Expert witness representing defendant on matters involving alleged drinking water contamination.

Invited Testimony, Reports, Papers and Presentations:

Hagemann, M.F., 2008. Disclosure of Hazardous Waste Issues under CEQA. Presentation to the Public Environmental Law Conference, Eugene, Oregon.

Hagemann, M.F., 2008. Disclosure of Hazardous Waste Issues under CEQA. Invited presentation to U.S.EPA Region 9, San Francisco, California.

Hagemann, M.F., 2005. Use of Electronic Databases in Environmental Regulation, Policy Making andPublic Participation. Brownfields 2005, Denver, Coloradao.

Hagemann, M.F., 2004. Perchlorate Contamination of the Colorado River and Impacts to Drinking Water in Nevada and the Southwestern U.S. Presentation to a meeting of the American Groundwater Trust, Las Vegas, NV (served on conference organizing committee).

Hagemann, M.F., 2004. Invited testimony to a California Senate committee hearing on air toxins atschools in Southern California, Los Angeles.

Brown, A., Farrow, J., Gray, A. and **Hagemann, M.**, 2004. An Estimate of Costs to Address MTBEReleases from Underground Storage Tanks and the Resulting Impact to Drinking Water Wells.

Presentation to the Ground Water and Environmental Law Conference, National GroundwaterAssociation.

Hagemann, M.F., 2004. Perchlorate Contamination of the Colorado River and Impacts to Drinking Waterin Arizona and the Southwestern U.S. Presentation to a meeting of the American Groundwater Trust, Phoenix, AZ (served on conference organizing committee).

Hagemann, M.F., 2003. Perchlorate Contamination of the Colorado River and Impacts to Drinking Waterin the Southwestern U.S. Invited presentation to a special committee meeting of the National Academy of Sciences, Irvine, CA.

Hagemann, M.F., 2003. Perchlorate Contamination of the Colorado River. Invited presentation to atribal EPA meeting, Pechanga, CA.

Hagemann, M.F., 2003. Perchlorate Contamination of the Colorado River. Invited presentation to ameeting of tribal representatives, Parker, AZ.

Hagemann, M.F., 2003. Impact of Perchlorate on the Colorado River and Associated Drinking WaterSupplies. Invited presentation to the Inter-Tribal Meeting, Torres Martinez Tribe.

Hagemann, M.F., 2003. The Emergence of Perchlorate as a Widespread Drinking Water Contaminant.Invited presentation to the U.S. EPA Region 9.

Hagemann, M.F., 2003. A Deductive Approach to the Assessment of Perchlorate Contamination. Invited presentation to the California Assembly Natural Resources Committee.

Hagemann, M.F., 2003. Perchlorate: A Cold War Legacy in Drinking Water. Presentation to a meeting ofthe National Groundwater Association.

Hagemann, M.F., 2002. From Tank to Tap: A Chronology of MTBE in Groundwater. Presentation to ameeting of the National Groundwater Association.

Hagemann, M.F., 2002. A Chronology of MTBE in Groundwater and an Estimate of Costs to AddressImpacts to Groundwater. Presentation to the annual meeting of the Society of Environmental Journalists.

Hagemann, M.F., 2002. An Estimate of the Cost to Address MTBE Contamination in Groundwater(and Who Will Pay). Presentation to a meeting of the National Groundwater Association.

Hagemann, M.F., 2002. An Estimate of Costs to Address MTBE Releases from Underground Storage Tanks and the Resulting Impact to Drinking Water Wells. Presentation to a meeting of the U.S. EPA andState Underground Storage Tank Program managers.

Hagemann, M.F., 2001. From Tank to Tap: A Chronology of MTBE in Groundwater. Unpublishedreport.

Hagemann, M.F., 2001. Estimated Cleanup Cost for MTBE in Groundwater Used as Drinking Water. Unpublished report.

Hagemann, M.F., 2001. Estimated Costs to Address MTBE Releases from Leaking Underground StorageTanks.

Unpublished report.

Hagemann, M.F., and VanMouwerik, M., 1999. Potential Water Concerns Related to Snowmobile Usage. Water Resources Division, National Park Service, Technical Report.

VanMouwerik, M. and **Hagemann, M.F**. 1999, Water Quality Concerns Related to Personal WatercraftUsage. Water Resources Division, National Park Service, Technical Report.

Hagemann, M.F., 1999, Is Dilution the Solution to Pollution in National Parks? The George WrightSociety Biannual Meeting, Asheville, North Carolina.

Hagemann, M.F., 1997, The Potential for MTBE to Contaminate Groundwater. U.S. EPA Superfund Groundwater Technical Forum Annual Meeting, Las Vegas, Nevada.

Hagemann, M.F., and Gill, M., 1996, Impediments to Intrinsic Remediation, Moffett Field Naval AirStation, Conference on Intrinsic Remediation of Chlorinated Hydrocarbons, Salt Lake City.

Hagemann, M.F., Fukunaga, G.L., 1996, The Vulnerability of Groundwater to Anthropogenic Contaminants on the Island of Maui, Hawaii. Hawaii Water Works Association Annual Meeting, Maui,October 1996.

Hagemann, M. F., Fukanaga, G. L., 1996, Ranking Groundwater Vulnerability in Central Oahu, Hawaii. Proceedings, Geographic Information Systems in Environmental Resources Management, Airand Waste Management Association Publication VIP-61.

Hagemann, M.F., 1994. Groundwater Characterization and Cleanup at Closing Military Basesin California. Proceedings, California Groundwater Resources Association Meeting.

Hagemann, M.F. and Sabol, M.A., 1993. Role of the U.S. EPA in the High Plains States Groundwater Recharge Demonstration Program. Proceedings, Sixth Biennial Symposium on the Artificial Recharge of Groundwater.

Hagemann, M.F., 1993. U.S. EPA Policy on the Technical Impracticability of the Cleanup of DNAPL-contaminated Groundwater. California Groundwater Resources Association Meeting.

Hagemann, M.F., 1992. Dense Nonaqueous Phase Liquid Contamination of Groundwater: An Ounce of Prevention... Proceedings, Association of Engineering Geologists Annual Meeting, v. 35.

Other Experience:
Selected as subject matter expert for the California Professional Geologist licensing examinations,2009-2011.

SWAPE Technical Consultation, Data Analysis and Litigation Support for the Environment

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Paul Rosenfeld, Ph.D.

Chemical Fate and Transport & Air Dispersion Modeling

Principal Environmental Chemist

Risk Assessment & Remediation Specialist

Education

Ph.D. Soil Chemistry, University of Washington, 1999. Dissertation on volatile organic compound filtration.

M.S. Environmental Science, U.C. Berkeley, 1995. Thesis on organic waste economics.

B.A. Environmental Studies, U.C. Santa Barbara, 1991. Focus on wastewater treatment.

Professional Experience

Dr. Rosenfeld has over 25 years of experience conducting environmental investigations and risk assessments for evaluating impacts to human health, property, and ecological receptors. His expertise focuses on the fate and transport of environmental contaminants, human health risk, exposure assessment, and ecological restoration. Dr. Rosenfeld has evaluated and modeled emissions from oil spills, landfills, boilers and incinerators, process stacks, storage tanks, confined animal feeding operations, industrial, military and agricultural sources, unconventional oil drilling operations, and locomotive and construction engines. His project experience ranges from monitoring and modeling of pollution sources to evaluating impacts of pollution on workers at industrial facilities and residents in surrounding communities. Dr. Rosenfeld has also successfully modeled exposure to contaminants distributed by water systems and via vapor intrusion.

Dr. Rosenfeld has investigated and designed remediation programs and risk assessments for contaminated sites containing lead, heavy metals, mold, bacteria, particulate matter, petroleum hydrocarbons, chlorinated solvents, pesticides, radioactive waste, dioxins and furans, semi- and volatile organic compounds, PCBs, PAHs, creosote, perchlorate, asbestos, per- and poly-fluoroalkyl substances (PFOA/PFOS), unusual polymers, fuel oxygenates (MTBE), among other pollutants. Dr. Rosenfeld also has experience evaluating greenhouse gas emissions from various projects and is an expert on the assessment of odors from industrial and agricultural sites, as well as the evaluation of odor nuisance impacts and technologies for abatement of odorous emissions. As a principal scientist at SWAPE, Dr. Rosenfeld directs air dispersion modeling and exposure assessments. He has served as an expert witness and testified about pollution sources causing nuisance and/or personal injury at sites and has testified as an expert witness on numerous cases involving exposure to soil, water and air contaminants from industrial, railroad, agricultural, and military sources.

Professional History:

Soil Water Air Protection Enterprise (SWAPE); 2003 to present; Principal and Founding Partner
UCLA School of Public Health; 2007 to 2011; Lecturer (Assistant Researcher)
UCLA School of Public Health; 2003 to 2006; Adjunct Professor
UCLA Environmental Science and Engineering Program; 2002-2004; Doctoral Intern Coordinator
UCLA Institute of the Environment, 2001-2002; Research Associate
Komex H_2O Science, 2001 to 2003; Senior Remediation Scientist
National Groundwater Association, 2002-2004; Lecturer
San Diego State University, 1999-2001; Adjunct Professor
Anteon Corp., San Diego, 2000-2001; Remediation Project Manager
Ogden (now Amec), San Diego, 2000-2000; Remediation Project Manager
Bechtel, San Diego, California, 1999 – 2000; Risk Assessor
King County, Seattle, 1996 – 1999; Scientist
James River Corp., Washington, 1995-96; Scientist
Big Creek Lumber, Davenport, California, 1995; Scientist
Plumas Corp., California and USFS, Tahoe 1993-1995; Scientist
Peace Corps and World Wildlife Fund, St. Kitts, West Indies, 1991-1993; Scientist

Publications:

Rosenfeld, P.E., Spaeth, K.R., McCarthy, S.J. *et al.* Camp Lejeune Marine Cancer Risk Assessment for Exposure to Contaminated Drinking Water From 1955 to 1987. *Water Air Soil Pollut* **235**, 124 (2024). https://doi.org/10.1007/s11270-023-06863-y.

Rosenfeld P.E., Spaeth K.R., Remy L.L., Byers V., Muerth S.A., Hallman R,C., Summers-Evans J., Barker S. (2023) Perfluoroalkyl substances exposure in firefighters: Sources and implications, *Environmental Research*, Volume 220, https://doi.org/10.1016/j.envres.2022.115164.

Rosenfeld P.E. and Spaeth K.R., (2023) Authors' Response to Letter to the Editor from Bullock and Ramacciotti, *Water Air Soil Pollution* Volume 234, https://doi.org/10.1007/s11270-023-06165-3

Rosenfeld P. E., Spaeth K., Hallman R., Bressler R., Smith, G., (2022) Cancer Risk and Diesel Exhaust Exposure Among Railroad Workers. *Water Air Soil Pollution.* **233,** 171.

Remy, L.L., Clay T., Byers, V., **Rosenfeld P. E.** (2019) Hospital, Health, and Community Burden After Oil Refinery Fires, Richmond, California 2007 and 2012. *Environmental Health.* 18:48

Simons, R.A., Seo, Y. **Rosenfeld, P**., (2015) Modeling the Effect of Refinery Emission On Residential Property Value. *Journal of Real Estate Research*. 27(3):321-342

Chen, J. A, Zapata A. R., Sutherland A. J., Molmen, D.R., Chow, B. S., Wu, L. E., **Rosenfeld, P. E.,** Hesse, R. C., (2012) Sulfur Dioxide and Volatile Organic Compound Exposure To A Community In Texas City Texas Evaluated Using Aermod and Empirical Data. *American Journal of Environmental Science*, 8(6), 622-632.

Rosenfeld, P.E. & Feng, L. (2011). *The Risks of Hazardous Waste.* Amsterdam: Elsevier Publishing.

Cheremisinoff, N.P., & **Rosenfeld, P.E.** (2011). *Handbook of Pollution Prevention and Cleaner Production: Best Practices in the Agrochemical Industry*, Amsterdam: Elsevier Publishing.

Gonzalez, J., Feng, L., Sutherland, A., Waller, C., Sok, H., Hesse, R., **Rosenfeld, P.** (2010). PCBs and Dioxins/Furans in Attic Dust Collected Near Former PCB Production and Secondary Copper Facilities in Sauget, IL. *Procedia Environmental Sciences*. 113–125.

Feng, L., Wu, C., Tam, L., Sutherland, A.J., Clark, J.J., **Rosenfeld, P.E.** (2010). Dioxin and Furan Blood Lipid and Attic Dust Concentrations in Populations Living Near Four Wood Treatment Facilities in the United States. *Journal of Environmental Health*. 73(6), 34-46.

Cheremisinoff, N.P., & **Rosenfeld, P.E.** (2010). *Handbook of Pollution Prevention and Cleaner Production: Best Practices in the Wood and Paper Industries.* Amsterdam: Elsevier Publishing.

Cheremisinoff, N.P., & **Rosenfeld, P.E.,** (2009). *Handbook of Pollution Prevention and Cleaner Production: Best Practices in the Petroleum Industry*. Amsterdam: Elsevier Publishing.

Wu, C., Tam, L., Clark, J., **Rosenfeld, P**. (2009). Dioxin and furan blood lipid concentrations in populations living near four wood treatment facilities in the United States. *WIT Transactions on Ecology and the Environment, Air Pollution,* 123 (17), 319-327.

Cheremisinoff, N.P., **Rosenfeld, P.E.** Davletshin, A.R. (2008). ***Responsible Care***. Gulf Publishing. Texas.

Tam L. K., Wu C. D., Clark J. J. and **Rosenfeld, P.E.** (2008). A Statistical Analysis Of Attic Dust And Blood Lipid Concentrations Of Tetrachloro-p-Dibenzodioxin (TCDD) Toxicity Equivalency Quotients (TEQ) In Two Populations Near Wood Treatment Facilities. *Organohalogen Compounds*, 70, 002252-002255.

Tam L. K., Wu C. D., Clark J. J. and **Rosenfeld, P.E.** (2008). Methods For Collect Samples For Assessing Dioxins And Other Environmental Contaminants In Attic Dust: A Review. *Organohalogen Compounds*, 70, 000527-000530.

Hensley, A.R. A. Scott, J. J. J. Clark, **Rosenfeld, P.E.** (2007). Attic Dust and Human Blood Samples Collected near a Former Wood Treatment Facility. *Environmental Research*. 105, 194-197.

Rosenfeld, P.E., J. J. J. Clark, A. R. Hensley, M. Suffet. (2007). The Use of an Odor Wheel Classification for Evaluation of Human Health Risk Criteria for Compost Facilities. *Water Science & Technology* 55(5), 345-357.

Rosenfeld, P. E., M. Suffet. (2007). The Anatomy of Odour Wheels for Odours of Drinking Water, Wastewater, Compost And The Urban Environment. *Water Science & Technology* 55(5), 335-344.

Sullivan, P. J. Clark, J.J.J., Agardy, F. J., **Rosenfeld, P.E.** (2007). *Toxic Legacy, Synthetic Toxins in the Food, Water, and Air in American Cities.* Boston Massachusetts: Elsevier Publishing

Rosenfeld, P.E., and Suffet I.H. (2004). Control of Compost Odor Using High Carbon Wood Ash. *Water Science and Technology*. 49(9),171-178.

Rosenfeld P. E., J.J. Clark, I.H. (Mel) Suffet (2004). The Value of An Odor-Quality-Wheel Classification Scheme for The Urban Environment. *Water Environment Federation's Technical Exhibition and Conference (WEFTEC) 2004.* New Orleans, October 2-6, 2004.

Rosenfeld, P.E., and Suffet, I.H. (2004). Understanding Odorants Associated with Compost, Biomass Facilities, and the Land Application of Biosolids. *Water Science and Technology*. 49(9), 193-199.

Rosenfeld, P.E., and Suffet I.H. (2004). Control of Compost Odor Using High Carbon Wood Ash, *Water Science and Technology*, 49(9), 171-178.

Rosenfeld, P. E., Grey, M. A., Sellew, P. (2004). Measurement of Biosolids Odor and Odorant Emissions from Windrows, Static Pile and Biofilter. *Water Environment Research*. 76(4), 310-315.

Rosenfeld, P.E., Grey, M and Suffet, M. (2002). Compost Demonstration Project, Sacramento California Using High-Carbon Wood Ash to Control Odor at a Green Materials Composting Facility. *Integrated Waste Management Board Public Affairs Office*, Publications Clearinghouse (MS–6), Sacramento, CA Publication #442-02-008.

Rosenfeld, P.E., and C.L. Henry. (2001). Characterization of odor emissions from three different biosolids. *Water Soil and Air Pollution*. 127(1-4), 173-191.

Rosenfeld, P.E., and Henry C. L., (2000). Wood ash control of odor emissions from biosolids application. *Journal of Environmental Quality.* 29, 1662-1668.

Rosenfeld, P.E., C.L. Henry and D. Bennett. (2001). Wastewater dewatering polymer affects on biosolids odor emissions and microbial activity. *Water Environment Research*. 73(4), 363-367.

Rosenfeld, P.E., and C.L. Henry. (2001). Activated Carbon and Wood Ash Sorption of Wastewater, Compost, and Biosolids Odorants. *Water Environment Research*, 73, 388-393.

Rosenfeld, P.E., and Henry C. L., (2001). High carbon wood ash effect on biosolids microbial activity and odor. *Water Environment Research*. 131(1-4), 247-262.

Chollack, T. and **P. Rosenfeld. (**1998). Compost Amendment Handbook for Landscaping. Prepared for and distributed by the City of Redmond, Washington State.

Rosenfeld, P. E. (1992). The Mount Liamuiga Crater Trail. *Heritage Magazine of St. Kitts*, 3(2).

Rosenfeld, P. E. (1993). High School Biogas Project to Prevent Deforestation on St. Kitts. *Biomass Users Network*, 7(1).

Rosenfeld, P. E. (1998). Characterization, Quantification, and Control of Odor Emissions from Biosolids Application To Forest Soil. Doctoral Thesis. University of Washington College of Forest Resources.

Rosenfeld, P. E. (1994). Potential Utilization of Small Diameter Trees on Sierra County Public Land. Master's thesis reprinted by the Sierra County Economic Council. Sierra County, California.

Rosenfeld, P. E. (1991). How to Build a Small Rural Anaerobic Digester & Uses Of Biogas In The First And Third World. Bachelor's Thesis. University of California.

Presentations:

Rosenfeld, P.E., "The science for Perfluorinated Chemicals (PFAS): What makes remediation so hard?" Law Seminars International, (May 9-10, 2018) 800 Fifth Avenue, Suite 101 Seattle, WA.

Rosenfeld, P.E., Sutherland, A; Hesse, R.; Zapata, A. (October 3-6, 2013). Air dispersion modeling of volatile organic emissions from multiple natural gas wells in Decatur, TX. *44th Western Regional Meeting, American Chemical Society.* Lecture conducted from Santa Clara, CA.

Sok, H.L.; Waller, C.C.; Feng, L.; Gonzalez, J.; Sutherland, A.J.; Wisdom-Stack, T.; Sahai, R.K.; Hesse, R.C.; **Rosenfeld, P.E.** (June 20-23, 2010). Atrazine: A Persistent Pesticide in Urban Drinking Water. *Urban Environmental Pollution*. Lecture conducted from Boston, MA.

Feng, L.; Gonzalez, J.; Sok, H.L.; Sutherland, A.J.; Waller, C.C.; Wisdom-Stack, T.; Sahai, R.K.; La, M.; Hesse, R.C.; **Rosenfeld, P.E.** (June 20-23, 2010). Bringing Environmental Justice to East St. Louis, Illinois. *Urban Environmental Pollution.* Lecture conducted from Boston, MA.

Rosenfeld, P.E. (April 19-23, 2009). Perfluoroctanoic Acid (PFOA) and Perfluoroactane Sulfonate (PFOS) Contamination in Drinking Water From the Use of Aqueous Film Forming Foams (AFFF) at Airports in the United States. *2009 Ground Water Summit and 2009 Ground Water Protection Council Spring Meeting*, Lecture conducted from Tuscon, AZ.

Rosenfeld, P.E. (April 19-23, 2009). Cost to Filter Atrazine Contamination from Drinking Water in the United States" Contamination in Drinking Water From the Use of Aqueous Film Forming Foams (AFFF) at Airports in the United States. *2009 Ground Water Summit and 2009 Ground Water Protection Council Spring Meeting*. Lecture conducted from Tuscon, AZ.

Wu, C., Tam, L., Clark, J., **Rosenfeld, P**. (20-22 July (2009). Dioxin and furan blood lipid concentrations in populations living near four wood treatment facilities in the United States. Brebbia, C.A. and Popov, V., eds., *Air Pollution XVII: Proceedings of the Seventeenth International Conference on Modeling, Monitoring and Management of Air Pollution*. Lecture conducted from Tallinn, Estonia.

Rosenfeld, P. E. (October 15-18, 2007). Moss Point Community Exposure To Contaminants From A Releasing Facility. *The 23rd Annual International Conferences on Soils Sediment and Water.* Platform lecture conducted at University of Massachusetts, Amherst MA.

Rosenfeld, P. E. (October 15-18, 2007). The Repeated Trespass of Tritium-Contaminated Water Into A Surrounding Community Form Repeated Waste Spills From A Nuclear Power Plant. *The 23rd Annual International Conferences on Soils Sediment and Water*. Platform lecture conducted from University of Massachusetts, Amherst MA.

Rosenfeld, P. E. (October 15-18, 2007). Somerville Community Exposure To Contaminants From Wood Treatment Facility Emissions. The *23rd Annual International Conferences on Soils Sediment and Water*. Lecture conducted from University of Massachusetts, Amherst MA.

Rosenfeld P. E. (March 2007). Production, Chemical Properties, Toxicology, & Treatment Case Studies of 1,2,3-Trichloropropane (TCP). *The Association for Environmental Health and Sciences (AEHS) Annual Meeting*. Lecture conducted from San Diego, CA.

Rosenfeld P. E. (March 2007). Blood and Attic Sampling for Dioxin/Furan, PAH, and Metal Exposure in Florala, Alabama. *The AEHS Annual Meeting.* Lecture conducted from San Diego, CA.

Hensley A.R., Scott, A., **Rosenfeld P.E.,** Clark, J.J.J. (August 21 – 25, 2006). Dioxin Containing Attic Dust And Human Blood Samples Collected Near A Former Wood Treatment Facility. *The 26th International Symposium on Halogenated Persistent Organic Pollutants – DIOXIN2006*. Lecture conducted from Radisson SAS Scandinavia Hotel in Oslo Norway.

Hensley A.R., Scott, A., **Rosenfeld P.E.,** Clark, J.J.J. (November 4-8, 2006). Dioxin Containing Attic Dust And Human Blood Samples Collected Near A Former Wood Treatment Facility. *APHA 134 Annual Meeting & Exposition.* Lecture conducted from Boston Massachusetts.

Paul Rosenfeld Ph.D. (October 24-25, 2005). Fate, Transport and Persistence of PFOA and Related Chemicals. Mealey's C8/PFOA. *Science, Risk & Litigation Conference.* Lecture conducted from The Rittenhouse Hotel, Philadelphia, PA.

Paul Rosenfeld Ph.D. (September 19, 2005). Brominated Flame Retardants in Groundwater: Pathways to Human Ingestion, *Toxicology and Remediation PEMA Emerging Contaminant Conference*. Lecture conducted from Hilton Hotel, Irvine California.

Paul Rosenfeld Ph.D. (September 19, 2005). Fate, Transport, Toxicity, And Persistence of 1,2,3-TCP. *PEMA Emerging Contaminant Conference.* Lecture conducted from Hilton Hotel in Irvine, California.

Paul Rosenfeld Ph.D. (September 26-27, 2005). Fate, Transport and Persistence of PDBEs. *Mealey's Groundwater Conference.* Lecture conducted from Ritz Carlton Hotel, Marina Del Ray, California.

Paul Rosenfeld Ph.D. (June 7-8, 2005). Fate, Transport and Persistence of PFOA and Related Chemicals. *International Society of Environmental Forensics: Focus on Emerging Contaminants*. Lecture conducted from Sheraton Oceanfront Hotel, Virginia Beach, Virginia.

Paul Rosenfeld Ph.D. (July 21-22, 2005). Fate Transport, Persistence and Toxicology of PFOA and Related Perfluorochemicals. *2005 National Groundwater Association Ground Water and Environmental Law Conference*. Lecture conducted from Wyndham Baltimore Inner Harbor, Baltimore Maryland.

Paul Rosenfeld Ph.D. (July 21-22, 2005). Brominated Flame Retardants in Groundwater: Pathways to Human Ingestion, Toxicology and Remediation. *2005 National Groundwater Association Ground Water and Environmental Law Conference.* Lecture conducted from Wyndham Baltimore Inner Harbor, Baltimore Maryland.

Paul Rosenfeld, Ph.D. and James Clark Ph.D. and Rob Hesse R.G. (May 5-6, 2004). Tert-butyl Alcohol Liability and Toxicology, A National Problem and Unquantified Liability. *National Groundwater Association. Environmental Law Conference*. Lecture conducted from Congress Plaza Hotel, Chicago Illinois.

Paul Rosenfeld, Ph.D. (March 2004). Perchlorate Toxicology. *Meeting of the American Groundwater Trust*. Lecture conducted from Phoenix Arizona.

Hagemann, M.F., **Paul Rosenfeld, Ph.D.** and Rob Hesse (2004). Perchlorate Contamination of the Colorado River. *Meeting of tribal representatives*. Lecture conducted from Parker, AZ.

Paul Rosenfeld, Ph.D. (April 7, 2004). A National Damage Assessment Model for PCE and Dry Cleaners. *Drycleaner Symposium. California Ground Water Association*. Lecture conducted from Radison Hotel, Sacramento, California.

Rosenfeld, P. E., Grey, M., (June 2003) Two stage biofilter for biosolids composting odor control. *Seventh International In Situ And On Site Bioremediation Symposium Battelle Conference* Orlando, FL.

Paul Rosenfeld, Ph.D. and James Clark Ph.D. (February 20-21, 2003) Understanding Historical Use, Chemical Properties, Toxicity and Regulatory Guidance of 1,4 Dioxane. *National Groundwater Association. Southwest Focus Conference. Water Supply and Emerging Contaminants*. Lecture conducted from Hyatt Regency Phoenix Arizona.

Paul Rosenfeld, Ph.D. (February 6-7, 2003). Underground Storage Tank Litigation and Remediation. *California CUPA Forum*. Lecture conducted from Marriott Hotel, Anaheim California.

Paul Rosenfeld, Ph.D. (October 23, 2002) Underground Storage Tank Litigation and Remediation. *EPA Underground Storage Tank Roundtable*. Lecture conducted from Sacramento California.

Rosenfeld, P.E. and Suffet, M. (October 7- 10, 2002). Understanding Odor from Compost, *Wastewater and Industrial Processes. Sixth Annual Symposium on Off Flavors in the Aquatic Environment. International Water Association*. Lecture conducted from Barcelona Spain.

Rosenfeld, P.E. and Suffet, M. (October 7- 10, 2002). Using High Carbon Wood Ash to Control Compost Odor. *Sixth Annual Symposium on Off Flavors in the Aquatic Environment. International Water Association*. Lecture conducted from Barcelona Spain.

Rosenfeld, P.E. and Grey, M. A. (September 22-24, 2002). Biocycle Composting for Coastal Sage Restoration. *Northwest Biosolids Management Association*. Lecture conducted from Vancouver Washington.

Rosenfeld, P.E. and Grey, M. A. (November 11-14, 2002). Using High-Carbon Wood Ash to Control Odor at a Green Materials Composting Facility. *Soil Science Society Annual Conferenc*e. Lecture conducted from Indianapolis, Maryland.

Rosenfeld. P.E. (September 16, 2000). Two stage biofilter for biosolids composting odor control. *Water Environment Federation.* Lecture conducted from Anaheim California.

Rosenfeld. P.E. (October 16, 2000). Wood ash and biofilter control of compost odor. *Biofest.* Lecture conducted from Ocean Shores, California.

Rosenfeld, P.E. (2000). Bioremediation Using Organic Soil Amendments. *California Resource Recovery Association*. Lecture conducted from Sacramento California.

Rosenfeld, P.E., C.L. Henry, R. Harrison. (1998). Oat and Grass Seed Germination and Nitrogen and Sulfur Emissions Following Biosolids Incorporation with High-Carbon Wood-Ash. *Water Environment Federation 12th Annual Residuals and Biosolids Management Conference Proceedings*. Lecture conducted from Bellevue Washington.

Rosenfeld, P.E., and C.L. Henry. (1999). An evaluation of ash incorporation with biosolids for odor reduction. *Soil Science Society of America*. Lecture conducted from Salt Lake City Utah.

Rosenfeld, P.E., C.L. Henry, R. Harrison. (1998). Comparison of Microbial Activity and Odor Emissions from Three Different Biosolids Applied to Forest Soil. *Brown and Caldwell.* Lecture conducted from Seattle Washington.

Rosenfeld, P.E., C.L. Henry. (1998). Characterization, Quantification, and Control of Odor Emissions from Biosolids Application To Forest Soil. *Biofest.* Lecture conducted from Lake Chelan, Washington.

Rosenfeld, P.E, C.L. Henry, R. Harrison. (1998). Oat and Grass Seed Germination and Nitrogen and Sulfur Emissions Following Biosolids Incorporation with High-Carbon Wood-Ash. Water Environment Federation 12th Annual Residuals and Biosolids Management Conference Proceedings. Lecture conducted from Bellevue Washington.

Rosenfeld, P.E., C.L. Henry, R. B. Harrison, and R. Dills. (1997). Comparison of Odor Emissions from Three Different Biosolids Applied to Forest Soil. *Soil Science Society of America*. Lecture conducted from Anaheim California.

Teaching Experience:

UCLA Department of Environmental Health (Summer 2003 through 20010) Taught Environmental Health Science 100 to students, including undergrad, medical doctors, public health professionals and nurses. The course focused on the health effects of environmental contaminants.

National Ground Water Association, Successful Remediation Technologies. Custom Course in Sante Fe, New Mexico. May 21, 2002. Focused on fate and transport of fuel contaminants associated with underground storage tanks.

National Ground Water Association; Successful Remediation Technologies Course in Chicago Illinois. April 1, 2002. Focused on fate and transport of contaminants associated with Superfund and RCRA sites.

California Integrated Waste Management Board, April and May 2001. Alternative Landfill Caps Seminar in San Diego, Ventura, and San Francisco. Focused on both prescriptive and innovative landfill cover design.

UCLA Department of Environmental Engineering, February 5, 2002. Seminar on Successful Remediation Technologies focusing on Groundwater Remediation.

University Of Washington, Soil Science Program, Teaching Assistant for several courses including Soil Chemistry, Organic Soil Amendments, and Soil Stability.

U.C. Berkeley, Environmental Science Program Teaching Assistant for Environmental Science 10.

Academic Grants Awarded:

California Integrated Waste Management Board. $41,000 grant awarded to UCLA Institute of the Environment. Goal: To investigate the effect of high carbon wood ash on volatile organic emissions from compost. 2001.

Synagro Technologies, Corona California: $10,000 grant awarded to San Diego State University.
Goal: investigate the effect of biosolids for restoration and remediation of degraded coastal sage soils. 2000.

King County, Department of Research and Technology, Washington State. $100,000 grant awarded to University of Washington: Goal: To investigate odor emissions from biosolids application and the effect of polymers and ash on VOC emissions. 1998.

Northwest Biosolids Management Association, Washington State. $20,000 grant awarded to investigate the effect of polymers and ash on VOC emissions from biosolids. 1997.

James River Corporation, Oregon: $10,000 grant was awarded to investigate the success of genetically engineered Poplar trees with resistance to round-up. 1996.

United State Forest Service, Tahoe National Forest: $15,000 grant was awarded to investigating fire ecology of the Tahoe National Forest. 1995.

Kellogg Foundation, Washington D.C. $500 grant was awarded to construct a large anaerobic digester on St. Kitts in West Indies. 1993

Deposition and/or Trial Testimony:

In the District Court of Harris County Texas
Mt Davis Interest, Inc v Sesco Cement Corp
Cause No 2023-26512
Trial 6-6-2-25

In the United States Southern District of New York
Gallo vs Avon Products Inc., et al
Civil Action No.: 1:23-cv-2023
Deposition 4-24-2025

In Vanderburgh Superior Court 5, County of Vanderburgh, Indiana
Markello v CSX
Civil Action No 82D05-2011-CT-004962
Deposition 3-26-25

Iin the Circuit Court of Cook County Illinois
Jarosiewicz v Northeast Regional Railroad
Case No 2023 L 002290
Deposition 2-27-25

In the District Court 191st Judicial District Dallas County
Acklin v Poly America International
Cause No DC-22-08610
Deposition 1-8-2025

United States District Court, Norther District of California
Asustin Vs Monsanto
Case No 2:23-cv-272
Deposition 12-20-25

In Jefferson Circuit Court Division One, Louisville, Kentucky
Stafford vs, CSX
Case No. 18-CI-001790

Deposition: 8-27-24

In the Twenty-Second Judicial Circuit of St. Louis. State of Missouri
Patricia Godfrey vs, Amtrak
Case No. 2122-CC-00525
Deposition: 7-17-24

In the Circuit Court of Jefferson County Alabama
Linda Early Vs. CSX
Case number CV-2021-00241
Deposition 6-24-24

In the Court of Common Please Lucas County, Ohio
Brenda Conkright vs. CSX
Case No. G-4801-CI-0202102664-000
Deposition: 6-4-24

In the Commonwealth of Kentucky, Greenup Circuit Court
Patsy Sue Napier vs. CSX
Case No. 19-CI-0012
Deposition: 5-8-2-24

In United States District Court of Hawaii
Patrick Feindt, Jr. et al. vs. The United States of America
Case No. 1:22-cv-LEK-KJM
Trial 3-29-24 and 4-5-24

In the District Court of Hood County State of Texas
Artie Gray vs. Exxon Mobil
Case No. C-2018047
Rosenfeld Deposition:4-22-2024

In the Elkhart Superior Court State of Indiana
Estate of Clark Stacy vs. Penn Central Corporation
Cause No 2D01-2001-CT-00007
Rosenfeld Deposition 1-25-2024 and 3-7-2024

In the Circuit Court of Trempealeau County, State of Wisconsin
Michael J. Sylla et al. vs. High-Crush Whitehall LLC
Case No. 2019-CV-63, 2019-CV-64, 2019-CV-65, 2019-CV-66
Rosenfeld Deposition: 3-5-2024

In the Circuit Court of Trempealeau County, State of Wisconsin
Leland Drangstveit vs. High-Crush Blair LLC
Case No. 19-CV-66
Rosenfeld Deposition 3-5-2024

In the Circuit Court of Jefferson County Alabama
Donald Lee Ashworth vs. CSX Transportation Inc.
Case No CV-2021-901261
Rosenfeld Deposition 1-23-2024

In the United States District Court for the Eastern District of Wisconsin
Gary L Siepe vs. Soo Line Railroad
Case No. 2:21-cv-00919
Rosenfeld Deposition 1-19-2024

In the United States District Court for the Western District of Louisiana
Ricky Bush v. Clean Harbors Colfax LLC
Case No. 1:22-cv-02026-DDD-JPM
Rosenfeld Deposition 12-18-2023 and 1-15-2024

In United States District Court of Hawaii
Patrick Feindt, Jr. et al. vs. The United States of America
Case No. 1:22-cv-LEK-KJM
Rosenfeld Deposition 11-29-2023

In the Circuit Court for the Twentieth Judicial Circuit St. Clair County, Illinois
Timothy Gray vs. Rural King et al.
Case No 2022-LA-355
Rosenfeld Deposition 9-26-2023

In United States District Court Eastern District of Wisconsin
Gary L. Siepe vs. Soo Line Railroad Company
Case No. 2:21-cv-00919
Rosenfeld Deposition 9-15-2023

In the Circuit Court of Cook County Illinois
Donald Fox vs. BNSF
Case No. 2021 L12
Rosenfeld Deposition 9-12-2023

In the Court of Common Please Cuyahoga County, Ohio
Thomas Schleich vs. Penn Central Corporation
Lead Case No. CV-20-939184
Rosenfeld Deposition 8-27-2023

In the Circuit Court of Jackson County Missouri at Kansas City
Timothy Dalsing vs. BNSF
Case No. No. 2216-cv06539
Rosenfeld Deposition 7-28-2023

In the United States District Court for the Southern District of Texas Houston Division
International Terminals Company LLC Deer Park Fire Litigation
Lead Case No. 4:19-cv-01460
Rosenfeld Deposition 7-25-2023

In the Circuit Court of Livingston County Missouri
Shirley Ralls vs. Canadian Pacific Railway and Soo Lind Railroad
Case No. 28LV-CV0020
Rosenfeld Daubert Hearing 7-18-2023 Trial Testimony 7-19-2023

In the Circuit Court of Cook County Illinois
Brenda Wright vs. Penn Central and Conrail
Case No. No. 2032L003966
Rosenfeld Deposition 6-13-2023

In the Circuit Court Common Please Philadelphia of Jefferson County Alabama
Frank Belle vs. Birmingham Southern Railroad Company et al.
Case No. 01-cv-2021-900901.00
Rosenfeld Deposition 4-6-2023

In the Circuit Court of Jefferson County Alabama
Linda De Gregorio vs. Penn Central
Case No. 002278
Rosenfeld Deposition 3-27-20203

In the United States District Court Eastern District of New York
Rosalie Romano et al. vs. Northrup Grumman Corporation
Case No. 16-cv-5760
Rosenfeld Deposition 3-16-2023

In the Superior Court of Washington, Spokane County
Judy Cundy vs. BNSF
Case No. 21-2-03718-32
Rosenfeld Deposition 3-9-2023

In The Court of Common Pleas of Philadelphia County, PA Civil Trial Division
Feaster v Conrail
Case No. 001075
Rosenfeld Deposition 2-1-2023

In United States District Court for the Central District of Illinois
Sherman vs. BNSF
Case No. 3:17-cv-01192
Rosenfeld Deposition 1-18-2023

In United States District Court District of Colorado
Gonzales vs. BNSF
Case No. 1:21-cv-01690
Rosenfeld Deposition 1-17-2023

In United States District Court District of Colorado
Abeyta vs. BNSF
Case No. 1:21-cv-01689-KMT
Rosenfeld Deposition 1-3-2023

In United States District Court For The Easter District of Louisiana
Nathaniel Smith vs. Illinois Central Railroad
Case No. 2:21-cv-01235
Rosenfeld Deposition 11-30-2022

In the Superior Court of the State of California, County of San Bernardino
Billy Wildrick, Plaintiff vs. BNSF Railway Company
Case No. CIVDS1711810
Rosenfeld Deposition 10-17-2022

In the State Court of Bibb County, State of Georgia
Richard Hutcherson, Plaintiff vs Norfolk Southern Railway Company
Case No. 10-SCCV-092007
Rosenfeld Deposition 10-6-2022

In the Civil District Court of the Parish of Orleans, State of Louisiana
Millard Clark, Plaintiff vs. Dixie Carriers, Inc. et al.
Case No. 2020-03891
Rosenfeld Deposition 9-15-2022

In The Circuit Court of Livingston County, State of Missouri, Circuit Civil Division

Shirley Ralls, Plaintiff vs. Canadian Pacific Railway and Soo Line Railroad
Case No. 18-LV-CC0020
Rosenfeld Deposition 9-7-2022

In The Circuit Court of the 13th Judicial Circuit Court, Hillsborough County, Florida Civil Division
Jonny C. Daniels, Plaintiff vs. CSX Transportation Inc.
Case No. 20-CA-5502
Rosenfeld Deposition 9-1-2022

In The Circuit Court of St. Louis County, State of Missouri
Kieth Luke et. al. Plaintiff vs. Monsanto Company et. al.
Case No. 19SL-CC03191
Rosenfeld Deposition 8-25-2022

In The Circuit Court of the 13th Judicial Circuit Court, Hillsborough County, Florida Civil Division
Jeffery S. Lamotte, Plaintiff vs. CSX Transportation Inc.
Case No. NO. 20-CA-0049
Rosenfeld Deposition 8-22-2022

In State of Minnesota District Court, County of St. Louis Sixth Judicial District
Greg Bean, Plaintiff vs. Soo Line Railroad Company
Case No. 69-DU-CV-21-760
Rosenfeld Deposition 8-17-2022

In United States District Court Western District of Washington at Tacoma, Washington
John D. Fitzgerald Plaintiff vs. BNSF
Case No. 3:21-cv-05288-RJB
Rosenfeld Deposition 8-11-2022

In Circuit Court of the Sixth Judicial Circuit, Macon Illinois
Rocky Bennyhoff Plaintiff vs. Norfolk Southern
Case No. 20-L-56
Rosenfeld Deposition 8-3-2022, Trial 1-10-2023

In Court of Common Pleas, Hamilton County Ohio
Joe Briggins Plaintiff vs. CSX
Case No. A2004464
Rosenfeld Deposition 6-17-2022

In the Superior Court of the State of California, County of Kern
George LaFazia vs. BNSF Railway Company.
Case No. BCV-19-103087
Rosenfeld Deposition 5-17-2022

In the Circuit Court of Cook County Illinois
Bobby Earles vs. Penn Central et. al.
Case No. 2020-L-000550
Rosenfeld Deposition 4-16-2022

In United States District Court Easter District of Florida
Albert Hartman Plaintiff vs. Illinois Central
Case No. 2:20-cv-1633
Rosenfeld Deposition 4-4-2022

In the Circuit Court of the 4th Judicial Circuit, in and For Duval County, Florida
Barbara Steele vs. CSX Transportation

Case No.16-219-Ca-008796
Rosenfeld Deposition 3-15-2022

In United States District Court Easter District of New York
Romano et al. vs. Northrup Grumman Corporation
Case No. 16-cv-5760
Rosenfeld Deposition 3-10-2022

In the Circuit Court of Cook County Illinois
Linda Benjamin vs. Illinois Central
Case No. No. 2019 L 007599
Rosenfeld Deposition 1-26-2022

In the Circuit Court of Cook County Illinois
Donald Smith vs. Illinois Central
Case No. No. 2019 L 003426
Rosenfeld Deposition 1-24-2022

In the Circuit Court of Cook County Illinois
Jan Holeman vs. BNSF
Case No. 2019 L 000675
Rosenfeld Deposition 1-18-2022

In the State Court of Bibb County State of Georgia
Dwayne B. Garrett vs. Norfolk Southern
Case No. 20-SCCV-091232
Rosenfeld Deposition 11-10-2021

In the Circuit Court of Cook County Illinois
Joseph Ruepke vs. BNSF
Case No. 2019 L 007730
Rosenfeld Deposition 11-5-2021

In the United States District Court For the District of Nebraska
Steven Gillett vs. BNSF
Case No. 4:20-cv-03120
Rosenfeld Deposition 10-28-2021

In the Montana Thirteenth District Court of Yellowstone County
James Eadus vs. Soo Line Railroad and BNSF
Case No. DV 19-1056
Rosenfeld Deposition 10-21-2021

In the Circuit Court Of The Twentieth Judicial Circuit, St Clair County, Illinois
Martha Custer et al. vs Cerro Flow Products, Inc.
Case No. 0i9-L-2295
Rosenfeld Deposition 5-14-2021
Trial October 8-4-2021

In the Circuit Court of Cook County Illinois
Joseph Rafferty vs. Consolidated Rail Corporation and National Railroad Passenger Corporation d/b/a AMTRAK,
Case No. 18-L-6845
Rosenfeld Deposition 6-28-2021

In the United States District Court For the Northern District of Illinois

Theresa Romcoe vs. Northeast Illinois Regional Commuter Railroad Corporation d/b/a METRA Rail
Case No. 17-cv-8517
Rosenfeld Deposition 5-25-2021

In the Superior Court of the State of Arizona In and For the Cunty of Maricopa
Mary Tryon et al. vs. The City of Pheonix v. Cox Cactus Farm, L.L.C., Utah Shelter Systems, Inc.
Case No. CV20127-094749
Rosenfeld Deposition 5-7-2021

In the United States District Court for the Eastern District of Texas Beaumont Division
Robinson, Jeremy et al vs. CNA Insurance Company et al.
Case No. 1:17-cv-000508
Rosenfeld Deposition 3-25-2021

In the Superior Court of the State of California, County of San Bernardino
Gary Garner, Personal Representative for the Estate of Melvin Garner vs. BNSF Railway Company.
Case No. 1720288
Rosenfeld Deposition 2-23-2021

In the Superior Court of the State of California, County of Los Angeles, Spring Street Courthouse
Benny M Rodriguez vs. Union Pacific Railroad, A Corporation, et al.
Case No. 18STCV01162
Rosenfeld Deposition 12-23-2020

In the Circuit Court of Jackson County, Missouri
Karen Cornwell, Plaintiff, vs. Marathon Petroleum, LP, Defendant.
Case No. 1716-CV10006
Rosenfeld Deposition 8-30-2019

In the United States District Court For The District of New Jersey
Duarte et al, Plaintiffs, vs. United States Metals Refining Company et. al. Defendant.
Case No. 2:17-cv-01624-ES-SCM
Rosenfeld Deposition 6-7-2019

In the United States District Court of Southern District of Texas Galveston Division
M/T Carla Maersk vs. Conti 168., Schiffahrts-GMBH & Co. Bulker KG MS "Conti Perdido" Defendant.
Case No. 3:15-CV-00106 consolidated with 3:15-CV-00237
Rosenfeld Deposition 5-9-2019

In The Superior Court of the State of California In And For The County Of Los Angeles – Santa Monica
Carole-Taddeo-Bates et al., vs. Ifran Khan et al., Defendants
Case No. BC615636
Rosenfeld Deposition 1-26-2019

In The Superior Court of the State of California In And For The County Of Los Angeles – Santa Monica
The San Gabriel Valley Council of Governments et al. vs El Adobe Apts. Inc. et al., Defendants
Case No. BC646857
Rosenfeld Deposition 10-6-2018; Trial 3-7-19

In United States District Court For The District of Colorado
Bells et al. Plaintiffs vs. The 3M Company et al., Defendants
Case No. 1:16-cv-02531-RBJ
Rosenfeld Deposition 3-15-2018 and 4-3-2018

In The District Court Of Regan County, Texas, 112th Judicial District
Phillip Bales et al., Plaintiff vs. Dow Agrosciences, LLC, et al., Defendants

Cause No. 1923
Rosenfeld Deposition 11-17-2017

In The Superior Court of the State of California In And For The County Of Contra Costa
Simons et al., Plaintifs vs. Chevron Corporation, et al., Defendants
Cause No. C12-01481
Rosenfeld Deposition 11-20-2017

In The Circuit Court of The Twentieth Judicial Circuit, St Clair County, Illinois
Martha Custer et al., Plaintiff vs. Cerro Flow Products, Inc., Defendants
Case No.: No. 0i9-L-2295
Rosenfeld Deposition 8-23-2017

In United States District Court For The Southern District of Mississippi
Guy Manuel vs. The BP Exploration et al., Defendants
Case No. 1:19-cv-00315-RHW
Rosenfeld Deposition 4-22-2020

In The Superior Court of the State of California, For The County of Los Angeles
Warrn Gilbert and Penny Gilber, Plaintiff vs. BMW of North America LLC
Case No. LC102019 (c/w BC582154)
Rosenfeld Deposition 8-16-2017, Trail 8-28-2018

In the Northern District Court of Mississippi, Greenville Division
Brenda J. Cooper, et al., Plaintifs, vs. Meritor Inc., et al., Defendants
Case No. 4:16-cv-52-DMB-JVM
Rosenfeld Deposition July 2017

In The Superior Court of the State of Washington, County of Snohomish
Michael Davis and Julie Davis et al., Plaintiff vs. Cedar Grove Composting Inc., Defendants
Case No. 13-2-03987-5
Rosenfeld Deposition, February 2017
Trial March 2017

In The Superior Court of the State of California, County of Alameda
Charles Spain., Plaintiff vs. Thermo Fisher Scientific, et al., Defendants
Case No. RG14711115
Rosenfeld Deposition September 2015

In The Iowa District Court In And For Poweshiek County
Russell D. Winburn, et al., Plaintiffs vs. Doug Hoksbergen, et al., Defendants
Case No. LALA002187
Rosenfeld Deposition August 2015

In The Circuit Court of Ohio County, West Virginia
Robert Andrews, et al. vs. Antero, et al.
Civil Action No. 14-C-30000
Rosenfeld Deposition June 2015

In The Iowa District Court for Muscatine County
Laurie Freeman et. al. Plaintiffs vs. Grain Processing Corporation, Defendant
Case No. 4980
Rosenfeld Deposition May 2015

In the Circuit Court of the 17th Judicial Circuit, in and For Broward County, Florida
Walter Hinton, et. al. Plaintiff, vs. City of Fort Lauderdale, Florida, a Municipality, Defendant.

Case No. CACE07030358 (26)
Rosenfeld Deposition December 2014

In the United States District Court Western District of Oklahoma
Tommy McCarty, et al., Plaintiffs, vs. Oklahoma City Landfill, LLC d/b/a Southeast Oklahoma City Landfill, et al. Defendants.
Case No. 5:12-cv-01152-C
Rosenfeld Deposition: July 2014

In the County Court of Dallas County Texas
Lisa Parr et al, *Plaintiff*, vs. Aruba et al, *Defendant.*
Case Number cc-11-01650-E
Rosenfeld Deposition: March and September 2013
Rosenfeld Trial: April 2014

In the County of Kern, Unlimited Jurisdiction
Rose Propagation Services vs. Heppe Enterprises
Case No. S-1500-CV-278190, LHB
Rosenfeld Deposition: May 2014

In the Circuit Court of Baltimore County Maryland
Philip E. Cvach, II et al., *Plaintiffs* vs. Two Farms, Inc. d/b/a Royal Farms, Defendants
Case Number: 03-C-12-012487 OT
Rosenfeld Deposition: September 2013

In the Court of Galveston County, Texas 56th Judicial District
MDL Litigation Regarding Texas City Refinery Ultracracker Emission Event Litigation
Cause No. 10-UC-0001
Rosenfeld Deposition: March 2013
Rosenfeld Trial: September 2013

In the United States District Court of Southern District of Texas Galveston Division
Kyle Cannon, Eugene Donovan, Genaro Ramirez, Carol Sassler, and Harvey Walton, each Individually and on behalf of those similarly situated, *Plaintiffs,* vs. BP Products North America, Inc., *Defendant.*
Case 3:10-cv-00622
Rosenfeld Deposition: February 2012
Rosenfeld Trial: April 2013

In the United States District court of Southern District of California
United States of America, Plaintiff vs. 2,560 Acres of Land, more or less, located in Imperial County, State of California; and Donald L. Crawford, et. al.
Civil No. 3:11-cv-02258-IEG-RBB
Rosenfeld Deposition: December 2012, January 2013

In the Court of Common Pleas of Tuscarawas County Ohio
John Michael Abicht, et al., Plaintiffs, vs. Republic Services, Inc., et al., Defendants
Case No. 2008 CT 10 0741 (Cons. w/ 2009 CV 10 0987)
Rosenfeld Deposition October 2012

In the Court of Common Pleas of Tuscarawas County Ohio
John Michael Abicht, et al., *Plaintiffs,* vs. Republic Services, Inc., et al., *Defendants*
Case Number: 2008 CT 10 0741 (Cons. w/ 2009 CV 10 0987)
Rosenfeld Deposition: October 2012

In the United States District Court for the Middle District of Alabama, Northern Division
James K. Benefield, et al., Plaintiffs, vs. International Paper Company, Defendant.

From:	Bullock, John (BOS)
To:	BOS-Supervisors; BOS-Legislative Aides
Cc:	BOS-Operations; Carroll, John (BOS); BOS Legislation, (BOS); Calvillo, Angela (BOS); De Asis, Edward (BOS); Entezari, Mehran (BOS); Mchugh, Eileen (BOS); Ng, Wilson (BOS); Somera, Alisa (BOS)
Subject:	6 Letters Regarding File Nos. 250700, 250701, 250966, and 251072
Date:	Monday, December 1, 2025 12:18:52 PM
Attachments:	6 Letters Regarding Family Zoning Plan.pdf

Hello,

Please see attached 6 letters regarding File Nos.:

250700: Zoning Map - Family Zoning Plan
250701: Planning, Business and Tax Regulations Codes - Family Zoning Plan
250966: General Plan Amendments - Family Zoning Plan
251072: Planning, Business and Tax Regulations Codes - Family Zoning Plan

Regards,

John Bullock
Office of the Clerk of the Board
San Francisco Board of Supervisors
1 Dr. Carlton B. Goodlett Place, Room 244
San Francisco, CA 94102
(415) 554-5184
BOS@sfgov.org | www.sfbos.org

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From:	D M LaPointe
To:	Carroll, John (BOS); Melgar, Myrna (BOS); Mandelman, Rafael (BOS)
Cc:	Lurie, Daniel (MYR); Wtpcc Delegates; Wtpcc Officers; MelgarStaff (BOS); Board of Supervisors (BOS)
Subject:	Submission of WTPCC Letter to the Land Use & Transportation Committee
Date:	Monday, December 1, 2025 11:20:45 AM
Attachments:	WTPCC-LU-upzoning - 12-1-25.docx

This message is from outside the City email system. Do not open links or attachments from untrusted sources.

Dear Chair and Clerk,

Please find attached the West of Twin Peaks Central Council's letter regarding the Family Zoning Plan for consideration by the Land Use & Transportation Committee. We respectfully request that this letter be entered into the official record for the upcoming hearing.

Thank you for your attention.

--
Denise M. LaPointe
President
WTPCC

West of Twin Peaks Central Council

A Resource for Neighborhood Organizations West of Twin Peaks in San Francisco since 1936

PO Box 27112
San Francisco, CA 94127

http://www.westoftwinpeaks.org/

December 1, 2025

Chair and Members of the Land Use & Transportation Committee:

On behalf of the West of Twin Peaks Central Council and the thousands of homeowners and families we represent, we register our firm and unequivocal opposition to the Family Zoning Plan unless it is substantially amended.

We believe in housing. We believe in growth. And we have proved it - approving and welcoming thousands of new homes at Stonestown, Parkmerced, Balboa Reservoir, and throughout our corridors. Our neighborhoods have done our part and remain ready to do more.

But this proposal is not real planning. It is paper compliance masquerading as progress, shifting the costs and destabilizing impacts onto the very neighborhoods that have kept San Francisco livable, stable, and resilient.

The City's own financial analysis makes one fact unavoidable: only mid-rise redevelopment pencils out. That means this plan incentivizes the demolition of existing homes - not on transit corridors already upzoned by SB 79, but deep inside long-standing, middle-class neighborhoods. SB 79 is already the law. Local zoning will be overridden in 2032. The City should be defending its residents - homeowners and long-term residents alike - not eliminating their remaining protections through density decontrol.

Density decontrol must be removed. Without that amendment, the plan reads as a teardown blueprint, not a family housing strategy.

A central flaw in the proposal is the assumption that so-called "well-resourced neighborhoods" should absorb the city's unmet housing goals, even though these areas do not have the infrastructure capacity to support significant added density. This approach contradicts the City's own service and transit data. Effective equity planning pairs new housing with targeted investment in under-served communities - expanding transit, upgrading utilities, and improving public services where it will meaningfully reduce disparities. Concentrating demolition incentives in stable neighborhoods while leaving actual inequities unaddressed is not sound planning and does not advance the City's stated equity goals.

WTPCC therefore urges the Committee to adopt these essential changes:

Eliminate density decontrol.
It is unnecessary, inequitable, and guaranteed to trigger speculative demolition pressure.

Protect small businesses and merchant corridors.
West Portal, Taraval, and Lakeside cannot absorb displacement without losing the local merchants who define them.

Restore design review, public notice, and protection of historic resources.
Residents - especially longtime homeowners - have the right to transparency. Eliminating due process is unjustifiable.

Guarantee strong protections for existing homeowners and long-term residents.
Middle-class families, whether they rent or own, are the backbone of San Francisco and deserve respect, stability, and a meaningful voice.

At the same time, WTPCC and its members are committed partners in real solutions -and we are sounding this alarm now because the unintended consequences of this plan will be profound and irreversible if the City does not course-correct. We stand ready to help the City unlock and incentivize the more than 70,000 approved units already in the pipeline - homes that can be delivered now, without destabilizing established neighborhoods or erasing neighborhood identity.

Our stable, historic, family-oriented neighborhoods are not obstacles - they are the civic bedrock and democratic center of gravity of this city, composed of taxpayers who keep San Francisco running. To ignore this constituency and insist that one community upend its way of life to cover for years of government failure is not equity - it is a fundamental injustice. No credible planning effort punishes families and homeowners for problems created by City Hall.

If the City is serious about housing, it will focus on the 70,000 units already approved - not dismantle the neighborhoods that sustain the city.

Amend this plan. Protect homeowners and tenants, small business and historic resources. And prove that San Francisco can grow without sacrificing the very neighborhoods that make it worth fighting for.

Sincerely,

Denise LaPointe
President | WTPCC

Cc: Mayor Daniel Lurie
Supervisor Rafael Mandelman, President, Board of Supervisors and Members
WTPCC Delegates

From:	James Lloyd
To:	Chen, Lisa (CPC); Board of Supervisors (BOS); Board of Supervisors (BOS); BOS-Supervisors; ChanStaff (BOS); ChenStaff; DorseyStaff (BOS); Fielder, Jackie (BOS); MahmoodStaff; MandelmanStaff (BOS); MelgarStaff (BOS); SauterStaff; SherrillStaff; Walton, Shamann (BOS)
Cc:	Carroll, John (BOS); Dennis Phillips, Sarah (CPC); Cityattorney
Subject:	public comment re Family Zoning plan for today"s Land Use Committee meeting
Date:	Monday, December 1, 2025 9:16:51 AM
Attachments:	CFH v BH - 2023-12-21 - Judgment.pdf San Francisco - Family Zoning Plan - BoS Land Use Committee 2025.12.01.pdf ucb-examining-local-law-policy-planning-practice-on-development-in-sf-using-cales.pdf

This message is from outside the City email system. Do not open links or attachments from untrusted sources.

Dear San Francisco Board of Supervisors,

The California Housing Defense Fund and Californians for Homeownership submit the attached public comment (and referenced attachments) for today's Land Use Committee meeting regarding the Family Zoning Plan, agendized as items 2 through 9.

Sincerely,

James M. Lloyd
Director of Planning and Investigations
California Housing Defense Fund
james@calhdf.org
CalHDF is grant & donation funded
Donate today - https://calhdf.org/donate/

Electronically Received 10/27/2023 11:58 PM

FILED
Superior Court of California
County of Los Angeles
12/21/2023
David W. Slayton, Executive Officer / Clerk of Court
By: M. Mort Deputy

SUPERIOR COURT OF THE STATE OF CALIFORNIA

FOR THE COUNTY OF LOS ANGELES

CALIFORNIANS FOR HOMEOWNERSHIP, INC., a California nonprofit public benefit corporation, Petitioner, v. CITY OF BEVERLY HILLS, Respondent.	Case No. 23STCP00143 **[~~PROPOSED~~] JUDGMENT** Assigned for all purposes to: Hon. Curtis A. Kin (Dept. 82)

On September 12, 2023, the Court held a hearing on Petitioner's Verified First Amended Petition for Writ of Mandate. After considering the parties' papers and oral argument, the Court issued the decision attached hereto as Exhibit A.

NOW THEREFORE, IT IS HEREBY ORDERED, ADJUDGED, AND DECREED:

1. Judgment is entered in favor of Petitioner on the Verified First Amended Petition for Writ of Mandate.

2. A writ of mandate shall issue pursuant to Code of Civil Procedure section 1085 and Government Code section 65754 (a) requiring Respondent to bring the housing element of its general plan into substantial compliance with state law within 120 days of the date of this judgment, (b) requiring Respondent to bring its zoning ordinance into consistency with the housing element of its general plan within 120 days of the amendment required by (a), and (c) requiring Respondent to

file a return to the writ within 250 days of the date of this judgment.

3. Pursuant to subdivision (a)(1) of Government Code section 65755, the Court hereby suspends the authority of Respondent to issue building permits pursuant to Division 13 (commencing with section 17910) of the Health and Safety Code, and all other related permits, except for permits that create new residential bedrooms or units, and except for permits subject to subdivision (b) of Government Code section 65755, until the City has substantially complied with the requirements of Article 5 of Chapter 3 of Division 1 of Title 7 of the Government Code (commencing with Government Code Section 65300).

4. The Court hereby declares that Respondent City of Beverly Hills has not adopted a substantially compliant general plan housing element

5. Petitioner is entitled to recover its reasonable and legally-authorized costs pursuant to a memorandum of costs to be subsequently filed with the Court.

Dated: 12/21/2023

Curtis A. Kin/Judge

Hon. Curtis A. Kin
Judge of the Superior Court

Respectfully submitted this 27th day of October, 2023
CALIFORNIANS FOR HOMEOWNERSHIP, INC.

Matthew P. Gelfand

Attorneys for Petitioner CALIFORNIANS FOR HOMEOWNERSHIP, INC.

EXHIBIT A

FILED
Superior Court of California
County of Los Angeles
SEP 12 2023
David W. Slayton, Executive Officer/Clerk of Court
By: M. Mort, Deputy

Superior Court of California
County of Los Angeles

CALIFORNIANS FOR HOMEOWNERSHIP, INC., Petitioner, vs. CITY OF BEVERLY HILLS, Respondent.	Case No. 23STCP00143 **RULING ON VERIFIED FIRST AMENDED PETITION FOR WRIT OF MANDATE** Dept. 82 (Hon. Curtis A. Kin)

Petitioner Californians for Homeownership, Inc. petitions for a writ of mandate directing respondent City of Beverly Hills to adopt a revised housing element pursuant to Government Code § 65754.

I. Factual Background

The State of California requires each city to have a "comprehensive, long-term general plan for the physical development" of the city. (Gov. Code § 65300.)[1] Each general plan must have a housing element. (§ 65302(c).) The housing element consists of 'standards and plans for housing sites in the municipality that 'shall endeavor to make adequate provision for the housing needs of all economic segments of the community.' [Citations.]" (*California Building Industry Assn. v. City of San Jose* (2015) 61 Cal.4th 435, 444; *see also* § 65580 [legislative findings concerning housing element law].)

"A municipality must review its housing element for the appropriateness of its housing goals, objectives, and policies and must revise the housing element in accordance with a statutory schedule." (*Martinez v. City of Clovis* (2023) 90 Cal.App.5th 193, 222, citing § 65588(a), (b).) "The interval between the due dates for

[1] All statutory references are to the Government Code, unless otherwise specified.

the revised housing element is referred to as a planning period or cycle, which usually is eight years." (*Martinez,* 90 Cal.App.5th at 222, citing § 65588(e)(3), (f)(1).)

"A revised housing element's assessment of needs must quantify the locality's existing and projected housing needs for all income levels, which includes the locality's proportionate share of regional housing needs for each income level." (*Martinez,* 90 Cal.App.5th at 223, citing § 65583(a)(1).) "The projected regional housing needs for a planning period are determined by the HCD [Department of Housing and Community Development] in consultation with regional 'councils of government.'" (*Martinez,* 90 Cal.App.5th at 223, citing §§ 65584(a) & (b), 65584.01, 65588(e)(3).) "Based on the HCD's regional housing needs determination, each regional council of governments adopts a 'final regional housing need plan that allocates a share of the regional housing need' among the cities and counties within its region." (*Martinez,* 90 Cal.App.5th at 223, citing § 65584(b).)

For the 2021-2029 planning period, the City Council of respondent City of Beverly Hills ("City") adopted a housing element on October 12, 2021 and submitted it for review to HCD. (JR 776.) On January 14, 2022, HCD determined that the housing element did not fully comply with the housing element law and provided necessary revisions. (JR 1309-16.)

On September 28, 2022, the City submitted a revised housing element to HCD. (JR 776.) On November 28, 2022, HCD determined that the revised housing element did not fully comply with the housing element law and provided necessary revisions. (JR 1318-24.)

On February 21, 2023, after having revised the September 2022 housing element, the City adopted the revision. (JR 5.) On February 21, 2023, petitioner Californians for Homeownership, Inc., who monitors local compliance with the housing element law, sent a letter to the City asserting that the revised housing element was inadequate for reasons identified by HCD and petitioner. (JR 1584-85.) On May 12, 2023, HCD determined that the housing element does not substantially comply with housing element law. (RJN Ex. B.)

II. Procedural History

On January 18, 2023, petitioner filed a verified petition for writ of mandate. On May 24, 2023, pursuant to stipulation, petitioner filed a verified first amended petitioner for writ of mandate.

On June 22, 2023, during the trial setting conference, the Court set the hearing on the instant petition for September 12, 2023.

On July 14, 2023, petitioner filed an opening brief. On August 15, 2023, respondent filed an opposition. On August 31, 2023, petitioner filed a reply.

III. Request for Judicial Notice

Petitioner's requests for judicial notice are ruled on as follows:

- Exhibit A (September 15, 2017 Assembly Floor Analysis of AB 1397 (2017-2018 Session)) – GRANTED (Evid. Code § 452(c); *Wood v. Kaiser Foundation Hospitals* (2023) 88 Cal.App.5th 742, 751, fn. 4)

- Exhibit B (May 12, 2023 Letter from HCD to City) – GRANTED (Evid. Code § 452(c))

- Exhibit C (Staff Report for June 22, 2023 Meeting of Beverly Hills Planning Commission) – DENIED

- Exhibit D (Minutes of June 22, 2023 Meeting of Beverly Hills Planning Commission) – DENIED

- Exhibit E (Resolution No. 1907 of Beverly Hills Planning Commission) – DENIED

- Exhibit F (2022 Form 10-K for Creative Media & Community Trust Corporation (Excerpts)) – DENIED

- Exhibit G (June 10, 2020 Memorandum of the California Department of Housing and Community Development, Entitled "Housing Element Site Inventory Guidebook") – GRANTED (Evid. Code § 452(c))

- Exhibit H (City of Gardena's 2021-2029 Housing Element, Table C-1) – GRANTED (Evid. Code § 452(c))

With respect to denying the request for judicial notice of Exhibits C, D, E, and F, the Court notes these exhibits are extra-record evidence petitioner presents to demonstrate that certain sites listed in the sites inventory of the housing element are improperly included. For the reason stated in section V.C below, this is improper. The exhibits are accordingly irrelevant. (*Mangini v. R.J. Reynolds Tobacco Co.* (1994) 7 Cal.4th 1057, 1063 ["Although a court may judicially notice a variety of matters (Evid. Code, § 450 *et seq.*), only relevant material may be noticed"].)

IV. Standard of Review

CCP § 1085(a) provides: "A writ of mandate may be issued by any court to any inferior tribunal, corporation, board, or person, to compel the performance of an act which the law specially enjoins, as a duty resulting from an office, trust, or station, or to compel the admission of a party to the use and enjoyment of a right or office to

which the party is entitled, and from which the party is unlawfully precluded by that inferior tribunal, corporation, board, or person."

"Any action brought by any interested party to review the conformity with the provisions of this article of any housing element or portion thereof or revision thereto shall be brought pursuant to Section 1085 of the Code of Civil Procedure; the court's review of compliance with the provisions of this article shall extend to whether the housing element or portion thereof or revision thereto substantially complies with the requirements of this article." (§ 65587(b); *see also* § 65751.) Substantial compliance means "actual compliance in respect to the substance essential to every reasonable objective of the statute, as distinguished from mere technical imperfections of form." (*Martinez,* 90 Cal.App.5th at 237, internal citations omitted.)

"[A] city's adoption of a housing element is a legislative enactment, something which is generally entitled to some deference." (*Fonseca v. City of Gilroy* (2007) 148 Cal.App.4th 1174, 1191.) "If the municipality has substantially complied with statutory requirements, we will not interfere with its legislative action, unless that action was arbitrary, capricious, or entirely lacking in evidentiary support." (*Ibid.*) The challenging party has the burden to demonstrate that the housing element is inadequate. (*Ibid.*)

V. Analysis

A. This Dispute is Not Moot

As a preliminary matter, respondent asserts that the City anticipates adopting a revised housing element in November of this year to address concerns about the current housing element. (Wiener Decl. ¶ 2.) However, there is no guarantee that a revision will be completed by November or that the City will adopt a revision at that time, or at any time thereafter. The Court can only rule based on the current housing element. The instant petition is entitled to preference. (§ 65752.) Further, if the Court were to enter judgment in favor of petitioner, the housing element law provides deadlines for the City to address the deficiencies in the housing element and to submit the revision to HCD. (§ 65754(a).) If respondent were to appeal, the appeal would be given preference also. (§ 65752.) Accordingly, there is no reason to delay ruling on the merits of the operative first amended petition.

B. Whether Sites Inventory Meets Statutory Requirements

1. Realistic Development Capacity

The inventory in a housing element must "specify for each site the number of units that can realistically be accommodated on that site and whether the site is adequate to accommodate lower income housing, moderate-income housing, or above moderate-income housing." (§ 65583.2(c).) For a city that does not require a

minimum residential density,[2] the city "shall demonstrate how the number of units determined for [each] site...will be accommodated." (§ 65583.2(c)(1).) As part of the calculation, " [t]he number of units calculated...shall be adjusted as necessary, based on the land use controls and site improvements requirement identified in paragraph (5) of subdivision (a) of Section 65583, the realistic development capacity for the site, typical densities of existing or approved residential developments at a similar affordability level in that jurisdiction, and on the current or planned availability and accessibility of sufficient water, sewer, and dry utilities." (§ 65583.2(c)(2).)

An "assessment of housing needs and an inventory of resources and constraints relevant to the meeting of these needs" shall include an "analysis of potential and actual governmental constraints upon the maintenance, improvement, or development of housing for all income levels...including land use controls, building codes and their enforcement, site improvements, fees and other exactions required of developers, local processing and permit procedures, and any locally adopted ordinances that directly impact the cost and supply of residential development." (§ 65583(a)(5).)

To demonstrate that its inventory is adequate, respondent relies on a Mixed Use Overlay Zone ("Overlay Zone") adopted by ordinance on November 17, 2020, where the maximum residential density within the zone was increased from 0 in commercial areas to 79.2 units/acre. (JR 200, 209.) The Overlay Zone spans the length of the City from east to west and partially north to south, along its largest commercial corridors, including Wilshire Boulevard, Robertson Boulevard, Olympic Boulevard, South Doheny Drive, and South Beverly Drive. (JR 125; *see also* JR 213 [map of Overlay Zone].) In the housing element, the City describes the purported benefits of the Overlay Zone: "This wide-scale rezoning allows for the creation or conversion of non-residential space into residential units, and therefore will create all net new housing, since it does not involve the displacement of any existing occupied housing/residents." (JR 125.)

Respondent argues that the maximum residential density exceeds the minimum 30 units per acre that is statutorily deemed appropriate to accommodate housing for lower income individuals. (§ 65583.2(c)(3)(B)(iv).) Respondent also argues that existing commercial buildings in the Overlay Zone may obtain a permit to convert to a mixed-use building and obtain relief from having to comply with standards concerning parking requirements, loading facilities, outdoor living space, commercial-residential transitional setbacks, or height limits if compliance is physically infeasible. (JR 1636; *see also* Chen Decl. Ex. G [Beverly Hills Municipal Code ("BMMC") § 10-3-1888].) The vacancy rates for commercial buildings also purportedly create an incentive for commercial building owners to convert their buildings to mixed-use projects. (JR 201.)

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[2] It is undisputed Beverly Hills does not mandate a minimum residential density.

For commercial properties listed in the sites inventory of the housing element that were designated for conversion or indicated as having conversion potential (JR 229-34), to calculate the total number of units on the site, the City multiplied the total parcel size by the maximum allowable residential density.[3] However, the total parcel size listed in the sites inventory refers to land area, not the square footage of the existing building that can accommodate residential units. Contrary to respondent's contention, the sites inventory does not account for floor area capacity; the sites inventory lists the height limit of the building, not the number of stories to be converted to residential use. (*See, e.g.,* JR 229 [column name is "Height Limit (stories)," 233 [8500 Wilshire Blvd. described as "8 story building – conversion," but height limit is 3 stories].) As a result, for buildings to be converted to mixed use, the housing element does not demonstrate how the number of units indicated in the sites inventory will be accommodated, as required by section 65583.2(c)(1).

Moreover, as petitioner points out in the reply, most of the sites in the City's sites inventory are not designated as conversions or potential conversions. (JR 229-34.) For sites not indicated as conversions, any construction of residential units is subject to land use and building controls. For example, multi-family developments are subject to height limits from three to five stories. (JR 153-54.) Any building in the Overlay Zone must include commercial uses on the ground floor, and residential uses on the first floor within the first 40 feet from the street are prohibited. (BMMC §§ 10-3-1877(C), 10-3-1879.) Moreover, each multi-family development must have at least 200 square feet for each dwelling unit, excluding front yards, balconies, and pedestrian accessways. (BHMC §§ 10-3-1886, 10-3-2803.)

The sites inventory contains no adjustment based on land use controls for new construction, as required by section 65583.2(c)(2). Rather, like the sites designated as conversions, the number of units for each site is calculated based on the land area multiplied by the maximum residential density. Moreover, the housing element contains no meaningful consideration and analysis of the governmental constraints on the development of housing, as required by § 65583(a)(5). Rather, the City relies on prior approved and proposed developments in arguing in conclusory fashion that "the current standards are not inhibiting development of housing." (JR 158-159, 203-04.) Accordingly, the housing element, including the sites inventory, fails to account for the realistic development capacity for the sites listed in the inventory.

With respect to respondent's contention that the maximum residential density exceeds the density set forth in section 65583.2(c)(3)(B)(iv), this only means that the

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[3] For example, for 8730 Wilshire Blvd., the parcel size is 11,863 square feet. (JR 233.) There are 1/43,560 acres in one square foot. (*See* https://www.britannica.com/science/acre-unit-of-measurement [43,560 square feet in 1 acre].) 11,863 square feet multiplied by 1/43,560 acre per square foot is 0.27 acres. 0.27 acres multiplied by 79.2 units per acre is approximately 21 units.

City does not have to provide an analysis demonstrating how its adopted density accommodates its share of the regional housing need for lower income households. (§ 65583.2(c)(3)(A-B).) However, the City still must adjust the number of units for each site based on the realistic development capacity of the site under section 65583.2(c)(1) and (c)(2) and provide an "analysis of potential and actual governmental constraints upon the...development of housing for all income levels" under section 65583(a)(5).

Petitioner also argues that the City designated the majority of the sites on the sites inventory as 100% low-income or 100% moderate-income housing without explaining the basis for such designation. (OB at 10:6-7.) Petitioner further argues that the City did not adjust the unit counts based on "typical densities of existing or approved residential developments at a similar affordability level in that jurisdiction," as required by section 65583.2(c)(2). (OB 10:7-8.)

Petitioner, however, does not reference any statute that requires an explanation for the basis for the low-income or moderate-income housing designation. The housing element law only requires that the City specify "the number of units that can realistically be accommodated on that site and whether the site is adequate to accommodate lower income housing, moderate-income housing, or above moderate-income housing" and demonstrate "how the number of units determined for that site...will be accommodated." (§ 65583.2(c), (c)(1).) The sites inventory indicates the total number of units for each site. (JR 229 ["Total Units" column].) By indicating the number of units that are designated as low-income or moderate-income housing, the City also indicates "whether the site is adequate to accommodate lower income housing [or] moderate-income housing." (JR 229 ["Lower" and "Mod" columns].) While the City did not explain how the total number of units will be accommodated for the reasons stated above, the designation of housing as low-income or moderate-income is not deficient.

Nevertheless, it is not apparent from the sites inventory whether the City adjusted the numbers for low-income and moderate-income housing based on "typical densities of existing or approved residential developments at a similar affordability level in that jurisdiction." (§ 65583.2(c)(2).) By multiplying the land area by the maximum residential density of 79.2 units per acre and designating all housing as low- or moderate-income housing, the City assumes that all units built on the site will be low-income or moderate-income housing. The City does not account for the possibility that only a certain percentage of the housing on the site will be designated for residents with low- or moderate-income. A revised housing element would need to contain an adjustment based on typical densities at similar affordability levels.

In sum, with respect to realistic development capacity, the housing element is deficient for the following reasons: (1) for conversions, the sites inventory calculates the total number of units based on a product of land area and the maximum residential density without accounting for the floor area of the building; (2) the sites

inventory does not contain any adjustments based on land use controls for new construction; (3) the housing element contains no analysis of the governmental constraints on the development of housing; and (4) the sites inventory does not contain any adjustments based on typical densities of existing or approved residential developments at similar affordability levels in the City.

2. Nonvacant Sites

For nonvacant sites, the housing element law imposes the following additional requirement:

> [T]he city or county shall specify the additional development potential for each site within the planning period and shall provide an explanation of the methodology used to determine the development potential. The methodology shall consider factors including the extent to which existing uses may constitute an impediment to additional residential development, the city's or county's past experience with converting existing uses to higher density residential development, the current market demand for the existing use, an analysis of any existing leases or other contracts that would perpetuate the existing use or prevent redevelopment of the site for additional residential development, development trends, market conditions, and regulatory or other incentives or standards to encourage additional residential development on these sites.

(§ 65583.2(g)(1).)

Petitioner argues that the City does not explain how its methodology relates to the sites it has included or excluded in the sites inventory. For underutilized nonvacant sites, respondent explains that it selected sites that were more likely to be redeveloped or converted based on evidence of a lack of investment in the property, such as a lack of maintenance or lack of recent upgrades and improvements; parcels with underutilized improvements; and parcels with existing commercial buildings that are higher than 3 stories but whose floor plan is conducive to residential conversion. (JR 202-03, 210-11.) Respondent also explains that existing uses do not constitute an impediment to additional residential development because the creation of the Overlay Zone creates opportunities for residential development; conversion from non-residential to residential use costs less than new construction; and high residential property values in the City create financial incentives for residential development. (JR 209-10.) However, respondent discusses its methodology for determining development potential generally, without engaging in any site-specific analysis.

Respondent contends that it need not engage in an analysis of the methodology of the development potential for each site. The Court disagrees. Section

65583.2(g)(1) states that, for nonvacant sites, "the city or county shall specify the additional development potential for each site within the planning period and shall provide an explanation of the methodology used to determine the development potential." Reading the subdivision as a whole, the City is required to provide an explanation of the methodology for each site in the sites inventory. Among the factors that the methodology must consider are "the current market demand for the existing use" and "an analysis of any existing leases or other contracts that would perpetuate the existing use or prevent redevelopment of the site for additional residential development." (§ 65583.2(g)(1).) These factors necessarily relate to specific sites and cannot be discussed generally. Because the Legislature included these factors, the Legislature surely intended that the City provide "an explanation of the methodology used to determine the development potential" for each site.

Without a site-specific analysis, it is unclear how the methodology was applied. For example, as petitioner points out in the opening brief, the City purports to have excluded commercial buildings that contained medical uses and car dealerships from the sites inventory. (JR 210.) However, the sites inventory includes medical buildings and car dealerships. (*See, e.g.,* JR 229-30 [153 S. Doheny Dr., 239 S. La Cienega Blvd., 8833 W. Olympic Blvd., 8845 W. Olympic Blvd., 9134 W. Olympic Blvd.].) The City does not explain how the existing use does not serve as an impediment to residential development.

For the foregoing reasons, with respect to section 65583.2(g)(1), the housing element is deficient because the City did not provide an explanation of the methodology used to determine the development potential for each site, including a discussion of the factors probative of likelihood of redevelopment set forth in section 65583.2(g)(1).

Further, the sites inventory shows that the City is meeting all of its share of the need for lower-income housing through nonvacant sites. Accordingly, section 65583.2(g)(2), quoted below, is implicated:

> In addition to the analysis required in paragraph (1), when a city or county is relying on nonvacant sites described in paragraph (3) of subdivision (b) to accommodate 50 percent or more of its housing need for lower income households, the methodology used to determine additional development potential shall demonstrate that the existing use identified pursuant to paragraph (3) of subdivision (b) does not constitute an impediment to additional residential development during the period covered by the housing element. An existing use shall be presumed to impede additional residential development, absent findings based on substantial evidence that the use is likely to be discontinued during the planning period.

(§ 65583.2(g)(2).)

For nonvacant sites, the "Field Notes/Existing Conditions & Analysis for Keeping/Removing" column in the sites inventory only indicates the existing use of the site and whether the site is designated for conversion or has conversion potential. (JR 229-34.) The City does not engage in any discussion of occupancy rates, lease terms, viability of the business operating at the sites. Nor does the City present any other discussion demonstrating that the existing use for each site "does not constitute an impediment to additional residential development during the period covered by the housing element." (§ 65583.2(g)(2).) Without any evidence concerning the existing use of each site, the existing use is presumed to impede additional residential development. (*Ibid.*)

Respondent maintains that Culver City and Gardena obtained HCD approval based on a chart similar to its sites inventory. However, unlike Beverly Hills, Gardena's sites inventory sets forth the existing use of each site and why the existing use is likely to be discontinued during the planning period. (Reply RJN Ex. B; cf. Chen Decl. Ex. B at 71 [listing criteria used in selection of sites].) With respect to Culver City, the sites inventory does not set forth the reason why the existing use is likely to be discontinued. (Chen Decl. Ex. A at Appendix B.) However, elsewhere in the housing element, Culver City discusses sites that present opportunities for development based on positive responses from property owners and developers. (Chen Decl. Ex. A at B-9 to B-10.) Unlike Beverly Hills, Culver City discussed how the existing use at certain sites would not impede residential development. Beverly Hills did not engage in any site-specific analysis concerning how the existing use would not impede additional residential development.

Respondent contends that the Court of Appeal in *Martinez v. City of Clovis* (2023) 90 Cal.App.5th 193 determined that no site-specific analysis concerning the methodology used to determine development potential and additional development factors is required. This is not quite accurate. In *Martinez*, the Court of Appeal found that section 65583.2(g)(1) "does not mandate the City 'specify the additional development potential for each [nonvacant] site within the planning period and ... provide an explanation of the methodology used to determine the development potential' *in the housing element itself*." (*Martinez*, 90 Cal.App.5th at 248-49, emphasis added.) While specification of the additional development potential for each site does not have to be part of the housing element, the City still must demonstrate the additional development potential for each site. In *Martinez*, for example, the City of Clovis provided evidence outside of the housing element to demonstrate the development potential of a nonvacant site. (*Id.* at 249-51.)

Here, there is no analysis of the additional development potential for each site listed in the sites inventory in the housing element or elsewhere. Further, the housing element does not contain findings based on substantial evidence that the existing uses of nonvacant sites are likely to be discontinued, as required by section 65583.2(g)(2).

In sum, with respect to nonvacant sites, the housing element is deficient for the following reasons: (1) the City did not provide an explanation of the methodology used to determine the development potential for each site in the sites inventory, including a discussion of the factors probative of likelihood of redevelopment set forth in section 65583.2(g)(1); and (2) the City fails to demonstrate with substantial evidence that the existing use for each site in the sites inventory does not constitute an impediment to additional residential development during the period covered by the housing element.

C. Specific Sites

Petitioner also contends that certain sites were improperly included in the sites inventory. (OB at 15:6-17:1.) Petitioner maintains that the City did not make the findings based on substantial evidence that are required to rebut the presumption under section 65583.2(g)(2) that the existing use will impede additional residential development. (Reply at 4:13-14.)

However, in contending that additional residential development is not possible on certain sites, petitioner relies on extra-record evidence. For example, for 55 North La Cienega, the sites inventory indicates that the property will have 70 low-income units. (JR 229.) However, petitioner presents a Planning Commission Report and meeting minutes to assert that the City's Planning Commission approved development on the site with only 11 units of very low-income housing. (Gelfand Decl. Exs. C at 1, D at 3-4.)

"[W]here the scope of review of factual findings is substantial evidence, review limited to the administrative record is appropriate because extra-record evidence is irrelevant to whether the agency's decision is supported by substantial evidence." (*Cinema West, LLC v. Baker* (2017) 13 Cal.App.5th 194, 208.) Petitioner cannot challenge the inclusion of sites in the inventory based on extra-record evidence. Ironically, petitioner would have the Court consider the propriety of certain sites based on extra-record evidence, but then bar respondent from presenting extra-record evidence to rebut petitioner's argument. (Reply at 4:18-5:13.)

With respect to sites which petitioner contends are unlikely to disappear based on their existing use (OB at 16:21-17:2; JR 1557-58), the Court already finds that respondent did not make findings based on substantial evidence that the existing use for each nonvacant site in the sites inventory is likely to be discontinued. The City must make such findings in revising the housing element.

VI. Conclusion

The petition is GRANTED. Pursuant to Local Rule 3.231(n), petitioner shall prepare, serve, and ultimately file a proposed judgment and proposed writ of mandate.

Date: September 12, 2023

HON. CURTIS A. KIN

09/14/2023

CALIFORNIANS FOR HOMEOWNERSHIP

CAL HDF

Dec 1, 2025

San Francisco Board of Supervisors
49 South Van Ness Avenue
San Francisco, CA 94103

Re: Housing Element Implementation

By email: Lisa.chen@sfgov.org, Board.of.Supervisors@sfgov.org, bos@sfgov.org, bos-supervisors@sfgov.org, ChanStaff@sfgov.org, ChenStaff@sfgov.org, DorseyStaff@sfgov.org, Jackie.Fielder@sfgov.org, MahmoodStaff@sfgov.org, MandelmanStaff@sfgov.org, MelgarStaff@sfgov.org, SauterStaff@sfgov.org, SherrillStaff@sfgov.org, Shamann.Walton@sfgov.org

Cc: john.carroll@sfgov.org; sarah.dennis-phillips@sfgov.org; cityattorney@sfcityatty.org

Dear San Francisco Board of Supervisors,

The California Housing Defense Fund ("CalHDF") and Californians for Homeownership ("CFH") write in advance of the Land Use and Transportation Committee meeting scheduled for December 1, 2025 at 1:30pm. We write to warn the Committee, as well as the larger Board, that certain elements of the proposed Family Zoning Plan violate state law. Specifically:

1. The City's proposed rezonings will not produce sufficient new housing. This violates commitments the City made when it adopted its Sixth Cycle Housing Element.

2. The City's proposed rezonings add new constraints on housing production. This, again, violates commitments the City made in its Sixth Cycle Housing Element and independently violates the Housing Element Law.

3. The "Housing Choice - San Francisco" program seeks to exempt San Francisco from certain state housing laws. That is illegal.

If the City does not correct these problems, CalHDF and CFH will challenge the City in court. As a result of the lawsuit, the City would, potentially, fall out of compliance with the Housing Element Law and face exposure to the "builder's remedy." (See Gov. Code, § 65589.5,

subds. (d)(5), (d)(6).) CalHDF and CFH urge the City to avoid such needless litigation and instead comply with the law in the first instance.

The City's Proposed Rezonings Are Inadequate

The Housing Element Law (Gov. Code, §§ 65580 et seq.) establishes a clear process for the evaluation, planning, and enactment of the City's housing policy. That process has a two-part structure. In the first part, the City must adopt a housing element on a specified timeline and that meets certain requirements. In the second part, the City must implement the programs promised in its housing element. Crucially, the second step relies on the first step: what, precisely, the City must do in the second step has already been established by the housing element. (See Gov. Code, § 65583, subd. (c).) The second step is *not* a freestanding exercise in policymaking or policy analysis. (See *id.*) The policymaking and policy analysis are conducted in the first step, and the Housing Element Law leaves essentially no room to alter the results at the second step.[1]

San Francisco has completed the first step. It adopted a housing element on January 31, 2023, adhering to the substantive and procedural rules in the Housing Element Law. The California Department of Housing and Community Development ("HCD") also certified the City's adopted housing element as legally compliant, pursuant to its statutory authority. (See, e.g., Gov. Code, § 65585.) That housing element made numerous detailed commitments. These commitments include promises to rezone large areas of the City to accommodate housing growth necessary to meet demand and ease upward pressures on housing costs. (See Gov. Code, §§ 65583 [establishing standards for required rezonings]; 65583.1 [same]; 65583.2 [same].) The housing element, moreover, promised not only to rezone, but to engage in detailed analysis that would help shape the rezoning. (See Program 7.1.1 in San Francisco's Housing Element, available here.)

San Francisco is now at the second step of the process: implementing the commitments in its housing element. This includes the aforementioned rezoning and associated policy analyses. The City's proposed rezoning, however, fails to fulfill crucial aspects of housing element commitments – commitments that the City, as explained above, cannot renege on without going through a full amendment process for its housing element.

Program 7.1.1 of the City's housing element commits the City to implementing a rezoning program that "reasonably account[s] for sites' likelihood of development during the planning period using an analytical model." The housing element uses mandatory language, stating that the City "shall" build its rezoning program around such a

[1] If the City wishes to alter the policy analysis or programs promised by its housing element, it has an avenue to do that: it may amend its housing element according to the procedures set forth in Government Code section 65585. But the process remains a two-step process: the City must first amend its housing element, and only then can it proceed to the second step of implementing the promised housing element programs.

"probability-of-development" analysis. In sum: the City must rezone to an extent that the expected number of new units that will be built after the rezoning, calculated via a robust probability-of-development analysis, meets the City's projected housing need (i.e. the Regional Housing Needs Assessment, or "RHNA," allocation, plus a buffer specified in the housing element).

The current rezoning proposal does not do this. The proposal's failure is twofold. First, none of the methods the Planning Department has relied on to assess whether the proposal will satisfy San Francisco's rezoning obligation constitutes a probability-of-development analysis using an analytical model in line with Program 7.1.1 in the housing element. Second, when the City has conducted an analysis that meets the requirements of Program 7.1.1, the analysis shows the current rezoning proposal will not satisfy San Francisco's rezoning obligation.

With respect to the rezoning proposal's first failure: the City proposes three methods to project the number of new units the proposed rezoning can be expected to produce. None of the three methods measures up to the standards in Program 7.1.1.

1. The first method is the "soft sites" method, which is described in appendix B of the City's housing element. This method assumes that a site currently hosting a residential use has a two percent probability of being redeveloped with the rezoning's planned residential capacity and a site currently hosting a non-residential use has a seventy percent probability of redevelopment. Such rigid calculations based on uniform, citywide assumptions about the odds of development on thousands of very different sites are not an "analytical model" and do not "reasonably account for sites' likelihood of development" as required by Program 7.1.1. These assumptions, furthermore, are not reasonable and do not rest on any evidence. They are highly motivated guesswork, and highly motivated guesswork will not cut the mustard.

2. The second method rests on an economic model developed by a consultant. This model does not assess the likelihood of a given site's being developed under the rezoning proposal. Instead, it calculates how many units of housing are "financially feasible" on parcels throughout the City. This is not an "analytical model" that "reasonably account[s] for sites' likelihood of development" as required by Program 7.1.1. As the City well knows, property owners across the City submit permit applications for only a small portion of economically feasible new housing units, and not all of those permit applications ultimately produce actual housing units. The City attempts to address this problem by assuming – similar to the soft sites method – that two percent of sites with economically feasible new housing developments currently occupied by residential uses and thirty-five percent of other sites with economically feasible new housing developments will be developed. This is inadequate for the same reasons the soft sites method is inadequate. Moreover, this

method projects only 19,000 new units of housing over the planning period – far below the 36,282 units the City must accommodate.

3. The third method involves looking at "how much of the City's overall zoning capacity has gotten built out over the years." This – again – is not an "analytical model." Nor does it look at the sites slated for rezoning under the current rezoning proposal and assess the likelihood they will produce new housing. This method is further flawed because much of San Francisco's recent increase in zoned capacity, and much of the new housing that has been built, took place on vacant sites, whereas the proposed housing element rezoning covers a broad swath of the City and comprises mostly non-vacant sites. Other problems here include unrealistically low estimates of the City's residential zoning capacity in prior years (thus inflating the share of residential zoned capacity that has been built out) and the inclusion of residential projects built under development agreements, which do not correspond to rezonings, and which were separately counted towards the City's pre-existing residential zoned capacity in the housing element.

With respect to the rezoning proposal's second failure, analytical models that would satisfy Program 7.1.1 in the housing element demonstrate that the proposed rezoning will not produce anywhere close to the required number of new units. San Francisco's City Economist recently released an analysis of the City's proposed rezoning. This analysis relies on the exact approach that San Francisco's Housing Element pledged to use: an analytical model that assesses the probability of development. (Indeed, it is the exact approach HCD suggested the city use.) The results are damning. In the **best case scenario,** San Francisco's City Economist's analytical model found that the rezoning can only be reasonably expected to produce around **14,646 units by 2045**. Less optimistic assumptions produce a forecast of only 8,504 units by 2045. This indicates the rezoning plan falls far short of what is required: being shown by an analytical model to reasonably be expected to produce **36,282 units by 2031**.

Changes to the planned rezoning since the analysis was conducted have further reduced the amount of new housing that can be expected. The proposed rezoning – specifically, the "Housing Choice - San Francisco" program – has been modified to add new unit mix requirements (see pages 14-15 here) and historic preservation requirements (page 30). The Land Use Committee made these changes despite unambiguous evidence in the record that the changes would reduce new housing's feasibility and reduce the number of new units the rezoning can be expected to create. The problem, then, is *even greater* than what the City Economist's analysis shows.

These are not minor problems. Program 7.1.1 is central to San Francisco's compliance with the Housing Element Law. The City's housing element meets the requirements of the Housing Element Law *only because* it included Program 7.1.1's commitment to rezone based

on a realistic probability-of-development analysis. To be crystal clear: without Program 7.1.1, the housing element does not comply with Government Code section 65583.2, subdivision (g)(2). This is because the housing element relies on non-vacant sites to accommodate more than half of its RHNA allocation at the lower-income level, and thus the Housing Element Law requires its housing element to "demonstrate that the existing use [on each non-vacant site] does not constitute an impediment to additional residential development." (Gov. Code, § 65583.2, subd. (g)(2).) "An existing use shall be presumed to impede additional residential development, absent findings based on substantial evidence that the use is likely to be discontinued." (*Ibid.*) San Francisco's housing element does not demonstrate with substantial evidence that specific existing uses on specific sites intended to accommodate low-income housing will not impede additional residential development. Instead, the housing element commits the City, in Program 7.1.1, to rezoning in a manner that "shall reasonably account for sites' likelihood of development during the planning period using an analytical model." That commitment is the basis of the City's compliance with Government Code section 65583.2, subdivision (g)(2). Refusing to follow through on that commitment would leave the City without any basis for compliance with the Housing Element Law on this point.[2]

CalHDF and CFH urges the City to do as the law requires. The City must adopt a rezoning that an analytical model, such as the City Economist's, shows can reasonably be expected to produce 36,282 new units under current economic conditions, as required by Program 7.1.1. Alternatively, the City can increase the probability of sites' development (again, according to a realistic analytical model) by adjusting non-zoning policies that constrain housing production: the City could, for example, reduce transfer taxes for residential projects, impact fees for new residential construction, or inclusionary zoning requirements. The City should not – it cannot – rely on flawed and insufficient analyses to justify its planned rezonings. Doing so violates the law.

The City Must Reduce Constraints on Housing Production, Not Add New Ones

The City's planned rezoning, although on net it adds new capacity, includes constraints on housing development that do not exist under current zoning rules. Specifically, the proposal includes minimum office densities, caps on dwelling unit size, new limits on curb cuts, and lower parking maximums. Furthermore, the City's proposed local zoning bonus program, known as the "Housing Choice–San Francisco" ("HCSF") program, imposes new limitations on residential projects' eligibility for protections and benefits under state laws, including the Statewide Density Bonus Law.

[2] The City could address this issue by producing site-specific evidence that existing uses on non-vacant sites will not impede additional residential development, adding that evidence to a new draft of its housing element, and adopting the amended housing element. But – again – the City would have to do this before rezoning. The process of developing and adopting housing element commitments and then, separately, implementing those commitments remains a two-step process.

CalHDF and CFH also note that the HCSF program was amended in committee on November 17, 2025 to include additional constraints. The HCSF program now virtually excludes any site in a historic district (see page 30 here). The HCSF now also imposes additional unit mix requirements on new housing projects (see pages 14 and 15 here). With respect to the unit mix requirements, it is silly for San Francisco, a City defined by large, multi-bedroom homes, to require new housing to replicate the bulk of existing housing supply in its bedroom counts. If new housing proposals include fewer bedrooms per unit, on average, that is because San Francisco's existing housing stock is already dominated by multi-bedroom homes; it is natural that new housing will fill a niche that the current housing supply does not.

More importantly, the new unit mix requirements, as well as other new constraints on housing, pose a problem for two reasons.

First, the new constraints were not analyzed by the City's housing element. The Housing Element Law requires local governments to analyze governmental constraints on housing production. (Gov. Code, § 65583, subd. (a)(5).) The results of this analysis then inform the policies and programs in the housing element. (See *id.*; *id.* at subd. (c)(3); *Californians for Homeownership, Inc. v. City of Beverly Hills* (2023) Los Angeles County Superior Court, Case No. 23STCP00143, at p. 6, [finding planned rezonings for housing element site inventory must consider constraints identified by the housing element's constraints analysis] [opinion attached to this letter].) Because the new constraints attached to the City's rezoning proposal were not analyzed in the City's housing element, the City cannot rely on the rezoning proposal to produce as many units as it is required to unless the City analyzes the effects of the new constraints and offsets their impact on housing production.

Second, the City's housing element explicitly recognizes this and commits the City to refrain from adding new constraints. Program 7.1.1 states: "The rezoning program … shall not add government constraints that reduce project financial feasibility as determined by an analysis prior to the rezoning enactment." Program 8.1.6 states: "[A]ny City-adopted rezoning or development controls shall not impose any new governmental constraints to the development of housing unless those increased constraints are offset by the removal or reduction of other constraints." If San Francisco wishes to establish new governmental constraints to housing production (such as making new developments ineligible for the waivers and protections offered by State Density Bonus Law), it must concurrently reduce other constraints to a degree that maintains the overall viability of new residential construction, "as determined by an analysis prior to the rezoning enactment" that assess projects' "financial feasibility." Pursuing the new constraints without offsetting them by reducing existing constraints, however, would violate the commitments in housing element programs 7.1.1 and 8.1.6 and hence violate the Housing Element Law.

The Proposed Housing Choice–San Francisco Bonus Program Cannot Exempt San Francisco from State Law

The proposed HCSF bonus program provides additional residential zoning capacity for projects that meet certain criteria. Overall, this is good. However, one of the HCSF eligibility criteria poses a problem: the requirement, found in section 206.10(b)(5), that an HCSF project "not receive any density or development bonuses or relief from applicable Planning Code standards in any other State or local law or program." This requirement is unenforceable to the extent it pertains to state law, and, should it be enacted, developers will have the option to ignore it.

This is for four reasons. First, the City "cannot choose to forgo application of land use policies imposed by the Legislature." (*Ailanto Properties, Inc. v. City of Half Moon Bay* (2006) 142 Cal.App.4th 572, 595.) Second, just as the City cannot waive state law's application, project applicants cannot waive protections to which they are entitled under state law, since those protections are designed to serve the public interest. (See Civ. Code, § 3513 ["a law established for a public reason cannot be contravened by a private agreement"].) Third, the SDBL includes explicit rules for local density bonus programs: such programs must build on, rather than supplant, the SDBL. Finally, even if the first three points are ignored, the SDBL allows project applicants to waive the HCSF eligibility requirement forbidding the use of state bonuses. (Gov. Code, § 65915, subd. (e).) Legal interpretations from the California Department of Housing and Community Development ("HCD"), the state agency charged with interpreting and enforcing state housing law, support these conclusions.

Background

State law contains many provisions that grant rights and protections to proposed housing developments and applications for proposed housing developments. These include AB 2011, codified at Government Code section 65912.100 et seq., the SDBL, codified at Government Code section 65915 et seq., SB 35, codified at Government Code section 65913.4, and more besides. These laws accomplish a variety of pro-housing policies by, among other things, allowing proposed housing developments that meet certain criteria (such as the inclusion of affordable units) to reduce or avoid local zoning and other land use restrictions. In some cases, whether a project is eligible for state law protections and the extent to which it may reduce or avoid local rules depends on the generosity of the local zoning code. For example, the SDBL calculates density bonuses using a "base density," defined as "the greatest number of units allowed under the zoning ordinance, specific plan, or land use element of the general plan." (Gov. Code, § 65915, subd. (o)(6).)

The proposed HCSF program expands the San Francisco zoning code's accommodation for denser housing in much of the City. The aforementioned state laws then further expand the allowed range of housing projects, providing for even greater density and even more

forgiving standards for projects. But there is a catch: the HCSF program attempts to forestall these state laws, in section 206.10(b)(5). If not for proposed section 206.10(b)(5), housing project applicants would be able to propose projects under the HCSF rules and avail themselves of the full range of state law protections. Thus, the critical question is: does proposed section 206.10(b)(5) have any legal effect? As explained below, the answer is no. Developers may use both the HCSF rules and any state law bonuses or protections that apply.

The City Cannot Forgo the Application of State Law

State law preempts local law. (Cal. Const., art. XI, § 7.) This is a foundational constitutional principle, and it is no less true in the land use context than anywhere else. As a corollary to this principle, local governments "cannot choose to forgo application of land use policies imposed by the Legislature." (*Ailanto Properties*, *supra*, 142 Cal.App.4th at 595.) Proposed section 206.10(b)(5), however, attempts to do exactly that: it states, in effect, that state land use laws do not apply to projects proceeding under the HCSF program. The City is careful to word the section to dance around the point, perhaps in recognition of the legal consequences, but the section's intended purpose is unmistakably to "forgo application of land use policies imposed by the Legislature," as caselaw and the California constitution forbid. (*Ibid.*)

As explained above, numerous state laws – particularly the SDBL – grant certain housing projects legal protections. None of these state laws allows local governments to circumvent or opt out of these rules. The attempt to do so, in section 206.10(b)(5) of the proposed HCSF program, does not pass legal muster, and project applicants will be entitled to ignore it.

Project Applicants Cannot Waive State Law Protections to Which They Are Entitled

Just as the City cannot waive the application state land use and housing laws, neither can developers. "[A] law established for a public reason cannot be contravened by a private agreement." (Civ. Code, § 3513.) In other words, if a law is designed to accomplish a public benefit (possibly in addition to private benefits), the law's provisions cannot be waived. (See, e.g., *County of Riverside v. Superior Court* (2000) 86 Cal.App.4th 211, 220 [holding employment protections for public safety officers, although they benefitted individual officers, also served a broader public purpose and could not be waived].) The legislature has made clear that pro-housing laws serve the broader public interest.[3] (See, e.g., Gov. Code, §§ 65915, subd. (u); 65913.4, subd. (u); 65582.1; Stats. 2024, ch. 294, § 1; Stats. 2023, ch. 783, § 1.) The legislative history for these laws, moreover, confirms they are intended to serve the public by

[3] On one occasion, California courts found that a law establishing time limits for housing permit application processing primarily benefitted project applicants and not the general public, and hence project applicants could waive them. (*Bickel v. City of Piedmont* (1997) 16 Cal.4th 1040, 1049-1052.) The legislature immediately rebuked the Courts and overturned the *Bickel* holding through legislation. (See *Riverwatch v. County of San Diego* (1999) 76 Cal.App.4th 1428, 1439.)

expanding the supply of housing and affordable housing. (See *Doskocz v. ALS Lien Services* (2024) 102 Cal.App.5th 107, 115-116 [legislative history is relevant in deciding whether law serves a public purpose and hence cannot be waived].) Hence, project applicants have no authority to disclaim the application of these laws, as the City's proposed HCSF program would have them do.

Two additional reasons prevent project applicants from waiving their right to pursue state law protections.

First, as with all legal waivers, such a waiver must be voluntary. (*Harvey v. County of Kern* (1930) 107 Cal.App. 590, 597.) As currently framed, the HCSF program does not ask project applicants to voluntarily waive their state law rights. It instead makes waiver *mandatory* for any project applicant. No waiver can occur through such an ultimatum; to the extent that the issue is unclear, moreover, the ambiguity resolves against the existence of a waiver. (See *Perini v. Perini* (1964), 225 Cal.App.2d 399.)

Second, waiver requires "an abandonment of a right that could be enforced or a privilege that could be exercised." (*Estate of Goyette* (1971) 14 Cal.App.3d 224, 232 [internal citations omitted].) Thus, for an applicant to be able to waive the application of state law to an HCSF project, it must be the case that the applicant could, absent the waiver, enforce the application of the relevant state law. And it must be the case, from there, that the applicant could choose *not* to waive their rights and instead apply state law protections and bonuses to their project. In this way, the City faces a catch-22, and however it resolves the dilemma, developers will be able to use both the HCSF program and state law.

<u>The State Density Bonus Law Creates Narrow Guidelines for Local Bonus Programs, Which the HCSF Program Does Not Obey</u>

The SDBL does allow local governments to implement local bonus programs. It includes strict rules for such programs, however, which the proposed HCSF program does not meet. Local bonus programs must add to, rather than supplant, the SDBL. Government Code section 65915, subdivision (n), states: "nothing in this section shall be construed to prohibit a city, county, or city and county from granting a density bonus *greater than* what is described in this section for a development that meets the requirements of this section" (emphasis added). By negative implication, local governments are forbidden from offering density bonuses that do not incorporate, at minimum, the bonuses allowed by the SDBL. Local bonus programs must add to the SDBL; they cannot displace it in favor of an entirely separate density bonus scheme. As described above, moreover, preemption principles prevent local governments from evading the SDBL, and this language in the SDBL confirms that outcome.

The SDBL includes stronger language too. Government Code section 65917 states:

> In enacting this chapter it is the intent of the Legislature that the density bonus or other incentives offered by the city, county, or city and county pursuant to this chapter shall contribute significantly to the economic feasibility of lower income housing in proposed housing developments. **In the absence of an agreement by a developer in accordance with Section 65915, a locality shall not offer a density bonus or any other incentive that would undermine the intent of this chapter.**

(Emphasis added.) In other words, if San Francisco wishes to offer a density bonus to developers, it must first allow them any protections they are entitled to under the SDBL. Only then can it offer a local bonus program. The law establishes a clear baseline: project applicants may avail themselves of any bonuses and benefits they are entitled to under the SDBL, and further local bonuses and benefits must come on top of the SDBL.

These rules are especially important in San Francisco. HCD has found that the SDBL is "critical" for developers navigating San Francisco's complex zoning rules and extensive procedural hurdles. (See "Examining Local Law, Policy, and Planning Practice on Development in San Francisco Using CALES," O'Neill et al., pp. 38-39 (available here and attached to this letter).) In some cases, HCD has issued Notices of Violation to San Francisco for impeding housing development by refusing to grant bonuses, incentives, and waivers allowed by the SDBL. (See, e.g., California Department of Housing and Community Development, Letter to Kate Conner, December 29, 2022 (available here).) These HCD findings and Notices of Violation confirm the SDBL's importance in producing housing in San Francisco.

The proposed HCSF program, by attempting to displace the SDBL entirely, violates the SDBL's explicit rules for a local bonus program. This violation carries particular significance for San Francisco, where project applicants often rely on the SDBL to navigate a complex zoning code and approval process. If San Francisco wishes to implement a local bonus program, it must stack that program on top of the SDBL. It cannot offer an "alternative" bonus program, such as the proposed HCSF program, that attempts to remove SDBL eligibility for projects that are eligible for SDBL protections.

In closing this section, CalHDF and CFH point out that HCD has weighed in on the question of whether local governments may enact zoning bonus programs that serve as alternatives to state law. In a letter to Menlo Park (available here), the Department wrote: "[T]he City's Affordable Housing Overlay states that the overlay will be an alternative to state density bonus law. **This is in conflict with state law and must be revised."** (Emphasis added.)[4] HCD's

[4] Separately, as explained later in this letter, HCD's Site Inventory Guidebook (available here) analyzes whether zoning overlays or other local zoning programs established by a city's housing element may supplant or displace the SDBL and firmly establishes that they cannot. (See pages 14-15 of the guidebook.) This analysis is more relevant to the question of how the HCSF program will affect the City's compliance with the Housing Element Law, but this analysis also underscores the specific point that the City may not wriggle out of state law.

view warrants substantial deference as the interpretation of a "technical, obscure, [or] complex" statutory scheme by the agency charged with enforcing it. (See *Boling v. Public Employment Relations Bd.* (2018) 5 Cal.5th 898, 911 [citing *Yamaha Corp. of America v. State Bd. of Equalization* (1998) 19 Cal.4th 1, 12]; *Hoffmaster v. City of San Diego* (1997) 55 Cal.App.4th 1098, 1113, fn. 13 ["We substantially rely on the Department of Housing and Community Development's interpretation [...] regarding compliance with the housing element law"].)

Even if the City Can Prohibit the Application of State Law, the Density Bonus Law Gives Project Applicants the Legal Right to Circumvent the City's Prohibition

Even if the above legal rules do not neutralize the City's attempt to avoid state law, any project eligible for the SDBL will be able to defeat the application of proposed section 206.10(b)(5). The SDBL states: "In no case may a city, county, or city and county apply any development standard that will have the effect of physically precluding the construction of a development meeting the criteria of subdivision (b) at the densities or with the concessions or incentives permitted by this section." (Gov. Code, § 65915, subd. (e)(1).) If a proposed project complies with the HCSF except for section 206.10(b)(5) – because it seeks benefits under the SDBL or another state law – and the application of section 206.10(b)(5) would physically preclude the project by eliminating its eligibility for the HCSF, then the City cannot apply that section to the project. To the extent the City doubts or intends to contest this, CalHDF and CFH remind the City that the SDBL, by its terms, "shall be interpreted liberally in favor of producing the maximum number of total housing units." (*Id.* at subd. (r).) Flouting the law on this point also carries severe penalties, including mandatory payment of attorney's fees to a project applicant who challenges the City in court. (*Id.* at subd. (e)(1).)

The HCSF Program Violates the Housing Element Law

Furthermore, the HCSF violates the Housing Element Law (Gov. Code, § 65580 et seq.). Rezoning programs enacted pursuant to a housing element, such as the proposed Family Zoning Plan and its component HCSF program, may not exempt themselves from state law's application, as HCD has explained in its Site Inventory Guidebook (available here – see pages 14-15). Pursuing the HCSF program as it is currently designed would violate this rule and risk the City's housing element compliance. This would expose it to a range of penalties, including the "builder's remedy."

The City Should Take Care to Comply with New Caselaw Concerning Housing Element Rezonings

Lastly, CalHDF and CFH warn the City to take care to ensure that the rezoning complies with housing element law requiring minimum residential density on low-income sites. The newly published Court of Appeal decision *New Commune DTLA LLC v. City of Redondo Beach* (Oct. 10, 2025, No. B336042) 115 Cal.App.5th 111 makes clear that in order to comply with

minimum density requirements, local zoning must require that all new development include a minimum density of residential use. Zoning "overlays" that allow for 100% non-residential development on a site fail to comply with housing element law. The proposed zoning includes many low-income sites that are given additional residential density on top of base commercial zoning. In order to comply with housing element law, the City should make clear that all new development of these sites must include the minimum density of residential use, and that 100% commercial development is prohibited.

As you are well aware, California remains in the throes of a statewide crisis-level housing shortage. New multifamily housing in San Francisco a public benefit: it will help satisfy demand for housing near jobs and transit, thereby reducing displacement pressure; and it will also cut down on transportation-related greenhouse gas emissions by providing housing in a major metro area, as opposed to farther-flung regions in the state (and out of state). CalHDF and CFH therefore urge the City to follow through on the commitments in its housing element, as the law requires, and obey state law in drafting and enforcing its land use regulations.

Sincerely,

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Dylan Casey
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Examining Local Law, Policy, and Planning Practice on Development in San Francisco Using CALES

Report in Support of San Francisco Policy and Practice Review

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Executive Summary

Background: Why Study San Francisco?

San Francisco is the anchor city in the Association of Bay Area Governments (ABAG) region, with one of the highest Regional Housing Needs Allocations (RHNA) statewide. Complex processes that lead to delayed housing development approvals leave open questions about whether San Francisco's local legal regime will allow the city to meet this housing production target.

In 2016, authors O'Neill, Biber, and students launched the Comprehensive Assessment of Land Use Entitlements Study (CALES) at the University of California, Berkeley, to understand how cities, including San Francisco, design and apply local and state law to proposed developments of five or more units approved in 2014 - 2017. In an earlier report,[1] we found San Francisco's local regulatory regime comparatively prohibitive, risking exclusionary zoning despite explicit policies to promote inclusion and fair housing goals through inclusionary housing programs, rent stabilization, and tenant protections. Among the 28 jurisdictions we studied, San Francisco was among the cities with more land zoned for dense housing, although that zoning was not equitably distributed citywide. But most notable, among all our study cities, San Francisco was an *extreme* outlier in process requirements and timeframes to approval. The city had a median timeframe to entitlement of over two years for code compliant multi-family housing that benefited from streamlined environmental review.

San Francisco's median timeframe was not only longer than its neighbors, it was longer than timeframes in neighboring cities with purportedly more difficult local law. Berkeley, for example, has complex rules that require a use permit[2] for all new housing development, and yet the median timeframe to entitlement was four months shorter for comparable multi-family housing. Moreover, once we parsed out our data to explore how environmental review streamlining might impact timelines, we found that Berkeley's median timeframe dropped to less than 10 months for apartment buildings, whereas San Francisco's remained at 24 months for the *same type of housing*. San Francisco exemplified how cities can write and implement procedural rules in a manner that creates uncertainty of approval. Uncertainty creates risk, and risk influences what developers will propose and build, as well as which developers will consider developing within a city. During our research, affordable developers who worked in neighboring cities explained they could not work within San Francisco because entitlement was too uncertain and difficult.

California's legislature has passed nearly 100 laws relevant to housing policy since 2016.[3] These laws seek to spur housing production across all income levels and promote equitable housing outcomes—namely increased housing production in high opportunity locations. Many important changes to state housing law target subjectivity in discretionary processes, like

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[1] We refer here to our Report to the California Air Resources Board in fulfillment of Contract #3900-19STC005. MOIRA O'NEILL-HUTSON ET AL., EXAMINING ENTITLEMENT IN CALIFORNIA TO INFORM POLICY AND PROCESS: ADVANCING SOCIAL EQUITY IN HOUSING DEVELOPMENT PATTERNS (2022). We also cross reference prior publications.

[2] Project proponents apply for a use permit, often referred to as a conditional use permit, when local rules allow for certain uses subject to approval—but not as a matter of right under the local zoning.

[3] *See* Ben Metcalf, Managing Dir., UC Berkeley, Terner Ctr. for Hous. Innovation, Presentation at the California Joint Oversight Hearing with Assembly Housing and Community Development Committee: Housing Production: Recent Legislative Actions and Outcomes (Feb. 28, 2023), https://shou.senate.ca.gov/node/21.

planning review,[4] and work towards quickening approval processes, particularly for multi-family housing. New law and policy aim to accelerate housing production in high opportunity areas, inviting important questions about how well San Francisco has implemented these laws and whether they effectuate production, affordability, and equity. To answer these questions, we expanded and extended CALES to explore San Francisco's local land use regulation in more detail and identify specific roadblocks to dense multi-family housing. This report details our methods, presents findings, and discusses their implications for the California Department of Housing and Community Development's (HCD) Policy and Practice Review.

Research Questions and Approach

HCD asked (1) whether San Francisco is fully implementing key state housing laws, such as the Housing Accountability Act, the Housing Crisis Act, the Permit Streamlining Act, Senate Bill 35 (SB 35), and State Density Bonus Law; (2) whether local implementation is allowing these state laws to achieve their intended effect of promoting housing production and affordability; (3) what causes delay in the entitlement process and how the city's discretionary review process impacts overall project timelines and the housing approvals pipeline.

To answer these questions, we used a spiraling mixed methods research design that joins legal research and qualitative, quantitative, and spatial analyses to understand San Francisco's local regulatory environment. This design helped our study overcome some of the limitations of each method and allowed us to adapt our research approach to the specific needs of studying San Francisco.

HCD's questions one and two require us to interpret our data and provide findings based on our interpretation of what state law requires of localities.[5] For example, we interpret the Permit Streamlining Act, Housing Accountability Act, and Housing Crisis Act as applicable to all multi-family housing approvals in San Francisco that do not require a local legislative action. We define "full implementation" of these state laws to mean that San Francisco both complies with state law, but also that local rules or planning practices do not effectively circumvent the purpose of the limitations imposed on cities by state law.

We built a unique and highly detailed dataset of 140 planning entitlements[6] of five or more units issued in 2014 - 2017. We added 144 observations of entitlements and SB 35 approvals issued

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[4] For a discussion of what characterizes a discretionary action, see Friends of Westwood, Inc. v. City of Los Angeles, 181 Cal. App. 3d 259, 269-74 (1987). When city employees can set standards and conditions for many aspects of a proposed building, the approval process is discretionary. For a definition of a ministerial process in California law, see Prentiss v. City of S. Pasadena, 15 Cal. App. 4th 85, 90, 18 Cal. Rptr. 2d 641 (1993) (citing CAL. CODE REGS., tit.14, § 15268(b)(1) (2023)("'Ministerial' describes a governmental decision involving little or no personal judgment by the public official as to the wisdom or manner of carrying out the project. The public official merely applies the law to the facts as presented but uses no special discretion or judgment in reaching a decision. A ministerial decision involves only the use of fixed standards or objective measurements, and the public official cannot use personal, subjective judgment in deciding whether or how the project should be carried out.")). Importantly, ministerial decisions are exempt from environmental review under the California Environmental Quality Act.

[5] We discuss this in the report; our analysis depends on some assumptions about what "full" implementation of state law would entail.

[6] We refer to "entitlement" as a process and "entitlement" as an observation of that process in the singular and plural throughout this report. Entitlement refers to the type of housing approval that a project proponent secures from the Planning Department, Planning Commission, or Board of Supervisors when

in 2018 - 2021 to this dataset.[7] Our approvals dataset captured detail on each application and approval step under local rules and state law (like the California Environmental Quality Act, or CEQA) and important project characteristics (like affordability, building size, and location). We gathered the detail for our dataset from source documents (application documents, planning staff reports, and motion and resolution documents) wherever possible. We analyzed our data using statistics and mapping.

We conducted in-depth interviews and used participant observation and primary document analysis to understand why San Francisco's approval process operates the way that it does. We analyzed more than 35 hours of confidential in-depth research interviews with 24 participants representing affordable and market-rate developers, former and current city personnel and staff that work on housing development, land use attorneys, and housing advocates.[8] We observed and analyzed notes and transcripts from another 33 meetings that HCD convened with approximately 146 stakeholders. Most were approximately one hour long. Twenty-five of the HCD-led meetings were very small, with one to three participants, in addition to O'Neill and one representative from HCD. The small meetings allowed participants to offer deep insights, much like research interviews. In all, we analyzed notes and transcripts from ~68 hours of research interviews and meetings with 14 individuals across the executive and legislative bodies within San Francisco, over 20 former and current planning staff, more than 60 development professionals (evenly split between affordable and market-rate developers), and 6 different housing advocacy groups. We analyzed materials to extract themes and looked for frequency of themes across stakeholder groups. We also cross-referenced written law, recordings from hearings, approval documents, and analyses from our entitlement data.

Limitations of Research Approach and Analysis

Each method and data point has some limitations. For example, each observation in our approval dataset represents a potential housing or mixed-use development that developers believed had a high enough probability of success that they were willing to pursue entitlement in the first place. There are no project denials in the database to allow for quantitative analysis, but we do have limited data on a few denials we examined during data collection. Gathering data on project denials in a systematic way (for quantitative analysis) would demand substantially expanding the scope of the research project, which was not feasible given the research timeframe. Further, defining a project denial for data collection and analysis is more complex than defining an entitlement. A denial includes what the city reports as a denial but should also include projects that the city effectively "denied" (where a political body denied a specific entitlement, for example) even though the project remains pending within the city's public portal

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the local law reviews a proposal to build housing through a discretionary process. Discretionary review is a legal concept that means the city can set standards and conditions for many aspects of a proposed building and the approval process is discretionary. An entitlement typically precedes the building permit process, and it is a process that involves planning department review of a proposal to build housing and potentially requires an approval from a local elected or appointed political body. A ministerial process involves a public official applying law to fact without discretion or subjective judgment. Often, building departments issue ministerial approvals. Uniquely, state law creates a ministerial process that also involves planning review—which we discuss at length in the full report.

[7] Corrected Annual Progress Reports helped us identify 11 observations late in our research process. We were able to code essential characteristics for these 11 observations to include them in our summary statistical analyses only.

[8] Eighteen participants sat for interviews in 2022 - 2023, and several participated in more than one interview. We also analyzed transcripts from six interviews across the same stakeholder groups in San Francisco (affordable developers, planners, market-rate developers, and community-based organization advocates) that O'Neill conducted in 2017, where comparisons with prior years was useful.

or in its annual reporting. For the purposes of research, a denial could also include a project from which a developer appears to voluntarily withdraw after the city determines that it will not approve the project or will impose conditions that render the project infeasible. There also may be no documentation to verify whether a project that appears to be pending has effectively been denied. In our work, however, where we come across developments that have advanced in the entitlement process but are ultimately denied, we do discuss those developments.

All interview participants volunteered, as did all participants in HCD-led meetings. Voluntary participation in interviews and research meetings increases selection bias and limits the generalizability of findings.[9] We increased the number of interviews in each stakeholder group and triangulated data and methods to augment the overall reliability of our findings from interviews where possible. Some topics do not allow for this, however. For example, developers may discuss why they are unwilling to apply for entitlement, but there is no other data to explore to understand what deters applications beyond what the interview participants shared.

Summary of Findings

HCD asked whether the data indicates San Francisco has fully implemented state housing law intended to promote housing production and affordability. **All data generally indicates that the answer is no.**

San Francisco's local rules embed subjectivity and uncertainty into review processes that state law says should be objective, time constrained, and, in some cases, certain. The city's authority to apply discretionary review to any permit, and the ease with which project opponents can appeal planning approvals and permits (including post-entitlement permits) to the Board of Supervisors or Board of Appeals fosters planning practices that limit full implementation of the Permit Streamlining Act, Housing Accountability Act, Housing Crisis Act, and in some instances, SB 35 and State Density Bonus Law. Planning staff are concerned about whether planning review will survive scrutiny from local political bodies, not the courts. Planning staff anticipate local political bodies will ignore planning recommendations and extend review processes if that is what neighborhood-level politics demand. Planning practices reflect this assumption, and local policy reinforces it. Developers interpret this planning practice as requiring more than what the law "on paper" demands through negotiation outside of public hearings to satisfy neighborhood interests. Developers perceive all planning approvals as uncertain and risky, even if the proposed development conforms to all zoning and planning standards. Eight years of approvals data confirms these perceptions. The risk and uncertainty embedded into local law has driven some developers to leave the San Francisco market and has deterred other developers from entering the market entirely.

Below, we elaborate on what the data tells us about the direct effects of specific state housing laws on San Francisco's housing approval process, what all data tells us about San Francisco's implementation of different state laws, and the relationship between local rules, planning practices, and lengthy entitlement outcomes. The report that follows details each finding.

[9] Selection bias refers to research participants not being fully representative of the group to which they belong. This limits our ability to interpret what we hear as the perspectives of a particular stakeholder group, generally.

SB 35 fixes planning review for eligible housing developments but is not a complete process fix.

Data shows San Francisco Planning diligently implemented SB 35. Approximately 36 professionals who work on affordable development unanimously reported that SB 35's ministerial process "fixed" planning review for affordable housing developments because the state law created certainty of planning approval where none existed previously. Stakeholder perceptions are borne out in the planning approval data. Table 1 shows that the median timeframe for planning approval for developments that applied only under SB 35 was ~3.4 months and could take up to eight months. In contrast, code compliant discretionary developments[10] requiring only a building permit had a median timeframe of two years and could take as many as four years.

Table 1: Timeframes to Planning Approvals Issued in 2018 - 2021 Selected Pathways

Process Category	Timeframe (Months)			
	Minimum	**Median**	**Mean**	Maximum
SB 35 only (N=9)[1]	0.89	3.42	4.24	7.62
Discretionary building permit only (N=13)	7.76	24.20	24.67	47.70

[1]This count does not include five applications that developers proposed as discretionary approvals, some before SB 35's enactment, that San Francisco later approved under SB 35.

Importantly, stakeholder interviews indicate SB 35 provided both affordable developers and planning staff relief from San Francisco's local rules. Data on how San Francisco Planning processed applications for development before SB 35 indicates Planning prioritized expediting 100% affordable developments.[11] Local law still limited how quickly planners could complete review for any development, including 100% affordable development that the city helped fund. In fact, the city entitled only five 100% affordable developments in 2014 – 2017, which would yield 567 units if built. The median timeframe to approval for these five 100% affordable developments was 15 months. In contrast, SB 35's ministerial process allowed San Francisco Planning to approve 14 100% affordable developments that would yield 1,663 affordable units if built. The median timeframe for the SB 35 100% affordable developments was less than 7.5 months, inclusive of developments that began as discretionary developments and later applied for SB 35 eligibility review. The median timeframe for 100% affordable housing developments that only applied for approval under SB 35 was less than three months. Most SB 35 developments also used State Density Bonus Law, so they were, on average, larger as compared with another three discretionary 100% affordable developments San Francisco approved in 2018 – 2021, or the five entitled in 2014 - 2017.

However, SB 35's effects are limited to planning review. All stakeholders still describe the post-entitlement approval process as subjective, lacking standardization and sufficient oversight.

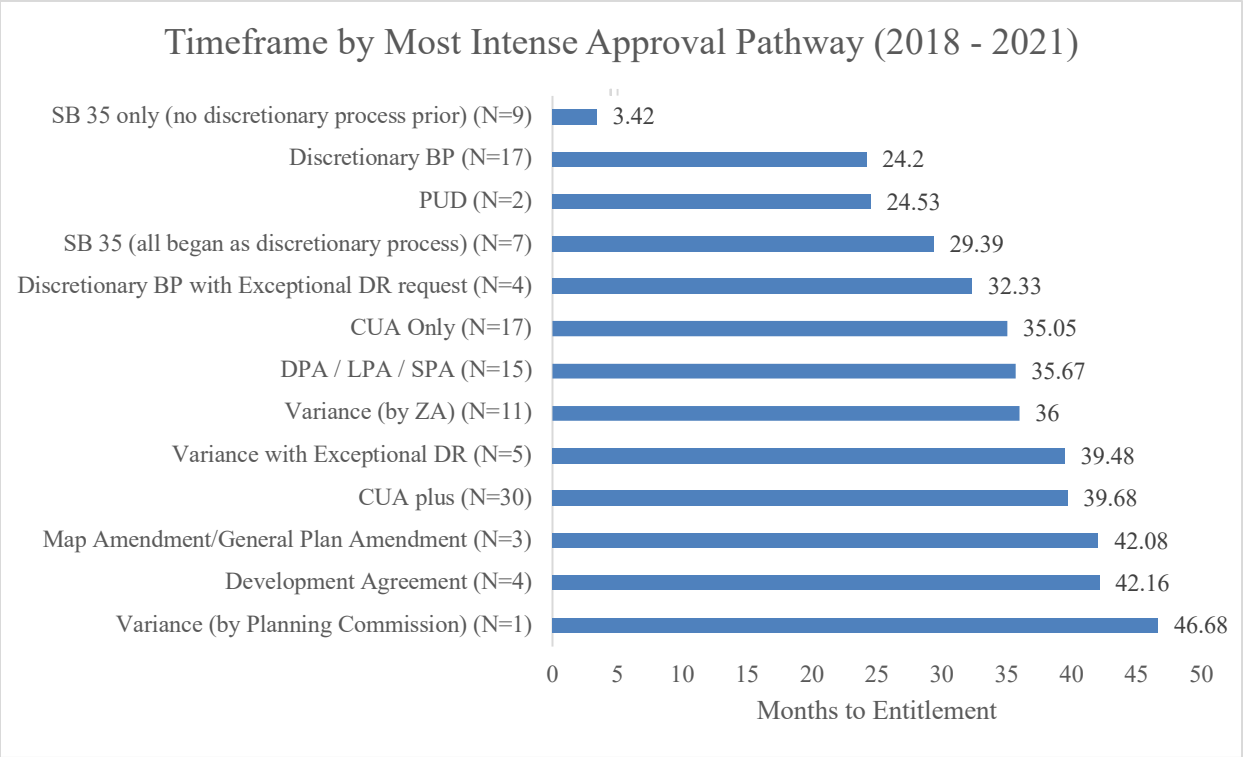
[10] Code compliant discretionary development means proposed housing development that conforms to all zoning and only requires a building permit. San Francisco law provides that this development is subject to discretionary review.

[11] Interviews at that time indicated internal work and analysis to expedite affordable development, but median timeframes for 100% affordable developments were still 15 months.

Stakeholders share that the post-entitlement permitting process depends entirely on the professional assigned to the project, not the project scope itself. Stakeholders report that subjectivity in the post-entitlement process can trigger additional planning review even after a project has moved to the Department of Building Inspection. Because SB 35 is limited to the planning review stage, the state law has no effect on these post-entitlement procedural issues. Developers share that because San Francisco's law offers opportunities for project opponents to challenge, or appeal, permits after entitlement, including demolition permits, SB 35 eligible projects are susceptible to process challenges after planning review as well.[12]

SB 35 also does not represent a complete fix for San Francisco's procedural challenges. SB 35 applies to qualifying projects so long as San Francisco keeps failing to meet its housing production targets. But missing housing production targets is not San Francisco's goal. **Still, San Francisco's implementation of SB 35 signals what is possible with a ministerial process while also spotlighting San Francisco's problematic existing discretionary review.**

Figure 1: Process Approval Pathway Timeframes



Graphic Developed by Dori Ganetsos using CALES data.

[12] The recent appeal of demolition permits for an SB 35 development located at 2550 Irving demonstrates this point.

Unpredictable discretionary review processes create uncertainty and risk—even for code compliant development of any size in any location citywide.

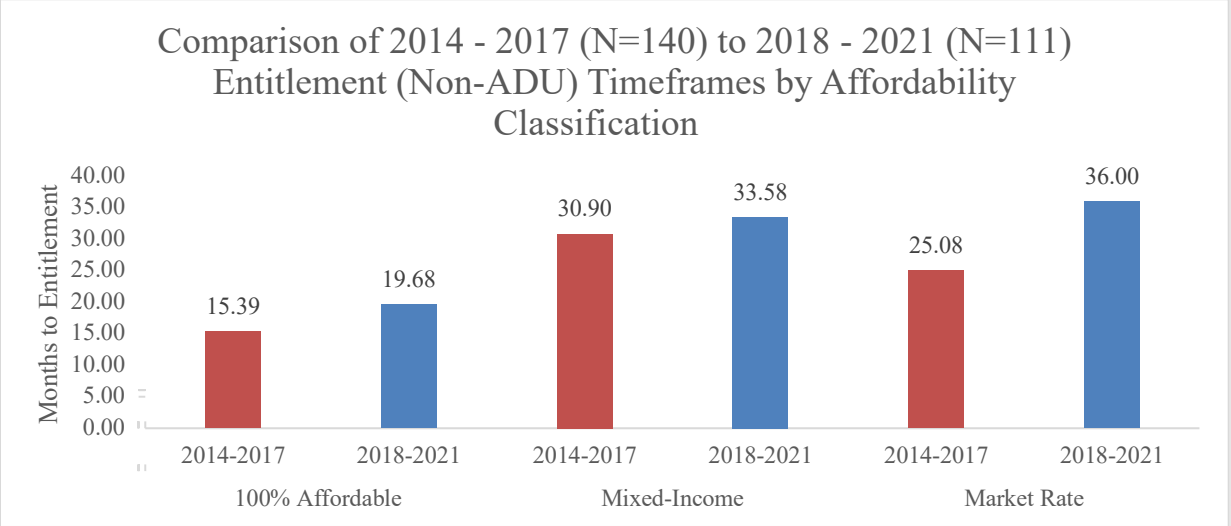
All permits in San Francisco are discretionary under local law unless preempted by state law[13] (like SB 35). Stakeholders describe the discretionary housing approval process in San Francisco as risky and unpredictable. Stakeholders report approval is uncertain even if the proposal conforms to all zoning and planning requirements. When we use different statistical methods to analyze the housing approval data, we also find that **no type of housing development is easy to entitle in San Francisco**. Even a smaller development that conforms to zoning and planning requirements faces unpredictable timeframes. When we analyze the approvals data to explore relationships between specific approval requirements and timeframes, we discover that there are factors—like affordability classification, project size, and location—outside of what zoning and planning standards require that influence timeframes. This suggests that these other factors might play a substantial role in whether and how a project gets entitled, even when a project conforms to all planning standards and zoning.

Timeframes for discretionary approvals increased.

Our 2018 - 2021 approvals data indicates that entitlement timeframes have increased as compared to the prior four years. The median timeframe for discretionary approvals of five or more units issued in 2014 - 2017 was 27 months. In 2018 - 2021, the median timeframe for the same climbed to 34 months—more than a 25% increase. Figure 2 shows that in both study periods, 100% affordable development moved comparatively faster: 100% affordable development requiring discretionary review had median approval timeframes of ~15 months in 2014 - 2017 and ~20 months in 2018 – 2021. Both periods show that the city can quicken the process, to some degree, for affordable development. Interview data from 2017 and 2022 - 2023 indicate that planning staff have been committed to expediting affordable development.

[13] The Municipal Business and Tax Regulations Code Section 26(a) provides that San Francisco's departments may "take into consideration the effects of the proposed business or calling upon surrounding property and upon its residents . . . [and to] exercise its [or their] sound discretion as to whether said permit should be granted, transferred, denied or revoked." SAN FRANCISCO, CAL., BUS. & TAX REGS. CODE § 26(a) (2019). San Francisco Planning's website states that the city interprets this part of the Municipal Code as granting the Planning Commission discretionary authority over all building permits, including permits not otherwise discretionary under zoning and planning requirements. *Discretionary Review*, S.F. PLAN., https://sfplanning.org/resource/discretionary-review (Jan. 25, 2023).

Figure 2: Comparison of Timeframes by Affordability Classification, All Years



Graphic Developed by Dori Ganetsos using CALES data.

Local policy and practices are inconsistent with the goals of the Permit Streamlining Act, Housing Accountability Act, and Housing Crisis Act.

Stakeholders report that San Francisco's local rules and politics create planning practices that are inconsistent with state housing laws which aim to quicken planning review and reduce subjectivity. Approvals data suggests these stakeholders are correct.

First, the data the city makes publicly available on project applications shows San Francisco systematically failed to meet PSA notification deadlines for discretionary approvals issued in 2018 - 2021. Planning recorded more information on application notices in its public portal for applications filed after January 1, 2018, as compared to prior years, indicating that San Francisco Planning is doing more to track and disclose project intake. Still, the city's data shows the city routinely did not meet PSA deadlines. Also, up until July 2023, local policy required the entitlement process for most dense development to begin with a mandatory Preliminary Project Assessment (PPA) process that added, on average, a year to the application process.

Second, local rules drive the city's implementation of the California Environmental Quality Act (CEQA), which extends timelines. Local rules that allow for easy administrative appeals and require appeal of CEQA determinations to follow entitlement[14] push environmental planners to make CEQA determinations at the close of the entitlement process. This practice limits the PSA's effect on overall approval timeframes.[15] Also, the state's CEQA guidelines do not require San Francisco Planning to incorporate wind and shadow studies into compliance pathways for exempt developments, but local law does. These supplemental studies add time

[14] The Board of Supervisors provides an advisory that explains that Section 31.16 of its Administrative Code requires that the Board will hear an appeal after the final approval action. *See* S.F. BD. OF SUPERVISORS, APPEAL FILING TO THE BOARD OF SUPERVISORS CALIFORNIA ENVIRONMENTAL QUALITY ACT (CEQA) EXEMPTION DETERMINATIONS APPEAL (Aug. 28, 2023), https://sfbos.org/sites/default/files/CEQA_Exemption_Determinations_Appeal_Info_Sheet.pdf.

[15] We interpret California Government Code § 65690(a) as imposing limits on the time to approval under the PSA only after a city makes CEQA determinations. *See* CAL. GOV'T CODE § 65690(a) (West 2023).

and cost to environmental review, and sometimes provide a basis for local administrative appeals.[16]

Third, and relatedly, administrative appeals not only delay entitlement for specific projects that face appeal, administrative appeals also influence planning practices at a systems level. Most stakeholders (across groups) perceive that San Francisco's process risks inserting the Board of Supervisors into any approval pathway through an appeal. This process nurtures risk averse planning practices at all stages which derail other local and state policy that aims to quicken review. Data also shows that appeals increase the workload for planners already juggling immense workloads, which in turn impacts the pace of review for other development proposals. For example, **an administrative appeal of just one entitlement in our dataset required 374 additional staff hours and $52,204 to prepare the appeal—even though the appeal was withdrawn**. Notably, nearly all the planners we interviewed or met with are more apprehensive of the Board of Supervisors than potential litigants.

Fourth, stakeholders report frequent continuances and multiple hearings for non-CEQA approvals, which they say also allows for changes to proposed development outside of formal hearings. San Francisco's publicly accessible data on hearing dates is incomplete for about half of our 2018 – 2021 observations. Still, we found that at least 22% of all 2018 – 2021 quasi-adjudicative entitlements had multiple continuances or hearings for a single step.[17] Some observations have remarkably high rates of continuances and hearings. One project, for example, had nine continuances for a joined Large Project Authorization and Density Bonus approval step.

Fifth, several stakeholder groups report that local policy allows frivolous and meritless challenges with ease (evidenced by withdrawn or denied appeals or withdrawn or denied requests for exceptional discretionary review)[18] and with little to no cost to project opponents, yet significant costs to planning staff and developers. Project proponents see increased costs because of the delays and uncertainty that these processes create. The processes also impact the workflow of Planning Department staff, which slows down planning review. For example, data shows that when project opponents request exceptional discretionary review, planners can expect to work several days and sometimes weeks preparing for a hearing on a project with which they already completed review. This requires shuffling work priorities. Developers report that rules that make it easy to challenge imminent planning approvals foster an opaque practice of negotiation outside of formal hearings which risks imposition of subjective conditions of approval. The approvals data show at least 14% of entitlements (across both study periods—or eight years) faced administrative appeals that were usually withdrawn or denied.[19]

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[16] We note here that San Francisco's public portal only provides access to shadow studies, although many stakeholders including planners stated that wind studies are common.

[17] This includes entitlements that only required a planning department or zoning administrator review. If we take out those entitlements that did not require a hearing in front of the Planning Commission or Board of Supervisors under planning and zoning law, the rate is at least 30%.

[18] Exceptional discretionary review refers to a local rule that allows project opponents to request the Planning Commission exercise discretionary review for an approval that did not otherwise require the Planning Commission's involvement. This request necessitates a hearing, at which time the Planning Commission then determines if it will exercise discretionary review because of exceptional and extraordinary circumstances which could lead to modifying the conditions of approval. More detail on this local process is in the full report. We refer to this as "exceptional discretionary review" hereafter.

[19] Administrative appeal data for 2018 - 2021 depends on internal tracking and self-reported data and is not systematically available on the city's public portal. It is possible that the rate of administrative appeal could be higher.

Also, at least 20% of discretionary building permits in study years received a request for exceptional discretionary review.

Subjectivity and variability persist in the post-entitlement process.

All stakeholders experienced with development in San Francisco shared that the permitting process lacks standardization or uniformity in how the process unfolds. Outcomes, in terms of processing time, are contingent on who is assigned to the development rather than on the form of the development. This variability slows, and sometimes derails, production. Stakeholders describe building permit processes as inefficient and subjective, triggering planning review again even after entitlement. There is also notable difference in the way all stakeholders describe Planning Department and Department of Building Inspection (DBI) staff. Stakeholders blame local approval bodies for overly cautious planning practices. In contrast, stakeholders complain of too little oversight or management of DBI staff, and too few performance standards, as influencing permitting practices.

Stakeholders suggest local reforms must eliminate discretionary review on some housing or the city will not meet its RHNA or resolve long-standing inequities in land use.

Importantly, planners, developers, and many housing advocates welcomed the state's intervention into local discretion through SB 35. Though planners expressed a need for more technical support from the state when state law augments local planning review, planners agreed with developers that the state ministerial process fixed planning review for most 100% affordable development and offered that a ministerial process could do the same for other housing projects.

Stakeholder groups also shared that reforms to expedite and simplify planning review while retaining discretion will fail to fix process problems in San Francisco. Statistical analysis of approvals data suggests these stakeholders are correct. Planning review of code compliant development can take years. This is true, even though our timeline calculations do not capture the frequency of developments subject to discretionary review being punted back to Planning *after* entitlement for further additional review, because San Francisco's public data portal does not allow for systematic analysis of this problem. Regression analysis suggests that reducing process steps while maintaining discretionary review is unlikely to resolve San Francisco's production challenges.[20]

Stakeholders shared that rezoning must be coupled with procedural reform that provides a local ministerial process to address production challenges *and* equity. Planners, developers, and some housing advocates perceive current reform efforts as "tinkering" with the zoning and planning code, when what they believe is needed is procedural overhaul and equitable upzoning. Stakeholders characterize San Francisco's existing regulation as reflecting historical and current power imbalances across neighborhoods. Stakeholders caution that current density and use controls that limit housing development in more affluent neighborhoods reflect existing neighborhood power over planning and political bodies. Also, the dominance of project-level adversarial politics reflects that some communities can only access power over land use by blocking development at public hearings. When affluent neighborhoods are rezoned, stakeholders caution that neighborhood power and influence over planning and

[20] Figure 8 illustrates. For a full discussion of regression analysis using the 2014 - 2021 data, see Appendix A.

political bodies will not necessarily disappear. Without a ministerial process for at least some development, stakeholders caution that rezoning will simply catalyze more project-by-project adjudication and administrative appeals as affluent communities block more equitable distribution of dense housing development through existing process tools. If what stakeholders forecast is correct—and the data suggests that they are—then existing timelines to approval likely underestimate future approval timeframes in higher opportunity neighborhoods that the city is in the process of upzoning or proposing to upzone.

Planners, developers, and advocates share that these local rules requiring reform are values-driven. These rules reflect a widespread assumption that more process supports meaningful community engagement and sharing of power over land use which, together, help address structural inequities in the built environment. Several stakeholder groups caution that these assumptions are faulty. San Francisco's process fosters project-level political fights that result in high-risk entitlement processes without altering longstanding inequities in planning standards and zoning. Planners, in particular, share that what San Francisco needed, and still needs, is deep engagement at the policy, planning, and zoning stages to hash out what zoning and planning standards should be, as well as simplified and ministerial approval for development at the project level that serves the city's housing policy goals. Planners and developers caution that as process has gotten worse in recent years, fewer developers can navigate the risk of developing in San Francisco, and this poses major challenges to San Francisco's ability to meet its production targets. During meetings with HCD, some Commissioners and Supervisors called out this local history and the problems of process in San Francisco, seemingly aligned with the perspectives of planners, affordable developers, and housing advocates. At the same time, meetings with both Commissioners and Supervisors also revealed clear disagreement within political bodies on both the source of San Francisco's housing problems and the solution. At least some Supervisors are skeptical that increasing anything other than affordable housing production could tackle the city's housing challenges. Some Commissioners and Supervisors also expressed concern about how State Density Bonus Law and SB 35 alter the urban form, even as they want more affordability. And at least some Supervisors perceived affordability to be welcome citywide, whereas planners and affordable developers say that this is not true.

Conclusion

San Francisco's planning practice and process problems spring from local law that applies discretionary review to any permit and offers repeated opportunities to challenge project approvals after an already complex and lengthy planning review process. These rules incentivize risk averse planning practices to avoid disruptions to a busy workflow and public scrutiny from political bodies. Risk averse planning practices, in turn, limit full implementation of the Permit Streamlining Act, Housing Accountability Act, Housing Crisis Act, and in some instances, State Density Bonus Law. Local rules also limit the effects of SB 35, as affordable developers face post-entitlement appeals. Still, the direct effects of state ministerial review highlight what is possible in terms of resolving San Francisco's process issues. Planners, developers, and housing advocates suggest achievement of the city's equity goals requires a local ministerial process coupled with equitable upzoning. What is also apparent, however, is that reforming zoning and entitlement will be insufficient to attain production targets. The city has major challenges with post-entitlement processes—some of which are related, again, to local rules, and some of which are related to variability and subjectivity in permitting processes, staffing, and lack of inter-agency coordination.

Introduction

In 2016, we launched the Comprehensive Assessment of Land Use Entitlements Study (CALES) at UC Berkeley. CALES explores how communities design and apply land use law to proposals to build dense housing. We used a 2015 California Legislative Analyst's Office report that identified the metro areas with the highest housing costs in the state and where demand has outpaced supply[21] to select our first group of study cities and regions. San Francisco was at the top of the list, and we began our work by studying San Francisco and four neighboring cities.[22] We eventually grew the study to include 28 jurisdictions in seven metropolitan regions across the state.

What we found was that San Francisco zoned comparatively more land for dense housing than nearly every other city we studied across the state. Indeed, San Francisco was one of only *two* cities studied that zoned more than a third of its zoned land for all income levels.[23] Zoning land for dense multi-family housing is a necessary though insufficient condition to achieving affordability and inclusion. California's fair share housing law is premised on this concept.[24]

Despite San Francisco zoning more land for dense housing than most cities studied, we found that San Francisco's local regulatory regime was comparatively prohibitive and risked exclusion. Even though the city has explicit local policy to promote inclusion and fair housing goals through inclusionary housing programs, rent stabilization, and tenant protections, our comparative analysis categorized San Francisco as "prohibitive" due to its complex procedural maze and application of laws. Among the 28 jurisdictions studied, San Francisco was unique in that it made all development discretionary. No other city we studied made all building permits (typically issued post-entitlement) discretionary; most used aesthetic regulation or design or site plan review as the blanket discretionary hook during entitlement. A few of our study cities required use permits for all multi-family housing development. But all the other approaches we found existed in the planning code and zoning regulations. No other city studied made building permits discretionary through some other area of local law.

San Francisco was also an extreme outlier in terms of timeframes to entitlement—with median timeframes of over two years, even for housing developments that met all zoning requirements and planning standards. These lengthy timeframes eclipsed the other study cities' timeframes by many months. These timelines also exceeded planner perceptions of "average" entitlement timeframes in communities nationwide. We found that only 5% of the 140 project observations in our 2014 - 2017 dataset from San Francisco achieved entitlement in 12 months or less.

We wrote that San Francisco's land use regime exemplifies how cities can zone land for dense multi-family housing and write and implement procedural rules to create delay and uncertainty of approval. Delay creates cost. Uncertainty creates risk. Increased development costs and risk influences which developers will build within a place, and what those developers will build. In that prior research, interview data and 2014 - 2017 approvals data suggested San Francisco's local regulatory regime burdened affordable development—even if the city prioritized affordable

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[21] CHAS ALAMO ET AL., LEGIS. ANALYST'S OFF., CALIFORNIA'S HIGH HOUSING COSTS: CAUSES AND CONSEQUENCES (2015), https://lao.ca.gov/reports/2015/finance/housing-costs/housing-costs.aspx.
[22] We refer here to our Report to the California Air Resources Board in fulfillment of Contract #3900-19STC005. MOIRA O'NEILL-HUTSON ET AL., EXAMINING ENTITLEMENT IN CALIFORNIA TO INFORM POLICY AND PROCESS: ADVANCING SOCIAL EQUITY IN HOUSING DEVELOPMENT PATTERNS (2022).
[23] *Id.*
[24] *See* CAL. GOV'T CODE § 65583.2 (West 2023).

development—and likely squeezed out possibilities for middle income housing development entirely. We found that San Francisco's local law facilitated most 2014 - 2017 entitlement being sited in formerly industrial locations or neighborhoods that had multi-family zoning in place for decades. What we concluded was that San Francisco was the most sophisticated of the cities we studied in how its local law effectively blocked dense housing development through complex procedural hurdles rather than traditional density and use constraints.

California's legislature has passed nearly 100 laws relevant to housing policy since 2016[25] to spur housing production across all income levels and promote equitable housing outcomes. Many important changes target subjectivity in planning review and aim to quicken planning review, particularly for multi-family housing. There is also new law and policy to accelerate equitable housing outcomes, in terms of increased production in high opportunity locations.

More recent legislative reforms invite important questions about how well San Francisco has implemented these state housing laws intended to promote housing production, affordability, and equity. To explore these questions, we expanded and extended our Comprehensive Assessment of Land Use Entitlements Study (CALES) to better understand San Francisco's local land use regulatory regime and identify roadblocks to all multi-family housing development approvals that would yield five or more units. This report details our methods, presents findings, and discusses their implications for the California Department of Housing and Community Developments' (HCD) Policy and Practice Review.

Methods, Data, and Limitations

HCD asked:

1) At the local level, are state housing laws (including the Housing Accountability Act, Housing Crisis Act, Permit Streamlining Act, State Density Bonus Law, SB 35, and Housing Element Law) intended to promote housing production and affordability being fully implemented, and are they achieving their intended effect?
2) What are the causes of delay in San Francisco's entitlement process?
3) To what extent do discretionary review processes impact overall project timelines and the housing approvals pipeline?

Overall Research Approach

We use a spiraling mixed methods research design that joins legal research and qualitative, quantitative, and spatial analyses to understand San Francisco's local regulatory environment and answer the research questions. A spiraling research design is iterative and allows us to reexamine theoretical assumptions and methodological choices throughout the research process. This iterative research approach is sensitive to local conditions and research needs that are sometimes difficult to discover at the beginning of a research process. This approach involves producing analysis at multiple points in the study to allow for a feedback loop with both HCD and San Francisco while also informing our own theoretical assumptions about which law, policy, or planning practice factors support or obstruct housing development. This approach also means we do not rely exclusively on qualitative, quantitative, or spatial analysis to answer any

[25] *See* Ben Metcalf, Managing Dir., UC Berkeley, Terner Ctr. for Hous. Innovation, Presentation at the California Joint Oversight Hearing with Assembly Housing and Community Development Committee: Housing Production: Recent Legislative Actions and Outcomes (Feb. 28, 2023), https://shou.senate.ca.gov/node/21.

research question. We use qualitative data (interviews) to understand our quantitative and spatial analysis (using our entitlement dataset) and vice versa.

Ongoing Legal Research

We completed initial legal research into San Francisco's planning and zoning through CALES in 2016. We updated that legal research in 2018 and 2019, and then again in 2021 to understand changes to local planning review processes (for example, the elimination of the pre-application Environmental Evaluation process in 2018) and the impact of state housing laws (including changes to Density Bonus Law, Accessory Dwelling Unit Law, Senate Bill 330, SB 35, and amendments to the Housing Accountability Act), wherever changes are codified or provided for in policy documents. The legal and planning code summary informs our interview questions and guides our current data collection process. In the scope of this work, we updated our review of local law with relevant trial court and appellate court opinions.

Our Interpretation of State Law and Definition of "Full Implementation" of State Law

Answering the first research question requires us to explore whether San Francisco's policy and practices comply with state law and whether San Francisco's local policy or practices prevent specific state laws from achieving their intended effect. This requires us, first, to interpret state law and define what it means for a locality to fully implement each law for the purposes of this research. How we define "full implementation" in the research questions also informs our methods of analysis. We list our understanding of the applicability of specific state laws, their aims, and our definition of "full implementation" here.

We interpret the PSA, Housing Accountability Act, and Housing Crisis Act as applicable to *all* discretionary approvals, or entitlements, in San Francisco that do not require local legislative action. We read provisions within San Francisco's Planning Code that allow for and anticipate that the Planning Commission will issue a waiver or exception from any planning standards or zoning *without* local legislative action as adjudicative and within the purview of these state laws.

We interpret the goal of the PSA as seeking to "expedite decisions" on qualifying development projects[26] by imposing time limits on application processing and approval decisions. We also interpret the Permit Streamlining Act as imposing limits on the time to approval under the Permit Streamlining Act only after a city makes CEQA determinations.[27] If our data shows that a local policy or practice prevents the Permit Streamlining from imposing those time limits, we conclude that the local policy or practice blocks the full implementation of the PSA, even if the data does not show San Francisco violated an express provision of the PSA.

We interpret that the goal of the Housing Accountability Act is to increase housing production by limiting the ability of cities to outright deny, reduce the density of, or render infeasible a development that complies with objective development standards. We interpret the Housing Accountability Act to prohibit these actions unless a locality provides written findings that the proposed development would have an unavoidable and impossible to mitigate adverse impact on public health or safety.[28] Relatedly, we interpret the 2017 amendments to the Housing Accountability Act, found in Assembly Bill 1515, as modifying the Housing Accountability Act's "reasonable person" standard for determining compliance with land use regulations[29] in favor of

[26] CAL. GOV'T CODE § 65921 (West 2023).
[27] CAL. GOV'T CODE § 65950 (West 2023).
[28] CAL. GOV'T CODE § 65589.5 (West 2023).
[29] CAL. GOV'T CODE § 65589.5(f)(4) (West 2023).

approving qualifying development. We read the law consistent with how the First District Court of Appeal read the law.[30] We also interpret the "deemed to comply" provision of the Housing Accountability Act consistent with this same appellate court opinion.[31] We interpret this state law as requiring a city to send a project applicant timely written notice and an explanation of non-compliance if a city determines a proposed housing development is inconsistent with applicable standards.

We use descriptive statistics and interviews to explore whether San Francisco may have imposed conditions that lead to a reduced density (between application and entitlement), or subjective standards (conditions that render the development infeasible), or otherwise effectively denied a proposal to develop housing that a reasonable person would conclude is compliant with land use regulations under the Housing Accountability Act. Where our data indicates that the city may have imposed subjective standards, conditions that reduce density, or conditions that may render developments infeasible, we describe this as a failure to fully implement the Housing Accountability Act. We do *not* conclude whether San Francisco violated an express provision the Housing Accountability Act because of the limitations of our data. We gather and analyze documents that are readily available through the city's parcel information map public portal—but we cannot confirm that the city did not issue a notice of non-compliance with applicable standards *or* did not prepare findings, because the documents are not readily available on the public portal. We cannot interpret the absence of those documents on the city's public portal as meaning that those documents do not exist, ergo, San Francisco did not comply with state law.[32]

We also interpret one goal of the Housing Crisis Act of 2019, enacted in October 2019,[33] to be to curb delays associated with hearings, continuances, and meetings.[34] Where we identify entitlements with multiple hearings and more than five hearings, we describe as inconsistent with this law or that the city is not fully implementing the law. We do not determine whether the city is systematically violating the express prohibition on number of hearings, largely because of the data challenges surrounding hearings as discussed in the body of this report.

Unique Entitlement Dataset

The Comprehensive Assessment of Land Use Entitlements Study (CALES) dataset is a uniquely detailed dataset on how entitlements issued in select years navigated their approval pathway. Table 2: Entitlement Data Counts by Project and Units Across Years details observations per study year.

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[30] We refer here to the opinion in Cal. Renters Legal Advoc. & Educ. Fund v. City of San Mateo, 68 Cal. App. 5th 820, 845 (2021) ("Subdivision (f)(4) is intentionally deferential to housing development.").
[31] *Id.* at 831 (a "project is deemed to comply if 'substantial evidence . . . would allow a reasonable person to conclude' that it does").
[32] We do recommend, however, that San Francisco make those documents publicly available if they exist.
[33] We refer here to the passage of Senate Bill 330, approved by the Governor on October 9, 2019. S.B. 330, 2019-2020 Leg., Reg. Sess. (Cal. 2019).
[34] CAL. GOV'T CODE § 65905.5 (West 2023).

Table 2: Entitlement Data Counts by Project and Units Across Years

	2014	2015	2016	2017	2018	2019*	2020	2021
Projects	24	23	55	38	36	42	25	41
Units	2,470	2,069	6,371	3,359	2,824	2,807	2,839	2,869

*We included one SB 35 observation without an eligibility determination date in 2019 based on the date of the building permit.

2014 - 2017 Observations

The 2014 - 2017 dataset does not include Accessory Dwelling Unit (ADU) approvals but does include litigation-related data.[35] We do not rely on San Francisco's reporting on entitlement and permitting. Rather, we build our dataset from source documents including application documents, planning staff reports, motion and resolution documents, and legal pleadings where relevant, and construct our own code book. Importantly, in addition to our typical quality control measures, San Francisco uniquely provided us an opportunity to review our 2014 - 2017 dataset with the San Francisco Planning Department's Environmental Review team in 2018 following our first working paper.

Using San Francisco's online Property Information Map system (PIM), we augmented the 2014 - 2017 entitlement data in this study by:

1) Collecting additional hearing, correspondence, and approval data on the PPA and Environmental Evaluation Application processes, where available;
2) Collecting in-depth information on the nine observations where parties applied for exceptional Discretionary Review (DR) under San Francisco's Business and Tax Code, including all available data on the requests, hearings, and the Planning Commission's actions;
3) Confirming if and how market-rate developments satisfied San Francisco's inclusionary zoning (IZ) ordinance by reviewing our data and supporting documents (there are 10 market-rate developments in our dataset where we cannot confirm how the projects satisfied the IZ requirement);
4) Supplementing our search for "determined to be complete" dates issued by the Planning Department (there are none for all 140 observations) with a second search through San Francisco's Property Information Map (PIM)[36] for correspondence regarding incomplete applications; and
5) Augmenting existing CEQA-related coding with any available data on Wind, Shadow, and Transportation Demand Management studies for each observation in the 2014 - 2017 dataset.

[35] We detail how we collected and quality checked the 2014 - 2017 entitlement data we reference in the Report to the California Air Resources Board (CARB Report). MOIRA O'NEILL-HUTSON ET AL., EXAMINING ENTITLEMENT IN CALIFORNIA TO INFORM POLICY AND PROCESS: ADVANCING SOCIAL EQUITY IN HOUSING DEVELOPMENT PATTERNS 36-43 (2022).
[36] PIM refers to San Francisco's public portal that provides comprehensive access to numerous records associated with parcels. *San Francisco Property Information Map*, S.F. PLAN., https://sfplanninggis.org/pim/ (last visited Sept. 18, 2023).

The Permit Streamlining Act provides planning departments should determine whether an application to develop housing is complete within 30 days of receipt or the application will be deemed complete.[37] We found no publicly available data that documents that San Francisco's planners made completeness determinations within 30 days of application for any entitlement of five or more units issued in 2014 - 2017. [38]

We explored the data to see if we could determine "deemed complete" dates as well. For discretionary building permit applications, we could almost always locate the Preliminary Project Assessment (PPA) applications (where applicable) but could not always find Project Applications consistently logged. The Notice of Building Permit Application, however, references the application date (though we cannot confirm the date against a source document). For other approval applications that require only one local approval—like a Conditional Use Authorization (CUA)—we can locate the PPA documents, but we can only sometimes locate applications for those discrete approvals with date stamps of application receipt by the Planning Department.

We also cannot determine from the documents on PIM when planning review began for entitlements issued in 2014 - 2017. For projects that fall under the Permit Streamlining Act, this means that it is not possible to confirm compliance with the Permit Streamlining Act even if the Planning Department staff did not make completeness determinations. For example, we found a few instances of Planning Department correspondence that lists what an application for a discretionary approval (like a CUA) is missing, and states that review has begun and that time limits do not begin until after the project proponent submits the required materials—but the letter does not provide *when* planning review began. These letters are dated many months after the application date.[39] The date of the letter suggests non-compliance with the PSA, but the language is vague. Also, although PIM links users to a portal that provides some building permit data (permit number, description, and date), there is little to no supporting documentation available.

2018 - 2021 Observations

We first modified the data collection template to account for important changes in state law and to track source documents closely. We have variables to identify the source of data that we used to determine the timeframe, approval, and hearing values. Adding data source variables allows us to code for whether we were able to identify an approval detail or event based on the original document (primary source) or an entry in San Francisco's portal (secondary or self-reported source). We also constructed new variables to explore:

- How many public hearings (including continuances) to which a project was subjected.
- The approval body required of a developer or property owner before issuing an approval.
- Changes to project characteristics (in terms of the number of units proposed, or types of units proposed) throughout the entitlement process.
- How developments that qualified for state ministerial approvals (such as SB 35) navigated the approval process.

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[37] CAL. GOV'T CODE § 65920 (West 2023).

[38] During our prior research in San Francisco, we did not request this information through a Public Records Act request. We did confirm in meetings with San Francisco personnel that at that time, Planning did not track the relevant information.

[39] For example, using one of our CUA observations to illustrate, we can find the application (with the submission date) and the Planning Department's notice that details what is missing, and that review is underway. The time lag between the two is about 10 months and does provide when planning review began.

Consistent with prior coding, we also always code for “other approvals” we could not anticipate from legal research and review of San Francisco’s local planning and zoning ordinances. In 2018 - 2021 data, examples include approvals like those requiring sidewalk legislation to allow a development to meet other code requirements. We also continuously add variables to augment the dataset to answer the research questions above.

We built our potential observation list to collect data from multiple sources. We referenced Annual Progress Report (APR) data to identify all reported entitlements or ADU or SB 35 approvals that would yield five or more new residential units if built. The APR listed duplicates. We cleaned for duplicates as we only wanted to examine unique projects in the APR. Once we had unique reported entitlements, we ran a match within our own 2014 - 2017 dataset. We ran a fuzzy-join text matching algorithm[40] between unique entitlements in the APR with our 2014 - 2017 dataset. We found six APR unique projects that overlapped with observations in our 2014 - 2017 data (which we had already cleaned and confirmed involved entitlements in those years). We do not include those in our 2018 - 2021 dataset.[41] We incorporated the remainder of APR entitlements into our data collection strategy. We then reviewed CEQA-related approvals in San Francisco's PIM portal and Planning Commission agendas using San Francisco’s public database of environmental review notices of determinations and exemptions.[42] We identified another group of observations (developments that appeared potentially approved in 2018 - 2021) to incorporate into our data collection strategy. Our 2018 - 2021 data includes 16 SB 35 observations and 17 discretionary ADUs. We provide more detail on the accuracy of APR data in Appendix C.

In all, a team of trained students collected data on 196 potential observations of entitlement/approvals issued in 2018 - 2021 after constructing a project list from the APR, cross-referencing environmental review determinations, and any other materials that listed out SB 35 project approvals. After preliminary data collection we determined 144 observations belonged in our study for analysis of entitlements and SB 35 approvals issued in 2018 - 2021. We excluded pending entitlements, entitlements outside of our study years, and Development Agreements associated with a major phased development where no phase or building had yet secured its final entitlement. We completed a full quality check of 133 of our 2018 - 2021 observations. The quality check process involved checking each coded value we recorded in the database twice against the source document or the PIM entry if no source document was available. Where there was an ambiguity or confusion about what the coded value should be, O’Neill reviewed the value and the source material to make a final coding decision.

We completed a partial quality check for 11 observations we gathered late in our data collection process, after referencing amended Annual Progress Reports, to allow for reliable summary statistics, including regression analysis, and all spatial analysis. We exclude these 11 observations from our analysis of frequency of continuances, changes in proposed density from

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[40] A fuzzy join is a joining method that is used for merging two datasets that are not perfectly matched. The reason we ran a fuzzy join is that there may be differences in how an address was written in the APR and our original dataset. A fuzzy join allows us to match projects that may have similar but not identical addresses in the APR and the CALES dataset.

[41] We would have to first confirm with San Francisco Planning whether these six potential observations were new entitlements and not modifications before including them in our dataset.

[42] *Environmental Review Documents*, S.F. PLAN., https://sfplanning.org/environmental-review-documents (last visited Sept. 18, 2023).

application to approval, project intake processes, inclusionary housing program compliance pathway, and frequency of additional studies during environmental review.

Primary Source Documents

Whenever possible, we relied on primary source documents; San Francisco does not make all primary source documents readily available. For example, calculating timeframes to entitlement for discretionary observations requires tracking the earliest required application date. Prior to discontinuing the PPA requirement in July 2023, San Francisco required project proponents submit a PPA for specific types of development before submitting a project application. We have 87 observations in our 2018 - 2021 dataset that would have required a PPA application. We were able to locate the signed and dated PPA application document to determine the first application date for 48 of those observations through PIM. We sourced PPA application dates for another six observations from PPA-related correspondence (including the PPA decision document). We had to rely on PIM entries for PPA dates for 22 observations because either the application itself was not dated, or there was no PPA application in the PIM portal. San Francisco's PPA process required project proponents to submit significant information about the proposed development.

Another example relates to San Francisco Planning's policy that mandates a pre-application neighborhood notification process, and a pre-application hearing called the "Pre-Application Community Outreach Process" or "Pre-Application Meeting."[43] This pre-application process requires project proponents to send notices and copies of plans to adjacent neighbors and neighborhood organizations *before* applying to develop land for any new construction or alteration that would change an existing structure by seven vertical feet or 10 horizontal feet. San Francisco Planning compiles the list of neighborhood organizations that project proponents must notify. Though PIM makes most PPAs available, PIM rarely provides source documents that furnish detail about pre-application hearings.

Also relevant, determining compliance with the Permit Streamlining Act requires tracking whether a project proponent applied for entitlement by submitting an application package to the Planning Department. While our dataset contains initial application dates for most of our 2018 - 2021 observations, we can source these dates from primary source documents—signed and dated applications—for only 58 observations. We rely on references to application dates in Plan Check Letters sent by the Planning Department and approval documents in another 29 observations. Where we do not have a primary source document, we rely on PIM entries for application dates, which is data that a San Francisco Planning Department planner entered into the PIM system directly.

In sum, more than half (56%) of the application dates in our dataset are essentially self-reported dates from Planning—and not readily verifiable with application documents. We also highlight here that in at least four instances, the PIM entry reports an application date *after* the approval event (which is available through a primary source document). In another five instances, the PIM system reports an application date that is prior to the PPA date. We assume these are errors (an application should neither follow an entitlement nor predate a preliminary application procedure) but we report out what the data shows, nonetheless. Although these potential errors do not impact descriptive findings on time frames to approval, they do limit analysis of consistency with the PSA.

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[43] *Pre-Application Meeting*, S.F. PLAN., https://sfplanning.org/resource/pre-application-meeting (July 30, 2023).

Regression Analysis

We ran several regressions to analyze existing relationships within the CALES dataset. We include all regressions, supplementary analysis, and robustness checks in a separate methods Appendix A, though the main findings are in this report. We ran regression models on 2014 - 2017 data and 2018 - 2021 data separately, and then together. We used the statsmodel Python module[44] to run all regressions in this analysis. We calculated all regression coefficients with robust standard errors (Errors of Order 3 (HC3)) in order to account for the existence of outliers and other issues within the data such as heteroskedasticity (variation in regression errors across our observations) and provide a small sample correction.[45] Note that if we did not use robust standard errors, the standard errors of our estimates would be smaller, so the standard errors and subsequent hypothesis testing are conservative.

In-Depth Interviews and Meetings and Review of Public Hearings

We have interviews from our prior research across cities from 2017. We used transcripts from six interviews conducted in 2017 with stakeholders within San Francisco (an affordable developer, market-rate developer, city employee who managed affordable development, city planner, land use attorney, and community organization advocate) in this analysis. For this research, we also completed an additional 28 in-depth interviews with 18 additional participants that did not participate in interviews in prior years or in meetings led by HCD between late-fall 2022 and May 2023. We interviewed participants from the following groups: developers (market-rate and non-profit affordable developers); private sector professionals (architects, land use lawyers, planners); government personnel (including city planning staff); and representatives from community-based organizations (including affordable housing advocates). We identified some of these interview participants as experts within San Francisco and reached out to them to participate in an interview. Other participants reached out to us to participate in interviews as well. We advised all participants that the research would be reported to HCD, but we would protect the confidentiality of each participant consistent with our research protocols. For that reason, we do not quote any individual participant and only report on themes based on what multiple participants or entire stakeholder groups shared.

We observed another 33 meetings that HCD convened for their Policy and Practice Review with approximately 146 stakeholders, including city planning personnel, Commissioners, Supervisors, market-rate developers, affordable developers, and housing organizations. Twenty of those meetings invited one participant, and five meetings invited two to three participants. These 25 HCD-led meetings with one to three participants offered in-depth conversations, much like research interviews. Most were an hour, though a few were longer or shorter. Most meetings included participants, one member of the HCD team and O'Neill. A handful of much larger meetings (with more than three participants) included more than two HCD team members

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[44] Documentation for this module can be found at STATSMODELS, statsmodels.org/stable/index.html (May 5, 2023).

[45] In regression analysis, the errors are defined by the difference between the observed values of the dependent variable (in this case, project timeframes) and values predicted by the regression specification. Accurate estimation of the uncertainty of OLS-predicted values generally depends on constant errors across observations. However, in this study, we do not assume that error is constant (homoscedasticity). For instance, model error might be larger for observations with substantially longer timeframes (i.e., where projects take two to three times longer than the median timeframe). When we use robust standard errors, we no longer assume that errors are constant across all observations, which can mitigate the impacts of this regression analysis being based on observational data. Further, we are using a small sample correction to mitigate the fact that our universe of observations is relatively small and to account for the natural clustering in timeframes that occurs at each local land use approval step.

and O'Neill, along with participants. In each of these meetings, HCD informed the participants that O'Neill would be observing and listening to the conversation for research purposes and that the research would support the state's Policy and Practice Review. About half of the meetings with Commissioners and Supervisors also included a deputy city attorney in the meeting with HCD. Stakeholders discussed planning review and post-entitlement processes in-depth.

In all, we analyzed notes from interviews and meetings with representatives from six different housing advocacy groups, over 20 planning staff and more than 60 development professionals (evenly split between affordable and market-rate development). We also heard from 14 individuals split across the executive and legislative bodies within San Francisco.

Two members of the research team performed a line-by-line reading of a subset (10%) of the interview transcripts and notes from interviews and meetings[46] to identify recurrent concepts to generate a codebook in MaxQDA. We developed codes through an inductive process—a process in which we analyzed the transcript to identify codes based on themes that the speaker emphasizes. We also generated some codes for analysis using a deductive process—a process in which we analyze the notes and transcripts for content which indicates the speaker perceives that San Francisco either violated a state law *or* believes a policy or practice blocks a state law from having its intended effect. Once we had a codebook, three members of the research team coded all transcripts using the same software. We used MaxQDA software to summarize the findings by code and used the summaries to identify cross-cutting themes. This report pulled out findings where the team reached greater than 90% agreement on coded segments. We also generated stakeholder abstracts that summarized dominant themes (including internal consensus and disagreement on key topics within stakeholder groups).

Where interview participants or meeting participants directed us to specific public hearings, we also reviewed those hearings to confirm what participants shared did occur. We only inserted quotes from public hearings or relevant media reporting into this report and did not include any direct quotes from conversations between stakeholders and either HCD or O'Neill.

Document Analysis

Both interview and meeting participants, along with data collection, identified more than 41 proposed developments for a more detailed review process by our research team. We also located and analyzed documents associated with those 41 potential developments to explore in-depth what occurred during planning review.

Study and Data Limitations

Regression analysis using CALES data does not establish causal relationships. We rely on qualitative data to establish causality. Interview data is limited by the fact that all study participants volunteered. Relatedly, data from individuals and groups that agreed to participate in meetings with HCD is also limited by the fact that these participants volunteered. Voluntary participation in interviews increases selection bias and limits the generalizability of findings from interviews. We increased the number of interviews to reduce bias, but that does not allow us to generalize about San Francisco's policies or practices. Interview findings, however, can help us craft questions for quantitative analysis. Interview findings can provide important insights when

[46] Some participants asked that the interview/meeting not be recorded for transcription purposes. In those instances, O'Neill took detailed notes during the conversation, and the team joined those notes with transcripts from other interviews or meetings for qualitative analysis.

combined with regression and spatial analysis that regression and spatial analysis alone cannot yield.

The advantage of our 2014 - 2017 entitlement dataset is that it is uniquely detailed. The limitation of that dataset, however, is that our original coding structure aimed for comparative analysis across cities. This means that when we coded our 2014 - 2017 observations, we collapsed some San Francisco processes into single variables to compare processes across jurisdictions. For example, Large Project Authorizations and Downtown Project Authorizations were coded together in our master dataset as "exceptions" because that was the most analogous to similar processes in other cities. That limits our ability to explore how those two distinct processes operate when we are studying San Francisco only. To address this in coding for the 2018 - 2021 data, we created two coded datasets. The 2014 - 2017 dataset has less detail than the 2018 - 2021 dataset.

Another important limitation of our entire entitlement and SB 35 approval dataset relates to what each observation represents. Each observation reflects successful entitlements or SB 35 approvals only. That means that this universe of projects that we use for quantitative and spatial analyses represents those developments that successfully navigated the entitlement process in San Francisco. This means that the observations also represent those developments that developers likely had a high enough probability of success that they were willing to pursue entitlement in the first place. We do not have data suitable for quantitative analysis on when and how the city may have denied applications for entitlement in our dataset. That was beyond the current research scope. There is also no reliable data suitable for quantitative or spatial analyses on parcels where a property owner is unwilling to apply for entitlement.

Also, we gathered insights from stakeholders through interviews regarding what occurs during entitlement and what influences whether some buildings get built. Specifically, stakeholders suggest that smaller buildings, which those stakeholders define as 20 units or less, may get entitled but become financially difficult to build post-entitlement. The stakeholders attributed this to an entitlement process that mediates conflicts with opponents in a way that may lead to a final entitlement of a project that is not financially possible to build.[47] If entitlement processes contribute to whether a proposed development is financially feasible—and in turn whether a developer will pull building permits to build—then theoretically we might see a difference in the rate of filing for building permits for buildings that are 20 units or less as compared to larger buildings (21 units or more).

We have two challenges concerning exploring this issue with quantitative methods. The first is that augmenting the entitlement data with post-entitlement permitting data is very difficult; San Francisco's building permit data is not as accessible online or as reliable as entitlement data. Also, San Francisco's local law makes it difficult to systematically identify what counts as the permit that represents the beginning of construction activity and/or intent to build the building because San Francisco has a discretionary building permit process.

[47] Relatedly, at the time of this writing, the San Francisco Chronicle reported on a study concluding that the City's Inclusionary Housing Program is rendering some development fiscally infeasible. *See* Noah Arroyo, *Affordable-Housing Quotas Imperil New S.F. Building Projects, Study Says*, S.F. CHRON. (Jan. 22, 2023), https://www.sfchronicle.com/bayarea/article/sf-affordable-housing-projects-17727101.php.

Findings

We report findings in response to each of the questions that HCD asked, drawing on all data and methods to answer each question. Our findings sometimes rely on data from both our 2014 - 2017 and 2018 - 2021 datasets, and sometimes draw exclusively on the 2018 - 2021 dataset. We also compare four years to four years where appropriate and construct year-to-year comparisons or group years by two-year comparisons (e.g., 2014 - 2015 compared with 2018 - 2019) where appropriate.

Table 3 summarizes the total number of observations in our dataset, and the units they would yield if built, both in terms of market-rate units and affordable units. We narrowly define affordable units to refer to deed-restricted below market-rate housing units. Group housing, student housing, and single room occupancy housing are not included in any affordable housing count. Table 4 elaborates on the type of observations within our 2018 - 2021 data only.

Table 3: Summary of Total Approvals and Unit Counts Across Study Period

Study Period	Total Approvals	Total Units	Affordable Units	% Affordable Units/ All Units
2014 - 2017 Units from Entitlement of Developments of Five or More Units	140	14,269	2,168	15%
2018 - 2021 Units Approved from Approval of Developments of Five or More Units	144	11,339	3,039	27%

Table 4: 2018-2021 Approval Observations and Units by Affordability and Process

Affordability Category	Project Count	Market-rate Units	Affordable Units
100% Market-Rate Discretionary Non-ADU[1]	55	4,264	–
100% Market-Rate Discretionary ADU[2]	16	110	–
Mixed-Income Discretionary Non-ADU	52	3,473	873
Mixed-Income Discretionary ADU	1	21	3
Mixed-Income SB 35	2	4	1,659
100% Affordable Discretionary Non-ADU	4	4	210
100% Affordable SB 35	14	426	294

[1]This includes 2 Group Housing Projects and 1 Student Housing Project.

Although we elaborate on the contours of specific rules and planning practices when we discuss each finding, there are the two aspects of San Francisco's local law that dominate nearly all interviews and provide critical framing for virtually all of our findings. The first local law is one that makes all housing approvals in San Francisco discretionary. The Municipal Business and Tax Regulations Code Section 26(a) provides that San Francisco's departments may "take into consideration the effects of the proposed business or calling upon surrounding property and upon its residents . . . [and to] exercise its [or their] sound discretion as to whether said permit should be granted, transferred, denied or revoked." The city interprets this law as granting the Planning Commission discretionary authority over all building permits, including permits not otherwise discretionary under zoning and planning requirements. The Planning Commission delegates this discretionary authority to the Planning Department to review applications that meet Planning Code standards and Design Guidelines. But when disputes arise over a building permit, "concerned parties may choose to file a [request for exceptional] DR."[48] A DR effectively stops the Planning Department's approval process, sets a public hearing in front of the Planning Commission, and triggers additional planning staff analysis to prepare for the hearing.

Once a party has requested DR, unless they withdraw their request, there is always a public hearing. At the public hearing, the Planning Commission reviews materials and hears testimony and then determines whether it will "approve, disapprove or require modifications to the project."[49] The city states that the Planning Commission exercises this form of discretionary review only in exceptional circumstances when disputes between neighbors cannot be resolved through mediation.[50] The procedure, based on how it is written, indicates that the process of requesting and holding a hearing can add months to the approval timeline, even if the Planning Commission leaves the Planning Department's approval intact.

Another topic that dominated interviews is the ease with which project opponents can challenge discretionary approvals and post-entitlement permits through an administrative appeal under City Charter Section 4.106(b). The city charter provides that the Board of Appeals (an appointed political body) will hear appeals of building permits and demolition permits, unless either permit is issued after the Planning Commission authorizes a Conditional Use.[51] The Board of Supervisors hears appeals of any post-entitlement permit associated with a Conditional Use Authorization and any appeal of a CEQA decision.[52]

San Francisco's local rules prevent full implementation of the goals and aims of state housing laws.

HCD asked whether the data shows that San Francisco is fully implementing state law, including the Housing Accountability Act, Housing Crisis Act, Permit Streamlining Act, SB 35, and State Density Bonus Law. The answer, as indicated by the data, is no. Developers, planning professionals, and most housing advocacy organizations perceive local rules as

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[48] *Discretionary Review*, S.F. PLAN., https://sfplanning.org/resource/discretionary-review (Jan. 25, 2023).
[49] *Discretionary Review*, S.F. PLAN., https://sfplanning.org/resource/discretionary-review (Jan. 25, 2023).
[50] The city also elaborates on its interpretation of the power this provision affords the Planning Commission in the Application Packet for Discretionary Review. *See Discretionary Review*, S.F. PLAN., https://sfplanning.org/resource/discretionary-review (Jan. 25, 2023).
[51] The city details the limitations of the Board of Appeal's jurisdiction. *About Us, Board of Appeals*, SF.GOV, https://sf.gov/departments/board-appeals/about (last visited Sept 18, 2023).
[52] Appeal of Certain CEQA Decisions, SAN FRANCISCO, CAL., ADMIN. CODE § 31.16 (2013).

blocking the full implementation of the Housing Accountability Act, Housing Crisis Act (SB 330), Permit Streamlining Act, and State Density Bonus Law. Descriptive and inferential statistical analysis of housing approvals yields findings that are consistent with these stakeholder perceptions. Stakeholders also report that SB 35 effectively expedites planning review, but does not resolve post-entitlement problems within San Francisco.

We report findings related to SB 35 and State Density Bonus Law first, and then move through findings related to steps in the entitlement and post-entitlement process.

San Francisco Planning fully implemented SB 35, but SB 35 is not a complete process fix.

SB 35 provides a state ministerial process for qualifying urban multifamily code compliant housing developments in jurisdictions that fail to meet their RHNA production targets in prior RHNA cycles. In San Francisco, SB 35 applies to qualifying housing where 50% or more of the units are affordable. A ministerial process is significant for developers and planners in San Francisco because local law renders all approvals discretionary. The state ministerial process eliminates pre-application requirements and hearings (discussed in more detail below), the opportunity for project opponents to request DR, and CEQA review. Once San Francisco Planning determines a project is eligible for SB 35, the developer proceeds directly to the Department of Building Inspection (DBI) for permitting.

SB 35 processing timeframes are fast—whereas discretionary building permits typically take years.

SB 35 cabins the eligibility review period to 90 or 180 days depending on the project size (measured by units).[53] Like many other cities, San Francisco "restarts" the review clock if there are any changes to the application.[54] The data shows San Francisco Planning diligently applied this state law. We found that planning review for developments that began as SB 35 applications take about four months but no more than eight months. Table 7 shows that, in contrast, discretionary building permits take approximately two years to entitle or complete planning review before they begin to work with the DBI. Stakeholders explain that entitlement delays increase holding costs, but approval delays may also result in being subject to higher fees, particularly when delays span over years. Timeframes for all non-ADU developments along specific approval pathways spotlight the difficulty of entitlement and the need for a local ministerial process in addition to other zoning and procedural reforms.

[53] CAL. GOV'T CODE § 65913.15(c)(1)-(2) (West 2023).
[54] Moira O'Neill & Ivy Wang, *How Can Procedural Reform Support Fair Share Housing Production? Assessing the Effects of California's Senate Bill 35,* 25 CITYSCAPE 143, 143-70 (2023).

Table 5: Entitlement Timeframe by Approval Pathway 2018-2021

Process Categorization	Min. Timeframe	**Median Timeframe**	Max. Timeframe	**Mean Timeframe**	Standard Deviation
SB 35 Only (no discretionary process prior) (N=9)	0.89	**3.42**	7.63	**4.29**	2.63
SB 35 Conversion (all began as discretionary) (N=7)[2]	15.39	**29.39**	41.39	**29.18**	10.32
Discretionary BP (N=17)	7.76	**24.20**	47.70	**24.07**	8.58
Discretionary BP with Exceptional DR request (N=4)[3]	10.32	**32.33**	55.56	**32.64**	19.76
Variance (by ZA) (N=11)	19.73	**36.00**	69.27	**41.40**	19.96
Variance (by ZA) with Exceptional DR (N=5)	10.39	**39.48**	146.69	**59.28**	52.30
Variance (by Planning Commission) and Exceptional DR (N=1)	46.68	**46.68**	46.68	**46.68**	—
DPA / LPA / SPA (N=15)	23.31	**35.67**	67.03	**38.33**	13.59
CUA Only (N=17)	18.71	**35.05**	59.34	**35.90**	12.45
CUA[4] Pplus (N=30)	17.00	**39.68**	105.40	**46.01**	21.99
PUD[5] (N=2)	7.73	**24.53**	41.33	**24.53**	23.76
Development Agreement (N=4)	32.09	**42.16**	51.52	**41.98**	7.94
Map Amendment/General Plan Amendment (N=3)	34.49	**42.08**	64.90	**47.16**	15.83

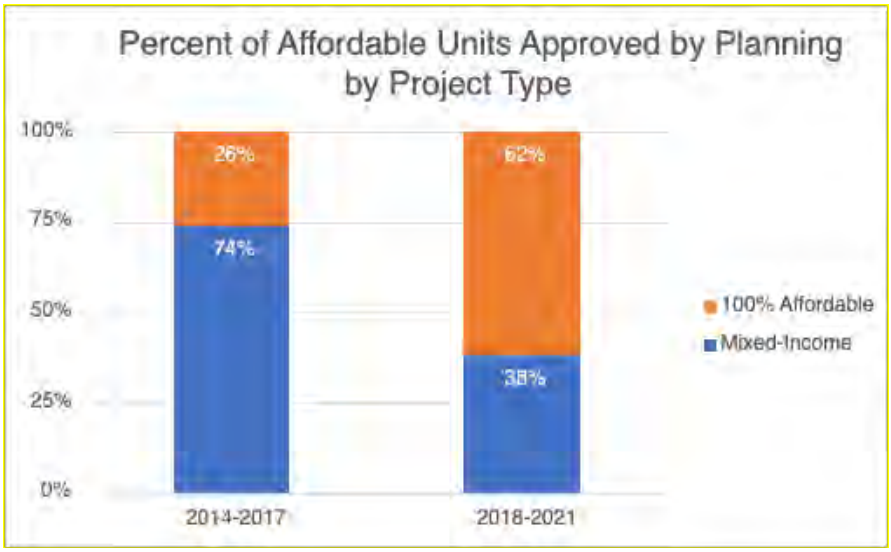
[1] We do not include two observations, discretionary building permit projects with additional administrative approvals, in this timeline calculation. One involved a discretionary building permit and an exception, and the other was a discretionary building permit with an ADU.
[2] We have one additional SB 35 project in this category that does not have an eligibility determination date. Though we know it received a building permit, we cannot include it for timeframe calculations. Each of the observations in this category proceeded through a discretionary approval process before initiating an SB 35 application. Some applications pre-date SB 35's enactment.
[3] This includes two discretionary building permits that received requests for exceptional DR and faced administrative appeals.
[4] Includes CUAs with other processes that typically go to the Zoning Administrator or Planning Commission but not the Board of Supervisors (such as CUA with a Variance, or CUA with a Certificate of Appropriateness).
[5] PUD refers to Planned Unit Development.

Developers report that SB 35 transformed planning approval pathways for affordable development.

Developers described SB 35 as eliminating risk because the law creates certainty in entitlement where none existed before. Some planners reported a steep learning curve at the outset; they shared that major changes like this to planning review are difficult to implement at first—and that early state guidance could help planning staff improve implementation. Developers, however, described San Francisco Planning's implementation of SB 35 as efficient and helpful. The data largely confirms that San Francisco Planning made most SB 35 eligibility determinations quickly and within required timeframes. The outliers represent proposals to develop affordable housing using local discretionary processes, sometimes because the project proponent filed the application before SB 35's passage and/or effective date.

Approval data also shows that state ministerial review allowed for faster processing which facilitated the approval of nearly three times the number of 100% affordable developments in 2018 - 2021 as compared to 2014 - 2017. There were only five 100% affordable developments entitled in 2014 - 2017. In 2018 - 2021 alone, San Francisco approved eighteen 100% affordable developments, and 14 of those developments used SB 35's ministerial process. Because of SB 35, most affordable units approved in 2018 - 2021 came through ministerially approved 100% affordable developments that used State Density Bonus Law. In 2014 - 2017, 74% of affordable units came from mixed income developments. In 2018 - 2021, 62% of all affordable units came from 100% affordable developments.

Figure 3: Distribution of Affordable Units by Development Type



Graphic Developed by Dori Ganetsos using CALES data.

SB 35 does not resolve post-entitlement opposition through appeals.

Affordable developers that have used SB 35 describe several post-entitlement difficulties that extend construction timelines. One difficulty affordable developers describe is that San Francisco's local rules allow project opponents to use the administrative appeals process to delay construction by challenging post-entitlement permits. (We discuss other post-entitlement difficulties below.) Construction activity impacts neighbors, who then may file complaints during the construction process.[55] But some neighborhood organizations escalate their opposition to construction by using administrative appeals to the Board of Appeals, which under local law suspends permit approvals until the appeal is resolved.[56]

2550 Irving Street exemplifies how post-entitlement challenges can delay construction of housing approved under SB 35. 2550 Irving, a 100% affordable development that would provide 90 units of supportive housing,[57] has faced at least two post-entitlement appeals of permits.[58] San Francisco Planning determined the development was SB 35 eligible on August 17, 2022. In November 2022, the Mid-Sunset Neighborhood Association appealed the demolition permit required to demolish a two-story office building because of concerns about toxins. The filing of the appeal suspended the building permit pending resolution. The Board of Appeals heard the

[55] One notable example relates to 78 Haight Street, which will house transitional-aged youth at risk of homelessness. We found three complaints from neighbors about construction logged in PIM so far. A neighborhood organization complains about inadequate notices about this development online, as well (though it characterizes the housing product incorrectly). *78 Haight*, HAYES VALLEY SAFE, https://www.hvsafe.com/78-haight/ (Mar. 17, 2022).

[56] Wherever PIM recorded an administrative appeal of a permit, we captured that in our database. San Francisco's public portal provides incomplete information about appeals and post-entitlement challenges, so we also asked interview participants to provide examples of projects that faced post-entitlement challenges. We then cross-referenced the DBI permitting system to see if we could find more information on the impact of appeals on permits.

[57] Application data indicates that at one point, this project was proposed to offer 98 units.

[58] San Francisco's public portal reports two appeals associated with the demolition permit for this development, both filed on December 5, 2022 (numbers 22-091 and 22-092). The neighborhood association also filed an appeal of the construction permit.

first appeal of the demolition permit on February 22, 2023, and denied the appeal (with a 3-2 split vote). Online records show that DBI reinstated the building permit, months after the initial approval date of October 28, 2022, on March 7, 2023. The same organization also appealed the construction site permit, originally approved on June 26, 2023. This permit was also suspended pending resolution, and on August 16, 2023, the Board of Appeals voted 2-2 on whether to grant the appeal and whether to continue the hearing. Both the appeal and the motion to continue failed as only four of five Commissioners were present. Ahead of both hearings, HCD sent Letters of Technical Assistance to the City and County of San Francisco's Board of Appeals regarding 2550 Irving, informing San Francisco that under state law, the city should not hear administrative appeals on SB 35 approvals.[59]

In related media, the neighborhood organization stated that they want more environmental remediation before construction.[60] The developer and the Mayor's Office of Housing and Community Development pointed to testing, review, and approval from public health and toxic substances agencies. The Chronicle reported that Supervisor Engardio publicly expressed support for 2550 Irving as "much needed [housing that] should not be delayed" though he also believed agencies could better communicate safety assurances to neighbors.[61] During confidential interviews, however, some stakeholders shared that they do not believe the neighborhood association is primarily concerned about environmental hazards; some stakeholders instead believe that the neighborhood opposes the development because of its size and the development's intended residents.

The agenda for the hearing on August 16, 2023, included a ~1,200-page record for this one appeal. During the hearing, Board of Appeals Commissioners disagreed about the effect of SB 35 on their power to review the permit and the appropriate scope of authority for Commissioners to exercise, generally, when deciding a matter that requires technical expertise. The Commissioner remarks during the hearing illustrate several of the ideological divides within local political bodies that stakeholders described during interviews. The public comments from Commissioners, some of which are quoted below, reveal conflicting perspectives on the normative value of state preemption of local power, the appropriate scope of administrative review of the work product from agency personnel with specific technical expertise, and the purpose and function of the Board of Appeals in general.

> Another point I wanted to make is in regard to SB 35 and SB 35 preemption. As one of the public commenters commented tonight . . . since SB 35 was passed several years ago, 2018-2019, **there has been a proliferation of new state level legislation also taking aim at local review processes**. And most have been drafted by San Francisco's own representatives in Sacramento, and those representatives in Sacramento need to know your opinions on these things **because they're doing their darndest to make sure there is no review process anymore, that the planning commission can't hear these items and they're trying to get it so that the Board of Appeals can't hear these items either, and if you believe in local review as I do as a member of this body, it's your duty and your responsibility to let your representatives**

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[59] One of the letters is available online. *See* Letter from Shannan West, Hous. Accountability Unit Chief, Cal. Dep't Hous. & Cmty. Dev., to S.F. Bd. of Appeals, City & Cnty of S.F. (Feb. 22, 2022), https://www.hcd.ca.gov/sites/default/files/docs/planning-and-community/HAU/SanFrancisco-LOSTA-022223.pdf.

[60] The Chronicle reports on the challenges. *See, e.g.*, J.K. Dineen, *Judge Rules Contested Sunset District Affordable Housing Project Can Proceed*, S.F. CHRON. (Dec. 9, 2021), https://www.sfchronicle.com/sf/article/judge-rules-contested-sunset-district-affordable-16688685.php (unsuccessful attempt to secure an injunction).

[61] *Id*.

know what's at stake here and what this means to you [deep pause] I do think what's going on here goes far beyond the lot lines of 2550 Irving, and I don't necessarily think that even granting this appeal will fix the larger environmental hazards in the Sunset District . . . but I think there is a much bigger picture here in terms of the legal background and what is going on between several different agencies . . . .[62]

I see a distinct difference between that remediation and the permit here that we are here to pass judgment on. . . . We recognize that there is a problem . . . that problem is there is PEC contamination in the Central Sunset particularly around this site, and that needs to be remediated. . . . However, I see a distinct difference between that remediation and the permit we are here to pass judgment upon . . . . The appellant themselves admitted that the construction of this site has no bearing on the issues and levels that will be taking place in the neighborhood. So I see a very bright line between the contamination which needs to be remedied, and the permit that we are here to consider. . . . You know what, this is something that happens to us a lot in different circumstances, usually less dire, usually with a lot less scientific data that we have to parse our way through. When we end up with landlord-tenant issues, we find ourselves with a conflict . . . that needs to be worked out . . . . [I]t is probably best venued in the civil courts . . . but we look not to that issue, but we look to the permit and underlying issues within our jurisdiction . . . . **I see how SB 35 can be very confusing, it can be tedious, it can be difficult, but I have to ask myself do we have grounds under SB 35 to have grounds to appeal this, or overturn this permit, even if we identified it as being material to these issues that were here and I don't think this permit is material to the contamination thing, but even if we did, in this circumstance I don't see a way to get there because the objective standards under the Planning Code . . . are through the Maher ordinance**.[63] DPH has engaged the Maher procedures. They've gone one further for us as a neighborhood association has for them to do and brought in the DTSC because they have more expertise and more resources . . . and so that process that is supposed to take place is ongoing . . . . Let's be clear here, we get nervous sometimes as a board about playing amateur architect. **Right now we're playing scientists and we're playing amateur environmental scientists . . . . [L]et's realize it doesn't have anything to do with the permit in front of us today. I will not move to uphold the appeal**.

I so fundamentally disagree . . . . [P]eople on appeals boards make judgments on experts all the time . . . . And then we had people representing to us that there would be communication, same thing, they made it sound like there was going to be community participation, none occurred . . . . **I think there is an appropriate time to say that the experts got it wrong, or the process was wrong**. . . . I would ask that we continue this [to allow Board of Appeals President to join discussion].[64]

I am not comfortable telling the Sunset residents that they should feel safe, and that is what it really boils down to for me, it is a moral ethical issue for me, and I do and I can take that into account. . . . this body isn't the one that should be hearing this, unfortunately we don't have another body that is more appropriate to hear this . . . . [W]e're attorneys not environmental experts . . . . [T]his shouldn't be litigated in the context of permit appeals . . . . [B]ut we don't have an appropriate forum. . . . [**I]nstead what we have is the Board of Appeals, which for all intents and purposes has become a catch all in many ways and we have taken it upon ourselves in many instances to make consequential decisions and push for consequential**

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[62] *S.F. Bd. of Appeals: Hearing on Appeal No. 23-034* (Aug. 16, 2023) (statement of Alex Lamberg, Comm'r, Bd. of Appeals), emphasis added.
[63] Commissioner Eppler is referring here to San Francisco Health Code Article 22A that gives the San Francisco Department of Public Health oversight of characterization and mitigation of hazardous substances in soil, soil vapor, and groundwater in the Maher Area identified in the city's Building Code Article 106A.3.2.4.
[64] *S.F. Bd. of Appeals: Hearing on Appeal No. 23-034* (Aug. 16, 2023) (statement of John Trasviña, Comm'r, Bd. of Appeals), emphasis added.

> **change in city policy in city operations in city administration**. And to me this is the most consequential of any the issues we've dealt with since I've been on the board . . . this one takes the cake. There are people's lives at risk here. **And I don't think we should be the body who is imbued with this power, but ultimately our state legislators have ripped away the other layers of review so it can't go to the Planning Commission. It can't go to other commissions. It's here, and we ultimately have de novo review of this, potentially with SB 35 limitations, but you know . . . ultimately legal advice is just that – it's legal advice and we as Commissioners get to make the say.** I obviously don't think we have the votes to grant the appeal here tonight . . . but you know, if there was a time to make a leap of faith, this was the time.[65]

More developments relied on State Density Bonus Law as compared with prior years, but stakeholders disagree about how easy it is to use the state law.

State Density Bonus law allows for developers building residential or mixed-use projects with five or more units to build more housing units than zoning would otherwise allow in exchange for a prescribed number of below-market-rate units. The law provides bonuses in the form of additional density and waivers of some local standards. State Density Bonus Law is a state mandate and the state law may preempt local implementation programs with a bias towards "producing the maximum number of total housing units" under § 65915(r) of the Government Code. The law prohibits cities from applying development standards to a density bonus project that would make it impossible to build at the densities or with the concessions or incentives provided in State Density Bonus Law.[66] San Francisco's Planning Code Section 206 implements State Density Bonus Law and provides two local density bonus programs, the HOME-SF program[67] and the 100% Affordable Housing Bonus Program.[68]

We found that nearly all SB 35-approved developments also relied on State Density Bonus Law. State ministerial review through SB 35 and State Density Bonus Law allowed for ministerially approved 100% affordable developments that were, on average, larger (measured in units) than 100% affordable developments requiring discretionary review. The median project size (measured by units) of all SB 35 developments is 121 units. The mean is 119 units. The median project size (measured by units) of all 100% affordable non-ADU discretionary observations is 13 units. The mean is 53 units. For comparative purposes, the median project size (measured by units) of 100% affordable developments entitled in 2014 - 2017 was 134 units, and the mean was 113 units. The median project size (measured by units) of all non-ADU discretionary observations is 24 units and the mean is 799 units. The two largest developments that exceeded 800 units if built—among the outliers—required discretionary approval.

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[65] *S.F. Bd. of Appeals: Hearing on Appeal No. 23-034* (Aug. 16, 2023) (statement of Alex Lamberg, Comm'r, Bd. of Appeals), emphasis added.
[66] CAL. GOV'T CODE § 65915(e)(1) (West 2023).
[67] Housing Opportunities Mean Equity – San Francisco Program (HOME-SF), SAN FRANCISCO, CAL., PLAN. CODE § 206.3 (2019).
[68] The 100 Percent Affordable Housing Bonus Program, SAN FRANCISCO, CAL., PLAN. CODE § 206.4 (2018); *see also Affordable Housing Bonus Program (AHBP)*, S.F. PLAN., https://sfplanning.org/ahbp#:~:text=State%20Density%20Bonus%20Law,-In%201979%2C%20the&text=Ten%20percent%20of%20total%20housing,age%20requirements%20for%20older%20persons (last visited Sept. 18, 2023).

Table 6: Median Project Size by Product Type and Approval Pathway

Type	Median Project Size Units	Mean Project Size Units (rounded)	Standard Deviation Project Size Units (rounded)
100% Market-Rate, Discretionary Non-ADU[1] (N=55)	9	78	193
100% Market-Rate, Discretionary ADU (N=16)	6	7	3
Mixed-Income, Discretionary Non-ADU (N=52)	47	84	104
Mixed-Income, Discretionary ADU (N=1)	24	24	—
Mixed-Income, SB 35 (N=2)	**360**	**360**	**127**
100% Affordable, Discretionary Non-ADU (N=4)	13	53	83
100% Affordable, SB 35 (N=14)	**121**	**119**	**59**

[1] This grouping includes two Group Housing Projects and one Student Housing Project.

Thirty-one developments in our 2018 - 2021 dataset used State Density Bonus Law to increase the number of allowable units, and another six developments used the local HOME-SF program (all entitled in 2021). We see a notable increase in projects using density bonus programs in 2021, overall. In total, developments that secured approvals in 2018-2021 relied on density bonus programs more often than the developments entitled in 2014-2017 as well. Only four developments entitled in 2014 - 2017 used any density bonus program.

Also important is that developers used State Density Bonus Law more often than the HOME-SF program. Fifteen SB 35 ministerially approved developments in our 2018 - 2021 dataset all used State Density Bonus Law. The remaining developments that used State Density Bonus Law were discretionary mixed-income developments. At least 13 of the mixed-income developments used State Density Bonus to help meet requirements under the local Inclusionary Housing Program requirements. Five mixed income developments used Home-SF to meet requirements under the local Inclusionary Housing Program requirements as well.

There was no consensus among developers about how easily developers could use State Density Bonus Law in San Francisco.

Some developers expressed that the waivers both help create an appealing and efficient development and increase the likelihood of entitlement, overall. Some developers shared that the city's local rules and guidelines do not apply state law correctly[69] and/or that the city steered them away from using State Density Bonus Law. Developers also reported that the city applies the law so as to increase inclusionary program fee requirements once development size increases. Planners shared that design review can interfere with application of State Density Bonus Law, as political bodies may request reduced heights or removal of floors to projects that qualify for density bonuses. Affordable developers shared their frustrations concerning how planners have to do substantial work to apply different density bonus programs to help 100% affordable housing developments benefit from SB 35 while also securing required waivers. Planners also commented that State Density Bonus Law is complex, and that they (planners) would really benefit from more state guidance on its application. But planners and affordable developers emphasized that ministerial review and State Density Bonus Law were, together, critical to creating opportunities for more affordable housing within San Francisco.

Both developers and planners shared that State Density Bonus Law has been critical to helping developers manage requirements under local rules.

Developers shared that State Density Bonus Law was critical to make development financially feasible. Planners also shared that developers use State Density Bonus Law to facilitate large projects that the Planning Commission might otherwise deny. Planners explained that the city's Large Project Authorization (LPA)—theoretically meant to allow for larger projects and for modifications and waivers—does easily support larger development. Planners perceive that when developers use the modifications and waivers under the LPA, the Planning Commission interprets the project as no longer compliant and covered by the Housing Accountability Act, allowing political bodies to deny approval. Planners report that developers therefore use State Density Bonus Law to make large projects work while also staying covered by the Housing Accountability Act.

One development, outside of our study years, that stakeholders discussed during interviews as illustrative of this issue was **1010 Mission Street**. Planners reported that the developer first sought an LPA for a group housing development which the Planning Commission did not like and denied. The developer then used State Density Bonus Law to get an approval. Cross referencing documents, we found that the developer requested an LPA that was later withdrawn. The developer secured a final entitlement with an Individually Requested State Density Bonus approval and Downtown Project Authorization.

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[69] Section 206.6 of San Francisco's Planning Code may require revision after the passage of AB 1763, which provides an 80% density bonus, four incentives or concessions, and special parking ratios for 100% affordable housing projects, and AB 2345, which increased the maximum range of the density bonus to 50% for housing projects with 15% very low-income units, 24% lower income units, or 44% moderate income units. *See* CAL. GOV'T CODE §§ 65915(f)(1), (f)(2), (f)(4). AB 2345 also lowers the required percentage of lower income units required to obtain multiple incentives and concessions under § 65915(d)(2). Table 206.6B seems inconsistent with those provisions under state law. San Francisco Planning, however, also issues Bulletins explaining how it applies state law. *See, e.g.,* S.F. PLAN., BULL. NO. 6, IMPLEMENTING THE STATE DENSITY BONUS PROGRAM (Feb. 2023), https://sfplanning.org/sites/default/files/documents/publications/DB_06_Implementing_State_Density.pdf.

Planners also stated that State Density Bonus law is critical to promoting productive dialogue about how to make proposed developments better, because once it becomes clear that the city cannot deny the project (and only after it is clear the city cannot deny the project), the public discourse shifts towards how to improve the design to be sensitive to neighborhood needs. Participants offered **321 Florida Street**, a mixed-used mixed-income development entitled in 2021 that required an LPA but also used State Density Bonus Law, as an example of a how state law helped secure entitlement rather than a project denial. After it was clear the city could not deny the development, planners also reported that the conversation with the community focused on how to improve the design in a manner that did, in fact, improve the aesthetics of the proposed development. Another example participants provided was **1560 Folsom Street**, another large mixed-use mixed-income development entitled in 2021 that required an LPA but also used State Density Bonus Law. The outcome for 1560 Folsom allowed for special sidewalk placards to celebrate the area's local history.

Planners note, however, that State Density Bonus Law, while critical to increasing certainty of entitlement for larger developments, may not produce more efficient and speedy deliberative processes during entitlement. Consistent with this perception, our data shows that the only approvals under State Density Bonus Law that planning department staff issued were those approvals associated with SB 35 projects. All other requests for density bonuses for discretionary projects required approval from San Francisco's Planning Commission. Relatedly, we found some observations with multiple continuances for hearings for joint LPA and State Density Bonus Law approvals, as well.

Our data also shows that while an LPA coupled with a State Density Bonus Law approval may secure approval from the Planning Commission, the approval is still vulnerable to being overturned by the Board of Supervisors if the community perceives the final entitlement outcome to be contrary to neighborhood needs. **2300 Harrison Street** illustrates this issue. This proposed mixed-use building would have added three stories to an existing three-story commercial building and demolished an adjacent parking lot. The development would add ~27,000 square feet of office and retail space on a site occupied by Lyft, along with 24 units of housing, of which three would be deed-restricted affordable. After the Planning Commission approved the development, community organizations appealed the Community Plan Exception under CEQA to the Board of Supervisors. The Board of Supervisors unanimously upheld the appeal. A community group publicly stated that the entitled development represented an exploitation of State Density Bonus Law.[70]

[70] Media reported that the new development would result in ~95,000 square feet of retail/commercial space. We reviewed the project proposal documents, and those documents indicate the proposed development would *add* approximately ~27,000 square feet of commercial space, and 24 units of housing, *to an existing* building that had ~68,000 square feet of office space. *See* Laura Waxmann, *S.F. Supervisors Take United Stance Against Mission Development at Former Lyft Offices*, S.F. BUS. TIMES (Aug 19, 2020), https://www.bizjournals.com/sanfrancisco/news/2020/08/19/sf-supervisors-vote-down-mission-district-office.html.

Table 7: Frequency of Use of Density Bonus (All Programs)[1]

Year (N=Total Approvals/Per Year)	N Density Bonus Used		N State Density Bonus used
2014 (N=24)	0		-
2015 (N=23)	0		-
2016 (N=55)	1		Unknown
2017 (N=38)	3		Unknown
2018 (N=33)	SB 35: 3	Other: 3	5
2019 (N=34)	SB 35: 3	Other: 2	5
2020 (N=25)	SB 35: 5	Other: 2	7
2021 (N=41)	SB 35: 4	Other: 15	16

[1]We do not calculate which density bonus programs (state or local) 2014 - 2017 entitlements used.

Stakeholders also do not agree on whether State Density Bonus Law is good for San Francisco. Market-rate developers shared that State Density Bonus Law has been critical to increasing the feasibility of housing development while also satisfying the local inclusionary program as on-site requirements increased over time.[71] Affordable developers heavily relied on State Density Bonus Law to increase the size of 100% affordable development, which did increase the number of units approved. Some Commissioners and Supervisors also described density bonuses as critical to reaching affordable housing targets.

But some Commissioners and Supervisors expressed concern about how the city's application of State Density Bonus Law might derail community outreach or historic preservation. Some planners shared that implementing State Density Bonus Law was difficult at times and required educating political bodies on where San Francisco retained discretion and where it did not under the law (which was further complicated by San Francisco's context of all permitting being discretionary). Planners also perceived that local political bodies did not like the impact of State

[71] Section 415.3 details the thresholds. Qualifying applications initiated before January 12, 2016, had a 14.5% on-site inclusionary requirement; applications initiated after that date had variable thresholds depending on the project size and a complex scheme of alternatives. Under Section 415.6(a)(1), a development larger than 10 units but smaller than 25 that elected on-site units would have to meet a 12% threshold. Section 415.6 (a)(2) and (a)(3) provided that owner occupied developments of 25 units or more would have to meet a 20% threshold, and rentals developments larger than 25 units would have to meet a 18% threshold. Section Section 415.6(a)(5) also provided for incremental increases beginning in 2018, which would raise the thresholds even higher for developments of 10 – 24 units to 15% and larger developments would increase incrementally each year, but not to exceed 26% for owner occupied developments and 24% for rental developments. SAN FRANCISCO, CAL., PLAN. CODE §§ 415.3, 415.6 (2021).

Density Bonus Law on urban form because it limited subjectivity in design review, or its impact on inclusionary outcomes in terms of the overall yield of on-site affordable units.[72] Consistent with these planner perceptions, some Commissioners and Supervisors did express concern about state law that overrides design considerations.

Local rules complicate application of the Housing Accountability Act.

When discussing the importance of SB 35 and State Density Bonus Law, another important theme emerged. Several stakeholder groups reported that local political bodies do not consistently follow the Housing Accountability Act and deny proposed development covered under state law. Importantly, stakeholders did not describe the Planning Commission as blatantly violating state law but explained that instead, complex local rules make it difficult to determine which local approvals are within the purview of the Housing Accountability Act and which are not. If there is any ambiguity about whether the Housing Accountability Act applies, and a proposed development is at all controversial, that ambiguity leads to a project denial.

Planners emphasized here again the importance of state guidance on how the law changes local processes. When state law does not create a ministerial process (like SB 35) but limits local discretion, state guidance provides clear communication to political bodies and the public how the state law changes local processes. That is critical, planners say, in a local context like San Francisco where at least some within the political bodies and communities interpret local rules as allowing the city to retain the power to deny an approval. If state law significantly limits the right to deny an approval, planners recommend that the state guidance be clear so as to enable staff and Commissioners to say publicly that state law dictates a particular outcome.[73]

Local rules require entitlement processes begin before the application—and navigate multiple hurdles along the way to approval.

Prior to July 1, 2023, the process for entitlement for many multifamily non-ADU and non-SB 35 developments began with a required Preliminary Project Assessment (PPA).[74] The Mayor's Office recently eliminated this hurdle through an Executive Directive, but we explain how this impacted the observations within our dataset.

Under the PPA process, a project proponent was required to complete the PPA before they could submit their project application. San Francisco's PPA process required project proponents to submit significant information about the proposed development. We have 87 observations in our dataset that would have required a PPA application under that local policy. We can verify PPA application dates against source documents for more than half of those, but otherwise rely

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[72] Commissioner Diamond on June 1, 2023, expressed concern about the impact of State Density Bonus Law on urban form when questioning whether Supervisor Melgar's proposed legislation to increase density in a west side neighborhood would, in conjunction with State Density Bonus Law, lead to nine-story buildings.

[73] It is important to note, however, that during this research, HCD sent two advisory letters to the city on the impact of SB 35 on post-entitlement administrative appeals, and the limitations that SB 35 placed on San Francisco's ability to hear post-entitlement appeals in the context of an SB 35 approval. San Francisco's Board of Appeals heard both post-entitlement administrative appeals, even though at least one of these letters explicitly stated that SB 35 did not allow for post-entitlement appeals.

[74] San Francisco Planning now provides that it no longer accepts PPAs consistent with the Mayor's Executive Directive issued on February 7, 2023, subsection II.9. OFF. OF THE MAYOR, CITY & CNTY. OF S.F., DIRECTIVE 23-01, HOUSING FOR ALL (Feb. 7, 2023), https://sf.gov/sites/default/files/2023-02/Executive%20Directive%2023-01_Housing%20for%20All.pdf.

on self-reported dates from San Francisco's system. The average time from PPA application to project application was about a year.

Table 8: PPA to Application Timeframes

(months)	**Median**	**Mean**	**Standard Deviation**
PPA to Earliest Application Date	4.96	11.71	21.00

San Francisco Planning, responding to direction from the Mayor's Office, eliminated the PPA process. Still, San Francisco Planning policy mandates a neighborhood notification process before a project proponent files an application, and a pre-application hearing called the "Pre-Application Community Outreach Process" or "Pre-Application Meeting."[75] This pre-application process requires project proponents to send notices and copies of plans to adjacent neighbors and neighborhood organizations *before* applying to develop land for any new construction or alteration that would change an existing structure by 7 vertical feet or 10 horizontal feet. San Francisco Planning compiles the list of neighborhood organizations that project proponents must notify. However, San Francisco Planning does not consistently track pre-application meetings in its public portal.

Stakeholders have differing perspectives on the value of this pre-application meeting process. Some Commissioners and Supervisors referred to the pre-application process as important community outreach. Other stakeholders perceive it as a requirement that assumes conflict exists before a developer has even proposed a development.

Application intake processes were inconsistent with the PSA but improved marginally over time.

The Permit Streamlining Act (PSA) requires cities to provide information to applicants about city requirements for applications to develop housing and sets limits on how long a city can take to determine an application is complete and begin planning review. This state law applies to all discretionary development projects that are quasi-adjudicatory actions (like a variance or conditional use requirement). The PSA also limits the amount of time a city can take to process an application, but the clock begins to run after Planning prepares environmental review documents.

We collected information on application dates, and any notices regarding the status of applications and the dates of those notices, when available on PIM, for 135 discretionary, non-ADU entitlements that we believe did not require a legislative act or development agreement for approval. This list includes more observations than we analyze—or it includes observations we collected some data on that we did not include in our timeline analysis because they were not yet entitled, or they were entitled in 2022 or 2023 .

Of these 135 observations, we found notifications sent to project proponents about their entitlement's application status (inclusive of notices about the incompleteness of their applications) for 75 observations(~56%). Of those 75 observations, we were able to determine

[75] *Pre-Application Meeting*, S.F. PLAN., https://sfplanning.org/resource/pre-application-meeting (July 30, 2023).

an application date and notice of status date for 72 observations. Of those 72 observations, 56 notifications (~78%) were outside of the required 30-day period. Of the 56 (out of 72 observations) that are in our dataset for analysis (observations entitled from 2018 - 2021), 41 notifications (~73%) were outside of the required 30-day period.

This does not mean that San Francisco Planning complied with the PSA in the other 60 instances, only that there is insufficient data to determine compliance or non-compliance with the PSA in half the observations.

We also looked at whether San Francisco Planning improved its project intake and notification processes over time. We have a confirmed application date for 130 out of 135 observations. In all five observations where we could not confirm an application date, we could also not confirm a notice of status date. Of these 130 observations, 65 observations have a confirmed application date after 1/1/2018, and 65 observations have a confirmed application date before 1/1/2018.

Of the 65 observations that have a confirmed application date after 1/1/2018, we found San Francisco Planning sent notifications to project proponents about their entitlement's application status (inclusive of notices about the incompleteness of their applications) for 53 observations (~82%). Of these 53 observations, 37 notifications are dated after the required 30-day period (70%). Of the 65 observations that have a confirmed application date before 1/1/2018, we found notifications sent to project proponents about their entitlement's application status (inclusive of notices about the incompleteness of their applications) for 19 observations (~29%). Of these 19 observations, 19 notifications are dated after the required 30-day period (100%). This suggests that San Francisco improved its application intake and notification process, but only marginally. What is also clear is San Francisco Planning is doing a better job to track the data, which can facilitate internal monitoring of this issue and continued improvement.

Table 9: Analysis of Application Status Notifications

	Application Date Before 1/1/2018 (N=65)	Application Date After 1/1/2018 (N= 65)
Percentage of observations where notice of application status is available	29% (N=19)	82% (N=53)
Percentage of observations where notice, if available, is outside of the required 30-day period	100% (N=19)	70% (N=37)

Planning policy relies on exemptions to comply with CEQA, but local rules require additional studies.

State law provides that if a development approval is discretionary, CEQA applies. With a few exceptions, local law determines whether CEQA applies to classes of housing development by making those housing approvals discretionary. State law, however, allows cities to quicken environmental review for some development. There are statutory exemptions in the California Public Resources Code, and the state's CEQA Guidelines provide for another thirty-three categorical exemptions. For example, a planning department can use the Class 32 infill exemption for an urban infill project to bypass CEQA review if the project satisfies certain conditions. The department must still prepare documentation. But the process is comparatively

faster than more intensive environmental review processes, like an Environmental Impact Report (EIR), within most jurisdictions in the state.

When a project is not categorically exempt, the planning agency conducts an initial study to assess whether there is substantial evidence that the project will have a significant effect on the environment. If it is not clear that the impacts can be mitigated below a significance threshold, a planning agency must prepare an EIR. If there is not substantial evidence of a potentially significant effect on the environment, the agency issues a Negative Declaration (ND). If there is substantial evidence that a project will significantly impact the environment, but the developer can properly mitigate the effects, then the agency issues a Mitigated Negative Declaration (MND).

California law also allows the planning agency to reuse existing EIRs to facilitate "streamlining" some classes of development through the environmental review process. This is called "tiering." Tiering allows the proposed development to satisfy CEQA's requirements by relying on existing EIRs, typically programmatic EIRs associated with a plan, and narrowing the environmental review documents to only those issues that have not been evaluated in a prior EIR that covers the proposed project. Tiering requires a prior environmental review document (generally an EIR) typically connected to a prior large-scale planning approval (usually a General Plan or Specific Plan); however, the source of the document varies. A Community Plan Exemption (CPE), for example, is a tiering-based exemption available to projects consistent with a community plan, General Plan, or zoning. When proposed development satisfies environmental review through tiering, it should theoretically reduce project-level costs for the developer because cities generally pay the costs of the relevant plan- or program-level EIR.[76]

EIRs are uncommon in San Francisco. Most developments benefit from streamlining. San Francisco is like its neighbors in this way, though San Francisco's timeframes are quite different from other neighboring jurisdictions we have studied. One notable change between 2014 - 2017 and 2018 - 2021 is that there are more categorical exemptions in the latter four years. That highlights that San Francisco Planning made a change in planning practice that simplifies and lightens the burden of environmental review for qualifying development—and yet overall, entitlements timelines increased in 2018 - 2021.

[76] Robert Olshansky, *The California Environmental Quality Act and Local Planning*, 62 J. AM. PLAN. ASS'N 313, 319–20 (1996).

Table 10: CEQA Compliance Pathways

Year Entitled and N	Categorical Exemption	Tiering (CPE)	Addendum	MND/ND	EIR	Multiple Pathway	CEQA Unknown*
2014 (N=24)	4%	79%	4%	0%	12%	0%	0%
2015 (N=23)	4%	56%	4%	15%	15%	7%	0%
2016 (N=55)	16%	67%	0%	11%	5%	0%	0%
2017 (N=38)	3%	82%	0%	3%	11%	0%	3%
2018 (N=31)	29%	45%	3%	13%	3%	3%	3%
2019 (N=29)	48%	38%	0%	10%	0%	0%	3%
2020 (N=18)	44%	17%	6%	17%	17%	0%	0%
2021 (N=33)	52%	33%	0%	9%	6%	0%	0%

Although San Francisco uses exemptions and tiering to comply with CEQA, local rules, not state CEQA guidelines, also require developers complete additional studies. Developers and planners in interviews and meetings indicated that local law demands that planning require wind and shadow studies. We collected information on whether San Francisco Planning required additional studies for 100 discretionary, non-ADU observations. We found no information about wind studies in San Francisco's public portal, which is noteworthy because wind studies came up frequently in interviews. Also, we note here that Class 32 infill exemptions require Transportation Demand Management studies.

Out of the 44 observations that satisfied CEQA through a Categorical Exemption, 22 (50%) required additional studies.

- ~18% (N=8) of all observations that benefited from a Categorical Exemption (N=44) also required a Shadow study.
- ~43% (N=19) of all observations that benefited from a Categorical Exemption (N=44) required a Transportation Demand Management study.
- ~11% (N=5) of all observations that used a Categorical Exemption (N=44) required both Shadow and Transportation Demand Management studies.

Out of the 33 observations that satisfy CEQA through a Community Plan Exemption, 24 (72%) required additional studies.

- ~32% (N=11) of all observations that used CPE (N=33) also required a Shadow study.
- ~70% (N=23) of observations that used a CPE (N=33) also required a Transportation Demand Management study.

- ~30% (N=10) of all observations that used a CPE (N=33) required both Shadow and Transportation Demand Management studies.

One observation (out of two) that complied with CEQA through a CEQA Addendum required a Transportation Demand Management study. Neither project required a Shadow Study.

Out of the 12 observations that required a Negative Declaration or Mitigated Negative Declaration, 10 (83%) required additional studies.

- ~33% (N=4) of all observations that required a ND or MND (N=12) required a Shadow Study.
- ~67% (N=8) of all observations that required a ND or MND (N=12) required a Transportation Demand Management study.
- ~17% (N=2) of all observations that used an ND/MND (N=12) to satisfy CEQA required both Shadow and Transportation Demand Management studies.

Out of the six observations that required an Environmental Impact Report, 3 (50%) also required a Shadow Study.

Risk of costly local appeals drives cautious environmental planning practices that limit the impact of the PSA.

In theory, using streamlined environmental review should quicken the planning review process. The PSA sets sixty-day time limits on approving development proposals that qualify for CEQA exemptions and streamlining, once the city makes a determination that the development is exempt from environmental review.[77] But in San Francisco, that is not necessarily true. One possible explanation might be that if environmental determinations always follow other entitlement approvals, using a streamlined environmental review process may have little impact on overall timelines if the other approval steps require more time (though a streamlined process should still reduce costs associated with more intensive environmental planning review).

After reviewing pre-application requirements and notification practices, we explored the data to understand when San Francisco Planning began environmental review and made CEQA determinations. We were able to isolate the environmental review determination or approval date in 95 of our discretionary non-ADU observations. Figures 4 and 5 illustrate what we found: that environmental review determinations almost always happen close to or at the same time as final entitlement decisions under local land use regulation. In 20 of those observations, the environmental determination and approval date is also the latest approval. For the remaining observations in this group, environmental determinations or approvals are often close to the final entitlement date. For 21 (out of 95) observations, the environmental approval date is at most seven days before the final approval date. For 36 (out of 95) observations, the environmental approval date is at most 30 days before the final approval date. For 48 (out of 95) observations, the environmental approval date is at most 60 days before the final approval date. This is important because of the limitations on entitlement review timeframes that the PSA imposes but, as noted, the clock begins to run after Planning prepares environmental review documents, not before. Because environmental determinations occur so close to the end of the entitlement period, the PSA seems to have little effect on overall entitlement timeframes.

[77] CAL. GOV'T CODE § 65950 (West 2023).

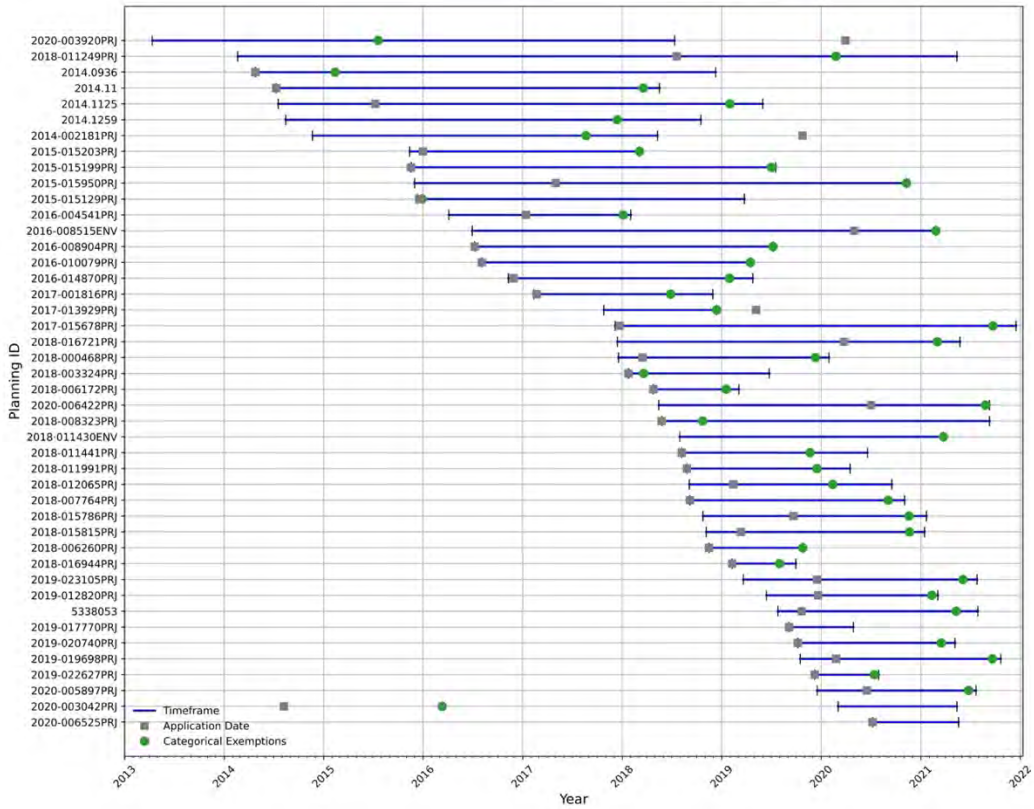

Figure 4: CEQA Milestone Timelines Categorical Exemptions Only (2018 - 2021)

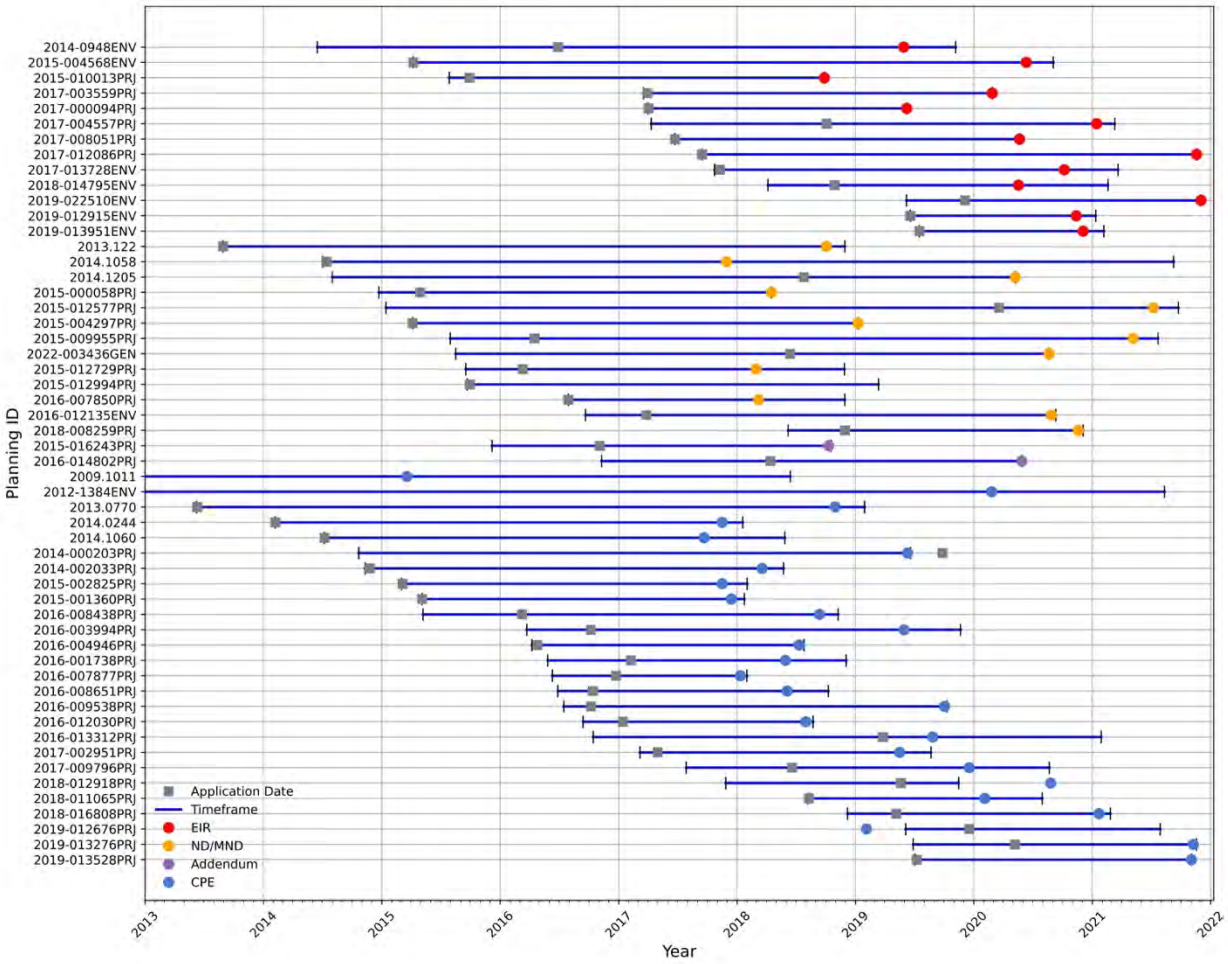

Figure 5: CEQA Milestone Timelines Multiple Pathways (2018 - 2021)

Commissioners, planners, and developers all agreed that CEQA slows approvals, and all—including planners and Commissioners—expressed concerns about CEQA abuse. During interviews and meetings with these stakeholders, we asked why environmental review takes as long as it does, as most development in San Francisco is categorically exempt from environmental review or benefits from a streamlined CEQA process. Developers believe San Francisco Planning is too slow to assign environmental planners to projects. Commissioners believe planners are overly cautious because they fear judicial scrutiny. In contrast, planners from multiple departments shared that there are two features of local rules that extend environmental review: (1) local rules requiring further studies add more work, and (2) administrative appeals, or the risk of administrative appeals, to the Board of Supervisors[78] steers planning practice and influences how long review takes overall.

On the second point, planners elaborated that because it is easy to appeal planning approvals, the risk of appeal influences planning practices. For environmental review, both Commissioners and planners perceive that there is a high risk that project opponents will challenge projects by

[78] State law governs much of the requirements for administrative appeals of CEQA determinations (*see* CAL. PUB. RES. CODE § 21151(c) (West 2023); CAL. CODE REGS. tit. 14, § 15025(b) (West 2023)) but local rules require that the filing deadline for an administrative appeal of a CEQA determination begins to run only after final entitlement decisions under local land use regulation.

challenging environmental determinations. What is most striking about the difference between Commissioner and planner perspectives is that Commissioners believe planners are worried about judges, but planners expressed confidence that their work would survive judicial scrutiny. Instead, planners expressed concerns regarding the Board of Supervisors.

Planners shared that even if most administrative appeals are withdrawn or denied, the beginning of an appeal creates more work for planning staff members managing environmental review. That additional work changes the pace of all environmental planning reviews for all projects because the projects that face an administrative appeal change review priorities. Also important, the experience of the administrative appeal for planners during the administrative appeal hearing influences their approach to work, overall. The risk of an appeal makes planners more conservative and risk-adverse in their work. One notable trend in interviews and meetings with planners was that planners appeared much more apprehensive of the Board of Supervisors than potential litigants. One planner also stated that, when elected, political bodies are highly critical of planning staff work within a public hearing. This can be demoralizing and impacts the department's working culture.

We reviewed our data across 2014 - 2021 to determine the rate of administrative appeal (inclusive of CEQA-related appeals and other appeals). At least 14% of the approvals in our data (2014 - 2021) faced administrative appeals. We say *at least* 14% because we are not certain that we have located all records on local administrative appeals, as the city does not make past records on administrative appeals readily available online. It is also true that most of the appeals we could locate are denied or withdrawn, and most administrative appeals involve challenges to CEQA determinations as well.

San Francisco Planning's environmental planning division also tracks administrative appeals worked on by their team. This log captures appeals of residential and non-residential entitlements. We reviewed their log of staff hours spent on administrative appeals involving CEQA. Twenty out of 48 administrative appeals filed in 2015 - 2021 that San Francisco Planning tracked overlap with our 2014 - 2021 dataset. Of these 20, the internal department data offers information on cost and time for 19 of our observations. Although the other appeals are not for multi-family housing development, planners shared that these appeals also influence how planners work on housing entitlements. Out of the 20 administrative appeals associated with entitlements in the CALES dataset, San Francisco Planning data indicates that 11 (55%) were denied, five (25%) were withdrawn, only one was upheld, and three were closed with no other details.[79]

San Francisco Planning reports that it logged a total of 5,680.75 hours because of all 48 administrative appeals related to CEQA that they tracked from 2015 - 2021. San Francisco Planning logged a total of 3,031.25 additional staff hours to prepare for CEQA-related administrative appeals associated with entitlements in the CALES database. Translating these hours into days, we find that on average, planners add about 20 days of work per year to their workload to deal with CEQA-related administrative appeals for housing entitlements.

[79] This is consistent with what San Francisco Planning reports for all of the administrative appeals.

Table 11: Total Time Spent on All CEQA Appeals 2015-2021 N=48

(days)	Minimum	**Median**	Max.	**Mean**	**Standard Deviation**
Total Time Related to Admin. Appealed	0.56	8.69	71.06	15.11	14.92

Table 12: Total Time Spent on CEQA Appeals 2015-2021 for CALES Observations

(days)	Minimum	**Median**	Max.	**Mean**	**Standard Deviation**
Total Time Related to Admin. Appealed	1.88	12.78	71.06	19.94	18.05

Administrative appeals add costs to the developer in lost time and higher holding costs, but there are also direct costs to the city associated with the work to prepare for an appeal, even if the appeal is withdrawn. San Francisco Planning reported that all administrative appeals related to CEQA cost the city a total of $793,993 in the years where San Francisco tracked the data (2015-2021). Administrative appeals related to CEQA and associated with entitlements in the CALES dataset (2015-2021) cost the city a total of $421,314. One entitlement in our dataset, 1500-1540 Market Street,[80] required 374 additional staff hours and $52,204 in costs to San Francisco Planning to prepare for the appeal—even though the appeal was withdrawn.

Table 13: Total Cost CEQA Appeals 2015-2021 (N=48)

(USD)	Minimum	**Median**	Max.	**Mean**	**Standard Deviation**
Total Cost Related to Admin. Appeals	$535	$10,245	$81,558	$16,893	$16,860

Table 14: Total Cost CEQA Appeals CALES Housing Only (N=19)

(USD)	Minimum	**Median**	Max.	**Mean**	**Standard Deviation**
Total Cost Related to Admin. Appeal	$2,167	$13,741	$81,558	$22,174	$20,501

[80] This is a 100% market-rate mixed-use development that satisfied the inclusionary program with an in-lieu fee.

During interviews and meetings, we also learned that San Francisco Planning has undertaken substantial internal work to address at least some part of this problem by consolidating what is presently six steps in the planning review and permitting into three steps. The aim is to bring the process from application through permitting into one department and facilitate one appeal period for project proponents. It is unclear, however, how these proposed operational changes would address post-entitlement appeals, if at all.

Continuances—possibly meant to avoid later challenges through administrative appeal—are frequent.

According to stakeholders, changes to the proposed development might appear voluntary but result from negotiations outside of hearings facilitated by Planning staff (who are mediating between project proponents and opponents) before a scheduled Planning Commission hearing. The negotiation is meant to facilitate Planning Commission approval, but developers report that what developers end up agreeing to can render a project infeasible. This is another perception that is difficult to verify through government documents, as there would be no written record of negotiations occurring informally before a scheduled hearing. Stakeholders suggested we look for continuances, or a frequency of continuances and multiple hearings, as evidence of this outcome.

We have 93 discretionary, non-ADU observations that required quasi-adjudicative hearings (but not legislative action). All 93 observations have *some* information about hearings, but only about half have complete information about hearings. Still, approximately 22% (N=20) of these observations, inclusive of observations that do not require public hearings under local zoning and planning law, have multiple hearings or continuances associated with a single approval step. One of the entitlements with multiple hearings had multiple hearings related to CEQA approvals. Another two observations were related to density bonus approvals only—one related to the local program and the other to State Density Bonus Law. Nine observations had more than three continuances or hearings for a single approval step. One of these observations (out of nine) is a discretionary building permit project (with no request for exceptional DR), which utilized San Francisco's local density bonus program, HOME-SF, for approval. The two continuances and one hearing for this observation were associated with the approval of the local density bonus program. This building permit project's application date was 3/3/2020, and San Francisco Planning approved it on 5/13/2021. Three observations required five or more hearings for approval. One of these projects had nine continuances for the same approval step. It is also possible that the rate of multiple hearings for a single approval step *might be higher* than what the data currently reveals—as interviews suggest. Our ability to verify these statements against hearing-related data is contingent on San Francisco Planning making the data publicly available.

When we analyze our data overall, we find that the density proposed is greater than density in final approval for 23 observations. Four (out of 23) observations are associated with a continuance. Another two (out of the 23) are associated with an administrative appeal.

Publicly Initiated Exceptional DR occurs frequently and may foster negotiations outside of public hearings.

San Francisco uniquely allows an interested party to request the Planning Commission exercise exceptional DR, which involves the Planning Commission "effectively taking a second look at the proposed project." This occurs even when the zoning and planning code do not require a

hearing in front of the Planning Commission, but where an interested member of the public states there are exceptional or extraordinary circumstances that warrant a public hearing.

There was not a consensus across stakeholder groups on the impact of this policy. Most of the city personnel and Planning Commissioners we spoke to through HCD-led meetings expressed perceptions that the ability to request exceptional DR is primarily, if not almost entirely, associated with disputes between neighbors relating to modifications or smaller developments (like single-family dwellings). These groups did not perceive exceptional DR as a dominant obstacle to multifamily development but as helpful to mediating smaller disputes between neighbors, even if it might take too much of the Planning Commission's time. San Francisco Planning shared their log of staff hours to support exceptional DR hearings between 2014 - 2021. Exceptional DR adds fees to all permits to support this process; the department collects between $750,000 - $1 million per year in permitting fees to support staff time for the exceptional DR process.

When we examine data on the staff hours logged to support exceptional DR, we find that between 2014 – 2021, San Francisco Planning had to allocate ~1,872 full days (8 hours per day) or ~7 business years (262 days at 8 hours per day) to additional work to respond to exceptional DR requests. But only about 4% of those hours were spent on exceptional DR requests associated with the multifamily housing entitlements in our dataset. From the perspective of staff who manage that work, the number of work hours dedicated to addressing exceptional DR hearings, generally, may make the same work for multi-family housing seem minimal compared with the work hours spent addressing all other exceptional DR requests. This may influence staff and Commissioner perceptions of whether DR burdens developers proposing multifamily housing.

But we also found that across almost all participants in confidential research interviews (where HCD was not present), regardless of the stakeholder group, exceptional DR was a dominant issue. The only interview participants that did not to bring up DR were those participants that self-described as only having worked with large-scale phased developments. Interview participants raised the topic of DR as a key obstacle to housing production and described the Planning Code Section 311 neighborhood notification process associated with a discretionary building permit, and potential for a request for DR and related hearing, as an opportunity to oppose entitlement on the eve of approval. Stakeholders described this provision as offering an early "appeal" of a planning approval for smaller or mid-size code compliant buildings. These participants also shared that even the request for DR could result in a change to the project that results in something that is no longer financially feasible to build.

Some stakeholders also shared that opposition comes from different types of neighbors; some are interested in the impacts on their own properties, but others use this process to address neighborhood-level concerns. In the latter context, stakeholders share that frequent project-level adjudications are the consequence of inequitable zoning and planning. The DR provision also came up in interviews when parties discussed the suggested reforms laid out in the recent housing element. Some city personnel that expressed support for proposed rezoning, specifically upzoning in more affluent areas, also predicted that upzoning without eliminating DR in certain neighborhoods would result in project opponents effectively using DR to delay housing development. In terms of its use, there are publicly initiated requests for DR for 19% of the discretionary building permits in our 2018 - 2021 data and 21% in the 2014 - 2017 data—for a combined rate of 20% across eight years for building permits only. We also know that the developments that require exceptional DR take comparatively longer to entitle, as well. The frequency with which exceptional DR comes up for code compliant multi-family housing (relative

to other code compliant multifamily housing) might explain why different stakeholder groups have such different perspectives on the same procedural rule, in terms of its influence on entitlement timelines generally.

In our 2018 - 2021 data, 35% of all variances also had hearings for exceptional DR. There were also another two requests for exceptional DR associated with discretionary ADU observations. One of the requests for exceptional DR was withdrawn. The Planning Commission heard the second request and granted DR. There are an additional two requests associated with approvals that already went before the Planning Commission—but the Planning Commission heard both requests for exceptional DR (and denied them).[81]

During interviews, stakeholders reported that once a party requests DR, Planning Staff (to mediate between the project proponent and the party requesting DR) might verbally ask the developer to change the proposed development to incentivize the party requesting DR to withdraw their request. We cannot verify this through the available entitlement data, however.

We explored the data to find instances of requests for DR being associated with developments that change in size (measured by units) over time. We did come across two proposals to develop five or more units through the local ADU ordinance that resulted in tenant requests for DR, though both would later be withdrawn. The first development that would lead to a tenant request for DR involved a request for five ADUs that required a variance. The Zoning Administrator approved a variance for three units, and a later revised approval document states the proposal changed from five to three units. The request for DR occurred after the variance approval, but before the later revision—though there is nothing that indicates there is a relationship between the request for DR and the later revision to the proposed number of units. In the request for DR, the tenants complain that the approved ADUs would interfere with parking both temporarily and permanently. The tenants also detail an ongoing dispute with the project proponent, their failed attempts to initiate mediation, and their failed efforts to delay final permitting.

Another DR request involved a proposal to build nine ADUs, but a building permit was ultimately issued for just six units. This project involved no special discretionary approval step, so it is even more difficult to determine why the proposal changed over time. The DR documents indicate that the organization that requested exceptional DR initiated the request because of concerns about the impact of the ADUs on parking, and the specific impact on a family with a child with a disability. The request for DR was ultimately withdrawn. Again, there is no data that directly links the reduction from nine to six units to the DR request; the DR request only indicates an ongoing dispute with tenants over parking impacts related to an accessibility and disability issue.

Developers report that design guidelines are vague and invite subjective conditions of approval.

Planners and developers describe design guidelines as highly subjective, allowing for random outcomes, problematic, and wielded as a “weapon.” Many stakeholders report that the design guidelines are not about design; they are about anticipating complaints from neighbors around light, air, “inches or feet” in setbacks, and related features within development that trigger complaints from neighbors, and satisfying neighbors.

[81] One of these observations required a CUA and the other required a zoning map amendment.

Planners shared that although the guidelines are not part of the Planning Code, they are codified in a roundabout way through a cross reference to the Planning Code. For example, Section 311(c)(1) of the Planning Code provides that Residential Design Guidelines shall be used to review plans for all new construction and alterations of existing residential buildings in R Districts. According to the Planning Department, "The Residential Design Guidelines (Guidelines) articulate expectations regarding the character of the built environment and are intended to promote design that will protect neighborhood character, enhancing the attractiveness and quality of life in the City."[82]

Importantly, developments that comply with the Planning Code but do not conform to the Guidelines end up back in deliberative processes, and sometimes back in front of planning staff, even when they have completed planning review and secured entitlement. Planners, developers, and architects note, however, that the subjectivity in the Guidelines makes this an inevitable outcome. Also, in the context of discretionary building permits, the design guidelines raise issues that often lead to requests for exceptional DR as well.

The Guidelines are filled with requirements that on their face allow for subjective interpretation through words like "compatible," "respect," and "character." Examples include, "In areas with a defined visual character, design buildings to be *compatible* with the patterns and architectural features of surrounding buildings." Explanatory text mandates that designers in areas of "mixed visual character" "draw on the *best* features of surrounding buildings" and "design buildings to help define, unify and contribute positively to the existing visual context." *Site Design* guidelines are also often subjective, requiring, for example, that designs "*[r]espect* the topography of the site." Guidelines addressing *Building Scale and Form* intend to ensure design is "*compatible* with that of surrounding buildings." Scale of buildings must be "*compatible*" in terms of height and depth of surrounding buildings, as well as with the "scale at the street" and mid-block open spaces. Building forms, facades, proportions, and rooflines must be "*compatible*" with those of existing buildings.

Cumulative and unique procedural hurdles create comparatively long entitlement timelines.

We explored our 2014 - 2017 data to run a comparative analysis with neighboring cities where we had similar data. Importantly, our 2014 - 2017 dataset indicates that entitlement timelines were generally *shorter* than in 2018 - 2021. Still, 2014 - 2017 timelines were longer than other jurisdictions. We searched our data to match observations from our 2014 - 2017 data with similar entitlements in Oakland, Berkeley, and Redwood City, looking for the best matches across the following characteristics:

- Same neighborhood characteristics (defined by 2019 Tax Credit Allocation Committee maps; we do not match high resource neighborhoods with low resource neighborhoods);
- Either for sale or for rent (in other words, we do not compare for sale developments to for rent developments);
- Around the same size (plus or minus five units). They need to have the same income characteristics (either all market-rate, all mixed-income, or all 100% affordable developments); and

[82] *Residential Design Guidelines*, S.F. PLAN., https://sfplanning.org/resource/residential-design-guidelines (Mar. 4, 2020).

- Similar local process characteristics (we do not compare a code compliant development that also benefited from a CPE with a non-code compliant development that required a conditional use permit or variance but also benefited from a CPE).

We use these criteria based on several assumptions about neighborhood-level politics across all cities. For example, we assume the political context varies across neighborhood types (in terms of income level). We also assume that neighborhood opposition might vary based on project type (for sale condos versus for rent apartments, and affordable versus market-rate). The last criterion (process steps) is the most difficult for us to match because no two study cities have identical regulatory environments. We therefore looked for equivalencies within local processes based on whether a development required special approvals or not.

We were unable to find matches in Berkeley and Redwood City. We found that the average difference between all San Francisco-Oakland pairs is 1,086 days (~3 years). The difference in timelines appeared related to San Francisco's pre-application requirements and exceptional DR process.

Table 15: Comparison of Entitlements Requiring CPEs Oakland-San Francisco 2014 - 2017 data

Address Jurisdiction	Project Size (units) and Type	2019 TCAC Classification	Neighborhood (Name)	Affordability	Compliance with IZ (SF)	Required Local Approvals	Timeframe to Entitlement (days)	Difference in Timeframes [83]
1924 Mission San Francisco	11 units for rent	Low Resource	Mission	Market-Rate (possibly 1 1-bedroom affordable unit)[84]	On-site	Discretionary Code Compliant (Building Permit only)	1,203 days	–
3253 Ettie St. Oakland[85]	9 units for rent	Low Resource	Clawson	Market-Rate	N/A	Discretionary Code Compliant (Design Review only)	348 days	855 days
7540 Macarthur Oakland	11 units for rent	Low Resource	Eastmont Hills	Market-Rate	N/A	Discretionary Code Compliant (Design Review only)	51 days	1,152 days
198 Valencia St. San Francisco	28 units for rent	Low Resource	SoMa	Market-Rate	Unknown	Variance, Public Initiated Discretionary Review	1,302 days	–
3129 Elmwood	30 units for rent	Low Resource	Jingletown	Market-Rate	N/A	Variance, Design Review	150 days	1,152 days

[83] Only populated for Oakland projects. This column shows the many more days it took for the Oakland project to entitle, relative to its matched San Francisco project.
[84] There is an August 2018 One Unit Compliance with Inclusionary Housing Program Affidavit that provides that one of the one-bedroom units would be affordable—but we could not locate a deed restriction in PIM.
[85] It looks like the developer successfully secured excavation, electrical, mechanical, and plumbing building permits post-entitlement in 2018, but those expired in 2019 and 2020.

Address Jurisdiction	Project Size (units) and Type	2019 TCAC Classification	Neighborhood (Name)	Affordability	Compliance with IZ (SF)	Required Local Approvals	Timeframe to Entitlement (days)	Difference in Timeframes [83]
Oakland								
956 63rd St. Oakland	28 units for rent	Low Resource	Paradise Park	Market-Rate	N/A	Variance, Design Review	105 days	1,197 days
645-647 Valencia St, San Francisco	7 units for rent	Moderate Resource	Mission	Market-Rate	N/A	Variance, Public Initiated Discretionary Review	1,435 days	–
4429 Piedmont, Oakland	9 units for rent	Moderate Resource	Piedmont Avenue	Market-Rate	N/A	Variance, Design Review	137 days	1,289 days
2201 Market San Francisco	17 units for rent	Low Resource	Mission	Market-Rate	Fee	Variance, Public Initiated Discretionary Review	1,160 days	–
5325 San Pablo Oakland	17 units for rent	Low Resource	Gaskill	Market-Rate	N/A	Variance, Design Review	287 days	873 days

Stakeholders report that San Francisco's policy emphasizes project-level adjudication to achieve equitable development outcomes, when what the city needs to achieve equitable development outcomes is zoning and planning reform.

The comparatively longer timeframes in San Francisco are associated with processes that illustrate a larger, complex, and recurring theme that dominated several interviews with developers, planners, and affordable housing advocates. From the table above, we pull out the entitlement at 1924 Mission to explain what stakeholders report—San Francisco's current policy attempts to resolve neighborhood-level concerns about inequitable land use development through project-level adjudication rather than more equitable planning and zoning.

1924 Mission Street involved a proposal to construct an 11-unit building with ground-floor retail on a site with an auto body shop. The project proponent submitted a required PPA in March 2014.[86] This pre-application process required submitting an application for assessment with the site plan, floor plan, building elevations, and photographs. This PPA process also required

[86] This is a required process applicable (at the time) to all proposed developments of seven or more units. San Francisco has since modified applicability; it is required for developments of 10 or more units, creation or expansion of group housing using 10,000 square feet or more, and unspecified "other complex projects." *Preliminary Project Assessment (PPA)*, S.F. PLAN., https://sfplanning.org/resource/ppa-application (July 11, 2023).

notice to the neighborhood[87] and a pre-application neighborhood meeting. The pre-application neighborhood meeting is supposed to identify neighborhood grievances and prevent requests for exceptional Discretionary Review.[88] Importantly, developers state that these pre-application processes do *not* achieve that end, and this example is consistent with those perceptions.

The Planning Department issued a Certificate of Determination on April 2, 2015, that the project qualified for a CPE (tiering). According to the Notice of Building Permit Application, the project proponent then applied for discretionary building permits on May 23, 2016.[89] The Planning Department issued the Notice of Building Permit Application on March 20, 2017.

A local neighborhood organization applied for the Planning Commission to take exceptional Discretionary Review on April 19, 2017. The application for exceptional Discretionary Review provided that the neighborhood organization requesting review believed the proposed development was inconsistent with the General Plan's policy priority that "[t]hat existing housing and neighborhood character be conserved and protected in order to preserve the cultural and economic diversity of our neighborhoods."[90] The application for Discretionary Review stated that proposed rents would be high, and expressed concern that "gentrification-inducing design, intended to target higher-end tenants, will create local upward price pressure on surrounding tenants."[91]

Importantly, the neighborhood organization expressed concerns that this proposed development was one of several that created harm in the neighborhood. The applicant noted that the harm was related to "the cumulative impact of this and the other seven projects proposed for the immediate vicinity of Mission St."[92] The request for Discretionary Review asked that the Planning Commission consider the cumulative impacts associated with the proposed development and other developments and "demand this project alter its appearance in order that it comes into line with neighboring buildings on the Mission corridor in a way that better helps 'preserve the cultural and economic diversity' of the corridor and the Mission District."[93]

The Planning Commission heard this request on July 6, 2017. The Planning Commission agreed that there were "extraordinary and exceptional circumstances" that warranted Discretionary Review and that "project refinements were necessary to address concerns over the project's compatibility with the surrounding neighborhood." The Planning Commission conditioned the building permit approval on the following grounds: the ground floor retail space needed to be designated for trade shop use, the project proponent needed to explore providing a mural on one wall, and the project proponent needed to "work with Planning Department staff on refin[ing] the exterior design to provide a stronger relationship to the surrounding context." The Building Department issued a demolition permit to demolish the auto body shop in August

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[87] The notice requirements for the Pre-Application Meeting demanded notification to all property owners within a 300 feet radius, all relevant neighborhood organizations, and anyone who requested notice. Meetings may only be held during certain hours, and project proponents must keep a record of all attendees.
[88] The first page of the Pre-Application Meeting Packet logged in PIM provides: "The meeting's intention is to initiate neighbor communication and identify issues and concerns early on; provide the project sponsor the opportunity to address neighbor concerns about the potential impacts of the project prior to submitting an application; and, reduce the number of Discretionary Reviews (DRs) that are filed."
[89] There is no Project Application logged in PIM.
[90] This language comes from the Application for Discretionary Review, page 4, logged in PIM.
[91] Id.
[92] Id.
[93] Id.

2019 and a temporary shoring permit for an empty lot in 2021. DBI's Permit Tracking system seems to indicate review of plans through spring of 2021, but no activity is logged after that.[94] It is also unclear how the final project-specific conditions of approval resolve the larger, neighborhood level concerns about gentrification and displacement raised during this request for exceptional Discretionary Review—which are at least in part related to the city's zoning and planning that dictates where developers may build multi-family housing citywide.

Planners and developers believe San Francisco needs procedural reform that addresses discretionary review, but not all Commissioners and Supervisors agree.

Stakeholders explained that three features of San Francisco's local law invite project-by-project adversarial politics that will prevent San Francisco from meeting housing production targets and equitable housing outcomes: (1) density and use controls that limit development to specific neighborhoods, (2) procedural law and policy that renders all approvals discretionary, and (3) charter provisions that allow project opponents to appeal multiple post-entitlement construction permits.

When discussing SB 35, affordable developers and planners explained the state ministerial process resolved the second issue without touching the first or third. SB 35 may fix planning review for eligible projects, but it cannot fix San Francisco's housing production pipeline because two major impediments to production remain. (SB 35 also only applies because San Francisco has failed to meet its RHNA targets—which is not the city's aim.)

According to planners, developers, and many housing advocates, achieving production targets, affordability, and equity demand long-range planning, rezoning for density in higher opportunity areas in conjunction with a *local* ministerial approval process, and charter reform to limit post-entitlement appeals. Some planners shared that a local ministerial process would have more legitimacy with community members than a state ministerial process; legitimacy that planners perceive as important within San Francisco because of the city's poor track record in prior decades of engaging with certain neighborhoods and low-income communities. But many stakeholders, including planners, shared their belief that current and proposed local procedural reforms, including the Mayor's Housing for All Executive Directive, are insufficient to remove policy constraints on production. According to these stakeholders, current reforms merely "tinker" with the planning code while leaving blanket discretionary review and the administrative appeal process intact. Stakeholders who shared this perspective stated plainly that they think the Mayor's Office can only do so much to fix these issues—the real fix depends on the Board of Supervisors and possibly the electorate. There were a handful of stakeholders who emphasized that the Mayor's Office must lead in addressing problems with permitting and felt entitlement processes were not the problem.

Every stakeholder that shared that San Francisco needs a local ministerial process and charter reform also felt accomplishing either one is politically impossible. Several planners expressed a belief in the need for state intervention—but not necessarily a preference for state intervention. Interview participants across several stakeholder groups emphasized that local processes that require the most reform are intertwined with values and assumptions about what these

[94] It is difficult to ascertain much more than the status of a permit from building permit data.

procedural rules offer in terms of stakeholder engagement, historic and cultural preservation, and ultimately, spatial equity.

Several planners also explained that San Francisco has inadequately engaged community around planning and zoning for decades. There was a consensus among planners that recent efforts by Supervisors to connect with low-income communities around land use still lack sufficient and intentional community engagement. Planners also described a need for the city to mend relationships with community through acknowledgment of and documentation of past harms. Some affordable developers echoed these concepts when they described how some neighborhoods continue to have the city's legacy of racism codified in neighborhood association covenants, conditions, and restrictions (CC&R).

Planning staff and some housing advocates explained that it is not in the city's best interests to keep existing processes as they are if the city's goal is to redress these past harms and increase housing production in an equitable way. But because process requirements are framed as key to stakeholder engagement and participation, planners believe no local political body wants to dismantle them. Process in San Francisco is sacrosanct. Consistent with this perspective from planners, some Commissioners emphasized the importance of engagement, but Commissioners focused on engagement during the project entitlement phase. The difference in how stakeholder groups described the need for community engagement in relationship to planning, zoning, and project development is significant. Planners discussed a need for engagement at larger scales and at the legislative level, to facilitate equitable planning and zoning, not just at the project-level. Commissioners focused on engagement at the project-level.

Interview participants also elaborated and described existing density and use controls and project-level adjudication as reflecting how power over land use is inequitably distributed citywide. Certain neighborhoods wield enough power over political bodies to block changing density and use controls, so no multifamily housing is proposed in the first instance. These constituents who benefit most from the spatial distribution of density and use controls do not need to attend public hearings to block housing development. Developers propose dense multifamily housing (and affordable housing) where housing may be built under zoning and planning standards.[95] That leaves communities in the neighborhoods where zoning allows housing to be built with one primary pathway to access power over land use; they must go through project-level adjudication, or public hearings. Some neighborhoods have built up power over time and can now effectively block all development through project-level adjudication. Other neighborhoods have more recently begun advocating for community needs through project adjudication. Planners also described alliances between wealthy residents and community activists with less money and influence that are working to protect their communities from harm from what they perceive to be the "greedy developer."

Stakeholders explained that project-level adversarial politics may seem responsive to inequitable land use patterns because it allows communities to advocate for what they need, but

[95] These perspectives were consistent with what we discovered in earlier research on San Francisco's zoning, reviewing zoning neighborhood planning between 1921 (beginning with the 1921 San Francisco Building Zone Ordinance, and reviewing 1948, 1979 and 1990 zoning) through the Eastern Neighborhoods Plan adopted in 2009. We found that the entitlements for 5 or more units issued in 2014 - 2017 were concentrated almost entirely in neighborhoods that had zoning for multi-family housing in place since at least 1921 (the Mission) or in neighborhoods that may have been zoned industrial neighborhoods but later rezoned for mixed-use (such as SoMa and Potrero Hill).

this approach fails to change power imbalances or solve for structural inequities. Neighborhoods that have prevented density (through zoning and planning standards) remain unavailable for development. Other neighborhoods feel perpetually burdened. When project opponents from vulnerable neighborhoods cannot stop an approval, they also interpret the entitlement as signaling that political bodies do not care about their neighborhood's needs[96] even though planners state that the opposite is true. Planners believe that the Planning Commission cares very deeply about neighborhood needs. From the perspective of planners, it is because the Commissioners care deeply about neighborhood needs that they slow or block housing approvals.

Planners shared local rules do too little to facilitate meaningful public input into design because the local rules without state intervention lead to just one conversation about how the city may deny the proposed development. Planners perceive that soliciting meaningful community input into design does not happen until political bodies and neighbors accept a project approval is imminent. Only then, according to planners, does the entitlement process facilitate community input to make the design better and prevent unintended harm the neighborhood. But planners report that at present productive dialogue to allow for community input depends entirely on state law that intervenes in local discretion in some way, and that the current local regulatory framework provides an inefficient and slow means to achieve housing production sensitive to neighborhood needs.

Participants in confidential research interviews cautioned that proposals to rezone need to be coupled with local ministerial processes or the rezoning will leave the existing inequities in place. Planners predict that any rezoned neighborhoods that have not welcomed dense housing in the past will use San Francisco's procedural law to block development if rezoning is not coupled with a ministerial approval process. Affordable developers share this perspective. Also, planners believe a local ministerial process would require all parties to pay more attention to the requirements of the code, which would better achieve more predictable and desired housing outcomes. Many planners and housing advocates said that disrupting this structural imbalance of power requires the kind of procedural overhaul that challenges entrenched beliefs about what current discretionary processes offer, which these stakeholders believe makes local procedural reform politically impossible. Planners believe the ideological divide within political bodies limits legislative proposals; planners believe Supervisors are limited to developing legislation that Supervisors believe will get passed,[97] which may or may not result in effective reform. Nonetheless, there was an unequivocal consensus among planners and affordable developers that San Francisco needs major procedural reform because not all neighborhoods welcome affordable housing development.

Although within stakeholder groups there was agreement on these topics, there was no consensus across stakeholder groups on any of these points. Planners and developers (including affordable developers) agree that San Francisco needs substantial local process reform that removes some discretion, but not all Commissioners and Supervisors share this perspective. During meetings with HCD, some Commissioners and Supervisors' perceptions clearly aligned with planners and developers on the relationship between zoning, procedural rules, and substantive standards on development and inequities across neighborhoods. These

[96] During interviews, one development noted as illustrative was 792 Capp Street, which required a Conditional Use Authorization to demolish a single-family dwelling to build four units; the CUA hearing was continued seven times before entitlement.

[97] Supervisor Melgar's public statements during the hearing on June 1, 2023, where she states her recommendations are to help ensure that the Housing Element gets passed, reflect a similar perspective.

participants acknowledged the challenges with existing discretionary review and administrative appeals of post-entitlement permits, and articulated these rules as potential constraints on supply and affordability. These Commissioners and Supervisors explained the difficult tradeoffs political bodies grapple with when developing or amending procedural rules, but they did acknowledge a need for legal reform.

Other Commissioners and Supervisors, however, expressed entirely different perceptions. Some Commissioners and Supervisors emphasized the importance of maintaining discretionary review while proposing that reforms should promote faster, more predictable processes. Some Supervisors characterized San Francisco's political bodies as consistently inclined to approve most proposals for housing and stated that all neighborhoods welcome affordable housing (though they did not distinguish between neighborhood groups responding to proposals to build affordable housing and their own voting records on affordable housing). The perspectives of some Supervisors on the topic of affordable housing sharply contrasted with what both affordable developers and planners shared. Affordable developers stated that many San Francisco neighborhoods do not welcome affordable development and residents are concerned about more units or taller buildings, generally. Affordable developers also perceived the west side of the city as particularly unwelcoming of affordable development.

Some Supervisors also shared their skepticism about the need for market-rate housing supply to address the city's housing issues, and their belief that inadequate funding for subsidized housing was the primary obstacle to addressing the city's housing needs.[98] While affordable developers and planners agreed that more state funding is critical for San Francisco to develop needed affordable housing, affordable developers and planners also called out local policy obstacles to production (including post-entitlement problems). In sum, affordable developers see funding and regulatory reform as both essential to increasing affordable development, whereas some Supervisors critique the latter as an approach to solving the city's housing challenges.

Some Commissioners and Supervisors also expressed deep concerns about state law that they interpreted as punitive, or harmful to local implementation of important aesthetic controls and historic preservation. What also really stood out was the difference between affordable developer and planner perspectives and those of some members of political bodies on the role of state law in accelerating affordable development.

All stakeholder groups report persistent post-entitlement challenges.

During interviews and meetings, *all* stakeholders, ranging from developers, architects, lawyers, and planners, complained of persistent challenges post-entitlement. Some of the dominant concerns related to the lack of uniformity in post-entitlement permitting. These stakeholders perceive that permitting depends on who is assigned to the process rather than on the form or

[98] In the November 15, 2022 hearing on the draft Housing Element, Supervisor Preston, for example, repeatedly stated that the aim of state law is to avoid providing more funding and to instead deregulate market-rate housing as the pathway to increase affordable development. *See S.F. Bd. of Supervisors: Hearing on the Draft Housing Element 2022* (Nov. 15, 2022) (statement of Dean Preston, Supervisor). Supervisor Preston shared these same perspectives in an open letter online, as well. Letter from Dean Preston, Supervisor, S.F. Bd. of Supervisors, to Gustavo Velasquez, Director, Cal. Dep't Hous. & Cmty. Dev. (Aug. 11, 2022), https://56a418ca-94d2-476c-9a45-f491ca4a0387.usrfiles.com/ugd/56a418_6abc98cb39f3429b85a1e3f2fb69fa17.pdf.

requirements of the development. Developers also commented that the system of review, itself, incentivizes extending review timelines. There is also no mechanism to escalate projects to someone with a higher position or a deeper understanding of what the projects require. The fact that there is priority review for affordable development is also negated by the fact that other developers can pay for priority review, so there is no true prioritization in the review process. Developers also shared that the subjectivity in the post-entitlement process can trigger a second stage of planning review even after the development has proceeded to the Department of Building Inspections.

Affordable developers were emphatic that state law, like SB 35, does nothing for post-entitlement challenges. All developers grapple with inadequate interagency coordination during the post-entitlement phase of development that creates duplicative review processes, delays, and inefficiencies. Interviews and meetings also suggest that affordable development may be most impacted. Developers attribute these problems to city departments lacking a production focus, and that no single person or department is sufficiently empowered to monitor the process. One stakeholder described post-entitlement as a “kickball game” with developers going back and forth between departments and personnel. Planners also described problems with permitting processes as at least in part due to a poorly structured operation that lacks adequate policy and transparency, so staff are unaccountable in the way that planning staff are held accountable. Developers shared similar perceptions. Stakeholders describe the lack of an intermediate administrator between DBI and the Building Inspection Commission (an administrator within the city’s executive branch) as a deficiency that contributes to inadequate coordination within and between departments.

Affordable developers shared significant difficulties with utilities processes for affordable development that led to extended periods of no power during and after construction. One developer characterized the San Francisco Public Utilities Commission (SFPUC) power requirements as “crippling” for affordable housing development. All developers expressed frustration with Pacific Gas & Electric (PG&E), generally, with some developers describing PG&E as monopolistic and engaged in “political retribution” with SFPUC by imposing infrastructure improvements or deprioritizing projects that go through the SFPUC. Affordable developers also report challenges with poor inter-agency coordination around meeting accessibility requirements, trouble with satisfying public art requirements, and difficulty meeting local hiring requirements because of labor shortages.

Nearly all participants offered their concerns about current efforts to address challenges with DBI and permitting. One frequent comment was that any directive to improve permitting processes (for example, by shortening permitting timelines) depends on having a baseline to make improvements from, but there is no baseline because there is poor data on permitting and no one has managed to track that information.

Conclusion

We entered this research understanding that San Francisco’s entitlement timeframes were much longer than other jurisdictions. (The state’s Annual Progress Report Data Dashboard would later show that San Francisco self-reported the longest entitlement timeframes across the state.) What remained unclear was *why* retaining discretion over all development creates comparatively longer timeframes in San Francisco. Neighboring jurisdictions in the Bay Area also used discretionary review to approve all multifamily housing as well, but they did not take as long. Oakland, for example, retained discretion over all development of five or more units and

the median timeframe to approval was six months. Redwood City applied discretionary review to similar housing development and required *more* approval steps and the timelines were still shorter. Even entitlement in the City of Berkeley, which requires a use permit for any development, did not take as long as San Francisco. These are findings we could not explain because we did not dive into the details of how different discretionary pathways influenced approval outcomes or timeframes for specific types of multi-family housing.

Our earlier data also made it clear that San Francisco Planning prioritized 100% affordable developments—yet it was also true that affordable development did not move quickly, and the local regulatory environment was not hospitable to affordable housing despite staff efforts to quicken approvals for affordable development. In fact, our interviews from prior years signaled that even as San Francisco Planning prioritized 100% affordable development, local regulation, and local application of environmental review created risk that some affordable developers simply could not manage. Consistent with what interview and meeting participants shared, the 2014 - 2017 housing approvals data revealed there were only five 100% affordable developments entitled in those four years. Nearly three out of every four affordable housing units entitled in 2014 - 2017 depended on mixed-income development, or application of the city's inclusionary program to market-rate housing. It is important to note that before SB 35, increasing affordable housing production depended almost entirely on market-rate developers.

The data we have now, however, offers more insight into what parts of San Francisco's system generate comparatively longer timeframes and why. San Francisco, like so many other cities we have studied, continues to grapple with the consequences of inequitable land use policy from earlier decades. One of the primary tools San Francisco uses to redress past wrongs is process. Thus, like many other cities, San Francisco local law creates a procedural maze for housing entitlement through both zoning and aesthetic regulation. But what the data above tells us is that in San Francisco, the procedural maze is one with walls that move. Provisions within the Business and Tax Code and the city's Charter allow project opponents to repeatedly challenge approvals during and after planning review, and in some instances, impose new conditions of approval. No proposed housing development is immune under local law. This fosters a system of lengthy and repeated negotiations throughout and beyond entitlement.

The state asked whether San Francisco was fully implementing state housing law, and the data indicates that for the most part, the answer is no. This is true despite the diligent work of city personnel to facilitate housing approvals. What came through as a dominant theme in most interviews and meetings with developers was high regard for planning personnel combined with a heightened level of frustration with planning department processes. It was also clear that several Commissioners and Supervisors want to see more housing production, as well.

What exactly about local law blocks full implementation of state law that aims to simplify and quicken process? Stakeholders explained that the same rules which allow for repeated challenge to approvals, including post-entitlement approvals, are what invite subjective conditions of approval and constant negotiation outside of public hearings during the entitlement process. They also report that the risk of administrative appeal to local political bodies drives all planning practice, not just environmental planning practices—although environmental planning is particularly burdened. Though we found that most administrative appeals are withdrawn or denied, we heard that the beginning of an appeal creates more work for planning staff, which in turn changes the pace of all environmental planning review for all projects. All environmental determinations under CEQA occur near the end of the entitlement process (right before or at final entitlement). This practice seems to eviscerate the effects of PSA on timely approvals. If left as is, existing blanket discretionary review and planning practices will likely diminish the

effects of SB 330 as well, which targets excessive continuances and hearings, going forward. That suggests that addressing this problem requires scrutinizing both existing planning practice and the local administrative appeal process. According to most stakeholders we consulted, although many parts of San Francisco's local law need reform, the efficacy of any reform hinges on whether the city can revise its Business and Tax Code and Charter.

San Francisco's application of SB 35 yields the most insight into what legal reforms will likely expedite planning review. SB 35 changed San Francisco's application and intake process for qualifying development. Although the 2018 - 2021 data indicates that San Francisco's application intake process under local law was inconsistent with the PSA, the city regularly complied with SB 35's time constraints on planning review. When discussing what is needed to improve the housing approval pipeline in general, participants in confidential interviews shared that San Francisco needs a local ministerial process that parallels SB 35, to eliminate blanket discretionary review of all permits, thoughtful reform of local administrative appeal processes, and equitable rezoning in low density affluent areas. But no interview participant was optimistic that San Francisco could deliver on these reforms without state intervention in local power.

Also important—there was consensus among several stakeholder groups that communities within San Francisco have been harmed by the city's planning and zoning in the past, but no consensus on how the city should proceed going into the future. There was also no consensus between stakeholder groups, particularly between city staff and city officials, on what housing production would best serve the city's housing needs, on the role of local regulation in enabling or blocking housing production, the role of state law on facilitating housing production, and what the city should do to meet housing need *and* achieve spatial equity.

For example, planners and city personnel discussed the city's RHNA obligations when defining the city's housing problems. Planners described San Francisco land use policy with a wide lens, pulling in developer perspectives, neighborhood needs, and politics when discussing the effects of current policy and planning practice on production outcomes. Also notable, most city staff described how reforms could advance participation goals or spatial justice, but they also described individual policies and planning practices as pieces within a larger system that accounted for law, policy, and cyclical market conditions. Planners and city personnel offered detailed analysis of what is not working that was easy to verify using other data. City staff were clear that local legal reform would be the best solution, but also were not hostile to state laws that addressed some of San Francisco's procedural challenges.

Discussions with members of the political bodies responsible for developing and enacting the local legal reform were very different. All Commissioners and Supervisors agreed that the housing approval process was slow and needed improvement. One Supervisor even went so far as to describe San Francisco's entitlement process as difficult by design. Some Commissioners and Supervisors were also as pragmatic as staff offered robust explanations of how local regulation operates across the city, distinguishing between law and practice and explaining how politics influence planning practice and production outcomes. A few foregrounded specific and precise local legal reforms to support housing production citywide with sensitivity to equity and spatial justice within the city's existing policy framework and current market conditions. Some were deferential to planning staff as experts on what is needed in terms of procedural reform. Some were explicit in their support of program statements in the housing element that call for ministerial processes for at least some development.

But some political participants responded to questions about how policy and planning work within San Francisco with answers focused almost entirely on contributing factors to production

that were outside of the city's purview—like state funding for affordable housing. Some Commissioners focused most on how to improve implementation of the existing rules while retaining discretion in all planning review. There was also a split in how the Commissioners and Supervisors perceived state law, and the housing element process, as well. Some were explicit that they felt the state was penalizing San Francisco through the RHNA process, and that regulatory and practice reform would not resolve the challenges San Francisco is facing.

Thus, what the data also shows is that the primary gatekeepers to local policy reform do not agree with each other or city staff on the scope of San Francisco's housing need or on what the city must to do to meet that need. There is also no agreement on the relative importance of local regulation in creating, perpetuating, or ameliorating the city's housing problems.

Appendix A: Regression Supplement With Methods

In earlier writing, we found that longer timeframes within a city were not necessarily associated with more approval steps on average. But our analysis compared median timeframes and average local steps to entitlement in one city to another city. We did not explore the potential relationship between timeframes and local steps to entitlement in any single case study city. This analysis, within San Francisco only, is important because at least some procedural reform proposals assume that reducing steps to approval while maintaining discretionary review will shorten timeframes. At the same time, stakeholders describe San Francisco's regulations as creating variability and uncertainty in the approval process, even when a proposed development has few steps to approval.

Generally, within a single city, even if entitlement takes a long time overall, we expect that more approval steps extend timeframes. Theoretically, if a development conforms to existing planning and zoning and requires no local-level approvals, it should take less time than a development that requires one or more special approvals to secure entitlement. San Francisco's local law does provide for dense residential buildings in some neighborhoods, without any special approvals. San Francisco's law also allows dense residential housing in other neighborhoods but with required special approvals. For example, development over a specific height threshold in some areas requires a Conditional Use Authorization or Large Project Authorization. If the local law is operating as we think it should, planning review might take longer when a development requires a Conditional Use Authorization before a building permit than if the development requires only a building permit. Finally, when a property owner proposes development that requires a rezoning or General Plan Amendment, it might take even longer than a project requiring a Conditional Use Authorization because what the developer is proposing is not provided for in existing planning and zoning.

But what we have heard within interviews so far is that this is not how local planning and zoning operates in practice. Most stakeholders described a process where neighbors may oppose any proposed development in any context, and planners are placed in a position of mediating disputes. Because of this, the time to entitlement (and certainty of approval) is unpredictable for all development subject to discretionary review, whether a project conforms to the local planning and zoning or not.

Stakeholders describe informal and formal pre-application processes for initial outreach and meetings to help planners, and the property owners anticipate neighborhood reaction and adjust a proposed development before proceeding through the entitlement application process. They also described a process where planners worked to mediate and resolve potential conflicts before proposals went in front of approval bodies (like the Planning Commission).

But stakeholders also note that although a property owner may begin negotiations with neighbors before the application (and in cases where the Planning Department requires a Preliminary Project Assessment, sometimes before that process), and continue negotiations throughout planning review, project opposition may not manifest until late in the process. They emphasized that smaller buildings are most vulnerable. Therefore, no matter what work the planners and property owners put into anticipating and mediating disputes over proposed projects, the process allows the risk of opposition for new, sometimes unpredictable, reasons to remain. Because opposition can emerge at any time, stakeholders say this makes the timeframes and approval outcomes uncertain.

These statements suggest that we should explore the entitlement data to see if entitlement for code compliant development is associated with shorter timeframes as compared with entitlement that requires special approvals or deviates from planning and zoning. Theoretically, code-consistent development should always move faster. One way we do this is to explore relationships between local steps to entitlement and timeframe to entitlement. If longer timeframes are associated with more approval steps, then policy proposals that focus on eliminating or consolidating approval process steps to expedite housing approvals should help shorten timeframes. But if more approval steps are not associated with longer timeframes, this means that something else is occurring to lengthen timeframes. If that is true, reducing the number of discretionary approval steps, alone, may not resolve the uncertainty and unpredictability stakeholders describe. **Although analyzing our entitlement dataset using regression cannot "prove" or "disprove" what stakeholders have shared, this additional analysis allows us to use more than one method and multiple data points for insights, which is more reliable than relying on only one method or data point.**

We chose to run linear regression models, rather than probability models, because we are interested in understanding what drives project timeframes in San Francisco—not necessarily what drives extreme delays within the context of San Francisco's regulatory environment. If we used a probability model, we would need to generate a binary variable as the dependent variable in our analysis. This variable would distinguish observations that are delayed (in terms of the project timeframe). San Francisco's extraordinarily long entitlement timeframes make this very difficult. For example, generating a binary cutoff for delayed timeframes at the median would lead to a cutoff of 39 months. That means we would be defining observations with incredibly long timeframes as "not delayed" because they were below this median, and then using the probability model to see whether certain factors generate delays beyond 39 months. Since most discretionary projects in San Francisco are delayed, even if they are delayed for less than 39 months, a probability model with a binary dependent variable is not best suited for our analysis. Also, that model would ignore project factors that are associated with two- or three-year timeframes because it would classify these projects as "not delayed."

Regression Analysis Using 2018 – 2021 Data (OLS Models)

We first analyze the existing associations between local land use approvals[99] required for entitlement in 2018 - 2021 and project timeframes using a multivariable, Ordinary Least Squares Regression (OLS). First, we ran a simple, OLS regression using local land use approval steps as the single independent variable, and timeframes as the dependent variable.

We used the statsmodel Python module to run all regressions in this analysis. We calculated all regression coefficients with robust standard errors (Errors of Order 3 (HC3)) to account for the existence of outliers and other issues within the data such as heteroskedasticity (variation in regression errors across our observations) and provide a small sample correction. Note that if we did not use robust standard errors with a small sample and clustered observation correction, the standard errors of our estimates would be smaller, so the standard errors and subsequent hypothesis testing are conservative.[100]

We observe a positive association between approval steps and timeframes. Interpreting the results of this simple regression, an additional approval step is associated with approximately a four-month increase in timeframes. While this positive association exists, our data suggests that observations with little to no local land use steps can take a long time. From this simple regression, we expect a development requiring a discretionary building permit only to take 32 months. Further, out of the 64 observations with less than a single local land use approval step, 23 observations (~36%) are above the mean (~38.6 months) and 26 observations (~41%) are above the median (~34.9 months) timeframe in San Francisco. While this positive association exists, timeframes are variable, regardless of the number of approval steps.

Even if such a relationship between local land use approval steps and timeframes exists, the magnitude of the relationship is, arguably, small. Meaning, the impact of approval steps on timeframes is small. From this simple regression, an additional approval step is associated with an additional ~3.7 months for approval. Given that the mean timeframe for all 111 observations is ~38.56 months, the impact of an additional approval step on timeframes is minimal.

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[99] We define local land use approval steps as any discrete approval step required for entitlement under local law, not including the California Environmental Quality Act (CEQA) compliance pathway step.

[100] In regression analysis, the errors are defined by the difference between the observed values of the dependent variable (in this case, project timeframes) and values predicted by the regression specification. Accurate estimation of the uncertainty of OLS-predicted values generally depends on constant errors across observations. However, in this study, we do not assume that error is constant (homoscedasticity). For instance, model error might be larger for observations with substantially longer timeframes (i.e., where projects take two to three times longer than the median timeframe). When we use robust standard errors, we no longer assume that errors are constant across all observations, which can mitigate the impacts of this regression analysis being based on observational data. Further, we are using a small sample correction to mitigate the fact that our universe of observations is relatively narrow and to account for the natural clustering in timeframes that occurs at each local land use approval step.

Figure 6: Regression 2018 - 2021 Observations (No Controls)

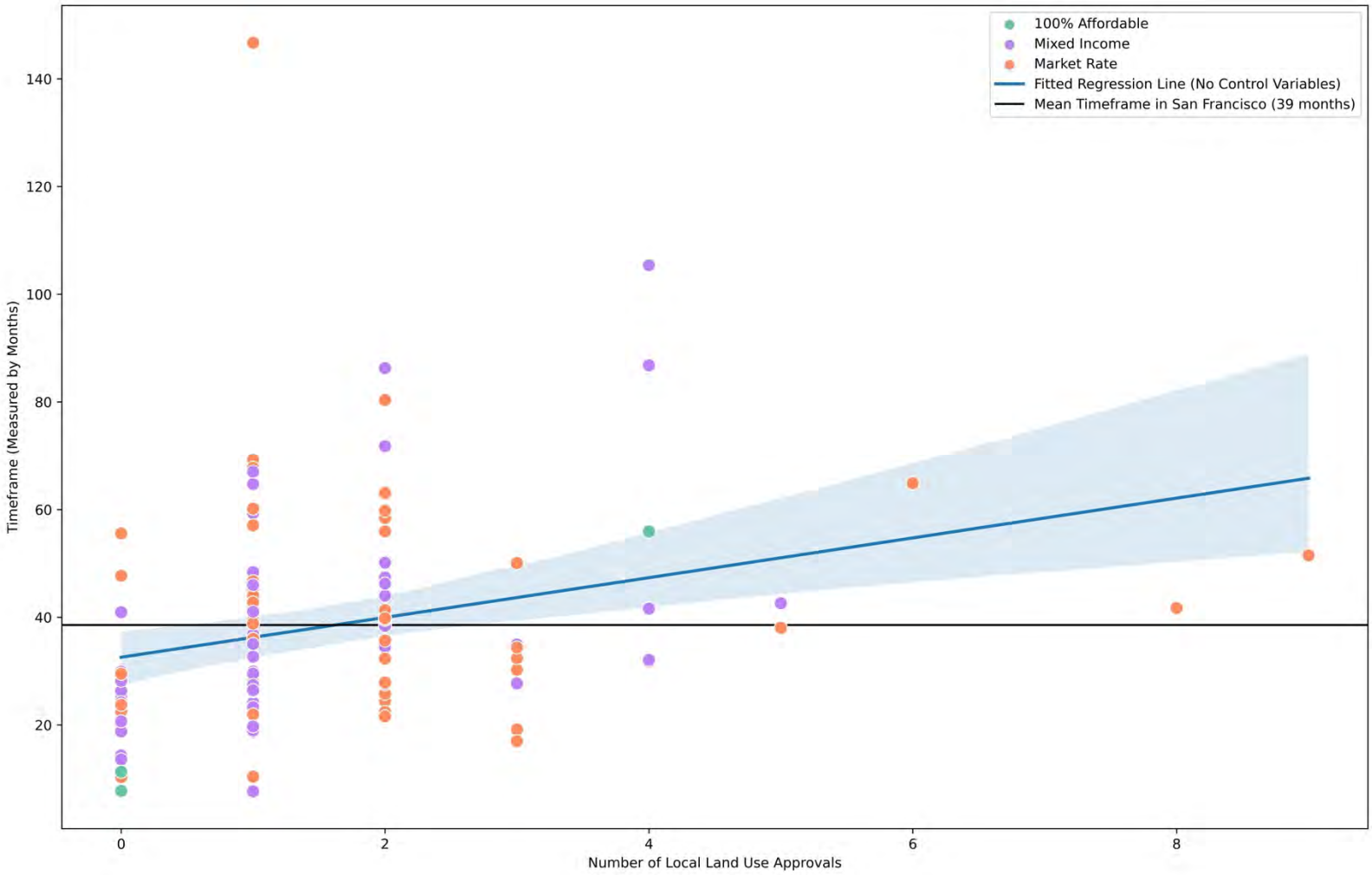


Figure 6 depicts the simple regression of time frames on local land use approval steps. In this graph, the translucent bounds represent the confidence interval for the regression line. Several observations, however, fall outside the bounds of the confidence interval for the regression line. The confidence interval indicates the uncertainty in our regression estimates. This uncertainty could suggest model misspecification.[101] More specifically, the number of approval steps does not adequately capture the variation in project timeframes. **This model misspecification could suggest that there are unaccounted variables that influence the existing relationship between the number of approval steps and timeframes.**

[101] A large confidence interval is also often a function of sample size. In other words, because of a limited amount of data, our regression estimates are uncertain. However, we capture a complete dataset of all discretionary, non-ADU entitlements greater than five or more units in 2018 - 2021. Because of this, we are not making statistical inferences based on a sample, but rather generating quantitative analysis on an entire population (and interpreting our results within the context of this population only). Therefore, theoretically, there is no statistical uncertainty through sampling uncertainty.

We controlled for project characteristics that based on interviews and meetings we assumed might influence the relationship between timeframes and the number of local land use approvals. One such example is affordability thresholds. We heard from planners, Commissioners, and Supervisors that the city wants to prioritize 100% affordable development. To control for affordability, we placed the 111 observations into three categories: market-rate, mixed-income, and 100% affordable. To avoid perfect multicollinearity, we did not include the indicator variable which controls for observations that are market-rate. However, due to the model specification, we are still controlling for all affordability classifications in our regression. Below is the distribution of all 111 discretionary observations, by affordability classification:

1) Market-Rate **(N=55)**
2) Mixed-Income **(N=52)**
3) 100% Affordable **(N=4)**

We also controlled for local process characteristics related to the intensity of the approval process—which is distinct from whether an approval process requires more steps. What we are referring to here is how a project proponent may seek only a Variance, or only a Conditional Use Authorization (CUA), or only a Large Project Authorization—and each may require one approval step, but these approval processes are quite different in terms of what we describe as process intensity. A Variance in San Francisco usually requires approval from the Zoning Administrator without a public hearing (though the public may request a public hearing in front of the Planning Commission through the exceptional Discretionary Review process). A Conditional Use Authorization and Large Project Authorization always requires a hearing in front of the Planning Commission. Interviews reveal, however, that the Planning Commissioners interpret the Housing Accountability Act as not applicable to Large Project Authorizations—and that they have the discretion to deny the Large Project Authorization.

Therefore, we wanted to explore whether the *type* of approval process—not necessarily the number of local land use approval steps—is what influences increases in timeframes. We identified five distinct process categories: Discretionary Building Permit, Variance, CUA & PUD, Large Project Authorizations and Downtown Project Authorizations, and Legislative Actions. We want to explore whether observations with a more intense process are associated with longer timeframes and, theoretically, more approval steps. Below is the distribution of all 111 discretionary observations, by process category:

1) Discretionary Building Permit (**N=23)**: The building permit category represents a group of observations that are only discretionary by virtue of the Business & Tax Code provision that renders all government approvals discretionary.

2) Variance Only (**N=17**): These are observations that required a variance for approval. The observations do not require any Conditional Use Authorizations, Large Project Exceptions, or Legislative Actions.

3) CUA & PUD (**N=49**): These are observations that required a Conditional Use Authorization or Planned Unit Development (PUD) Approval. The observations do not require any Large Project Exceptions or Legislative Actions.

4) Large Project Authorizations and Downtown Project Authorizations **(N=15)**: These are observations that required either a Downtown Project Authorization or Large Project Authorization. Interviews and meetings indicate that Large Projects face significant hurdles—because they are disfavored. The issue here though is that these large projects may only require one step, and they theoretically seem to be no different than a CUA if we only consider the process in terms of both the number of approval steps and the approval body. However, the procedural step allows for waivers or exceptions to allow for a large project under the planning code. Though these do not appear to require legislative action, interviews suggest that the Planning Commission eschews these approvals, believes that they are not covered by the Housing Accountability Act, and will deny these approvals. That the Planning Commission interprets the Housing Accountability Act as not applying to the LPAs is something planners dispute, as they think this is a faulty interpretation of state law.

5) Legislative Actions (**N=7**): These are observations that required a local legislative act (Planning Code Amendment, Zoning Map Amendment, General Plan Amendment, or Development Agreement) for approval.

To assess the impact of process intensity on approval steps, we translated process intensity and incremental numeric ranking in the following order: Discretionary Building Permit (least intense), Variance Only, CUA & PUD, Large Project Authorizations and Downtown Project Authorizations (referred to collectively as Exceptions), Legislative Actions (most intense). After running a simple regression of the number of approval steps on this numeric ranking, we find increasing process intensity is associated with an increase of one approval step (rounded).[102] A project that requires a local legislative act or a development agreement for approval is expected to have three to four more approval steps than a discretionary building permit project. This makes sense, as Development Agreements are often associated with proposals that require multiple approvals. This association is statistically significant at the 1% level. While process intensity and the number of local land use approval steps are related, they are not multicollinear. The correlation coefficient between the numeric translation between process intensity and local land use approval steps is 0.63. In an additional section of this report, we run a correlation heatmap between all independent variables to identify any possible sources of multicollinearity.

We also calculate the variation in the number of approval steps for all process categories. Below is a table that breaks out the quantile distribution of approval steps, by process intensity.

[102] The slope coefficient in the simple regression 0.856.

Table 16: Variation in Number of Approval Steps, by Process Categories, Non-ADU Discretionary Observations 2018 - 2021 (N=111)

Process Categorization	Min. Steps	25th Percentile Steps	**Median Steps**	75th Percentile Steps	Max. Steps	**Mean Steps**	Standard Steps
Discretionary Building Permit (N=23)[103]	0	0	**0**	0	2	0.13	0.46
Variance (N=17)[104]	1	1	**1**	1	3	1.29	0.59
CUA & PUD (N=49)[105]	1	1	**2**	2	4	1.96	0.96
Exceptions (N=15)[106]	1	1	**1**	2	5	1.60	1.12
Legislative Acts (N=7)[107]	1	3	**5**	7	9	5	2.94

We highlight this variation to show that process categorizations are not just a categorical grouping of the number of local land use approval steps. For instance, all process categorizations have observations that require a single approval step. However, an observation that requires only a variance is significantly different from an observation that requires only a Large Project Exception. It is because these single approval step processes are so different that we control for process in our analysis.

Finally, we also control for project size and whether the observation was in a vulnerable area. Interviews suggest that larger projects are disfavored. We control for project size (instead of just an LPA or DPA) because some proposed developments benefit from State Density Bonus Law, increasing their size, but they do not necessarily require an LPA or DPA (which is determined in part by location as well). Lastly, we control for location within a priority equity geography because interviews suggest political bodies are sensitive to proposals to build in these areas. These project and neighborhood characteristics can also impact the relationship between local land use approval steps and timeframes.

We completed several regression models to explore whether there is a relationship between number of approval steps and timeframes. Or in other words, does increasing the number of required approval steps create longer entitlement timeframes? **The regression models show that when we control for affordability characteristics, project size, location within a vulnerable geographic area, and intensity of the approval process, there is no**

[103] Out of the 23 discretionary building permit observations, one observation had an additional administrative approval. Another observation required an additional administrative approval and a Certificate of Appropriateness for approval.
[104] There are 13 observations that require only one step or only a variance for approval.
[105] There are 18 observations that require only one step, or only a CUA or PUD for approval.
[106] There are 10 observations that require only one step, or an exception (Downtown Project Authorization or Large Project Authorization) for approval.
[107] There is one observation that required only a legislative act for approval.

statistically significant association between the number of approval steps and timeframes.

This outcome supports what stakeholders say to be true in San Francisco—factors outside of law influence timeframes, and there is a lot of uncertainty of how entitlement will unfold in San Francisco no matter what a developer proposes to build. This outcome does not prove that there is no causal relationship between timeframes and approval steps; we cannot account for all confounding variables that influence this relationship. OLS identifies associations within our data only. And we are using observational data, as well. Thus, the data and methods do not allow us to prove or disprove that there is no relationship between number of approval steps and timeframes. **But importantly, the regression findings are consistent with what descriptive statistics and interviews both show—there is no easy entitlement pathway in San Francisco, and factors outside of law appear to influence entitlement outcomes. This tells us that reforms that focus on simplifying discretionary review by reducing the number of steps to approval may be insufficient to address uncertainty and lengthy timeframes to approval.**

Discretionary Non-ADU Observations 2018 - 2021 with Controls

Table 17 below shows the association between local land use approval steps and timeframes was numerically smaller and no longer statistically significant after we controlled for affordability, process intensity, and project size. These results indicate that there are factors outside of what the planning and zoning law requires of developers that strongly affect the relationship between approval steps and timeframes.

What Table 17 illustrates is that project size may impact the relationship between approval steps and timeframes in our dataset. When controlling for number of approval steps to understand the relationship between project size and timeframes, an additional unit increase in project size is associated with a 0.021 month increase in timeframes. This relationship is statistically significant at the 5% level.

Another factor that may impact the relationship between approval steps and timeframes is the intensity of the process. An observation requiring a variance or CUA/PUD is associated with an increase in timeframes, relative to a discretionary building permit observation. This relationship is diminished (in terms of significance) but is still present when we add controls. Further, an approval requiring a Large Project Authorization is associated with an increase in timeframes, relative to a discretionary building permit observation—but this association is no longer statistically significant when we add all controls (including project size).

Table 17: All Discretionary Non-ADU Observations 2018 - 2021

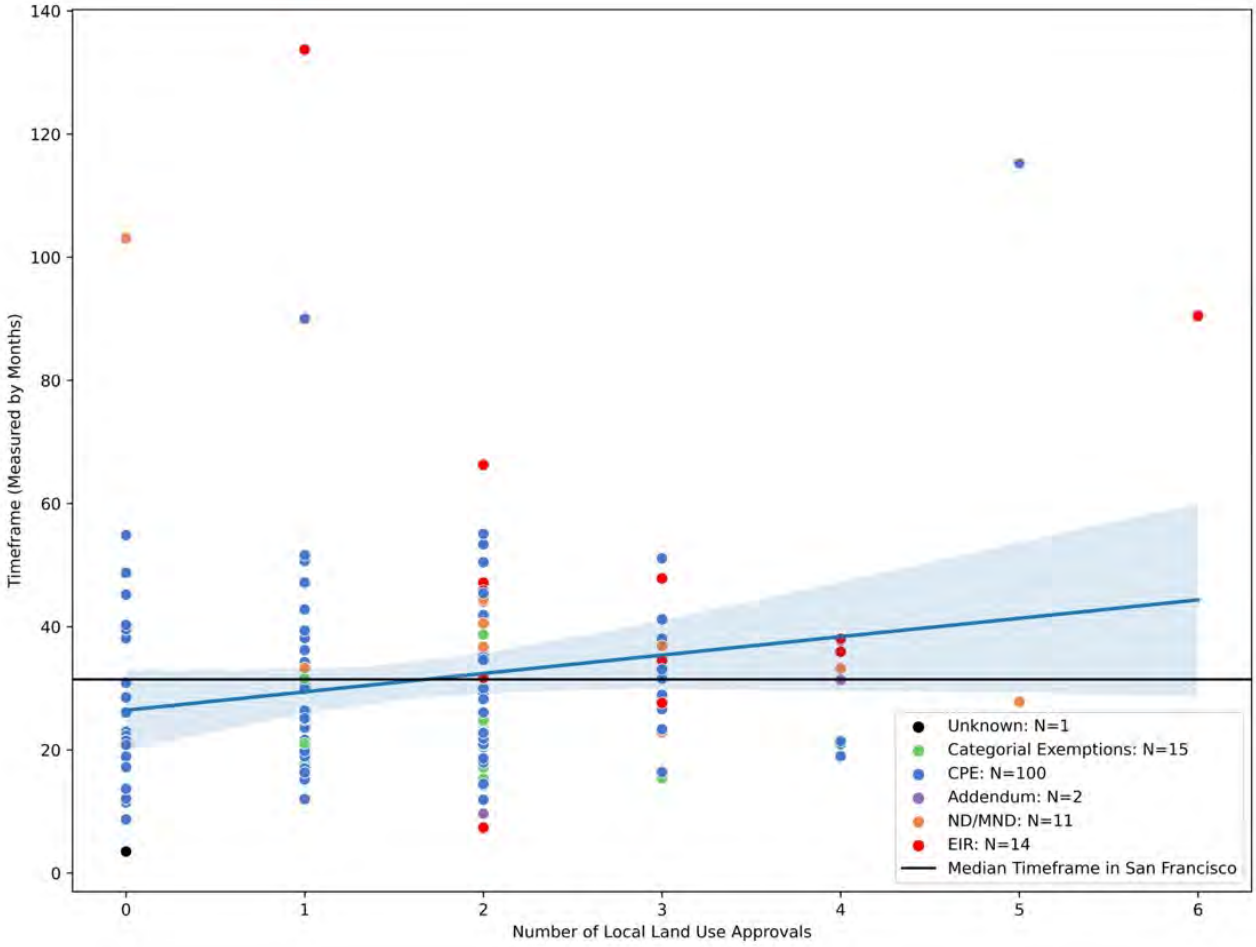
Variables	No Controls	Affordability Controls	Neighborhood Controls	Size Controls	Process Controls	All Controls
Dependent Variable: Timeframe (denoted in months)						
Num. Approvals	3.693***	3.681***	3.743***	2.794**	2.761*	2.360
	(1.244)	(1.353)	(1.260)	(1.117)	(1.637)	(1.755)
Market-rate		12.706				4.160
		(9.493)				(8.372)
Mixed Income		12.934				6.833
		(9.242)				(8.970)
Vulnerable Area			1.584			1.307
			(3.860)			(4.331)
Project Size				0.021**		0.028**
				(0.011)		(0.013)
Variance					19.468**	20.488**
					(8.799)	(9.149)
CUA & PUD					12.286***	11.115**
					(4.092)	(4.547)
Exceptions					9.987*	6.653
					(5.317)	(6.152)
Legis. Acts					6.467	0.558
					(9.207)	(11.431)
Constant	32.580***	20.246**	31.714***	32.369***	23.930***	17.656**
	(2.653)	(8.889)	(2.854)	(2.587)	(2.567)	(7.260)
Observations	111	111	111	111	111	111
R-squared	0.075	0.088	0.076	0.094	0.157	0.197
Adj. R-Squared	0.066	0.063	0.059	0.077	0.117	0.126

Notes: *** indicates coefficient is significant at the 1% level. ** indicates coefficient is significant at the 5% level. * indicates coefficient is significant at the 10% percent level. Table presents robust standard errors in parentheses.

Regression Analysis Using 2014 - 2017 Data

After running a simple regression on approval steps and timeframes using the 2014 - 2017 dataset, we find a positive association between approval steps and timeframes. This association is not statistically significant. In terms of magnitude, the association between local land use approval steps within the 2014 - 2017 dataset is weaker than in the 2018 - 2021 dataset**.**

Figure 7: Ordinary Least Squares Regression 2014 - 2017 Observations (N=140)



We also run our regressions on observations that received a Community Plan Exemption (N=100).
We did this to further explore whether local approval steps impact timeframes for projects that satisfy CEQA in the same way.

Table 18: Regression Using 100 CPE Observations 2014 - 2017

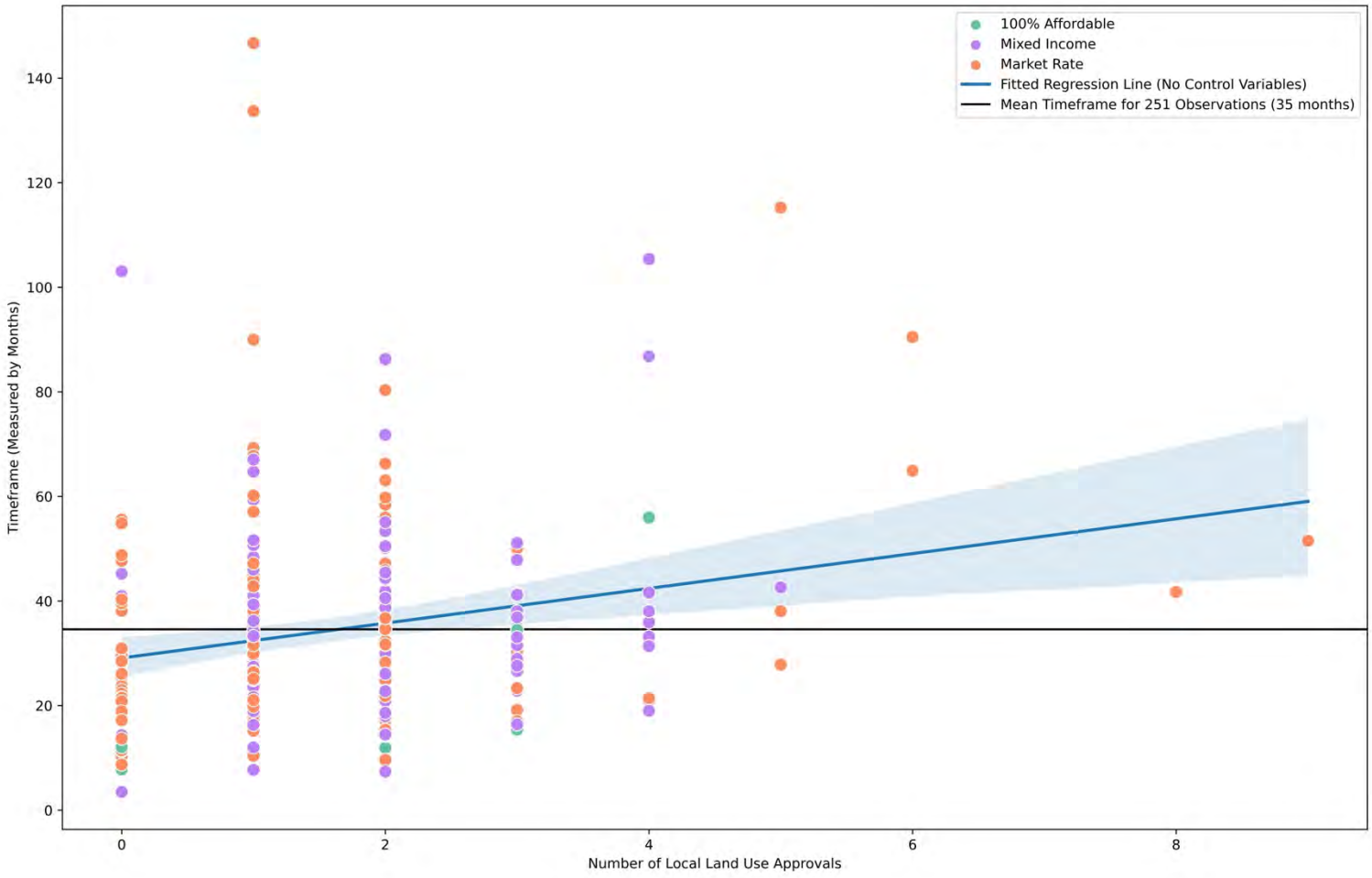
Variables	No Controls	Affordability Controls	Neighborhood Controls	Size Controls	Process Controls	All Controls
Dependent Variable: Timeframe (denoted in months)						
Num. Approvals	3.295	3.521	3.009	4.097	4.062	2.515
	(2.740)	(3.802)	(2.731)	(2.615)	(7.615)	(6.105)
Market-rate		15.159***				22.226
		(5.177)				(19.833)
Mixed Income		12.443*				23.791
		(6.614)				(19.983)
Vulnerable Area			-2.478			-1.423
			(3.184)			(3.265)
Project Size				-0.019		0.002
				(0.022)		(0.028)
Variance					4.305	3.071
					(9.589)	(9.902)
CUA & PUD					-5.188	-6.306
					(10.667)	(10.416)
Exceptions					-4.053	-3.885
					(19.060)	(17.804)
Legis. Acts					10.918	20.784
					(34.670)	(35.476)
Constant	24.966***	11.406**	26.813***	25.232***	25.700***	6.351
	(3.513)	(5.124)	(4.363)	(3.667)	(2.779)	(19.031)
Observations	100	100	100	100	100	100
R-squared	0.055	0.086	0.061	0.061	0.119	0.196
Adj. R-Squared	0.046	0.057	0.042	0.042	0.072	0.092

Notes: *** indicates coefficient is significant at the 1% level. ** indicates coefficient is significant at the 5% level. * indicates coefficient is significant at the 10% percent level. Table presents robust standard errors in parentheses.

Regressions Using 2014 - 2021 Data

We ran our regression models on the entire 2014 - 2021 dataset. We find no differences in our main findings above. Figure 3 depicts the simple regression of time frames on local land use approval steps. We found a positive association between number of approval steps and timeframes that is statistically significant. In this graph, the translucent bounds represent the confidence interval for the regression line. As was true in the regression of 2018 - 2021 data only, several observations fall outside the bounds of the confidence interval for the regression line. The confidence interval indicates the uncertainty in our regression estimates. This uncertainty suggests that there are other unaccounted variables that influence the existing relationship between the number of approval steps and timeframes.

Figure 8: Regression All Non-ADU Discretionary Observations 2014 - 2021 (No Controls)



Our results using the 2014 - 2021 dataset also show that when we control for affordability characteristics, project size, location within a vulnerable geographic area, and intensity of the approval process, there is no statistically significant association between the number of approval steps and timeframes.

We also add an additional model where we only exclude process controls. We find that there exists a positive, statistically significant association between approval steps and timeframes when we only control for affordability, project size, and area characteristics, but this relationship is numerically smaller and decreases in statistical significance when we add these controls.

Table 19: Regression All Discretionary Non-ADU Observations 2014 - 2021 With Controls

Variables	No Controls	Affordability Controls	Neighborhood Controls	Size Controls	Process Controls	All Controls Except Process Controls	All Controls
Dependent Variable: Timeframe (denoted in months)							
Num. Approvals	3.328***	3.363***	3.149***	2.882***	2.998**	2.643**	2.263
	(1.019)	(1.034)	(0.990)	(1.043)	(1.470)	(1.046)	(1.453)
Market-rate		14.441***				13.854***	11.718**
		(4.756)				(5.168)	(5.446)
Mixed Income		12.003***				11.610**	10.510*
		(4.539)				(4.933)	(5.497)
Vulnerable Area			-3.878			-3.577	-3.798
			(2.494)			(2.574)	(2.588)
Project Size				0.009		0.012	0.016
				(0.010)		(0.010)	(0.011)
Variance					10.836*		10.407*
					(5.620)		(5.763)
CUA & PUD					4.266		3.413
					(3.793)		(4.122)
Exceptions					0.859		-0.183
					(4.628)		(5.428)
Legis. Acts					5.815		4.783
					(8.056)		(9.030)
Constant	29.094***	16.346***	31.460***	28.968***	26.008***	18.847***	17.794***
	(2.013)	(4.357)	(2.548)	(2.026)	(2.466)	(4.943)	(5.063)
Observations	251	251	251	251	251	251	251
R-squared	0.052	0.070	0.061	0.055	0.080	0.082	0.109
Adj. R-Squared	0.048	0.059	0.053	0.047	0.062	0.063	0.076

Notes: *** indicates coefficient is significant at the 1% level. ** indicates coefficient is significant at the 5% level. * indicates coefficient is significant at the 10% percent level. Table presents robust standard errors in parentheses.

It is not typical for a development to have eight to nine steps to entitlement in San Francisco. Because it is possible that the relationship between approval steps and timeframes is driven by atypical projects in San Francisco (or observations that require eight or nine steps for approval), we also analyze the impact of outliers (in terms of the number of approval steps) on the relationship between approval steps and timeframes. Any observation in our discretionary, non-ADU dataset from 2018 - 2021 with more than four approval steps is considered an outlier.[108] We dropped these from our dataset and reran our regression models in the table below.

Table 20: Regression Results, Dropping Approval Step Outliers (2014 - 2021 Data)

Variables	No Controls	Some Controls	All Controls
Dependent Variable: Timeframe (denoted by months)			
Num. Approvals	1.987*	1.685	-0.756
	(1.133)	(1.309)	(1.928)
Market-rate		17.294***	14.218***
		(3.723)	(3.982)
Mixed Income		15.522***	12.450***
		(3.397)	(4.428)
Vulnerable Area		-1.829	-2.090
		(2.666)	(2.683)
Project Size		0.006	0.010
		(0.012)	(0.013)
Variance			13.440**
			(6.072)
CUA & PUD			6.949
			(4.802)
Exceptions			7.935
			(5.780)
Legs. Acts			9.840
			(7.396)
Constant	30.585***	15.720***	15.110***
	(2.205)	(3.880)	(4.142)
Observations	229	229	229
R-squared	0.010	0.041	0.075
Adj. R-Squared	0.005	0.020	0.037

Notes: *** indicates coefficient is significant at the 1% level. ** indicates coefficient is significant at the 5% level. * indicates coefficient is significant at the 10% percent level. Table presents robust standard errors in parentheses

[108] We calculated the bounds for large outliers (based on the number of approval steps) with the following formula: 1.5 * [75% Percentile – 25% Percentile] + 75% Percentile. For all 251 observations, the 25% percentile is one approval step and the 75th percentile is two approval steps. Using this formula, 1.5 * (2 – 1) + 2 = 3.5. Meaning, any observations with more than four approval steps are outliers.

We observe a positive association between approval steps and timeframes when we discard outlier observations, although this association is numerically smaller and decreases in statistical significance. When we exclude process controls in our regression—and only control for affordability, project size, and neighborhood characteristics—we find no statistically significant association between approval steps and timeframes. This suggests that the observations which required significantly more steps for approval play a role in the association between approval steps and timeframes. In other words, when we discard these observations to generate a dataset of more typical developments in San Francisco, we find no statistically significant association between approval steps and timeframe, controlling for factors outside of planning and zoning law. This also suggests that a more typical observation (an observation with two or three steps) would likely see no substantial difference in timeframe if it have been approved with fewer steps.

Robustness Checks for Analysis

We generated correlation heat maps to understand existing associations between the independent variables in our models. If high correlations exist between our independent variables, it could lead to imperfect multicollinearity.

In the following correlation heat maps, the only variables that are highly associated with each other are indicator variables that are mutually exclusive and exhaustive. As a result of these heatmaps, we feel comfortable using these variables as independent variables in our regression.

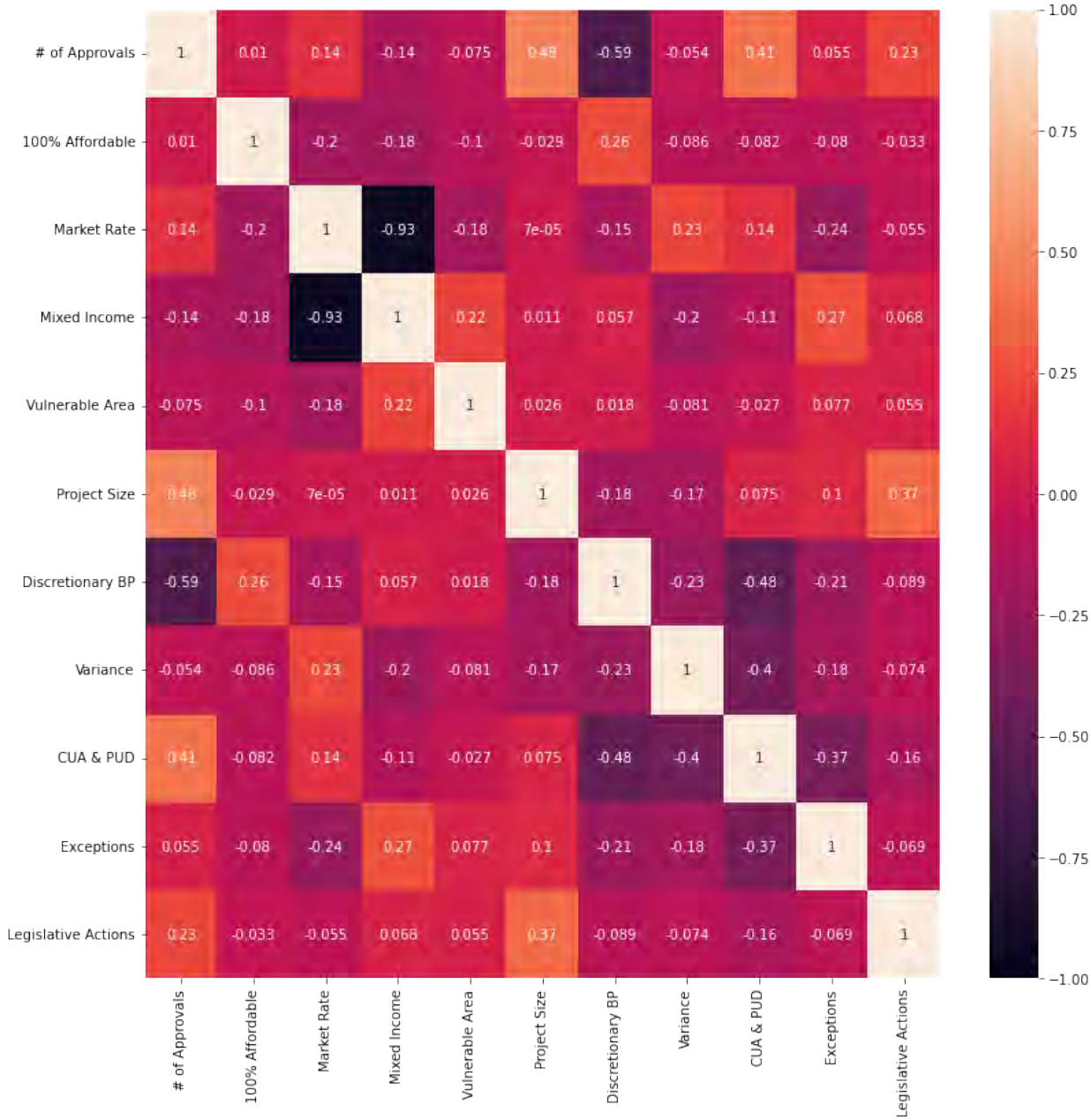


Figure 9: Correlation Heat Map for 2018 - 2021 Regression Data (N=111) with Affordability, Neighborhood, and Process Characteristics

Residual Plots for Regressions

We also run residual plots for some of our models for assessment. First, we use the residual plots to assess our model's functional form (e.g., is the association between the number of approval steps and timeframes linear?). We also use residual plots to assess the effectiveness of our control variables. We are interested in understanding if the introduction of these control variables help capture the underlying associations within our data.

Figure 10: Residual Plot and LOESS Line for Simple Regression ("No Controls" in Table 1) Using All 111 Non-Discretionary Non-ADU Observations 2018 - 2021

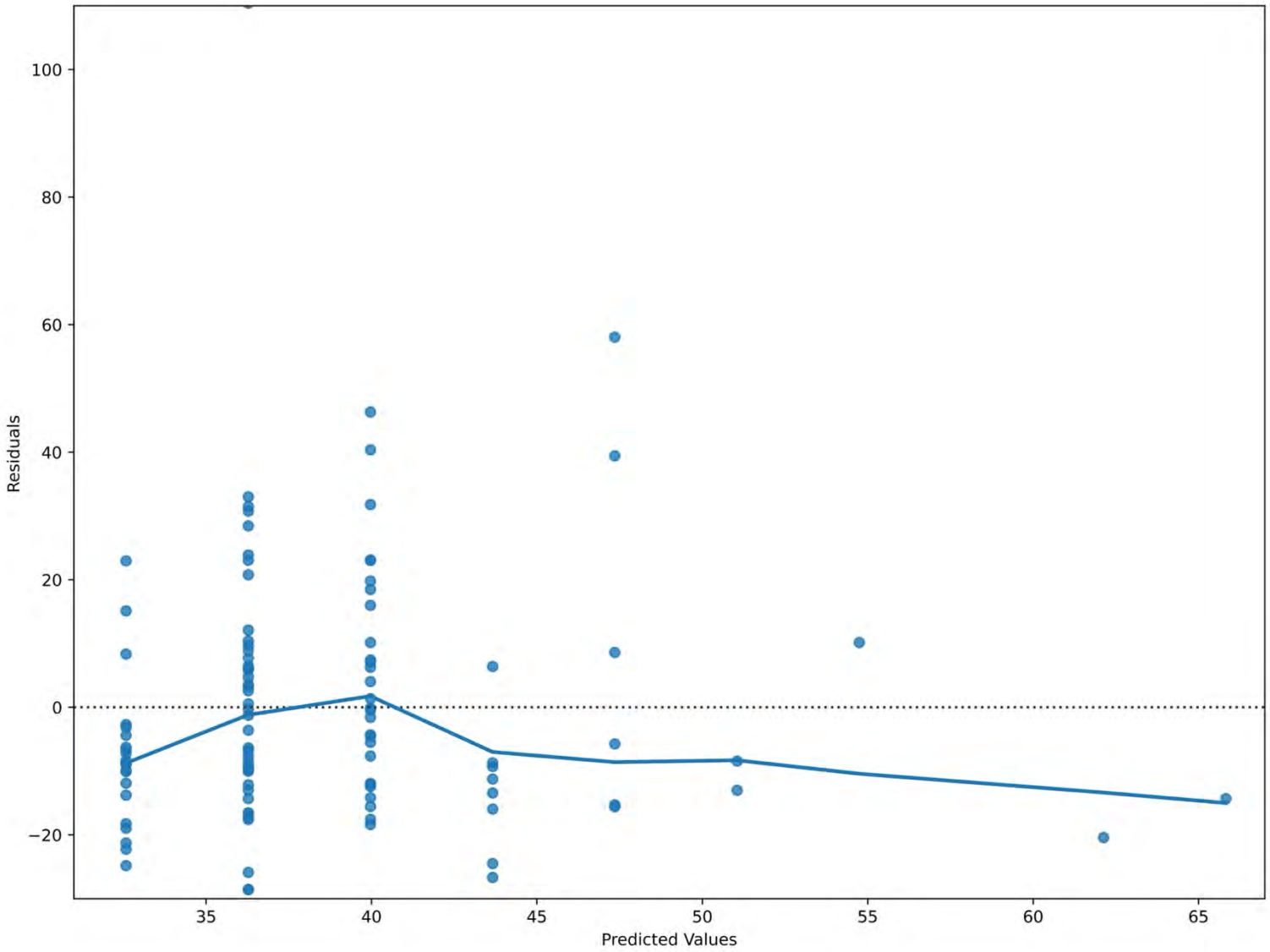
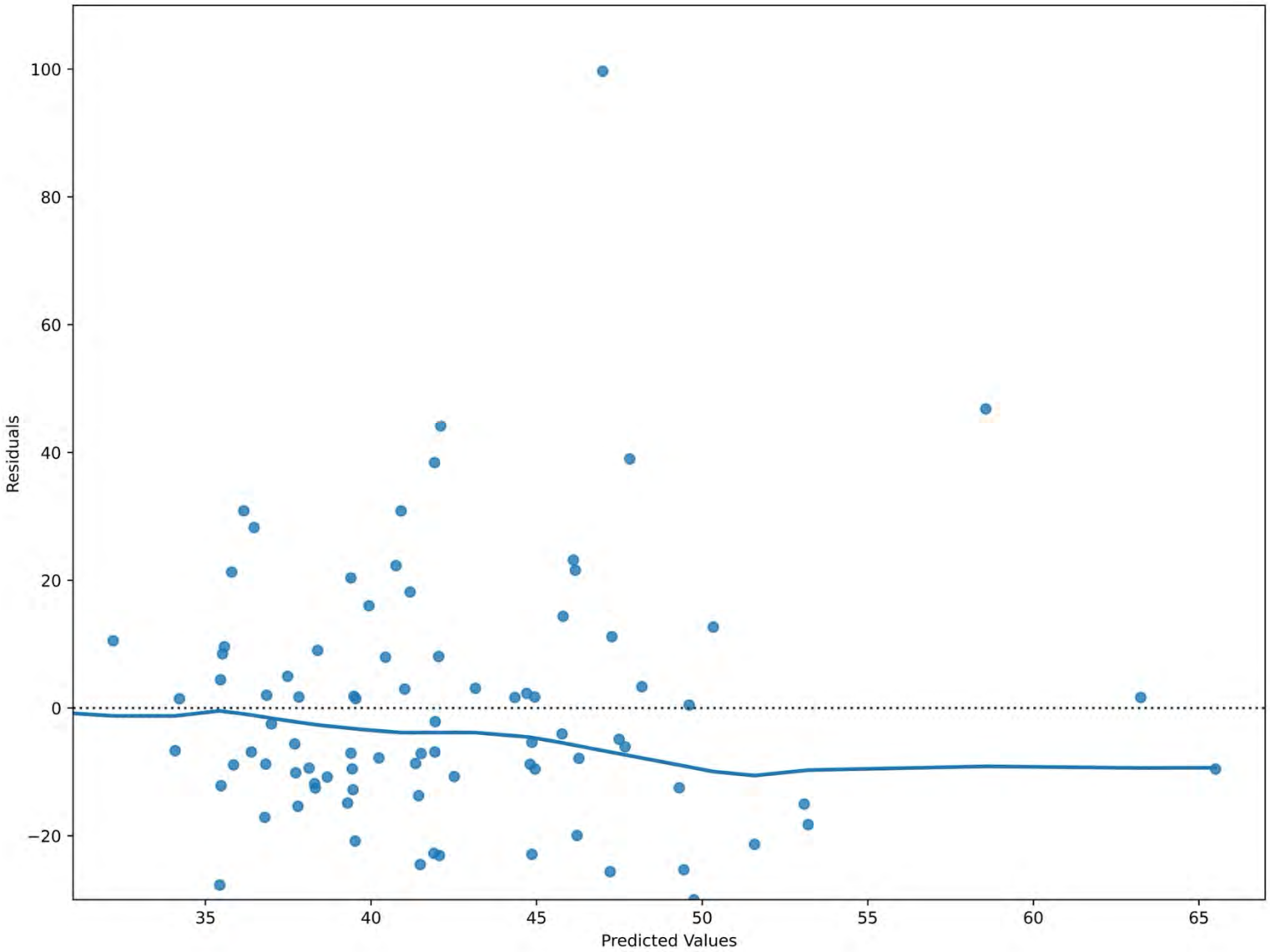


Figure 11: Residual Plot and LOESS Line for Simple Regression ("All Controls" in Table 1) Using All 111 Discretionary Non-ADU Observations 2018 - 2021



In Figure 10: Residual Plot and LOESS Line for Simple Regression ("No Controls" in Table 1) Using All 111 Non-Discretionary Non-ADU Observations 2018 - 2021, there is clustering in this plot. This indicates that the simple regression model is missing information to properly explain the relationship between the number of approval steps and timeframes. It strongly indicates that there are factors outside the number of approval steps that impacts the linear relationship between timeframes.

Figure 11: Residual Plot and LOESS Line for Simple Regression ("All Controls" in Table 1) Using All 111 Discretionary Non-ADU Observations 2018 - 2021 shows the residual plot of the regression specification when we control for process intensity, project size, neighborhood vulnerability, whether the project received an administrative appeal, and affordability. The clustering in this residual plot is less pronounced, which indicates that the controls are effective

in capturing sources of variation that influence the relationship between the number of approval steps and timeframes. Also, observe that there is no clear, consistent pattern in the residual plot. This indicates that a linear regression is most likely the best functional form for our model.

However, observe that the LOESS line is not a linear line at zero, but is rather slightly sloping downward. This indicates that there may be other omitted variables that impact the relationship between timeframes and approval steps, which may bias the magnitude of our regression estimates. Future regression work can test the use of interactive effects between independent variables or assess the impact of new control variables.

Appendix B: Spatial Distribution of Developments

Affordability and TCAC Category Cross Sectional Table (N=144), 2018 - 2021[1]

Highest Resource	Projects	Units	Affordable Units	Median Time	Mean Time
Market-rate	10	352	-	29.38	30.91
Market-rate(ADU)	1	5	-	6.41	6.41
Mixed Inc.(Discretionary)	3	150	38	28.21	31.34
100% Aff.(Discretionary)	0	-	-	-	-
100% Aff.(SB 35–Began as Disc.)	1[2]	135	135	15.39	15.39
High Resource	**Projects**	**Units**	**Affordable Units**	**Median Time**	**Mean Time**
Market-rate	9	328	-	39.81	38.15
Market-rate(ADU)	6	47	-	9.63	17.20
Mixed Inc.(Discretionary)	6	242	43	53.51	53.48
100% Aff.(Discretionary)	2	19	19	9.53	9.53
100% Aff.(Always SB 35)	2	228	228	4.47	4.47
Moderate Resource (Rapidly Changing to higher resources)	**Projects**	**Units**	**Affordable Units**	**Median Time**	**Mean Time**
Market-rate	4	47	-	32.74	37.44
Market-rate(ADU)	1	7	-	21.99	21.99
Mixed Inc.(Discretionary)	3	237	81	32.08	28.48
Mixed Inc.(ADU)	1	24	3	41.19	41.19
100% Aff.(Discretionary)	0	-	-	-	-
100% Aff.(SB 35–Began as Disc.)	2[3]	268	267	26.20	26.20
Moderate Resource	**Projects**	**Units**	**Affordable Units**	**Median Time**	**Mean Time**
Market-rate	18	1,555	-	40.41	40.30
Market-rate(ADU)	6	38	-	26.50	24.38
Mixed Inc.(Discretionary)	21	2,564	520	41.03	40.67
100% Aff.(Discretionary)	1	178	176	28.04	28.04
100% Aff.(Always SB 35)	2	175	173	4.65	4.65
100% Aff.(SB 35–Began as Disc.)	1[4]	63	63	41.39	41.39
Low Resource	**Projects**	**Units**	**Affordable Units**	**Median Time**	**Mean Time**
Market-rate	14	1,982	-	38.45	47.15

Mixed Inc.(Discretionary)	19	1,153	191	27.58	33.47
Mixed Inc.(Always SB 35)	2	720	294	6.84	6.84
100% Aff.(Discretionary)	1	15	15	55.96	55.96
100% Aff.(Always SB 35)	3	400	400	2.40	2.40
100% Aff.(SB 35–Began as Disc.)	3[5]	394	393	32.58	30.70

High Segregation & Poverty	Projects	Units	Affordable Units	Median Time	Mean Time
Market-rate	0	-	-	-	-
Market-rate(ADU)	2	13	-	19.04	19.04
Mixed Inc.(Discretionary)	0	-	-	-	-
100% Aff.(Discretionary)	0	-	-	-	-

[1] Observations that are student or group housing developments have been categorized as market-rate. We confirmed that group housing beds are not deed-restricted affordable.
[2] This is 1360 43rd Ave, originally proposed under 1351 42nd Ave. This project began as a discretionary entitlement. We use the earliest file date to calculate timeframes.
[3] The two SB 35 projects in this category of Moderate Resource (Rapidly Changing) began before SB 35 was signed into law, which influences timeframe calculations in this neighborhood classification. We logged one project, 2340 San Jose Ave, as having an earliest file date of 9/21/2017. We logged a second project, 4840 Mission St, as having an earliest file date of 9/21/2016. Further, 2340 San Jose Ave does not have an eligibility determination date, though we know it received a building permit. But we excluded it from timeframe analysis.
[4] This is 2205 Mission St, which began as a discretionary project.
[5] Three SB 35 projects in this category (Low Resource) began before SB 35 was signed into law.

Affordability and 2021 TCAC Category Cross Sectional Table, 2014 - 2017

Highest Resource	Projects	Units	Affordable Units	Median Time	Mean Time
Market-rate	3	69	-	89.98	79.68
Mixed Income	1	41	6	38.70	38.70
100% Affordable	0	0	0	0.00	0.00

High Resource	Projects	Units	Affordable Units	Median Time	Mean Time
Market-rate	6	120	-	23.79	24.77
Mixed Income	5	287	27	18.94	20.92

100% Affordable	0	0	0	-	-
Moderate Resource (Rapidly Changing)	Projects	Units	Affordable Units	Median Time	Mean Time
Market-rate	4	100	-	19.50	21.48
Mixed Income	3	527	171	34.26	32.10
100% Affordable	0	0	0	-	-
Moderate Resource	Projects	Units	Affordable Units	Median Time	Mean Time
Market-rate	29	2415	-	26.37	34.31
Mixed Income	25	3071	415	31.59	35.11
100% Affordable	0	0	0	-	-
Low Resource	Projects	Units	Affordable Units	Median Time	Mean Time
Market-rate	20	1600	-	23.98	27.17
Mixed Income	39	5472	982	31.23	30.30
100% Affordable	4	400	400	13.73	14.16
High Segregation & Poverty	Projects	Units	Affordable Units	Median Time	Mean Time
Market-rate	0	0	-	-	-
Mixed Income	0	0	0	-	-
100% Affordable	1	167	167	34.49	34.49

Affordability and Priority Equity Geographies (PEG) Sectional Table, 2018 - 2021 (N=144)

Vulnerable Area, Denoted by PEG	Projects	Units	Affordable Units	Median Time	Mean Time
Market-rate(Discretionary)	26	2,377	-	36.85	43.54
Market-rate(ADU)	6	37	-	21.70	22.56
Mixed Inc.(Discretionary)	35	2,424	468	32.09	34.97
Mixed Inc.(Always SB 35)	1	270	109	6.05	6.05
Market-rate(ADU)	1	24	3	41.19	41.19
100% Aff.(Discretionary)	1	15	15	55.96	55.96
100% Aff.(Always SB 35)	4[2]	512	510	2.91	3.31
100% Aff.(SB 35–Began As Disc.)	6	725	723	32.58	31.94
Not In a Vulnerable Area, Denoted by PEG	**Projects**	**Units**	**Affordable Units**	**Median Time**	**Mean Time**
Market-rate	29	1,88773	-	36.00	36.40
Market-rate(ADU)	10		-	9.71	18.07
Mixed Inc.(Discretionary)	17	1,922	405	42.44	45.09
100% Aff.(Always SB 35)	1	450	185	7.63	7.63
100% Aff.(Discretionary)	3	197	195	11.31	15.70
100% Aff.(Always SB 35)	3	291	291	2.76	3.90
100% Aff.(SB 35–Began As Disc.)	1	135	135	15.39	15.30

Distribution of Affordable Units (Inclusive of 11 Observations From Updated APR)

2014 - 2015 Affordable Units, by 2021 TCAC Distribution (N=351 new affordable units)

Neighborhood TCAC Category	Total Affordable Units in Category	Percentage (of Total Affordable Units)
Highest Resource	0	0.00%
High Resource	3	3.70%
Moderate Resource (Rapidly Changing)	0	0.00%
Moderate Resource	194	55 .27%

Low Resource	144	41.03%
High Segregation and Poverty	0	0.00%

2016 - 2017 Affordable Units Distribution, by 2021 TCAC (N=1,817 new affordable units)

Neighborhood TCAC Category	Total Affordable Units in Category	Percentage (of Total Affordable Units)
Highest Resource	6	0.33%
High Resource	14	0.77%
Moderate Resource (Rapidly Changing)	171	9.41%
Moderate Resource	221	12.16%
Low Resource	1,238	68.13%
High Segregation and Poverty	167	9.19%

2018 - 2019 Affordable Units Distribution by 2021 TCAC, Expanded by SB 35 Affordable Units (N=1,390 new affordable units, SB 35 affordable units=896)

Neighborhood TCAC Category	Total Affordable Units in Category	Percentage (of Total Affordable Units)
Highest Resource	Total: 22 ● SB 35: 0 ● Non SB 35: 22	Total: 1.58%

High Resource	Total: 17 ● SB 35: 0 ● Non SB 35: 17	Total: 1.22%
Moderate Resource (Rapidly Changing)	Total: 336 ● SB 35: 267 ● Non SB 35: 69	Total: 24.17%
Moderate Resource	Total: 321 ● SB 35: 0 ● Non SB 35: 321	Total: 23.09%
Low Resource	Total: 694 ● SB 35: 629 ● Non SB 35: 65	Total: 49.93%
High Segregation and Poverty	Total: 0 ● SB 35: 0 ● Non SB 35: 0	Total: 0.00%

2020 - 2021 Affordable Units Distribution by 2021 TCAC, Expanded by SB 35 Affordable Units (N=1,649 new affordable units, SB 35 affordable units=1,057)

Neighborhood TCAC Category	Total Affordable Units in Category	Percentage (of Total Affordable Units)
Highest Resource	Total: 151 ● SB 35: 135 ● Non SB 35: 16	Total: 9.16%
High Resource	Total: 273 ● SB 35: 228 ● Non SB 35: 45	Total: 16.56%
Moderate Resource (Rapidly Changing)	Total: 15 ● SB 35: 0 ● Non SB 35: 15	Total: 0.91%
Moderate Resource	Total: 611 ● SB 35: 236 ● Non SB 35: 375	Total: 37.05%
Low Resource	Total: 599 ● SB 35: 458 ● Non SB 35: 141	Total: 36.33%

High Segregation and Poverty	Total: 0 ● SB 35: 0 ● Non SB 35: 0	Total: 0.00%

Distribution of Affordable Units, by Priority Equity Geographies

2014 - 2015 Affordable Units by Priority Equity Geographies (N=351 new affordable units)

	Total Affordable Units in Category	Percentage (of Total Affordable Units)
Vulnerable Area, Denoted by Priority Equity Geographies	154	43.87%
NOT in a vulnerable Area, Denoted by Priority Equity Geographies	197	56.13%

2016 - 2017 Affordable Units by Priority Equity Geographies (N=1,817 new affordable units)

	Total Affordable Units in Category	Percentage (of Total Affordable Units)
Vulnerable Area, Denoted by Priority Equity Geographies	282	15.52%
NOT in a vulnerable Area, Denoted by Priority Equity Geographies	1,535	84.48%

2018 - 2019 Affordable Units by Priority Equity Geographies (N=1,390 new affordable units, SB 35 affordable units=896)

	Total Affordable Units in Category	Percentage (of Total Affordable Units)
Vulnerable Area, Denoted by Priority Equity Geographies	Total: 294 ● SB 35: 0 ● Non-SB 35: 294	Total: 21.15%

NOT in a vulnerable Area, Denoted by Priority Equity Geographies	Total: 1,096 • SB 35: 896 • Non-SB 35: 200	Total: 78.85%

2020 - 2021 Affordable Units by Priority Equity Geographies (N=1,649 new affordable units, SB 35 affordable units=1,057)

	Total Affordable Units in Category	Percentage (of Total Affordable Units)
Vulnerable Area, Denoted by Priority Equity Geographies	Total: 732 • SB 35: 446 • Non-SB 35: 286	Total: 44.39%
NOT in a vulnerable Area, Denoted by Priority Equity Geographies	Total: 917 • SB 35: 611 • Non-SB 35: 306	Total: 55.61%

Number and Percentage of 100% Affordable Developments in Areas with a Higher Density of Vulnerable Populations, by Year.

Year	Number of 100% Affordable Entitlements	Percentage of 100% Affordable Entitlements in Sensitive Geographies
2014 – 2017 (N=5)	Total: 5	Total: 100%
2018 – 2019 (N=8)	Total: 6 • SB 35: 6 • Discretionary Non-ADU: 0	Total: 75%
2020 – 2021 (N=10)	Total: 5 • SB 35: 4 • Discretionary Non-ADU: 1	Total: 50%

Appendix C: Analysis of Accuracy of Annual Progress Report Data on Entitlements and SB 35 Approvals

We relied on Annual Progress Report data that we pulled over three periods. For the 2018 - 2019 analysis, we first built a list of observations from 2018 - 2019 APR data that we gained access to on May 18, 2020. We began collecting data on these observations for related research during the 2021 - 2022 academic year, prior to working with HCD on this study. We did not collect as much information as we did for this research during that period, however. We then downloaded San Francisco's Original 2020 - 2021 APR data on or around October 2, 2022, to construct our original observation list for data collection. We then downloaded 2021 APR data on February 18, 2023. Then we downloaded all four years—2018 - 2021—APR data on July 14, 2023, from the state data dashboard to do a final check to confirm if we had any additional observations that may have come in through corrected reporting for any one of these four years. We also separately reviewed environmental review determinations to identify any possible observations not included in any APR data.

San Francisco reported 72 entitlements or SB 35 approvals in 2018 and 2019 on the report we accessed dated May 18, 2020.

- Of the 72 entitlements or SB 35 approvals from 2018 - 2019, we determined that 45 of these observations (~63%) were entitled in 2018 - 2019 and reported in the correct year.
- Therefore, 27 entitlements or SB 35 approvals (~38%) in the 2018 - 2019 APR (N=72) were incorrect reports.
- We found an additional seven entitlements or SB 35 approvals issued in 2018 - 2019 that San Francisco reported in another year (or the wrong year).
- The 2018 - 2019 APR Report also missed 33 entitlements issued in those years, which we found from reviewing San Francisco's Environmental Review Documents and Planning Commission Agendas.

San Francisco reported 82 observations entitled in 2020. San Francisco reported 30 entitlements or SB 35 approvals in 2021. Combined, San Francisco reported 112 entitlements or SB 35 approvals across 2020 - 2021.

- Of the 112 observations from 2020 - 2021, we determined that 45 of these observations (~40%) were entitled in 2020 - 2021 and San Francisco reported the correct year.
- We found an additional 18 entitlements or SB 35 approvals issued in 2020 - 2021 that San Francisco reported, but reported as entitled in the wrong year.
- 67 observations (~60%) in the 2020 - 2021 APR (N=112) are incorrect reports.
- Most, or 62 (out of 67), incorrect reports in the 2020 - 2021 APR are from Reporting Year 2020.
- The 2020 - 2021 APR data also missed an additional 21 entitlements, which we found through reviewing environmental review determinations.

In the inaccurate reporting across 2018 - 2021, we determined six entitlements that San Francisco incorrectly reported in 2018 - 2021 were entitled sometime in 2014 - 2017.

We also used the July 14, 2023, download of San Francisco's Annual Progress Reports to HCD a final time to run a second audit of the 2018 - 2021 APR before completing all analysis. In total, San Francisco underreported on 69 entitlements or SB 35 approvals across those four years.

From:	Howard
To:	Board of Supervisors (BOS); Calvillo, Angela (BOS); Carroll, John (BOS)
Cc:	Lurie, Daniel (MYR); Sauter, Danny (BOS); dennis-phillips@sfgov.org; rachel.tanner@sfgov.org; Chen, Lisa (CPC); So, Lydia (CPC); Moore, Kathrin (CPC); Imperial, Theresa (CPC); Braun, Derek (CPC); Campbell, Amy (CPC); Mcgarry, Sean (CPC); Williams, Gilbert A (CPC); CPC-Commissions Secretary
Subject:	UPZONING: ANALYSIS: PERFECT PLANNING = ICONIC BEAUTY + HOUSING
Date:	Monday, December 1, 2025 6:02:46 AM
Attachments:	~~~~PERFECT PLANNING = ICONIC BEAUTY + HOUSING 12-25.pdf

This message is from outside the City email system. Do not open links or attachments from untrusted sources.

FOR HEARINGS ON UPZONING PLAN
TO: Board of Supervisors
CC: Mayor Lurie/ Office, Planning Commission/ Staff
ATTACHED: PERFECT PLANNING = ICONIC BEAUTY + HOUSING

An entertaining and informative analysis of the history of Waterfront Land-Use Battles, development fights, upzoning, housing options, affordable housing around the world and photos.
Best Regards, Howard Wong, AIA
P.S.: Please include in Board Package---online and printed (if possible) for public education.

PERFECT PLANNING = ICONIC BEAUTY + HOUSING

OPPOSE WATERFRONT UPZONING *Please share this!*

SEE BELOW: HISTORY OF SF WATERFRONT LAND-USE BATTLES:

PROTECT WATERFRONT BEAUTY AND HISTORIC NEIGHBORHOODS AS ECONOMIC ASSETS
San Francisco's waterfront/ hilltop beauty is priceless. Environmental capital, like physical/ visual links to the Bay, has quantifiable value. The City's Mediterranean beauty differentiates it from most cities. Tourism attracts 23 million visitors and $9 billion/ year. Public vistas fuel a real estate industry of up to $10 billion/ year. Conservatively, waterfront beauty has a $2 billion valuation/ year---for perpetuity.

History makes the case for Voter Approval of waterfront development/ height increases
Generations of San Franciscans have fought to protect the beauty and scale of the northern waterfront. Upzoning at the northern waterfront would override General Plans, urban design/ environmental elements, planning priorities, design guidelines, settled law, ballot measures, legislation, codes, and voter advocacy for a Mediterranean scale---with building heights tapering gently upward to hilltops.

Planning codes have reinforced the waterfront's 40-foot height limit as a benchmark for tapering heights---protecting visual corridors to the bay. Public and legal directives have elevated environmental beauty as a priority, aspiring to the beauty of Venice, Florence, Santorini, Paris and great places that have protected their timeless treasures and World Heritage Sites---actual and potential.

HOUSING: SUPERLATIVE OPTIONS *Please share this!*

INSTEAD OF PLANNERS, HIRE MATHEMATICIANS AND FINANCIERS TO CREATE NEW HOUSING.
San Francisco's Chief Economist deems the SF Upzoning Plan as unrealistic. ***Why approve a deleterious upzoning plan, harming neighborhoods and waterfronts, when better options exist?*** Throughout the world, cities/ countries/ people have built vast amounts of affordable housing for their growing populations. Besides, San Francisco has already built, entitled more projects, and forecasts more development than almost any city in the region and state.

Mathematicians can finetune hypotheses and calculate housing construction accurately.
Depending on the timeline, completed projects, in-progress projects, entitled projects, proposed projects (more every day), untapped zoning capacity, infill development, availability of public land, new financing plans, new area/ neighborhood plans, and revised incentives/ housing types/ unit sizes/ densification, San Francisco can likely meet its RHNA (Regional Housing Needs Allocation)---without flailing citywide upzoning. Rather than number of housing units, the focus should be on the number of people housed.

Financiers can coalesce all funding to effectively build housing: $20 billion MTC Regional Affordable Housing Bond (2028 as a revolving fund), local/ state housing bonds, grants, trust funds, tax credits, tax increment financing, low-interest loans, public banks, nonprofits, philanthropy, partnerships, rent subsidies, and more. Many countries have affordable housing strategies and programs---worth emulating. ***Affordable housing is not for lack of zoning, but lack of comprehensive planning.***

DO THE MATH: HOUSING TAKES MANY FORMS: After the 1906 Earthquake, 250,000 San Franciscans were homeless (60% of the population)---quickly housed in tens/t camps and tiny redwood cottages. Today, the homeless instinctively gather in encampments, RV/ car clusters, for community and self-support. As seen throughout the world, affordable housing can take the form of cooperative housing, micro-housing, shared housing, land trusts, accessory units, modular dwellings, single-room occupancies, boarding houses, public housing, dual-use spaces, and informal communities (at least for the near/ short term). Rio de Janeiro's favelas are naturally-occurring low-income squatter housing---a normal human response to homelessness. 35% of Lima's population live in squatter settlements and 50% are employed in informal jobs. Around the world, 1 billion people live in slums or other informal settlements.

AFFORDABLE HOUSING IS A PUBLIC POLICY CHOICE. Government has economic tools to invest in land, utilize public property, zone for public benefits, provide public services, incentivize smaller/ plentiful dwellings, provide flexibility in housing, give tax incentives, prioritize approvals and permitting. Not inconceivable, like China and forty other countries, government can build new cities and towns---on public land. China has built hundreds of new cities, including many with one million residents. ***The region and the state can carry its housing fair share, not just the 49 square miles of San Francisco.***

RENTCHAMBER: The Top 10 Countries with Exceptional Housing Policies
https://rentchamber.com/the-top-10-countries-with-exceptional-housing-policies/
WIKIPEDIA: Affordable Housing by Country:
https://en.wikipedia.org/wiki/Affordable_housing_by_country

GUARDIAN: The social housing secret: how Vienna became the world's most livable city
https://www.theguardian.com/lifeandstyle/2024/jan/10/the-social-housing-secret-how-vienna-became-the-worlds-most-livable-city
NPR: Could this city be the model for how to tackle the housing crisis and climate change?
https://www.npr.org/2025/06/15/nx-s1-5400642/affordable-housing-environment-vienna-climate-change
HOUSING PERSPECTIVES: What Can We Learn from the Dutch Social Housing System?
https://www.jchs.harvard.edu/blog/what-can-we-learn-dutch-social-housing-system
ASSEMBLE PAPERS: A primer on social housing in Amsterdam
https://assemblepapers.com.au/2018/12/13/amsterdam-social-housing-a-primer/
ROUTE FIFTY: Hungry for affordable housing, communities turn to land trusts **https://www.route-fifty.com/management/2024/09/hungry-affordable-housing-communities-turn-land-trusts/399784/?oref=rf-today-nl&utm_source=Sailthru&utm_medium=email&utm_campaign=Route%20Fifty%20Today:%20September%2025%2C%202024&utm_term=newsletter_rf_today**
BLOOMBERG: Why Singapore Has One of the Highest Home Ownership Rates
https://www.bloomberg.com/news/articles/2020-07-08/behind-the-design-of-singapore-s-low-cost-housing?cmpid=BBD102120_CITYLAB&utm_medium=email&utm_source=newsletter&utm_term=201021&utm_campaign=citylabdaily

WATERFRONT BEAUTY = BEST ECONOMICS ***Please share this!***

HISTORY: SF WATERFRONT LAND-USE BATTLES

Over time, by tapering heights downward towards the waterfront, public vistas and San Francisco's hills/ beauty will be preserved for all---an economic asset that attracts 23 million visitors and $9 billion per year.

SAN FRANCISCO HAS THWARTED DARWINIAN MARKET FORCES, which threaten prime waterfront sites for obstructive development. Big money is spent to push projects by the few who benefit financially---developers, contractors, consultants, public relations firms, city staff, politicians, and groups that reap donations, fees, payments, and wages. Instead, citizens/ height limits/ codes have protected our Mediterranean village-like character for all.

SAN FRANCISCO'S WATERFRONT BATTLES led to protective tapering height limits, which preserve public vistas and a Mediterranean village-like beauty for everyone. Powerful special interests attempt to override codes---to gain extraordinary favors. Each code exemption is used to justify subsequent height increases----a never-ending ratcheting upward. Learning from history, we can better appreciate the waterfront's esthetic and economic value.

The Fontana Towers led to the 40-foot height limit on the waterfront.

The Fontana Towers battle stopped five other high-rises at Aquatic Park.

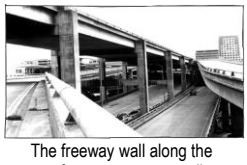
San Francisco's Freeway Revolt started a national movement.

The Embarcadero Freeway was stopped at Broadway---in mid-construction.

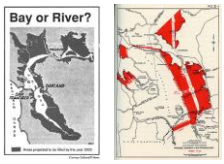
The Embarcadero Freeways demolition opened the waterfront.

Freeway plans wrapped around the entire waterfront and throughout the city.

WPA Freeway Plan, around northern waterfront---and over Columbus Ave.



The freeway wall along the waterfront was a near reality.



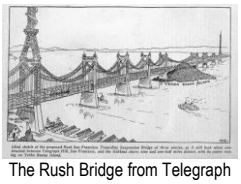
"Save The Bay" map and Reber Plan for bay infill.

Citizen activists and founders of "Save The Bay": Esther Gulick, Sylvia McLaughlin, Catherine Kerr.

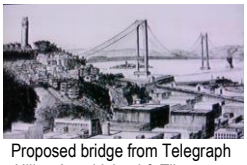
HISTORY TEACHES US that many design options exist for any site---like fully code-compliant alternatives or open space. After contentious debates, better designs often result.
FOUNDSF: The Fontana Towers and Waterfront Battle.
http://foundsf.org/index.php?title=Height_Limit_Revolt_Saves_Waterfront_Vistas
Residents of Russian Hill and Attorney Casper Weinberger (a Republican conservationist) stopped towers along the waterfront. A coalition fought for the waterfront 40-foot height limits. Later, height limits on Russian Hill were passed.

Bridge and large development proposed adjacent to Telegraph Hill---through North Beach.

Bridge and freeways proposed atop Telegraph Hill.

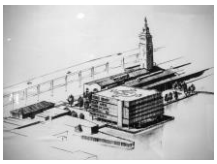


The Rush Bridge from Telegraph Hill had three stories of traffic lanes.



Proposed bridge from Telegraph Hill to Angel Island & Tiburon---stopped by Washington officials.

Russian Hill: Ten years after 40-foot height limit.

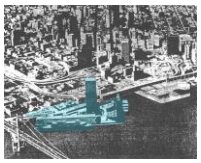


Ferry Building Project (1968) with helipad atop roof.

World Trade Center (1950) demolishes Ferry Building.

World Trade Center's terraced high-rises at waterfront.

Proposed 30-story skyscraper at waterfront.



U.S. Steel Building Complex---South of Ferry Building.

Embarcadero Crescent (1961): Ferry Building to Aquatic Park.

Embarcadero Crescent (1961): Bay development east of Telegraph Hill.

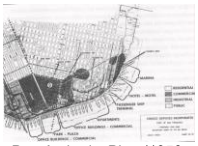
The 1963 Downtown Plan had two high-rises flanking the saved Ferry Building's tower.

Old Produce Market's tenants fought and were displaced by the Golden Gateway towers.

Instead of more Golden Gateway towers, activists fought for the low-rise Golden Gateway Commons.

ENVIRONMENTAL CAPITAL: A long-term economic measure includes incorporating "natural capital"---the value of such things as esthetics, nature, and generic diversity---into economic decision-making. From a long-range perspective, waterfront beauty has incalculable economic value---for regional drawing power and people's happiness quotient.

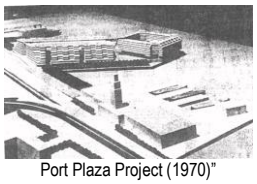
Russian Hill Towers (1958): Mies van der Rohe proposal with block-long parking garage.



Port Authority Plan (1959: Office buildings, hotel, commercial, terminal….

International Market Place (1968): Multiblock complex at foot of Telegraph Hill.

Ferry Building Plans (1968): Northern Waterfront Plan.



Port Plaza Project (1970)" Ferry Building and Pier 1.

Villamarina Project (1974): The piers and area around Aquatic Park developed.

Pei-Cobb-Fried Proposal (1980)" Office and commercial at Ferry Building and Pier 1.

Koll's Sailing Center (1980)" Piers at Bay Bridge---Hotel, restaurant, retail, marina….

SWL 330 Condo Tower (2006) built though Pier 30-32 cruise terminal cancelled.

Arena/ Condo Project (2014): Entertainment venue and condo towers around Pier 30-32---moved.

THE DEVELOPER-POLITICAL COMPLEX of financial interests works to heighten development, to escalate land values and to transfer public assets to private interests. Freeways and subways are regional escalators of real estate values by promoting well-heeled commuters. The Developer-Political Complex is a network of financial self-interests --- developers, realtors, contractors, consultants, public relations firms, politicians, city staff, nonprofits, and groups who receive donations, fees, payments, and wages. Citizens have rightfully fought for their assets.

> FOUNDSF: "The Freeway Revolt" **http://foundsf.org/index.php?title=The_Freeway_Revolt**
> **O**n November 2, 1956 the *San Francisco Chronicle* graciously published a map of the proposed and actual freeway routes through San Francisco even though its accompanying editorial was already chastising protestors: "The remarkable aspect of these protests and claims of injury is their tardiness. They concern projects that have for years been set forth in master plans, surveys, and expensive traffic studies. They have been ignored or overlooked by citizens and public official alike—until the time was at hand for concrete pouring and when revision had become either impossible or extremely costly. The evidence indicates that the citizenry never did know or had forgotten what freeways the planners had in mind for them."

WE ARE ON LIFE'S STAGE EVER SO BRIEFLY relative to the timeless beauty of the waterfront environment. It is the responsibility of each generation to protect natural assets for all.

Howard Wong, AIA