SAN FRANCISCO
PLANNING DEPARTMENT

1650 Mission St.
Suite 400
San Francisco,
CA 94103-2479

Reception:
415.558.6378

Fax:
415.558.6409

Planning
Information:
415.558.6377

Section 295 Actions Related to the Transit Center District Plan and Transbay Tower (101 1st Street)

Executive Summary

HEARING DATE: OCTOBER 11, 2012

Case Nos.: **2007.0558K**
Section 295 Action Pursuant to the Transit Center District Plan
2008.0789K
Section 295 Findings Related to 101 1st Street (Transbay Tower)

Staff Contacts: *Joshua Switzky* - (415) 575-6815
joshua.switzky@sfgov.org
Kevin Guy – (415) 558-6163
kevin.guy@sfgov.org

ATTACHMENTS:

(1) Individual Park Shadow and Usage Analysis
(2) Text of Planning Code Section 295
(3) 1989 Proposition K Implementation Memo
(4) Park Shadow Task Force Closing Statement (May 24, 2012)
(5) Transit Center District Plan Final Environmental Impact Report -- Shadow Chapter
(6) Planning Department Memo on Recreation & Parks Commissioner Questions from August 16, 2012 Informational Hearing
(7) Draft Resolution for Joint Action with Recreation & Park Commission, including attachments

SUMMARY

On August 8, 2012, Mayor Edwin M. Lee signed the ordinances adopting and implementing the Transit Center District Plan ("TCDP" or "the Plan") following approval by the Board of Supervisors in July by a vote of 10-0. The result of a multi-year public and cooperative interagency planning process that began in 2007, the Plan is a comprehensive vision for shaping growth on the southern side of Downtown to respond to and support the construction of the new Transbay Transit Center project, including the Downtown Rail Extension. Implementation of the Plan would result in generation of up to $590 million for public infrastructure, including over $400 million for the Downtown Rail Extension. Adoption of the Plan included height

reclassification of numerous parcels in the area to increase height limits, including a landmark tower site in front of the Transit Center with a height limit of 1,000 feet, exclusive of architectural sculptural features, and several other nearby sites with height limits ranging from 600 to 850 feet. The Plan Final EIR identified potential new shadows on up to nine open spaces under the jurisdiction of the Recreation & Parks Department ("RPD") that could be created cumulatively by likely development sites in the Plan area. Approval of buildings on some of these sites would thus be subject to approval under the procedures of Planning Code Section 295 (also known as "Prop K") by the Recreation & Parks and Planning Commissions.

In 1989 the Planning and Recreation & Park Commission jointly adopted a memorandum implementing Section 295, per Prop K (the "1989 Section 295 Implementation Memo" or "1989 Memo"). This memo established both qualitative criteria for evaluating shadow impacts and well as Absolute Cumulative Limits ("ACLs" or "budgets") for new shadows on certain parks in the downtown area. This memo also was the outgrowth of an initial joint meeting between the Commissions where they discussed implementation of Proposition K and methods to analyze properties that could be shadowed by new development. As part of that 1985 hearing, the Commission's adopted a memorandum describing an analytical approach to this exercise (the "1985 Memo"). Since 1989, budgets on some of these individual parks have been increased nine (9) times in response to individual projects that would add shadows to these parks. In order to implement the Plan, the Planning Department recommends revising the 1989 Memo to comprehensively revise the ACLs for seven downtown parks based on the cumulative potential shading by future buildings anticipated in the Plan's zoning framework and as analyzed in the Plan's certified EIR and adding additional qualitative criteria. Amending the 1989 Memo to revise the ACLs and establish new qualitative criteria requires a joint action by the Planning and Recreation & Park Commissions. In amending the 1989 Memo and revising the ACLs pursuant to the Plan, the Department recommends that the Commissions adopt criteria that restricts allocation of newly available ACL for these parks to the shadow profiles that are consistent with those analyzed in the Plan FEIR.

The Recreation and Parks Commission is also scheduled to consider the project-specific Section 295 issues related to the Transbay Tower project (101 1st Street; Case No.'s 2008.0789 and 2012.0257) following the Joint Hearing. A separate staff report was prepared for that item. The Tower is a proposed 1,070'-tall 1.35 million square foot office building adjacent to the Transbay Transit Center at the southeast corner of Mission and 1st Streets. This tower is intended to become the centerpiece of the downtown skyline and mark the front door of the Transit Center. The Transbay Tower is on land currently owned by the Transbay Joint Power Authority ("TJPA"), which would sell the property to the project sponsor (Hines Corporation). As intended by State legislation, the price paid for the property will be used to fund the Transit Center. The Transbay Tower would cast new shadow on eight parks, six of which have ACLs. In order for the Planning Commission to approve the Transbay Tower project, Section 295 requires that the General Manager of the Recreation & Park Department (RPD), in consultation with the Recreation and Park Commission review and comment on whether any new shadows cast by the project would be adverse to the use of those parks. The findings of the General Manager are based on the qualitative criteria established in the 1989 Memo. (For the parks with ACLs, availability of ACL is

a pre-condition to considering such a determination.) The act of the RPD General Manager making such a recommendation and subsequently the Planning Commission making a determination, for a project that would add shadow to a park with available ACL is colloquially referred to as "allocating" ACL to that development project (and reducing the available ACL accordingly).

The Planning Commission would consider the approval of the Transbay Tower project, including the determination regarding shadow impacts, at a subsequent hearing, scheduled for October 18, 2012.

This staff report is an update to and revision of the staff report prepared for the Planning Commission's September 27, 2012 informational hearings on the abovementioned actions.

PRELIMINARY STAFF RECOMMENDATIONS

Joint Planning and Recreation & Parks Commission Action:

(1) Jointly amend the 1989 Section 295 Implementation Memo to:

(a) Increase Absolute Cumulative Limits for seven specified parks* based on the analysis for the cumulative development in the Transit Center District Plan Environmental Impact Report certified by the Planning Commission on May 24, 2012. (*Portsmouth Square, St. Mary's Square, Union Square, Justin Herman Plaza, Maritime Plaza, Boeddeker Park, and Willie Woo Woo Wong Playground)

(b) Adopt criteria for each of these parks to be considered by the Planning Commission and Recreation & Parks Department General Manager in future determinations under Section 295 that:

(1) Newly available ACLs may only be allocated to buildings whose shadow profiles are consistent with those analyzed in the Transit Center District Plan's certified EIR; and

(2) The "public good" of any project considered for allocation of new shadow within these revised ACLs be considered in the context of the public benefits of the Transit Center District Plan as a whole provided that such project is within the Plan area; and

(3) Projects must demonstrate that reasonable efforts have been made to refine final building designs in order to reduce shadow impacts below those anticipated in the Plan's EIR.

Recreation & Parks Commission Action:

(2) Adopt findings that the net new shadow from the Transbay Tower (101 1st Street) project are not adverse to the use of eight potentially affected parks (Portsmouth Square, St. Mary's Square, Union Square, Justin Herman Plaza, Maritime Plaza, Boeddeker Park, Woh Hei Yuen Park and Chinese Recreation Center) and that the project meets the above qualitative criteria, and allocate to the project available ACL for the six affected parks with ACLs (all those listed above except Woh Hei Yuen Park and Chinese Recreation Center).

PLAN OVERVIEW

The Transit Center District Plan supports and builds on the 1985 Downtown Plan's vision for the area around the Transbay Transit Center as the heart of the new downtown. The Planning Commission approved the Plan on May 24, 2012, and the Mayor signed the ordinances on August 8, 2012 adopting and implementing the Plan following approval by the Board of Supervisors in July by a vote of 10-0. An overview of the Plan was provided for the Recreation and Parks Commission at an informational hearing on August 16, 2012. An informational hearing was held at the Planning Commission on September 27, 2012 regarding the Section 295 issues related to the Plan.

The result of a multi-year public and cooperative interagency planning process that began in 2007, the Plan is a comprehensive vision for shaping growth on the southern side of Downtown to respond to and support the construction of the new Transbay Transit Center project, including the Downtown Rail Extension. In addition to laying out policy recommendations to accommodate additional transit-oriented growth, sculpt the downtown skyline, improve streets and open spaces, and expand protection of historic resources, the Plan will result in the potential to generate up to $590 million for public infrastructure, particularly the Downtown Rail Extension project ("DTX").

The Plan would create or help fund the creation of over 12 acres of new public open space in the Plan Area, which currently has no publicly-owned open space. While the majority of the fee revenue generated by the Plan is targeted for these open space improvements in the Plan Area, a portion of the projected revenues are allocated to improvements outside of the Plan area, as increased population in the Plan area would have outward rippling effects on usage and demand for open space in nearby neighborhoods. The Funding Program specifically provides for up to $12.5 million from the Plan's future Open Space Fee revenue to fund open space improvements outside of the Plan area, including $9 million for open space improvements in the Chinatown area and $3.5 million for other downtown area open space improvements. The specific projects to be funded with these monies are to be determined through future deliberations by the Board of Supervisors with input from the Interagency Plan Implementation Committee ("IPIC"), as established in Chapter 36 of the Administrative Code. It is possible that these funds could be spent to acquire, construct or improve new or existing Recreation & Parks Department Open Spaces or open spaces under the jurisdiction of other public agencies. An additional $6 million will be available from increased revenues into the Downtown Open Space Fund for Recreation & Park Department open space improvements outside of the Plan area.

ENVIRONMENTAL REVIEW

The Planning Commission certified the Final Environmental Impact Report on the Transit Center District Plan ("Final EIR") and adopted CEQA findings, including a Statement of Overriding Considerations, on May 24, 2012. A CEQA appeal was filed and subsequently withdrawn prior to a scheduled Board of Supervisors hearing to consider the appeal. On July 10 the Board affirmed the certification of the EIR by a vote of 11-0. This Final EIR provided environmental clearance for both the Plan and the Transbay Tower Project. The Recreation and Park Commission's and RPD General Manager's proposed recommendation regarding allocation of available ACL to the Transbay Tower Project on October 11, 2012 will be the first City discretionary action related to this project; and therefore, this action will rely on the Final EIR. As stated above, Planning Commission action on this project is scheduled for October 18, 2012.

ABSOLUTE CUMULATIVE LIMITS AND THE 1989 JOINT COMMISSION MEMO

Planning Code Section 295, adopted pursuant to Proposition K approved by the City's voters in 1984, requires that the Planning Commission disapprove any building permit to construct a structure exceeding a height of 40 feet that will cast shadow on property under the jurisdiction of

the Recreation and Parks Department, unless it is determined that the shadow would not be significant or adverse.

In 1989 the Planning and Recreation & Park Commission jointly adopted a memo implementing Section 295 that established both qualitative criteria for evaluating shadow impacts and well as Absolute Cumulative Limits ("ACLs" colloquially known as shadow "budgets") for new shadows on certain parks in the downtown area. Amending the 1989 Memo to revise the ACLs requires a joint action by the Planning and Recreation & Park Commissions. In amending the Memo and revising the ACLs pursuant to the Plan, the Department recommends that the Commissions adopt criteria that restrict allocation of newly available ACL for these parks only to the shadow profiles generated by the Plan area consistent with the shadow profiles analyzed in the certified Final EIR.

Section 295 and Prop K[1] do not require the establishment of Absolute Cumulative Limits, nor do they mention adoption of any particular quantitative mechanism. Section 295 required the Commissions to jointly develop implementation criteria to ensure that shadows which would be adverse to the use of parks would not be created by new development.[2] The Planning and Recreation & Parks Commission decided jointly to create such limits for certain parks in the downtown area in order to more deliberately manage the sunlight on parks in the densest part of the City. Fourteen of the approximately 220 properties under the jurisdiction of the Recreation and Parks Department have ACLs. The same overall qualitative criteria of Section 295 apply to all parks. Additional qualitative criteria were adopted in the 1989 Memo for the three downtown parks that were at that time granted ACL greater than zero.[3] Based on the deliberations and analysis leading to the 1989 Memo, the Commissions evaluated the various parks and considered the overall patterns of development in the broader downtown area, and decided to set various standards for certain parks. As the ACLs are a creation of joint Commission action in the 1989 memo, the Commissions, under the authority delegated to them under Proposition K, have the ability to revise such limits from time to time in a manner they deem appropriate based on new information and experience provided that the revisions are still consistent with the mandate of Section 295 that no new shadows may be permitted which are adverse to the use of the parks.

The establishment and revision of the ACLs is a distinct action from the consideration of the shadows cast by a particular proposed building. The former is done as a joint action of both Commissions, and the latter as individual actions. Both the Planning and Recreation & Park Commissions, as well as the General Manager of the RPD, review and consider individual developments taller than 40 feet that would cast new shadows on properties under the

[1] The full text of Section 295 is included as an attachment to this report. Note that Proposition K consisted of only the adopted and current text of Section 295.

[2] See text of Section 295 subsections (b) and (c).

[3] Civic Center (1.0% ACL), Union Square (0.1% ACL), Justin Herman Plaza (0.1% ACL). As noted above, since 1989, the joint Commissions have revised the Memo on nine occasions to increase ACLs on various parks, though no additional qualitative criteria specific to other parks have been adopted.

jurisdiction of the Recreation and Parks Department. Specifically, these entities consider whether the new shadow would be adverse to the use of a park, based on the qualitative criteria adopted in the 1989 Memo. These criteria consider the timing of the shadow (both time of day as well as time of year), as well as the size, duration, and location of the shadow, and the use patterns of those areas of the park that may be affected. The criteria also include consideration of whether the proposed development serves the public interest in terms of a needed use or contribution to urban form. If an ACL has been established for the park in question, these entities will consider the criteria and guidelines set forth in the 1989 Memo in their recommendations and determination regarding whether a development project has an adverse impact on use of the park. If it is determined that the new shadow would not be adverse to the use of the park and if an ACL has been established for a given park and there is sufficient available ACL to accommodate that project, then the quantity of shadow will be "allocated" from the ACL to the proposed project and the "available" ACL for that park reduced accordingly.

In practice, the General Manager of RPD and the Recreation & Park Commission follow this process at a public hearing, with the General Manager forwarding a recommendation to the Planning Commission following consultation with the Recreation and Park Commission. Then, the Planning Commission will consider the recommendation of the General Manager of RPD, whether the new shadow is adverse to the use of the park, and whether to allocate a portion of the ACL to the project if an ACL has been adopted and can accommodate new shadow.

TRANSIT CENTER DISTRICT PLAN CUMULATIVE SHADOW ANALYSIS

The following table from the Plan FEIR summarizes the Section 295 parks that could feature net new shading by buildings consistent with the height limits adopted as part of the Plan. There are no Recreation & Parks Department properties in the Plan area. All of the potentially affected open spaces are north of Market Street. The nearest parks are over 1,000' feet away from any buildings that might shade them, and most of the potentially affected open spaces are ½-mile or more from the Plan area buildings.

SHADOW ON SECTION 295 PARKS FROM DEVELOPMENT IN THE PLAN AREA

Open Space	Existing Shadow[1]	Permitted Shadow[2]	Shaded By:[3]	Plan Shadow[4]	Shadow w/Plan[5]	Time/Date of Net New Shadow	Maximum Shadow[6]
Union Square[7]	38.30%	0.1% (0.098%)	Pal., 50 F, TT, GGU, 181 Frmt.	0.19%	38.5%	mid-March – late September – 7:10 - 8:40 a.m.	24.5% (8:00 am, early Apr. & early Sept.)
St. Mary's Square[8]	51.90%	0.0%	TT, 50 F, GGU	0.09%	52.0%	mid- Sep – mid-October; late February – late March –8:10 - 9:10 a.m.	26.3% (8:45 am, mid-Mar. & late Sept.)
Portsmouth Square	39.00%	0.0%	TT, 50 First	0.41%	39.4%	late October – mid-February – 8:00 - 9:10 a.m.	42.5% (8:30 am, mid-Jan. & late Nov.)
Justin Herman Plaza[9]	37.60%	0.1% (0.007%)	TT, 50 F, 350 Msh.	0.09%	37.7%	early November - early February – 1:00 - 2:40 p.m.	10.1% (1:15 pm, early Jan. & early Dec.)
Willie "Woo Woo" Wong Plgrd.	52.80%	0.0%	P-F; GGU	0.03%	52.83%	early November. - early December; January – 8:00 - 8:20 a.m.	15.1% (8:15 am, mid-Jan. & late Nov.)
Maritime Plaza	68.40%	0.0%	Transit Tower	<0.01%	68.4%	early to mid-December; late December- early January – 10:40 to 11:05 a.m.	1.9% (10:45 am, late December)
Woh Hei Yuen Park[10]	n/a	n/a	Transit Tower	<0.01%	n/a	Early November and early February, approximately 7:45 a.m.	1.9% (7:44 am,* late Jan. & early Nov.)
Chinese Recreation Ctr.	n/a	0.0%	Transit Tower	<0.01%	n/a	Mid-October and mid-February, approximately 8:25 a.m.	36.5%(8:23 am,* late Feb. & mid-Oct.)
Boeddeker Park[11]	37.70%	0.244% (0.000%)	Transit Tower	<0.01%	37.70%	early June – early July, from 6:50 to 7:00 a.m.	2.9% (6:47 am,* late June)

1 Existing Shadow is the existing amount of shadow cast by existing buildings, measured by the percentage of theoretical annual available sunlight (TAAS) that would be available if no existing buildings were present (based on 1989 Planning Department analysis). TAAS is computed by multiplying the area of each park by 3,721.4 (number of hours covered by Sec. 295). n/a – Not Available

2 Permitted Shadow is the additional amount of **net new** shadow allowed (the Absolute Cumulative Limit) under Sec. 295 for each park. This includes any changes that have occurred since 1989. Bottom figure (in parentheses) indicates remaining budget available, if applicable.

3 Shaded By indicates Plan area buildings that would shade each park: TT – Transit Tower; Pal. – Palace Hotel tower addition; 50 F – 50 First Street; 181 Frmt. – 177 – 187 Fremont; GGU – Golden Gate University site tower; P-F – TJPA Parcel F; 350 Msh. – 350 Mission Street tower (at 700 feet, in accordance with the draft Plan height; this is taller than the 375-foot-tall approved project at this site).

4 Plan Shadow is the amount of net new shadow, given as an approximate percentage of the theoretical annual available sunlight, that would be cast on each park on an annual basis.

5 Shadow w/Plan is the percentage of theoretical annual available sunlight that would be shaded by existing building ***plus*** the proposed project, on an annual basis. Top number is entire Transit Tower; bottom number excludes rooftop element.

6 Maximum Shadow is the greatest amount of each park that would be newly shaded by Plan area buildings at any one moment. Percent of park area that would be shaded is given first column; dates and time in parentheses). Asterisk (*) indicates time is first minute subject to Section 295.

7 The shadow budget remaining within the Absolute Cumulative Limit (ACL) for Union Square has been partially reduced since 1989. In 2004, 69,540 square foot hours was allocated to a project at 690 Market Street, which rehabilitated and expanded the historic De Young (Chronicle) Building, now the Four Seasons Residences, reducing the 0.1 percent budget by 0.02 percent.

8 Existing sunlight and existing shadow coverage for St. Mary's Square, as calculated by the Planning Department, assumed future expansion of this park.

9 The shadow budget remaining within the Absolute Cumulative Limit (ACL) for Justin Herman Plaza has been reduced since 1989, when an ACL for this park was established at 0.1 percent, by the allocation of most of the shadow budget. In 2000, the Planning Commission allocated more than nine-tenths of the available shadow under the 0.1 percent ACL to the Hotel Vitale at Spear and Mission Streets, reducing the remaining available shadow to 0.008 percent of theoretical annual available sunlight. In 2008, the Commission allocated an additional 0.001 percent of the available shadow to a proposed vertical expansion of an office building at 100 California Street (Case No. 2006.0660K), reducing the remaining available shadow to 0.007 percent of theoretical annual available sunlight. This latter project has not been constructed.

10 No Absolute Cumulative Limit has been established for Woh Hei Yuen Park.

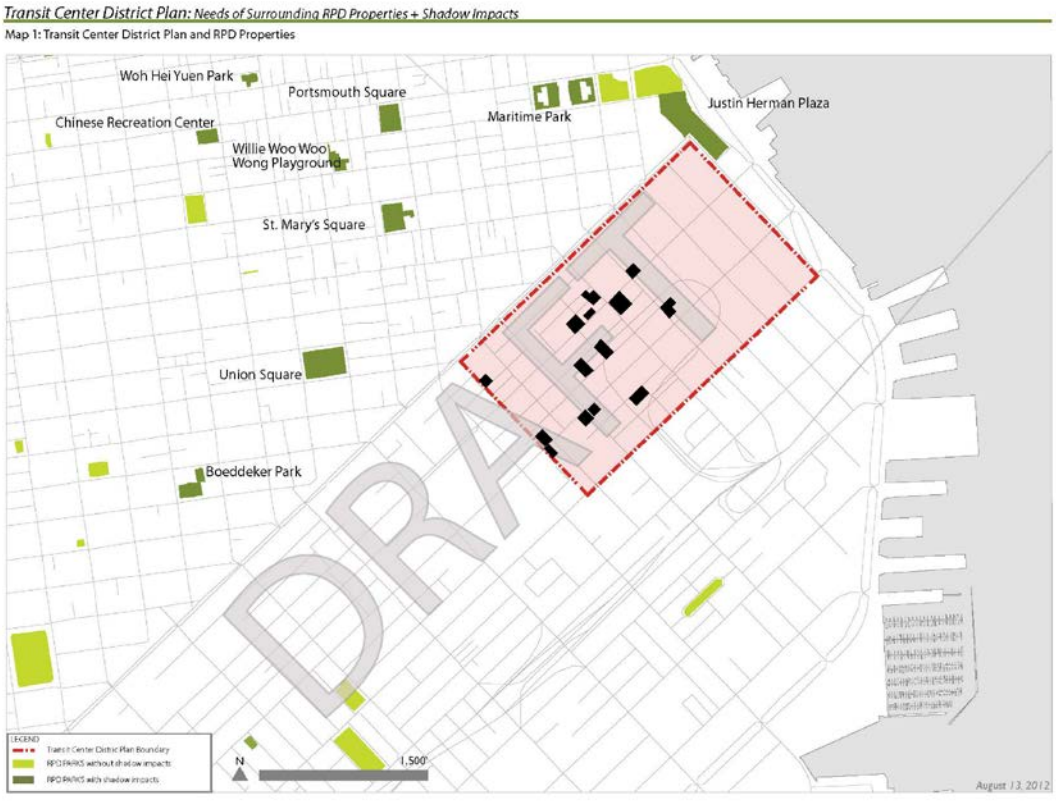
11 The Absolute Cumulative Limit (ACL) for Boeddeker Park has been adjusted three times since 1989, to accommodate the Emporium/Bloomingdales project (amendment to the Yerba Buena Center Redevelopment Project, for which the ACL was increased from 0.0%to 0.007%); the Tenderloin Neighborhood Development Center (TNDC) Curran House residential project at 145 Taylor Street (0.087%); and, most recently, in 2009, the TNDC Eddy & Jones Family Housing Project (0.244%). This latter project has not yet been constructed.

SOURCE: San Francisco Planning Department; CADP; Environmental Science Associates

All of the parks listed in the table, except for Chinese Recreation Center and Woh Hei Yuen Park, have quantitative shadow "budgets" adopted as policy by the joint Commissions[4]. Additionally, the 1989 Memo includes Qualitative Criteria to be used generally to evaluate new shadows on parks to determine adversity, including criteria specific to the three downtown parks with ACLs greater than 0.0%.

[4] No ACL has been adopted for Chinese Recreation Center, despite what is indicated in the Table in the FEIR.

To enable the buildings envisioned in the adopted Plan and rezoning to proceed, the Recreation and Park Commission and Planning Commission would have to make the appropriate findings pursuant to Section 295 and building by building that the shadows cast by the Plan's buildings would not adversely affect the usage of the parks in question as further described in this report. Cumulatively, as indicated in the table, a total of seven building sites in the Plan area could add shading to nine Recreation and Park Department properties. As the cumulative potential increased shadows from the Plan's buildings would exceed the available budgets for seven of these parks, the Commissions would need to jointly amend these budgets as indicated in the table. Assuming that there is available budget for one or more parks that might be shaded by a specific building proposal, the particulars of that building proposal would be considered at the time of entitlement of that project by the RPD General Manager regarding a determination that the new shadows from that particular development project is not adverse to the use of the parks. Upon receiving such a determination from the General Manager, the Planning Commission would consider whether the shadows from the project are adverse to the use of the park. If the Planning Commission determines that the shadows are not adverse, it would "allocate" any available budget for the park(s) to the development project in question as part of the entitlement actions for that project.



Attached to this Staff Report is an analysis of each potentially affected open space, including a description of magnitude, duration of the new shading and the relationship of the net new shading to the overall layout and usage of each park. For four of the largest and heavily used open spaces among these nine, the Planning Department conducted field observations and collected data on usage of each park before, during, and after the times of day that potential new shading from the TCDP would occur. The field observations, conducted in half-hour intervals, noted the total number of individuals using the park, including those passing through, engaged in stationary activities, exercise, play, or other notable activities. Areas of sun and shade were also noted. This data was mapped. These observations were conducted on a weekday in August 2012.

The Transbay Tower would add new shading to eight downtown parks, six of which have ACLs. This information is also provided in the attached analysis for each park. The following table from the Plan FEIR summarizes the Section 295 parks that could feature net new shading the Transbay Tower project only.

TRANSIT TOWER SHADOW ON SECTION 295 PARKS

Open Space	Existing Shadow[1]	Permitted Shadow[2]	Project Shadow[3]	Pct. new Shadow[4]	Shadow w/Project[5]	Time/Date of Net New Shadow includes Rooftop Element)	Maximum Shadow Sq. Ft.[6]	Maximum Shadow Percent[7]	Maximum Shadow Date/ Time[8]
Union Square[9]	38.30%	0.1% (0.098%)	47,165 22,935	0.011% 0.005%	38.31% 38.31%	Mid-July – mid-August; May, from approx. 7:30 to 8:00 a.m.	7,565 3,882	6.7% 3.4%	7:45 am, mid-May & early Aug.
St. Mary's Square[10]	51.90%	0.0%	70,928 52,120	0.048% 0.035%	51.95% 51.94%	Mid- September – early October; March – 8:40 - 9:10 a.m.	7,442 6,579	18.8% 16.6%	8:45 am. mid-Mar. & late Sept.
Portsmouth Square	39.00%	0.0%	321,553 277,780	0.133% 0.115%	39.13% 39.12%	Mid-October - early Dec.; early Jan. - mid-Feb. – 8:00 - 8:40 a.m.	22,523 22,523	34.7% 34.7%	8:15 am, late Jan. & early Nov.
Justin Herman Plaza[11]	37.60%	0.1% (0.007%)	277,935 119,665	0.046% 0.020%	37.65% 37.62%	Mid-November - late January – 1:00 - 1:40 p.m.	16,361 8,263	10.1% 5.1%	1:15 pm, early Jan. & early Dec.
Maritime Plaza	68.40%	0.0%	19,110 0	0.004% 0.000%	68.40% 68.40%	Early December – early January, from 10.40 to 11:10 a.m.	2,659 0	1.9% 0.0%	10:45 am, late December
Woh Hei Yuen Park[12]	n/a	n/a	510 510	0.001% 0.001%	n/a n/a	Early November and late January, approximately 7:45 a.m.	275 275	1/9% 1.9%	7:44 am,* late Jan. & early Nov.
Chinese Recreation Ctr.	n/a	0.0%	8,415 0	0.008% 0.000%	n/a n/a	Mid-October and mid-February, approximately 8:25 a.m.	10,386 0	36.5% 0.0%	8:23 am,* late Feb. & mid-Oct.
Boeddeker Park[13]	37.70%	0.244% (0.000%)	3,900 3,900	0.003% 0.003%	37.70% 37.70%	early June – early July, from 6:50 to 7:00 a.m.	1,188 1,188	2.9% 2.9%	6:47 am,* late June

1 Existing Shadow is the existing amount of shadow cast by existing buildings, measured by the percentage of theoretical annual available sunlight (TAAS) that would be available if no existing buildings were present (based on 1989 Planning Department analysis). TAAS is computed by multiplying the area of each park by 3,721.4 (number of hours covered by Sec. 295). n/a – Not Available

2 Permitted Shadow is the additional amount of **net new** shadow allowed (the Absolute Cumulative Limit) under Sec. 295 for each park. This includes any changes that have occurred since 1989. Bottom figure (in parentheses) indicates remaining budget available, if applicable.

3 Project Shadow is the amount of net new shadow, measured in shadow-foot-hours, that would be cast on each park on an annual basis. Top number is entire Transit Tower; bottom number excludes rooftop element.

4 Pct. new Shadow is the percentage of theoretical annual available sunlight (TAAS) that would be lost due to project shadow, on an annual basis. Top number is entire Transit Tower; bottom number excludes rooftop element.

5 Shadow w/Project is the percentage of theoretical annual available sunlight that would be shaded by existing building ***plus*** the proposed project, on an annual basis. Top number is entire Transit Tower; bottom number excludes rooftop element.

6 Sq. Ft. is the greatest amount of each park that would be newly shaded by the proposed project at any one moment. Top number is entire Transit Tower; bottom number excludes rooftop element.

7 Percent Coverage is the percent of each park that would be newly shaded by the proposed project at any one moment. Top number is entire Transit Tower; bottom number excludes rooftop element.

8 Date/Time indicates the date(s) during the year and the time of day when the maximum shadow would fall on each park. Asterisk (*) indicates time is first minute subject to Section 295.

9 The shadow budget remaining within the Absolute Cumulative Limit (ACL) for Union Square has been partially reduced since 1989. In 2004, 69,540 square foot hours was allocated to a project at 690 Market Street, which rehabilitated and expanded the historic De Young (Chronicle) Building, now the Four Seasons Residences, reducing the 0.1 percent budget by 0.02 percent.

10 Existing sunlight and existing shadow coverage for St. Mary's Square, as calculated by the Planning Department, assumed future expansion of this park.

11 The shadow budget remaining within the Absolute Cumulative Limit (ACL) for Justin Herman Plaza has been reduced since 1989, when an ACL for this park was established at 0.1 percent, by the allocation of most of the shadow budget. In 2000, the Planning Commission allocated more than nine-tenths of the available shadow under the 0.1 percent ACL to the Hotel Vitale at Spear and Mission Streets, reducing the remaining available shadow to 0.008 percent of theoretical annual available sunlight. In 2008, the Commission allocated an additional 0.001 percent of the available shadow to a proposed vertical expansion of an office building at 100 California Street (Case No. 2006.0660K), reducing the remaining available shadow to 0.007 percent of theoretical annual available sunlight. This latter project has not been constructed.

12 No Absolute Cumulative Limit has been established for Woh Hei Yuen Park.

13 The Absolute Cumulative Limit (ACL) for Boeddeker Park has been adjusted three times since 1989, to accommodate the Emporium/Bloomingdales project (amendment to the Yerba Buena Center Redevelopment Project, for which the ACL was increased from 0.0%to 0.007%); the Tenderloin Neighborhood Development Center (TNDC) Curran House residential project at 145 Taylor Street (0.087%); and, most recently, in 2009, the TNDC Eddy & Jones Family Housing Project (0.244%). This latter project has not yet been constructed.

SOURCE: San Francisco Planning Department; CADP; Environmental Science Associates

PARK SHADOW TASK FORCE

At the request of Mayor Gavin Newsom and Board of Supervisors President David Chiu, the Planning Department facilitated the formation of a task force to review and analyze the manner in which projects casting shadow upon Recreation and Parks Department properties are

reviewed by the two Commissions. The Task Force held five public meetings between September 2010 and May 2012. In May 2012 the co-chairs of the Task Force jointly issued a "Closing Statement," including the following recommendation:

> "The Task Force proposes that the Planning Commission and the Recreation and Parks Commission review cumulative data regarding shadow impacts from development within the Transit Center District Plan, and consider whether to allocate shadow budgets cumulatively for all development within the Plan area versus allocating shadow budgets on a project-by-project basis. Informational presentations of any potential shadowing of property under the jurisdiction of the Recreation and Parks Department by each individual project would also be made to both Commissions as projects seek entitlements."

While the Commissions have most commonly considered the characteristics of specific individual development projects in relation to approvals pursuant to Section 295, given the comprehensive and integrated nature of the Transit Center District Plan, the Planning Department believes that the Commissions should consider whether it might be more prudent to modify shadow budgets cumulatively. This is a key question for the Commissions to consider as part of future discussions related to the Plan, its shadow analysis, and resulting actions.

CONSIDERATIONS FOR CUMULATIVE REVISION TO ACLS FOR THE PLAN

Since 1989, the Commissions have approved 23 development projects (some of which have not been built) that would add net new shadow to Recreation and Park Department properties. As part of these approvals, the Commissions have amended the quantitative budgets first established in the 1989 memo for certain of these parks on nine occasions, generally in the course of considering approval of one or more specific building proposals that might add new shadow to certain parks in excess of the available budgets at that time. As stated above, Proposition K vested these Commission with the authority to jointly adopt criteria for implementing this Proposition. The Commissions' selected method for addressing this is reflected in the 1989 Memo and takes the approach of adopting ACLs for certain parks. Consequently, under the authority delegated in Proposition K, the Commission's initial adoption of ACLs and any subsequent changes to these have been addressed through an administrative process with both Commissions acting jointly. If the Commissions find, based on new information and experience, that the initially adopted criteria are unnecessarily restrictive or are ineffective to protect parks from shadow, then they, acting jointly, have the authority to change such criteria so long as the changes do not result in an adverse impact to the use of the parks.

In order to implement the Plan, the Planning Department recommends amending the 1989 Memo to comprehensively revise the ACLs for seven downtown parks based on the cumulative potential shading by future buildings anticipated in the Plan's zoning framework and as analyzed in the Plan's certified EIR.

Based on the analysis in the Plan EIR and the additional detailed analysis of each park, Planning Department staff believes that the net new shading from the Plan's buildings cumulatively are modest and would not adversely affect the use the parks in question. Therefore, amending the 1989 Memo and increasing the ACLs for the seven parks by the quantitative amounts described in the Plan EIR accompanied by the adoption of implementation criteria for each park limiting potential new shadows to those meeting the characteristics described in the EIR[5], would be consistent with the requirements and intent of Section 295 and Proposition K. Additionally, development of buildings consistent with the adopted Plan would provide substantial public benefit, particularly in providing $420 million for construction of the Transit Center and Downtown Rail Extension, over $150 million for open space and streetscape improvements in the Plan area (including over 12 acres of new open space in the Plan area), $12.5 million for open space improvements outside of the Plan area, and over one thousand units of affordable housing, in addition to providing tremendous regional environmental benefits by locating concentrations of activity immediately adjacent to the region's best transit facilities.

The intention of the Downtown Plan was to shift growth south of Market Street, particularly to the area around the Transbay Transit Center, in order to reduce development pressure north of Market Street, preserve historic buildings, and reduce the encroachment of the central business district into surrounding neighborhoods to the north and northwest, such as Chinatown, North Beach and the Tenderloin. This Plan is the manifestation of that, and is a fuller consideration of the overall landscape of the downtown and its growth for the next generation. This consideration includes the distribution and quantity of open space in the downtown. The standards and criteria in 1989 Memo were adopted based on the understanding of the Commissions at that time as to the evolution of the downtown and the broad considerations involved in interpreting and implementing the sunlight protection ordinance. A key emphasis was clearly on north of Market Street parks based on the development controls then recently adopted in the Downtown Plan and the desire to shift growth south of Market Street. At the time the open spaces north of Market Street were the primary open spaces to speak of in the Downtown, and as such, were given heightened consideration[6], absent a clear vision for how the south of Market area might develop, including the future availability of open space. Given a new landscape, now 23 years later, of a specific plan for much broader availability of open space in the downtown, including sunny open space, the criteria for evaluating these parks and the specific numeric ACLs for individual parks could reasonably be adjusted while still being consistent with the requirements of Section 295 and a conservative approach to preventing significant amounts of shadows from adversely affecting parks. It is important to note that in establishing the various ACLs for various parks in the 1989, the Commissions did consider the zoning plans in place or under consideration at the time and the potential impacts of future buildings consistent with those plans. For instance, the

[5] Including location, extent, duration, time of day, and time of year.

[6] A demonstration of this fact is that ACLs were adopted for only 14 open spaces citywide, all downtown and almost all north of Market Street. It is notable that of the 25 occasions in which the Commissions have approved projects that add shadow to parks, 9 of these occasions were on parks without ACLs outside of the downtown.

1985 and 1989 Memos speak specifically to the fact that the Civic Center Plan called for the creation of a new Main Library building that, if built to the heights considered otherwise appropriate for the district, would add shading to Civic Center Plaza, and therefore the ACL for Civic Center Plaza was set a high-enough amount to allow that building to proceed.

The 1989 Memo, in considering the impacts of specific buildings, allows the Commission to consider the "public benefit" of the projects in question. The Commissions have considered such questions of public benefit holistically in evaluating both the question of revising an ACL for a particular park at the same time as determining whether the shadow from a particular building would adversely affect the usage of that park. The potential impacts or benefits of individual buildings in the Transit Center District Plan would not be reasonably evaluated independently of their role in the broader Plan. While consistent with its overarching policy objectives, the Transit Center District Plan is a comprehensive revision and update to key aspects of the Downtown Plan based on contemporary issues, investments, and realities. Shadow considerations and a robust shadow analysis were an important factor in shaping the adopted height limits, location of such tall buildings, and overall urban form. The public benefits of each building are their contributions to the overall program (which among other benefits funds the creation of over 12 acres of open space and provides over $400 million to a major public transit project) and not a building-by-building benefit. The Plan's public benefit program would be obscured by a piecemeal evaluation of all the established ACLs as part of each individual building's approval process. Such an approach also would undermine the purposes of doing comprehensive planning for development, open space, and miscellaneous public benefits. As such, adjustments to the 1989 Memo should be considered holistically in light of the newly adopted TCDP.

One goal of the Downtown Plan, more fully fleshed out in the TCDP, is the expansion of the open space system South of Market Street in the area around the Transit Center, as well as the further enhancement. The TCDP lays out a detailed vision of the creation and funding of over 12 acres of new publicly-owned open space, the realization of which is made possible by the development of several tall buildings, some of which unavoidably cast very modest amounts of shadow on some distant north of Market parks.

As such, adjustments to the 1989 Memo should be considered holistically in light of the newly adopted revision to the Downtown Plan. The nine prior instances since 1989 when the Commissions have adjusted ACLs, they have mostly done so in consideration of individual project proposals outside of the context of an overarching neighborhood plan. The Plan is the result of the City's public initiative to rethink how best to comprehensively achieve the Downtown Plan's objectives based on today's considerations and how best to achieve the broadest improvements to livability, economic development, and sustainability to the downtown area and beyond. It is arguably more consistent with the intent, methodology, and considerations underlying adoption of the ACLs in the original 1989 Memo to revise it in a thorough manner based on a full consideration of the downtown's development and open space patterns and needs rather than on a strictly project-by-project basis.

PROPOSED ACTIONS AND PROCESS

October 11 Joint Hearing

A joint hearing is scheduled for October 11, 2012 for the Planning and Recreation and Parks Commissions. In order to implement the Plan, the Planning Department recommends revising the 1989 Memo to comprehensively revise the ACLs for seven downtown parks based on the cumulative potential shading by future buildings anticipated in the Plan's zoning framework and as analyzed in the Plan's certified EIR. Amending the 1989 Memo to revise the ACLs requires a joint action by the Planning and Recreation & Park Commissions. In amending the Memo and revising the ACLs pursuant to the Plan, the Department recommends that the Commissions adopt criteria that restricts allocation of newly available ACL for these parks only to buildings whose net new shadow profiles are consistent with the characteristics of shadows described in the Plan's certified EIR, in terms of location and extent of shadows, duration, time of day, and time of year.

Below is a chart indicating the proposed revisions to the ACLs for the various parks, as well as the specific amounts attributable and proposed to be allocated subsequently to the Transbay Tower project.

Open Space	Current Available ACL	Cumulative Plan Shadow	Proposed ACL Increase	Total ACL after Proposed Increase	Transbay Tower Shadow	Remaining ACL After Transbay Tower Allocation
Union Square	0.080%	0.190%	0.110%	0.190%	0.011%	0.179%
St. Mary's Square	0%	0.090%	0.090%	0.090%	0.048%	0.042%
Portsmouth Square	0%	0.410%	0.410%	0.410%	0.133%	0.277%
Justin Herman Plaza	0.007%	0.090%	0.083%	0.090%	0.046%	0.044%
Willie "Woo Woo" Wong Playgrour	0%	0.030%	0.030%	0.030%	N/A	0.030%
Maritime Plaza	0%	0.004%	0.004%	0.004%	0.004%	0%
Woh Hei Yuen Park	N/A	0.001%	N/A	N/A	0.001%	N/A
Chinese Recreation Center	N/A	0.008%	N/A	N/A	0.008%	N/A
Boedekker Park	0%	0.003%	0.003%	0.003%	0.003%	0%

Staff also recommends that the Commissions adopt the following evaluation criteria for their consideration in future determinations for all nine of these parks under Section 295 that:

(1) The "public good" of any project considered for allocation of new shadow within these revised ACLs be considered in the context of the public benefits of the Transit Center District Plan as a whole provided that such project is within the Plan area; and

(2) Projects in the Plan area must demonstrate that reasonable efforts have been made to refine final building designs in order to reduce shadow impacts below those anticipated in the Plan's EIR.

Following action by the joint Commissions, at the October 11 hearing, the General Manager of RPD and the Recreation & Park Commission will be asked to consider making a recommendation regarding whether the shadows being cast by the Transbay Tower project (101 1st Street) are adverse to the use of the various affected parks.

Future Actions After October 11 Joint Hearing

By acting jointly on October 11 to amend the 1989 Memo and revise the ACLs for seven parks based on a comprehensive consideration of the Transit Center District Plan, no further *joint action* by the Commissions would be necessary for implementation of the Plan or of individual buildings. However, at the time that any individual project would seek entitlements, each Commission would be required to independently consider the project, with the General Manager of RPD and Recreation and Park Commission first considering the project and then forwarding a recommendation to the Planning Commission for subsequent action when Planning considers the entitlements for that project. The Commissions would consider the characteristics of the individual projects against the quantitative and qualitative criteria in the 1989 Memo, including those adopted on October 11.

At a hearing on October 18, 2012, the Planning Commission will consider, as part of its many actions related to entitlement of the Transbay Tower project, the recommendation of the RPD General Manager regarding the Transbay Tower and make its own determination as to whether project's shadows are adverse, and whether to allocate from the budgets of the various ACLs to the project.

Based on the Plan's zoning framework and the analysis in the Plan FEIR, up to seven total buildings (including the Transbay Tower) might add new shadow to the parks listed in the table above. In addition to the Transbay Tower, there are three projects with applications on file that would potentially shadow RPD properties. These include 181 Fremont Street, 50 1st Street, and 2 New Montgomery Street (Palace Hotel). Of these, the 181 Fremont project is likely to come to the Commissions in the next few months for review and entitlement.

Individual Park Shadow and Use Analysis

Union Square

Union Square is an urban plaza at the heart of the downtown retail district, recently renovated in 2002. The plaza is primarily hardscaped and oriented to passive recreational uses, large civic gatherings, and ancillary retail. There are no recreational facilities. The Square features an expansive central open plaza, and is ringed by seating areas, landscaping, and small structures including a café. The southern edge along Geary Street features grass and concrete-covered seating terraces. Underneath the Square is a large public parking garage, whose entries are on Geary and Post Streets. An entry to a new subway station, part of the Central Subway project, will be constructed by SFMTA in the next few years at the southeast corner of the Square.

Existing Shadow Load:	38.3%. *
Potential TCDP Net New Shadow:	0.19%
Current Available ACL:	0.08%
Requested Increase in ACL:	0.11%
Time/Date of Net New Shadow:	Mid-March through Late September
Duration of Net New Shadow:	5 – 60 minutes
Time of Day:	Between 7:10 – 8:40 am; Day of Maximum extent 7:40 – 8:40am
1989 Memo Qualitative Criteria:	Avoid mid-day shadows
Net New Shadow from Transbay Tower:	0.011%
Date of Net New Transbay Tower Shadow:	Mid-July through Mid-August, May
Time of Day of Net New Transbay Tower Shadow:	7:30 – 8:00 am

* *After the adoption of the ACL in the 1989 Memo, the Macy's expansion project added sunlight to Union Square amounting to approximately 0.05% of the theoretically available sunlight on the park. It should be noted, however, that the ACL for Union Square was not formally increased to account for this added sunlight.*

The net new shadow would sweep across various parts of the park depending on the time of year, however the shadows at times of maximum extent would occur in the southern edge of the park, on the terraced steps, garage driveway, and adjacent landscaping and circulation areas. The maximum area of new shadow is 24.5% of the park at 8:00 in early April and early September. The shading on these particular days would begin at 7:40am at the southwest corner part of the park, peak at 8:00am, and depart by 8:40am.

Park Usage Observations:
Observations were conducted between 7:00am and 9:30am. The weather was foggy at 7:00 and then mostly sunny by 9:00am. Stationary usage of Union Square as observed was very light during the morning hours. The primary usage of the Square was by people passing through, especially prior to 9:00am. At 7:30am, there were 22 individuals spending time in the Square while 20 individuals passed through the square without stopping. The number of individuals engaged in stationary activities ranged from 11-25 individuals at any one time prior to 9:00, increasing substantially after 9:00am to 97 individuals at 9:30am (at which time an additional 50 people passed through the Square without stopping). Prior to 9:00am most individuals engaged in stationary activities were clustered at the periphery of the square in fixed seating (formal and informal); Union Square staff set up movable seating between 8:00 and 9:30am. The individuals seated in the terraced steps at the southwest corner, where new shading would occur prior to 9:00am, were observed to be tourists waiting for tour buses, which pick up along the Geary Street curb. After 9:00am, a significant number of people began to occupy the movable chairs placed on the western portion of the square.

Analysis:

- Usage of the park is very light prior to 9:00am, during the time when the new shadows would fall on the parts of the park.
- Usage of the park at these hours is predominantly pass-through traffic, with few stationary users.

Portsmouth Square

Portsmouth Square is an urban plaza in the southeastern portion of Chinatown. The park features substantial grade changes and is subdivided into many sub-areas. Overall the plaza is primarily hardscaped with planted areas on the edges and scattered in planters throughout. There are two small children's play areas on different levels of the park. Formal and informal seating is scattered throughout the park. An elevated pedestrian bridge over Kearny Street connects the upper level of the park to the Hyatt Hotel on the east side of Kearny Street. At the lower level of the square, a community center is located underneath the pedestrian bridge. Below the Square is a large public parking garage, whose entry is on Kearny Street.

Existing Shadow Load:	39.0%.
Potential TCDP Net New Shadow:	0.41%
Current Available ACL:	0%
Requested Increase in ACL:	0.41%
Time/Date of Net New Shadow:	Mid-October to early December, early January to late February
Duration of Net New Shadow:	30 – 60 minutes
Time of Day:	Between 8:00 – 9:10 am; Day of Maximum extent 8:00 – 9:00am
1989 Memo Qualitative Criteria:	N/A

Net New Shadow from Transbay Tower:	0.133%
Date of Net New Transbay Tower Shadow:	Mid-October through early December, Early January through mid-February
Time of Day of Net New Transbay Tower Shadow:	8:00 – 8:40 am

The net new shadow would sweep across various parts of the park depending on the time of year, however the shadows at times of maximum extent would occur over the southwestern half of the park, on the upper plaza and the playgrounds. The maximum area of new shadow is 42.5% of the park at 8:30 in late November and mid January. The shading on these particular days would being at 8:00am at the center of the park, peak at 8:30am, and depart by 9:00am.

Park Usage Observations:
Observations were conducted between 7:45am and 10:00am. The weather was sunny. Portsmouth Square is a very heavily used park and is an important gathering place for the Chinatown neighborhood. Throughout the times observed, users of the park were evenly dispersed throughout the park. The number of individuals engaged in stationary activities increased gradually from 44 at 8:30am to 67 at 9:00am to 118 at 10:00am. Notably there were significantly more individuals in the park at 7:45am—72 – before any sunlight reached the park than there were once the sun was mostly out at 8:30. An additional 20-40 individuals pass through the park at each of these times without stopping; with slightly more pass-through traffic at the later hours. People were seated throughout the park on formal, informal, and makeshift seating. Small groups and individual adults were observed exercising (tai chi) throughout the park, varying from the upper plaza, children's playgrounds, and lower plaza. Between 7-15 people were exercising in the park at all times, though the number of people engaged in seated or other stationary activities increased steadily throughout the morning. A few children were observed playing in the upper playground. Various areas of the park were shaded during the morning, and many of the shaded areas were heavily used, as much or more so than sunny areas at times. Groups engaged in exercise or socializing in large groups appeared to congregate in available open areas regardless of sun or shade.

Analysis:

- Usage of the park is heavy and constant, substantially increasing after 9:00am
- Park usage is heavy even before the sunlight reaches the square in the early morning.
- Usage of the park is dispersed evenly throughout the park, with users spreading themselves out to take advantage of open and available areas for gathering or exercise, regardless of sun/shade or the intended use of the space. For instance, adults use children's play areas to exercise.
- Some shaded areas of the park are very heavily used, particularly as usage of the park increases and the density of users increases.

St. Mary's Square

St. Mary's Square is a small urban park on the edge of northern Financial District and southern edge of Chinatown. The park is a level platform on a steeply-sloped hill, sited atop a parking garage. Access to the park is provided where both Pine and California Streets meet Quincy Street, a small alley, as well as directly from Quincy. Overall the plaza is characterized by meandering hardscape areas around extensive planters. A small children's play area is in the northeast corner of the park and a swingset is located in the southeast corner. Formal and informal seating is scattered throughout the park.

Existing Shadow Load:	51.9%.
Potential TCDP Net New Shadow:	0.09%
Current Available ACL:	0%
Requested Increase in ACL:	0.09%
Time/Date of Net New Shadow:	Mid-September to mid-October, late February to late March
Duration of Net New Shadow:	5 – 40 minutes
Time of Day:	Between 8:10 – 9:10 am; Day of Maximum extent 8:30 – 9:10am
1989 Memo Qualitative Criteria:	N/A
Net New Shadow from Transbay Tower:	0.048%
Date of Net New Transbay Tower Shadow:	Mid-September through early October, March
Time of Day of Net New Transbay Tower Shadow:	8:30 – 9:10 am

The net new shadow would sweep across various parts of the park depending on the time of year, however the shadows at times of maximum extent would occur over the southwestern half of the park, on the upper plaza and the playgrounds. The maximum area of new shadow is 26.3% of the park at 8:45am in late September and mid-March. The shading on these particular days would being at 8:30am at the southwest of the park, peak at 8:45am, and depart by 9:10am.

Park Usage Observations:
Observations were conducted between 8:30am and 10:00am. The weather was sunny. The number of individuals engaged in stationary activities stayed constant from 20 at 8:30am to 19 at 10:00am, with as few as 12 people at 9:30am. No more than one or two children were observed at any one time. The primary usage of the park observed before 10:00am is exercise/tai chi. Small groups of 3-4 people and individual adults were observed exercising (tai chi) throughout the park. Throughout the times observed, users of the park were evenly dispersed throughout the park. No more than one child was observed in the play area at any one time. Most of the park was shaded during the hours of observation, with the southern one-third becoming sunlight by 9:30am.

Analysis:

- St. Mary's is a lightly-used park during the morning hours. Usage does not increase substantially as the morning progresses and sunlight increases.
- Usage of the park is dispersed evenly throughout the park regardless of sun/shade. Park users remain evenly divided between sunlit and shaded areas even after more of the park becomes sunlight as the morning progresses.
- The majority of park users in the morning are engaged in tai chi/exercise in small groups of 3-4 or individually. These groups gather where open areas exist regardless of sunlight/shading.
- The park is already heavily shaded during the morning hours due to its location in the Financial District adjacent to tall buildings.

Justin Herman Plaza

Justin Herman Plaza is a large urban open space of varying character on the eastern edge of the Financial District. It sits at the foot of Market Street, separated from the Ferry Building by the Embarcadero Roadway. The property is comprised of three primary areas: the northern plaza, the Market Street extension, and the southern park. The northern area is dominated by a large open hardscape plaza, sunken by a couple feet from street level. The sunken plaza is bordered on its western edge by an extensive area of public seating serving ground level eateries at the eastern edge of the Embarcadero Center and hotel complex that borders the Plaza north of Market Street. The northern side of the plaza is dominated by the large Vallainourt Fountain. A raised circular stage with steps is located on the eastern portion of the sunken plaza. Formal walkways with landscaping, benches and informal seating walls line the east side of the plaza. There are no formal recreational facilities in the northern part of the park. The Market Street extension area aligns generally with the Market Street right-of-way and is characterized by open hardscape and rows of palm trees. The southern portion of the property is a rectangular park, with formal seating and landscaping surrounding a sunken area occupied by bocce courts and a lawn area.

Existing Shadow Load:	37.6%.
Potential TCDP Net New Shadow:	0.09%
Current Available ACL:	0.007%
Requested Increase in ACL:	0.083%
Time/Date of Net New Shadow:	Early November - Early February
Duration of Net New Shadow:	30 – 60 minutes
Time of Day:	Between 1:00 – 2:40 pm; Day of Maximum extent 1:10 – 1:40pm and 2:10 – 2:40pm
1989 Memo Qualitative Criteria:	N/A
Net New Shadow from Transbay Tower:	0.011%

Date of Net New Transbay Tower Shadow:	Mid-November through late January
Time of Day of Net New Transbay Tower Shadow:	1:10 – 1:40 pm

The net new shadow would sweep across various parts of the park depending on the time of day; however, the shadows at times of maximum extent would occur over the southern portion of the sunken plaza, including part of the stage, the steps along the edge of the plaza, and small portions of the landscaping and palm trees along the eastern and southern edges of the sunken plaza. No new shading would be cast on the southern portion of the park south of the Market Street extension. The maximum area of new shadow is 10.1% of the park at 1:15pm in early December and early January. The shading on these particular days would begin at 1:10pm on the southern part of the sunken plaza in the northern part of the park, peak at 1:15pm, and depart by 1:40pm, then reappear at 2:10pm over the Market Street extension and disappear by 2:40pm. The two distinct periods are due to shading from different buildings occurring at different times. The shading during the first period would be theoretically cast by the unenclosed sculptural lattice top of the Transbay Tower.

Park Usage Observations:
Observations were conducted between noon and 3:00pm. The weather was sunny. The number of individuals (180) engaged in stationary activities was the same at noon and 3pm, and peaked at 1:00pm with 273 individuals stationary in the park. The primary usage of the park during these hours is seated lunchtime eating and related stationary socializing by downtown workers, with the exception that the Market Street extension area is used heavily by people walking and bicycling through en route to the Ferry Building and Embarcadero waterfront and by two facing rows of artist's market booths intended to serve this pedestrian traffic. (The user counts include people who were stopped to look at market booths, but not those passing through the market area without stopping.) Significant numbers of people utilize formal and informal seating and lawn areas around the periphery of the plaza, with the heaviest concentrations of people in the seating areas adjacent to the eateries on the west edge of the plaza.

Analysis:

- The Plaza is most heavily used before 2:30pm by downtown workers seeking places to eat lunch.
- Usage of the park is heavily dispersed to its edges where seating opportunities exist. Some areas with formal seating are heavily used despite shading.
- The new shading would primarily fall on circulation areas and areas of sporadically used informal seating.
- The fleeting shadows on the Market Street extension would not likely affect the through-traffic and market activities.
- Most of the new shadow would be primarily cast by the narrow and unenclosed sculptural lattice-like top of the Transbay Tower, such that any new shading cast by this element would likely be diffuse if apparent at all on the ground.

Willie "Woo Woo" Wong Playground

Willie "Woo Woo" Wong Playground (formerly "Chinese Playground") is a small urban park in the comprised almost exclusively of active recreational courts (basketball, tennis, volleyball), two children's play areas, and a recreation center building. There is little natural landscaping. The park is bordered by Sacramento Street on the south and Hang Ah Street, a very narrow alleyway, on the west. Hang Ah serves as an extension of the park, as it is primarily pedestrian with little traffic, and features benches along the park edge.

Existing Shadow Load:	52.8%.
Potential TCDP Net New Shadow:	0.03%
Current Available ACL:	0.0%
Requested Increase in ACL:	0.03%
Time/Date of Net New Shadow:	Early November - Early December; January
Duration of Net New Shadow:	20 minutes
Time of Day:	Between 8:00 – 8:20 am; Day of Maximum extent 8:00 – 8:20am
1989 Memo Qualitative Criteria:	N/A
Net New Shadow from Transbay Tower:	N/A

The net new shadow would sweep over portions of the southern sport court and the children's play area along the Sacramento Street edge between 8:00-8:20. The maximum area of new shadow is 15.1% of the park at 8:15 in late November and mid-January.

Analysis:

- The new potential shadow is of very limited duration during the early mornings in late fall and early winter.
- At the time of day when the new shadows would fall, there is unlikely to be significant usage of the play area or sport court, as children are generally in school at these times of day during these times of year.

Maritime Plaza

Maritime Plaza is an elevated plaza located above a parking structure immediately north of the Embarcadero Center. The plaza contains some lawn area, vegetation, sculptures, and a fountain. There are few seating facilities in the plaza. The park is divided into two halves by an high-rise office building. Low-scale commercial buildings sit in the middle of both halves of the park. Because of it was created in this location, it is heavily shaded year round. Access is provided via the adjacent office buildings, a skybridge from the Embarcadero Center, and via stairways

connected to the parking structure. The plaza has little to no visibility nor clear and direct access from the surrounding streets.

Existing Shadow Load:	68.4%.
Potential TCDP Net New Shadow:	0.004%
Current Available ACL:	0.0%
Requested Increase in ACL:	0.004%
Time/Date of Net New Shadow:	Early to Mid-December; - Late December to Early January
Duration of Net New Shadow:	25 minutes
Time of Day:	Between 10:40 – 11:05 am; Day of Maximum extent 10:40 – 11:05 am
1989 Memo Qualitative Criteria:	N/A
Shadow from Transbay Tower:	Same as for Plan – See Above (i.e. Tower is only building in the Plan Area to contribute new to shadow this Park)

The shadow falls on the southernmost third of a very skinny and long north-south slice of sun that tracks across the western half of the plaza in the morning. The area featuring circulation, landscaping, sculpture, and informal seating areas. This shadow occurs when the Transbay Tower lines up briefly with the narrow gap between Embarcadero Center towers; the shadow is primarily cast by the rooftop sculptural top of the Tower. The maximum area of new shadow is 1.9% of the park at 10:45am in late December.

Analysis:

- New shadow would be primarily cast by the narrow and unenclosed sculptural lattice-like top of the Transbay Tower, such that any new shading cast by this element would likely be diffuse if apparent at all on the ground.
- The new potential shadow is of very limited duration during mid-morning times of very little park usage, prior to mid-day lunch hours when the park sees most of its usage.
- Overall the park gets very little usage, in large part due to its difficult access, lack of visibility, and lack of unique interest or recreational facilities, combined with its close proximity to the waterfront and other more inviting public spaces.

Chinese Recreation Center

The Betty Ann Ong Chinese Recreation Center is located at 1199 Mason Street, bordered by Washington, Mason, and Truett Streets. The Recreation Center underwent a complete reconstruction and renovation from 2010-2012 and was re-opened in July 2012. The facility features a 3-story indoor recreation building and a 12,500 square foot outdoor active recreation area that includes children's play equipment, a basketball court, and seating.

Existing Shadow Load:	N/A (Unknown)
Potential TCDP Net New Shadow:	0.008%
Current Available ACL:	N/A (none established)
Requested Increase in ACL:	N/A (none proposed)
Time/Date of Net New Shadow:	Mid October; Mid February
Duration of Net New Shadow:	5 minutes
Time of Day:	8:25am Day of Maximum extent 8:25am
1989 Memo Qualitative Criteria:	N/A
Shadow from Transbay Tower:	Same as for Plan – See Above (i.e. Tower is only building in the Plan Area to contribute new shadow to this Park)

The shadow would predominantly fall on the roof of the Recreation Center building and a northern portion of the adjacent open recreation area.

Analysis:

- The net new shadow is of extremely limited duration in the early morning and occurs at the very first minute of analysis in the morning, departing immediately thereafter.
- The shadow would fall on a portion of the roof of the Recreation Center building. Because of its location, the shadow would not be visible or apparent to any user of the park or the Recreation Center building.
- The Recreation Center building was just completed and opened to the public in 2012.

Boeddeker Park

Boeddeker Park is a nearly 1-acre park in the Tenderloin neighborhood. The main part of the park is located at the northeast corner of Eddy and Jones Streets, and a smaller extension of the park extends to a mid-block location on Ellis Street. Since 2007, the Recreation and Parks Department has been engaged with the Trust for Public Land to redesign the park to improve its usability, safety, and attractiveness. A concept plan for the park has been completed and construction is slated to begin in 2013 and last 2 years. The renovated park is slated to feature a lawn, basketball court, children's play area, plaza, seating, and a small community center building in the main park area, and adult fitness areas with planters in the Ellis Street extension area.

Existing Shadow Load:	37.7%
Potential TCDP Net New Shadow:	0.003%
Current Available ACL:	0%
Requested Increase in ACL:	0.003%

Time/Date of Net New Shadow:	Early June – Early July
Duration of Net New Shadow:	5 minutes
Time of Day:	6:47 – 7:00 am Day of Maximum extent 6:47 – 6:52am
1989 Memo Qualitative Criteria:	N/A
Shadow from Transbay Tower:	Same as for Plan – See Above (i.e. Tower is only building in the Plan Area to contribute new shadow to this Park)

The shadow would fall in two locations, both on small portions of the outer street edges of the park, one along the Jones Street edge and one on the Ellis Street edge. In both cases, the shadow would fall on service entries and raised planters, based on the proposed design for the park renovation. The shadow would not touch any of the proposed active or passive recreational areas.

Analysis:

- The net new shadow is of extremely limited duration in the very early morning and occurs at the very first minutes of analysis in the morning, departing immediately.
- The shadow would fall on small portions of the park's fenced edges on raised planters and service gates where public usage is not expected.
- The Recreation and Park Department has tentatively stated an intent to open the renovated park from dawn to dusk, though historically the park has been open limited hours (9:30am-6pm) and has not been open to the public during the hours of the potential shadows.

Woh Hei Yuen Park

Woh Hei Yuen Park is a small (1/3-acre) park in Chinatown located at Powell and John Streets. The park was opened in 1999. The park is surrounded and immediately abutted by 4-story residential buildings. Woh Hei Yuen features a children's play area on its western side, picnic tables beneath an arbor along the John Street edge, and an open plaza bordered by lawn and landscaping and benches occupies its eastern portion toward Powell Street. Access is provided from both John and Powell Streets. A narrow 2-story recreation center (922 Jackson Street) with a roof deck connects the southern edge of the park to Jackson Street.

Existing Shadow Load:	N/A (Uknown)
Potential TCDP Net New Shadow:	0.001%
Current Available ACL:	N/A (none established)
Requested Increase in ACL:	N/A (none proposed)
Time/Date of Net New Shadow:	Early November; Early February

Duration of Net New Shadow:	<10 minutes
Time of Day:	7:44-7:50am Day of Maximum extent 7:44-7:50am
1989 Memo Qualitative Criteria:	N/A
Shadow from Transbay Tower:	Same as for Plan – See Above (i.e. Tower is only building in the Plan Area to contribute new shadow to this Park)

The shadow falls on the John Street edge touching a small part of the plaza and part of the picnic table area beneath the arbor a part of the western portion of the park.

Analysis:

- The net new shadow is of extremely limited duration and time during the year, and occurs at the very first minute of analysis in the morning, departing immediately thereafter.
- The new shadow touches only the street edge along John Street, which is already shaded by an arbor structure. Primary usage of the park at these early morning hours is for exercise (tai chi) in the open plaza areas, and the net new shadow would not substantially shade this area.
- No Absolute Cumulative Limit has been established for the park. The park was created a decade after the 1989 memo.

Planning Code Section 295

295. HEIGHT RESTRICTIONS ON STRUCTURES SHADOWING PROPERTY UNDER THE JURISDICTION OF THE RECREATION AND PARK COMMISSION.

(a) No building permit authorizing the construction of any structure that will cast any shade or shadow upon any property under the jurisdiction of, or designated for acquisition by, the Recreation and Park Commission may be issued except upon prior action of the City Planning Commission pursuant to the provisions of this Section; provided, however, that the provisions of this Section shall not apply to building permits authorizing:

(1) Structures which do not exceed 40 feet in height;

(2) Structures which cast a shade or shadow upon property under the jurisdiction of, or designated for acquisition by, the Recreation and Park Commission only during the first hour after sunrise and/or the last hour before sunset;

(3) Structures to be constructed on property under the jurisdiction of the Recreation and Park Commission for recreational and park-related purposes;

(4) Structures of the same height and in the same location as structures in place on June 6, 1984;

(5) Projects for which a building permit application has been filed and either

(i) a public hearing has been held prior to March 5, 1984 on a draft environmental impact report published by the Department of City Planning, or

(ii) a Negative Declaration has been published by the Department of City Planning prior to July 3, 1984;

(6) Projects for which a building permit application and an application for environmental evaluation have been filed prior to March 5, 1984 and which involve physical integration of new construction with rehabilitation of a building designated as historic either by the San Francisco Board of Supervisors as a historical landmark or by the State Historic Preservation Officer as a State Historic Landmark, or placed by the United States Department of the Interior on the National Register of Historic Places and which are located on sites that, but for separation by a street or alley, are adjacent to such historic building.

(b) The City Planning Commission shall conduct a hearing and shall disapprove the issuance of any building permit governed by the provisions of this Section if it finds that the proposed project will have any adverse impact on the use of the property under the jurisdiction of, or designated for acquisition by, the Recreation and Park Commission because of the shading or shadowing that it will cause, unless it is determined that the impact would be insignificant. The City Planning Commission shall not make the determination required by the provisions of this

Subsection until the general manager of the Recreation and Park Department in consultation with the Recreation and Park Commission has had an opportunity to review and comment to the City Planning Commission upon the proposed project.

(c) The City Planning Commission and the Recreation and Park Commission, after a joint meeting, shall adopt criteria for the implementation of the provisions of this Section.

(d) The Zoning Administrator shall determine which applications for building permits propose structures which will cast a shade or shadow upon property under the jurisdiction of, or designated for acquisition by, the Recreation and Park Commission. As used in this Section, "property designated for acquisition by the Recreation and Park Commission" shall mean property which a majority of each of the Recreation and Park Commission and the City Planning Commission, meeting jointly, with the concurrence of the Board of Supervisors, have recommended for acquisition from the Open Space Acquisition and Park Renovation Fund, which property is to be placed under the jurisdiction of the Recreation and Park Commission.

(Added Ord. 62-85, App. 1/31/85)

435695.1

City and County of San Francisco
Department of City Planning

450 McAllister Street
San Francisco, CA 94102

ADMINISTRATION
(415) 558-6414
CITY PLANNING COMMISSION
(415) 558-6414
PLANS AND PROGRAMS
(415) 558-6264
IMPLEMENTATION / ZONING
(415) 558-6377

MEMORANDUM

February 3, 1989*

TO: The City Planning Commission
The Recreation and Parks Commission

FROM: Department of Parks and Recreation
Department of City Planning

RE: Proposition K--The Sunlight Ordinance

BACKGROUND

The Sunlight Ordinance (Section 295 of the City Planning Code) requires the Planning Commission, prior to the issuance of a permit for a project that exceeds 40 feet in height, to make a finding that any shadow on property under the jurisdiction of the Park and recreation Department cast by the project is insignificant.

The Ordinance further requires that the Planning Commission and the Parks and Recreation Commission jointly adopt the criteria to be used by the Planning Commission in the implementation of the Ordinance.

PROPOSED CRITERIA FOR DETERMINING SIGNIFICANCE

The approach recommended by staff involves two steps. The first step is to set an absolute cumulative limit for new shadow allowed in an open space. The Absolute Cumulative Limit is the additional shadow-foot-hours expressed as a percentage of the total foot-hours for each park over a period of one year. The second step is to determine individual building impacts and allocate a portion of the additional allowable shadow among specific projects within the Absolute Cumulative Limit.

Details on the methodology for measuring and modeling shadows are explained in the memorandum to the Recreation and Parks Commission and the Planning Commission on "Proposition K--The Sunlight Ordinance," dated November 1, 1987.

Absolute Limit

It is recommended that a quantitative limit be set on the amount of new shadow (summed up over a period of one year) which could be allowed in each park based on the current shadow conditions in the park and the size of the park. A large park with little shadow could be permitted a larger Absolute Cumulative Limit than a smaller park with a lot of shadow, for example.

This absolute cumulative limit could be used up by one or more new buildings, but, the final determination of how much of this limit could be used by an individual building and what form the new shadow will take should be determined on a case by case basis. However, any shadow cast beyond this limit would be considered significant and could not be allowed.

Allocation of The Absolute Cumulative Limit Among Individual Buildings

Each open space has distinctive characteristics of existing shadows and the shadow that would be created by a new building. Each potential shadow also has distinctive characteristics. Depending on the proposed new building's location the shadow could be fast or slow moving (shadows of buildings near the open space will move through the open space slower than a building farther away from the open space). The proposed new building's height and location will also determine the size and shape of potential new shadow in the park, when (e.g. time of day, time of season) and where in the park the new shadow would be cast. Since a potential shadow may have immensely varied impacts at different times of day, or different seasons, or duration of the shadow, or the size or the location of the shadow, the evaluation of impact depends on a variety of qualitative factors.

The factors to be considered in allocating additional shadow within the Absolute Cumulative Limit will vary from park to park based on the characteristics of that park and the pattern of its existing shadows.

Qualitative criteria for each park should be based on existing shadow profiles, important times of day, important seasons in the year, size and duration of new shadows and the public good served by buildings casting new shadow. These bases are explained below:

Value of the Sunlight

Time of Day (morning, mid-day, afternoon)
Based on existing shadow conditions and location of a given park, the time of day values of sunlight will have to be established. For example, afternoon and morning sun resources may be more important for preservation in neighborhood parks whereas mid-day sun may be more important in downtown parks. Additionally, some parks may have more shadow during certain times of the day when compared with other parks.

Time of Year (Spring, Summer, Fall, Winter)
In the same way that the time of day value of sunlight has to be established, sunlight value during times of year will also have to be determined.

Shadow Characteristics

Size of Shadow
Small shadows will generally be preferred to large shadows unless they last for long periods of time or fall on parts of the park where sunlight is particularly critical to users.

Duration of Shadow

Shadows lasting a short period of time will generally be preferred to shadows which last a long time unless the fleeting shadows fall during a critical time of day or season and/or are so large that they disrupt use of the park.

Location of Shadow

Efforts should be made to avoid shadows in areas of the park where existing or future use of the park is intense and where a new shadow could have detrimental effects on park vegetation.

Building Characteristics

Public Good Served By Shadow Caster

Buildings in the public interest in terms of a needed use or building design and urban form may be allocated a larger portion of the Absolute Cumulative Limit than other buildings. For example, the Civic Center Urban Design Plan calls for a building at the same height as the existing library to continue the cornice on Marshall Square thus completing the gap in the framing of Civic Center Plaza. A new library building to accommodate the growing needs of the Public Library is proposed at that space. This new building would cast new shadows in the morning hours on Civic Center Plaza. If the new building could not cast shadows, the ability to use the site for the library would be severely limited. Most of the Civic Center Plaza shadow "budget" could perhaps be allocated to be used by this library.

STAFF PROPOSAL FOR CONSIDERATION BY BOTH COMMISSIONS

The Proposition K mandate is to minimize new shadow impacts and protect the sun resource on San Francisco open spaces. On the basis of several public hearings on the subject, the objective is to construe Proposition K very strictly in terms of the additional shadow on parks. In order to accomplish this objective an Absolute Cumulative Limit is proposed for each individual park. This limit is the additional amount of shadow-foot-hours expressed as a percentage of total-foot-hours of each park as measured by the Sunlight Access Computer System (SACS) developed for the City by the University of California at Berkeley. Additionally, for each open space, criteria for the approval of new buildings have been proposed to evaluate allocations within the Absolute Cumulative Limit.

There are two major factors affecting the impact of shadow on the use of a park which are relevant to setting standards. One is the size of the park and the other is the amount of existing shadow on the park. Taking these two factors into account the staff recommends that the following standards be adopted.

In smaller parks (less than two acres) which are already shadowed 20% or more of the time during the year, it is recommended that no additional shadow

be permitted. On this basis the Absolute Cumulative Limit should be set at zero for the following parks:

Name Of Park	Absolute Cumulative Limit
Maritime Plaza	0%
Embarcadero Plaza I (north)	0%
Portsmouth Square	0%
St. Mary's Square	0%
Boeddecker Park	0%
Chinese Playground	0%
Sgt. Macaulley Park	0%
Huntington Park	0%
South of Market Park	0%

In larger parks (two acres or more) which are shadowed between 20% and 40% of the time during the year it is recommended that up to an additional 0.1% of the current shadow should be permitted if the specific shadow meets the additional qualitative criteria for the park. On this basis the Absolute Cumulative Limit for the following parks should be set at 0.1%:

Name of Park	Absolute Cumulative Limit
Embarcadero Plaza II (south)	0.1%
Union Square	0.1%

Some parks, although within this category above, have surrounding height limits that preclude the possibility of any new shadow. Therefore, the Absolute Cumulative Limit for these parks should be set at 0%. These parks are:

Name of Park	Absolute Cumulative Limit
Washington Square	0%
North Beach	0%

In larger parks which are shadowed less than 20% of the time during the year, it is recommended that additional shadow of up to 1.0% could be permitted if the specific shadow meets the additional qualitative criteria for that park. On this basis the Absolute cumulative criteria for the following park should be set at 1.0%:

Name of Park	Absolute Cumulative Limit
Civic Center Plaza	1.0%

For the three parks on which additional shadow is recommended, it is further recommended that individual project shadows within the Absolute Cumulative Limit be allocated according to the following qualitative criteria for each park.

Union Square

LOCATION: Geary, Post, Powell, Stockton
Located in the center of the City's retail district.

SIZE: 105,515 square feet
This park ranks as the third largest Downtown park.

CHARACTERISTICS: The park is surrounded by tall buildings to the east, west and the south. This relatively flat formal park is slightly elevated from the surrounding streets. Features include park furniture for sitting and lawn areas. The greatest intensity of park use occurs during mid-day hours. Users are downtown workers, shoppers, tourists. Many pedestrians use the park as a mid-block crossing. This park is the location for many civic demonstrations and cultural activities. Union Square is near the Powell Street cable car line and major hotels. A parking facility is located beneath the park.

SUN AND SHADOW CONDITIONS:

Yearly Shadow: 38.3% of the total year round sunshine is used up by existing shadows. The shadow profile for this park is generally a "U" shaped shadow distribution with significant shadows in the morning and even greater shadows in the afternoon hours. The "U" shaped distribution is increasingly flat in the Winter due to increased mid-day shadows.

Seasonal Shadow:

Summer: Least shadow impacts - greatest sun resource. Shadowed in early morning and late afternoon with relatively more shadow during the afternoon hours. Approximately 30% of the sun resource is in shadows at the time of the Summer Solstice.

Spring/Fall: Major shadow impacts during the early morning and late afternoon hours. Morning shadows increase as Fall approaches. The least shadow impacts occur between 9:30 AM and 2:30 PM. During Equinox approximately 35% of the park sun resource is in shade.

Winter: The greatest shadow impacts on Union Square occur during the Winter months. In Winter, nearly 50% of the park is in shadow for the entire day. There is very little sunlight available before 9:30 AM and after 2:30 PM during the winter. The Winter Solstice conditions are such that 60% of the park sun resource is in shadow.

ADDITIONAL SHADOW

Absolute Limit:

Increase of up to 0.1% of total foot-hours for the park based on size and amount of existing shadow. A maximum of 392,663.5 new shadow foot-hours could be allowed.

Qualitative Criteria:

- Avoid additional shadows during mid-day.

Civic Center Plaza

LOCATION: Polk, Grove, Larkin, McAllister
In the Civic Center, with major government offices, library and Brook Hall surrounding the open space.

SIZE: 222,995 square feet
Civic Center Plaza is the largest downtown park.

CHARACTERISTICS: Heaviest use occurs during mid-day hours. Users are civic center workers, tourists and street people. Features include some park furniture for sitting, lawn area and fountain. This park is the location for many civic demonstrations, assemblies and cultural activities. This is a relatively flat formal park. A parking garage is located beneath the park. Adopted redesign of the park will accommodate more use by neighborhood children and day care providers.

SUN AND SHADOW CONDITIONS:

Yearly Shadow: 7.4% of the total year round sunshine is used up by existing shadows. Civic Center is one of the sunniest of the downtown parks. During most of the year the daily shadow distribution profile is that of a relatively flat "U" shape with greater shadows in the afternoon than in the morning. By Winter the "U" shape has flattened further by decreases in shadows early and late and increased shadows at mid-day.

Seasonal Shadow:

Summer: Sunny all day except in the late afternoon hours when an average of less than 40% of the park is in shade. Some shadows very early in the morning and very late in the afternoon. Almost no shadows from 9 AM to 4 PM. Approximately 5% in shadows during the Summer Solstice.

Spring/Fall: In general summer shadow conditions continue from the Spring and into the Fall. There are however less shadow impacts during the early morning hours and more shadows in the afternoon than occur during the Summer months. Approximately 5% in shadows during the Equinox.

Winter: Nearly 75% of the park remains in sun during the Winter months. In late afternoon hours there are increased shadow impacts on the open space. Approximately 10% in shadows during the Winter Solstice.

ADDITIONAL SHADOW

Absolute Limit:	Increase of up to 1.0% of total foot-hours for the park based on size of the park and the amount of existing shadow. A maximum of 8,272,486.1 new shadow foot hours could be allowed.
Qualitative Criteria:	Preserve afternoon sun, particularly on seating areas and lawn areas.

Embarcadero Center 2

LOCATION: Embarcadero, Clay & Steuart
This open space is located at the Eastern edge of the Financial District.

SIZE: 149,698 square feet
The second largest Downtown park.

CHARACTERISTICS: This park is a plaza surrounded by large office buildings with many ground floor restaurants opening on to the space. The plaza contains a large fountain, open air cafes and is predominately paved. There is a flat grass area at the South end of the plaza. The space has excellent access from Market Street and South of Market Street. During lunch hour the park is heavily used by workers from the Financial District. Tourist use of the park is also heavy due to its location at the base of Market Street, proximity to the Ferry Building, California Street cable car line and the Hyatt Regency. Noon concerts, fashion shows and performances create a great deal of day use of the park.

SUN AND SHADOW CONDITIONS:

Yearly Shadow: This open space has significant sun resources during the morning hours. Afternoon shadows are heavy. The "J" shape to the shadow profile is consistent throughout the Spring, Fall and Summer due to the morning sun and the heavy afternoon shadows. The "J" shaped shade curve disappears in the Winter. In the Winter no more than 50% of the park is in the sun after the noon hour. The shape of the curve in Winter is represented by a shaft of sun in the morning and a nearly solid block of shadow in the post morning hours. Overall, 37.6% of the annual sun resource is currently in shadow.

Seasonal Shadow:

Summer: Between 8:30 am and noon there are almost no shadows in the plaza. Before 8:30 am nearly 40% of the space is in the shade. After the mid-morning sun the shadows gradually increase until 100% of the park is in shadow at the end of the day. 30% shaded during the Summer Solstice.

Spring/Fall: For two hours in the mid-morning there is 100% sun in the park. After 11:30 am the shadows increase such that mid-afternoon shadows are greater than in Summer but never reach the 100% shadows of late afternoon Summer days. 60% shaded during the Equinox.

Winter: During the Winter there is a brief two hour period where the park is in the sun. After 10 am shadows increase rapidly and by noon in mid-December 90% of the plaza is in the shade. 80% shaded during the Winter Solstice.

ADDITIONAL SHADOW

Absolute Limit: Increase of up to 0.1% of total foot-hours for the park based on size of park and amount of existing shadows. A maximum of 557,086.1 new shadow foot-hours could be allowed.

Qualitative Criteria:

Avoid mid-day and Winter shadows.

SAN FRANCISCO

CITY PLANNING COMMISSION

RESOLUTION NO. 11595

JOINT RESOLUTION OF THE CITY PLANNING COMMISSION AND RECREATION AND PARK COMMISSION ADOPTING CRITERIA FOR DETERMINATIONS OF SIGNIFICANT SHADOWS IN FOURTEEN DOWNTOWN PARKS WHICH ARE SUBJECT TO BEING SHADOWED BY NEW DEVELOPMENT AND DECLARING THE INTENTION TO APPLY THESE CRITERIA REGARDING SHADOW IMPACTS PRIOR TO CONSIDERATION OF AN APPLICATION FOR A STRUCTURE THAT WOULD SHADOW A PROTECTED PROPERTY.

WHEREAS, The people of the City and County of San Francisco in June 1984 adopted an initiative ordinance, commonly known as Proposition K; and

WHEREAS, Proposition K requires that the City Planning Commission disapprove any building permit application authorizing the construction of any structure that will have any adverse impact on the use of property under the jurisdiction of the Recreation and Park Department because of the shading or shadowing that it will cause, unless it is determined that the impact would be insignificant; and

WHEREAS, Proposition K provides that the City Planning Commission and the Recreation and Park Commission shall adopt criteria for the implementation of that ordinance; and

WHEREAS, Proposition K can most effectively be implemented by analyzing properties in the City protected by that legislation which could be shadowed by new development, the current patterns of use of such properties, how such properties might be used in the future including considerations of possible future design and redevelopment of the property, and the various shadowing that could be created by various structures, including the amount of shadowing, the duration, and location; and

WHEREAS, The City Planning Commission and Recreation and Park Commission endorsed the submission by the Department of City Planning to the Mayuor of a request for a supplemental appropriation in order to fund an analysis of properties that could be shadowed by new development (Resolution No. 13887); and

WHEREAS, A contract was awarded to the University of California at Berkeley's College of Environmental Design to develop a computerized system which could analyze existing shadow conditions on Proposition K properties and provide information to these Commissions necessary to establish rules or guidelines delineating the type of shadowing that can be determined to be significant or insignificant; and

WHEREAS, a computerized system of analysis was developed and used to analyze existing shadow conditions on fourteen downtown parks under the jurisdiction of the Recreation and Park Department; and

WHEREAS, The information developed by this computer analysis was then evaluated jointly by the staffs at the Department of City Planning and the Recreation and Park Department; and

WHEREAS, Recommendations for determinations of significant new shadows based on these staff evaluations were presented jointly to the Commissions in October and November of 1987; and

WHEREAS, A duly advertised public hearing was held on these recommendations; and

THEREFORE BE IT RESOLVED, That the criteria and the staff proposal for consideration by both Commissions presented in the memorandum to the Planning Commission and the Recreation and Park Commission dated February 3, 1989 regarding "Proposition K -- The Sunlight Ordinance" and describing criteria for determining significance be adopted as rules and guidelines for the determinations of significant shadows for the fourteen downtown parks analyzed.

I hereby certify that the foregoing Resolution was ADOPTED by the City Planning Commission on February 7, 1989.

Lori Yamauchi
Secretary

AYES	Commissioners Bierman, Dick, Engmann, Hu, Johnson, Morales and Tom
NOES	None
ABSENT	None
ADOPTED	February 7, 1989

AKG:181

DATE: **May 24, 2012**

TO: **Planning Commission**

Recreation and Parks Commission

FROM: **Gabriel Metcalf**

Brad Paul

RE: **Park Shadow Task Force Closing Statement**

At the request of Mayor Gavin Newsome and Board of Supervisors President David Chiu, the Planning Department facilitated the formation of a task force to review and analyze the manner in which projects casting shadow upon property under the jurisdiction of the Recreation and Park Department are reviewed by the Planning and Recreation and Parks Commissions. These projects, subject to Planning Code Section 295 (Proposition K), have been the subject of much public attention.

The Park Shadow Task Force was formed to include community based planning professionals, architecture and urban design professionals, representatives of the development community and technical experts. The Task Force received support from the Director of the Planning Department, Planning Department staff, the Director of the Recreation and Parks Department and Recreation and Parks Department staff, who provided background and technical information regarding the current methodology for analysis and implementation of Section 295.

The Task Force held five meetings between September 2010 and June 2012. During that time, the Task Force considered the original Proposition K implementation documents, the current methodology to determine shadow quantity and frequency, the number of properties shadowed by approved projects since the passage of Proposition K, and potential changes to the implementation process and approval of future projects casting shadow on applicable properties.

The Task Force found that since the passage of Proposition K in 1985 only 13 projects have been approved and constructed that increased shadow on Recreation and Parks Department property.

The Task Force found that technical changes to the current methodology for calculating the extent of cast shadow and its frequency would yield results that slightly differ from those derived from the current methodology. However, the Task Force also found that modifications to the methodology are better carried out at a future date and the Task Force anticipates technical changes to the methodology to be considered in a subsequent review of the implementation of Planning Code Section 295.

The Task Force found that some members are concerned about the potential for future cumulative addition of shadow upon open spaces in general (and in particular the open spaces potentially shaded by the future development in the Transit Center District Plan), and would like to establish definitive and

final limits of shadow upon specific open spaces. It found that others are concerned that new development be sited in locations amenable to walking and transit access, and are willing to tolerate some amount of new shadowing upon Recreation and Parks Department property

RECOMMENDATIONS

Given these findings and diverse points of view, the Task Force proposes that:

- The Planning Department maintain the current methodology for calculating the extent and frequency of cast shadow upon property under the jurisdiction of the Recreation and Parks Department; and

- Planning Department staff present to the Planning and Recreation and Park Commissions, as well as the Board of Supervisors the total maximum shadow cast upon property under the jurisdiction of the Recreation and Parks Department resulting from future development in the Transit Center District Plan area; and

- The Planning Commission and the Recreation and Parks Commission review cumulative data regarding shadow impacts from development within the Transit Center District Plan, and consider whether to allocate shadow budgets cumulatively for all development within the Plan area versus allocating shadow budgets on a project-by-project basis. Informational presentations of any potential shadowing of property under the jurisdiction of the Recreation and Parks Department by each individual project would also be made to both Commissions as projects seek entitlements.

J. Shadow

This section describes shadow effects on publicly accessible areas, including public parks, publicly-accessible private open spaces, and sidewalks.

Setting

Open space in the Plan area is limited. Generally, the open space that exists nearby is in the form of publicly accessible, privately owned open space developed, in accordance with the Downtown Plan and *Planning Code*, in conjunction with newer office buildings. **Figure 59** depicts open spaces in the Plan area. There are no public parks or other public open spaces in the immediate project vicinity. The nearest public open space is Yerba Buena Gardens, a San Francisco Redevelopment Agency property, at Third and Howard Streets, one block west of the project site. Across Mission Street to the north of Yerba Buena Gardens is Jessie Square, an open space south of the Contemporary Jewish Museum. The new Transit Center will include a public park ("City Park") located on the roof of the terminal, approximately 70 feet above grade level. Rincon Park, a Redevelopment Agency property, is located along the Embarcadero between Mission and Harrison Streets.[290] Ferry Plaza is a Port-owned public open space on the Bay side of the Ferry Building. Smaller public open spaces include Hallidie Plaza at Powell and Market Streets and the Mechanics Plaza at Battery, Bush, and Market Streets. The Plan area and vicinity also contains numerous privately owned publicly accessible open spaces (sometimes known as POPOS) that have been developed in conjunction with office towers built over approximately the last 40 years. These open spaces are shown on Figure 59.

Regulatory Framework

Sunlight Ordinance

Section 295 of the Planning Code, the Sunlight Ordinance, was adopted through voter approval of Proposition K in November 1984 to protect certain public open spaces from shadowing by new structures. Section 295 generally prohibits the issuance of building permits for structures or additions to structures greater than 40 feet in height that would shade property under the jurisdiction of or designated to be acquired by the Recreation and Park Commission, during the period from one hour after sunrise to one hour before sunset. Section 295(b) states that the Planning Commission, following a public hearing, "shall disapprove" any project governed by this section that would have an "adverse effect" due to shading of a park subject to Section 295, "unless it is determined that the impact would be insignificant." The Planning Commission's decision under Section 295 cannot be made "until the general manager of the Recreation and Park Department in consultation with the Recreation and Park Commission has had an opportunity to review and comment to the City Planning Commission upon the proposed project." None of the open spaces in the Plan area identified above is subject to Section 295.

[290] This park contains two buildings housing restaurants that occupy much of the park south of Folsom Street.

NOTE: Open Spaces Not to Scale and Locations May not be Exact

1 595 Market Street
2 555 – 575 Market Street (former Chevron buildings)
3 525 Market Street
4 55 Second Street
5 71 Stevenson Street
6 49 Stevenson Street
7 560 Mission Street
8 Golden Gate University
9 25 Ecker Street
10 425 Market Street
11 50 Fremont Street (Fremont Center Plaza)
12 333 Market Street
13 45 Fremont Street
14 50 Beale Street (Bechtel Plaza)
15 PG&E (77 Beale Street)
16 One Market Plaza
17 101 Second Street
18 555 Mission Street
19 100 First Street Plaza
20 Foundry Square
21 199 Fremont Street
22 201 Mission Street
23 301 Howard Street
24 135 Main Street
25 123 Mission Street
26 Spear Street
27 180 Howard Street
28 Rincon Center
29 235 Second Street (CNet/CBS Interactive)
30 211 Main Street
31 221 Main Street
32 201 Spear Street (Gap Building)

SOURCE: San Francisco Planning Department; ESA

Case Nos. 2007.0558E and 2008.0789E: Transit Center District Plan and Transit Tower . 207439

Figure 59
Open Space in Plan Area

In 1989, the two Commissions adopted shadow criteria for 14 downtown parks, including an Absolute Cumulative Limit for new shadow for each open space and qualitative criteria for assessing new shadow. The sunlight on a park is measured in terms of "square-foot-hours" of sunlight, while the shadow load is measured in terms of "shadow-foot-hours." A square-foot-hour of sunlight is one hour of sunlight on one square foot of ground, while a shadow-foot-hour represents one hour of shade on one square foot of ground. For projects that would affect parks for which a quantitative limit was established, shadow impacts have typically been judged less than significant if the project would not exceed the Absolute Cumulative Limit. In establishing the Absolute Cumulative Limits for the downtown parks, the commissions generally relied upon the following guidelines: for smaller parks (of less than two acres) on which more than 20 percent of the potential "Prop. K" sunlight was in shadow under then-existing conditions, no additional shadow was to be permitted. (This standard was applied to nine downtown parks.) For larger parks (of two acres or more) with between 20 percent and 40 percent existing shadow, the Absolute Cumulative Limit was to be set at 0.1 percent; that is, an additional 0.1 percent new shadow, measured in shadow-foot-hours, would be permitted beyond existing conditions.[291] The increment permitted as the Absolute Cumulative Limit—0.1 percent, in this case—is measured as a percentage of the theoretical annual available sunlight.[292] For larger parks shadowed less than 20 percent of the time,[293] an additional 1.0 percent new shadow was to be permitted.[294] No guideline was provided for parks of less than two acres that have less than 20 percent existing shadow.[295]

There are no parks subject to Section 295 within the Plan area. Yerba Buena Gardens, just west of the Plan area, is under the jurisdiction of the San Francisco Redevelopment Agency and is not subject to Section 295. The nearest parks subject to Section 295 are Union Square; Justin Herman Plaza, at the foot of Market Street; St. Mary's Square, on Pine Street near Kearny Street; Portsmouth Square, at Clay and Kearny Streets; Willie "Woo Woo" Wong Playground (formerly Chinese Playground), between Sacramento and Clay Streets and Stockton Street and Grant Avenue; Chinese Recreation Center, a partially indoor facility at Washington and Mason Streets (under renovation and scheduled to reopen in 2012); Woh Hei Yuen Recreation Center and Park, on Powell Street between Jackson Street and Pacific Avenue; Maritime Plaza, an elevated park between Battery and Davis Streets and Clay and Washington Streets; Sue Bierman Park, between the Embarcadero and Drumm Streets at Clay Street; Boeddeker Park, on the block bounded by Ellis, Eddy, Jones, and Taylor Streets; Huntington Park, between California and

291 This criterion applied to Union Square and Embarcadero Plaza II (Justin Herman Plaza). Two other parks, Washington Square and North Beach Playground, were not permitted new shadow because height limits precluded the possibility of new shadow on those parks.

292 The theoretical annual available sunlight is the amount of sunlight, measured in square-foot-hours, that would fall on a given park during the hours covered by Section 295. It is computed by multiplying the area of the park by 3,721.4, which is the number of hours in the year subject to Section 295. Thus, this quantity is not affected by shadow cast by existing buildings, but instead represents the amount of sunlight that would be available with no buildings in place. Theoretical annual available sunlight calculations for each downtown park were used by the Planning and Recreation and Park Commissions in establishing the allowable Absolute Cumulative Limit for downtown parks in 1989.

293 Civic Center Plaza was the only park in this category.

294 The guidelines for new shadow were presented in a memorandum to the Planning and Recreation and Parks Commissions, from their staffs, dated February 3, 1989, and referred to in Joint Resolution 11595 of the two commissions, adopted February 7, 1989.

295 None of the 14 downtown parks for which Absolute Cumulative Limits were established met these criteria.

Sacramento Streets and Taylor and Mason Streets; Gene Friend Recreation Center, at Sixth and Folsom Street; and South Park, in the center of the block bounded by Second, Third, Bryant, and Brannan Streets. The latter two parks, because they are well south of the Plan area, would not be affected by shadows from development in the Plan area.

Other Planning Code Regulations

Planning Code Section 146(a), applicable to certain streets in the C-3 zoning districts, requires that buildings and additions fit within an envelope defined by a plane sloping away from the street at a prescribed angle above a prescribed height "in order to maintain direct sunlight on public sidewalks in certain downtown areas during critical periods of use." In the Plan area, Section 146(a) applies to the west side of New Montgomery Street and the west side of Second Street (to a point 300 feet south of Folsom Street), specifying that buildings be within an envelope that slopes away from the street at an angle of 62 degrees from horizontal beginning at 132 feet above grade. Section 146(a) also applies to portions of Bush, Sutter, Post, Geary, O'Farrell, Ellis, Powell, Stockton, and Kearny Streets and Grant Avenue. Under Section 146(b), an exception to the foregoing may be granted, pursuant to the procedures of Section 309, Permit Review in C-3 Districts, if no new shadow is created, or if "the shadow created by the penetration of the plane is deemed insignificant because of the limited extent or duration of the shadow or because of the limited public use of the shadowed space." Section 146(c) states that, on other streets in the C-3 districts, "New buildings and additions to existing buildings shall be shaped, if it can be done without creating an unattractive design and without unduly restricting the development potential of the site in question, so as to reduce substantial shadow impacts on public sidewalks." A determination of compliance with Section 146(c) is made as part of the Section 309 project consideration process.

Planning Code Section 147, applicable to the C-3, RSD, SLR, SLI, or SSO zoning districts, where height limits are greater than 40 feet, requires that all new development and additions to existing structures where the height exceeds 50 feet must be shaped to minimize shadow on public plazas or other publicly accessible open spaces other than those protected by Section 295, "in accordance with the guidelines of good design and without unduly restricting the development potential of the property." The following factors must be taken into account in determining compliance with this criterion: the amount of area shadowed, the duration of the shadow, and the importance of sunlight to the type of open space being shadowed. A determination of compliance with Section 147 is made as part of the Section 309 project consideration process.

Impacts

Significance Criteria

The proposed project would have a significant shadow impact if it were to create new shadow in a manner that would:

- Affect, in an adverse manner, the use of any park or open space under the jurisdiction of the Recreation and Park Department; or

- Substantially affect the usability of other existing publicly accessible open space or outdoor recreation facilities or other public areas.

Plan Analysis

Impact SH-1: The draft Plan would adversely affect the use of various parks under the jurisdiction of the Recreation and Park Department and, potentially, other open spaces. (Significant and Unavoidable)

Shadow effects of the draft Plan were analyzed by computer generation of shadows that would be cast by the proposed Transit Tower as well as shadows that would be cast by other buildings that could be built with implementation of the draft Plan, as described in the discussion of Analysis Assumptions at the start of Chapter IV (p. 72). For potential future buildings other than the Transit Tower, shadows analyzed are based on massing models representative of potential future development in the Plan area. Each individual development project that is proposed in the Plan area would be subject to *Planning Code* Sections 295, 146, and 147, and therefore project-specific shadow impacts would be analyzed at such a time as a subsequent project is being reviewed by the Planning Department.

As described below and depicted in **Figures 60 – 62**, shadow from several potential future Plan area buildings at 500 feet in height or greater would reach a number of parks subject to Section 295 controls, including Union Square, Justin Herman Plaza, Portsmouth Square, St. Mary's Square, Maritime Plaza, and Boeddeker Park. Figures 60 through 62 depict shadow from the proposed project for representative times of day during the four seasons: in December, on the winter solstice, the midday sun is at its lowest and shadows are at their longest, while on the summer solstice in June, the midday sun is at its highest and shadows are at their shortest. Shadows are also shown at the spring equinox, when shadows are midway through a period of shortening, and at the fall equinox, when shadows are midway through a period of lengthening. Shadows on any other day of the year would be within the range of shadows presented in Figures 60 through 62. In some cases, new shadow would fall on parks during times not portrayed in the figures. **Table 41**, p. 523, summarizes shadow impacts on the affected parks.

With one exception, shadow from any given potential building would cover part of any affected
- Section 295 park for less than 90 minutes per day over a period of time ranging from 2 to 16 weeks
- (one-half to almost four months) per year; the exception would be that Union Square would be newly shaded by up to about one hour per day, over a period of six months, by a 600-foot tower addition to the southwest corner of the Palace Hotel on New Montgomery Street.[296] Most new shadow on Section 295 parks would be in the early morning hours, except that Justin Herman Plaza would be newly shaded in the early afternoon in late fall and early winter.

[296] A project on file at this location (Case No. 2005.1101E) proposes a 710-foot-tall residential tower at this location. This project is discussed under Alternative C, Developer-Proposed Scenario, in Chapter VI, p. 665.

SOURCE: CADP

Case No. 2007.0558E: Transit Center District Plan and Transit Tower . 207439

Figure 60-A

June 21 - Sunrise + 1 Hour

SOURCE: CADP

Case No. 2007.0558E: Transit Center District Plan and Transit Tower . 207439

Figure 60-B
June 21 - 7AM

SOURCE: CADP

Case No. 2007.0558E: Transit Center District Plan and Transit Tower . 207439

Figure 60-C
June 21 - 8AM

SOURCE: CADP

Case No. 2007.0558E: Transit Center District Plan and Transit Tower . 207439

Figure 60-D
June 21 - 9AM

SOURCE: CADP

Case No. 2007.0558E: Transit Center District Plan and Transit Tower . 207439

Figure 60-E

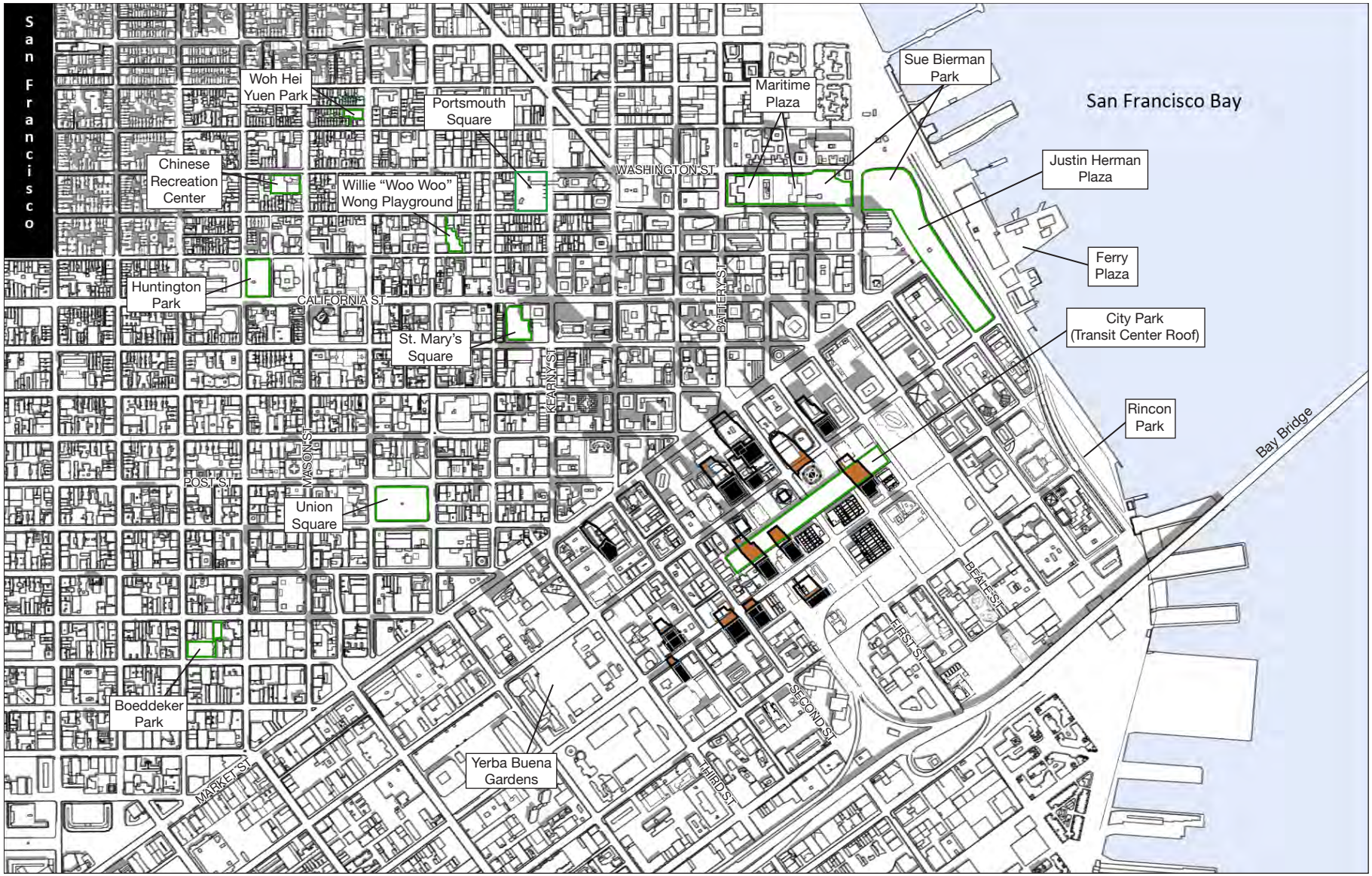
June 21 - 10AM

SOURCE: CADP

Case No. 2007.0558E: Transit Center District Plan and Transit Tower . 207439

Figure 60-F

June 21 - 11AM



SOURCE: CADP

Case No. 2007.0558E: Transit Center District Plan and Transit Tower . 207439

Figure 60-G

June 21 - 12 Noon

SOURCE: CADP

Case No. 2007.0558E: Transit Center District Plan and Transit Tower . 207439

Figure 60-H
June 21 - 1PM

SOURCE: CADP

Case No. 2007.0558E: Transit Center District Plan and Transit Tower . 207439

Figure 60-I
June 21 - 2PM

SOURCE: CADP

Case No. 2007.0558E: Transit Center District Plan and Transit Tower . 207439

Figure 60-J
June 21 - 3PM

SOURCE: CADP

Case No. 2007.0558E: Transit Center District Plan and Transit Tower . 207439

Figure 60-K
June 21 - 4PM

SOURCE: CADP

Case No. 2007.0558E: Transit Center District Plan and Transit Tower . 207439

Figure 60-L
June 21 - 5PM

SOURCE: CADP

Case No. 2007.0558E: Transit Center District Plan and Transit Tower . 207439

Figure 60-M
June 21 - 6PM

SOURCE: CADP

Case No. 2007.0558E: Transit Center District Plan and Transit Tower . 207439

Figure 60-N
June 21 - 7PM

SOURCE: CADP

Case No. 2007.0558E: Transit Center District Plan and Transit Tower . 207439

Figure 60-O

June 21 - Sunset -1 Hour

SOURCE: CADP

Case No. 2007.0558E: Transit Center District Plan and Transit Tower . 207439

Figure 61-A

September 21 - Sunrise +1 Hour
(March 21 Similar)

SOURCE: CADP

Case No. 2007.0558E: Transit Center District Plan and Transit Tower . 207439

Figure 61-B
September 21 - 8AM
(March 21 Similar)

SOURCE: CADP

Case No. 2007.0558E: Transit Center District Plan and Transit Tower . 207439

Figure 61-C
September 21 - 9AM
(March 21 Similar)

0 1000 Feet

Net New Shadow

Shadow Outline from New Buildings

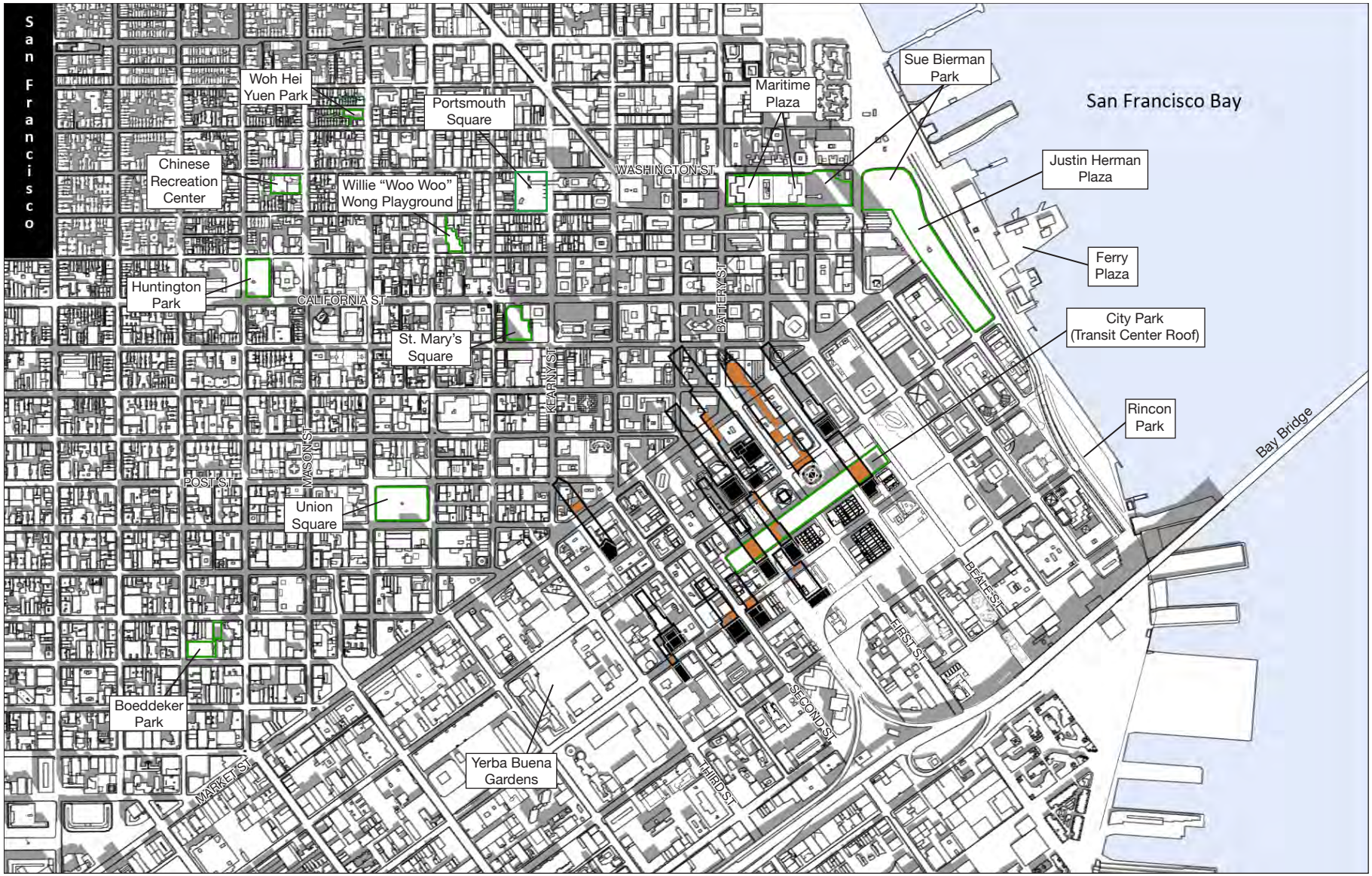
Existing Shadow

SOURCE: CADP

Case No. 2007.0558E: Transit Center District Plan and Transit Tower . 207439

Figure 61-D

September 21 - 10AM
(March 21 Similar)



SOURCE: CADP

Case No. 2007.0558E: Transit Center District Plan and Transit Tower . 207439

Figure 61-E
September 21 - 11AM
(March 21 Similar)

SOURCE: CADP

Case No. 2007.0558E: Transit Center District Plan and Transit Tower . 207439

Figure 61-F
September 21 - 12 Noon
(March 21 Similar)

SOURCE: CADP

Case No. 2007.0558E: Transit Center District Plan and Transit Tower . 207439

Figure 61-G
September 21 - 1 PM
(March 21 Similar)

SOURCE: CADP

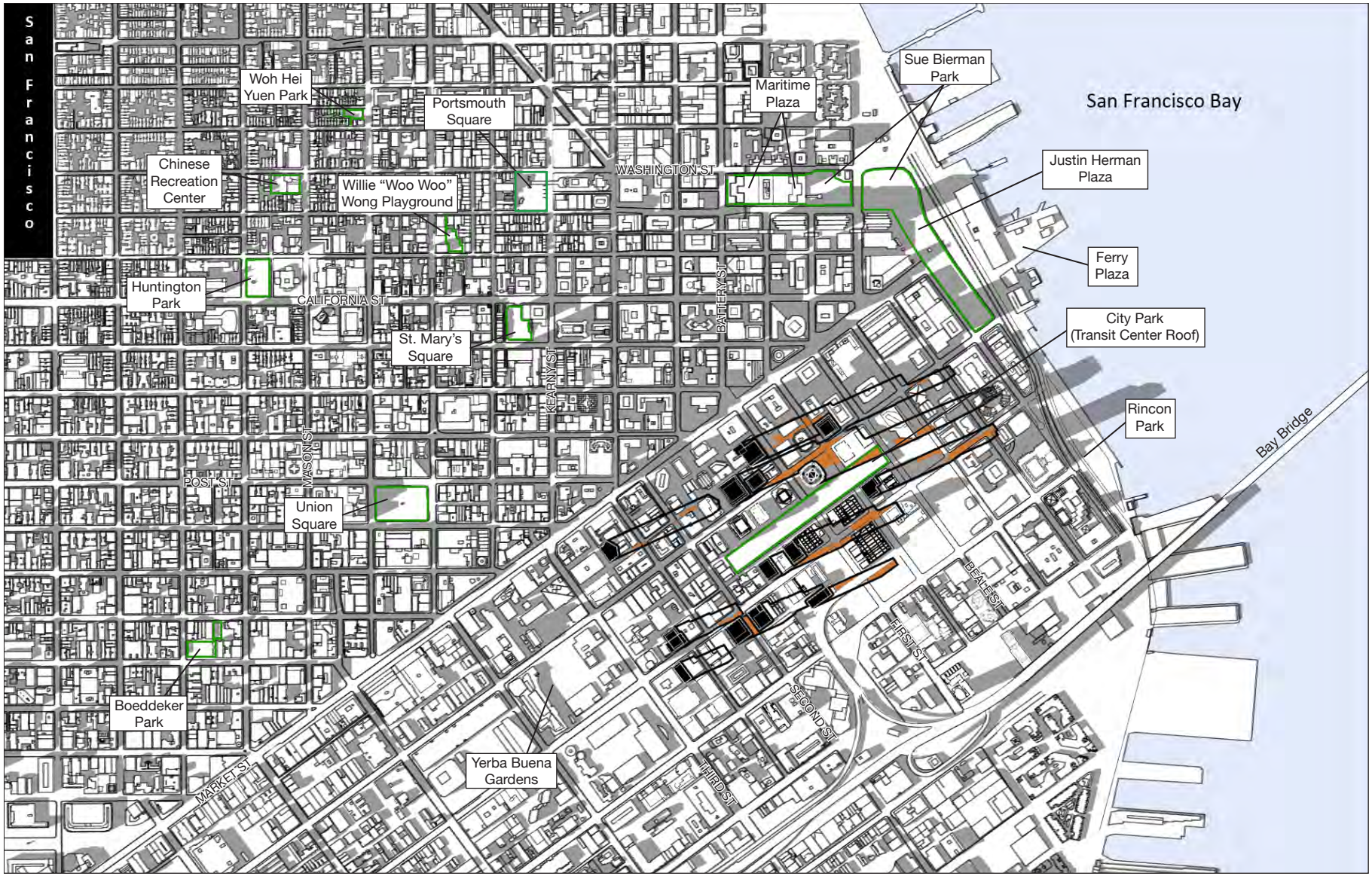
Case No. 2007.0558E: Transit Center District Plan and Transit Tower . 207439

Figure 61-H
September 21 - 2 PM
(March 21 Similar)

SOURCE: CADP

Case No. 2007.0558E: Transit Center District Plan and Transit Tower . 207439

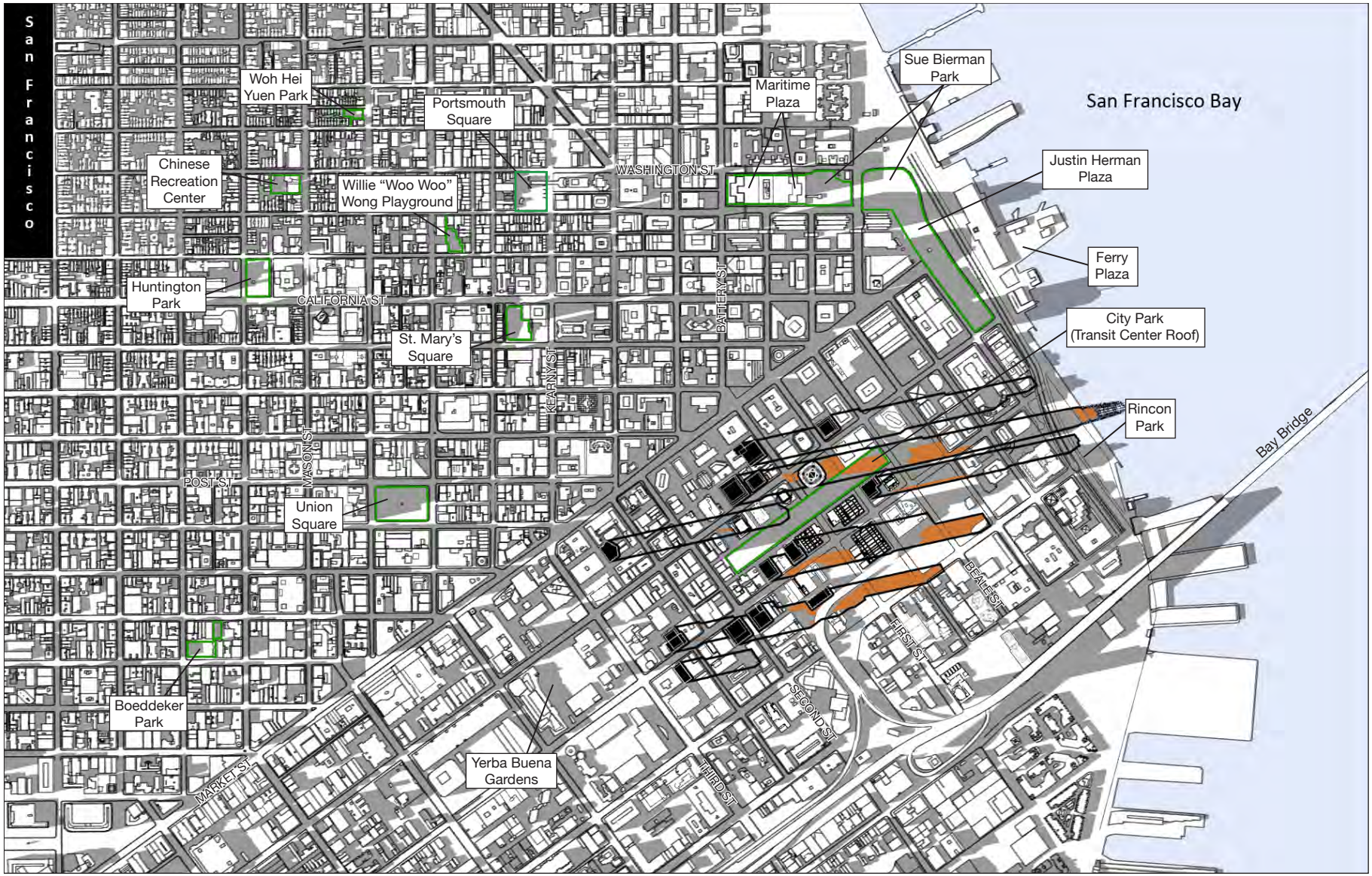
Figure 61-I
September 21 - 3PM
(March 21 Similar)



SOURCE: CADP

Case No. 2007.0558E: Transit Center District Plan and Transit Tower . 207439

Figure 61-J
September 21 - 4PM
(March 21 Similar)



SOURCE: CADP

Case No. 2007.0558E: Transit Center District Plan and Transit Tower . 207439

Figure 61-K
September 21 - 5PM
(March 21 Similar)

SOURCE: CADP

Case No. 2007.0558E: Transit Center District Plan and Transit Tower . 207439

Figure 61-K
September 21 - 6PM
(March 21 Similar)

SOURCE: CADP

Case No. 2007.0558E: Transit Center District Plan and Transit Tower . 207439

Figure 61-M
September 21 - Sunset -1 Hour
(March 21 Similar)

SOURCE: CADP

Case No. 2007.0558E: Transit Center District Plan and Transit Tower . 207439

Figure 62-A

December 21 - Sunrise +1 Hour

SOURCE: CADP

Case No. 2007.0558E: Transit Center District Plan and Transit Tower . 207439

Figure 62-B

December 21 - 9AM

SOURCE: CADP

Case No. 2007.0558E: Transit Center District Plan and Transit Tower . 207439

Figure 62-C

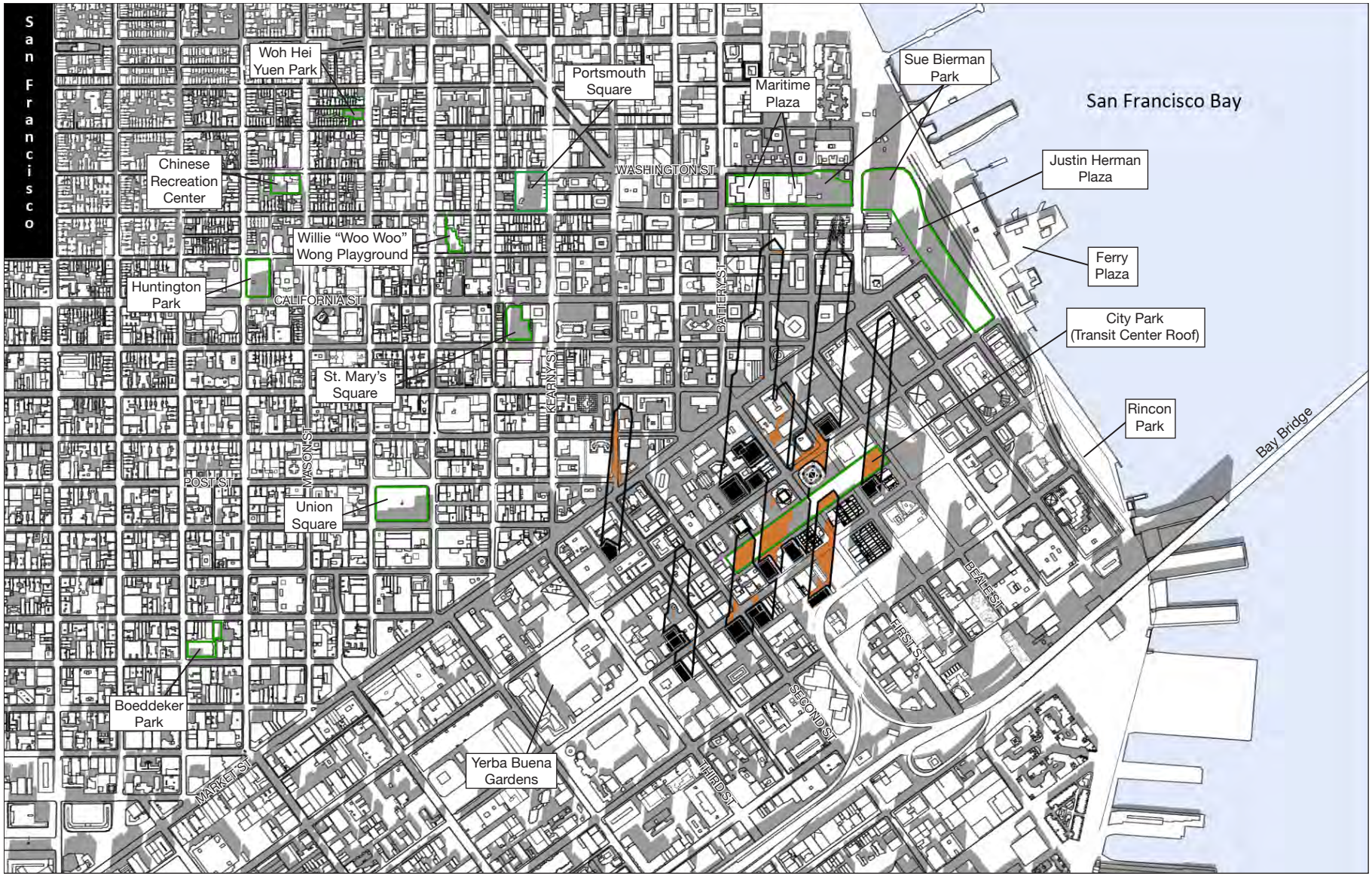
December 21 - 10AM

SOURCE: CADP

Case No. 2007.0558E: Transit Center District Plan and Transit Tower . 207439

Figure 62-D

December 21 - 11AM



SOURCE: CADP

Case No. 2007.0558E: Transit Center District Plan and Transit Tower . 207439

Figure 62-E

December 21 - 12 Noon

SOURCE: CADP

Case No. 2007.0558E: Transit Center District Plan and Transit Tower . 207439

Figure 62-F

December 21 - 1 PM

SOURCE: CADP

Case No. 2007.0558E: Transit Center District Plan and Transit Tower . 207439

Figure 62-G

December 21 - 2 PM

SOURCE: CADP

Case No. 2007.0558E: Transit Center District Plan and Transit Tower . 207439

Figure 62-H

December 21 - 3 PM

SOURCE: CADP

Case No. 2007.0558E: Transit Center District Plan and Transit Tower . 207439

Figure 62-I

December 21 - Sunset -1 Hour

TABLE 41
SHADOW ON SECTION 295 PARKS FROM DEVELOPMENT IN THE PLAN AREA

Open Space	Existing Shadow[1]	Permitted Shadow[2]	Shaded By:[3]	Plan Shadow[4]	Shadow w/Plan[5]	Time/Date of Net New Shadow	Maximum Shadow[6]
Union Square[7]	38.30%	0.1% (0.08%)	Pal., 50 F, TT, GGU, 181 Frmt.	0.19%	38.5%	mid-March – late September – 7:10 - 8:40 a.m.	24.5% (8:00 am, early Apr. & early Sept.)
St. Mary's Square[8]	51.90%	0.0%	TT, 50 F, GGU	0.09%	52.0%	mid- Sep – mid-October; late February – late March –8:10 - 9:10 a.m.	26.3% (8:45 am, mid-Mar. & late Sept.)
Portsmouth Square	39.00%	0.0%	TT, 50 First	0.41%	39.4%	late October – mid-February – 8:00 - 9:10 a.m.	42.5% (8:30 am, mid-Jan. & late Nov.)
Justin Herman Plaza[9]	37.60%	0.1% (0.007%)	TT, 50 F, 350 Msh.	0.09%	37.7%	early November - early February – 1:00 - 2:40 p.m.	10.1% (1:15 pm, early Jan. & early Dec.)
Willie "Woo Woo" Wong Plgrd.	52.80%	0.0%	P-F; GGU	0.03%	52.83%	early November. - early December; January – 8:00 - 8:20 a.m.	15.1% (8:15 am, mid-Jan. & late Nov.)
Maritime Plaza	68.40%	0.0%	Transit Tower	<0.01%	68.4%	early to mid-December; late December- early January – 10:40 to 11:05 a.m.	1.9% (10:45 am, late December)
Woh Hei Yuen Park[10]	n/a	n/a	Transit Tower	<0.01%	n/a	Early November and early February, approximately 7:45 a.m.	1.9% (7:44 am,* late Jan. & early Nov.)
Chinese Recreation Ctr.	n/a	0.0%	Transit Tower	<0.01%	n/a	Mid-October and mid-February, approximately 8:25 a.m.	36.5%(8:23 am,* late Feb. & mid-Oct.)
Boeddeker Park[11]	37.70%	0.244% (0.000%)	Transit Tower	<0.01%	37.70%	early June – early July, from 6:50 to 7:00 a.m.	2.9% (6:47 am,* late June)

1 Existing Shadow is the existing amount of shadow cast by existing buildings, measured by the percentage of theoretical annual available sunlight (TAAS) that would be available if no existing buildings were present (based on 1989 Planning Department analysis). TAAS is computed by multiplying the area of each park by 3,721.4 (number of hours covered by Sec. 295). n/a – Not Available

2 Permitted Shadow is the additional amount of **net new** shadow allowed (the Absolute Cumulative Limit) under Sec. 295 for each park. This includes any changes that have occurred since 1989. Bottom figure (in parentheses) indicates remaining budget available, if applicable.

3 Shaded By indicates Plan area buildings that would shade each park: TT – Transit Tower; Pal. – Palace Hotel tower addition; 50 F – 50 First Street; 181 Frmt. – 177 – 187 Fremont; GGU – Golden Gate University site tower; P-F – TJPA Parcel F; 350 Msh. – 350 Mission Street tower (at 700 feet, in accordance with the draft Plan height; this is taller than the 375-foot-tall approved project at this site).

4 Plan Shadow is the amount of net new shadow, given as an approximate percentage of the theoretical annual available sunlight, that would be cast on each park on an annual basis.

5 Shadow w/Plan is the percentage of theoretical annual available sunlight that would be shaded by existing building ***plus*** the proposed project, on an annual basis. Top number is entire Transit Tower; bottom number excludes rooftop element.

6 Maximum Shadow is the greatest amount of each park that would be newly shaded by Plan area buildings at any one moment. Percent of park area that would be shaded is given first; dates and time in parentheses. Asterisk (*) indicates time is first minute subject to Section 295.

7 The shadow budget remaining within the Absolute Cumulative Limit (ACL) for Union Square has been partially reduced since 1989. In 2004, 69,540 square foot hours was allocated to a project at 690 Market Street, which rehabilitated and expanded the historic De Young (Chronicle) Building, now the Four Seasons Residences, reducing the 0.1 percent budget by 0.02 percent.

8 Existing sunlight and existing shadow coverage for St. Mary's Square, as calculated by the Planning Department, assumed future expansion of this park.

9 The shadow budget remaining within the Absolute Cumulative Limit (ACL) for Justin Herman Plaza has been reduced since 1989, when an ACL for this park was established at 0.1 percent, by the allocation of most of the shadow budget. In 2000, the Planning Commission allocated more than nine-tenths of the available shadow under the 0.1 percent ACL to the Hotel Vitale at Spear and Mission Streets, reducing the remaining available shadow to 0.008 percent of theoretical annual available sunlight. In 2008, the Commission allocated an additional 0.001 percent of the available shadow to a proposed vertical expansion of an office building at 100 California Street (Case No. 2006.0660K), reducing the remaining available shadow to 0.007 percent of theoretical annual available sunlight. This latter project has not been constructed.

10 No Absolute Cumulative Limit has been established for Woh Hei Yuen Park.

11 The Absolute Cumulative Limit (ACL) for Boeddeker Park has been adjusted three times since 1989, to accommodate the Emporium/Bloomingdales project (amendment to the Yerba Buena Center Redevelopment Project, for which the ACL was increased from 0.0%to 0.007%); the Tenderloin Neighborhood Development Center (TNDC) Curran House residential project at 145 Taylor Street (0.087%); and, most recently, in 2009, the TNDC Eddy & Jones Family Housing Project (0.244%). This latter project has not yet been constructed.

SOURCE: San Francisco Planning Department; CADP; Environmental Science Associates

Among Recreation and Park Department parks, development pursuant to the draft Plan would most substantially affect Union Square, Portsmouth Square, and St. Mary's Square, both in terms duration (time of day and year) and amount of shadow (increased shadow coverage).

Union Square

Union Square would be newly shaded by up to five potential projects—the Transit Tower and private developments including the Palace Hotel residential tower, a mixed-use project consisting of two towers at 50 First Street, and a residential-office tower at 181 Fremont Street (also known as 177 – 187 Fremont Street)—applications are on file for all of these sites—as well as potential development of a 700-foot-tall building at the existing location of Golden Gate University, on Mission Street between First and Second Streets, as called for in the draft Plan.[297] Because of the location of Union Square relative to the Plan area and to the position of the sun in the sky, shadow from development in the Plan area would fall on Union Square from late March through late September, about 6 months in all, between about 7:10 a.m. and 8:40 a.m.; on any given day during that period, new shadow would fall on Union Square for between a few minutes and about one hour, with the duration being less than 30 minutes on most days except between late August and mid-September and between late March and mid-April, when shadows would last up to about one hour. Most of the new shadow on Union Square would be cast by the Palace Hotel tower, which is proposed for a site that is considerably closer to Union Square than other development in the Plan area.

New shadow from potential Plan area buildings would eliminate less than 0.2 percent of the theoretical annual available sunlight from Union Square, increasing the annual shadow load from approximately 38.3 percent to about 38.5 percent. Under the criteria adopted by the Planning and Recreation and Park Commissions in 1989, Union Square has an Absolute Cumulative Limit of 0.1 percent, meaning that one-tenth of one percent of additional shadow may be permitted, relative to theoretical annual available sunlight. Union Square has had the most development activity relative to the creation of net new shadow of any of the parks that would be affected by tall buildings in the Plan area. Changes have included the addition to the Macy's store facing Union Square at 235-281 Geary Street (Case No. 1996.228K; approved November 21, 1996), which involved the demolition of two six-story buildings and construction of a new eight-story structure of the south side of Geary Street between Powell and Stockton Streets; because of setbacks at the upper story, this project resulted in a net decrease in shadow on Union Square during the hours covered by *Planning Code* Section 295 of approximately 194,293 shadow-foot-hours; however, this amount was not formally "added back" to Union Square's shadow budget. New shadow was added to Union Square by the vertical expansion of the historic DeYoung (Chronicle) Building at 690 Market Street for development of the Ritz-Carlton Residences project (Case No. 2004.0584K; approved March 18, 2004). That project added approximately 69,540 shadow-foot-hour hours of new shade on Union Square, approximately 17.7 percent of the annual shadow hours available for use under the absolute cumulative limit. Therefore, in order for Plan area buildings that would add new shadow to Union Square to be

[297] No application is on file for the Golden Gate University site, although it is assumed in this analysis to be redeveloped in the future.

approved, the Absolute Cumulative Limit would have to be increased—as part of individual building approvals—to approximately 0.2 percent, if all Plan area buildings were to be approved.[298]

The greatest area of net new shadow at any one time would be approximately 27,500 square feet (about 24.5 percent of the total area of Union Square), at 8:00 a.m. in early September and early April, from the Palace Hotel tower (see **Figure 63**). At these times, shadow on Union Square would increase from about 67 percent shadow coverage to over 90 percent shading. Because most of the Plan area buildings (with the exception of the Palace Hotel tower) that would shade Union Square would do so in the very early morning, additional shadow would generally be cast on Union Square when the park is already three-fourths or more shaded, and often when existing shadow covers more than 90 percent of the park; in some instances, new shadow would complete the shading of Union Square, although for only a few minutes per day. The Palace Hotel tower, being farther west than the other building sites, would add shadow to Union Square when the park is as little as one-third in shadow under existing conditions, and would never result in full shading of the park.

Portsmouth Square

Two potential buildings (the Transit Tower and the project at 50 First Street) would newly shade Portsmouth Square. The park's location to the northwest of these project sites means that new shadow would fall on Portsmouth Square in the late fall and early winter, when shadows are longer. New

- shadow would reach Portsmouth Square between late October and mid-February (almost 4 months in all), from about 8:00 a.m. until just after 9:00 a.m. Because of the locations of the Transit Tower and the 50 First Street tower relative to Portsmouth Square, shadow from these two projects would fall on the park in sequence during November and early December and again during January and early February. For these approximately 10 weeks, shadow from the First Street project would begin to fall on Portsmouth Square just as shadow from the Transit Tower is leaving the park, meaning that new shadow would be cast for about one hour each morning between about 8:00 and 9:00 a.m. On any given day during the rest of the time when Portsmouth Square would be newly shaded, new shadow would last less than 30 minutes. The greatest area of net new shadow at any one time would be approximately 27,600 square feet (about 43 percent of the total area of Portsmouth Square), at 8:30 a.m. in late November and mid-January, from the project at 50 First Street; at these times, shadow on Portsmouth Square would increase from about 50 percent to more than 90 percent shadow coverage (see **Figure 64**).

- New shadow from potential Plan area buildings would eliminate about 0.41 percent of the theoretical annual available sunlight from Portsmouth Square, increasing the annual shadow load from
- approximately 39 percent to about 39.4 percent. Under the criteria adopted by the Planning and Recreation and Park Commissions in 1989, Portsmouth Square has an Absolute Cumulative Limit of

[298] A pending case, 706 Mission Street (Case No. 2008.1084), proposes to exhaust the remaining shadow budget for Union Square, and to increase the budget by 0.004 percent. Should this project be approved, additional adjustments in the Absolute Cumulative Limit would be necessary to accommodate Plan area buildings.

Maximum Extent of New Shadow on Union Square (Draft Plan) - April 5 / September 6, 8:00 a.m.

Maximum Extent of New Shadow on Union Square (Transit Tower) - Mayt 10 / August 2, 7:45 a.m.

Net New Shadow Shadow Outline from New Buildings Existing Shadow

SOURCE: CADP

Figure 63
Maximum Extent of New Shadow on Union Square

Maximum Extent of New Shadow on Portsmouth Square - January 10 / November 29, 8:30 a.m.

Maximum Extent of New Shadow on Portsmouth Square - January 31 / November 8, 8:15 a.m.

Net New Shadow | Shadow Outline from New Buildings | Existing Shadow

Case No. 2007.0558E: Transit Center District Plan and Transit Tower . 207439

SOURCE: CADP

● Figure 64 (revised)

Maximum Extent of New Shadow on Portsmouth Square

0.0 percent, meaning that no additional shadow may be permitted. Therefore, in order for Plan area buildings that would add new shadow to Portsmouth Square to be approved, the Absolute Cumulative Limit would have to be increased—as part of individual building approvals—to approximately

- 0.41 percent, if all Plan area buildings were to be approved.

St. Mary's Square

St. Mary's Square has the greatest existing shadow load of the parks that would be most substantially affected, with nearly 52 percent of theoretical annual available sunlight already lost to building shadows. St. Mary's Square would be newly shaded by the Transit Tower, the 50 First Street project, and a potential 700-foot building at 350 Mission Street, as called for in the draft Plan.[299] New shadow would fall on St. Mary's Square from mid-September to mid-October, and during March (about 1.5 months in all), between about 8:10 a.m. and 9:10 a.m. As with Portsmouth Square, St. Mary's Square would be consecutively shaded by the Transit Tower and the 50 First Street project. This would occur in late September and early October, and in mid- to late March. During these times of the year, new shadow would last more than 30 minutes. At other times when new shadow would fall on St. Mary's Square, the duration on any particular day would be 20 minutes or less. The greatest area of net new shadow at any one time would be approximately 10,500 square feet (about 26 percent of the total area of St. Mary's Square), at 8:45 a.m. in late September and mid-March, from the project at 50 First Street; at these times, shadow on St. Mary's Square would increase from about 75 percent to 100 percent shadow coverage (see **Figure 65**).

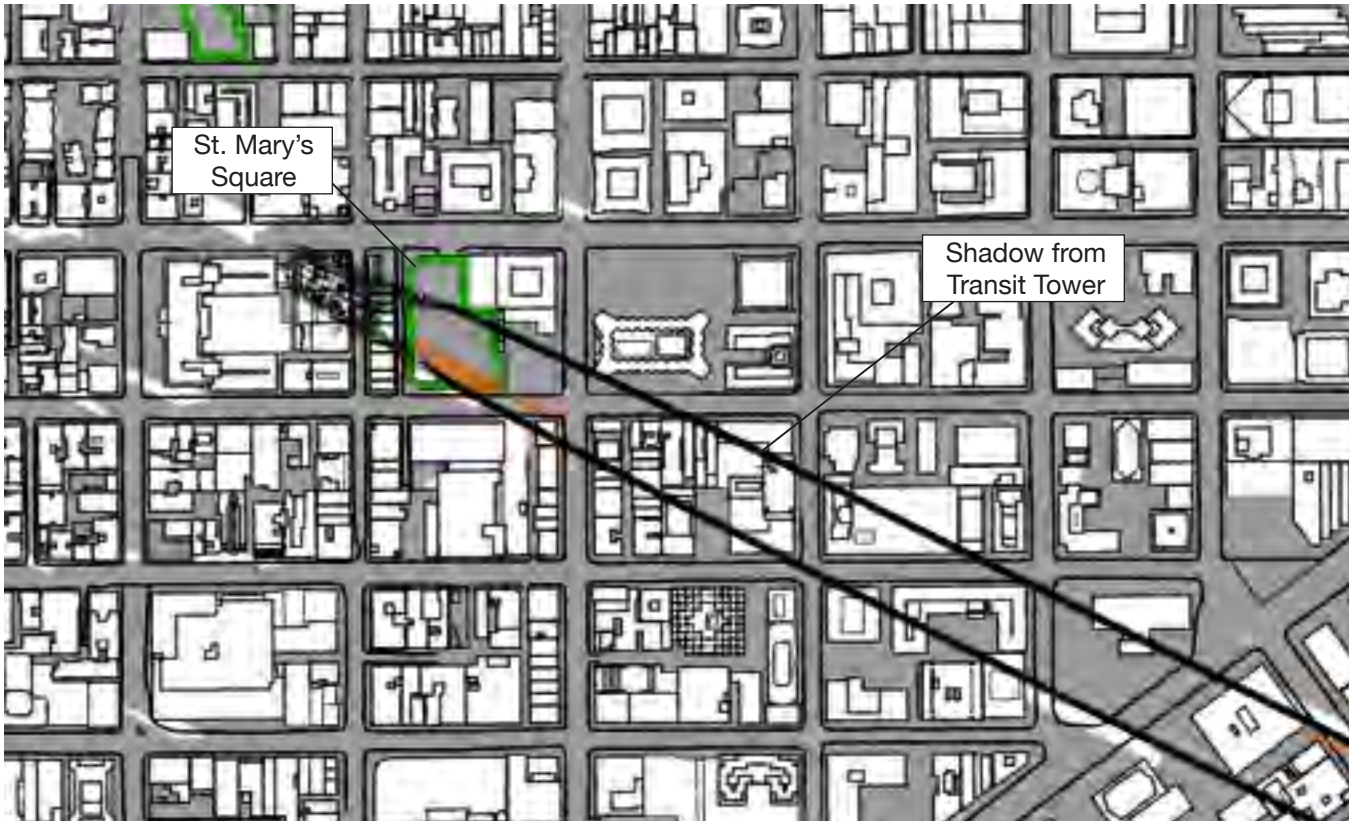
New shadow from potential Plan area buildings would eliminate less than 0.1 percent of the theoretical annual available sunlight from St. Mary's Square, increasing the annual shadow load from approximately 51.9 percent to about 52.0 percent. Under the criteria adopted by the Planning and Recreation and Park Commissions in 1989, St. Mary's Square has an Absolute Cumulative Limit of 0.0 percent, meaning that no additional shadow may be permitted. Therefore, in order for Plan area buildings that would add new shadow to St. Mary's Square to be approved, the Absolute Cumulative Limit would have to be increased—as part of individual building approvals—to approximately 0.09 percent, if all Plan area buildings were to be approved.

Justin Herman Plaza

The only other Proposition K park that would be affected by more than one building in the Plan area would be Justin Herman Plaza. Justin Herman Plaza is also the only Proposition K open space that would be affected at a time of day other than early morning. This park would be shaded by the Transit Tower, the 50 First Street project, and a building at 350 Mission Street developed at the draft Plan's proposed height limit of 700 feet. Justin Herman Plaza would be newly shaded between early November and early February (about 2.5 months in all), from about 1:00 p.m. to 2:40 p.m. New shadow would fall on Justin

[299] As stated in the Project Description, a 375-foot-tall building was approved at this site in 2011. However, the Plan proposes that the height limit on this site be increased to 700 feet.

Maximum Extent of New Shadow on St. Mary's Square - March 15 / September 27, 8:45 a.m.



Maximum Extent of New Shadow on St. Mary's Square - March 15 / September 27, 8:45 a.m.

Net New Shadow | Shadow Outline from New Buildings | Existing Shadow

SOURCE: CADP

Case No. 2007.0558E: Transit Center District Plan and Transit Tower . 207439

● Figure 65 (revised)

Maximum Extent of New Shadow on St. Mary's Square

Herman Plaza for between 15 minutes and 50 minutes per day. The greatest area of new shadow at any one time would be approximately 16,400 square feet (about 10 percent of the total area of Justin Herman Plaza), at 1:15 p.m. in early December and early January, from the Transit Tower; at these times, shadow on Justin Herman Plaza would increase from about 86 percent to about 96 percent shadow coverage (see **Figure 66**).[300]

New shadow from potential Plan area buildings would eliminate about 0.1 percent of the theoretical annual available sunlight from Justin Herman Plaza, increasing the annual shadow load from 37.6 percent to about 37.7 percent. Under the criteria adopted by the Planning and Recreation and Park Commissions in 1989, Justin Herman Plaza has an Absolute Cumulative Limit of 0.1 percent, meaning that one-tenth of one percent of additional shadow may be permitted. However, most of the 0.1 percent increment of new shadow was consumed by the Hotel Vitale, which was approved and constructed at Mission Street and the Embarcadero subsequent to adoption of the shadow criteria in 1989. According to the Final EIR for the Hotel Vitale, that project added approximately 510,544.8 square-foot-hours of shadow to Justin Herman Plaza, representing approximately 92 percent of the allowable new shadow (0.092 percent of potential sunlight), as established in 1989.Therefore, in order for Plan area buildings that would add new shadow to Justin Herman Plaza to be approved, the Absolute Cumulative Limit would have to be increased to approximately 0.2 percent.

Willie "Woo Woo" Wong Playground

Plan area development would add new shadow to Willie "Woo Woo" Wong Playground (formerly Chinese Playground); this shadow would be cast by a potential 700-foot building on the Golden Gate University site and by a potential 700-foot building on the TJPA's "Parcel F" (on the south side of the Transit Center east of Second Street), and would occur from early November to early December and during January (about 2 months in all), from about 8:00 to 8:20 a.m. New shadow would fall on Willie Wong Playground for about 20 minutes per day. The greatest area of new shadow at any one time would be approximately 4,000 square feet (about 15 percent of the total area of Willie Wong Playground), at

- 8:15 a.m. in late November and mid-January, from the building on TJPA Parcel F; at these times, shadow on the playground would increase from about 80 percent to about 97 percent shadow coverage (see **Figure 67**).

New shadow from potential Plan area buildings would eliminate about 0.06 percent of the existing sunlight on an annual basis from Willie Wong Playground (about 0.03 percent of the theoretical annual available sunlight), increasing the annual shadow load only incrementally (from 52.80 percent to about 52.83 percent. Under the criteria adopted by the Planning and Recreation and Park Commissions in 1989, Willie Wong Playground has an Absolute Cumulative Limit of 0.0 percent, meaning that no additional shadow may be permitted. Therefore, in order for Plan area buildings that would add new shadow to

[300] As described below under Impact SH-2, the shadow analysis includes shadow potentially cast by the rooftop sculptural element atop the proposed Transit Tower. This element was modeled as a series of discrete vertical columns and horizontal beams, and the shadow from each discrete column and beam was included in the analysis, even though this shadow would, in most cases, not be readily perceptible on the ground.

Maximum Extent of New Shadow on Justin Herman Plaza - January 3 / December 6, 1:15 p.m.

Maximum Extent of New Shadow on Woh Hei Yuen Park - January 31 / November 8, 7:44 a.m. (First Prop. K minute)

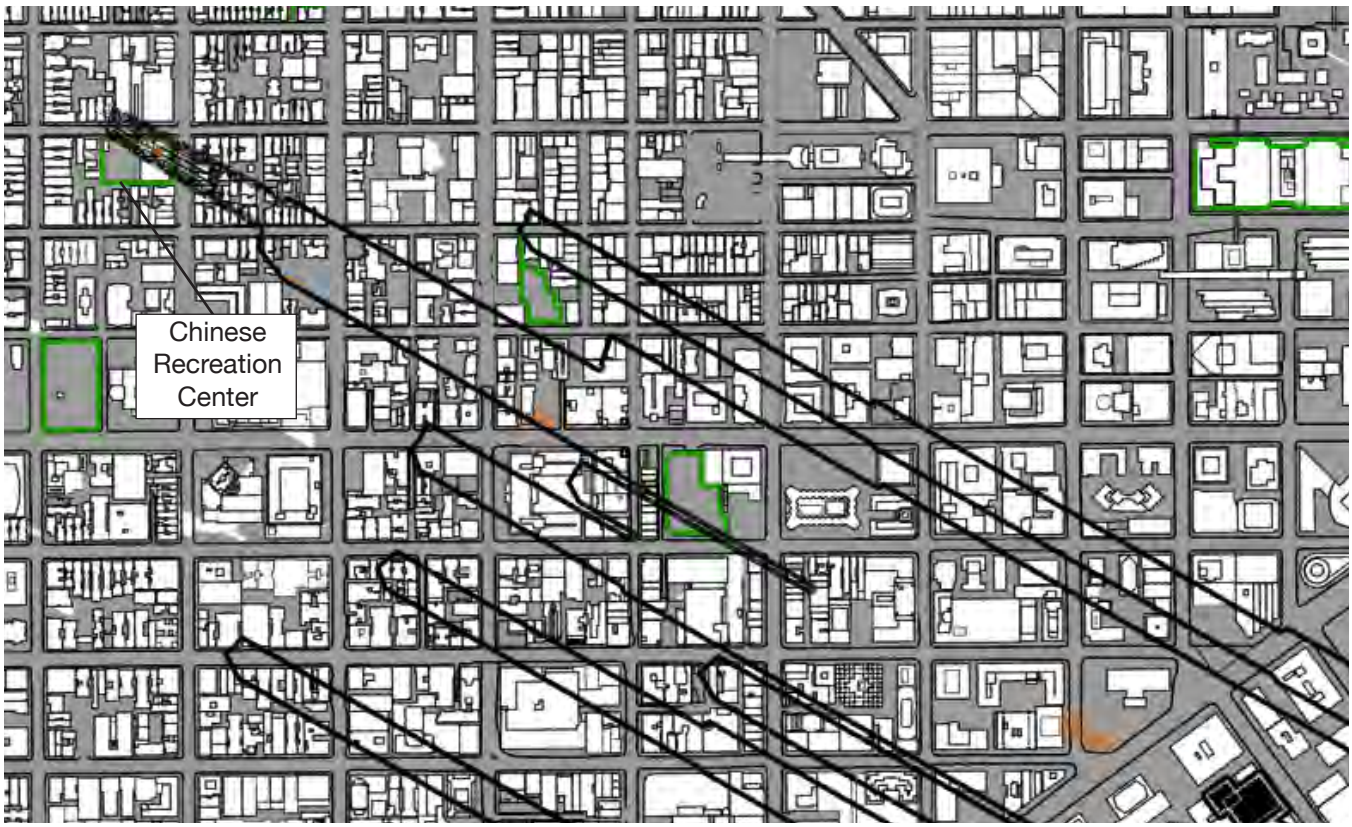
Net New Shadow | Shadow Outline from New Buildings | Existing Shadow

SOURCE: CADP

Figure 66

Maximum Extent of New Shadow on Justin Herman Plaza and Woh Hei Yuen Park

Maximum Extent of New Shadow on Willie "Woo Woo" Wong Playground - January 10 / November 29, 8:15 a.m.



Maximum Extent of New Shadow on Chinese Recreation Center - February 21 / October 18, 8:23 a.m. (First Prop. K minute)

Net New Shadow Shadow Outline from New Buildings Existing Shadow

SOURCE: CADP

Figure 67
Maximum Extent of New Shadow on Willie "Woo Woo" Wong Playground and Chinese Recreation Center

Willie Wong Playground to be approved, the Absolute Cumulative Limit would have to be increased to approximately 0.03 percent.

Other Section 295 Parks

Development pursuant to the draft Plan would also result in net new shadow falling on Maritime Plaza (about 0.004 percent of theoretical annual available sunlight), Chinese Recreation Center (about 0.008 percent of theoretical annual available sunlight; see Figure 67), Boeddeker Park (about 0.003 percent of theoretical annual available sunlight), and Woh Hei Yuen Recreation Center and Park (about

- 0.001 percent of theoretical annual available sunlight). The first three of these parks have an Absolute Cumulative Limit of 0.0 percent, meaning that no additional shadow may be permitted; no Absolute Cumulative Limit has been established for Woh Hei Yuen Park, as this facility was developed subsequent to the 1989 action that set these limits for 14 downtown parks. Therefore, in order for Plan area buildings that would add new shadow to Maritime Plaza, Boeddeker Park, Chinese Recreation Center, or Woh Hei Yuen Park to be approved, the Absolute Cumulative Limit would have to be increased to between
- 0.001 percent and 0.008 percent, depending on the park. Because only the proposed Transit Tower would shade these parks, those shadows are discussed in detail under impact SH-2, below.

It is important to note that, because of the distance between many of the parks and the buildings whose shadow would fall on the parks, the great majority of new shadow from Plan area buildings on Section 295 parks would not have an edge defined by a clear divide between sunlight and shadow. Instead, the observer would see on the ground an area that would gradually change from fully sunlit to fully shaded, with no evident "edge" do the shadow. The reason for this is that the sun, when observed from earth at any given moment, is seen as a disk that occupies approximately one-half of one degree

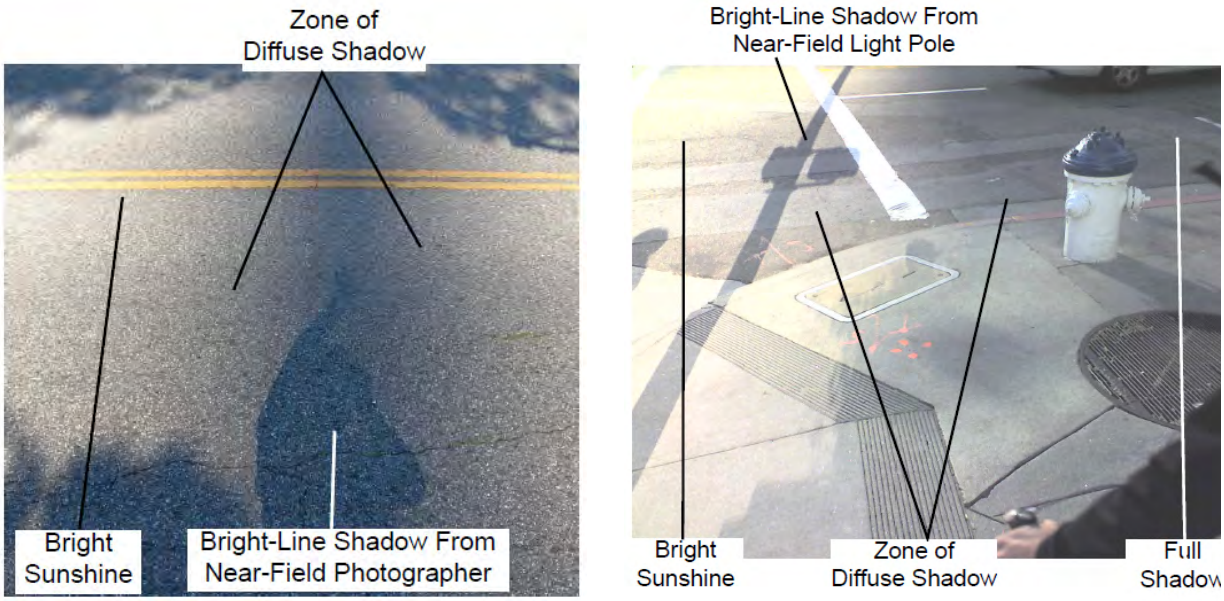
- (0.53 degrees) of a 360-degree circle that represents the sun's path across the sky. Because light emanates from the entire surface of the disk, sunlight can "pass around" objects that are occupy less than 0.53 degrees of the sky. For example, a finger held at arm's length is not wide enough to obscure the sun. Accordingly, in the case of a building more than a few hundred feet from a particular park, the edge of the building intercepts only a portion of the sunlight at any given moment, and therefore the shadow from that building is cast as a diffuse "line" on the distant park. **Figure 68** illustrates this phenomenon, depicting shadow cast by Sutro Tower on Marview Way (about 900 feet distant) and by the residential tower at One Rincon Hill onto the corner of Howard and Fremont Streets, approximately 1,500 feet (one-quarter mile) distant. Because the parks that are subject to Section 295 and that would be shaded by Plan area buildings are all at least one-quarter mile from the building that would cast shadow—many are one-third to one-half a mile away, or even more—the actual area than an observer on the ground would see as being shaded would generally be less than is reported above. For this reason, actual effects of shadow as perceived by park users could be less substantial than indicated by the calculations.

For the same reason, individual elements of a building, such as a spire or a small mechanical penthouse, cast no solid shadow on a distant park if they obscure less than the 0.533-degree angle. Thus, at a distance of one-third of a mile (1,750 feet), a 16-foot wide object will cast no discernible shadow at all because, like the finger at arm's length, this object will not obscure the entirety of the sun's disk, and the sun's rays

therefore can pass around the object to light the location one-third of a mile distant from the object. This phenomenon is the reasoning behind the decorative sculptural element at the top of the proposed Transit Tower.

Impacts on Use of the Affected Parks

Union Square, because it is in a retail and tourist hotel neighborhood, is generally not heavily used during the early morning hours (before 8:00 a.m.) when much of the new shadow from Plan area buildings would fall on the park. Between 8:00 a.m. and 9:00 a.m., when shadow from the Palace Hotel tower would fall on Union Square, activity is increased, although there is substantially more pedestrian activity on the sidewalks surrounding Union Square at this time than in the park itself, as many people pass Union Square when walking to work and other destinations.



Sutro Tower Shadow on Marview Way (900 feet distant)

One Rincon Hill Shadow at Fremont and Howard Streets (1,500 feet distant)

Figure 68
Diffuse Shadow

Portsmouth Square, at the eastern edge of Chinatown, a very dense residential neighborhood, is relatively heavily used even between 8:00 a.m. and 9:00 a.m., when new shadow from Plan area buildings would fall on the park. Much of the activity in Portsmouth Square at this time of day consists of individuals, many elderly, exercising.

St. Mary's Square, although near the southern edge of Chinatown, is not as heavily used as Portsmouth Square. However, it is used by people exercising in the early morning, when new shadow from Plan area buildings would fall on the park.

Justin Herman Plaza, which would be newly shaded in the early afternoon in late fall and early winter, is heavily used during the midday period by persons traveling to and from the Ferry Building, tourists, street vendors, and lunchtime office workers and strollers.

In general, due to the relatively small area that would be newly shaded and the limited times of the day that would be affected at most parks, shadow from the buildings that could be developed in the Plan area pursuant to the draft Plan would not be likely to result in major changes in usage of the affected parks, such that the use of any of the parks would be dramatically affected. In some cases, such as Portsmouth Square and Justin Herman Plaza, new shadow would be expected to be readily noticeable to park users. However, given that approval of the Plan area buildings would require that the Absolute Cumulative Limit be increased on eight downtown parks, the impact is considered adverse, and this impact would therefore be **significant and unavoidable**, with the Plan-proposed building heights. No mitigation is available for shadow impacts on existing parks, because it not possible to lessen the intensity or otherwise reduce the shadow cast by a building at a given height and bulk. Additionally, it is not normally possible to relocate an existing park or to add park space to existing parks. It is noted, however, that the draft Plan proposes to create or fund the creation of up to 11 acres of new open space (including the City Park atop the Transit Center) and to set aside funds from fees generated by new development in the Plan area to make improvements to parks that would be shaded by Plan area buildings, notably Portsmouth Square and St. Mary's Square. Chapter VI, Alternatives, discusses shadow impacts of alternatives that would reduce building heights from those proposed in the draft Plan.

In terms of shadow effects on sidewalks and open spaces not subject to *Planning Code* Section 295, development pursuant to the draft Plan would result in relatively greater impacts on sidewalks in the Plan area and on nearby non-Section 295 open spaces, compared to impacts on the Section 295 open spaces described above. This is because shadow effects are typically greater for closer-in locations than locations very far away because—assuming existing shadow loads are comparable—closer-in spaces will tend to be shaded for more days and more hours of the year than distant locations.

The non-Section 295 public open space that would be most greatly affected by Plan area development is Rincon Park along the Embarcadero. This open space would be newly shaded in the late afternoon throughout much of the year, except from mid-fall through mid-winter, by the Transit Tower, 181 Fremont, the 50 First Street project, and potential 700-foot buildings at the Golden Gate University site and at 350 Mission Street. Rincon Park is currently in substantial late afternoon shadow, cast primarily by office towers at 201 Spear Street, 2 Harrison Street (the GAP building), and 211 and 221 Main Street, as well as by the parking garage at Howard and Steuart Street and by Hills Plaza. New buildings in the Plan area would add additional shadow between the shadow cast by existing buildings, obscuring some of the existing sunlight. Several Plan area buildings, including the Transit Tower, 50 First Street project, and potential buildings at the Golden Gate University site and 350 Mission Street, would add new shadow to Ferry Plaza in the late afternoon in late fall and early winter. Much of the plaza is already shaded by the Ferry Building at this time; net new shadow would be limited to the southern portion of Ferry Plaza. Portions of Herb Caen Way (the pedestrian promenade along the Embarcadero) would also be shaded by Plan area buildings in the afternoon, year-round, with the precise location, extent, and

duration varying by season. The 50 First Street project and the Transit Tower would each add new shadow to Mechanics Plaza, on the north side of Market Street at Battery Street, in the late morning in spring and fall. None of the Plan area buildings discussed above, including the Transit Tower, would add new shadow to Yerba Buena Gardens during the hours covered by Section 295 (from one hour after sunrise to one hour before sunset), because this open space is too far south of the Plan area building sites. Yerba Buena Gardens would be newly shaded in the early morning by buildings proposed and approved near the southwestern corner of the Plan area, such as the approved building at 222 Second Street and potential buildings at the southeast corner of Second and Howard Streets and on either side of Howard Street near Hawthorne Street.

Development pursuant to the draft Plan would also add new shadow to privately owned, publicly accessible open spaces (POPOS), such as the open spaces at 555 – 575 Market Street, 525 Market Street, 560 Mission Street, 50 Fremont Street (Fremont Center Plaza), 45 Fremont Street, and 50 Beale Street (Bechtel Plaza), as well as Crown Zellerbach Plaza (at One Bush Street) and McKesson Plaza (at one Post Street); this last open space would be shaded during the noon hour in spring and fall by the proposed Palace Hotel Tower. Plan area buildings, including the Transit Tower, would also add new shadow to the planned City Park atop the new Transit Center and to Mission Square, adjacent to the proposed Transit Tower (see Figures 60 through 62).

The only assumed development sites in the Plan area subject to *Planning Code* Section 146(a), which requires that buildings and additions fit within an envelope defined by a plane sloping away from the street at a prescribed angle above a prescribed height, are sites at the southwest corner of Second and Howard Streets, the proposed Palace Hotel tower at New Montgomery and Jessie Streets, and as site on the west side of Second Street between Natoma and Howard Streets. Regarding the first site, an office tower was approved in 2010 at 222 Second Street and, as part of that approval, the Planning Commission granted an exception to the shadow angle requirement of Section 146(a), pursuant to Section 309. The Palace Hotel tower and the other Second Street site would require the granting of similar exceptions if the Planning Commission finds that "the shadow created by the penetration of the plane is deemed insignificant because of the limited extent or duration of the shadow or because of the limited public use of the shadowed space." For all subsequent projects in the Plan area, a determination would have to be made, under Section 146(c), that each building is shaped "so as to reduce substantial shadow impacts on public sidewalks in the C-3 Districts" if this can be done "without creating an unattractive design and without unduly restricting the development potential of the site in question."

Planning Code Section 147 requires that all new development and additions to existing structures where the height exceeds 50 feet must be shaped to minimize shadow on public plazas or other publicly accessible open spaces other than those protected by Section 295, "in accordance with the guidelines of good design and without unduly restricting the development potential of the property." As indicated above and in Figures 60 through 62, Plan area buildings would add new shadow to various POPOS. A separate determination concerning Section 147 compliance would be required to be made for each subsequent project in the Plan area.

Impact SH-2: The proposed Transit Tower would adversely affect the use of various parks under the jurisdiction of the Recreation and Park Department and, potentially, other open spaces. (Significant and Unavoidable)

As stated under Impact SH-1, the proposed 1,070-foot-tall Transit Tower would cast new shadow on eight parks that are governed by Section 295 of the *Planning Code*: Union Square, Portsmouth Square, St. Mary's Square, Justin Herman Plaza, Maritime Plaza, Woh Hei Yuen Recreation Center and Park, Chinese Recreation Center, and Boeddeker Park. **Table 42** summarizes the impacts of the Transit Tower on each of these parks.

To evaluate the year-round Proposition K impact from the Transit Tower, a quantitative analysis of sunlight and shade was conducted for net new shadow. The analysis consisted of calculating the amount of shadow coverage resulting from existing buildings at 15-minute intervals on one day per week, for six months of the year. The shadow coverage at the 15-minute intervals was averaged to calculate hourly shadow coverage (in shadow-foot-hours), and the hourly figures for each day were added and resulting numbers extrapolated to weekly figures through averaging with the preceding week's total. Because the sun's path from January through June essentially mirrors its path from July through December, the six months' shadow-foot-hour totals were doubled to return a yearly figure.[301]

It is noted that the proposed Transit Tower would consist of a 920-foot-tall building with 150-foot-tall sculptural element atop the roof (and a 20-foot-tall mechanical penthouse within the sculptural element, set back from the perimeter of the roof). Because the sculptural element is proposed as a lattice-like structure, the sculptural element would not cast a solid shadow on the ground at distant locations, such as the Section 295 parks included in this analysis. This analysis considers shadow cast by the sculptural element as part of the total building shadow; the sculptural element was included in the shadow model as a series of discrete vertical columns and horizontal beams, as is proposed. As discussed above in Impact SH-1, building components that are narrower than the apparent width of the sun in the sky do not cast actual shadow that can be seen on the ground at distant locations, because the sun's rays pass around the object. Because the sculptural element would consists of a steel lattice with individual columns and beams no more than 2 feet wide, none of the individual steel members would cast discernible shadow on any of the Section 295 parks, and the only actual shadow that would be cast by the 150-foot-tall sculptural element would occur if the sun were to be at an angle relative to the building such that several of the steel members were lined up next to one another, like a closely spaced picket fence. This condition would not be expected to generally arise, except at discrete locations in a park that would be much smaller than the theoretical shadow from the sculptural element, were it to be a solid object. **Figures 63 and 66** illustrate this potential for representative times at Union Square and Justin Herman Plaza. Although these figures depict shadow from the entire sculptural element, the single "strands" of shadow illustrated in the figures are artifacts of the computer modeling program, and would not, under actual conditions, be visible on the ground. Moreover, the drawing program uses lines that appear thicker in the shadow images than the theoretical shadow on the ground. Nevertheless, for purposes of a conservative analysis,

[301] This is the same methodology used by the Planning Department to calculate shadow and establish the Proposition K baseline shadow coverage for other San Francisco parks.

TABLE 42
TRANSIT TOWER SHADOW ON SECTION 295 PARKS

Open Space	Existing Shadow[1]	Permitted Shadow[2]	Project Shadow[3]	Pct. new Shadow[4]	Shadow w/Project[5]	Time/Date of Net New Shadow includes Rooftop Element)	Maximum Shadow Sq. Ft.[6]	Maximum Shadow Percent[7]	Maximum Shadow Date/ Time[8]
Union Square[9]	38.30%	0.1% (0.08%)	47,165 22,935	0.011% 0.005%	38.31% 38.31%	Mid-July – mid-August; May, from approx. 7:30 to 8:00 a.m.	7,565 3,882	6.7% 3.4%	7:45 am, mid-May & early Aug.
St. Mary's Square[10]	51.90%	0.0%	70,928 52,120	0.048% 0.035%	51.95% 51.94%	Mid- September – early October; March – 8:30 - 9:10 a.m.	7,442 6,579	18.8% 16.6%	8:45 am, mid-Mar. & late Sept.
Portsmouth Square	39.00%	0.0%	321,553 277,780	0.133% 0.115%	39.13% 39.12%	Mid-October - early Dec.; early Jan. - mid-Feb. – 8:00 - 8:40 a.m.	22,523 22,523	34.7% 34.7%	8:15 am, late Jan. & early Nov.
Justin Herman Plaza[11]	37.60%	0.1% (0.007%)	277,935 119,665	0.046% 0.020%	37.65% 37.62%	Mid-November - late January – 1:00 - 1:40 p.m.	16,381 8,263	10.1% 5.1%	1:15 pm, early Jan. & early Dec.
Maritime Plaza	68.40%	0.0%	19,110 0	0.004% 0.000%	68.40% 68.40%	Early December – early January, from 10:40 to 11:10 a.m.	2,659 0	1.9% 0.0%	10:45 am, late December
Woh Hei Yuen Park[12]	n/a	n/a	510 510	0.001% 0.001%	n/a n/a	Early November and late January, approximately 7:45 a.m.	275 275	1.9% 1.9%	7:44 am,* late Jan. & early Nov.
Chinese Recreation Ctr.	n/a	0.0%	8,415 0	0.008% 0.000%	n/a n/a	Mid-October and mid-February, approximately 8:25 a.m.	10,386 0	36.5% 0.0%	8:23 am,* late Feb. & mid-Oct.
Boeddeker Park[13]	37.70%	0.244% (0.000%)	3,900 3,900	0.003% 0.003%	37.70% 37.70%	early June – early July, from 6:50 to 7:00 a.m.	1,188 1,188	2.9% 2.9%	6:47 am,* late June

1 Existing Shadow is the existing amount of shadow cast by existing buildings, measured by the percentage of theoretical annual available sunlight (TAAS) that would be available if no existing buildings were present (based on 1989 Planning Department analysis). TAAS is computed by multiplying the area of each park by 3,721.4 (number of hours covered by Sec. 295). n/a – Not Available

2 Permitted Shadow is the additional amount of **net new** shadow allowed (the Absolute Cumulative Limit) under Sec. 295 for each park. This includes any changes that have occurred since 1989. Bottom figure (in parentheses) indicates remaining budget available, if applicable.

3 Project Shadow is the amount of net new shadow, measured in shadow-foot-hours, that would be cast on each park on an annual basis. Top number is entire Transit Tower; bottom number excludes rooftop element.

4 Pct. new Shadow is the percentage of theoretical annual available sunlight (TAAS) that would be lost due to project shadow, on an annual basis. Top number is entire Transit Tower; bottom number excludes rooftop element.

5 Shadow w/Project is the percentage of theoretical annual available sunlight that would be shaded by existing building ***plus*** the proposed project, on an annual basis. Top number is entire Transit Tower; bottom number excludes rooftop element.

6 Sq. Ft. is the greatest amount of each park that would be newly shaded by the proposed project at any one moment. Top number is entire Transit Tower; bottom number excludes rooftop element.

7 Percent Coverage is the percent of each park that would be newly shaded by the proposed project at any one moment. Top number is entire Transit Tower; bottom number excludes rooftop element.

8 Date/Time indicates the date(s) during the year and the time of day when the maximum shadow would fall on each park. Asterisk (*) indicates time is first minute subject to Section 295.

9 The shadow budget remaining within the Absolute Cumulative Limit (ACL) for Union Square has been partially reduced since 1989. In 2004, 69,540 square foot hours was allocated to a project at 690 Market Street, which rehabilitated and expanded the historic De Young (Chronicle) Building, now the Four Seasons Residences, reducing the 0.1 percent budget by 0.02 percent.

10 Existing sunlight and existing shadow coverage for St. Mary's Square, as calculated by the Planning Department, assumed future expansion of this park.

11 The shadow budget remaining within the Absolute Cumulative Limit (ACL) for Justin Herman Plaza has been reduced since 1989, when an ACL for this park was established at 0.1 percent, by the allocation of most of the shadow budget. In 2000, the Planning Commission allocated more than nine-tenths of the available shadow under the 0.1 percent ACL to the Hotel Vitale at Spear and Mission Streets, reducing the remaining available shadow to 0.008 percent of theoretical annual available sunlight. In 2008, the Commission allocated an additional 0.001 percent of the available shadow to a proposed vertical expansion of an office building at 100 California Street (Case No. 2006.0660K), reducing the remaining available shadow to 0.007 percent of theoretical annual available sunlight. This latter project has not been constructed.

12 No Absolute Cumulative Limit has been established for Woh Hei Yuen Park.

13 The Absolute Cumulative Limit (ACL) for Boeddeker Park has been adjusted three times since 1989, to accommodate the Emporium/Bloomingdales project (amendment to the Yerba Buena Center Redevelopment Project, for which the ACL was increased from 0.0%to 0.007%); the Tenderloin Neighborhood Development Center (TNDC) Curran House residential project at 145 Taylor Street (0.087%); and, most recently, in 2009, the TNDC Eddy & Jones Family Housing Project (0.244%). This latter project has not yet been constructed.

SOURCE: San Francisco Planning Department; CADP; Environmental Science Associates

these narrow shadows are considered in the quantitative analysis below. For information, Table 42 also indicates the amount of new shadow that would be cast by the solid portion of the Transit Tower, excluding shadow from the rooftop sculptural element.

As can be seen in Table 42, the quantitative analysis found that the proposed Transit Tower would result in an increase in shadow on the eight affected open spaces of between 0.003 percent and 0.133 percent of the Theoretical Annual Available Sunlight (TAAS). The greatest impact would occur on Portsmouth

- Square (0.133 percent of TAAS), followed by St. Mary's Square (0.048 percent of TAAS), Justin Herman Plaza (0.046 percent), Union Square (0.011 percent), Chinese Recreation Center (0.008 percent), Maritime
- Plaza (0.004 percent), Boeddeker Park (0.003 percent), and Woh Hei Yuen Recreation Center and Park (0.001 percent). Approval of the proposed Transit Tower would require that the Absolute Cumulative Limit for six of these eight parks be increased to accommodate project shadow, in general by the amount of new shadow that would be cast by the Transit Tower.[302] Union Square has sufficient available shadow remaining within its Absolute Cumulative Limit to allow for the shadow from the Transit Tower, although approval would require a finding by the Planning Commission, upon the advice of the Recreation and Park Commission or General Manager, that project shadow would not adversely affect
- the use of Union Square. Woh Hei Yuen Park has no Absolute Cumulative Limit; however, effects on this park would also have to be found to not adversely affect its use.

As with the impacts of buildings that could be developed pursuant to the draft Plan, most net new shadow from the Transit Tower would occur in the early morning hours—before 8:45 a.m. at three of the eight parks and before 9:15 a.m. at three others. As with Plan impacts, Justin Herman Plaza would be the only park shaded in the midday period: new shadow from the Transit Tower would fall on Justin Herman Plaza between mid-November and late January, from about 1:00 - 1:40 p.m.[303] The Transit Tower would add new shadow to Maritime Plaza in the late morning—between early December and early January, from about 10:40 to 11:10 a.m.

The greatest one-time effect would be on Portsmouth Square. The Transit Tower would add about 22,500 square feet of shadow, covering about 35 percent of the park, at 8:15 a.m. in early November and late January (see **Figure 64**). The largest impact on Justin Herman Plaza would be about 16,400 square feet (10 percent of the park) in early December and early January (see **Figure 66**), while the largest single area shaded at Union Square and St. Mary's Square would be about 7,500 square feet on each park (see **Figures 63** and **65**). At Union Square, this would represent about 7 percent of the park area, and would occur in early August and mid-May, while at St. Mary's Square, this would amount to about 19 percent of the park, and would occur in late September and mid-March. The Transit Tower would add a small amount of new shadow to Woh Hei Yuen Recreation Center and Park, for about two weeks of the year, in early November and late January, for less than 15 minutes after the "first Proposition K minute"; that is, approximately 7:45 a.m. At these times, the Tower would delay for a few minutes the sunlight beginning

302 Justin Herman Plaza has approximately 0.007 percent of theoretical available annual sunlight remaining to be allocated; thus, the Absolute Cumulative Limit for this par, would have to be increased to 0.167 percent in order for the Transit Tower to be approved.

303 Shadow from the solid portion of the building, excluding the rooftop sculptural element, would occur at generally the same times, but only in December and early January, and for a few minutes less each day.

to fall on this park, casting shadow on the 2 percent of the park that is not then shaded—but only for about 10 minutes (see Figure 66). Likewise, the maximum one-time shadow on Chinese Recreation Center would occur for less than 15 minutes after the "first Proposition K minute" (8:23 a.m.) for one week in late February and one week in mid-October, when the Transit Tower would shade about 35 percent of the park's area (see **Figure 67**). The maximum one-time shadow on Maritime Plaza and Boeddeker Park would each be less than 3 percent of the parks' areas, and each would be shaded by the Transit Tower for less than one month of the year (see **Figure 69**).

As with the effects of Plan area buildings discussed above in Impact SH-1, shadow from the proposed Transit Tower would not be likely to result in major changes in usage of the affected parks, such that the use of any of the parks would be dramatically affected, because the areas that would be newly shaded would be relatively small at most times of the day and year. However, in many instances, the new shadow would be noticeable to park users. Therefore, given that approval of the Transit Tower would require that the Absolute Cumulative Limit be increased on six downtown parks, the impact of the Transit Tower with respect to shading of Section 295 parks is considered adverse. This impact would be significant and unavoidable, with the Transit Tower as proposed, because design solutions would not entirely reduce this impact to a less-than-significant level. Chapter VI, Alternatives, discusses shadow impacts of alternatives that would develop the Transit Tower at a lesser height, which would reduce shadow impacts.

As described above in Impact SH-1, the proposed Transit Tower would add new shadow to Mission Square, which would be adjacent to and east of the Tower. Accordingly, the Transit Tower (and the 181 Fremont Street and 50 First Street projects building to the southeast and northwest, respectively) would shade Mission Square to varying degrees in the late morning and the afternoon throughout the year (see Figures 50-F, 60-H through 60-M, 61-D, 61-G through 61-K, 62-D and 62-E, and 66). (Mission Square is not proposed to be under the jurisdiction of the Recreation and Park Commission, and therefore would not be subject to *Planning Code* Section 295.) The Transit Tower would also add shadow to the planned City Park, atop the Transit Center. However, because the Transit Tower would be northwest of this park, the Tower would shade only the eastern end of City Park (east of the Tower), and only in the late afternoon (see Figures 60-J through 60-M, 61-J, and 61-K). (No shadow from the Transit Tower shadow would fall on City Park in late fall and early winter, when the sun does not move far enough to the north, relative to the earth.)

The Transit Tower would cast new shadow on nearby sidewalks and POPOS, as well. For example, new Tower shadow would fall on the open space at 333 Market Street in the morning in winter (see Figure 62-B); on the open spaces at 525 Market Street and 50 Fremont Street at mid-morning in spring, summer, and fall (see Figures 60-E, 60-F, 61-C, 61-E, 61-F); on the 50 Fremont Street at noon in summer (see Figure 60-G); and on the open spaces at 199 Fremont Street and 301 Howard Street during summer afternoons (see Figure 60-K).

Maximum Extent of New Shadow on Maritime Plaza - December 20, 10:45 a.m.

Maximum Extent of New Shadow on Boeddeker Park- June 21 / September 21, 6:47 a.m. (First Prop. K minute)

Net New Shadow Shadow Outline from New Buildings Existing Shadow

SOURCE: CADP

Figure 69

Maximum Extent of New Shadow on Maritime Plaza and Boeddeker Park

Impact C-SH: The draft Plan, including the proposed Transit Tower, would contribute to cumulative new shadow that would adversely affect the use of various parks under the jurisdiction of the Recreation and Park Department and, potentially, other open spaces. (Significant and Unavoidable)

In addition to shadow from development in the Plan area, a 550-foot-tall residential tower is proposed at 706 Mission Street (Case No. 2008.1084E), just west of the Plan area. This tower, which is part of a project that would also rehabilitate the historic Aronson Building at Third and Mission Streets and provide a permanent location for the Mexican Museum, would add new shadow to Union Square. This project would add new shadow to Union Square from mid-October to mid-November, and during the month of February, between about 7:20 a.m. and 9:20 a.m. This shadow would fall on Union Square at different times of the year than shadow from Plan area buildings, due to the fact that the 706 Mission Street project is east of the Plan area. As noted previously in Impact SH-1, the 706 Mission Street project proposes to exhaust the reminder of the 0.1 percent shadow budget for Union Square, and to increase the budget by 0.004 percent. Therefore, in order for the 706 Mission Street project and all Plan area buildings that would add new shadow to Union Square to be approved, the Absolute Cumulative Limit would have to be increased—as part of individual building approvals—to approximately 0.2 percent (subject to variation in individual building designs), if all Plan area buildings and the 706 Mission Street project were to be approved. The draft Plan, in combination with the 706 Mission Street project, would contribute considerably to a significant cumulative shadow impact on Union Square; this impact, as with the draft Plan and Transit Tower, would be **significant and unavoidable**. It is noted that design changes to the building might reduce impacts, but not necessarily to a less-than-significant level.

Mitigation Measures

None available.

Chapter VI, Alternatives, discusses shadow impacts of alternatives that would allow for development of the Transit Tower and other Plan area buildings at lesser heights, which would reduce shadow impacts.

SAN FRANCISCO
PLANNING DEPARTMENT

1650 Mission St.
Suite 400
San Francisco,
CA 94103-2479

Reception:
415.558.6378

Fax:
415.558.6409

Planning
Information:
415.558.6377

Follow-up to August 16, 2012 Transit Center District Plan Informational Hearing at the Recreation & Parks Commission

September 20, 2012

Staff Contacts:
Joshua Switzky, Planning Department (joshua.switzky@sfgov.org, 575-6815)
Gillian Gillett, Office of Mayor Edwin Lee (gillian.gillett@sfgov.org, 554-4192)

The Planning Department provided an informational overview of the recently adopted Transit Center District Plan to Recreation & Parks Commission on August 16, 2012. At the hearing, several Commissioners posed requested additional information on a number of items. Following are responses to these inquiries:

1) Please provide a chart, or simpler statement, showing RPD possible role or not in each new park, including possible new Chinatown park over subway station. If unknown, that should be listed.

All of the main open spaces in the Transbay area will be designed, built and owned by either the TJPA or the Successor Agency on land owned by one of those two agencies. There is a possible role for the Recreation & Parks Department in the future operation, maintenance and long-term ownership (pending status of the Successor Agency) for two of the parks: Transbay Park and the Essex Street Open Space.

The future design and management of a potential open space on top of the SFMTA's Chinatown Subway Station has not yet been determined, and could include participation by the Recreation & Parks Department. As noted below, planning for this potential open space is funded through MTA and scheduled to begin in fall of this year.

The below table summarizes the agency roles for each of the primary open spaces, noting where functions are yet to be determined and therefore where RPD may have a role.

Transbay Area Park Oversight and Management

Facility	Current Owner	Design	Construction	Maintenance	Operations	Future Owner
City Park	TJPA	TJPA	TJPA	TJPA	TJPA	TJPA
Transbay Park	Successor Agency	Successor Agency	Successor Agency	TBD	TBD	TBD
Oscar Park	TJPA, Caltrans	Successor Agency	Successor Agency	Successor Agency	Successor Agency	TJPA, Caltrans
Essex Street Open Spaces	Successor Agency	Successor Agency	Successor Agency	TBD	TBD	TBD
2nd/Howard Plaza	TJPA	TJPA	TJPA	TJPA	TJPA	TJPA
Chinatown Central Subway	SFMTA	TBD	TBD	TBD	TBD	TBD

Possible RPD Role

2) Please provide an estimate for net land value of new park land in the plan area and for the possible new Chinatown park.

The Plan is helping fund the creation of over 12 acres of open space in the Plan Area. The value of raw developable land in downtown San Francisco is valued at, on average, $1,200 per square foot, or roughly $52 million per acre. (Though note that some land, like the Transit Tower site, is much more valuable at over $3,500/sf, or over $152 million per acre) In simple terms, the value of the 12 acres of new open space being created in the Plan Area is over $600 million. Note that some of the new parks will indeed on raw land that could otherwise be developed (e.g. Transbay Park) and some new parks (e.g. Oscar Park, City Park) will be on property that also feature other uses or infrastructure, thereby making a truly accurate "land value" of the entire proposed open space portfolio difficult or impossible to ascertain.

The SFMTA purchased the 10,000 square foot Chinatown Station site for $6.9 million, or roughly $30 million per acre.

3) Are there any maps, diagrams, parcel info for the possible new park at the Chinatown Station site?

The station site is a 10,000 square foot parcel at the southwest corner of Stockton and Washington Streets. The Gordon Lau Elementary School playground is immediately to the west of the station parcel, and stretches from Washington to Clay Streets. The station building is planned to be a one-story structure occupying a portion of the site. The current concept for an open space on the station parcel would be to site it on the roof of the 1-2 story structures at the same level as the school playground, offering opportunity to connect the two open spaces. A preliminary shadow analysis indicates that both the playground and the potential station park site are generally sunny, and in no case would either be affected by the potential buildings in the Transit Center District. See attached slide for related graphics.

The MTA has funded a community planning process to develop and refine a concept for both rooftop open space on the station building, and an adjacent TOD development on the remainder of the parcel. A team of consultants, working with OEWD, MTA, Planning and Recreation & Parks staff, as well as the community, will start work on this in fall of this year, with completion of a concept expected in spring or summer of 2013. Assuming a rooftop open space is found to be viable, the completed concept will be provided to MTA for further engineering.

4) Please provide information about how San Francisco voters have supported measures, state or local, supporting construction of the Transit Center, High Speed Rail at the Transit Center, or any references to these transit projects in voter or adopted policy measures.

- In 1999, San Francisco voters overwhelmingly approved Proposition H, making it City policy to extend Caltrain to a "a new or rebuilt terminal . . . . constructed on the present site of the Transbay Transit Terminal serving . . . high-speed rail." (Attached, excerpted from the Voter Information Pamphlet.)
- In 2004, the voters approved Regional Measure 2, authorizing an increase in area bridge tolls to fund a "new Transbay Terminal in San Francisco, connecting [regional transit with] future high-speed rail . . . " (Sts. and High. Code § 30914(c)(22).)
- In 2008, California voters approved Proposition 1A, a state bond measure "to initiate the construction of a high-speed train system that connects the San Francisco Transbay Terminal to Los Angeles Union Station and Anaheim." (Sts. and High. Code § 2704.04(a) .)
- In 2010, San Francisco voters approved Proposition G, declaring it City policy "that the northern end of the planned San Francisco-to-Los Angeles high-speed rail line be located at the Transbay Transit Center at First and Mission streets." (Attached, excerpted from the Voter Information Pamphlet.)

The California Legislature has also shown strong support for the Transbay Transit Center. For instance, in California Public Resources Code Section 5027.1 the legislature approved demolition of the old terminal at First and Mission Streets "for construction of a new terminal at the same location, designed to serve Caltrain in addition to local, regional, and intercity bus lines, and designed to accommodate high-speed passenger rail service . . . ."

5) What is the projected timeline of available impact fees for open space?

The Plan Funding Program assumes development will be spread evenly over 20 years of development, and that in total approximately $50 million will be paid over that time in the Plan's new open space impact fees, of which $12.5 million is allocated to improvements outside of the Plan Area. Based on the 20-year buildout assumption, the Plan's fees would expect to generate $2.5 million a year for 20 years, starting in 2013/2014. However, we do know of a few specific development projects that are seeking entitlements in the next few months, meaning that there is a likelihood of some fees to be paid *sooner* than the Plan's assumptions if these projects follow through with construction within a year or two of entitlement. Here is a list of those projects and their estimated Plan-related open space impact fees:

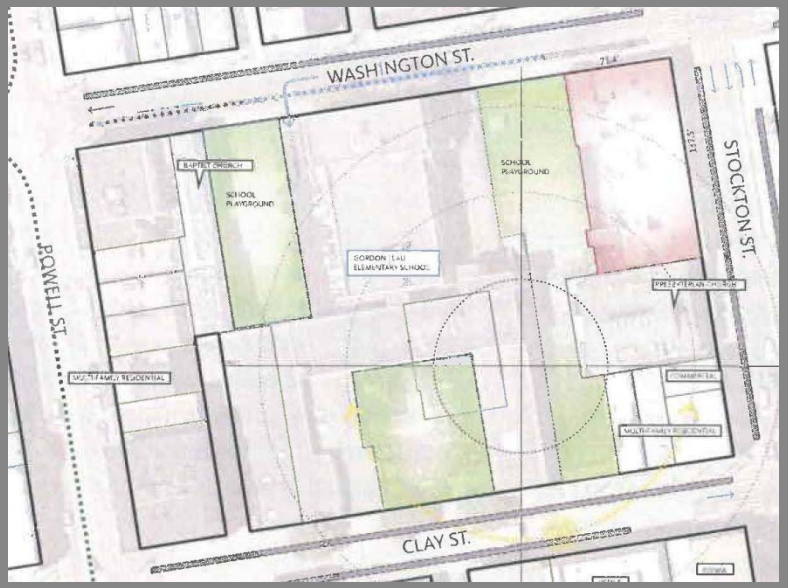
Transit Tower (101 1st Street):	$2.0 million
181 Fremont:	$3.6 million
41 Tehama:	$1.8 million

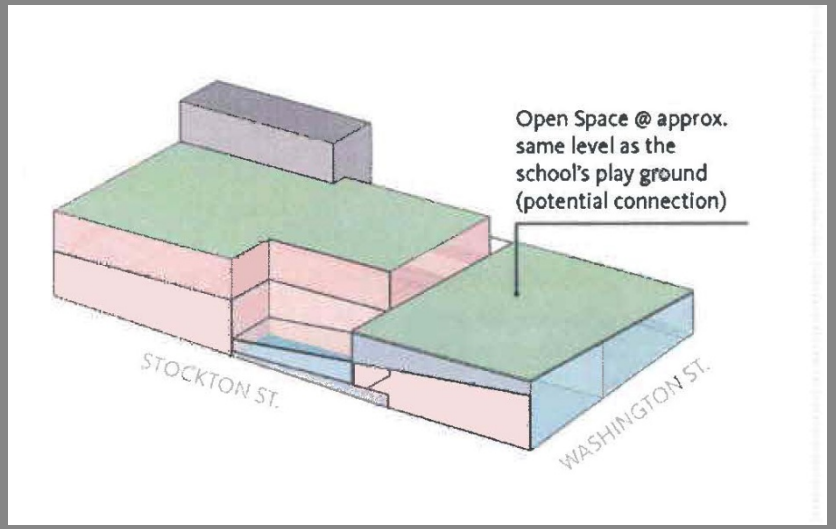
Of that $7.4M total, some will presumably be used for the Plan Area and some will be available for use outside the Plan Area, such as for the Chinatown station park. Those amounts will be determined by the Board of Supervisors with input from the Interagency Plan Implementation Committee (IPIC), a process established in the Administrative Code. We would assume that the full $2 million from the Transit Tower will be used for the Chinatown Station park project because the need for that funding is very timely based on the planning and construction of the subway project. In addition, these three development projects will generate approximately $3.5

million from the existing Downtown Park Fee that must be used within the Transbay Redevelopment Area.

Potential New Chinatown Open Space

- Central Subway Chinatown Station
- Adjacent to Gordon Lau Elementary playground
- New open space on top subway station, at same level as school yard
- Approx. 10,000 square feet
- Generally sunny (would not be impacted by TCDP buildings)





(5) This Subsection 37.3(d) is intended to be and shall be construed to be consistent with the Costa-Hawkins Rental Housing Act (Civil Code Sections 1954.50. et seq.).

(e) Effect of Deferred Maintenance on Passthroughs for Lead Remediation Techniques.

(1) When lead hazards are remediated or abated pursuant to San Francisco Health Code Articles 11 or 26, are violations of State or local housing health and safety laws, there shall be a rebuttable presumption that the lead hazards are caused or created by deferred maintenance as defined herein of the current or previous landlord. If the landlord fails to rebut the presumption, the costs of such work shall not be passed through to tenants as either a capital improvement or an operating and maintenance expense. If the landlord rebuts the presumption, he or she shall be entitled to a rent increase if otherwise justified by the standards set forth in this Chapter.

(2) For purposes of the evaluation of petitions for rent increases for lead remediation work, maintenance is deferred if a reasonable landlord under the circumstances would have performed, on a regular basis, the maintenance work required to keep the premises from being in violation of housing safety and habitability standards set forth in California Civil Code Section 1941 and the San Francisco Municipal Code. In order to prevail on a deferred maintenance defense, a tenant must show that the level of repair or remediation currently required would have been lessened had maintenance been performed in a more timely manner.

Administrative Code Section 37.3(f).

(f) Tenant Financial Hardship Applications. In addition to any existing hardship provisions in the Rent Stabilization and Arbitration Ordinance or Rules and Regulations at the time this Section 37.3 becomes effective:

(1) A tenant in a household who is either unemployed, or whose wages have been reduced by 20% or more compared to 12 months prior, or whose sole income consists of government benefits such as Social Security, Supplemental Security Income (SSI), State Disability Insurance (SDI), or similar benefits and who has not received a cost of living increase in the past 12 months, may file a petition claiming hardship at any time on grounds of financial hardship with respect to any rent increase pursuant to Section 37.3. Payment of such rent increase(s) set forth in the hardship application shall be stayed for a period of 60 days from the date of filing, or until the hearing is held and the decision of the Administrative Law Judge is issued, whichever date comes later.

(2) In determining whether the tenant's claim of financial hardship shall be granted, the Rent Board and Administrative Law Judge shall base their determination on:

(A) Whether or not a tenant in the household (i) is either unemployed or has had wages reduced by 20% or more compared to 12 months prior, or (ii) whose sole income consists of government benefits such as Social Security, SSI, SDI or similar benefits has not received a cost of living increase in the past 12 months; and

(B) Whether the rent including the increase comprises or will comprise 33% or more of the tenant's gross income .

(C) The tenant's assets shall also be considered in making this determination.

(3) Upon finding that the tenant has financial hardship, the Administrative Law Judge shall order that the rent increase will not be in effect prospectively for a specific period of time based on the tenant's circumstances, and schedule a review at the end of that period. If that rent increase is later allowed, it will be effective as of the date the tenant's income or assets changed to permit the increase.

Section 2. Severability

If any provision or clause of this ordinance or the application thereof to any person or circumstance is held to be unconstitutional or to be otherwise invalid by any court of competent jurisdiction, such invalidity shall not affect other provisions of the this ordinance, and clauses of this ordinance are declared to be severable.

Proposition G

NOTE: Additions are *single-underline italics Times New Roman*; deletions are *strike-through italics Times New Roman*.

It shall be the policy of the people of the City and County of San Francisco that:

The new Transbay Transit Center, under construction at First and Mission Streets, be the Northern California terminus for California High Speed Rail.

We call on the California High Speed Rail Authority to abandon consideration of an alternate site for High Speed Rail at Main and Beale Streets and focus on bringing High Speed Rail to the Transbay Transit Center. A train station at Main and Beale would result in unnecessary duplication and delay and cause undue disruption to the residents of San Francisco, especially in the South of Market neighborhood, where 1800 existing and planned units of housing would be lost.

Planning for a new Transbay Terminal with an extension of Caltrain to downtown San Francisco began more than 2 decades ago. A full public process to receive community input and develop a locally preferred site for the new Transbay Terminal resulted in the selection of First and Mission Streets. During this process and after much study, the Main and Beale Streets site was rejected as infeasible and technically inferior to the Transbay Terminal site.

San Francisco residents voted in favor of Proposition H in November 1999 to bring rail to downtown San Francisco and for Proposition K in November 2003 to provide funding for the Transbay Project. Both measures specified that the Transbay Terminal be built on its current site at First and Mission. Considerable time and resources have been put into the First and Mission site, which will bring together rail, Muni, BART, AC Transit and other public transit options in a convenient downtown location for San Francisco and regional travelers. In addition, the voters of California approved Proposition 1A in 2008 to provide funding for High Speed Rail with the specific condition that the northern terminus be located at the Transbay Terminal in San Francisco.

The Transbay Joint Powers Authority (TJPA) was created in 2001 to design, build, and operate the new Transbay Transit Center. Since that time, the TJPA has cleared environmental review, selected the design and development team, completed initial project design, secured over $2 billion to fully fund the first phase of the project, and completed construction of the temporary terminal. The TJPA Board and its capable staff are on schedule to complete the new Transbay Transit Center building by 2015 and the downtown extension by 2018. The Transbay Transit Center is designed to accommodate California High Speed Rail.

Because of the overwhelming support for the Transbay Transit Center at First and Mission Streets, the people of the City and County of San Francisco support this location as the Northern California terminus for High Speed Rail between downtown San Francisco and downtown Los Angeles, and declare as a matter of policy to call on the California High Speed Rail Authority to abandon consideration of an alternate terminus of High Speed Rail at Main and Beale Streets.

TEXT OF PROPOSED ORDINANCE
PROPOSITION H

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

Traffic congestion on highways and surface streets ranks near the top of San Francisco's environmental and economic challenges: Bay Area traffic congestion increased by over 30% from 1995 to 1996, wasting countless hours of people's time and adding to emissions of air pollutants including volatile organic compounds, nitrogen oxide, dioxin and particulate matter, which harm human health and the environment;

Significant new commercial and residential development is planned for the South of Market area and Mission Bay, including construction of a new ballpark, the Pacific Exchange, and a new University of California campus;

Without strengthened regional and local transit service, such development will dramatically increase traffic congestion, overwhelm MUNI capacity, and decrease the quality of life in the South of Market area;

The Caltrain commuter rail line from San Jose and Gilroy, which stops at every major city along the Peninsula, currently ends at 4th and Townsend Streets in San Francisco, over a mile from employment centers in downtown San Francisco, making it less attractive to daily commuters travelling in both directions;

The most efficient and economical means of reducing auto traffic between the Peninsula and San Francisco is to:

a) convert the Caltrain line from diesel to electric propulsion compatible with high speed rail; b) extend the Caltrain rail line to a regional transit station near downtown; and c) operate Caltrain at BART levels of speed, comfort, and frequency of service;

San Mateo and Santa Clara counties have already committed the majority of financing required to complete these projects: as a responsible partner in regional transportation planning, San Francisco should identify its fair share of federal, state, or local financing to accomplish these goals;

The California High Speed Rail Commission has selected San Francisco as the preferred destination for a bullet train from Los Angeles to the Bay Area, which would provide rail service between downtown Los Angeles and downtown San Francisco in under three hours;

A world-class regional transit station, connecting Caltrain, MUNI, AC Transit, Golden Gate Transit, and other intercity bus lines with high-speed rail should be located within easy walking distance of downtown and should have a direct connection to BART and MUNI Metro; and

Such a regional transit station will help maintain San Franciscols role as the economic and cultural center of Northern California into the twenty-first century.

SECTION 1. It shall be and is the law of the city and county that the Caltrain commuter rail line, operated by the Peninsula Corridor Joint Powers Board or any successor agency thereto, be extended downtown to a regional intermodal transit station. To implement such law, the Mayor, the Board of Supervisors, and all city officers and agencies, including Redevelopment Agency Commissioners, with any, authority over any aspect of the extension of Caltrain downtown or the Transbay land use planning and redevelopment effort (hereinafter referred to as 3all relevant city officers and agencies2) shall adopt such further ordinances and resolutions and take all other actions as necessary to effectuate the prompt extension of Caltrain downtown to said station, and to protect right-of-way as identified in the Joint Powers Boardls draft Downtown Extension Environmental Impact Report from any development that would preclude the extension or increase its costs.

SECTION 2. As part of the extension of Caltrain downtown, a new or rebuilt terminal shall be constructed on the present site of the Transbay Transit Terminal serving Caltrain, regional and intercity bus lines, MUNI, and high speed rail, and having a convenient connection to BART and MUNI Metro. Said terminal shall be so designed and constructed as to: (a) yield the highest possible transit use by residents and commuters; (b) afford senior citizens, persons with disabilities, and other commuters with the most convenient connections between regional bus lines, MUNI, Caltrain, and BART; (c) produce the highest density of foot traffic, in conjunction with foot traffic from the Caltrain station, to accommodate mixed use retail development; (d) provide the lowest possible operating costs for MUNI and regional public bus lines; and (e) result in the lowest feasible combined costs for construction of the bus terminal and the Caltrain station, without sacrificing the aesthetic qualities of the terminal and station and their interface with surrounding development.

SECTION 3. To eliminate diesel locomotive air pollution and minimize noise impacts on South of Market neighbors, the Mayor, the Board of Supervisors, and all relevant city officers and agencies shall pursue electrification of the Caltrain line from San Francisco to San Jose prior to or concurrent with the extension of Caltrain downtown. To ensure minimal inconvenience to businesses and residents South of Market Street during construction, the project shall, whenever feasible, employ tunnel boring techniques to extend Caltrain downtown.

SECTION 4. Any construction contracts related to extension of Caltrain downtown signed by the City and County of San Francisco shall include provisions to reward contractors for the timely and safe completion of project work within the City and County of San Francisco.

SECTION 5. The Mayor, the Board of Supervisors, and all relevant city officers and agencies shall negotiate construction contract and subcontract provisions with a goal of providing at least 10% of the new construction jobs resulting from the Caltrain downtown extension project to recent welfare recipients. The Mayorls Office of Economic Development and the Department of Human Services shall coordinate, in conjunction with other city departments and private, non profit social service agencies, any job training, employment recruitment, and related programs which are deemed necessary to achieve and maintain said goal. Whenever possible, any such job training and/or employment recruitment programs shall be focused within San Francisco neighborhoods with the highest rates of unemployment and welfare enrollment.

SECTION 6. The Mayor, the Board of Supervisors, and all relevant city officers and agencies shall coordinate with elected officials and other officers and agencies representing San Mateo and Santa Clara counties to explore the feasibility and cost-efficiency of performing a substantial portion of the manufacture and/or assembly of any new equipment or retrofits for an electrified Caltrain commuter rail line in the Bay Area, so that the jobs and tax-revenue resulting from such manufacture and/or assembly benefit Bay Area residents.

SECTION 7. The Mayor, the Board of Supervisors, the San Francisco Transportation Authority, and all relevant city officers and agencies shall coordinate with the Caltrain Joint Powers Board to explore the costs, feasibility, and benefits of reconfiguring and/or adding Caltrain station stops within San Francisco so as to provide easier Caltrain access to residents in Bayview/Hunterls Point and Visitation Valley who commute to downtown San Francisco and/or the Peninsula.

SECTION 8. The Mayor, the Board of Supervisors, the San Francisco Transportation Authority, and all relevant city officers and agencies shall take all appropriate actions to generate the revenue necessary to finance the Caltrain extension downtown and station construction referred to herein. Funding options to

be pursued shall include, but shall not be limited to, the following, in the following order of priority:

(a) an application to secure funding through the federal Intermodal Surface Transportation Efficiency Act;

(b) an application to secure a portion of highway funding through the flexible funding provisions of the federal Intermodal Surface Transportation Efficiency Act;

(c) designation of the Caltrain extension as a priority mitigation project for the demolition of the Embarcadero freeway and use of a portion of the proceeds from the sale of excess Embarcadero freeway and Terminal Separator land, pursuant to the California Streets and Highways Code (Chapter 498 of the statutes of 1991);

(d) a portion of rental income and/or the local tax-increment from transit-oriented, mixed-use joint development at the site of the existing Transbay Transit Terminal and/or in the immediate vicinity thereof;

(e) a portion of Bay Bridge toll revenues;

(f) a portion of mitigation funds earmarked for the Bay Bridge retrofit; and/or (g) a portion of any future federal, state, regional, or local revenues which become available for transportation projects.

SECTION 9. The Mayor, the Board of Supervisors, and all relevant city officers and agencies are hereby forbidden from taking any actions that would conflict with the extension of Caltrain to downtown San Francisco, including, but not limited to, pursuing any uses for the present Transbay Terminal site that conflict with Section 2, or undertaking any other land use planning or development efforts that would conflict with the intent of this legislation..

SECTION 10. If any word, phrase, sentence, paragraph or section of this ordinance, or application thereof to any person or circumstance, is held to be invalid, the remaining parts of this ordinance, including their application to other persons or circumstances, shall not be affected thereby and shall continue in full force and effect. To this end, the parts of this ordinance and the applications thereof shall be deemed severable, and to have been enacted separately.

SAN FRANCISCO
PLANNING DEPARTMENT

Subject to: (Select only if applicable)

☐ Affordable Housing (Sec. 415)
☐ Jobs Housing Linkage Program (Sec. 413)
☐ Downtown Park Fee (Sec. 412)
☐ First Source Hiring (Admin. Code)
☐ Child Care Requirement (Sec. 414)
☐ Other

1650 Mission St.
Suite 400
San Francisco,
CA 94103-2479

Reception:
415.558.6378

Fax:
415.558.6409

Planning
Information:
415.558.6377

Draft Planning Commission Resolution

HEARING DATE: OCTOBER 11, 2012

Date:	September 27, 2012
Case No.:	**2007.0558K**
Park Properties;	0308/001 (Union Square)
Block/Lot:	0258/003 (St. Mary's Square)
	0209/017 (Portsmouth Square)
	0233/035 (Justin Herman Plaza)
	0204/020 (Maritime Plaza)
	0180/004 (Woh Hei Yuen Park)
	0213/001 (Chinese Recreation Center)
	0332/009 (Boedekker Park)
	0225/018 (Willie "Woo Woo" Wong Playground)
Staff Contact:	Kevin Guy – (415) 558-6163
	kevin.guy@sfgov.org

JOINT RESOLUTION WITH THE RECREATION AND PARK COMMISSION TO AMEND THE SECTION 295 IMPLEMENTATION MEMO ADOPTED IN 1989 TO: (1) RAISE THE ABSOLUTE CUMULATIVE SHADOW LIMITS ON SEVEN PARK PROPERTIES (UNION SQUARE, ST. MARY'S SQUARE, PORTSMOUTH SQUARE, JUSTIN HERMAN PLAZA, MARITIME PLAZA, WILLIE "WOO WOO" WONG PLAYGROUND, AND BOEDDEKER PARK) THAT COULD BE SHADOWED BY DEVELOPMENT PURSUANT TO THE TRANSIT CENTER DISTRICT PLAN, AND (2) INCORPORATE ADDITIONAL QUALITATIVE CRITERIA FOR NINE PARKS (THE PREVIOUSLY LISTED SEVEN PARKS, PLUS WOH HEI YUEN PARK AND CHINESE RECREATION CENTER) THAT DESCRIBE THE QUANTITY, COVERAGE AREA, DURATION, TIMES OF DAY, AND TIMES OF YEAR OF NEW SHADOWS; AND TO ADOPT FINDINGS UNDER THE CALIFORNIA ENVIRONMENTAL QUALITY ACT.

PREAMBLE

Under Planning Code Section 295, adopted pursuant to the voters' approval of Proposition K in 1984, a building permit application for a project exceeding a height of 40 feet cannot be approved if there is any shadow impact on a property under the jurisdiction of the Recreation and Park Department, unless the Planning Commission, upon recommendation from the General Manager of the Recreation

and Park Department, in consultation with the Recreation and Park Commission, makes a determination that the shadow impact will not be significant or adverse.

Planning Code Section 295 states that "The City Planning Commission and the Recreation and Park Commission, after a joint meeting, shall adopt criteria for the implementation of the provisions of this Section." The Commissions initially met on January 24, 1985 to discuss implementation of Proposition K and methods to analyze properties that could be shadowed by new development. As part of that hearing, the Commissions adopted a memorandum describing an analytical approach to this exercise (the "1985 Memo").

On February 7, 1989, the Recreation and Park Commission and the Planning Commission jointly adopted criteria establishing absolute cumulative limits ("ACLs") for additional shadows on fourteen parks (Planning Commission Resolution No. 11595), as described in a staff memorandum (the "1989 Memo"). The ACL for each park is expressed as a percentage of the Theoretically Available Annual Sunlight ("TAAS") on the park (with no adjacent structures present).

On May 26, 2012, the Planning Commission held a duly noticed public hearing and recommended approval of the Transit Center District Plan ("TCDP" or "Plan"), along with implementing ordinances, to the Board of Supervisors. The result of a multi-year public and cooperative interagency planning process that began in 2007, the Plan is a comprehensive vision for shaping growth on the southern side of Downtown to respond to and support the construction of the new Transbay Transit Center project, including the Downtown Rail Extension. Implementation of the Plan would result in generation of up to $590 million for public infrastructure, including over $400 million for the Downtown Rail Extension. Adoption of the Plan included height reclassification of numerous parcels in the area to increase height limits, including a landmark tower site in front of the Transit Center with a height limit of 1,000 feet and several other nearby sites with height limits ranging from 600 to 850 feet.

On September 28, 2011, the Planning Department published a draft Environmental Impact Report (EIR) for the Plan for public review. The draft EIR was available for public comment until November 28, 2011. On November 3, 2011, the Planning Commission conducted a duly noticed public hearing at a regularly scheduled meeting to solicit comments regarding the draft EIR. On May 24, 2012, the Planning Department published a Comments and Responses document, responding to comments made regarding the draft EIR prepared for the Plan.

On May 24, 2012, the Planning Commission reviewed and considered the Final EIR and found that the contents of said report and the procedures through which the Final EIR was prepared, publicized, and reviewed complied with the California Environmental Quality Act (California Public Resources Code Sections 21000 et seq.) ("CEQA"), 14 California Code of Regulations Sections 15000 et seq. ("the CEQA Guidelines"), and Chapter 31 of the San Francisco Administrative Code ("Chapter 31").

The Planning Commission also found the Final EIR was adequate, accurate and objective, reflected the independent analysis and judgment of the Planning Department and the Planning Commission, and that the summary of comments and responses contained no significant revisions to the draft EIR, and certified the Final EIR for the Plan in compliance with CEQA, the CEQA Guidelines and Chapter 31.

Before taking action on the TCDP Ordinances and other related actions, the Planning Commission on May 24, 2012, approved Motion No. 18629, adopting environmental findings in accordance with CEQA, including the rejection of alternatives and a statement of overriding benefits. As part of this action on May 24, 2012, the Planning Commission also adopted a Mitigation Monitoring and Reporting program ("MMRP") for the Plan and made mitigation measures conditions of its approval.

The Final EIR prepared for the Plan analyzed and identified potential new shadows that could be created cumulatively by likely development sites in the Plan area on up to nine open spaces (Union Square, Saint Mary's Square, Portsmouth Square, Justin Herman Plaza, Willie "Woo Woo" Wong Playground, Maritime Plaza, Woh Hei Yuen Park, Chinese Recreation Center, and Boeddeker Park) that are under the jurisdiction of the Recreation & Park Department. Seven of these open spaces (Union Square, Saint Mary's Square, Portsmouth Square, Justin Herman Plaza, Willie "Woo Woo" Wong Playground, Maritime Plaza, and Boeddeker Park) were assigned ACLs in the 1989 Memo. Approval of these buildings would thus be subject to approval under the procedures of Planning Code Section 295 (also known as "Prop K") by the Recreation & Park and Planning Commissions.

On July 24, 2012, the Board of Supervisors held a duly noticed public hearing, affirmed certification of the Final EIR and approved the Plan, as well as the associated ordinances to implement the Plan, on first reading.

On July 31, 2012, the Board of Supervisors held a duly noticed public hearing, and approved the Plan, as well as the associated ordinances to implement the Plan, on final reading.

On August 8, 2012, Mayor Edwin Lee signed into law the ordinances approving and implementing the Plan, which subsequently became effective on September 7, 2012.

On October 11, 2012, the Planning Commission and the Recreation and Park Commission held a duly noticed joint public hearing to consider raising the absolute cumulative shadow limits for seven open spaces under the jurisdiction of the Recreation & Park Department that cumulatively could be shadowed by likely development sites in the Plan area.

The Planning Commission and has reviewed and considered reports, studies, plans and other documents pertaining to the Plan.

The Planning Commission has heard and considered the testimony presented at the public hearing and has further considered the written materials and oral testimony presented on behalf of the Project Sponsor, Department staff, and other interested parties.

The Planning Department, Linda Avery, is the custodian of records for this action, and such records are located at 1650 Mission Street, Fourth Floor, San Francisco, California.

Therefore, having reviewed the materials identified in the recitals above, and having heard all testimony and arguments, this Commission finds, concludes, and resolves as follows:

RESOLUTION

WHEREAS, Proposition K was adopted by the voters over 25 years ago in 1984, and codified as Planning Code Section 295 in 1985, with the general intent of preserving sunlight to open spaces under the jurisdiction of the Recreation and Park Department; and,

WHEREAS, Planning Code Section 295 required the Planning and Recreation and Park Commissions ("the Commissions") to jointly develop implementation criteria to ensure that shadows that would be adverse to the use of parks would not be created by new development. The Commissions jointly adopted a memorandum in 1989 (the "1989 Memo") that included quantitative and qualitative criteria and guidelines, including the adoption of Absolute Cumulative Shadow Limits ("ACLs") for 14 parks within the larger downtown area. These ACLs were established based on considerations of the existing shadow load of a park, size of the park, and other factors, including patterns and locations of future development consistent with existing plans whose implementation was in the public interest. The Commissions also adopted qualitative factors to consider when determining whether an individual development project would have a significant adverse impact on use of such parks, based on the time of year, time of day, location, and duration of new shadows, and the effect of these shadows on usage patterns within parks; and,

WHEREAS, The Commissions recognized that they were vested with the administrative authority to establish criteria and guidelines governing shadow on parks as set forth in the 1989 Memo. Neither Proposition K nor Section 295 require the establishment of ACLs. They also do not mention any particular quantitative mechanism or require the adoption of such mechanism. However, the Planning and Recreation and Park Commissions decided jointly to create such limits in the 1989 Memo for certain parks in the downtown area in order to more deliberately manage the sunlight on parks in the densest part of the City, which was situated north of Market Street at the time; and,

WHEREAS, The ACLs are a creation of the joint action of the Commissions and are set forth in the 1989 Memo. The Commissions, under the authority delegated to them under Proposition K, have the ability to revise such limits from time to time in a manner they deem appropriate based on new information and experience, provided that the revisions are consistent with the mandate of Section 295 that no new shadows may be permitted which are adverse to the use of the parks; and,

WHEREAS, The Downtown Plan was adopted in 1985, after the adoption of Section 295, with the intention of shifting growth south of Market Street, particularly to the area around the Transbay Transit Center, in order to reduce development pressure north of Market Street, preserve historic buildings, and reduce the encroachment of the central business district into surrounding neighborhoods to the north and northwest; and,

WHEREAS, The Transit Center District Plan ("TCDP" or the "Plan") is a multi-year public and cooperative interagency planning process that began in 2007 which supports and builds on the 1985

Downtown Plan's vision for the area around the Transbay Transit Center as the heart of the new downtown. Specifically, the Plan is a comprehensive vision for shaping growth on the southern side of Downtown to respond to and support the construction of the new Transbay Transit Center project, including the Downtown Rail Extension; and,

WHEREAS, The TCDP is consistent with the overarching policy objectives of the 1985 Downtown Plan, but is a comprehensive revision and update to key aspects of the Downtown Plan based on today's considerations and how best to achieve the broadest improvements to livability, economic development, and sustainability; and,

WHEREAS, Adoption of the TCDP included reclassification of numerous parcels in the area to increase height limits and facilitate greater intensity and density for individual developments in furtherance of the goals of the Plan. These reclassifications include a landmark tower site in front of the Transit Center with a height limit of 1,000 feet and several other nearby sites with height limits ranging from 600 to 850 feet; and,

WHEREAS, Each building proposed within the TCDP contributes to the Plan's overall program of public benefits, and the Plan cannot be reasonably evaluated for public interest on a building-by-building basis. The Plan's public benefit program would be obscured by a piecemeal evaluation of all the established ACLs as part of each individual building's approval process. Such an approach also would undermine the purposes of doing comprehensive planning for development, open space, and miscellaneous public benefits. As such, adjustments to the 1989 Memo should be considered holistically in light of the newly adopted TCDP; and,

WHEREAS, The 1989 Memo provides that the Planning Commission and Recreation and Park Commission may consider the public good served by development that would cast new shadows on park properties, in terms of a needed use, building design, and urban form. The adoption and implementation of the Plan is intended to shape regional growth patterns through the development of an intense, employment-focused neighborhood situated within downtown San Francisco in an area served by abundant existing and planned transportation infrastructure. As the tallest proposed building within both the City and the Plan area, the Transbay Tower, at over 1,000 feet in total height, would serve as the centerpiece of a new sculpted downtown skyline that marks the location of the Transbay Transit Center, the future nexus of local, regional, and statewide transportation infrastructure in San Francisco. The Transbay Tower will necessarily be flanked by nearby buildings of 600 to 850 feet in height in order to provide a graceful skyline and provide transitions to the Transbay Tower from the predominant existing skyline or 600 feet.

WHEREAS, The additional cumulative shadow that could be cast by development within the Plan area on Union Square, Portsmouth Square, Saint Mary's Square, Justin Herman Plaza, Maritime Plaza, Chinese Recreation Center, Boeddeker Park, Willie "Woo Woo" Wong Playground, and Woh Hei Yuen Park is not expected to interfere with or adversely affect the use of these parks, for the following reasons: (1) the new shadow would primarily occur in the morning hours during periods of

comparatively low park usage; (2) the new shadow would generally occur for a limited amount of time on any given day, with durations ranging from five minutes to a maximum of approximately 60 minutes, depending on the specific park and the time of year; and (3) the new shadow would occur during limited discrete periods of the year, which would vary depending on the specific park, and would range from a minimum of a couple weeks to a maximum of approximately three months, with fluctuations in the amount of new shadow that would be cast during these periods on a given park property. These considerations are consistent with the analytical criteria and guidelines in the 1989 Memo, which include qualitative criteria that recommend avoiding shadows that cover extensive areas of a park for a substantial length of time, particularly in areas and during times of intense usage; and,

WHEREAS, Development within the Plan area will generate substantial revenue for new infrastructure and improvements to the public realm, including the creation of new open spaces. Implementation of the Plan, if all major development sites are constructed, would generate up to $590 million for public infrastructure, including over $400 million for the Downtown Rail Extension. This contribution of funds to the Downtown Rail Extension represents the vast majority of the City 's commitment to provide $450 million, memorialized in a regional agreement with the Metropolitan Transportation Commission to leverage $2 billion in additional regional and federal funds to construct the rail project; and,

WHEREAS, The Plan would create or help fund the creation of over 12 acres of new public open space in the Plan Area, which currently has no publicly-owned open space. The 1989 Memo considered the importance of distributing sunny open spaces throughout the larger Downtown area. However, the Memo primarily focused on open spaces north of Market Street, and did not contemplate the creation the type of extensive new public open space proposed by the Plan; and,

WHEREAS, A portion of the projected revenues from implementation of the Plan are allocated to improvements outside of the Plan area, in recognition that increased population in the Plan area would have outward rippling effects on usage and demand for open space in nearby neighborhoods. The Funding Program for the Plan specifically provides for up to $12.5 million from the Plan's future Open Space Fee revenue to fund open space improvements outside of the Plan area, including $9 million for open space improvements in the Chinatown area and $3.5 million for other downtown area open space improvements; and,

WHEREAS, The 1989 Memo did not establish an ACL for either Woh Hei Yuen Park or the Chinese Recreation Center; and,

WHEREAS, A determination by the Commissions to raise the ACLs for the seven specified parks in amounts that would accommodate the additional shadow that could be cast by development within the Plan area as reported in the Plan's FEIR does not constitute an approval of any specific project. Through future action at public hearings, the Planning Commission, and Recreation and Park Commission (if it so desires), would analyze and consider the shadow impacts of individual development projects within the Plan area, and determine whether a given project would result in an

adverse shadow impact on open spaces regulated by Section 295 and allocate available shadow to that project; and

WHEREAS, CEQA Guidelines Sections 15162 and 15163 require a lead agency to prepare a subsequent EIR or a supplement to an EIR when substantial changes to the project, substantial changes with respect to the circumstances under which the project would be undertaken, or new information of substantial importance would require major revisions of the certified EIR. There have been no substantial changes to the TCDP, no substantial changes in circumstances, and no new information of substantial importance since the Final EIR was certified on May 24, 2012. Therefore, no subsequent or supplemental environmental review is required.

DECISION

Now, therefore be it

RESOLVED, That based upon the Record and the submissions by the staff of the Planning Department, the Planning Commission and Recreation and Park Commission hereby amend the 1989 Memo to increase the Absolute Cumulative Shadow Limits ("ACLs") for the following specified properties under the jurisdiction of the Recreation and Park Department, as specified below:

Open Space	Current Available ACL	Cumulative Plan Shadow	Proposed ACL Increase	Total ACL after Proposed Increase	Transbay Tower Shadow	Remaining ACL After Transbay Tower Allocation
Union Square	0.080%	0.190%	0.110%	0.190%	0.011%	0.179%
St. Mary's Square	0%	0.090%	0.090%	0.090%	0.048%	0.042%
Portsmouth Square	0%	0.410%	0.410%	0.410%	0.133%	0.277%
Justin Herman Plaza	0.007%	0.090%	0.083%	0.090%	0.046%	0.044%
Willie "Woo Woo" Wong Playground	0%	0.030%	0.030%	0.030%	N/A	0.030%
Maritime Plaza	0%	0.004%	0.004%	0.004%	0.004%	0%
Woh Hei Yuen Park	N/A	0.001%	N/A	N/A	0.001%	N/A
Chinese Recreation Center	N/A	0.008%	N/A	N/A	0.008%	N/A
Boedekker Park	0%	0.003%	0.003%	0.003%	0.003%	0%

BE IT FURTHER RESOLVED THAT, The increases in the ACLs specified by this resolution are limited to the general shadow profiles of the cumulative new shadows that could be cast by buildings within the Transit Center District Plan, as identified in the FEIR prepared for the Plan.

BE IT FURTHER RESOLVED THAT, The increases in the ACLs specified by this resolution are accompanied by additional qualitative and quantitative criteria for the characteristics of potential shadows within these ACLs, including the duration, time of day, time of year, and location of shadows on the particular parks, as described in the Plan Final EIR and attached to this Resolution as Exhibit A. Any future consideration of allocation of "shadow" within these newly increased ACLs for projects must be consistent with these the criteria set forth in Exhibit A.

BE IT FURTHER RESOLVED THAT, The "public benefit" of any project considered for allocation of new shadow within these revised ACLs shall be considered in the context of the public benefits of the Transit Center District Plan as a whole, provided that such project is within the Plan area.

BE IT FURTHER RESOLVED THAT, Any development project that seeks allocation of available ACL within the limits newly established herein must adequately demonstrate a good faith effort to sculpt the massing and architectural elements of the proposed building so that it: (1) is consistent with the adopted building height limits and controls in the Plan, and (2) reduces the effect of the building's shadows on the parks protected by Section 295 in comparison to the building's shadow as analyzed in the Plan's Final EIR. This requirement shall not apply to the Transbay Tower (101 1st Street) project, however, which was analyzed at a project level in the Final EIR.

BE IT FURTHER RESOLVED THAT, The Planning Commission and Recreation and Park Commission, for purposes of this action, rely upon and incorporate by reference as though fully set forth herein, the findings, including a Mitigation, Monitoring, and Reporting Program, set forth in Exhibit B of this Motion as approved by the Planning Commission on May 24, 2012 in Motion No. 18629 ("CEQA Findings") and attached hereto as Exhibit B.

I hereby certify that the foregoing Resolution was ADOPTED by the Planning Commission at its meeting on October 11, 2012

Linda Avery
Commission Secretary

AYES:

NAYS:

ABSENT:

ADOPTED: October 11, 2012

EXHIBIT A

Additional Criteria for the Consideration of New Shadows on Certain Parks

The qualitative and quantitative criteria for each of the listed parks below shall supplement any evaluation criteria in the 1989 Memo. Times of day given for new shading should be considered approximate, with tolerance for consideration plus or minus 10 minutes. The "maximum coverage" criteria refers to the maximum coverage of new shading at the minute of greatest new shading.

Union Square

Existing Shadow Load:	38.3%. *
Revised ACL:	0.19%
Time/Date of Net New Shadow:	Mid-March through Late September
Maximum Duration of Net New Shadow:	60 minutes
Time of Day:	Between 7:10 – 8:40 am; On Day of Maximum extent: 7:40 – 8:40am
Maximum coverage of new shading:	24.5% of the park

Net new shadow may sweep across various parts of the park depending on the time of year, however the shadows at times of maximum extent would occur in the southern edge of the park, on the terraced steps, garage driveway, and adjacent landscaping and circulation areas. The maximum area of new shadow shall not exceed approximately 24.5% of the park at 8:00am in early April and early September. Shading on these particular days would begin at 7:40am at the southwest corner part of the park, peak at 8:00am, and depart by 8:40am.

* *After the adoption of the ACL in the 1989 Memo, the Macy's expansion project added sunlight to Union Square amounting to approximately 0.05% of the theoretically available sunlight on the park. It should be noted, however, that the ACL for Union Square was not formally increased to account for this added sunlight.*

Portsmouth Square

Existing Shadow Load:	39.0%.
Revised ACL:	0.41%
Time/Date of Net New Shadow:	Mid-October to early December, early January to late February
Maximum Duration of Net New Shadow:	60 minutes

Time of Day:	Between 8:00 – 9:10 am; On Day of Maximum Extent: 8:00 – 9:00am
Maximum coverage of new shading:	42.5% of the park

The net new shadow would sweep across various parts of the park depending on the time of year, however the shadows at times of maximum extent would occur over the southwestern half of the park, on the upper plaza and the playgrounds. The maximum area of new shadow is 42.5% of the park at 8:30am in late November and mid-January. The shading on these particular days would begin at 8:00am at the center of the park, peak at 8:30am, and depart by 9:00am.

St. Mary's Square

Existing Shadow Load:	51.9%.
Revised ACL:	0.09%
Time/Date of Net New Shadow:	Mid-September to mid-October, late February to late March
Maximum Duration of Net New Shadow:	40 minutes
Time of Day:	Between 8:10 – 9:10 am; On Day of Maximum Extent: 8:30 – 9:10am
Maximum coverage of new shading:	26.3% of the park

The net new shadow would sweep across various parts of the park depending on the time of year, however the shadows at times of maximum extent would occur over the southwestern half of the park, on the upper plaza and the playgrounds. The maximum area of new shadow is 26.3% of the park at 8:45am in late September and mid-March. The shading on these particular days would being at 8:30am at the southwest of the park, peak at 8:45am, and depart by 9:10am.

Justin Herman Plaza

Existing Shadow Load:	37.6%.
Potential TCDP Net New Shadow:	0.09%
Time/Date of Net New Shadow:	Early November - Early February
Maximum Duration of Net New Shadow:	60 minutes total (coverage from different buildings at discrete times, each with a duration of approximately 30 minutes)
Time of Day:	Between 1:00 – 2:40 pm; On Day of Maximum Extent: 1:10 – 1:40pm and 2:10 – 2:40pm
Maximum coverage of new shading:	10.1% of the park

The net new shadow would sweep across various parts of the park depending on the time of day; however, the shadows at times of maximum extent would occur over the southern portion of the sunken plaza, including part of the stage, the steps along the edge of the plaza, and small portions of

the landscaping and palm trees along the eastern and southern edges of the sunken plaza. No new shading would be cast on the southern portion of the park south of the Market Street extension. The maximum area of new shadow is 10.1% of the park at 1:15pm in early December and early January. The shading on these particular days would begin at 1:10pm on the southern part of the sunken plaza in the northern part of the park, peak at 1:15pm, and depart by 1:40pm, then reappear at 2:10pm over the Market Street extension and disappear by 2:40pm. The two distinct periods are due to shading from different buildings occurring at different times.

Willie "Woo Woo" Wong Playground

Existing Shadow Load:	52.8%.
Revised ACL:	0.03%
Time/Date of Net New Shadow:	Early November - Early December; January
Maximum Duration of Net New Shadow:	20 minutes
Time of Day:	Between 8:00 – 8:20 am; On Day of Maximum Extent: 8:00 – 8:20am
Maximum coverage of new shading:	15.1% of the park

The net new shadow would sweep primarily over portions of the southern sport court and the children's play area along the Sacramento Street edge between 8:00-8:20. The maximum area of new shadow is 15.1% of the park at 8:15 in late November and mid-January.

Maritime Plaza

Existing Shadow Load:	68.4%.
Revised ACL:	0.004%
Time/Date of Net New Shadow:	Early to Mid-December; - Late December to Early January
Maximum Duration of Net New Shadow:	25 minutes
Time of Day:	Between 10:40 – 11:05 am; On Day of Maximum Extent: 10:40 – 11:05 am
Maximum coverage of new shading:	1.9% of the park

The shadow falls on the southern portion of a skinny and long north-south slice of sun that tracks across the western half of the plaza in the morning as the shading building lines up with the gap between Embarcadero Center towers. The area features circulation, landscaping, sculpture, and informal seating areas. The maximum area of new shadow is 1.9% of the park at 10:45am in late December.

Chinese Recreation Center

ACL:	N/A

Time/Date of Net New Shadow:	Mid October; Mid February
Duration of Net New Shadow:	5 minutes
Time of Day:	8:25am
	On Day of Maximum Extent: 8:25am
Maximum coverage of new shading:	36.5% of the park

The shadow would predominantly fall on a portion of the roof of the Recreation Center building and a northern portion of the adjacent open recreation area.

Boeddeker Park

Existing Shadow Load:	37.7%
Revised ACL:	0.003%
Time/Date of Net New Shadow:	Early June – Early July
Duration of Net New Shadow:	5 minutes
Time of Day:	6:47 – 7:00 am
	On Day of Maximum Extent: 6:47 – 6:52am
Maximum coverage of new shading:	2.9% of the park

The shadow would fall in two locations, both on small portions of the outer street edges of the park, one along the Jones Street edge and one on the Ellis Street edge. In both cases, the shadow would fall on service entries and raised planters, based on the proposed design for the park renovation. The shadow would not touch any of the proposed active or passive recreational areas.

Woh Hei Yuen Park

Existing Shadow Load:	Unknown
ACL:	N/A
Time/Date of Net New Shadow:	Early November; Early February
Duration of Net New Shadow:	<10 minutes
Time of Day:	7:44-7:50am
	On Day of Maximum Extent: 7:44-7:50am
Maximum coverage of new shading:	1.9% of the park

The shadow falls on the John Street edge touching a small part of the plaza and part of the picnic table area beneath the arbor, and a part of the western portion of the park.

SAN FRANCISCO
PLANNING DEPARTMENT

1650 Mission St.
Suite 400
San Francisco,
CA 94103-2479

Reception:
415.558.6378

Fax:
415.558.6409

Planning
Information:
415.558.6377

Planning Commission Motion No. 18629

HEARING DATE MAY 24, 2012

Date:	May 24, 2012
Case No.:	**2007.0558EMTZU**
Project:	*Transit Center District Plan – Adoption of CEQA Findings*
Staff Contact:	Joshua Switzky - (415) 575-6815 *joshua.switzky*@sfgov.org

ADOPTING ENVIRONMENTAL FINDINGS AND A STATEMENT OF OVERRIDING CONSIDERATIONS UNDER THE CALIFORNIA ENVIRONMENTAL QUALITY ACT AND STATE GUIDELINES IN CONNECTION WITH THE ADOPTION OF THE TRANSIT CENTER DISTRICT PLAN AND RELATED ACTIONS NECESSARY TO IMPLEMENT SUCH PLAN.

WHEREAS, the Planning Department, the Lead Agency responsible for the implementation of the California Environmental Quality Act ("CEQA") has undertaken a planning and environmental review process for the proposed Transit Center District Plan and provided appropriate public hearings before the Planning Commission.

In 1985, the City adopted the Downtown Plan into the General Plan to guide growth in the Downtown area. Recognizing the potential for transit-oriented growth in the vicinity of the Transbay Terminal south of Market Street, the Downtown Plan called for concentrating the City's greatest densities and building heights in this area, as well as creating a system to transfer development rights from other parts of the downtown to this area.

Since the adoption of the Downtown Plan several major infrastructure changes have happened or are being undertaken. The Embarcadero Freeway was removed following the 1989 Loma Prieta earthquake, allowing for the renovation of the waterfront and rethinking of the southern side of the downtown. The City and region have embarked on a multi-billion dollar investment in improving and expanding transit infrastructure, further enhancing the transit accessibility of the area, through construction of a new Transbay Transit Center on the site of the former Transbay Terminal and an extension of intra-city rail from the current terminus at 4th and King Streets into the Transit Center. This is the single largest investment in public transit in San Francisco since the construction of BART in the early 1970s. In 2005 the City adopted the Transbay Redevelopment Plan to direct funding toward the Transit Center project and direct the redevelopment of underutilized publicly-owned lands, primarily those that formerly housed the Embarcadero Freeway, into a new high-density residential neighborhood.

In 2006, a Mayor's Interagency Working Group published a report calling for the City to investigate further land use studies around the Transit Center as to whether building densities and heights could be increased further in recognition of the transit investment and as to whether such growth could be leveraged to generated substantial new revenues to help fund the full Transit Center project, including the Downtown Rail Extension.

In 2007, the Planning Department initiated a public planning effort called the Transit Center District Plan, focused on the area roughly bounded by Market Street, Embarcadero, Folsom Street, and Hawthorne Street, whose five fundamental goals were to:

(1) Build on the General Plan's Urban Design Element and Downtown Plan, establishing controls, guidelines and standards to advance existing policies of livability, as well as those that protect the unique quality of place;
(2) Capitalize on major transit investment with appropriate land use in the downtown core, with an eye toward long-term growth considerations;
(3) Create a framework for a network of public streets and open spaces that support the transit system, and provides a wide variety of public amenities and a world-class pedestrian experience;
(4) Generate financial support for the Transit Center project, district infrastructure, and other public improvements; and
(5) Ensure that the Transit Center District is an example of comprehensive environmental sustainability in all regards.

The Planning Department held numerous public workshops and worked with consultants throughout 2008 and 2009, resulting in the publication of a Draft Transit Center District Plan in November 2009. In April 2012 the Planning Department published a Plan Addendum revising and clarifying aspects of the Draft Plan.

The Transit Center District Plan ("the Plan"), a sub-area plan of the Downtown Plan, supports and builds on the Downtown Plan's vision for the area around the Transbay Transit Center as the heart of the new downtown. The Plan enhances and augments the Downtown Plan's patterns of land use, urban form, public space, circulation, and historic preservation, and makes adjustments to this specific sub-area based on today's understanding of the issues and constraints facing the area, particularly in light of the Transit Center project. The Plan's core recommendations include:

- Increasing allowable density and strategic increases to height limits in the Plan area to increase the transit-oriented growth capacity of the area while recognizing the importance of these buildings with respect to city form and impacts to the immediate and neighboring districts;

- Ensuring that major development sites incorporate commercial space in order to preserve the job growth capacity for the downtown;

- Enhancing the public realm and circulation system to accommodate growth and provide a world-class pedestrian experience, including widening sidewalks, providing dedicated transit lanes, augmenting the bicycle network, adding signalized mid-block crosswalks, and converting certain alleys into pedestrian plazas;

- Identifying and funding opportunities for new public open space and improved access to planned spaces, including at 2nd/Howard, Transbay Park, Mission Square and City Park on the roof of the Transit Center, as well as providing additional funding for park improvements in the downtown outside of the Plan area;

- Enlarging the New Montgomery-2nd Street Conservation District and updating individual resource ratings based on a newly-adopted survey;

- Identifying opportunities to explore advanced district-level energy and water utility systems to improve environmental performance beyond individual buildings; and

- Adopting a funding program including two new key revenue mechanisms – impact fees and a Mello-Roos Community Facilities District – to ensure that new development contributes substantially toward the implementation of necessary public infrastructure, including the Transit Center/Downtown Extension project.

The San Francisco Planning Department is seeking to adopt and implement the Transit Center District Plan. The core policies and supporting discussion in the Plan have been incorporated into a Sub-Area Plan proposed to be added to the Downtown Plan. The Sub-Area Plan, together with other General Plan, Planning Code, Zoning Map, and Administrative Code Amendments, and approval of an Implementation Document provide a comprehensive set of policies, regulatory controls and implementation programming to realize the vision of the Plan.

The actions listed in Attachment A hereto ("Actions") are part of a series of considerations in connection with the adoption of the Transit Center District Plan and various implementation actions ("Project"), as more particularly described in Attachment A hereto.

The Planning Department determined that an Environmental Impact Report (hereinafter "EIR") was required for the proposed Transit Center District Plan and provided public notice of that determination by publication in a newspaper of general circulation on July 20, 2008.

Notices of availability of the DEIR and of the date and time of the public hearing were posted in the project area by Department staff on September 28, 2011.

On September 28, 2011, copies of the DEIR were mailed or otherwise delivered to a list of persons requesting it, to those noted on the distribution list in the DEIR, to adjacent property owners, and to government agencies, the latter both directly and through the State Clearinghouse.

Notice of Completion was filed with the State Secretary of Resources via the State Clearinghouse on September 28, 2011.

The Commission held a duly advertised public hearing on said DEIR on November 3, 2011 at which opportunity for public comment was given, and public comment was received on the DEIR. The period for acceptance of written comments ended on November 28, 2011.

The Department prepared responses to comments on environmental issues received at the public hearing and in writing during the 60 day public review period for the DEIR, prepared revisions to the text of the DEIR in response to comments received or based on additional information that became available during the public review period, and corrected errors in the DEIR. This material was presented in a Draft Comments and Responses document, published on May 10, 2012, distributed to the Commission and all parties who commented on the DEIR, and made available to others upon request at the Department.

A Final Environmental Impact Report (hereinafter "FEIR") was prepared by the Department, consisting of the DEIR, any consultations and comments received during the review process, any additional information that became available, and the Comments and Responses document all as required by law.

The Planning Commission, on May 24, 2012, by Motion No. 18628 reviewed and considered the FEIR and found that the contents of said report and the procedures through which the FEIR was prepared, publicized and reviewed complied with the provisions of CEQA, the CEQA Guidelines and Chapter 31 of the San Francisco Administrative Code.

Also by Motion No. 18628 , the Planning Commission, finding that the FEIR was adequate, accurate and objective, reflected the independent judgment of the Planning Commission and that the Comments and Responses document contains no significant revisions to the DEIR, adopted findings of significant impacts associated with the Project and certified the completion of the FEIR for the Project in compliance with CEQA and the CEQA Guidelines.

The Planning Department prepared proposed Findings, as required by CEQA, including mitigation measures and significant environmental impacts analyzed in the FEIR, adoption of such measures, rejection of alternatives, and overriding considerations for approving the Project, including all of the actions listed in Attachment A hereto, and a proposed mitigation monitoring and reporting program, attached as Exhibit 1 to Attachment A. These materials were made available to the public and this Planning Commission for the Planning Commission's review, consideration, and actions.

THEREFORE BE IT RESOLVED, that the Planning Commission has reviewed and considered the FEIR and hereby adopts the Project Findings attached hereto as Attachment A, including adoption of Exhibit 1, the mitigation monitoring and reporting program, and imposition of those mitigation measures in that are within the Planning Commission jurisdiction as project conditions, and incorporates the same herein by this reference.

I hereby certify that the foregoing Motion was ADOPTED by the Planning Commission at its regular meeting of May 24, 20012.

Linda D. Avery

Commission Secretary

AYES: Commissioners Fong, Wu, Antonini, Borden, and Sugaya

NOES: Commissioner Moore

ABSENT: Commissioner Miguel

ADOPTED: May 24, 2012

ATTACHMENT A

TRANSIT CENTER DISTRICT PLAN

**CALIFORNIA ENVIRONMENTAL QUALITY ACT FINDINGS:
FINDINGS OF FACT, EVALUATION OF MITIGATION MEASURES AND ALTERNATIVES, AND STATEMENT OF OVERRIDING CONSIDERATIONS**

SAN FRANCISCO PLANNING COMMISSION

In determining to approve the proposed Transit Center District Plan Project and related approval actions ("Project"), the San Francisco Planning Commission ("Planning Commission" or "Commission") makes and adopts the following findings of fact and statement of overriding considerations and adopts the following recommendations regarding mitigation measures and alternatives based on substantial evidence in the whole record of this proceeding and under the California Environmental Quality Act, California Public Resources Code Sections 21000 et seq. ("CEQA"), particularly Sections 21081 and 21081.5, the Guidelines for implementation of CEQA, California Code of Regulations, Title 14, Sections 15000 et seq. ("CEQA Guidelines"), particularly Sections 15091 through 15093, and Chapter 31 of the San Francisco Administration Code.

I. Introduction

This document is organized as follows:

Section I provides a description of the proposed Project, the environmental review process for the Project, the Planning Commission actions to be taken, and the location of records;

Section II identifies the impacts found not to be significant that do not require mitigation;

Section III identifies potentially significant impacts that can be avoided or reduced to less-than-significant levels through mitigation;

Section IV identifies significant impacts that cannot be avoided or reduced to less-than significant levels;

Section V discusses why recirculation of the EIR is not required;

Section VI evaluates the economic, legal, social, technological, and other considerations that support the rejection of the alternatives analyzed in the EIR; and

Section VII presents a statement of overriding considerations setting forth specific reasons in support of the Planning Commission's actions in light of the environmental consequences of the project.

Section VIII includes a statement incorporating the Final EIR by reference.

Attached to these findings as Exhibit 1 is the Mitigation Monitoring and Reporting Program ("MMRP") for the mitigation measures that have been proposed for adoption. The Mitigation Monitoring and Reporting Program is required by CEQA Section 21081.6 and CEQA Guidelines Section 15091. It provides a table setting forth each mitigation measure listed in the Final EIR ("FEIR") that is required to reduce or avoid a significant adverse impact. Exhibit 1 also specifies the agency responsible for implementation of each measure and establishes monitoring actions and a monitoring schedule.

These findings are based upon substantial evidence in the entire record before the Planning Commission. The references set forth in these findings to certain pages or sections of the EIR or responses to comments in the Final EIR are for ease of reference and are not intended to provide an exhaustive list of the evidence relied upon for these findings.

A. Project Description

The **Transit Center District Plan** proposes new planning policies and controls for land use; urban form, including building height and design; street change/public realm improvements; historic preservation; and sustainability. The area subject to the Project is centered on the new Transit Center, and is bounded generally by Market, Steuart, and Folsom Streets, and a line east of Third Street (the "Plan area"). The Project would allow height limit increases permitting up to about six buildings at a height of 700 feet or taller, including the proposed Transit Tower. It also includes financial support for the new Transit Center, which is under construction and will replace the former Transbay Terminal as a regional transit hub.

B. Environmental Review

The Planning Department determined that an Environmental Impact Report ("EIR") was required for the Project. The Planning Department published the Draft EIR (State Clearinghouse No. 2008072073) and provided public notice of the availability of the Draft EIR for public review and comment on September 28, 2011.

On September 28, 2011, a Notice of Completion and copies of the Draft EIR were distributed to the State Clearinghouse. Notices of availability for the Draft EIR of the date and time of the public hearings were posted on the Planning Department's website on September 28, 2011.

The Planning Commission held a duly noticed public hearing on the Draft EIR on November 3, 2011. At this hearing, opportunity for public comment was given, and public comment was received on the Draft EIR. The Planning Department accepted public comments on the Draft EIR from September 28, 2011, to November 28, 2011.

The Planning Department published the Comments and Responses on the Draft EIR on May 10, 2012. This document includes responses to environmental comments on the Draft EIR made at the public hearing on November 3, 2011, as well as written comments submitted on the Draft EIR during the public review period from September 28, 2011, to November 28, 2011. The comments and responses document also contains text changes to the Draft EIR to correct or clarify information presented in the DEIR, including changes to the DEIR text made in response to comments.

C. Planning Commission Actions

The Planning Commission is being requested to take the following actions to approve, recommend to the Board of Supervisors, and implement the Project.

- Certify the Final EIR.
- Adopt CEQA findings and a Mitigation Monitoring and Reporting Program.
- Determine consistency of the Transit Center District Plan Project with the General Plan and Planning Code Section 101.1 Priority Policies, and recommend adoption to the Board of Supervisors.
- Approve and recommend to the Board of Supervisors adoption of amendments to the General Plan constituting the Transit Center District Plan.
- Approve and recommend to the Board of Supervisors related amendments to the San Francisco Planning Code and Zoning Maps including related amendments to the Administrative Code and an associated implementation plan.

D. Location of Records

The record upon which all findings and determinations related to the Project are based includes the following:

- The Transit Center District Plan.
- The EIR, and all documents referenced in or relied upon by the EIR.
- All information (including written evidence and testimony) provided by City staff to the Planning Commission relating to the EIR, the proposed approvals and entitlements, the Project, and the alternatives set forth in the EIR.

- All information (including written evidence and testimony) presented to the Planning Commission by the environmental consultant and subconsultants who prepared the EIR, or incorporated into reports presented to the Planning Commission.

- All information (including written evidence and testimony) presented to the City from other public agencies relating to the Project or the EIR.

- All applications, letters, testimony and presentations presented to the City by the Transbay Joint Power Authority ("TJPA"), the project sponsor for the Transbay Transit Center and the proposed Transit Tower, and its consultants in connection with the Project.

- All information (including written evidence and testimony) presented at any public hearing or workshop related to the Project and the EIR.

- For documentary and information purposes, all locally-adopted land use plans and ordinances, including, without limitation, general plans, specific plans and ordinances, together with environmental review documents, findings, mitigation monitoring programs and other documentation relevant to planned growth in the area.

- The MMRP.

- All other documents comprising the record pursuant to Public Resources Code Section 2116.76(e)

The public hearing transcript, a copy of all letters regarding the Final EIR received during the public review period from September 28, 2011 to November 28, 2011, the administrative record, and background documentation for the Final EIR are located at the Planning Department, 1650 Mission Street, Suite 400, San Francisco. Linda Avery, Commission Secretary, is the custodian of these documents and materials.

II. Impacts Found Not To Be Significant, Thus Requiring No Mitigation

Finding: Based on substantial evidence in the whole record of this proceeding, the Planning Commission finds that the implementation of the Project and associated Area Plans would not result in any significant environmental impacts in the following areas: Land Use; Population, Housing, Business Activity and Employment (Growth Inducement); Greenhouse Gas Emissions; Recreation and Public Space; Utilities and Service Systems; Public Services; Geology, Soils, and Seismicity; Hydrology and Water Quality; Mineral and Energy Resources; and Agricultural and Forest Resources. Each of these topics is analyzed and discussed in detail including, but not limited to, in the EIR Chapters: IV.A; IV.C; IV.K; IV.L; IV.M; IV.O; IV.P; IV.R, IV.S; V.A; 7.A-C (IS); 8.A-C (IS); 9.A, B (IS); 10.A-C (IS); 11.A-B (IS).

III. Findings of Potentially Significant Impacts That Can Be Avoided Or Reduced To A Less Than Significant Level

Finding: CEQA requires agencies to adopt mitigation measures that would avoid or substantially lessen a project's identified significant impacts or potential significant impacts if such measures are feasible.

The findings in this Section III and in Section IV concern impacts identified in the EIR and mitigation measures set forth in the FEIR. These findings discuss mitigation measures as proposed in the FEIR and recommended for adoption by this Commission, the Board of Supervisors, and other City entities that can be implemented by City agencies or departments. Except for minor revisions shown in double underline and ~~strike through~~ text in the language of Mitigation Measures M-CP-3d, M-TR-1c, M-NO-1a, M-NO-1e, M-AQ-2, M-AQ-3, M-AQ-5, M-AQ-7, and M-HZ-2c in Response to Comments on the DEIR, the mitigation measures proposed for adoption in this section are identical to the mitigation measures identified in the DEIR. The Draft EIR and Response to Comments document provides additional evidence as to how these measures would avoid or reduce the identified impacts, though in some cases not to a less than significant level, as described herein. Such analysis, as statement in Section VIII, is incorporated herein by reference.

As explained previously, **Exhibit 1**, attached, contains the Mitigation Monitoring and Reporting Program required by CEQA Section 21081.6 and CEQA Guidelines Section 15091. It provides a table setting forth each mitigation measure listed in Chapter V of the EIR that is required to reduce or avoid a significant adverse impact. **Exhibit 1** also specifies the agency responsible for implementation of each measure, establishes monitoring actions and a monitoring schedule.

The Planning Commission finds, based on the record before it, that the mitigation measures proposed for adoption in the FEIR are feasible, and that they can and should be carried out by the identified agencies at the designated time. This Planning Commission urges other agencies to adopt and implement applicable mitigation measures set forth in the FEIR that are within the jurisdiction and responsibility of such entities. The Planning Commission acknowledges that if such measures are not adopted and implemented, the Project may result in additional significant unavoidable impacts. For this reason, and as discussed in Section VI, the Planning Commission is adopting a Statement of Overriding Considerations as set forth in Section VII.

All mitigation measures identified in the FEIR that would reduce or avoid significant adverse environmental impacts are proposed for adoption and are set forth in **Exhibit 1**, in the Mitigation Monitoring and Reporting Program. With the exception of Mitigation Measure A-1 which is rejected due to infeasibility as discussed under Section IV.B., the Planning Commission agrees to and adopts all mitigation measures set forth in the FEIR.

A. Cultural Resources

1. Impact – Disturbance or Destruction of Archeological Resources

a) Potentially Significant Impact

The EIR finds that development projects in the Plan area could cause a substantial adverse change in the significance of archeological resources.

b) Mitigation Measure M-CP-1 and Conclusion

The Planning Commission finds the potentially significant impacts listed above would be reduced to a less-than-significant level with implementation of Mitigation Measure M-CP-1, p. 254, which would require the implementation of a Subsequent Archeological Testing Program, as follows:

When a project is to be developed within the Transit Center District Plan Area, it will be subject to preliminary archeological review by the Planning Department archeologist. This in-house review will assess whether there are gaps in the necessary background information needed to make an informed archaeological sensitivity assessment. This assessment will be based upon the information presented in the Transit Center District Plan Archeological Research Design and Treatment Plan (Far Western Anthropological Research Group, Inc., *Archaeological Research Design and Treatment Plan for the Transit Center District Plan Area, San Francisco, California*, February 2010), as well as any more recent investigations that may be relevant. If data gaps are identified, then additional investigations, such as historic archival research or geoarchaeological coring, may be required to provide sufficiently detailed information to make an archaeological sensitivity assessment.

If the project site is considered to be archaeologically sensitive and based on a reasonable presumption that archeological resources may be present within the project site, the following measures shall be undertaken to avoid any potentially significant adverse effect from the proposed project on buried or submerged historical resources. The project sponsor shall retain the services of an archeological consultant from the Planning Department pool of qualified archaeological consultants as provided by the Planning Department archaeologist. The archeological consultant shall undertake an archeological testing program as specified herein. In addition, the consultant shall be available to conduct an archeological monitoring and/or data recovery program if required pursuant to this measure. The archeological consultant's work shall be conducted in accordance with this measure and with the requirements of the Transit Center District Plan archeological research design and treatment plan at the direction of the ERO. In instances of inconsistency between the requirement of the project archaeological research design and treatment plan and of this archaeological mitigation

measure, the requirements of this archaeological mitigation measure shall prevail. All plans and reports prepared by the consultant as specified herein shall be submitted first and directly to the ERO for review and comment, and shall be considered draft reports subject to revision until final approval by the ERO. Archeological monitoring and/or data recovery programs required by this measure could suspend construction of the project for up to a maximum of four weeks. At the direction of the ERO, the suspension of construction can be extended beyond four weeks only if such a suspension is the only feasible means to reduce to a less than significant level potential effects on a significant archeological resource as defined in CEQA Guidelines Sections 15064.5 (a) (c).

Archeological Testing Program. The archeological consultant shall prepare and submit to the ERO for review and approval an archeological testing plan (ATP). The archeological testing program shall be conducted in accordance with the approved ATP. The ATP shall identify the property types of the expected archeological resource(s) that potentially could be adversely affected by the proposed project, the testing method to be used, and the locations recommended for testing. The purpose of the archeological testing program will be to determine to the extent possible the presence or absence of archeological resources and to identify and to evaluate whether any archeological resource encountered on the site constitutes an historical resource under CEQA.

At the completion of the archeological testing program, the archeological consultant shall submit a written report of the findings to the ERO. If based on the archeological testing program the archeological consultant finds that significant archeological resources may be present, the ERO in consultation with the archeological consultant shall determine if additional measures are warranted. Additional measures that may be undertaken include additional archeological testing, archeological monitoring, and/or an archeological data recovery program. If the ERO determines that a significant archeological resource is present and that the resource could be adversely affected by the proposed project, at the discretion of the project sponsor either:

A) The proposed project shall be re-designed so as to avoid any adverse effect on the significant archeological resource; or

B) A data recovery program shall be implemented, unless the ERO determines that the archeological resource is of greater interpretive than research significance and that interpretive use of the resource is feasible.

Archeological Monitoring Program. If the ERO in consultation with the archeological consultant determines that an archeological monitoring program shall be implemented, the archeological consultant shall prepare an archeological monitoring plan (AMP):

- The archeological consultant, project sponsor, and ERO shall meet and consult on the scope of the AMP reasonably prior to any project-related soils disturbing activities commencing. The ERO in consultation with the

archeological consultant shall determine what project activities shall be archeologically monitored. In most cases, any soils- disturbing activities, such as demolition, foundation removal, excavation, grading, utilities installation, foundation work, driving of piles (foundation, shoring, etc.), site remediation, etc., shall require archeological monitoring because of the risk these activities pose to potential archaeological resources and to their depositional context;

- Archeological monitoring shall conform to the requirements of the final AMP reviewed and approved by the ERO;
- The archeological consultant shall advise all project contractors to be on the alert for evidence of the presence of the expected resource(s), of how to identify the evidence of the expected resource(s), and of the appropriate protocol in the event of apparent discovery of an archeological resource;
- The archeological monitor(s) shall be present on the project site according to a schedule agreed upon by the archeological consultant and the ERO until the ERO has, in consultation with project archeological consultant, determined that project construction activities could have no effects on significant archeological deposits;
- The archeological monitor shall record and be authorized to collect soil samples and artifactual/ecofactual material as warranted for analysis;
- If an intact archeological deposit is encountered, all soils-disturbing activities in the vicinity of the deposit shall cease. The archeological monitor shall be empowered to temporarily redirect demolition/excavation/pile driving/construction activities and equipment until the deposit is evaluated. If in the case of pile driving activity (foundation, shoring, etc.), the archeological monitor has cause to believe that the pile driving activity may affect an archeological resource, the pile driving activity shall be terminated until an appropriate evaluation of the resource has been made in consultation with the ERO. The archeological consultant shall immediately notify the ERO of the encountered archeological deposit. The archeological consultant shall make a reasonable effort to assess the identity, integrity, and significance of the encountered archeological deposit, and present the findings of this assessment to the ERO.

Whether or not significant archeological resources are encountered, the archeological consultant shall submit a written report of the findings of the monitoring program to the ERO.

Archeological Data Recovery Program. The archeological data recovery program shall be conducted in accord with an archeological data recovery plan (ADRP). The archeological consultant, project sponsor, and ERO shall meet and consult on the scope of the ADRP prior to preparation of a draft ADRP. The archeological consultant shall submit a draft ADRP to the ERO. The ADRP shall identify how the proposed data recovery program will preserve the significant information the archeological resource is expected to contain. That is, the ADRP will identify what scientific/historical research questions are applicable to the expected resource, what data classes the resource is expected to possess, and how the expected data classes would address the applicable research questions. Data recovery, in general, should be limited to the portions of the historical property that could be adversely affected by the proposed project. Destructive data recovery methods shall not be applied to portions of the archeological resources if nondestructive methods are practical.

The scope of the ADRP shall include the following elements:

- Field Methods and Procedures. Descriptions of proposed field strategies, procedures, and operations.
- Cataloguing and Laboratory Analysis. Description of selected cataloguing system and artifact analysis procedures.
- Discard and Deaccession Policy. Description of and rationale for field and post-field discard and deaccession policies.
- Interpretive Program. Consideration of an on-site/off-site public interpretive program during the course of the archeological data recovery program.
- Security Measures. Recommended security measures to protect the archeological resource from vandalism, looting, and non-intentionally damaging activities.
- Final Report. Description of proposed report format and distribution of results.
- Curation. Description of the procedures and recommendations for the curation of any recovered data having potential research value, identification of appropriate curation facilities, and a summary of the accession policies of the curation facilities.

Human Remains and Associated or Unassociated Funerary Objects. The treatment of human remains and of associated or unassociated funerary objects discovered during any soils disturbing activity shall comply with applicable State and Federal laws. This shall include immediate notification of the Coroner of the City and County of San Francisco and in the event of the Coroner's determination that the human remains are Native American remains, notification of the California State Native American Heritage

Commission (NAHC) who shall appoint a Most Likely Descendant (MLD) (Pub. Res. Code Sec. 5097.98). The archeological consultant, project sponsor, and MLD shall make all reasonable efforts to develop an agreement for the treatment of, with appropriate dignity, human remains and associated or unassociated funerary objects (CEQA Guidelines. Sec. 15064.5(d)). The agreement should take into consideration the appropriate excavation, removal, recordation, analysis, custodianship, curation, and final disposition of the human remains and associated or unassociated funerary objects.

Final Archeological Resources Report. The archeological consultant shall submit a Draft Final Archeological Resources Report (FARR) to the ERO that evaluates the historical significance of any discovered archeological resource and describes the archeological and historical research methods employed in the archeological testing/monitoring/data recovery program(s) undertaken. Information that may put at risk any archeological resource shall be provided in a separate removable insert within the final report.

Once approved by the ERO, copies of the FARR shall be distributed as follows: California Archaeological Site Survey Northwest Information Center (NWIC) shall receive one (1) copy and the ERO shall receive a copy of the transmittal of the FARR to the NWIC. The Major Environmental Analysis division of the Planning Department shall receive one bound, one unbound and one unlocked, searchable PDF copy on CD of the FARR along with copies of any formal site recordation forms (CA DPR 523 series) and/or documentation for nomination to the National Register of Historic Places/California Register of Historical Resources. In instances of high public interest in or the high interpretive value of the resource, the ERO may require a different final report content, format, and distribution than that presented above.

2. Impact – Physical Damage to Historic Architectural Resources

a) Potentially Significant Impact

The EIR finds that construction activity in the Plan area could result in damage to historic architectural resources.

b) Mitigation Measure M-CP-5 and Conclusion

The Planning Commission finds the potentially significant impacts listed above would be reduced to a less-than-significant level with implementation of Mitigation Measure M-CP-5a, p. 270, which would require the implementation of Construction Best Practices for Historical Resources, and Mitigation Measure M-CP-5b, also on p. 270, which would require Construction Monitoring Program for Historical Resources, as follows:

M-CP-5a: Construction Best Practices for Historical Resources. The project sponsor of a development project in the Plan area shall incorporate into construction specifications

for the proposed project a requirement that the construction contractor(s) use all feasible means to avoid damage to adjacent and nearby historic buildings, including, but not necessarily limited to, staging of equipment and materials as far as possible from historic buildings to avoid direct impact damage; using techniques in demolition (of the parking lot), excavation, shoring, and construction that create the minimum feasible vibration; maintaining a buffer zone when possible between heavy equipment and historical resource(s) within 125 feet, as identified by the Planning Department; appropriately shoring excavation sidewalls to prevent movement of adjacent structures; design and installation of the new foundation to minimize uplift of adjacent soils; ensuring adequate drainage from adjacent sites; covering the roof of adjacent structures to avoid damage from falling objects; and ensuring appropriate security to minimize risks of vandalism and fire.

M-CP-5b: Construction Monitoring Program for Historical Resources. The project sponsor shall undertake a monitoring program to minimize damage to adjacent historic buildings and to ensure that any such damage is documented and repaired. The monitoring program would include the following components. Prior to the start of any ground-disturbing activity, the project sponsor shall engage a historic architect or qualified historic preservation professional to undertake a preconstruction survey of historical resource(s) identified by the Planning Department within 125 feet of planned construction to document and photograph the buildings' existing conditions. Based on the construction and condition of the resource(s), the consultant shall also establish a maximum vibration level that shall not be exceeded at each building, based on existing condition, character-defining features, soils conditions, and anticipated construction practices (a common standard is 0.2 inches per second, peak particle velocity). To ensure that vibration levels do not exceed the established standard, the project sponsor shall monitor vibration levels at each structure and shall prohibit vibratory construction activities that generate vibration levels in excess of the standard.

Should vibration levels be observed in excess of the standard, construction shall be halted and alternative techniques put in practice, to the extent feasible. The consultant shall conduct regular periodic inspections of each building during ground-disturbing activity on the project site. Should damage to either building occur, the building(s) shall be remediated to its preconstruction condition at the conclusion of ground-disturbing activity on the site.

B. Noise and Vibration

1. Impact – Construction Noise

a) Potentially Significant Impact

The EIR finds that construction activities in the Plan area could expose persons to temporary increases in noise levels substantially in excess of ambient levels. The EIR concludes that such impacts could occur individually (as a result of construction of a single new building) as well as cumulatively (the joint contributions of all new buildings).

b) Mitigation Measure M-NO-2 and Conclusion

The Planning Commission finds the potentially significant impacts listed above would be reduced to a less-than-significant level with implementation of Mitigation Measure M-NO-2a, Noise Control Measures During Pile Driving, p. 360; and Mitigation Measure M-NO-2b, General Construction Noise Control Measures, p. 361, as follows:

M-NO-2a: Noise Control Measures During Pile Driving. For individual projects that require pile driving, a set of site-specific noise attenuation measures shall be completed under the supervision of a qualified acoustical consultant. These attenuation measures shall include as many of the following control strategies, and any other effective strategies, as feasible:

- The project sponsor of a development project in the Plan area shall require the construction contractor to erect temporary plywood noise barriers along the boundaries of the project site to shield potential sensitive receptors and reduce noise levels;
- The project sponsor of a development project in the Plan area shall require the construction contractor to implement "quiet" pile-driving technology (such as pre-drilling of piles, sonic pile drivers, and the use of more than one pile driver to shorten the total pile driving duration), where feasible, in consideration of geotechnical and structural requirements and conditions;
- The project sponsor of a development project in the Plan area shall require the construction contractor to monitor the effectiveness of noise attenuation measures by taking noise measurement; and
- The project sponsor of a development project in the Plan area shall require that the construction contractor limit pile driving activity to result in the least disturbance to neighboring uses.

M-NO-2b: General Construction Noise Control Measures. To ensure that project noise from construction activities is minimized to the maximum extent feasible, the project sponsor of a development project in the Plan area shall undertake the following:

- The project sponsor of a development project in the Plan area shall require the general contractor to ensure that equipment and trucks used

for project construction utilize the best available noise control techniques (e.g., improved mufflers, equipment redesign, use of intake silencers, ducts, engine enclosures and acoustically-attenuating shields or shrouds, wherever feasible).

- The project sponsor of a development project in the Plan area shall require the general contractor to locate stationary noise sources (such as compressors) as far from adjacent or nearby sensitive receptors as possible, to muffle such noise sources, and to construct barriers around such sources and/or the construction site, which could reduce construction noise by as much as five dBA. To further reduce noise, the contractor shall locate stationary equipment in pit areas or excavated areas, if feasible.
- The project sponsor of a development project in the Plan area shall require the general contractor to use impact tools (e.g., jack hammers, pavement breakers, and rock drills) that are hydraulically or electrically powered wherever possible to avoid noise associated with compressed air exhaust from pneumatically powered tools. Where use of pneumatic tools is unavoidable, an exhaust muffler on the compressed air exhaust shall be used, along with external noise jackets on the tools, which could reduce noise levels by as much as 10 dBA.
- The project sponsor of a development project in the Plan area shall include noise control requirements in specifications provided to construction contractors. Such requirements could include, but not be limited to, performing all work in a manner that minimizes noise to the extent feasible; use of equipment with effective mufflers; undertaking the most noisy activities during times of least disturbance to surrounding residents and occupants, as feasible; and selecting haul routes that avoid residential buildings inasmuch as such routes are otherwise feasible.
- Prior to the issuance of each building permit, along with the submission of construction documents, the project sponsor of a development project in the Plan area shall submit to the Planning Department and Department of Building Inspection (DBI) a list of measures to respond to and track complaints pertaining to construction noise. These measures shall include (1) a procedure and phone numbers for notifying DBI, the Department of Public Health, and the Police Department (during regular construction hours and off-hours); (2) a sign posted on-site describing noise complaint procedures and a complaint hotline number that shall be answered at all times during construction; (3) designation of an on-site construction complaint and enforcement manager for the project; and (4) notification of neighboring residents and non-residential building managers within 300 feet of the project construction area at least 30 days in advance of

extreme noise generating activities (defined as activities generating noise levels of 90 dBA or greater) about the estimated duration of the activity.

C. Wind

1. Impact – Increase in Pedestrian-Level Wind Speeds

a) Potentially Significant Impact

The EIR finds that, absent mitigation, implementation of the draft Plan would not cause large increases in pedestrian wind speeds or wind speeds in publicly accessible open spaces over a substantial portion of the Plan area. The EIR finds that such impacts could occur individually (as a result of a single new building) as well as cumulatively (the joint contributions of all new buildings), but would be avoidable through design of subsequent projects.

b) Mitigation Measure M-WI-2 and Conclusion

The Planning Commission finds the potentially significant impacts listed above would be reduced to a less-than-significant level with implementation of Mitigation Measure M-WI-2, p. 462, which would require that new towers be designed to minimize pedestrian wind speeds, as follows:

M-WI-2: Tower Design to Minimize Pedestrian Wind Speeds. As part of the design development for buildings on Parcel F and at the 524 Howard Street, 50 First Street, 181 Fremont Street and Golden Gate University sites, the project sponsor(s) shall consider the potential effect of these buildings on pedestrian-level winds and on winds in the City Park atop the Transit Center. If wind-tunnel testing identifies adverse impacts, the project sponsor(s) shall conduct additional mitigation testing to resolve impacts to the maximum degree possible and to the satisfaction of Planning Department staff. Design features could include, but not be limited to, setting a tower atop a podium, which can interfere with "downwash" of winds from higher elevations toward the ground; the use of setbacks on tower facades, particularly those facades facing into prevailing winds, which can have similar results; using chamfered and/or rounded corners to minimize the acceleration of upper-level winds as they round corners; façade articulation; and avoiding the placement of large, unbroken facades into prevailing winds.

D. Biological Resources

1. Impact – Adverse Effects to Special-Status Animal Species

a) Potentially Significant Impact

The EIR finds that development under the draft Plan has the potential to adversely impact species identified as a candidate, sensitive, or special-status species in local or regional plans, policies, or regulations, or by the California Department of Fish and Game or U.S. Fish and Wildlife Service.

b) Mitigation Measure M-BI-1 and Conclusion

The Planning Commission finds the potentially significant impacts listed above would be reduced to a less-than-significant level with implementation of Mitigation Measure M-BI-1a, Pre-Construction Bird Surveys, p. 565, and Mitigation Measure M-BI-1b, Pre-Construction Bat Surveys, p. 566, as follows:

M-BI-1a: Pre-Construction Bird Surveys. Conditions of approval for building permits issued for construction within the Plan area shall include a requirement for pre-construction breeding bird surveys when trees or vegetation would be removed or buildings demolished as part of an individual project. Pre-construction nesting bird surveys shall be conducted by a qualified biologist between February 1st and August 15th if vegetation (trees or shrubs) removal or building demolition is scheduled to take place during that period. If special-status bird species are found to be nesting in or near any work area or, for compliance with federal and state law concerning migratory birds, if birds protected under the federal Migratory Bird Treaty Act or the California Fish and Game Code are found to be nesting in or near any work area, an appropriate no-work buffer zone (e.g., 100 feet for songbirds) shall be designated by the biologist. Depending on the species involved, input from the California Department of Fish and Game (CDFG) and/or the U.S. Fish and Wildlife Service (USFWS) Division of Migratory Bird Management may be warranted. As recommended by the biologist, no activities shall be conducted within the no-work buffer zone that could disrupt bird breeding. Outside of the breeding season (August 16 – January 31), or after young birds have fledged, as determined by the biologist, work activities may proceed. Birds that establish nests during the construction period are considered habituated to such activity and no buffer shall be required, except as needed to avoid direct destruction of the nest, which would still be prohibited.

M-BI-1b: Pre-Construction Bat Surveys. Conditions of approval for building permits issued for construction within the Plan area shall include a requirement for pre-construction special-status bat surveys when large trees are to be removed or underutilized or vacant buildings are to be demolished. If active day or night roosts are found, the bat biologist shall take actions to make such roosts unsuitable habitat prior to tree removal or building demolition. A no disturbance buffer shall be created around active bat roosts being used for maternity or hibernation purposes at a distance to be determined in consultation with CDFG. Bat roosts initiated during construction are presumed to be unaffected, and no buffer would necessary.

E. Hazards and Hazardous Materials

1. Impact – Potential Exposure to Contaminated Soil and Groundwater

a) Potentially Significant Impact

The EIR finds that excavation in the Transit Center District Plan area would require the handling of potentially contaminated soil and groundwater, potentially exposing workers and the public to hazardous materials, or resulting in a release to the environment during construction.

b) Mitigation Measure M-HZ-2 and Conclusion

The Planning Commission finds the potentially significant impacts listed above would be reduced to a less-than-significant level with implementation of Mitigation Measure M-HZ-2a, Mitigation Measure M-HZ-2b, and Mitigation Measure M-HZ-2c, pp. 640 – 642, which would require appropriate soil assessment and corrective action, as follows:

M-HZ-2a: Site Assessment and Corrective Action for Sites Located Bayward of Historic Tide Line. For any project located bayward of the historic high tide line the project sponsor shall initiate compliance with, and ensure that the project fully complies with, Article 22A of the San Francisco Health Code. In accordance with this article, a site history report shall be prepared, and if appropriate, a soil investigation, soil analysis report, site mitigation plan, and certification report shall also be prepared. If the presence of hazardous materials is indicated, a site health and safety plan shall also be required. The soil analysis report is submitted to DPH. If required on the basis of the soil analysis report, a site mitigation plan shall be prepared to 1) assess potential environmental and health and safety risks; 2) recommend cleanup levels and mitigation measures, if any are necessary, that would be protective of workers and visitors to the property; 3) recommend measures to mitigate the risks identified; 4) identify appropriate waste disposal and handling requirements; and 5) present criteria for on-site reuse of soil. The recommended measures would be completed during construction. Upon completion, a certification report shall be prepared documenting that all mitigation measures recommended in the site mitigation report have been completed and that completion of the mitigation measures has been verified through follow-up soil sampling and analysis, if required.

If the approved site mitigation plan includes leaving hazardous materials in soil or the groundwater with containment measures such as landscaping or a cap to prevent exposure to hazardous materials, the project sponsor shall ensure the preparation of a risk management plan, health and safety plan, and possibly a cap maintenance plan in accordance with DPH requirements. These plans shall specify how unsafe exposure to

hazardous materials left in place would be prevented, as well as safe procedures for handling hazardous materials should site disturbance be required. DPH could require a deed notice, for example, prohibiting or limiting certain future land uses, and the requirements of these plans and the deed restriction would transfer to the new property owners in the event that the property was sold.

M-HZ-2b: Site Assessment and Corrective Action for Projects Landward of the Historic High Tide Line. For any project that is not located bayward of the historic high tide line, the project sponsor shall ensure that a site-specific Phase I environmental site assessment is prepared prior to development. The site assessment shall include visual inspection of the property; review of historical documents; and review of environmental databases to assess the potential for contamination from sources such as underground storage tanks, current and historical site operations, and migration from off-site sources. The project sponsor shall ensure that the Phase I assessment and any related documentation is provided to the Planning Department's Environmental Planning (EP) division and, if required by EP, to DPH for review and consideration of potential corrective action.

Where the Phase I site assessment indicates evidence of site contamination, additional data shall be gathered during a Phase II investigation, including sampling and laboratory analysis of the soil and groundwater for the suspected chemicals to identify the nature and extent of contamination. If the level(s) of chemical(s) would create an unacceptable risk to human health or the environment, appropriate cleanup levels for each chemical, based on current and planned land use, shall be determined in accordance with accepted procedures adopted by the lead regulatory agency providing oversight (e.g., the DTSC, the RWQCB, or DPH). At sites where there are ecological receptors such as sensitive plant or animal species that could be exposed, cleanup levels shall be determined according to the accepted ecological risk assessment methodology of the lead agency, and shall be protective of ecological receptors known to be present at the site.

If agreed-upon cleanup levels were exceeded, a remedial action plan or similar plan for remediation shall be prepared and submitted review and approval by the appropriate regulatory agency. The plan shall include proposed methods to remove or treat identified chemicals to the approved cleanup levels or containment measures to prevent exposure to chemicals left in place at concentrations greater than cleanup levels.

Upon determination that a site remediation has been successfully completed, the regulatory agency shall issue a closure letter to the responsible party. For sites that are cleaned to levels that do not allow unrestricted land use, or where containment measures were used to prevent exposure to hazardous materials, the DTSC may require a limitation on the future use of the property. The types of land use restriction include

deed notice, deed restriction, or a land use restriction that binds current and future owners. A risk management plan, health and safety plan, and possibly a cap maintenance plan could be required. These plans would specify procedures for preventing unsafe exposure to hazardous materials left in place and safe procedures for handling hazardous materials should site disturbance be required. The requirements of these plans and the land use restriction shall transfer to the new property owners in the event that the property is sold.

M-HZ-2c: Site Assessment and Corrective Action for All Sites. The project sponsor shall characterize the site, including subsurface features such as utility corridors, and identify whether volatile chemicals are detected at or above risk screening levels in the subsurface. If so, a screening evaluation shall be conducted in accordance with guidance developed by the DTSC to estimate worst case risks to building occupants from vapor intrusion using site specific data and conservative assumptions specified in the guidance. If an unacceptable risk were indicated by this conservative analysis, then additional site data shall be collected and a site specific vapor intrusion evaluation, including fate and transport modeling, shall be required to more accurately evaluate site risks. Should the site specific evaluation identify substantial risks, then additional measures shall be required to reduce risks to acceptable levels. These measures could include remediation of site soil and/or groundwater to remove vapor sources, or, should this be infeasible, use of engineering controls such as a passive or active vent system and a membrane system to control vapor intrusion. Where engineering controls are used, a deed restriction shall be required, and shall include a description of the potential cause of vapors, a prohibition against construction without removal or treatment of contamination to approved risk-based levels, monitoring of the engineering controls to prevent vapor intrusion until risk-based cleanup levels have been met, and notification requirements to utility workers or contractors who may have contact with contaminated soil and groundwater while installing utilities or undertaking construction activities. In addition, if remediation is necessary, the project sponsor shall implement long-term monitoring at the site as needed. The frequency of sampling and the duration of monitoring will depend upon site-specific conditions and the degree of volatile chemical contamination.

The screening level and site-specific evaluations shall be conducted under the oversight of DPH and methods for compliance shall be specified in the site mitigation plan prepared in accordance with this measure, and subject to review and approval by the DPH. The deed restriction, if required, shall be recorded at the San Francisco Office of the Assessor-Recorder after approval by the DPH and DTSC.

2. Impact – Potential Exposure to Hazardous Building Materials

a) <u>Potentially Significant Impact</u>

The EIR finds that demolition and renovation of buildings in the Transit Center District Plan area could potentially expose workers and the public to hazardous building materials including asbestos-containing materials, lead-based paint, PCBs, DEHP, and mercury, or result in a release of these materials to the environment during construction.

b) Mitigation Measure M-HZ-3 and Conclusion

The Planning Commission finds the potentially significant impacts listed above would be reduced to a less-than-significant level with implementation of Mitigation Measure M-HZ-3, p. 645, which would require hazardous building materials abatement, as follows:

M-HZ-3: Hazardous Building Materials Abatement. The project sponsor of any development project in the Plan area shall ensure that any building planned for demolition or renovation is surveyed for hazardous building materials including PCB-containing electrical equipment, fluorescent light ballasts containing PCBs or DEHP, and fluorescent light tubes containing mercury vapors. These materials shall be removed and properly disposed of prior to the start of demolition or renovation. Old light ballasts that are proposed to be removed during renovation shall be evaluated for the presence of PCBs and in the case where the presence of PCBs in the light ballast cannot be verified, they shall be assumed to contain PCBs, and handled and disposed of as such, according to applicable laws and regulations. Any other hazardous building materials identified either before or during demolition or renovation shall be abated according to federal, state, and local laws and regulations.

IV. Significant Impacts That Cannot Be Avoided or Reduced to a Less Than Significant Level

Finding: Based on substantial evidence in the whole record of these proceedings, the Planning Commission finds that, where feasible, changes or alterations can and should be incorporated into, the Plan to reduce the significant environmental impacts listed below as identified in the FEIR. The Planning Commission determines that the following significant impacts on the environment, as reflected in the FEIR, are unavoidable, but under Public Resources Code Section 21081(a)(3) and (b), and CEQA Guidelines 15091(a)(3), 15092(b)(2)(B), and 15093, the City determines that the impacts are acceptable due to the overriding considerations described in Section VII below. This finding is supported by substantial evidence in the record of this proceeding.

A. Aesthetics

1. Impact – Adverse Effects on Public Views from Long-Range Viewpoints

a) Potentially Significant Impact

The EIR finds that implementation of the draft Plan draft Plan would alter public views of the Plan area from key long-range vantage points. The EIR concludes that such impacts could occur individually (as a result of construction of Plan area buildings) as well as cumulatively (the contribution of Plan area buildings to the effect from all new buildings, including those on Rincon Hill and outside the Plan area to the west).

b) Mitigation Measure and Conclusion

As stated on EIR p. 153, the increases in density and height of the proposed development would result in changes in the built forms, perceptible most clearly in long-range views of the Plan area. The EIR finds that the proposed changes would not generally constitute a substantial departure from the types and massing of structures that already exist in the Plan area, and that the proposed Transit Tower and a limited number of other buildings taller than existing development would be separated by sufficient distance and would incorporate setbacks and sculpted massing such that they would not adversely affect important views. However, the EIR finds that, in views from central vantage points including Twin Peaks and Portola Drive, views of the Bay, Bay Bridge, and Yerba Buena Island would be overwhelmed and potentially obscured by Plan area buildings, and that policy established through the General Plan recognizes that such an outcome would be adverse. For this reason, the Planning Commission finds that the impact is conservatively considered significant and unavoidable. No feasible mitigation is identified for this impact. However, the EIR addresses this impact in the discussion of alternatives, in Chapter VI (see Section VI, Evaluation of Project Alternatives, below).

B. Cultural Resources

1. Impact – Adverse Effects on Historical Resources

a) Potentially Significant Impact

The EIR finds that implementation of the draft Plan could result in adverse impacts to historic architectural resources through demolition or substantial alteration. This impact would be both individual and cumulative.

b) Mitigation Measure M-CP-3 and Conclusion

The EIR identifies Mitigation Measure M-CP-3a, p. 267, which would require documentation of historical resources; Mitigation Measure M-CP-3b, p. 268, which would require the creation of public information displays concerning historical resources; Mitigation Measure M-CP-3c, p. 268, which would that historical resources be

made available for relocation, and Mitigation Measure M-CP-3d, p. 268, which would require that materials from historical resources be made available for salvage, as follows:

M-CP-3a: HABS/HAER Documentation. Prior to demolition or substantial adverse alteration of historical resource(s), the project sponsor of a development project in the Plan area shall contract with a qualified preservation architect, historic preservation expert, or other qualified individual to fully document the structure(s) to be demolished or altered. Documentation shall be undertaken following consultation with Planning Department preservation staff and the Historic Preservation Commission, and shall at a minimum be performed to HABS Level II documentation standards. According to HABS Standards, Level II documentation consists of the following tasks:

- Written data: A brief report documenting the existing conditions and history of the building shall be prepared, focusing on the building's architectural and contextual relationship with the greater Western SoMa neighborhood.
- Photographs: Photographs with large-format (4x5-inch) negatives shall be shot of exterior and interior views of all three project site buildings. Historic photos of the buildings, where available, shall be photographically reproduced. All photos shall be printed on archival fiber paper.
- Drawings: Existing architectural drawings (elevations and plans) of all three the project site buildings, where available, shall be photographed with large format negatives or photographically reproduced on Mylar.
- The completed documentation package shall be submitted to local and regional archives, including but not limited to, the San Francisco Public Library History Room, the California Historical Society and the Northwest Information Center at Sonoma State University in Rohnert Park.

M-CP-3b: Public Interpretative Displays. Prior to demolition or substantial adverse alteration of historical resource(s) that are significant due to event(s) that occurred in the building at the development site, the project sponsor of a development project in the Plan area shall develop, in consultation with Planning Department preservation staff, a permanent interpretative program/and or display that would commemorate such event(s). The program/display would be installed at a publicly accessible location, either at or near the project site or in another appropriate location (such as a library or other depository). The content and location of the display shall be presented to the Historic Preservation Commission for review and comment.

M-CP-3c: Relocation of Historical Resources. Prior to demolition or substantial alteration of historical resource(s), the project sponsor of a development project in the Plan area shall make any historical resources that would otherwise be demolished or substantially altered in an adverse manner available for relocation by qualified parties.

M-CP-3d: Salvage of Historical Resources. Prior to demolition of historical resource(s) that are significant due to architecture (resource(s) that embody the distinctive characteristics of a type, period, region, or method of construction, or represents the work of a master, or possesses high artistic values), the project sponsor of a development project in the Plan area shall consult with a Planning Department Preservation Technical Specialist and/or other qualified parties regarding salvage of materials from the affected resource(s) for public information or reuse in other locations.

The EIR finds that, while the foregoing mitigation measures would reduce the adverse impacts of the proposed Plan on historical resources, they would not reduce the impacts to a less-than-significant level, because it cannot be stated cannot be stated with certainty that no historical resources would be demolished or otherwise adversely affected in the Plan area with implementation of the draft Plan. Therefore, the Planning Commission finds that the impacts are considered significant and unavoidable.

C. Transportation

1. Impact – Adverse Effects on Intersection Levels of Service

a) Potentially Significant Impact

The EIR finds that traffic growth related to the draft Plan, including the street changes, would adversely affect local intersection operation, and therefore would conflict with established measures of effectiveness for the performance of the circulation system.

b) Mitigation Measure M-TR-1 and Conclusion

The EIR identifies Mitigation Measure M-TR-1a through M-MR-TR-1m, p. 291 -- 296, which would changes to signal timing, lane striping, prohibition of certain turning movements, and similar alterations to intersection operations, as follows:

M-TR-1a: Signal Timing Optimization. The Municipal Transportation Agency (MTA) could optimize signal timing at the following intersections to reduce impacts on intersection LOS to a less-than-significant level, by either improving conditions to LOS D or better or by avoiding the draft Plan's contribution to increased vehicle delay (mitigated LOS in parentheses):

- Stockton / Geary Streets (LOS F, p.m.)

- Kearny / Sutter Streets (LOS F, p.m.)
- Battery and California Streets (LOS D, a.m. and p.m.)
- Embarcadero / Washington Streets (LOS F, p.m.)
- Third / Folsom Streets (LOS F, p.m. peak)
- Beale / Folsom Streets (LOS F, p.m. peak)
- Embarcadero / Folsom Streets (LOS F, a.m. and p.m. peak)

Altering signal timing to change the amount of green-light time at the aforementioned intersections would either improve level of service to LOS D or better or, where the intersection would still operate at an unacceptable LOS E or F, avoid the draft Plan's contribution to increased vehicle delay, thereby reducing impacts to a less than significant level. However, because the feasibility of these changes is not known at this time, given that MTA would have to further evaluate signal progression (timing of related traffic signals) and pedestrian crossing time requirement prior to changing signal timing, impacts at these intersections would remain significant and unavoidable, due to the uncertainty of implementing this measure.

M-TR-1b: Taxi Left-Turn Prohibition. At the intersection of Third /Mission Streets, the Municipal Transportation Agency (MTA) could expand existing prohibitions on peak-hour left turn to include taxis, thereby permitting only buses to make left turns. Prohibiting eastbound left turns by taxis would either improve LOS or avoid the draft Plan's contribution to increased vehicle delay, thereby reducing impacts to a less than significant level. However, because the feasibility of these changes is not known at this time, given that MTA would have to further evaluate area-wide traffic circulation and volumes, the impacts at this intersection would remain significant and unavoidable, due to the uncertainty of implementing this measure.

M-TR-1c: Beale / Mission Streets Bulbs and Optimization. At the intersection of Beale and Mission Streets, the Municipal Transportation Agency (MTA) and Department of Public Works (DPW) could install bulb-outs on the north and south crosswalks to reduce pedestrian crossing distances and times and optimize the signal timing plan at this intersection during the weekday p.m. peak hour by reallocating green time from the less-congested eastbound / westbound Mission Street approaches to the southbound Beale Street approach. Implementation of this measure would avoid the draft Plan's contribution to increased vehicle delay, thereby reducing impacts to a less than significant level. However, because the feasibility of these changes is not known at this time, given that MTA and DPW would have to further evaluate signal progression, pedestrian crossing time, and area-wide traffic circulation and volumes, the impacts at this intersection would remain significant and unavoidable, due to the uncertainty of implementing this measure.

M-TR-1d: Steuart / Howard Streets Restriping. At the intersection of Steuart and Howard Streets, the Municipal Transportation Agency (MTA) could remove two on-

street parking spaces on the south side of Howard Street immediately west of the intersection and stripe the eastbound approach as one through lane and one shared through-right lane. The proposed design for eastbound Howard Street after extension of the westbound Howard Street bicycle lane to The Embarcadero calls for one wide curb lane and one parking lane, but a second eastbound travel lane at the intersection could be provided by removing up to two on-street parking spaces. Implementation of this measure would improve conditions at Steuart / Howard Streets to LOS D, thereby reducing impacts to a less than significant level. However, because the feasibility of these changes is not known at this time, given that MTA would have to further evaluate area-wide traffic circulation and volumes, the impacts at this intersection would remain significant and unavoidable, due to the uncertainty of implementing this measure.

M-TR-1e: Beale / Folsom Streets Left-Turn Prohibition and Signal Optimization. At the intersection of Beale and Folsom Streets, the Municipal Transportation Agency (MTA) could prohibit eastbound right turns from Folsom Street in the p.m. peak hour and optimize the signal timing by reallocating green time from the eastbound / westbound Folsom Street approaches to the northbound / southbound Beale Street approaches. Implementation of this measure would avoid the draft Plan's contribution to increased vehicle delay, thereby reducing impacts to a less than significant level. However, because the feasibility of these changes is not known at this time, given that MTA would have to further evaluate signal progression, pedestrian crossing time requirements, and area-wide traffic circulation and volumes, the impacts at this intersection would remain significant and unavoidable, due to the uncertainty of implementing this measure.

M-TR-1f: Third / Harrison Streets Restriping. At the intersection of Third and Harrison Streets, the Municipal Transportation Agency (MTA) could convert one of the two eastbound lanes leaving the intersection into an additional westbound through lane by restriping the east (Harrison Street) leg of the intersection. In order to allow sufficient turning radius and clearance for heavy vehicles such as buses and trucks, two on-street parking spaces on the south side of Harrison Street east of the intersection would be removed. Implementation of this measure would avoid the draft Plan's contribution to increased vehicle delay, thereby reducing impacts to a less than significant level. However, because the feasibility of these changes is not known at this time, given that MTA would have to further evaluate intersection lane geometry and area-wide traffic circulation and volumes, the impacts at this intersection would **remain significant and unavoidable, d**ue to the uncertainty of implementing this measure.

M-TR-1g: Hawthorne / Harrison Streets Restriping. At the intersection of Hawthorne and Harrison Streets, the Municipal Transportation Agency (MTA) could stripe an additional westbound through lane approaching the intersection by converting one of the two eastbound lanes. Implementation of this measure would avoid the draft Plan's

contribution to increased vehicle delay, thereby reducing impacts to a less than significant level. However, because the feasibility of these changes is not known at this time, given that MTA would have to further evaluate intersection lane geometry and area-wide traffic circulation and volumes, the impacts at this intersection would remain significant and unavoidable, due to the uncertainty of implementing this measure.

M-TR-1h: Second / Harrison Streets Turn Prohibition and Optimization. At the intersection of Second and Harrison Streets, the Municipal Transportation Agency (MTA) could prohibit eastbound left turns during the p.m. peak hour. Implementation of this measure would avoid the draft Plan's contribution to increased vehicle delay, thereby reducing impacts to a less than significant level. However, because the feasibility of these changes is not known at this time, given that MTA would have to further evaluate signal progression, pedestrian crossing time requirements, area-wide traffic circulation and volumes, the impacts at this intersection would remain **significant** and unavoidable, due to the uncertainty of implementing this measure.

M-TR-1i: Third / Bryant Streets Bulbs and Optimization. At the intersection of Third and Bryant Streets, the Municipal Transportation Agency (MTA) and Department of Public Works (DPW) could install bulb-outs on the south crosswalk to reduce pedestrian crossing distances and times and optimize the signal timing plan at this intersection during the weekday p.m. peak hour by reallocating green time from the eastbound Bryant Street approach to the northbound Third Street approach. Implementation of this measure would avoid the draft Plan's contribution to increased vehicle delay, thereby reducing impacts to a less than significant level. However, because the feasibility of these changes is not known at this time, given that MTA would have to further evaluate signal progression, pedestrian crossing time requirements, and area-wide traffic circulation and volumes, the impacts at this intersection would remain significant and unavoidable, due to the uncertainty of implementing this measure.

M-TR-1j: Second / Bryant Streets Bulbs and Optimization. At the intersection of Second and Bryant Streets, the Municipal Transportation Agency (MTA) and Department of Public Works (DPW) could install bulb-outs on the east and west crosswalks to reduce pedestrian crossing distances and times and optimize the signal timing plan at this intersection during the weekday p.m. peak hour by reallocating green time from the northbound / southbound Second Street approaches to the eastbound Bryant Street approach. Implementation of this measure would avoid the draft Plan's contribution to increased vehicle delay, thereby reducing impacts to a less than significant level. However, because the feasibility of these changes is not known at this time, given that MTA would have to further evaluate signal progression, pedestrian crossing time requirements, and area-wide traffic circulation and volumes, the impacts at this intersection would remain significant and unavoidable, due to the uncertainty of implementing this measure.

M-TR-1k: Second / Tehama Streets Restriping and Optimization. At the intersection of Second and Tehama Streets, the Municipal Transportation Agency (MTA) could prohibit eastbound and westbound left turns (from Tehama Street) during the a.m. and p.m. peak hours. Implementation of this measure would improve operations to LOS D, thereby reducing impacts to a less than significant level. However, because the feasibility of these changes is not known at this time, given that MTA would have to further evaluate signal progression, pedestrian crossing time requirements, and area-wide traffic circulation and volumes, the impacts at this intersection would remain significant and unavoidable, due to the uncertainty of implementing this measure.

M-TR-1l: Mid-Block Signalized Intersection Improvements. At the signalized intersections proposed in the public realm plan at Second / Natoma Streets; First / Minna Streets; First / Natoma Streets; Fremont / Tehama Streets; and Fremont Street / Transit Center Bus Plaza, the following improvements could improve traffic operations.

- At Second / Natoma Streets, the Municipal Transportation Agency (MTA) could install bulb-outs on the north and south crosswalks to reduce pedestrian crossing distances and times, allowing more green time for through traffic along Second Street. The traffic signal could also be designed to give priority to transit vehicles. However, due to two-way traffic along Second Street and the close proximity of the proposed crossing to the Second / Howard Streets intersection, this measure may not be sufficient to reduce the proposed mid-block crossing's impacts to traffic and transit operations. In addition, while bulb-outs would reduce crossing distance, a sufficiently high volume of pedestrians heading to and from the Transit Center may warrant retaining longer pedestrian phases to ensure adequate crossing times and throughput, so as not to introduce substantial queuing or congestion at the crosswalk or surrounding sidewalk. Accordingly, the feasibility of this measure is uncertain, and this impact is considered significant and unavoidable.

- At First / Minna Streets and First / Natoma Streets, reducing impacts would require additional lane capacity on First Street, although that would result in increased pedestrian crossing distances that would require longer pedestrian signal phases. This would also preclude the public realm plan's proposed sidewalk widening on First Street adjacent to the Transit Center. Moreover, additional lanes would not alleviate downstream congestion on First Street leading to the Bay Bridge. Eliminating one or both of the mid-block crossings might result in congested sidewalks on First Street. In addition, traffic signals at these two locations may be necessary for freight and passenger loading-related traffic circulation to and from Minna and Natoma Streets, regardless of whether pedestrian crossings are provided. Accordingly, no feasible mitigation was identified and this impact is considered significant and unavoidable.

- At Fremont / Natoma Streets and Fremont Street at the Transit Center Bus Plaza, the signal could be designed with two signal phases instead of three. One phase would be for northbound Fremont Street, and the second, for all five bus bays to exit the Bus Plaza, as well as pedestrians crossing Fremont Street at both Natoma Street and at the Bus Plaza. This would increase traffic capacity on Fremont Street and reduce the potential for queues on Fremont Street and the Bay Bridge. However, the Municipal Transportation Agency has determined that a two-phase signal would create operational and safety concerns for transit and pedestrians. Accordingly, no feasible mitigation was identified and this impact is considered significant and unavoidable.

For the reasons noted above, the impacts at these mid-block intersections would remain significant and unavoidable.

M-TR-1m: Downtown Traffic Signal Study. As part of a Regional Traffic Signalization and Operations Program project, the Municipal Transportation Agency (MTA) could conduct a study of Downtown-area traffic signal systems, with the aim of recalibrating cycle lengths, offsets, and splits at Downtown-area intersections to optimize traffic flow and minimize unnecessary delays (without impacting other modes of travel). Implementation of such a study could improve operations throughout the Plan area and elsewhere in Downtown. However, because the outcome of such an analysis is not known, intersection impacts would remain significant and unavoidable.

Mitigation (indicated in parentheses) could reduce average vehicle delay at the following intersections, but not to a less-than-significant level because further mitigation would require increased lane capacity that would preclude one or more proposed sidewalk improvements under the draft Plan's public realm plan, and because further signal timing optimization would require coordination with other signals that could increase overall vehicle delay. Therefore, impacts at the following intersections would be significant and unavoidable:

- New Montgomery / Mission Streets (Optimize signal timing)
- Third / Howard Streets (Optimize signal timing)
- New Montgomery / Howard Streets (Optimize signal timing)
- Fremont / Howard Streets (Prohibit eastbound p.m. peak left turns and optimize signal)
- Main / Howard Streets (Prohibit eastbound p.m. peak left turns and optimize signal)
- Spear / Howard Streets (Add northbound and southbound left-turn pockets, prohibit eastbound p.m. peak left turns and optimize signal)

No mitigation is feasible to reduce impacts at the following intersections to a less-than-significant level because, while increased lane capacity and/or signal timing optimization and, in some cases, installation of corner pedestrian bulbs to allow for less green time for pedestrian crossing could improve level of service for one or more approaches, the applicable mitigation strategy would increase delays for transit vehicles on Market and Mission Streets and also cause increased pedestrian delays or, in some instances, precluding proposed sidewalk or transit improvements under the draft Plan's public realm plan. Therefore, impacts at the following intersections would be significant and unavoidable:

- Third / Kearny / Market / Geary Streets
- Montgomery / Market / New Montgomery Streets
- First / Market Streets
- Fremont / Market / Front Streets
- Beale / Market / Davis / Pine Streets
- Second / Mission Streets
- First / Mission Streets
- Fremont / Mission Streets
- Second / Howard Streets
- First / Howard Streets
- Beale / Howard Streets
- Hawthorne / Folsom Streets
- Second / Folsom Streets
- First / Folsom Streets
- Spear / Folsom Streets
- Fourth / Harrison Streets / I-80 WB On-Ramp
- First / Harrison Streets / I-80 EB On-Ramp

No mitigation is feasible to reduce impacts at the following intersection to a less-than-significant level because additional lane capacity is unavailable and/or signal timing optimization would not improve level of service to an acceptable level. Therefore, impacts at the following intersection would be significant and unavoidable:

- Essex / Harrison Streets / I-80EB On-Ramp

No mitigation is required for the following intersections, which would experience significant impacts only in the absence of the public realm improvements that are part of the draft Plan:

Spear / Mission Streets (without the public realm improvements, could be mitigated by changing signal phasing and optimizing signal timing)

The EIR finds that the feasibility of mitigation identified in the EIR to reduce the impacts of the Project on intersection levels of service to a less than significant level is unknown, and in some cases no mitigation is available. Therefore, the Planning Commission finds that the impacts are considered significant and unavoidable.

2. Impact – Effects on Freeway Ramp Operations

a) Potentially Significant Impact

The EIR finds that traffic growth related to the draft Plan would increase congestion at the Fourth/Harrison Streets and First/Harrison Streets freeway on-ramps, thereby conflicting with established measures of effectiveness for the circulation performance.

b) Mitigation Measure and Conclusion

As stated on EIR p. 298, no feasible mitigation is available for the impacts at the Fourth and Harrison Streets and First and Harrison Streets ramps, because there is insufficient physical space for additional capacity without redesign of the I-80 aerial structures. Other potential measures to improve operations would involve reducing the traffic volumes entering the weaving section, either through ramp metering, tolling, or other means. Ramp metering, however, would likely exacerbate congestion on roads leading to the on-ramp (i.e., Fourth Street and Harrison Street), while tolling would need to be implemented as a systemwide improvement in order to prevent concentration of vehicular traffic and increased congestion on non-tolled facilities. Moreover, any changes to the ramps would require approval of Caltrans, which operates the freeways and ramps. Therefore, the Planning Commission finds that this impact is significant and unavoidable.

3. Impact – Effects on Transit Capacity and Delay

a) Potentially Significant Impact

The EIR finds that transit ridership related to the draft Plan, including the street changes, would cause a substantial increase in transit demand that could not be accommodated by adjacent transit capacity, resulting in unacceptable levels of transit service; and would cause a substantial increase in delays or operating costs such that significant adverse impacts in transit service levels could result. Additionally, the area-wide shortfall of parking within the Plan area could potentially result in a mode shift of more persons onto transit, which would further increase ridership in comparison to capacity.

b) Mitigation Measure and Conclusion

The EIR identifies Mitigation Measure M-TR-3a, p. 306, under which the San Francisco Municipal Transportation Agency (SFMTA) would install transit-only lanes and transit queue-jump lanes; Mitigation Measure M-TR-3b, p. 307, under which SFMTA would reserve the use of Mission Street boarding islands for Muni buses; Mitigation Measure M-TR-3c, p. 307, which calls for transit improvements on Plan area streets; Mitigation Measure M-TR-3d, p. 308, which would provide for additional transit funding, and Mitigation Measure M-TR-3e, p. 308, which would provide for additional funding for regional transit , as follows:

M-TR-3a: Installation and Operation of Transit-Only and Transit Queue-Jump Lanes. To reduce or avoid the effects of traffic congestion on Muni service, at such time as the transit-vehicle delay results in the need to add additional vehicle(s) to one or more Muni lines, the Municipal Transportation Agency (MTA) could stripe a portion of the approach lane at applicable intersections to restrict traffic to buses only during the p.m. peak period, thereby allowing Muni vehicles to avoid traffic queues at certain critical intersections and minimizing transit delay. Each queue-jump lane would require the prohibition of parking during the p.m. peak period for the distance of the special lane.

For the 41 Union, MTA could install a p.m. peak-hour transit-only lane along Beale Street approaching and leaving the intersection of Beale/Mission Street, for a distance of 150 to 200 feet. Five parking spaces on the west side of Beale Street north of Mission Street could be eliminated when the transit lane is in effect to allow for a right-turn pocket. MTA could also install a p.m. peak-hour queue-jump lane on the eastbound Howard Street approach to the intersection of Beale/Howard Streets, for a distance of 100 feet. If the foregoing were ineffective, MTA could consider re-routing the 41 Union to less-congested streets, if available, or implementing actions such as providing traffic signal priority to Muni buses.

For the 11-Downtown Connector and 12 Folsom Pacific, MTA could install a p.m. peak-hour queue-jump lane on the southbound Second Street approach to the intersection to the intersection of Second/Folsom Streets, for a distance of approximately 150 feet. When the lane is in effect, five on-street parking spaces on the west side of Second Street north of Folsom Street could be eliminated, as well as a portion of the southbound bicycle lane approaching the intersection. If the foregoing were ineffective, MTA could consider re-routing the 11-Downtown Connector and 12 Folsom to less-congested streets, if available, or implementing actions such as providing traffic signal priority to Muni buses.

The MTA could also evaluate the effectiveness and feasibility of installing an eastbound transit-only lane along Folsom Street between Second and Third Streets, which would minimize delays incurred at these intersections by transit vehicles. The study would

create a monitoring program to determine the implementation extent and schedule, which may include conversion of one eastbound travel lane into a transit-only lane.

M-TR-3b: Exclusive Muni Use of Mission Street Boarding Islands. To reduce or avoid conflicts between Muni buses and regional transit service (Golden Gate Transit and SamTrans) using the relocated transit-only center lanes of Mission Street between First and Third Streets, MTA could reserve use of the boarding islands for Muni buses only and provide dedicated curbside bus stops for regional transit operators. Regional transit vehicles would still be allowed to use the transit-only center lanes between stops, but would change lanes to access the curbside bus stops. This configuration would be similar to the existing Muni stop configuration along Market Street, where two different stop patterns are provided, with each route assigned to only one stop pattern.

M-TR-3c: Transit Improvements on Plan Area Streets. To reduce or avoid the effects of traffic congestion on regional transit service operating on surface streets (primarily Golden Gate Transit and SamTrans), MTA, in coordination with applicable regional operators, could conduct study the effectiveness and feasibility of transit improvements along Mission Street, Howard Street, Folsom Street, First Street, and Fremont Street to reduce delays incurred by transit vehicles when passing through the Plan area. The study would examine a solutions including, but not limited to the following:

- Installation of transit-only lanes along Howard Street and Folsom Street, which could serve both Muni buses (e.g., 12 Folsom-Pacific) and Golden Gate Transit buses heading to / from Golden Gate's yard at Eighth and Harrison Streets;
- Extension of a transit-only lane on Fremont Street south to Howard Street and installation of transit-actuated queue-jump phasing at the Fremont Street / Mission Street intersection to allow Golden Gate Transit buses to make use of the Fremont Street transit lane (currently only used by Muni vehicles); and
- Transit signal priority treatments along Mission, Howard, and Folsom Streets to extend major-street traffic phases or preempt side-street traffic phases to reduce signal delay incurred by SamTrans and Golden Gate Transit vehicles.
- Golden Gate Transit and SamTrans could consider rerouting their lines onto less-congested streets, if available, in order to improve travel times and reliability. A comprehensive evaluation would need to be conducted before determining candidate alternative streets, considering various operational and service issues such as the cost of any required capital investments, the availability of layover space, and proximity to ridership origins and destinations.

M-TR-3d: Increased Funding to Offset Transit Delays. Sponsors of development projects within the Plan area could be subject to a fair share fee that would allow for the purchase of additional transit vehicle(s) to mitigate the impacts on transit travel time. In

the case of Muni operations, one additional vehicle would be required. For regional operators, the analysis also determined that on-street delays could require the deployment of additional buses on some Golden Gate Transit and SamTrans routes.

Funds for the implementation of this measure are expected to be generated from a delineated portion of the impact fees that would be generated with implementation of the draft Plan, and are projected to be adequate and sufficient to provide for the capital cost to purchase the additional vehicle and facility costs to store and maintain the vehicle.

M-TR-3e: Increased Funding of Regional Transit. Sponsors of development projects within the Plan area could be subject to one or more fair share fees to assist in service improvements, such as through the purchase of additional transit vehicles and vessels or contributions to operating costs, as necessary to mitigate Plan impacts. These fee(s) could be dedicated to Golden Gate Transit, North Bay ferry operators, AC Transit, BART, and/or additional North Bay and East Bay transit operators. Depending on how the fee(s) were allocated, Caltrain and SamTrans might also benefit, although lesser impacts were identified for these South Bay operators.

Funds for the implementation of this measure are expected to be generated from a delineated portion of the impact fees that would be generated with implementation of the draft Plan.

Implementation of Mitigation Measure M-TR-3a could reduce the effects of traffic congestion on Muni headways. However, as stated on FEIR p. 306-307, it cannot be determined whether the impact would be reduced to a less-than-significant level, because the efficacy of the improvements is not certain, pending trial implementation and additional review by MTA. Because the effectiveness of the above mitigation measures is unknown, this impact is considered significant and unavoidable. Moreover, it is noted that, because there is finite right-of-way at Plan area intersections, installation of transit-only lanes and/or transit queue-jump lanes could increase traffic congestion and, possibly, transit delays at other locations.

As stated on FEIR p. 307, the feasibility and effectiveness of Mitigation Measure M-TR-3b in reducing impacts to both Muni and regional transit is uncertain. In particular, relocation of the Mission Street transit-only lanes while still requiring regional transit vehicles to use curbside stops may result in unsafe maneuvers for regional transit vehicles and increase the potential for collisions and conflict between buses and vehicles or bicycles. Alternatively, regional transit operators could use only the curb lane, eliminating increased potential for collisions due to merging in and out of the transit-only lanes, but this would subject regional transit vehicles to substantial travel time delays as a result of

traveling in mixed-flow traffic. Accordingly, this impact is considered significant and unavoidable.

Implementation of Mitigation Measure M-TR-3c could reduce the effects of traffic congestion on regional transit operations. However, as stated on FEIR p. 308, it cannot be determined whether the impact would be reduced to a less-than-significant level. Therefore, this impact is considered significant and unavoidable. Moreover, it is noted that, because there is finite right-of-way at Plan area intersections, adding transit-only lanes could increase congestion for other traffic and, possibly, increase transit delays.

Implementation of Mitigation Measure M-TR-3d could incrementally reduce the effects of traffic congestion on Muni and regional transit operations. However, as stated on FEIR p. 308, inasmuch as operational costs (primarily drivers' salaries) would not be included in this fee, the effect would not be fully mitigated and this impact is considered significant and unavoidable.

Funds for the implementation of Mitigation Measure M-TR-3e are expected to be generated from a delineated portion of the impact fees that would be generated with implementation of the draft Plan. However, as stated on FEIR p. 309, it would be speculative at this time to presume that sufficient funding could be available to offset project effects. Additional funding would likely have to be identified, whether from public or private sources, or a combination thereof, potentially including project sponsors of individual development projects in the Plan area, in order to purchase and operate additional transit vehicles and, potentially in some cases, to increase rail system capacity. Adoption of the draft Plan is anticipated to be accompanied by additional development impact fees, such as were adopted in the Eastern Neighborhoods and Market Octavia Plan areas. However, because it is not known whether or how much additional funding would be generated for transit, and because no other definite funding sources have been identified, the Planning Commission finds that this impact is significant and unavoidable.

4. Impact – Pedestrian Crowding

a) Potentially Significant Impact

The EIR finds that pedestrian activity resulting from implementation of the draft Plan would cause the level of service at sidewalks, street corners, and crosswalks to deteriorate.

b) Mitigation Measure and Conclusion

The EIR identifies Mitigation Measure M-TR-4, p. 312, under which the SFMTA widen Plan area sidewalks, as follows:

M-TR-4: Widen Crosswalks. To ensure satisfactory pedestrian level of service at affected crosswalks, the Municipal Transportation Agency, Sustainable Streets Division, could conduct periodic counts of pedestrian conditions (annually, for example) and could widen existing crosswalk widths, generally by 1 to 3 feet, at such times as pedestrian LOS is degraded to unacceptable levels.

As stated on p. 312 of the FEIR, Implementation of Mitigation Measure M-TR-4 would reduce potential LOS impacts to a less-than-significant level at each of the affected crosswalks. It is noted that the street corner congestion that would occur at First/Mission Streets, New Montgomery/Howard Streets, and Beale/Howard Streets, a significant impact due to Plan growth only but not with the inclusion of the public realm improvements, would be resolved by the sidewalk improvements (bulbs and widening) proposed as part of the draft Plan's public realm improvements. However, because the feasibility of these changes is not known at this time, given that MTA would have to further evaluate and consider crosswalk widening in light of other circulation considerations, the Planning Commission finds that these impacts are conservatively judged to remain significant and unavoidable.

5. Impact – Creation of Additional Pedestrian Hazards

a) Potentially Significant Impact

The EIR finds that development of large projects pursuant to the draft Plan would create potentially hazardous conditions for pedestrians and otherwise interfere with pedestrian accessibility.

b) Mitigation Measure and Conclusion

The EIR identifies Mitigation Measure M-TR-5, p. 313, which would require sponsors of subsequent development projects, where warranted, to have loading dock attendances on duty to minimize potential pedestrian impacts, as follows:

M-TR-5: Garage/Loading Dock Attendant. If warranted by project-specific conditions, the project sponsor of a development project in the Plan area shall ensure that building management employs attendant(s) for the project's parking garage and/or loading dock, as applicable. The attendant would be stationed as determined by the project-specific analysis, typically at the project's driveway to direct vehicles entering and exiting the building and avoid any safety-related conflicts with pedestrians on the sidewalk during the a.m. and p.m. peak periods of traffic and pedestrian activity, with extended hours as dictated by traffic and pedestrian conditions and by activity in the project garage and loading dock. (See also Mitigation Measure M-TR-4b, above.) Each project shall also install audible and/or visible warning devices, or comparably effective warning devices

as approved by the Planning Department and/or the Sustainable Streets Division of the Municipal Transportation Agency, to alert pedestrians of the outbound vehicles from the parking garage and/or loading dock, as applicable.

As stated on p. 313 of the FEIR, because it cannot be stated with certainty that pedestrian conflicts and safety hazards with respect to driveway operation would be fully mitigated, the Planning Commission finds that this impact is conservatively judged to be significant and unavoidable.

6. Impact – Creation of Additional Bicycle Hazards

a) Potentially Significant Impact

The EIR finds that implementation of the draft Plan would create potentially hazardous conditions for bicyclists or otherwise substantially interfere with bicycle accessibility to the site and adjoining areas and would result in a loading demand during the peak hour of loading activities that could not be accommodated within proposed on-site loading facilities or within convenient on-street loading zones, and create potentially hazardous conditions or significant delays affecting traffic, transit, bicycles, and pedestrians.

b) Mitigation Measure and Conclusion

The EIR identifies Mitigation Measure M-TR-7a, p. 316, which would require sponsors of subsequent development projects to development and implement a loading dock management plan, and Mitigation Measure M-TR-7b, p. 317, under which the SFMTA could augment the on-street freight loading supply, as follows:

M-TR-7a: Loading Dock Management. To ensure that off-street loading facilities are efficiently used and that trucks longer than can be safely accommodated are not permitted to use a building's loading dock, the project sponsor of a development project in the Plan area shall develop a plan for management of the building's loading dock and shall ensure that tenants in the building are informed of limitations and conditions on loading schedules and truck size. Such a management plan could include strategies such as the use of an attendant to direct and guide trucks (see Mitigation Measure M-TR-5), installing a "Full" sign at the garage/loading dock driveway, limiting activity during peak hours, installation of audible and/or visual warning devices, and other features. Additionally, as part of the project application process, the project sponsor shall consult with the Municipal Transportation Agency concerning the design of loading and parking facilities. Typically, a building property manager dictates the maximum size of trucks that can be accommodated by a building's loading dock, and when trucks may access the project site.

M-TR-7b: Augmentation of On-Street Loading Space Supply. To ensure the adequacy of the Plan area's supply of on-street spaces, the Municipal Transportation Agency (MTA) could convert existing on-street parking spaces within the Plan Area to commercial loading use. Candidate streets might include the north side of Mission Street between Second Street and First Street, both sides of Howard Street between Third Street and Fremont Street, and both sides of Second Street between Howard Street and Folsom Street. The MTA and Planning Department could also increase the supply of on-street loading "pockets" that would be created as part of the draft Plan's public realm improvements.

Increasing the supply of on-street loading spaces would reduce the potential for disruption of traffic and transit circulation in the Plan Area as a result of loading activities. However, the feasibility of increasing the number of on-street loading spaces is unknown. Locations for additional loading pockets have not been identified, and the feasibility of adding spaces is uncertain, as any such spaces would reduce pedestrian circulation area on adjacent sidewalks. Locations adjacent to transit-only lanes would also not be ideal for loading spaces because they may introduce new conflicts between trucks and transit vehicles. Given these considerations, potential locations for additional on-street loading spaces within the Plan area are limited, and it is unlikely that a sufficient amount of spaces could be provided to completely offset the net loss in supply.

As stated on FEIR p. 317, while loading dock management (Mitigation Measure M-TR-6a) would improve operations, it cannot be stated with certainty that the impact due to increased loading demand would be mitigated to a less-than-significant level. With respect to the supply of on-street loading, Mitigation Measure M-TR-7b would be infeasible; in particular, because implementation of the draft Plan would reduce the number of available on-street spaces, compared to existing conditions, the loading shortfall would have a significant and unavoidable effect on Muni and regional transit operators (primarily Golden Gate Transit and SamTrans) that use City streets. The Planning Commission, therefore, finds that the loading shortfall would result in a significant and unavoidable impact on transit operators and on bicycle movement and safety.

7. Impact – Construction-Period Impacts

a) Potentially Significant Impact

The EIR finds that plan area construction, including construction of individual projects along with ongoing construction of the Transit Center, would result in disruption of nearby streets, transit service, and pedestrian and bicycle circulation.

b) Mitigation Measure and Conclusion

The EIR identifies Mitigation Measure M-TR-9, p. 321, which would require sponsors of subsequent development projects to develop Construction Management Plans, as follows:

M-TR-9: Construction Coordination. To minimize potential disruptions to transit, traffic, and pedestrian and bicyclists, the project sponsor and/or construction contractor for any individual development project in the Plan area shall develop a Construction Management Plan that could include, but not necessarily be limited to, the following:

- Limit construction truck movements to the hours between 9:00 a.m. and 4:00 p.m. (or other times, if approved by the Municipal Transportation Agency) to minimize disruption of traffic, transit, and pedestrian flow on adjacent streets and sidewalks during the weekday a.m. and p.m. peak periods.
- Identify optimal truck routes to and from the site to minimize impacts to traffic, transit, pedestrians, and bicyclists; and,
- Encourage construction workers to use transit when commuting to and from the site, reducing the need for parking.

The sponsor shall also coordinate with the Municipal Transportation Agency/Sustainable Streets Division, the Transbay Joint Powers Authority, and construction manager(s)/contractor(s) for the Transit Center project, and with Muni, AC Transit, Golden Gate Transit, and SamTrans, as applicable, to develop construction phasing and operations plans that will result in the least amount of disruption that is feasible to transit operations, pedestrian and bicycle activity, and vehicular traffic.

As stated on FEIR p. 321, given the proximity of the sites to each other and the Transbay Transit Center, as well as the uncertainty regarding construction schedules, construction activities would likely result in disruptions and secondary impacts to traffic, transit, pedestrians, and bicycles, even with implementation of this mitigation measure. Therefore, the Planning Commission finds this impact is significant and unavoidable.

D. Noise and Vibration

1. Impact – Exposure of Sensitive Receptors to High Noise Levels

a) Potentially Significant Impact

The EIR finds that implementation of the draft Plan could result in exposure of persons to noise levels in excess of standards in the *San Francisco General Plan* and could introduce new sensitive uses that would be affected by existing noise levels.

b) Mitigation Measure and Conclusion

The EIR identifies Mitigation Measure M-NO-1a, p. 357, which would require a noise survey prior to approval subsequent development projects; Mitigation Measure M-NO-1b, p. 357, which would require that noise levels be minimized at residential open space; Mitigation Measure M-NO-1c, p. 357, which would require that noise levels be minimized at non-residential sensitive receptors; Mitigation Measure M-NO-1d, p. 357, which would require that existing mechanical equipment noise be considered in the design of new residential projects; and Mitigation Measure M-NO-1a, p. 357, which would require that noise from interior mechanical equipment be minimized, as follows:

M-NO-1a: Noise Survey and Measurements for Residential Uses. For new residential development located along streets with noise levels above 70 dBA Ldn, the Planning Department shall require the preparation of an analysis that includes, at a minimum, a site survey to identify potential noise-generating uses within two blocks of the project site, and including at least one 24 hour noise measurement (with average and maximum noise level readings taken so as to be able to accurately describe maximum levels reached during nighttime hours), prior to completion of the environmental review for each subsequent residential project in the Plan area. The analysis shall be completed by person(s) qualified in acoustical analysis and shall demonstrate with reasonable certainty that Title 24 standards, where applicable, can be met, and that there are no particular circumstances about the proposed project site that appear to warrant heightened concern about noise levels in the vicinity. Should such concerns be present, the Planning Department may require the completion of a detailed noise assessment by person(s) qualified in acoustical analysis and/or engineering prior to the first project approval action, in order to demonstrate that acceptable interior noise levels consistent with those in the Title 24 standards can be attained.

M-NO-1b: Noise Minimization for Residential Open Space. To minimize effects on residential development in the Plan area, the Planning Department, through its building permit review process and in conjunction with the noise analysis set forth in Mitigation Measure M NO 1a, shall require that open space required under the Planning Code for residential uses be protected, to the maximum feasible extent, from existing ambient noise levels that could prove annoying or disruptive to users of the open space. Implementation of this measure could involve, among other things, site design that uses the building itself to shield on-site open space from the greatest noise sources, construction of noise barriers between noise sources and open space, and appropriate use of both common and private open space in multi-family dwellings, and implementation would also be undertaken consistent with other principles of urban design.

M-NO-1c: Noise Minimization for Non-Residential Uses. To reduce potential effects on new non-residential sensitive receptors such as child care centers, schools, libraries,

and the like, for new development including such noise-sensitive uses, the Planning Department shall require, as part of its building permit review process, the preparation of an acoustical analysis by person(s) qualified in acoustical analysis and/or engineering prior to the first project approval action, in order to demonstrate that daytime interior noise levels of 50 dBA, based on the General Plan Environmental Protection Element, can be attained.

M-NO-1d: Mechanical Equipment Noise Standard. The Planning Department shall require that, as part of required the noise survey and study for new residential uses (Mitigation Measure M-NO-1a), all reasonable efforts be made to identify the location of existing rooftop mechanical equipment, the predicted noise generated by that equipment, and the elevation at which the predicted noise level would be of potential concern for new residential uses, as well as the necessary noise insulation for the new residential uses, where applicable.

M-NO-1e: Interior Mechanical Equipment. The Planning Department shall require, as part of subsequent project-specific review under CEQA, that effects of mechanical equipment noise on adjacent and nearby noise-sensitive uses be evaluated by a qualified acoustic consultant and that control of mechanical noise, as specified by the acoustical consultant, be incorporated into the final project design of new buildings to achieve the maximum feasible reduction of building equipment noise, consistent with *Building Code* and Noise Ordinance requirements and CEQA thresholds, such as through the use of quieter equipment, fully noise-insulated enclosures around rooftop equipment, and/or incorporation of mechanical equipment into intermediate building floor(s).

Implementation of the above mitigation measures would reduce noise impacts to the maximum extent feasible, consistent with the *San Francisco General Plan*, and would render this impact less than significant with respect to new residential development and other new sensitive land uses. However, as stated on FEIR p. 359, it cannot be stated with certainty that existing sensitive land uses would not be adversely affected by increased noise levels, particularly with respect to traffic noise. Therefore, because it is not generally feasible to retrofit existing uses to increase noise insulation, the Planning Commission finds that this impact is significant and unavoidable. It should be noted that the identification of this program level potentially significant impact does not preclude the finding of future less-than-significant impacts for subsequent projects, for which project-specific analysis finds that those project(s) would meet applicable thresholds of significance.

2. Impact – Construction-Generated Noise and Vibration

a) Potentially Significant Impact

The EIR finds that construction activities in the Plan area could expose persons to temporary increases in vibration levels substantially in excess of ambient levels. The EIR also identifies a cumulative impact due to construction-generated noise resulting from potential construction of multiple projects in proximity to one another (including ongoing construction of the new Transbay Transit Center) at the same time.

b) Mitigation Measures M-NO-2a, M-CP-5a, M-CP-5b, and M-C-NO and Conclusion

The EIR identifies Mitigation Measure M-NO-2a, p. 360, Noise Control Measures During Pile Driving, which would reduce vibration impacts of construction (see Section III, Findings of Potentially Significant Impacts That Can Be Avoided Or Reduced To A Less Than Significant Level above). The EIR also identifies Mitigation Measure M-CP-5a, p. 270, which would require the implementation of Construction Best Practices for Historical Resources, and Mitigation Measure M-CP-5b, also on p. 270, which would require Construction Monitoring Program for Historical Resources; these measures would also reduce vibration-related impacts (see Section III, Findings of Potentially Significant Impacts That Can Be Avoided Or Reduced To A Less Than Significant Level above). The EIR identifies Mitigation Measure M-C-NO, p. 369, which would require that sponsors of subsequent development projects participate in any City-sponsored construction noise control program, as follows:

M-C-NO: Cumulative Construction Noise Control Measures. In addition to implementation of Mitigation Measure NO-2a and Mitigation Measure NO-2b (as applicable), prior to the time that construction of the proposed project is completed, the project sponsor of a development project in the Plan area shall cooperate with and participate in any City-sponsored construction noise control program for the Transit Center District Plan area or other City-sponsored areawide program developed to reduce potential effects of construction noise in the project vicinity. Elements of such a program could include a community liaison program to inform residents and building occupants of upcoming construction activities, staggering of construction schedules so that particularly noisy phases of work do not overlap at nearby project sites, and, potentially, noise and/or vibration monitoring during construction activities that are anticipated to be particularly disruptive.

Implementation of Mitigation Measures M-NO-2a, M-CP-5a and M-CP-5b would reduce the vibration impact from future construction throughout most of the Plan area to a less than significant level. However, certain uses in close proximity to construction sites could, depending on the source and nature of the vibration, experience construction-related vibration that would be considered significant and unavoidable. It should be

noted that the identification of this program level potentially significant impact does not preclude the finding of future less-than-significant impacts for subsequent projects, for which project-specific analysis finds that those project(s) would meet applicable thresholds of significance.

With implementation of Mitigation Measures M-NO-2a, M-NO-2b, and M-C-NO, cumulative construction noise impacts would be reduced, but not necessarily to a less-than–significant level. It is also noted that the limitation on annual office development codified in *Planning Code* Section 321 could result in some "metering" of office development over time. While there is enough available space in the inventory of space available for large buildings to accommodate all Plan area buildings with applications currently on file, the entire amount of office space anticipated under the Plan represents about six years of annual allocations, or twice the amount of the current inventory. Therefore, if a number of additional projects—either in or outside of the Plan area—were to be proposed soon, not all could be approved at the same time. This could incrementally reduce the potential for cumulative construction noise in the Plan area. For purposes of a conservative assessment, however, the Planning Commission finds that this impact is significant and unavoidable. It should be noted that the identification of this program level potentially significant impact does not preclude the finding of future less-than-significant impacts for subsequent projects, for which project-specific analysis finds that those project(s) would meet applicable thresholds of significance.

E. Air Quality

1. Impact – Exposure of New Receptors to Fine Particulate Matter ($PM_{2.5}$) and Air Toxics

a) Potentially Significant Impact

The EIR finds that the draft Plan would expose new sensitive receptors to substantial concentrations of $PM_{2.5}$ and toxic air contaminants. This impact would be both individual and cumulative.

b) Mitigation Measure and Conclusion

The EIR identifies Mitigation Measure M-AQ-2, p. 403, which would require subsequent evaluation of development projects that would house sensitive receptors, as follows:

M-AQ-2: Implementation of Risk and Hazard Overlay Zone and Identification of Health Risk Reduction Policies. To reduce the potential health risk resulting from exposure of new sensitive receptors to health risks from roadways, and stationary sources, and other non-permitted sources $PM_{2.5}$ and TACs, the Planning Department shall require analysis of potential site-specific health risks for all projects that would include sensitive receptors, based on criteria as established by the Planning

Department, as such criteria may be amended from time to time. For purposes of this measure, sensitive receptors are considered to include dwelling units; child-care centers; schools (high school age and below); and inpatient health care facilities, including nursing or retirement homes and similar establishments. Parks and similar spaces are not considered sensitive receptors for purposes of this measure unless it is reasonably shown that a substantial number of persons are likely to spend three hours per day, on a daily basis, at such facilities.

Development projects in the Plan area that would include sensitive receptors shall undergo, during the environmental review process and no later than the first project approval action, a screening-level health risk analysis, consistent with methodology approved by the Planning Department, to determine if health risks from pollutant concentrations would exceed BAAQMD thresholds or other applicable criteria as determined by the Environmental Review Officer. If one or more thresholds would be exceeded at the site of the subsequent project where sensitive receptors would be located, the project (or portion of the project containing sensitive receptors, in the case of a mixed-use project) shall be equipped with filtration systems with a Minimum Efficiency Reporting Value (MERV) rating of 13 or higher, as necessary to reduce the outdoor-to-indoor infiltration of air pollutants by 80 percent. The ventilation system shall be designed by an engineer certified by the American Society of Heating, Refrigeration and Air- Conditioning Engineers, who shall provide a written report documenting that the system offers the best available technology to minimize outdoor to indoor transmission of air pollution. The project sponsor shall present a plan to ensure ongoing maintenance of ventilation and filtration systems and shall ensure the disclosure to buyers and/or renters regarding the findings of the analysis and inform occupants as to proper use of any installed air filtration.

The above measure would require development projects in the Plan area to undergo site-specific evaluation and to incorporate the maximum feasible mitigation for impacts resulting from $PM_{2.5}$ or toxic air contaminant levels in excess of adopted thresholds. However, as stated on FEIR p. 404, because it cannot be determined with certainty that this mitigation measure would reduce impacts to below BAAQMD's significance thresholds, the Planning Commission finds that this impact is significant and unavoidable. However, it is noted that, in the case of individual development projects in the Plan area, site- and project-specific equipment and other considerations may lead to a conclusion that the project-specific effect can be mitigated to a less-than-significant level.

2. Impact – Exposure of Existing and New Receptors to New Sources of $PM_{2.5}$ and Air Toxics

a) Potentially Significant Impact

The EIR finds that the draft Plan would expose existing and future sensitive receptors to substantial levels of $PM_{2.5}$ and toxic air contaminants from new vehicles and equipment. This impact would be both individual and cumulative.

b) Mitigation Measure and Conclusion

The EIR identifies Mitigation Measure M-AQ-3, p. 405, which would require a survey of sensitive receptors, and analysis of impacts to those receptors where applicable, prior to siting of new sources of toxic air contaminants, as follows:

M-AQ-3: Siting of Uses that Emit DPM and Other TACs. To minimize potential exposure of sensitive receptors to diesel particulate matter (DPM), for new development including warehousing and distribution centers, and for new development including commercial, industrial or other uses that would be expected to generate substantial levels of toxic air contaminants (TACs) as part of everyday operations, whether from stationary or mobile sources, the Planning Department shall require, during the environmental review process but no later than the first project approval action, the preparation of an analysis that includes, at a minimum, a site survey to identify residential or other sensitive uses within 1,000 feet of the project site, and an assessment of the health risk from potential stationary and mobile sources of TACs generated by the project. If risks to nearby receptors are found to exceed applicable significance thresholds, then emissions controls would be required prior to project approval to ensure that health risks would not be significant.

The above measure would require development projects in the Plan area to undergo site-specific evaluation and to incorporate maximum feasible mitigation for impacts resulting from or toxic air contaminant levels in excess of adopted thresholds. However, as stated on FEIR p. 406, because it cannot be determined with certainty that mitigation would result in health risks that would be below applicable BAAMQD significance thresholds, the Planning Commission finds that this impact is significant and unavoidable. However, it is noted that, in the case of individual development projects in the Plan area, site- and project-specific equipment and other considerations may lead to a conclusion that the project-specific effect can be mitigated to a less-than-significant level.

3. Impact – Construction-Period Criteria Pollutant Emissions

a) Potentially Significant Impact

The EIR finds that implementation of the draft Plan would result in construction-period emissions of criteria air pollutants, including ozone precursors, that would contribute to

an existing or projected air quality violation or result in a cumulatively considerable increase in criteria pollutants, and could expose sensitive receptors to substantial levels of construction dust. This impact would be both individual and cumulative.

b) Mitigation Measure and Conclusion

The EIR identifies Mitigation Measure M-AQ-4a, p. 408, which would require minimization of construction vehicle emissions, and Mitigation Measure M-AQ-4b, p. 409, which would require sponsors of certain subsequent development projects to implement a dust control plan, as follows:

M-AQ-4a: Construction Vehicle Emissions Minimization. To reduce construction vehicle emissions, the project sponsor shall incorporate the following into construction specifications:

- All construction equipment shall be maintained and properly tuned in accordance with manufacturer's specifications. All equipment shall be checked by a certified mechanic and determined to be running in proper condition prior to operation.

M-AQ-4b: Dust Control Plan. To reduce construction-related dust emissions, the project sponsor of each development project in the Plan area and each public infrastructure project (such as improvements to the public realm) in the Plan area on a site of one-half acre or less but that would require more than 5,000 cubic yards of excavation lasting four weeks or longer shall incorporate into construction specifications the requirement for development and implementation of a site-specific Dust Control Plan as set forth in Article 22B of the *San Francisco Health Code*. The Dust Control Plan shall require the project sponsor to: submit a map to the Director of Public Health showing all sensitive receptors within 1,000 feet of the site; wet down areas of soil at least three times per day; provide an analysis of wind direction and install upwind and downwind particulate dust monitors; record particulate monitoring results; hire an independent, third party to conduct inspections and keep a record of those inspections; establish shut-down conditions based on wind, soil migration, etc.; establish a hotline for surrounding community members who may be potentially affected by project-related dust; limit the area subject to construction activities at any one time; install dust curtains and windbreaks on the property lines, as necessary; limit the amount of soil in hauling trucks to the size of the truck bed and secure soils with a tarpaulin; enforce a 15 mph speed limit for vehicles entering and exiting construction areas; sweep affected streets with water sweepers at the end of the day; install and utilize wheel washers to clean truck tires; terminate construction activities when winds exceed 25 miles per hour; apply soil stabilizers to inactive areas; and sweep adjacent streets to reduce particulate emissions. The project sponsor would be required to designate an individual to monitor compliance with dust control requirements.

Notwithstanding implementation of Mitigation Measure M-AQ-4a, it is possible that one or more of the development projects in the Plan area could result in project-specific significant construction exhaust emissions impacts, even with this mitigation measure. Therefore, the Planning Commission finds that the impacts associated with construction equipment exhaust emissions of criteria pollutants that would result from implementation of the draft Plan are significant and unavoidable. It should be noted that the identification of this program level potentially significant impact does not preclude the finding of future less-than-significant impacts for subsequent projects that comply with BAAQMD screening criteria or meet applicable thresholds of significance.

Even though implementation of Mitigation Measure M-AQ-4b would reduce construction dust emissions to less-than-significant levels, emissions of criteria pollutants from construction could exceed applicable thresholds for individual projects, despite implementation of Mitigation Measure M-AQ-4a. Therefore, as state above, the City finds that this impact is significant and unavoidable. As noted, identification of this program level potentially significant impact does not preclude the finding of future less-than-significant impacts for subsequent development projects in the Plan area that comply with BAAQMD screening criteria or meet applicable thresholds of significance.

4. Impact – Construction-Period Emissions of Toxic Air Contaminants

a) Potentially Significant Impact

The EIR finds that implementation of the draft Plan could expose sensitive receptors to substantial levels of toxic air contaminants generated by construction equipment. This impact would be both individual and cumulative.

b) Mitigation Measure and Conclusion

The EIR identifies Mitigation Measure M-AQ-5, p. 411, which would require minimization of construction vehicle emissions, as follows:

M-AQ-5: Construction Vehicle Emissions Evaluation and Minimization. To reduce the potential health risk resulting from project construction activities, the project sponsor of each development project in the Plan area shall undertake a project-specific health risk analysis, or other appropriate analysis as determined by the Environmental Planning Division of the Planning Department, for diesel-powered and other applicable construction equipment, using the methodology recommended by the Planning Department. If the analysis determines that construction emissions would exceed applicable health risk significance threshold(s) identified by the Planning Department, the project sponsor shall include in contract specifications a requirement that the contractor use the cleanest possible construction equipment and exercise best practices

for limiting construction exhaust. Measures may include, but are not limited to, the following:

- Idling times shall be minimized either by shutting equipment off when not in use or reducing the maximum idling time to two minutes;
- The project shall develop a Construction Emissions Minimization demonstrating that the off-road equipment (more than 50 horsepower) to be used in the construction project (i.e., owned, leased, and subcontractor vehicles) would be reduced to the maximum extent feasible. Acceptable options for reducing emissions include, as the primary option, use of Interim Tier 4 equipment where such equipment is available and feasible for use, use of equipment meeting Tier 2/Tier 3 or higher emissions standards, the use of other late model engines, low-emission diesel products, alternative fuels, engine retrofit technology, after-treatment products, add-on devices such as particulate filters, and/or other options as such become available;
- All construction equipment, diesel trucks, and generators shall be equipped with Best Available Control Technology for emission reductions of NOx and PM, including Tier 2/3 or alternative fuel engines where such equipment is available and feasible for use;
- All contractors shall use equipment that meets ARB's most recent certification standard for off-road heavy duty diesel engines; and
- The project construction contractor shall not use diesel generators for construction purposes where feasible alternative sources of power are available.

During the environmental review process, the project sponsor shall submit a Construction Emissions Minimization Plan demonstrating compliance with the requirements of this mitigation measure.

Implementation of the Mitigation Measure M-AQ-5 would result in the maximum feasible reduction of diesel emissions that would contribute to construction-period health risk, thereby lowering both lifetime cancer risk and the concentration of PM2.5 to which sensitive receptors near certain subsequent development projects would be exposed. However, as stated on FEIR p. 412, although in many cases, the use of interim Tier 4 or Tier 2/ Tier 3 equipment with Level 3 VDECS diesel construction equipment would reduce the health risk to a level that would not exceed any of the significance thresholds identified by the BAAQMD, because it cannot be stated with certainty that either cancer risk or PM2.5 concentration would be reduced to below the BAAQMD-recommended significance thresholds, and because of the uncertainty concerning the availability and feasibility of using construction equipment that meets the requirements of Mitigation Measure M-AQ-5, the Planning Commission finds that this impact is significant and unavoidable. However, identification of this program level potentially significant impact does not preclude the finding of future less-than-significant impacts

for subsequent development projects in the Plan area that meet applicable thresholds of significance.

F. Shadow

1. Impact – Creation of Additional Shadow on City Parks

a) Potentially Significant Impact

The EIR finds that the draft Plan would adversely affect the use of various parks under the jurisdiction of the Recreation and Park Department and, potentially, other open spaces. This impact would occur individually (shadow from Plan area buildings) and would also occur cumulatively (shadow from Plan area buildings in conjunction with shadow from new towers outside the Plan area).

b) Mitigation Measure and Conclusion

As stated on EIR p. 520, no feasible mitigation is available to reduce the shadow impacts on existing parks to a less-than-significant level, because it not possible to lessen the intensity or otherwise reduce the shadow cast by a building at a given height and bulk. Additionally, it is not normally possible to relocate an existing park or to add park space to existing parks. Therefore, the Planning Commission finds that this impact is significant and unavoidable. It is noted, however, that the Project proposes to create or fund the creation of up to 11 acres of new open space (including the City Park atop the Transit Center) and to set aside funds from fees generated by new development in the Plan area to make improvements to parks that would be shaded by Plan area buildings, notably Portsmouth Square and St. Mary's Square. EIR Chapter VI, Alternatives, discusses shadow impacts of alternatives that would reduce building heights from those proposed in the draft Plan (see Section VI, Evaluation of Project Alternatives, below).

V. Why Recirculation is Not Required

Finding: For the reasons set forth below and elsewhere in the Administrative Record, none of the factors are present which would necessitate recirculation of the Final EIR under CEQA Guideline Section 15088.5 or the preparation of a subsequent or supplemental EIR under CEQA Guideline Section 15162. The Comments and Responses document thoroughly addressed all public comments that the Planning Department received on the Draft EIR. In response to these comments, the Planning Department added new and clarifying text to the EIR and modified some mitigation measures.

The Comments and Responses document, which is incorporated herein by reference, analyzed all of these changes, including the Project, and determined that these changes did not constitute new information of significance that would alter any of the conclusions of the EIR. Further,

additional changes to the Project have been incorporated into the project after publication of the Comments and Responses document. These changes have been addressed orally by staff or in staff reports, which statements and reports are incorporated herein by reference, and based on this information, the Planning Department has determined that these additional changes do not constitute new information of significance that would alter any of the conclusions of the EIR.

Based on the information set forth above and other substantial evidence in light of the whole record on the Final EIR, the Commission determines that the Project, is within the scope of project analyzed in the Final EIR; (2) approval of Project will not require important revisions to the Final EIR due to the involvement of new significant environmental effects or a substantial increase in the severity of previously identified significant effects; (3) taking into account the Project and other changes analyzed in the Final EIR, no substantial changes have occurred with respect to the circumstances under which the Project are undertaken which would require major revisions to the Final EIR due to the involvement of new significant environmental effects, or a substantial increase in the severity of effects identified in the Final EIR; and (4) no new information of substantial importance to the Project has become available which would indicate (a) the Project or the approval actions will have significant effects not discussed in the Final EIR, (b) significant environmental effects will be substantially more severe; (c) mitigation measures or alternatives found not feasible which would reduce one or more significant effects have become feasible; or (d) mitigation measures or alternatives which are considerably different from those in the Final EIR would substantially reduce one or more significant effects on the environment. Consequently, there is no need to recirculate the Final EIR under CEQA Guideline 15088.5 or the preparation of a subsequent or supplemental EIR under CEQA Guideline Section 15162.

VI. Evaluation of Project Alternatives

This Section describes the alternatives analyzed in the EIR and the reasons for rejecting the alternatives. This Section also outlines the proposed Project's (for purposes of this section, "Preferred Project") purposes (the "Project objectives"), describes the components of the alternatives, and explains the rationale for selecting or rejecting alternatives.

CEQA mandates that an EIR evaluate a reasonable range of alternatives to the project, which would "feasibly attain most of the basic objectives of the project, but would avoid or substantially lessen effects of the project, and evaluate the comparative merits of the project." (CEQA Guidelines, Section 15126.6(a)).

CEQA requires that every EIR evaluate a "No Project" alternative as part of the range of alternatives analyzed in the EIR. The Transit Center District Plan EIR's No Project analysis was prepared in accordance with CEQA Guidelines Sections 15126.6(e)(3)(A) and (C).

Alternatives provide a basis of comparison to the Preferred Project in terms of beneficial, significant, and unavoidable impacts. This comparative analysis is used to consider reasonable feasible ways to avoid or substantially lessen the significant environmental consequences of the Preferred Project.

A. Reasons for Selection of the Preferred Project

The EIR analyzes the following alternatives:

- No Project Alternative (Alternative A);
- Reduced Project Alternative (Alternative B);
- Reduced Shadow Alternative (Alternative C); and
- Developer Scenario (Alternative D).

These alternatives are discussed in greater detail in Chapter VI, Alternatives, of the EIR.

B. Alternatives Rejected and Reasons for Rejection

The Planning Commission recommends rejection of the alternatives set forth in the FEIR and listed below because the Planning Commission finds that there is substantial evidence, including evidence of economic, legal, social, technological, and other considerations described in this Section in addition to those described in Section VII below under CEQA Guidelines 15091(a)(3), that make such alternatives infeasible .

1. No Project Alternative

The No Project Alternative, with respect to the draft Plan, is the maintenance of the existing zoning and height and bulk controls in the Plan area, and no adoption of the draft Plan. This alternative assumes that development in Zone 1 of the approved Transbay Redevelopment Plan area—primarily along the north side of Folsom Street east of Essex Street, and also between Beale and Main Streets south of Mission Street—would proceed as approved. Approved development in the Rincon Hill Plan area also would proceed, and projects proposed west of the Transit Center District Plan area also would be undertaken, although at generally lesser heights than currently presumed.

The No Project Alternative would not be desirable nor meet the Preferred Project objectives for the following reasons.

Job Capacity and Transit-Oriented Growth: Under the No Project Alternative the capacity of the district to accommodate further job growth would not be increased. This would result in San Francisco not being able to accommodate projected job growth according to regional policy direction to direct growth to existing urban areas served by public transit. Downtown San Francisco, and the Transit Center District specifically, is the most transit-served district in the

Bay Area. The downtown C-3 districts currently have limited remaining capacity for job growth. The No Project Alternative would result in the City having to direct job growth to other, significantly less transit-served parts of the City and region, resulting in increases in air pollution, greenhouse gas emissions, congestion, and other effects of regional urban sprawl. For example, the No Project Alternative, by limiting development on the site of the proposed Transit Tower to a 30-foot-tall building, would create only a negligible amount of new office or retail space. Thus, the No Project Alternative would limit the economic growth of the City more than the Preferred Project and limit the ability of Downtown San Francisco to continue to be the premier concentration of economic activity in the region.

Visual Quality and Urban Form: Goals for enhancing the urban form of the downtown skyline and at the pedestrian scale would not be met as height limits, bulk controls, setbacks, and other requirements proposed in the Plan would not be adopted. In particular, the No Project Alternative would only permit a 30-foot-tall building on the proposed Transit Tower site, which would not create the visual focal point for downtown San Francisco. Under the No Project Alternative the skyline would continue to be flat and "benched" with numerous buildings at a height of 600 feet and would not recognize the Transit Center District as the center of downtown. Rincon Hill on the far southern end and Transamerica and 555 California on the far northern end would continue to be the tallest buildings on the skyline. At the street level, necessary setbacks to accommodate increased pedestrian activity would not be implemented.

Historic Resources: The proposed Plan would result in increased protection for identified historic resources through expansion of the New Montgomery-Second Street Conservation District, designation of 43 buildings as Category I, III, or IV buildings in Article 11 of the Planning Code, and change of one building from Category III to Category IV. The No Project Alternative would not result in expansion of the Conservation District or addition of the 43 buildings to Article 11, leaving these resources undesignated locally and subject to substantial development pressure. Further, the No Project would not allow these 43 buildings to sell Transferrable Development Rights that would permanently remove development potential from the lots and thereby protect the resources.

Public Improvement and Funding Program: Under the No Project scenario, no new impact fees related to open space, streets or transportation would be adopted and a Mello-Roos District would not be adopted. These mechanisms are projected to generate approximately $590 million over 20 years for public improvements, including over $400 million for the Transit Center and Downtown Rail Extension Project. Without these funds, the Downtown Rail Extension project may not be able to be constructed. Local open space, streetscape and circulation improvements necessary and desirable to accommodate the substantial additional high-density high-rise growth which will still occur in the Plan area (at somewhat lower densities than under the Preferred Project) will not be funded or implemented. New connections to the rooftop park on the Transit Center will not be built. In addition, the No Project Alternative would only permit a

30-foot-tall building on the proposed Transit Tower site, which would provide little to no land sale and tax increment revenue to support the Transit Center Project.

For the reasons listed above and in Section VII, Statement of Overriding Considerations, the Planning Commission hereby rejects the No Project Alternative.

2. Reduced Project Alternative (Alternative B)

The Reduced Project Alternative assumes construction on each of the "soft" development sites identified in this EIR, but at lesser heights and intensity than would be permitted under the draft Plan. The heights are those at which development would cast no additional shadow on parks under the jurisdiction of the Recreation and Park Department, beyond that which could occur from buildings developed to existing height limits. As a result of the lesser heights, it is assumed that development of Plan area sites containing historical resources would proceed in a different manner than would be allowed under the draft Plan, thereby reducing the Plan's impacts on historic architectural resources. In particular, this alternative assumes that development at five sites in the Plan area that contain identified or potential historic architectural resources would generally be undertaken consistent with the Secretary of the Interior's Standards for the Treatment of Historic Properties (or otherwise determined by Planning Department preservation staff to result in less-than-significant impacts under CEQA, to the maximum extent feasible) in order that historical resources on these sites are minimally affected. This alternative would include some of the public realm improvements, subject to funding, that are proposed under the draft Plan.

The Reduced Project Alternative would not be desirable nor meet the Preferred Project objectives for the following reasons.

Job Capacity and Transit-Oriented Growth: Under the No Project Alternative the capacity of the district to accommodate further job growth would not be increased substantially above existing zoning as only one potential office development site not already entitled under existing zoning, as opposed to at least five, would be upzoned to increase office capacity. The largest and least constrained sites (such as the Transit Tower site) capable of accommodating the most desirable layouts for office space would not be increased in capacity. This would diminish San Francisco's ability to accommodate projected job growth according to regional policy direction to direct growth to existing urban areas served by public transit. Downtown San Francisco, and the Transit Center District specifically, is the most transit-served district in the Bay Area. The downtown C-3 districts currently have limited remaining capacity for job growth. The Reduced Project Alternative would result in the City having to direct job growth to other, significantly less transit-served parts of the City and region, resulting in increases in air pollution, greenhouse gas emissions, congestion, and other effects of regional urban sprawl. The Reduced Project Alternative would also limit the economic growth of the City more than the Plan and limit the ability of Downtown San Francisco to continue to be the premier concentration of economic activity in the region.

Visual Quality and Urban Form: Goals for enhancing the urban form of the downtown skyline proposed in the Plan would not be achieved. Under the Reduced Project Alternative the skyline would continue to be flat and "benched" with numerous buildings at a height of approximately 600 feet and would not recognize the Transit Center District as the center of downtown. Rincon Hill on the far southern end and Transamerica and 555 California on the far northern end would continue to be the most prominent buildings on the skyline. In particular, the Reduced Project Alternative would only allow for a 550-foot-tall building on the Transit Tower site, rather than the 1,070-foot building contemplated by the Preferred Project. Thus, this alternative would not create a new visual focus for downtown within the Plan area because the 550-foot-tall building would be the same size as several other existing downtown buildings and proposed Plan area buildings.

Public Improvement and Funding Program: Under the Reduced Project Alternative, significantly lesser revenue from a Mello-Roos District and lesser impact fees related to open space, streets or transportation would be collected. Under the Plan, these mechanisms are projected to generate approximately $590 million over 20 years for public improvements, including over $400 million for the Transit Center and Downtown Rail Extension Project. Under the Reduced Project Alternative the maximum combined amount of revenue from all sources would be $345 million, a decrease of $245 million. Without these funds, the Downtown Rail Extension project may not be able to be constructed. Local open space, streetscape and circulation improvements necessary and desirable to accommodate the substantial additional high-density high-rise growth which will still occur in the Plan area (at somewhat lower densities than under the Plan) will be funded and implemented to a much lesser extent.

In addition, the Reduced Project Alternative, by limiting the proposed Transit Tower to a 550-foot-tall building, would provide substantially less land sale and tax increment to support the Transit Center project than the 1,070-foot building due to two major factors: (1) the 550-foot building would have about 56 percent less floor area than the proposed Transit Tower, and (2) the higher floors of the 1,070-foot-building would command higher rents and would be of much greater value than the rent in a shorter building. This reduction in revenue would also reduce the amount of funding available for the other infrastructure projects, such as Mission Square and the surrounding streetscape, which would reduce the quality of the ground level pedestrian spaces around the building.

For the reasons listed above and in Section VII, Statement of Overriding Considerations, the Planning Commission hereby rejects the Reduced Project Alternative.

3. Reduced Shadow Alternative (Alternative C)

The Reduced Shadow Alternative is premised on reducing to some degree the new shadow resulting from the Plan while retaining in large measure the draft Plan's fundamental urban design concept that the Transit Tower, which would identify the location of the new Transit

Center, be the City's tallest and most prominent building—the "crown" of the downtown core that rises notably above the dense cluster of downtown buildings, as stated in draft Plan Policy 2.1. In contrast to Alternative B, which is based on site-by-site evaluation of building heights to reduce shadow on Section 295 parks, Alternative C would retain the Transit Tower as the tallest building in the Plan area. This alternative would also proportionally adjust the proposed height limits on the other sites in the Plan area in relation to the Transit Tower in order to maintain similar massing/height relationships as contemplated under the draft Plan's urban form concepts. This alternative would include some of the public realm improvements, subject to funding, that area proposed under the draft Plan.

The Reduced Shadow Alternative would not be desirable nor meet the Preferred Project objectives for the following reasons.

Job Capacity and Transit-Oriented Growth: Under the Reduced Shadow Alternative the capacity of the district to accommodate further job growth would not be increased sufficiently to address capacity concerns in the downtown. This would diminish San Francisco's ability to accommodate projected job growth according to regional policy direction to direct growth to existing urban areas served by public transit. Downtown San Francisco, and the Transit Center District specifically, is the most transit-served district in the Bay Area. The downtown C-3 districts currently have limited remaining capacity for job growth. The Reduced Shadow Alternative would result in the City having to direct job growth to other, significantly less transit-served parts of the City and region, resulting in increases in air pollution, greenhouse gas emissions, congestion, and other effects of regional urban sprawl. The Reduced Shadow Alternative would also limit the economic growth of the City more than the Plan and limit the ability of Downtown San Francisco to continue to be the premier concentration of economic activity in the region.

Shadow Impacts: While the Reduced Shadow Alternative would have reduced shadow impacts on open spaces than the proposed Plan, there still would be significant and unavoidable impacts to four open spaces similar to the impacts from the proposed Plan, including Portsmouth Square, St. Mary's Square, Union Square, and Willy Woo Wong Playground. The net benefit to reducing shadow impacts under this Alternative would be minor while the reduced opportunities for transit-oriented growth and public funding program would be significant compared to the proposed Plan.

Public Improvement and Funding Program: Under the Reduced Shadow Alternative, significantly lesser revenue from a Mello-Roos District and lesser impact fees related to open space, streets or transportation would be collected. Under the proposed Plan, these mechanisms are projected to generate approximately $590 million over 20 years for public improvements, including over $400 million for the Transit Center and Downtown Rail Extension Project. Under the Reduced Shadow Alternative the maximum combined amount of revenue from all sources would be approximately $515 million, a decrease of $75 million. Without these funds, the

Downtown Rail Extension project may not be able to be constructed. Local open space, streetscape and circulation improvements necessary and desirable to accommodate the substantial additional high-density high-rise growth which will still occur in the Plan area (at somewhat lower densities than under the Plan) will be funded and implemented to a lesser extent.

For the reasons listed above and in Section VII, Statement of Overriding Considerations, the Planning Commission hereby rejects the Reduced Shadow Alternative.

4. Developer Scenario (Alternative D)

This alternative differs from the draft Plan in that development assumptions for certain specific sites would reflect project applications that are on file at the Planning Department. In up to three instances, this alternative would therefore permit taller buildings than the draft Plan proposes, while for two other sites, lesser height is assumed. Although this alternative would result in several buildings being taller than proposed with the draft Plan development assumptions for the Developer Scenario Alternative would be similar to those of the Plan with respect to office space, and somewhat less intensive than the Plan with respect to residential units and hotel space. This is because the projects with applications on file at the Planning Department propose a different mix of uses than the Plan forecasts assume for those sites, propose generally larger residential units than the Plan assumes, and because an office project was approved in 2011 at 350 Mission Street at a lesser height than proposed in the draft Plan.

The Developer Scenario Alternative would not be desirable nor meet the Preferred Project objectives for the following reason.

Visual Quality and Urban Form: Goals for enhancing the urban form of the downtown skyline and the enhancing public views of and through the district would not be met. Building heights proposed under the Developer Alternative would over-emphasize the importance of certain buildings, particularly the Palace Hotel Tower, very distant from the Transit Center on the skyline, in contrast to the coordinated and sculpted form proposed under the Plan which confines the concentration of buildings taller than the current 600-foot skyline benchmark to the area immediately around the Transit Center. Under the Developer Alternative proposed towers at 50 1st Street and 181 Fremont would either be too close in height to the Transit Tower and other planned buildings to maintain the desired sculpted skyline form, prominence of the Transit Tower, and separation of tall buildings on the skyline.

For the reason listed above and in Section VII, Statement of Overriding Considerations, the Planning Commission hereby rejects the Developer Alternative.

C. Environmentally Superior Alternative

The Planning Commission finds that Alternative B, Reduced Project, is considered the environmentally superior alternative for purposes of CEQA Guidelines section 15126.6(e)(2) because it would substantially reduce shadow impacts on parks subject to Section 295 and effects on historic architectural resources, compared to the proposed Project, . To the extent that development precluded under the Reduced Project Alternative from taking place in the Transit Center District were to occur elsewhere in the Bay Area, however, employees in and residents of that development could potentially generate substantially greater impacts on transportation systems, air quality, and greenhouse gases than would be the case for development of a similar amount of office space in the more compact and better-served-by-transit Plan area. This would be particularly likely for development in more outlying parts of the region where fewer services and less transit access is provided. Therefore, while it would be speculative to attempt to quantify or specify the location of the impacts, it is acknowledged that, while the Reduced Project Alternative would incrementally reduce local impacts, in the Transit Center District and in San Francisco, it could also increase regional emissions of criteria air pollutants and greenhouse gases, and to increase regional traffic congestion. It could also incrementally increase impacts related to "greenfield" development on previously undeveloped locations in the Bay Area and, possibly, beyond.

VII. STATEMENT OF OVERRIDING CONSIDERATIONS

Notwithstanding the significant effects noted above, pursuant to CEQA Section 21081(b) and the CEQA Guidelines Section 15093, the Planning Commission finds, after considering the FEIR and based on substantial evidence in the administrative record as a whole and as set forth herein, that specific overriding economic, legal, social, and other considerations outweigh the identified significant effects on the environment. Moreover, in addition to the specific reasons discussed in Section VI above, the Planning Commission finds that the alternatives rejected above are also rejected for the following specific economic, social, or other considerations resulting from Project approval and implementation:

A. The purpose of the Transit Center District Plan (the "Plan") is to increase the density of development in the southern Financial District and thereby provide critical funding for the Transbay Transit Center/Downtown Rail Extension Project—the centerpiece of the Plan—and other infrastructure in the Plan Area.

The Plan is an outgrowth of the 2006 Report of the City and County of San Francisco Interagency Working Group. To address the funding shortfall for the construction of the complete Transit Center Project, in February 2006 the City convened a Working Group consisting of the Mayor's Office, the Planning Department, the Office of the City Administrator, the San Francisco Redevelopment Agency, SFMTA, and the SFCTA to make recommendations to help ensure that the entirety of the Transit Center Project is completed – including both the terminal and rail components – as soon as possible.

The Working Group recommended that the goal of identifying additional funds to complete the Transit Center Project could be created by capturing additional value through intensified development around the Transit Center and by reducing Project costs. The Working Group stated that the purpose of the Report is to ensure that whatever strategy is adopted for proceeding with the Transit Center Project maximizes the likelihood that the full vision of Transbay, including bringing rail into an inter-modal station in downtown San Francisco, is fully realized.

The Working Group Report recommended that the City create a special zoning district around the Transit Center to permit a limited number of tall buildings, including two on public parcels, and allowances for additional development in exchange for financial contributions to the Transbay Project and other public infrastructure. The Report also proposed forming a Mello-Roos Community Facilities District ("CFD") to levy a special tax to provide the majority of that funding for the Transit Center Project. The Working Group further proposed that the revenues generated by the additional development allowed by the overlay zoning district be prioritized to fund construction of the Transit Center Project. The zoning concept that grew out of the Report is that which is proposed as the Transit Center District Plan.

B. Adoption and implementation of the Plan will expand the capacity for transit-oriented growth, particularly job growth, in the most transit-accessible location in the Bay Area, thereby promoting transit usage and reducing regional urban sprawl and its substantial negative regional environmental, economic, and health impacts, including air and water pollution, greenhouse gas emissions, congestion, and loss of open space and habitat. The Association of Bay Area Governments is projecting a need to accommodate approximately 170,000 jobs in San Francisco by 2040 in order to meet the City's share of regional jobs under a Sustainable Communities Strategy. At least half of those jobs are projected to be office jobs. The City currently does not have sufficient capacity to accommodate that many office jobs, particularly not in locations served by major regional public transit. The Transit Center District is well served by existing BART, Muni Metro, Muni bus, regional bus and ferry service. The Transbay Transit Center, under construction, and the planned DTX to bring Caltrain commuter rail and California High Speed Rail service in the Transit Center will substantially improve transit access and increase transit capacity. No other location in the region features transit access as robust as the Plan area. In the Transit Center District as many as 80% of workers take transit to work, 10% walk or bicycle, and no more than 10% drive or carpool. In other parts of the region, including core city centers and other parts of San Francisco, significantly higher percentages of workers drive to work. Job growth is severely constrained geographically in San Francisco, because only 12.5% of the City's land permits office uses and such uses must compete with housing and other uses in much of this area. In order to accommodate job growth, particularly in transit-served locations such as the Plan area, rezoning is necessary in order to increase capacity. The proposed Plan is consistent with the City's Transit First policy and with regional mandates to reduce greenhouse gas emissions and promote transit usage.

C. The Transit Center District Plan is exemplary transit-oriented development. It promotes the Sustainable Communities Strategies required by the Sustainable Communities and Climate Protection Act of 2008 (SB 375, Steinberg, Statutes of 2008) and related transportation, affordable housing, job creation, environmental protection, and climate change goals. The new Transit Center, which is at the center of the Plan area and the impetus for the Plan, will be a regional multi-modal facility connecting 11 different transportation systems under a single roof - local, intercity and regional buses, and Caltrain, and is designed to accommodate high-speed rail and Amtrak. Phase 1 of the Project consists of a Temporary Terminal and the Transit Center, which includes above-grade bus levels, the below-grade train box serving Caltrain commuter rail and high-speed rail, a 5.4-acre rooftop park, bus ramps connecting to the Bay Bridge, and bus storage. Phase 2 consists of the Downtown Rail Extension ("DTX"), which includes the improvements necessary to extend the rail connections into the train box. Phase 1 has been under construction since 2009 when the TJPA broke ground for the Temporary Terminal. Construction of the new Transit Center began in 2010 and scheduled for completion in 2017. The Transit Center will provide numerous benefits for San Francisco and the entire Bay Area. With the construction of the DTX, Caltrain daily ridership will increase by 20,000 passengers per day (a 67% increase) by bringing Caltrain directly into the Transit Center from its current terminus at 4th and King Streets. The Transit Center rail facilities are being designed also to accommodate service by California High Speed Rail.

D. Plan adoption and implementation will generate approximately $590 million in net new revenues for public infrastructure from development impact fees and a Mello-Roos Community Facilities District. Per the Funding Program established in the Program Implementation Document, of this amount approximately $420 million would be available to the Transbay Joint Powers Authority to fund the Transit Center/Downtown Rail Extension project and related infrastructure. This funding is a vital piece of the overall funding plan for the Downtown Rail Extension, a $2 billion project, as it can leverage larger sources of additional funds. Approximately $170 million from these new funds would be used to fund local open space, streetscape and transportation improvements to support growth in the downtown, including improvements to open spaces in the broader downtown area.

E. Plan implementation will promote the retention and rehabilitation of 43 historic resources not currently protected by local designations, as well as the expansion of the New Montgomery-Second Street Conservation District.

F. Plan adoption and implementation will substantially enhance the City skyline by accentuating the currently flat and crowded downtown form with a new clear crown at the center of the skyline, which will be created by the Transit Tower in front of the Transit Center and a limited number of adjacent tall structures, thereby balancing and centering the skyline currently defined by tall peaks at its extreme northern and southern ends with Transamerica and Rincon Hill. This improved skyline would be consistent with City policy to identify the

center of the downtown transit access and activity and provide focal orientation from throughout the area.

G. Plan implementation will contribute funding or directly create over 11 acres of new public open space, including the 5.4-acre City Park on the Transit Center, a public plaza at 2nd/Howard Streets, linear park "Living Streets," and transformation of several alleys, including Natoma and Shaw alleys, into pedestrian-only plazas. The Plan also will result in numerous new public connections to the elevated City Park, thereby enhancing access and activation to this new largest downtown open space. None of the alternatives analyzed would eliminate significant and unavoidable shadow impacts on public open spaces, including Union Square, Portsmouth Square and St Mary's Square. These alternatives still result in significant and unavoidable shadow impacts that are not substantially less than those of the proposed Plan. and do not achieve the other Plan objectives and benefits, particularly by reducing by $75-590 million the potential revenue for the Transit Center/Downtown Rail Extension project and other public improvements, including over $10 million for public improvements to downtown parks such as Portsmouth Square.

H. Plan adoption and implementation will create an attractive and pedestrian-oriented neighborhood scale of development through incorporation of design controls and development standards related to building bases and ground floors, setbacks, and other measures.

I. Plan adoption and implementation will enact transportation measures, through Planning Code requirements and streetscape and traffic improvements, to encourage and facilitate the use of transit, walking, bicycling, car-sharing, and other non-single occupant auto modes of transportation for commuting, daily needs and recreation. Enhancements to transit, aside from substantial funding contributions to realize the Downtown Rail Extension, include dedicated transit lanes on Mission Street and other streets, expanded bicycle lanes on several area streets, and widened sidewalks with pedestrian amenities. Funds to be generated by new Plan revenue sources will also help fund capacity improvements at Embarcadero and Montgomery BART stations and studies to reduce congestion and manage parking in the downtown area.

Having considered these benefits of the proposed Project, including the benefits and considerations discussed above, the Planning Commission finds that the Project's benefits outweigh its unavoidable adverse environmental effects, and that the adverse environmental effects are therefore considered acceptable. The Planning Commission further finds that each of the Project benefits discussed above is a separate and independent basis for these findings.

VIII. INCORPORATION BY REFERENCE

The Final EIR is hereby incorporated into these Findings in its entirety. Without limitation, this incorporation is intended to elaborate on the scope and nature of the mitigation measures, the

basis for determining the significance of impacts, the comparative analysis of alternatives, and the reasons for approving the Project in spite of the potential for associated significant and unavoidable adverse environmental effects.

EXHIBIT 1:
MITIGATION MONITORING AND REPORTING PROGRAM
(Including the Text of the Mitigation Measures Adopted as Conditions of Approval and Proposed Improvement Measures)

1. MITIGATION MEASURES ADOPTED AS CONDITIONS OF APPROVAL	Responsibility for Implementation	Mitigation Schedule	Monitoring/Report Responsibility	Status/Date Completed
D. Cultural and Paleontological Resources				
Archeological Resources				
M-CP-1: Subsequent Archeological Testing Program. When a project is to be developed within the Transit Center District Plan Area, it will be subject to preliminary archeological review by the Planning Department archeologist. This in-house review will assess whether there are gaps in the necessary background information needed to make an informed archaeological sensitivity assessment. This assessment will be based upon the information presented in the Transit Center District Plan Archeological Research Design and Treatment Plan (Far Western Anthropological Research Group, Inc., *Archaeological Research Design and Treatment Plan for the Transit Center District Plan Area, San Francisco, California*, February 2010), as well as any more recent investigations that may be relevant. If data gaps are identified, then additional investigations, such as historic archival research or geoarchaeological coring, may be required to provide sufficiently detailed information to make an archaeological sensitivity assessment. If the project site is considered to be archaeologically sensitive and based on a reasonable presumption that archeological resources may be present within the project site, the following measures shall be undertaken to avoid any potentially significant adverse effect from the proposed project on buried or submerged historical resources. The project sponsor shall retain the services of an archeological consultant from the Planning Department ("Department") pool of qualified archaeological consultants as provided by the Department archaeologist. The archeological consultant shall undertake an archeological testing program as specified herein. In addition, the consultant shall be available to conduct an archeological monitoring and/or data recovery program if required pursuant to this measure. The archeological consultant's work shall be conducted in accordance with this measure and with the requirements of the Transit Center District Plan archeological research design and treatment plan at the direction of the ERO. In instances of inconsistency between the requirement of the project archaeological research design and treatment plan and of this archaeological	Planning staff, for preliminary review; Project sponsor and project archeologist for each subsequent project undertaken pursuant to the Transit Center District Plan, for any subsequently required investigations.	During environmental review of projects, then as specified in ATP/ AMT/ARDTP.	ERO to review and approve any required Archeological Testing Program.	Project archeologist to report to ERO on progress of any required investigation monthly, or as required by ERO. Considered complete upon review and approval by ERO of results of Archeological Testing Program/ Archeological Monitoring Program/ Archeological Data Recovery Program, as applicable.

EXHIBIT 1:
MITIGATION MONITORING AND REPORTING PROGRAM
(Including the Text of the Mitigation Measures Adopted as Conditions of Approval and Proposed Improvement Measures)

1. MITIGATION MEASURES ADOPTED AS CONDITIONS OF APPROVAL	Responsibility for Implementation	Mitigation Schedule	Monitoring/Report Responsibility	Status/Date Completed
D. Cultural and Paleontological Resources (continued)				
mitigation measure, the requirements of this archaeological mitigation measure shall prevail. All plans and reports prepared by the consultant as specified herein shall be submitted first and directly to the ERO for review and comment, and shall be considered draft reports subject to revision until final approval by the ERO. Archeological monitoring and/or data recovery programs required by this measure could suspend construction of the project for up to a maximum of four weeks. At the direction of the ERO, the suspension of construction can be extended beyond four weeks only if such a suspension is the only feasible means to reduce to a less than significant level potential effects on a significant archeological resource as defined in CEQA Guidelines Sections 15064.5 (a) (c). *Archeological Testing Program*. The archeological consultant shall prepare and submit to the ERO for review and approval an archeological testing plan (ATP). The archeological testing program shall be conducted in accordance with the approved ATP. The ATP shall identify the property types of the expected archeological resource(s) that potentially could be adversely affected by the proposed project, the testing method to be used, and the locations recommended for testing. The purpose of the archeological testing program will be to determine to the extent possible the presence or absence of archeological resources and to identify and to evaluate whether any archeological resource encountered on the site constitutes an historical resource under CEQA. At the completion of the archeological testing program, the archeological consultant shall submit a written report of the findings to the ERO. If based on the archeological testing program the archeological consultant finds that significant archeological resources may be present, the ERO in consultation with the archeological consultant shall determine if additional measures are warranted. Additional measures that may be undertaken include additional archeological testing, archeological monitoring, and/or an archeological data recovery program. If the ERO determines that a significant archeological				

EXHIBIT 1:
MITIGATION MONITORING AND REPORTING PROGRAM
(Including the Text of the Mitigation Measures Adopted as Conditions of Approval and Proposed Improvement Measures)

1. MITIGATION MEASURES ADOPTED AS CONDITIONS OF APPROVAL	Responsibility for Implementation	Mitigation Schedule	Monitoring/Report Responsibility	Status/Date Completed
D. Cultural and Paleontological Resources (continued)				
resource is present and that the resource could be adversely affected by the proposed project, at the discretion of the project sponsor either: A) The proposed project shall be re-designed so as to avoid any adverse effect on the significant archeological resource; or B) A data recovery program shall be implemented, unless the ERO determines that the archeological resource is of greater interpretive than research significance and that interpretive use of the resource is feasible. *Archeological Monitoring Program.* If the ERO in consultation with the archeological consultant determines that an archeological monitoring program shall be implemented, the archeological consultant shall prepare an archeological monitoring plan (AMP): ▪ The archeological consultant, project sponsor, and ERO shall meet and consult on the scope of the AMP reasonably prior to any project-related soils disturbing activities commencing. The ERO in consultation with the archeological consultant shall determine what project activities shall be archeologically monitored. In most cases, any soils- disturbing activities, such as demolition, foundation removal, excavation, grading, utilities installation, foundation work, driving of piles (foundation, shoring, etc.), site remediation, etc., shall require archeological monitoring because of the risk these activities pose to potential archaeological resources and to their depositional context; ▪ Archeological monitoring shall conform to the requirements of the final AMP reviewed and approved by the ERO; ▪ The archeological consultant shall advise all project contractors to be on the alert for evidence of the presence of the expected resource(s), of how to identify the evidence of the expected resource(s), and of the appropriate protocol in the event of apparent discovery of an archeological resource;				

EXHIBIT 1:
MITIGATION MONITORING AND REPORTING PROGRAM
(Including the Text of the Mitigation Measures Adopted as Conditions of Approval and Proposed Improvement Measures)

1. MITIGATION MEASURES ADOPTED AS CONDITIONS OF APPROVAL	Responsibility for Implementation	Mitigation Schedule	Monitoring/Report Responsibility	Status/Date Completed
D. Cultural and Paleontological Resources (continued)				
▪ The archeological monitor(s) shall be present on the project site according to a schedule agreed upon by the archeological consultant and the ERO until the ERO has, in consultation with project archeological consultant, determined that project construction activities could have no effects on significant archeological deposits; ▪ The archeological monitor shall record and be authorized to collect soil samples and artifactual/ecofactual material as warranted for analysis; ▪ If an intact archeological deposit is encountered, all soils-disturbing activities in the vicinity of the deposit shall cease. The archeological monitor shall be empowered to temporarily redirect demolition/excavation/pile driving/construction activities and equipment until the deposit is evaluated. If in the case of pile driving activity (foundation, shoring, etc.), the archeological monitor has cause to believe that the pile driving activity may affect an archeological resource, the pile driving activity shall be terminated until an appropriate evaluation of the resource has been made in consultation with the ERO. The archeological consultant shall immediately notify the ERO of the encountered archeological deposit. The archeological consultant shall make a reasonable effort to assess the identity, integrity, and significance of the encountered archeological deposit, and present the findings of this assessment to the ERO. Whether or not significant archeological resources are encountered, the archeological consultant shall submit a written report of the findings of the monitoring program to the ERO. *Archeological Data Recovery Program*. The archeological data recovery program shall be conducted in accord with an archeological data recovery plan (ADRP). The archeological consultant, project sponsor, and ERO shall meet and consult on the scope of the ADRP prior to preparation of a draft ADRP. The archeological consultant shall submit a draft ADRP to the ERO. The ADRP shall identify how the proposed data recovery program will preserve the significant information the archeological resource is expected to contain. That is, the ADRP will identify what scientific/historical research questions are applicable to the expected resource, what data classes the				

EXHIBIT 1:
MITIGATION MONITORING AND REPORTING PROGRAM
(Including the Text of the Mitigation Measures Adopted as Conditions of Approval and Proposed Improvement Measures)

1. MITIGATION MEASURES ADOPTED AS CONDITIONS OF APPROVAL	Responsibility for Implementation	Mitigation Schedule	Monitoring/Report Responsibility	Status/Date Completed
D. Cultural and Paleontological Resources (continued)				
resource is expected to possess, and how the expected data classes would address the applicable research questions. Data recovery, in general, should be limited to the portions of the historical property that could be adversely affected by the proposed project. Destructive data recovery methods shall not be applied to portions of the archeological resources if nondestructive methods are practical. The scope of the ADRP shall include the following elements: ▪ Field Methods and Procedures. Descriptions of proposed field strategies, procedures, and operations. ▪ Cataloguing and Laboratory Analysis. Description of selected cataloguing system and artifact analysis procedures. ▪ Discard and Deaccession Policy. Description of and rationale for field and post-field discard and deaccession policies. ▪ Interpretive Program. Consideration of an on-site/off-site public interpretive program during the course of the archeological data recovery program. ▪ Security Measures. Recommended security measures to protect the archeological resource from vandalism, looting, and non-intentionally damaging activities. ▪ Final Report. Description of proposed report format and distribution of results. ▪ Curation. Description of the procedures and recommendations for the curation of any recovered data having potential research value, identification of appropriate curation facilities, and a summary of the accession policies of the curation facilities. *Human Remains and Associated or Unassociated Funerary Objects.* The treatment of human remains and of associated or unassociated funerary objects discovered during any soils disturbing activity shall comply with applicable State and Federal laws. This shall include immediate notification				

EXHIBIT 1:
MITIGATION MONITORING AND REPORTING PROGRAM
(Including the Text of the Mitigation Measures Adopted as Conditions of Approval and Proposed Improvement Measures)

1. MITIGATION MEASURES ADOPTED AS CONDITIONS OF APPROVAL	Responsibility for Implementation	Mitigation Schedule	Monitoring/Report Responsibility	Status/Date Completed
D. Cultural and Paleontological Resources (continued)				
of the Coroner of the City and County of San Francisco and in the event of the Coroner's determination that the human remains are Native American remains, notification of the California State Native American Heritage Commission (NAHC) who shall appoint a Most Likely Descendant (MLD) (Pub. Res. Code Sec. 5097.98). The archeological consultant, project sponsor, and MLD shall make all reasonable efforts to develop an agreement for the treatment of, with appropriate dignity, human remains and associated or unassociated funerary objects (CEQA Guidelines. Sec. 15064.5(d)). The agreement should take into consideration the appropriate excavation, removal, recordation, analysis, custodianship, curation, and final disposition of the human remains and associated or unassociated funerary objects. *Final Archeological Resources Report.* The archeological consultant shall submit a Draft Final Archeological Resources Report (FARR) to the ERO that evaluates the historical significance of any discovered archeological resource and describes the archeological and historical research methods employed in the archeological testing/monitoring/data recovery program(s) undertaken. Information that may put at risk any archeological resource shall be provided in a separate removable insert within the final report. Once approved by the ERO, copies of the FARR shall be distributed as follows: California Archaeological Site Survey Northwest Information Center (NWIC) shall receive one (1) copy and the ERO shall receive a copy of the transmittal of the FARR to the NWIC. The Major Environmental Analysis division of the Planning Department shall receive one bound, one unbound and one unlocked, searchable PDF copy on CD of the FARR along with copies of any formal site recordation forms (CA DPR 523 series) and/or documentation for nomination to the National Register of Historic Places/California Register of Historical Resources. In instances of high public interest in or the high interpretive value of the resource, the ERO may require a different final report content, format, and distribution than that presented above.				

EXHIBIT 1:
MITIGATION MONITORING AND REPORTING PROGRAM
(Including the Text of the Mitigation Measures Adopted as Conditions of Approval and Proposed Improvement Measures)

1. MITIGATION MEASURES ADOPTED AS CONDITIONS OF APPROVAL	Responsibility for Implementation	Mitigation Schedule	Monitoring/Report Responsibility	Status/Date Completed
D. Cultural and Paleontological Resources (continued)				
Historical Resources *M-CP-3a: HABS/HAER Documentation.* Prior to demolition or substantial adverse alteration of historical resource(s), the project sponsor of a development project in the Plan area shall contract with a qualified preservation architect, historic preservation expert, or other qualified individual to fully document the structure(s) to be demolished or altered. Documentation shall be undertaken following consultation with Planning Department preservation staff and the Historic Preservation Commission, and shall at a minimum be performed to HABS Level II documentation standards. According to HABS Standards, Level II documentation consists of the following tasks: ▪ Written data: A brief report documenting the existing conditions and history of the building shall be prepared, focusing on the building's architectural and contextual relationship with the greater Western SoMa neighborhood. ▪ Photographs: Photographs with large-format (4x5-inch) negatives shall be shot of exterior and interior views of all three project site buildings. Historic photos of the buildings, where available, shall be photographically reproduced. All photos shall be printed on archival fiber paper. ▪ Drawings: Existing architectural drawings (elevations and plans) of all three the project site buildings, where available, shall be photographed with large format negatives or photographically reproduced on Mylar. ▪ The completed documentation package shall be submitted to local and regional archives, including but not limited to, the San Francisco Public Library History Room, the California Historical Society and the Northwest Information Center at Sonoma State University in Rohnert Park.	Project sponsor and qualified historic preservation individual for each subsequent project undertaken pursuant to the Transit Center District Plan.	Prior to the start of any demolition or adverse alteration on a designated historical resource.	Planning Department Preservation Technical Specialist to review and approve HABS documentation.	Considered complete upon submittal of final HABS documentation.
M-CP-3b: Public Interpretative Displays. Prior to demolition or substantial adverse alteration of historical resource(s) that are significant due to event(s) that occurred in the building at the development site, the project sponsor of a development project in the Plan area shall develop, in consultation with Planning Department preservation staff, a permanent interpretative program/and or display that would	Project sponsor and qualified historic preservation individual for each subsequent project undertaken pursuant	Prior to the start of any demolition or adverse alteration on a designated historical	Planning Department Preservation Technical Specialist and Historic Preservation Commission to review and approve	Considered complete upon installation of display.

EXHIBIT 1:
MITIGATION MONITORING AND REPORTING PROGRAM
(Including the Text of the Mitigation Measures Adopted as Conditions of Approval and Proposed Improvement Measures)

1. MITIGATION MEASURES ADOPTED AS CONDITIONS OF APPROVAL	Responsibility for Implementation	Mitigation Schedule	Monitoring/Report Responsibility	Status/Date Completed
D. Cultural and Paleontological Resources (continued)				
commemorate such event(s). The program/display would be installed at a publicly accessible location, either at or near the project site or in another appropriate location (such as a library or other depository). The content and location of the display shall be presented to the Historic Preservation Commission for review and comment.	to the Transit Center District Plan.	resource.	interpretive display.	
M-CP-3c: Relocation of Historical Resources. Prior to demolition or substantial alteration of historical resource(s), the project sponsor of a development project in the Plan area shall make any historical resources that would otherwise be demolished or substantially altered in an adverse manner available for relocation by qualified parties.	Project sponsor for each subsequent project undertaken pursuant to the Transit Center District Plan.	Prior to the start of any demolition or adverse alteration on a designated historical resource.	ERO to review confirmation from project sponsor that resource(s) were made available for relocation.	Considered complete upon submittal to ERO by project sponsor of documentation confirming that resource(s) were made available for relocation.
M-CP-3d: Salvage of Historical Resources. Prior to demolition of historical resource(s) that are significant due to architecture (resource(s) that embody the distinctive characteristics of a type, period, region, or method of construction, or represents the work of a master, or possesses high artistic values), the project sponsor of a development project in the Plan area shall consult with a Planning Department Preservation Technical Specialist and/or other qualified parties regarding salvage of materials from the affected resource(s) for public information or reuse in other locations.	Project sponsor and qualified historic preservation individual for each subsequent project undertaken pursuant to the Transit Center District Plan.	Prior to the start of any demolition or adverse alteration on a designated historical resource.	Planning Department Preservation Technical Specialist shall participate in discussions with project sponsor regarding building salvage.	Considered complete upon submittal to ERO by project sponsor of documentation confirming that resource(s) were made available for salvage.
M-CP-5a. Construction Best Practices for Historical Resources. The project sponsor of a development project in the Plan area shall incorporate into construction specifications for the proposed project a requirement that the construction contractor(s) use all feasible means to avoid damage to adjacent and nearby historic buildings, including, but not necessarily limited to, staging of equipment and materials as far as possible from historic buildings to avoid direct impact damage; using techniques in demolition (of the parking lot), excavation, shoring, and construction that create the minimum feasible vibration; maintaining a buffer zone when possible between heavy equipment and historical resource(s) within 125 feet,	Project sponsor and qualified historic preservation individual for applicable subsequent projects undertaken pursuant to the Transit Center District Plan.	Prior to the issuance of contract specifications for construction proximate to a designated historical resource.	ERO and, optionally, Planning Department Preservation Technical Specialist, to review construction specifications.	Considered complete upon submittal to ERO by project sponsor of construction specifications.

EXHIBIT 1:
MITIGATION MONITORING AND REPORTING PROGRAM
(Including the Text of the Mitigation Measures Adopted as Conditions of Approval and Proposed Improvement Measures)

1. MITIGATION MEASURES ADOPTED AS CONDITIONS OF APPROVAL	Responsibility for Implementation	Mitigation Schedule	Monitoring/Report Responsibility	Status/Date Completed
D. Cultural and Paleontological Resources (continued)				
as identified by the Planning Department; appropriately shoring excavation sidewalls to prevent movement of adjacent structures; design and installation of the new foundation to minimize uplift of adjacent soils; ensuring adequate drainage from adjacent sites; covering the roof of adjacent structures to avoid damage from falling objects; and ensuring appropriate security to minimize risks of vandalism and fire.				
M-CP-5b. Construction Monitoring Program for Historical Resources. The project sponsor shall undertake a monitoring program to minimize damage to adjacent historic buildings and to ensure that any such damage is documented and repaired. The monitoring program would include the following components. Prior to the start of any ground-disturbing activity, the project sponsor shall engage a historic architect or qualified historic preservation professional to undertake a preconstruction survey of historical resource(s) identified by the Planning Department within 125 feet of planned construction to document and photograph the buildings' existing conditions. Based on the construction and condition of the resource(s), the consultant shall also establish a maximum vibration level that shall not be exceeded at each building, based on existing condition, character-defining features, soils conditions, and anticipated construction practices (a common standard is 0.2 inches per second, peak particle velocity). To ensure that vibration levels do not exceed the established standard, the project sponsor shall monitor vibration levels at each structure and shall prohibit vibratory construction activities that generate vibration levels in excess of the standard. Should vibration levels be observed in excess of the standard, construction shall be halted and alternative techniques put in practice, to the extent feasible. The consultant shall conduct regular periodic inspections of each building during ground-disturbing activity on the project site. Should damage to either building occur, the building(s) shall be remediated to its preconstruction condition at the conclusion of ground-disturbing activity on the site.	Project sponsor, project contractor, and qualified historic preservation individual for applicable subsequent projects undertaken pursuant to the Transit Center District Plan.	Prior to the start of demolition, earth moving, or construction activity proximate to a designated historical resource.	Planning Department Preservation Technical Specialist shall review and approve construction monitoring program.	Considered complete upon submittal to ERO of post-construction report on construction monitoring program and effects, if any, on proximate historical resources.

EXHIBIT 1:
MITIGATION MONITORING AND REPORTING PROGRAM
(Including the Text of the Mitigation Measures Adopted as Conditions of Approval and Proposed Improvement Measures)

1. MITIGATION MEASURES ADOPTED AS CONDITIONS OF APPROVAL	Responsibility for Implementation	Mitigation Schedule	Monitoring/Report Responsibility	Status/Date Completed
D. Cultural and Paleontological Resources (continued)				
M-C-CP: Mitigation of Cumulative Historical Resources Impacts. Implement Mitigation Measures M-CP-3a, HABS/HAER Documentation, and M-CP-3b, Public Interpretive Displays, and M-CP-3c, Relocation of Historical Resources, and M-CP-3d, Salvage of Historical Resources.	See Measures M-CP-3a, M-CP-3b, M-CP-3c, and M-CP-3d.			
E. Transportation				
Traffic				
M-TR-1a: Signal Timing Optimization. The Municipal Transportation Agency (MTA) could optimize signal timing at the following intersections to reduce impacts on intersection LOS to a less-than-significant level, by either improving conditions to LOS D or better or by avoiding the draft Plan's contribution to increased vehicle delay (mitigated LOS in parentheses): ▪ Stockton / Geary Streets (LOS F, p.m.) ▪ Kearny / Sutter Streets (LOS F, p.m.) ▪ Battery and California Streets (LOS D, a.m. and p.m.) ▪ Embarcadero / Washington Streets (LOS F, p.m.) ▪ Third / Folsom Streets (LOS F, p.m. peak) ▪ Beale / Folsom Streets (LOS F, p.m. peak) ▪ Embarcadero / Folsom Streets (LOS F, a.m. and p.m. peak)	S.F. Municipal Transportation Agency (MTA)	Monitor intersections periodically through traffic counts; implement feasible alterations to signal timing when LOS degrades.	S.F. MTA, Planning Department	Considered complete upon implementation of timing changes by MTA.
M-TR-1b: Taxi Left-Turn Prohibition. At the intersection of Third / Mission Streets, the Municipal Transportation Agency (MTA) could expand existing prohibitions on peak-hour left turn to include taxis, thereby permitting only buses to make left turns.	S.F. Municipal Transportation Agency (MTA)	Evaluate feasibility of turn prohibition; implement if feasible and warranted.	S.F. MTA, Planning Department	Considered complete upon implementation of turn prohibition by MTA.
M-TR-1c: Beale / Mission Streets Bulbs and Optimization. At the intersection of Beale and Mission Streets, the Municipal Transportation Agency (MTA) and Department of Public Works (DPW) could install bulb-outs on the north and south crosswalks to reduce pedestrian	S.F. Municipal Transportation Agency (MTA)	Evaluate feasibility of sidewalk bulbs and signal timing changes;	S.F. MTA, Planning Department	Considered complete upon construction of sidewalk bulbs and implementation of signal timing changes by MTA.

EXHIBIT 1:
MITIGATION MONITORING AND REPORTING PROGRAM
(Including the Text of the Mitigation Measures Adopted as Conditions of Approval and Proposed Improvement Measures)

1. MITIGATION MEASURES ADOPTED AS CONDITIONS OF APPROVAL	Responsibility for Implementation	Mitigation Schedule	Monitoring/Report Responsibility	Status/Date Completed
E. Transportation (continued)				
crossing distances and times and optimize the signal timing plan at this intersection during the weekday p.m. peak hour by reallocating green time from the less-congested eastbound / westbound Mission Street approaches to the southbound Beale Street approach.		implement if feasible and warranted.		
M-TR-1d: Steuart / Howard Streets Restriping. At the intersection of Steuart and Howard Streets, the Municipal Transportation Agency (MTA) could remove two on-street parking spaces on the south side of Howard Street immediately west of the intersection and stripe the eastbound approach as one through lane and one shared through-right lane. The proposed design for eastbound Howard Street after extension of the westbound Howard Street bicycle lane to The Embarcadero calls for one wide curb lane and one parking lane, but a second eastbound travel lane at the intersection could be provided by removing up to two on-street parking spaces.	S.F. Municipal Transportation Agency (MTA)	Evaluate feasibility of restriping; implement if feasible and warranted.	S.F. MTA, Planning Department	Considered complete upon implementation of restriping by MTA.
M-TR-1e: Beale / Folsom Streets Left-Turn Prohibition and Signal Optimization. At the intersection of Beale and Folsom Streets, the Municipal Transportation Agency (MTA) could prohibit eastbound right turns from Folsom Street in the p.m. peak hour and optimize the signal timing by reallocating green time from the eastbound / westbound Folsom Street approaches to the northbound / southbound Beale Street approaches.	S.F. Municipal Transportation Agency (MTA)	Evaluate feasibility of turn prohibition; implement if feasible and warranted.	S.F. MTA, Planning Department	Considered complete upon implementation of turn prohibition by MTA.
M-TR-1f: Third / Harrison Streets Restriping. At the intersection of Third and Harrison Streets, the Municipal Transportation Agency (MTA) could convert one of the two eastbound lanes leaving the intersection into an additional westbound through lane by restriping the east (Harrison Street) leg of the intersection. In order to allow sufficient turning radius and clearance for heavy vehicles such as buses and trucks, two on-street parking spaces on the south side of Harrison Street east of the intersection would be removed.	S.F. Municipal Transportation Agency (MTA)	Evaluate feasibility of restriping; implement if feasible and warranted.	S.F. MTA, Planning Department	Considered complete upon implementation of restriping by MTA.

EXHIBIT 1:
MITIGATION MONITORING AND REPORTING PROGRAM
(Including the Text of the Mitigation Measures Adopted as Conditions of Approval and Proposed Improvement Measures)

1. MITIGATION MEASURES ADOPTED AS CONDITIONS OF APPROVAL	Responsibility for Implementation	Mitigation Schedule	Monitoring/Report Responsibility	Status/Date Completed
E. Transportation (continued)				
M-TR-1g: Hawthorne / Harrison Streets Restriping. At the intersection of Hawthorne and Harrison Streets, the Municipal Transportation Agency (MTA) could stripe an additional westbound through lane approaching the intersection by converting one of the two eastbound lanes.	S.F. Municipal Transportation Agency (MTA)	Evaluate feasibility of restriping; implement if feasible and warranted.	S.F. MTA, Planning Department	Considered complete upon implementation of restriping by MTA.
M-TR-1h: Second / Harrison Streets Turn Prohibition and Optimization. At the intersection of Second and Harrison Streets, the Municipal Transportation Agency could prohibit eastbound left turns during the p.m. peak hour.	S.F. Municipal Transportation Agency (MTA)	Evaluate feasibility of turn prohibition; implement if feasible and warranted.	S.F. MTA, Planning Department	Considered complete upon implementation of turn prohibition by MTA.
M-TR-1i: Third / Bryant Streets Bulbs and Optimization. At the intersection of Third and Bryant Streets, the Municipal Transportation Agency (MTA) and Department of Public Works (DPW) could install bulb-outs on the south crosswalk to reduce pedestrian crossing distances and times and optimize the signal timing plan at this intersection during the weekday p.m. peak hour by reallocating green time from the eastbound Bryant Street approach to the northbound Third Street approach.	S.F. Municipal Transportation Agency (MTA)	Evaluate feasibility of sidewalk bulbs and signal timing changes; implement if feasible and warranted.	S.F. MTA, Planning Department	Considered complete upon construction of sidewalk bulbs and implementation of signal timing changes by MTA.
M-TR-1j: Second / Bryant Streets Bulbs and Optimization. At the intersection of Second and Bryant Streets, the Municipal Transportation Agency (MTA) and Department of Public Works (DPW) could install bulb-outs on the east and west crosswalks to reduce pedestrian crossing distances and times and optimize the signal timing plan at this intersection during the weekday p.m. peak hour by reallocating green time from the northbound / southbound Second Street approaches to the eastbound Bryant Street approach.	S.F. Municipal Transportation Agency (MTA)	Evaluate feasibility of sidewalk bulbs and signal timing changes; implement if feasible and warranted.	S.F. MTA, Planning Department	Considered complete upon construction of sidewalk bulbs and implementation of signal timing changes by MTA.

EXHIBIT 1:
MITIGATION MONITORING AND REPORTING PROGRAM
(Including the Text of the Mitigation Measures Adopted as Conditions of Approval and Proposed Improvement Measures)

1. MITIGATION MEASURES ADOPTED AS CONDITIONS OF APPROVAL	Responsibility for Implementation	Mitigation Schedule	Monitoring/Report Responsibility	Status/Date Completed
E. Transportation (continued)				
M-TR-1k: Second / Tehama Streets Restriping and Optimization. At the intersection of Second and Tehama Streets, the Municipal Transportation Agency (MTA) could prohibit eastbound and westbound left turns (from Tehama Street) during the a.m. and p.m. peak hours.	S.F. Municipal Transportation Agency (MTA)	Evaluate feasibility of restriping and signal timing changes; implement if feasible and warranted (may be warranted only in conjunction with project at 41 Tehama Street).	S.F. MTA, Planning Department	Considered complete upon implementation of restriping and signal timing changes by MTA.
M-TR-1m: Downtown Traffic Signal Study. As part of a Regional Traffic Signalization and Operations Program project, the Municipal Transportation Agency (MTA) could conduct a study of Downtown-area traffic signal systems, with the aim of recalibrating cycle lengths, offsets, and splits at Downtown-area intersections to optimize traffic flow and minimize unnecessary delays (without impacting other modes of travel).	S.F. Municipal Transportation Agency (MTA)	Evaluate feasibility of Downtown traffic signal study; implement if feasible and warranted.	S.F. MTA	Considered complete upon initiation of traffic signal study.
Transit				
M-TR-3a: Installation and Operation of Transit-Only and Transit Queue-Jump Lanes. To reduce or avoid the effects of traffic congestion on Muni service, at such time as the transit-vehicle delay results in the need to add additional vehicle(s) to one or more Muni lines, the Municipal Transportation Agency (MTA) could stripe a portion of the approach lane at applicable intersections to restrict traffic to buses only during the p.m. peak period, thereby allowing Muni vehicles to avoid traffic queues at certain critical intersections and minimizing transit delay. Each queue-jump lane would require the prohibition of parking during the p.m. peak period for the distance of the special lane.	S.F. Municipal Transportation Agency (MTA)	Evaluate feasibility of transit-only lanes and transit queue-jump lanes; implement if feasible and warranted.	S.F. MTA, Planning Department	Considered complete upon determination as to feasibility of such lanes and, if applicable, initiation of their installation, if applicable.

EXHIBIT 1:
MITIGATION MONITORING AND REPORTING PROGRAM
(Including the Text of the Mitigation Measures Adopted as Conditions of Approval and Proposed Improvement Measures)

1. MITIGATION MEASURES ADOPTED AS CONDITIONS OF APPROVAL	Responsibility for Implementation	Mitigation Schedule	Monitoring/Report Responsibility	Status/Date Completed
E. Transportation (continued)				
For the 41 Union, MTA could install a p.m. peak-hour transit-only lane along Beale Street approaching and leaving the intersection of Beale/Mission Street, for a distance of 150 to 200 feet. Five parking spaces on the west side of Beale Street north of Mission Street could be eliminated when the transit lane is in effect to allow for a right-turn pocket. MTA could also install a p.m. peak-hour queue-jump lane on the eastbound Howard Street approach to the intersection of Beale/Howard Streets, for a distance of 100 feet. If the foregoing were ineffective, MTA could consider re-routing the 41 Union to less-congested streets, if available, or implementing actions such as providing traffic signal priority to Muni buses. For the 11-Downtown Connector and 12 Folsom Pacific, MTA could install a p.m. peak-hour queue-jump lane on the southbound Second Street approach to the intersection to the intersection of Second/Folsom Streets, for a distance of approximately 150 feet. When the lane is in effect, five on-street parking spaces on the west side of Second Street north of Folsom Street could be eliminated, as well as a portion of the southbound bicycle lane approaching the intersection. If the foregoing were ineffective, MTA could consider re-routing the 11-Downtown Connector and 12 Folsom to less-congested streets, if available, or implementing actions such as providing traffic signal priority to Muni buses. The MTA could also evaluate the effectiveness and feasibility of installing an eastbound transit-only lane along Folsom Street between Second and Third Streets, which would minimize delays incurred at these intersections by transit vehicles. The study would create a monitoring program to determine the implementation extent and schedule, which may include conversion of one eastbound travel lane into a transit-only lane.				
M-TR-3b: Exclusive Muni Use of Mission Street Boarding Islands. To reduce or avoid conflicts between Muni buses and regional transit service (Golden Gate Transit and SamTrans) using the relocated transit-only center lanes of Mission Street between First and Third Streets, MTA could reserve use of the boarding islands for Muni buses only and provide dedicated curbside bus stops for regional transit operators. Regional transit vehicles	S.F. Municipal Transportation Agency (MTA)	Evaluate feasibility of Muni-only boarding island use; implement if feasible and warranted.	S.F. MTA, Planning Department	Considered complete upon determination as to feasibility of Muni-only boarding island use.

EXHIBIT 1:
MITIGATION MONITORING AND REPORTING PROGRAM
(Including the Text of the Mitigation Measures Adopted as Conditions of Approval and Proposed Improvement Measures)

1. MITIGATION MEASURES ADOPTED AS CONDITIONS OF APPROVAL	Responsibility for Implementation	Mitigation Schedule	Monitoring/Report Responsibility	Status/Date Completed
E. Transportation (continued)				
would still be allowed to use the transit-only center lanes between stops, but would change lanes to access the curbside bus stops. This configuration would be similar to the existing Muni stop configuration along Market Street, where two different stop patterns are provided, with each route assigned to only one stop pattern.				
M-TR-3c: Transit Improvements on Plan Area Streets. To reduce or avoid the effects of traffic congestion on regional transit service operating on surface streets (primarily Golden Gate Transit and SamTrans), MTA, in coordination with applicable regional operators, could conduct study the effectiveness and feasibility of transit improvements along Mission Street, Howard Street, Folsom Street, First Street, and Fremont Street to reduce delays incurred by transit vehicles when passing through the Plan area. The study would examine a solutions including, but not limited to the following: ▪ Installation of transit-only lanes along Howard Street and Folsom Street, which could serve both Muni buses (e.g., 12 Folsom-Pacific) and Golden Gate Transit buses heading to / from Golden Gate's yard at Eighth and Harrison Streets. ▪ Extension of a transit-only lane on Fremont Street south to Howard Street and installation of transit-actuated queue-jump phasing at the Fremont Street / Mission Street intersection to allow Golden Gate Transit buses to make use of the Fremont Street transit lane (currently only used by Muni vehicles); and ▪ Transit signal priority treatments along Mission, Howard, and Folsom Streets to extend major-street traffic phases or preempt side-street traffic phases to reduce signal delay incurred by SamTrans and Golden Gate Transit vehicles. ▪ Golden Gate Transit and SamTrans could consider rerouting their lines onto less-congested streets, if available, in order to improve travel times and reliability. A comprehensive evaluation would need to be conducted before determining candidate alternative streets, considering various operational and service issues such as the cost of any required capital investments, the availability of layover space, and proximity to ridership origins and destinations.	S.F. Municipal Transportation Agency (MTA)	Evaluate feasibility of transit improvements; implement if feasible and warranted.	S.F. MTA, Planning Department	Considered complete upon determination as to feasibility of transit improvements and initiation of their installation, if applicable.

EXHIBIT 1:
MITIGATION MONITORING AND REPORTING PROGRAM
(Including the Text of the Mitigation Measures Adopted as Conditions of Approval and Proposed Improvement Measures)

1. MITIGATION MEASURES ADOPTED AS CONDITIONS OF APPROVAL	Responsibility for Implementation	Mitigation Schedule	Monitoring/Report Responsibility	Status/Date Completed
E. Transportation (continued)				
M-TR-3d: Increased Funding to Offset Transit Delays. Sponsors of development projects within the Plan area could be subject to a fair share fee that would allow for the purchase of additional transit vehicle(s) to mitigate the impacts on transit travel time. In the case of Muni operations, one additional vehicle would be required. For regional operators, the analysis also determined that on-street delays could require the deployment of additional buses on some Golden Gate Transit and SamTrans routes. Funds for the implementation of this measure are expected to be generated from a delineated portion of the impact fees that would be generated with implementation of the draft Plan, and are projected to be adequate and sufficient to provide for the capital cost to purchase the additional vehicle and facility costs to store and maintain the vehicle.	Planning Department, Planning Commission, Board of Supervisors	Evaluate feasibility of additional transit fees; implement if feasible and warranted.	Planning Department	Considered complete upon determination of feasibility of such fees and initiation of their implementation, if applicable.
M-TR-3e: Increased Funding of Regional Transit. Sponsors of development projects within the Plan area could be subject to one or more fair share fees to assist in service improvements, such as through the purchase of additional transit vehicles and vessels or contributions to operating costs, as necessary to mitigate Plan impacts. These fee(s) could be dedicated to Golden Gate Transit, North Bay ferry operators, AC Transit, BART, and/or additional North Bay and East Bay transit operators. Depending on how the fee(s) were allocated, Caltrain and SamTrans might also benefit, although lesser impacts were identified for these South Bay operators. Funds for the implementation of this measure are expected to be generated from a delineated portion of the impact fees that would be generated with implementation of the draft Plan, and are projected to be adequate and sufficient to provide for the capital cost to purchase the additional vehicle and facility costs to store and maintain the vehicle.	Planning Department, Planning Commission, Board of Supervisors	Evaluate feasibility of additional transit fees; implement if feasible and warranted.	Planning Department	Considered complete upon determination of feasibility of such fees and initiation of their implementation, if applicable.

EXHIBIT 1:
MITIGATION MONITORING AND REPORTING PROGRAM
(Including the Text of the Mitigation Measures Adopted as Conditions of Approval and Proposed Improvement Measures)

1. MITIGATION MEASURES ADOPTED AS CONDITIONS OF APPROVAL	Responsibility for Implementation	Mitigation Schedule	Monitoring/Report Responsibility	Status/Date Completed
E. Transportation (continued)				
Pedestrians				
M-TR-4a: Widen Crosswalks. To ensure satisfactory pedestrian level of service at affected crosswalks, the Municipal Transportation Agency, Sustainable Streets Division, could conduct periodic counts of pedestrian conditions (annually, for example) and could widen existing crosswalk widths, generally by 1 to 3 feet, at such times as pedestrian LOS is degraded to unacceptable levels.	S.F. Municipal Transportation Agency (MTA)	Evaluate feasibility of crosswalk widening; implement if feasible and warranted.	S.F. MTA, Planning Department	Considered complete upon determination of feasibility of sidewalk widening and initiation of its implementation, if applicable.
M-TR-5 Garage/Loading Dock Attendant. If warranted by project-specific conditions, the project sponsor of a development project in the Plan area shall ensure that building management employs attendant(s) for the project's parking garage and/or loading dock, as applicable. The attendant would be stationed as determined by the project-specific analysis, typically at the project's driveway to direct vehicles entering and exiting the building and avoid any safety-related conflicts with pedestrians on the sidewalk during the a.m. and p.m. peak periods of traffic and pedestrian activity, with extended hours as dictated by traffic and pedestrian conditions and by activity in the project garage and loading dock. (See also Mitigation Measure M-TR-4b, above.) Each project shall also install audible and/or visible warning devices, or comparably effective warning devices as approved by the Planning Department and/or the Sustainable Streets Division of the Municipal Transportation Agency, to alert pedestrians of the outbound vehicles from the parking garage and/or loading dock, as applicable.	Project sponsor of any subsequent development project undertaken pursuant to the Transit Center District Plan.	Prior to project approval.	ERO shall review and approve project sponsor's proposed garage/loading dock operations program.	Considered complete upon review and approval by ERO of proposed garage/loading dock operations program.
Loading				
M-TR-7a: Loading Dock Management. To ensure that off-street loading facilities are efficiently used and that trucks longer than can be safely accommodated are not permitted to use a building's loading dock, the project sponsor of a development project in the Plan area shall develop a plan for management of the building's loading dock and shall ensure that tenants in the building are informed of limitations and	Project sponsor of any subsequent development project undertaken pursuant to the Transit Center District Plan.	Prior to project approval.	ERO shall review and approve project sponsor's proposed loading dock operations program.	Considered complete upon review and approval by ERO of proposed loading dock operations program.

EXHIBIT 1:
MITIGATION MONITORING AND REPORTING PROGRAM
(Including the Text of the Mitigation Measures Adopted as Conditions of Approval and Proposed Improvement Measures)

1. MITIGATION MEASURES ADOPTED AS CONDITIONS OF APPROVAL	Responsibility for Implementation	Mitigation Schedule	Monitoring/Report Responsibility	Status/Date Completed
E. Transportation (continued)				
conditions on loading schedules and truck size. Such a management plan could include strategies such as the use of an attendant to direct and guide trucks (see Mitigation Measure M-TR-5), installing a "Full" sign at the garage/loading dock driveway, limiting activity during peak hours, installation of audible and/or visual warning devices, and other features. Additionally, as part of the project application process, the project sponsor shall consult with the Municipal Transportation Agency concerning the design of loading and parking facilities.				
M-TR-7b: Augmentation of On-Street Loading Space Supply. To ensure the adequacy of the Plan area's supply of on-street spaces, the Municipal Transportation Agency (MTA) could convert existing on-street parking spaces within the Plan Area to commercial loading use. Candidate streets might include the north side of Mission Street between Second Street and First Street, both sides of Howard Street between Third Street and Fremont Street, and both sides of Second Street between Howard Street and Folsom Street. The MTA and Planning Department could also increase the supply of on-street loading "pockets" that would be created as part of the draft Plan's public realm improvements. Increasing the supply of on-street loading spaces would reduce the potential for disruption of traffic and transit circulation in the Plan Area as a result of loading activities. However, the feasibility of increasing the number of on-street loading spaces is unknown. Locations for additional loading pockets have not been identified, and the feasibility of adding spaces is uncertain, as any such spaces would reduce pedestrian circulation area on adjacent sidewalks. Locations adjacent to transit-only lanes would also not be ideal for loading spaces because they may introduce new conflicts between trucks and transit vehicles. Given these considerations, potential locations for additional on-street loading spaces within the Plan area are limited, and it is unlikely that a sufficient amount of spaces could be provided to completely offset the net loss in supply.	S.F. Municipal Transportation Agency (MTA)	Evaluate feasibility of increasing on-street loading supply; implement if feasible and warranted.	S.F. MTA, Planning Department	Considered complete upon determination of feasibility of increasing on-street loading supply and initiation of its implementation, if applicable.

EXHIBIT 1:
MITIGATION MONITORING AND REPORTING PROGRAM
(Including the Text of the Mitigation Measures Adopted as Conditions of Approval and Proposed Improvement Measures)

1. MITIGATION MEASURES ADOPTED AS CONDITIONS OF APPROVAL	Responsibility for Implementation	Mitigation Schedule	Monitoring/Report Responsibility	Status/Date Completed
E. Transportation (continued)				
Construction				
M-TR-9: Construction Coordination. To minimize potential disruptions to transit, traffic, and pedestrian and bicyclists, the project sponsor and/or construction contractor for any individual development project in the Plan area shall develop a Construction Management Plan that could include, but not necessarily be limited to, the following: ▪ Limit construction truck movements to the hours between 9:00 a.m. and 4:00 p.m. (or other times, if approved by the Municipal Transportation Agency) to minimize disruption of traffic, transit, and pedestrian flow on adjacent streets and sidewalks during the weekday a.m. and p.m. peak periods. ▪ Identify optimal truck routes to and from the site to minimize impacts to traffic, transit, pedestrians, and bicyclists; and, ▪ Encourage construction workers to use transit when commuting to and from the site, reducing the need for parking. The sponsor shall also coordinate with the Municipal Transportation Agency/Sustainable Streets Division, the Transbay Joint Powers Authority, and construction manager(s)/contractor(s) for the Transit Center project, and with Muni, AC Transit, Golden Gate Transit, and SamTrans, as applicable, to develop construction phasing and operations plans that would result in the least amount of disruption that is feasible to transit operations, pedestrian and bicycle activity, and vehicular traffic.	Project sponsor/ construction contractor of any subsequent development project undertaken pursuant to the Transit Center District Plan.	Prior to the start of project construction.	S.F. MTA, Planning Department	Considered complete upon MTA and, optionally, Planning Department review of Construction Management Plan.
F. Noise				
M-NO-1a: Noise Survey and Measurements for Residential Uses. For new residential development located along streets with noise levels above 70 dBA Ldn, the Planning Department shall require the preparation of an analysis that includes, at a minimum, a site survey to identify potential noise-generating uses within two blocks of the project site, and including at least one 24-hour noise measurement (with average and maximum noise level readings taken so as to be able to accurately describe maximum levels	Project sponsor, architect, acoustical consultant, and construction contractor for each subsequent development project	Analysis to be completed during environmental review; incorporate findings of noise	Planning Department and Department of Building Inspection	Considered complete upon approval of final construction plan set.

EXHIBIT 1:
MITIGATION MONITORING AND REPORTING PROGRAM
(Including the Text of the Mitigation Measures Adopted as Conditions of Approval and Proposed Improvement Measures)

1. MITIGATION MEASURES ADOPTED AS CONDITIONS OF APPROVAL	Responsibility for Implementation	Mitigation Schedule	Monitoring/Report Responsibility	Status/Date Completed
F. Noise (continued)				
reached during nighttime hours), prior to completion of the environmental review for each subsequent residential project in the Plan area. The analysis shall be completed by person(s) qualified in acoustical analysis and shall demonstrate with reasonable certainty that Title 24 standards, where applicable, can be met, and that there are no particular circumstances about the proposed project site that appear to warrant heightened concern about noise levels in the vicinity. Should such concerns be present, the Department may require the completion of a detailed noise assessment by person(s) qualified in acoustical analysis and/or engineering prior to the first project approval action, in order to demonstrate that acceptable interior noise levels consistent with those in the Title 24 standards can be attained.	undertaken pursuant to the Transit Center District Plan.	study into building plans prior to issuance of final building permit and certificate of occupancy.		
M-NO-1b: Noise Minimization for Residential Open Space. To minimize effects on residential development in the Plan area, the Planning Department, through its building permit review process and in conjunction with the noise analysis set forth in Mitigation Measure M-NO-1a, shall require that open space required under the Planning Code for residential uses be protected, to the maximum feasible extent, from existing ambient noise levels that could prove annoying or disruptive to users of the open space. Implementation of this measure could involve, among other things, site design that uses the building itself to shield on-site open space from the greatest noise sources, construction of noise barriers between noise sources and open space, and appropriate use of both common and private open space in multi-family dwellings, and implementation would also be undertaken consistent with other principles of urban design.	Project sponsor, architect, acoustical consultant, and construction contractor for each subsequent development project undertaken pursuant to the Transit Center District Plan	Incorporate findings of noise study into building plans prior to issuance of final building permit and certificate of occupancy.	Planning Department and Department of Building Inspection	Considered complete upon approval of final construction plan set.
M-NO-1c: Noise Minimization for Non-Residential Uses. To reduce potential effects on new non-residential sensitive receptors such as child care centers, schools, libraries, and the like, for new development including such noise-sensitive uses, the Planning Department shall require, as part of its building permit review process, the preparation of an acoustical analysis by person(s) qualified in acoustical analysis and/or engineering prior to the first project approval action, in order to demonstrate that daytime interior noise levels of 50 dBA, based on the *General Plan* Environmental Protection Element, can be attained.	Project sponsor, architect, acoustical consultant, and construction contractor for each subsequent development project undertaken pursuant to the Transit Center District Plan.	Incorporate findings of noise study into building plans prior to issuance of final building permit and certificate of occupancy.	Planning Department and Department of Building Inspection	Considered complete upon approval of final construction plan set.

EXHIBIT 1:
MITIGATION MONITORING AND REPORTING PROGRAM
(Including the Text of the Mitigation Measures Adopted as Conditions of Approval and Proposed Improvement Measures)

1. MITIGATION MEASURES ADOPTED AS CONDITIONS OF APPROVAL	Responsibility for Implementation	Mitigation Schedule	Monitoring/Report Responsibility	Status/Date Completed
F. Noise (continued)				
M-NO-1d: Mechanical Equipment Noise Standard. The Planning Department shall require that, as part of required the noise survey and study for new residential uses (Mitigation Measure M-NO-1a), all reasonable efforts be made to identify the location of existing rooftop mechanical equipment, the predicted noise generated by that equipment, and the elevation at which the predicted noise level would be of potential concern for new residential uses, as well as the necessary noise insulation for the new residential uses, where applicable.	Project sponsor, architect, acoustical consultant, and construction contractor for each subsequent development project undertaken pursuant to the Transit Center District Plan.	Analysis to be completed during environmental review; incorporate findings of noise study into building plans prior to issuance of final building permit and certificate of occupancy.	Planning Department and Department of Building Inspection	Considered complete upon approval of final construction plan set.
M-NO-1e: Interior Mechanical Equipment. The Planning Department shall require, as part of subsequent project-specific review under CEQA, that effects of mechanical equipment noise on adjacent and nearby noise-sensitive uses be evaluated by a qualified consultant and that control of mechanical noise, as specified by the acoustical consultant, be incorporated into the final project design of new commercial buildings to achieve the maximum feasible reduction of building equipment noise, consistent with *Building Code* and Noise Ordinance requirements and CEQA thresholds, such as through the use of fully noise-insulated enclosures around rooftop equipment and/or incorporation of mechanical equipment into intermediate building floor(s).	Project sponsor, architect, acoustical consultant, and construction contractor for each subsequent development project undertaken pursuant to the Transit Center District Plan.	Analysis to be completed during environmental review; incorporate findings of noise study into building plans prior to issuance of final building permit and certificate of occupancy.	Planning Department and Department of Building Inspection	Considered complete upon approval of final construction plan set.

EXHIBIT 1:
MITIGATION MONITORING AND REPORTING PROGRAM
(Including the Text of the Mitigation Measures Adopted as Conditions of Approval and Proposed Improvement Measures)

1. MITIGATION MEASURES ADOPTED AS CONDITIONS OF APPROVAL	Responsibility for Implementation	Mitigation Schedule	Monitoring/Report Responsibility	Status/Date Completed
F. Noise (continued)				
M-NO-2a: Noise Control Measures During Pile Driving. For individual projects that require pile driving, a set of site-specific noise attenuation measures shall be completed under the supervision of a qualified acoustical consultant. These attenuation measures shall include as many of the following control strategies, and any other effective strategies, as feasible: ▪ The project sponsor of a development project in the Plan area shall require the construction contractor to erect temporary plywood noise barriers along the boundaries of the project site to shield potential sensitive receptors and reduce noise levels; ▪ The project sponsor of a development project in the Plan area shall require the construction contractor to implement "quiet" pile-driving technology (such as pre-drilling of piles, sonic pile drivers, and the use of more than one pile driver to shorten the total pile driving duration), where feasible, in consideration of geotechnical and structural requirements and conditions; ▪ The project sponsor of a development project in the Plan area shall require the construction contractor to monitor the effectiveness of noise attenuation measures by taking noise measurements; and ▪ The project sponsor of a development project in the Plan area shall require that the construction contractor limit pile driving activity to result in the least disturbance to neighboring uses.	Project sponsor and construction contractor of each subsequent development project pursuant to the Transit Center District Plan that requires pile-driving during construction.	During period of pile-driving	Project sponsor to provide monthly noise reports during pile-driving.	Considered complete upon final monthly report.
M-NO-2b: General Construction Noise Control Measures. To ensure that project noise from construction activities is minimized to the maximum extent feasible, the project sponsor of a development project in the Plan area shall undertake the following: ▪ The project sponsor of a development project in the Plan area shall require the general contractor to ensure that equipment and trucks used for project construction utilize the best available noise control techniques (e.g., improved mufflers, equipment redesign, use of intake silencers, ducts, engine enclosures and acoustically-attenuating shields or shrouds, wherever feasible).	Project sponsor and construction contractor of each subsequent development project pursuant to the Transit Center District Plan.	During construction period.	Project sponsor to provide monthly noise reports during construction.	Considered complete upon final monthly report.

EXHIBIT 1:
MITIGATION MONITORING AND REPORTING PROGRAM
(Including the Text of the Mitigation Measures Adopted as Conditions of Approval and Proposed Improvement Measures)

1. MITIGATION MEASURES ADOPTED AS CONDITIONS OF APPROVAL	Responsibility for Implementation	Mitigation Schedule	Monitoring/Report Responsibility	Status/Date Completed
F. Noise (continued)				
▪ The project sponsor of a development project in the Plan area shall require the general contractor to locate stationary noise sources (such as compressors) as far from adjacent or nearby sensitive receptors as possible, to muffle such noise sources, and to construct barriers around such sources and/or the construction site, which could reduce construction noise by as much as five dBA. To further reduce noise, the contractor shall locate stationary equipment in pit areas or excavated areas, if feasible. ▪ The project sponsor of a development project in the Plan area shall require the general contractor to use impact tools (e.g., jack hammers, pavement breakers, and rock drills) that are hydraulically or electrically powered wherever possible to avoid noise associated with compressed air exhaust from pneumatically powered tools. Where use of pneumatic tools is unavoidable, an exhaust muffler on the compressed air exhaust shall be used, along with external noise jackets on the tools, which could reduce noise levels by as much as 10 dBA. ▪ The project sponsor of a development project in the Plan area shall include noise control requirements in specifications provided to construction contractors. Such requirements could include, but not be limited to, performing all work in a manner that minimizes noise to the extent feasible; use of equipment with effective mufflers; undertaking the most noisy activities during times of least disturbance to surrounding residents and occupants, as feasible; and selecting haul routes that avoid residential buildings inasmuch as such routes are otherwise feasible. ▪ Prior to the issuance of each building permit, along with the submission of construction documents, the project sponsor of a development project in the Plan area shall submit to the Planning Department and Department of Building Inspection (DBI) a list of measures to respond to and track complaints pertaining to construction noise. These measures shall include (1) a procedure and phone numbers for notifying DBI, the Department of Public Health, and the Police Department (during regular construction hours and off-hours); (2) a sign posted on-site describing noise complaint procedures and a complaint hotline number that shall be answered at all times during construction; (3) designation of an on-site construction complaint and enforcement manager for the project; and (4) notification of				

EXHIBIT 1:
MITIGATION MONITORING AND REPORTING PROGRAM
(Including the Text of the Mitigation Measures Adopted as Conditions of Approval and Proposed Improvement Measures)

1. MITIGATION MEASURES ADOPTED AS CONDITIONS OF APPROVAL	Responsibility for Implementation	Mitigation Schedule	Monitoring/Report Responsibility	Status/Date Completed
F. Noise (continued)				
neighboring residents and non-residential building managers within 300 feet of the project construction area at least 30 days in advance of extreme noise generating activities (defined as activities generating noise levels of 90 dBA or greater) about the estimated duration of the activity.				
M-C-NO: Cumulative Construction Noise Control Measures. In addition to implementation of Mitigation Measure NO-2a and Mitigation Measure NO-2b (as applicable), prior to the time that construction of the proposed project is completed, the project sponsor of a development project in the Plan area shall cooperate with and participate in any City-sponsored construction noise control program for the Transit Center District Plan area or other City-sponsored areawide program developed to reduce potential effects of construction noise in the project vicinity. Elements of such a program could include a community liaison program to inform residents and building occupants of upcoming construction activities, staggering of construction schedules so that particularly noisy phases of work do not overlap at nearby project sites, and, potentially, noise and/or vibration monitoring during construction activities that are anticipated to be particularly disruptive.	Project sponsor and construction contractor of each subsequent development project; Planning Department, Department of Building Inspection, Department of Public Health, and/or other City department(s), as applicable.	During construction period, if City-sponsored noise control program(s) are promulgated.	City department(s) involved in development and enforcement of City-sponsored noise control program(s), if applicable.	Considered complete at conclusion of construction activities that generate substantial noise.
G. Air Quality				
M-AQ-2: Implementation of Risk and Hazard Overlay Zone and Identification of Health Risk Reduction Policies. To reduce the potential health risk resulting from exposure of new sensitive receptors to health risks from roadways, and stationary sources, and other non-permitted sources PM2.5 and TACs, the Planning Department shall require analysis of potential site-specific health risks for all projects that would include sensitive receptors, based on criteria as established by the Planning Department, as such criteria may be amended from time to time. For purposes of this measure, sensitive receptors are considered to include	Planning Department	Prior to approval of subsequent development projects for any required air quality analysis.	ERO to review and approve any required air quality analysis for subsequent development projects.	Considered complete for each subsequent development project upon ERO review and approval of air quality analysis, as applicable.

EXHIBIT 1:
MITIGATION MONITORING AND REPORTING PROGRAM
(Including the Text of the Mitigation Measures Adopted as Conditions of Approval and Proposed Improvement Measures)

1. MITIGATION MEASURES ADOPTED AS CONDITIONS OF APPROVAL	Responsibility for Implementation	Mitigation Schedule	Monitoring/Report Responsibility	Status/Date Completed
G. Air Quality (continued)				
dwelling units; child-care centers; schools (high school age and below); and inpatient health care facilities, including nursing or retirement homes and similar establishments. Parks and similar spaces are not considered sensitive receptors for purposes of this measure unless it is reasonably shown that a substantial number of persons are likely to spend three hours per day, on a daily basis, at such facilities. Development projects in the Plan area that would include sensitive receptors shall undergo, during the environmental review process and no later than the first project approval action, a screening-level health risk analysis, consistent with methodology approved by the Planning Department, to determine if health risks from pollutant concentrations would exceed BAAQMD thresholds or other applicable criteria as determined by the Environmental Review Officer. If one or more thresholds would be exceeded at the site of the subsequent project where sensitive receptors would be located, the project (or portion of the project containing sensitive receptors, in the case of a mixed-use project) shall be equipped with filtration systems with a Minimum Efficiency Reporting Value (MERV) rating of 13 or higher, as necessary to reduce the outdoor-to-indoor infiltration of air pollutants by 80 percent. The ventilation system shall be designed by an engineer certified by the American Society of Heating, Refrigeration and Air-Conditioning Engineers, who shall provide a written report documenting that the system offers the best available technology to minimize outdoor to indoor transmission of air pollution. The project sponsor shall present a plan to ensure ongoing maintenance of ventilation and filtration systems and shall ensure the disclosure to buyers and/or renters regarding the findings of the analysis and inform occupants as to proper use of any installed air filtration.				
M-AQ-3: Siting of Uses that Emit DPM and Other TACs. To minimize potential exposure of sensitive receptors to diesel particulate matter (DPM), for new development including warehousing and distribution centers, and for new development including commercial, industrial or other uses that would be expected to generate substantial levels of toxic air contaminants (TACs) as part of everyday operations, whether from stationary or mobile sources,	Planning Department	Prior to approval of subsequent development projects for any required air quality analysis.	ERO to review and approve any required air quality analysis for subsequent development projects.	Considered complete for each subsequent development project upon ERO review and approval of air quality analysis, as applicable.

EXHIBIT 1:
MITIGATION MONITORING AND REPORTING PROGRAM
(Including the Text of the Mitigation Measures Adopted as Conditions of Approval and Proposed Improvement Measures)

1. MITIGATION MEASURES ADOPTED AS CONDITIONS OF APPROVAL	Responsibility for Implementation	Mitigation Schedule	Monitoring/Report Responsibility	Status/Date Completed
G. Air Quality (continued)				
the Planning Department shall require, during the environmental review process but no later than the first project approval action, the preparation of an analysis that includes, at a minimum, a site survey to identify residential or other sensitive uses within 1,000 feet of the project site, and an assessment of the health risk from potential stationary and mobile sources of TACs generated by the project. If risks to nearby receptors are found to exceed applicable significance thresholds, then emissions controls would be required prior to project approval to ensure that health risks would not be significant.				
M-AQ-4a: Construction Vehicle Emissions Minimization. To reduce construction vehicle emissions, the project sponsor shall incorporate the following into construction specifications: ▪ All construction equipment shall be maintained and properly tuned in accordance with manufacturer's specifications. All equipment shall be checked by a certified mechanic and determined to be running in proper condition prior to operation.	Project sponsor and construction contractor for any subsequent development project pursuant to the Transit Center District Plan.	During construction.	Project sponsor and construction contractor.	Project sponsor shall submit affidavit at the completion of construction that construction equipment has been properly operated.
M-AQ-4b: Dust Control Plan. To reduce construction-related dust emissions, the project sponsor of each development project in the Plan area and each public infrastructure project (such as improvements to the public realm) in the Plan area on a site of one-half acre or less but that would require more than 5,000 cubic yards of excavation lasting four weeks or longer shall incorporate into construction specifications the requirement for development and implementation of a site-specific Dust Control Plan as set forth in Article 22B of the *San Francisco Health Code*. The Dust Control Plan shall require the project sponsor to: submit a map to the Director of Public Health showing all sensitive receptors within 1,000 feet of the site; wet down areas of soil at least three times per day; provide an analysis of wind direction and install upwind and downwind particulate dust monitors; record particulate monitoring results; hire an independent, third party to conduct inspections and keep a record of those inspections; establish shut-down conditions based on wind, soil migration, etc.; establish a hotline for surrounding community members who may be potentially affected by project-related dust;	Project sponsor and construction contractor for any subsequent development project pursuant to the Transit Center District Plan.	Prior to the start of earthmoving activities.	S.F. Department of Public Health (DPH), Planning Department.	Considered complete upon DPH and ERO review of Dust Control Plan.

EXHIBIT 1:
MITIGATION MONITORING AND REPORTING PROGRAM
(Including the Text of the Mitigation Measures Adopted as Conditions of Approval and Proposed Improvement Measures)

1. MITIGATION MEASURES ADOPTED AS CONDITIONS OF APPROVAL	Responsibility for Implementation	Mitigation Schedule	Monitoring/Report Responsibility	Status/Date Completed
G. Air Quality (continued)				
limit the area subject to construction activities at any one time; install dust curtains and windbreaks on the property lines, as necessary; limit the amount of soil in hauling trucks to the size of the truck bed and secure soils with a tarpaulin; enforce a 15 mph speed limit for vehicles entering and exiting construction areas; sweep affected streets with water sweepers at the end of the day; install and utilize wheel washers to clean truck tires; terminate construction activities when winds exceed 25 miles per hour; apply soil stabilizers to inactive areas; and sweep adjacent streets to reduce particulate emissions. The project sponsor would be required to designate an individual to monitor compliance with dust control requirements.				
M-AQ-5 Construction Vehicle Emissions Evaluation and Minimization: To reduce the potential health risk resulting from project construction activities, the project sponsor of each development project in the Plan area shall undertake a project-specific health risk analysis, or other appropriate analysis as determined by the Environmental Planning Division of the Planning Department, for diesel-powered and other applicable construction equipment, using the methodology recommended by the Planning Department. If the analysis determines that construction emissions would exceed applicable health risk significance threshold(s) identified by the Planning Department, the project sponsor shall include in contract specifications a requirement that the contractor use the cleanest possible construction equipment and exercise best practices for limiting construction exhaust. Measures may include, but are not limited to, the following: ▪ Idling times shall be minimized either by shutting equipment off when not in use or reducing the maximum idling time to two minutes; ▪ The project shall develop a Construction Emissions Minimization demonstrating that the off-road equipment (more than 50 horsepower) to be used in the construction project (i.e., owned, leased, and subcontractor vehicles) would be reduced to the maximum extent feasible. Acceptable options for reducing emissions include, as the primary option, use of Interim Tier 4 equipment where such equipment is available and feasible for use, use of equipment meeting Tier 2/Tier 3 or higher emissions standards, the	Project sponsor and construction contractor for any subsequent development project pursuant to the Transit Center District Plan.	Prior to the start of heavy diesel equipment use on site.	ERO to review and approve health risk assessment, or other appropriate analysis.	Considered complete upon ERO review and acceptance of health risk assessment, or other appropriate analysis.

EXHIBIT 1:
MITIGATION MONITORING AND REPORTING PROGRAM
(Including the Text of the Mitigation Measures Adopted as Conditions of Approval and Proposed Improvement Measures)

1. MITIGATION MEASURES ADOPTED AS CONDITIONS OF APPROVAL	Responsibility for Implementation	Mitigation Schedule	Monitoring/Report Responsibility	Status/Date Completed
G. Air Quality (continued)				
use of other late model engines, low-emission diesel products, alternative fuels, engine retrofit technology, after-treatment products, add-on devices such as particulate filters, and/or other options as such become available; ▪ All construction equipment, diesel trucks, and generators shall be equipped with Best Available Control Technology for emission reductions of NOx and PM, including Tier 2/3 or alternative fuel engines where such equipment is available and feasible for use; ▪ All contractors shall use equipment that meets ARB's most recent certification standard for off-road heavy duty diesel engines; and ▪ The project construction contractor shall not use diesel generators for construction purposes where feasible alternative sources of power are available. During the environmental review process, the project sponsor shall submit a Construction Emissions Minimization Plan demonstrating compliance with the requirements of this mitigation measure.				
I. Wind				
M-WI-2: Tower Design to Minimize Pedestrian Wind Speeds. As part of the design development for buildings on Parcel F and at the 524 Howard Street, 50 First Street, 181 Fremont Street and Golden Gate University sites, the project sponsor(s) shall consider the potential effect of these buildings on pedestrian-level winds and on winds in the City Park atop the Transit Center. If wind-tunnel testing identifies adverse impacts, the project sponsor(s) shall conduct additional mitigation testing to resolve impacts to the maximum degree possible and to the satisfaction of Planning Department staff. Design features could include, but not be limited to, setting a tower atop a podium, which can interfere with "downwash" of winds from higher elevations toward the ground; the use of setbacks on tower facades, particularly those facades facing into prevailing winds, which can have similar results; using chamfered and/or rounded corners to minimize the acceleration of upper-level winds as they round corners; façade articulation; and avoiding the placement of large, unbroken facades into prevailing winds.	Project sponsor of identified development projects and any other subsequent development project adjacent to the Transit Center.	Wind-tunnel testing to occur during environmental review; project revisions to occur prior to project approval.	ERO shall review and approve wind study.	Considered complete upon EOR acceptance of wind study.

EXHIBIT 1:
MITIGATION MONITORING AND REPORTING PROGRAM
(Including the Text of the Mitigation Measures Adopted as Conditions of Approval and Proposed Improvement Measures)

1. MITIGATION MEASURES ADOPTED AS CONDITIONS OF APPROVAL	Responsibility for Implementation	Mitigation Schedule	Monitoring/Report Responsibility	Status/Date Completed
N. Biological Resources				
M-BI-1a: Pre-Construction Bird Surveys. Conditions of approval for building permits issued for construction within the Plan area shall include a requirement for pre-construction breeding bird surveys when trees or vegetation would be removed or buildings demolished as part of an individual project. Pre-construction nesting bird surveys shall be conducted by a qualified biologist between February 1st and August 15th if vegetation (trees or shrubs) removal or building demolition is scheduled to take place during that period. If special-status bird species are found to be nesting in or near any work area or, for compliance with federal and state law concerning migratory birds, if birds protected under the federal Migratory Bird Treaty Act or the California Fish and Game Code are found to be nesting in or near any work area, an appropriate no-work buffer zone (e.g., 100 feet for songbirds) shall be designated by the biologist. Depending on the species involved, input from the California Department of Fish and Game (CDFG) and/or the U.S. Fish and Wildlife Service (USFWS) Division of Migratory Bird Management may be warranted. As recommended by the biologist, no activities shall be conducted within the no-work buffer zone that could disrupt bird breeding. Outside of the breeding season (August 16 – January 31), or after young birds have fledged, as determined by the biologist, work activities may proceed. Birds that establish nests during the construction period are considered habituated to such activity and no buffer shall be required, except as needed to avoid direct destruction of the nest, which would still be prohibited.	Planning Department; Project sponsor of any subsequent development project pursuant to the Transit Center District Plan.	Prior to project approval.	ERO to review and approve bird survey.	Considered complete upon ERO approval of bird survey.
M-BI-1b: Pre-Construction Bat Surveys. Conditions of approval for building permits issued for construction within the Plan area shall include a requirement for pre-construction special-status bat surveys when large trees are to be removed or underutilized or vacant buildings are to be demolished. If active day or night roosts are found, the bat biologist shall take actions to make such roosts unsuitable habitat prior to tree removal or building demolition. A no disturbance buffer shall be created around active bat roosts being used for maternity or hibernation purposes at a distance to be determined in consultation with CDFG. Bat roosts initiated during construction are presumed to be unaffected, and no buffer would necessary.	Planning Department; Project sponsor of any subsequent development project pursuant to the Transit Center District Plan.	Prior to project approval.	ERO to review and approve bat survey.	Considered complete upon ERO approval of bat survey.

EXHIBIT 1:
MITIGATION MONITORING AND REPORTING PROGRAM
(Including the Text of the Mitigation Measures Adopted as Conditions of Approval and Proposed Improvement Measures)

1. MITIGATION MEASURES ADOPTED AS CONDITIONS OF APPROVAL	Responsibility for Implementation	Mitigation Schedule	Monitoring/Report Responsibility	Status/Date Completed
Q. Hazards and Hazardous Materials				
M-HZ-2a: Site Assessment and Corrective Action for Sites Located Bayward of Historic Tide Line. For any project located bayward of the historic high tide line the project sponsor shall initiate compliance with, and ensure that the project fully complies with, Article 22A of the San Francisco Health Code. In accordance with this article, a site history report shall be prepared, and if appropriate, a soil investigation, soil analysis report, site mitigation plan, and certification report shall also be prepared. If the presence of hazardous materials is indicated, a site health and safety plan shall also be required. The soil analysis report is submitted to DPH. If required on the basis of the soil analysis report, a site mitigation plan shall be prepared to 1) assess potential environmental and health and safety risks; 2) recommend cleanup levels and mitigation measures, if any are necessary, that would be protective of workers and visitors to the property; 3) recommend measures to mitigate the risks identified; 4) identify appropriate waste disposal and handling requirements; and 5) present criteria for on-site reuse of soil. The recommended measures would be completed during construction. Upon completion, a certification report shall be prepared documenting that all mitigation measures recommended in the site mitigation report have been completed and that completion of the mitigation measures has been verified through follow-up soil sampling and analysis, if required. If the approved site mitigation plan includes leaving hazardous materials in soil or the groundwater with containment measures such as landscaping or a cap to prevent exposure to hazardous materials, the project sponsor shall ensure the preparation of a risk management plan, health and safety plan, and possibly a cap maintenance plan in accordance with DPH requirements. These plans shall specify how unsafe exposure to hazardous materials left in place would be prevented, as well as safe procedures for handling hazardous materials should site disturbance be required. DPH could require a deed notice, for example, prohibiting or limiting certain future land uses, and the requirements of these plans and the deed restriction would transfer to the new property owners in the event that the property was sold.	Project sponsor of any subsequent development project pursuant to the Transit Center District Plan that is bayward of the historic high tide line.	Analysis to occur during environmental review; remedial actions, if any, to occur prior to issuance of site permit.	Planning Department, S.F. Department of Public Health (DPH).	Considered complete upon ERO and DPH review and approval of site history and, if appropriate, soil investigation, soil analysis report, site mitigation plan, and certification report, and any studies and remediation required by DPH.

EXHIBIT 1:
MITIGATION MONITORING AND REPORTING PROGRAM
(Including the Text of the Mitigation Measures Adopted as Conditions of Approval and Proposed Improvement Measures)

1. MITIGATION MEASURES ADOPTED AS CONDITIONS OF APPROVAL	Responsibility for Implementation	Mitigation Schedule	Monitoring/Report Responsibility	Status/Date Completed
Q. Hazards and Hazardous Materials (continued)				
M-HZ-2b: Site Assessment and Corrective Action for Projects Landward of the Historic High Tide Line. For any project that is not located bayward of the historic high tide line, the project sponsor shall ensure that a site-specific Phase I environmental site assessment is prepared prior to development. The site assessment shall include visual inspection of the property; review of historical documents; and review of environmental databases to assess the potential for contamination from sources such as underground storage tanks, current and historical site operations, and migration from off-site sources. The project sponsor shall ensure that the Phase I assessment and any related documentation is provided to the Planning Department's Environmental Planning (EP) division and, if required by EP, to DPH for review and consideration of potential corrective action. Where the Phase I site assessment indicates evidence of site contamination, additional data shall be gathered during a Phase II investigation, including sampling and laboratory analysis of the soil and groundwater for the suspected chemicals to identify the nature and extent of contamination. If the level(s) of chemical(s) would create an unacceptable risk to human health or the environment, appropriate cleanup levels for each chemical, based on current and planned land use, shall be determined in accordance with accepted procedures adopted by the lead regulatory agency providing oversight (e.g., the DTSC, the RWQCB, or DPH). At sites where there are ecological receptors such as sensitive plant or animal species that could be exposed, cleanup levels shall be determined according to the accepted ecological risk assessment methodology of the lead agency, and shall be protective of ecological receptors known to be present at the site. If agreed-upon cleanup levels were exceeded, a remedial action plan or similar plan for remediation shall be prepared and submitted review and approval by the appropriate regulatory agency. The plan shall include proposed methods to remove or treat identified chemicals to the approved cleanup levels or containment measures to prevent exposure to chemicals left in place at concentrations greater than cleanup levels.	Project sponsor of any subsequent development project pursuant to the Transit Center District Plan that is landward of the historic high tide line.	Analysis to occur during environmental review; remedial actions, if any, to occur prior to issuance of site permit.	Planning Department, S.F. Department of Public Health (DPH).	Considered complete upon ERO and DPH review and approval of Phase I site assessment and, if appropriate, additional studies and remediation as required by DPH.

EXHIBIT 1:
MITIGATION MONITORING AND REPORTING PROGRAM
(Including the Text of the Mitigation Measures Adopted as Conditions of Approval and Proposed Improvement Measures)

1. MITIGATION MEASURES ADOPTED AS CONDITIONS OF APPROVAL	Responsibility for Implementation	Mitigation Schedule	Monitoring/Report Responsibility	Status/Date Completed
Q. Hazards and Hazardous Materials (continued)				
Upon determination that a site remediation has been successfully completed, the regulatory agency shall issue a closure letter to the responsible party. For sites that are cleaned to levels that do not allow unrestricted land use, or where containment measures were used to prevent exposure to hazardous materials, the DTSC may require a limitation on the future use of the property. The types of land use restriction include deed notice, deed restriction, or a land use restriction that binds current and future owners. A risk management plan, health and safety plan, and possibly a cap maintenance plan could be required. These plans would specify procedures for preventing unsafe exposure to hazardous materials left in place and safe procedures for handling hazardous materials should site disturbance be required. The requirements of these plans and the land use restriction shall transfer to the new property owners in the event that the property is sold.				
M-HZ-2c: Site Assessment and Corrective Action for All Sites. The project sponsor shall characterize the site, including subsurface features such as utility corridors, and identify whether volatile chemicals are detected at or above risk screening levels in the subsurface. If so, If potential exposure to vapors is suspected, a screening evaluation shall be conducted in accordance with guidance developed by the DTSC to estimate worst case risks to building occupants from vapor intrusion using site specific data and conservative assumptions specified in the guidance. If an unacceptable risk were indicated by this conservative analysis, then additional site data shall be collected and a site specific vapor intrusion evaluation, including fate and transport modeling, shall be required to more accurately evaluate site risks. Should the site specific evaluation identify substantial risks, then additional measures shall be required to reduce risks to acceptable levels. These measures could include remediation of site soil and/or groundwater to remove vapor sources, or, should this be infeasible, use of engineering controls such as a passive or active vent system and a membrane system to control vapor intrusion. Where engineering controls are used, a deed restriction shall be required, and shall include a description of the potential cause of vapors, a prohibition against construction without removal or	Project sponsor of any subsequent development project pursuant to the Transit Center District Plan.	Analysis to occur during environmental review; remedial actions, if any, to occur prior to issuance of site permit.+	Planning Department, S.F. Department of Public Health (DPH).	Considered complete upon ERO and DPH review and approval of any studies and remediation required by DPH.

EXHIBIT 1:
MITIGATION MONITORING AND REPORTING PROGRAM
(Including the Text of the Mitigation Measures Adopted as Conditions of Approval and Proposed Improvement Measures)

1. MITIGATION MEASURES ADOPTED AS CONDITIONS OF APPROVAL	Responsibility for Implementation	Mitigation Schedule	Monitoring/Report Responsibility	Status/Date Completed
Q. Hazards and Hazardous Materials (continued)				
treatment of contamination to approved risk-based levels, monitoring of the engineering controls to prevent vapor intrusion until risk-based cleanup levels have been met, and notification requirements to utility workers or contractors who may have contact with contaminated soil and groundwater while installing utilities or undertaking construction activities. In addition, if remediation is necessary, the project sponsor shall implement long-term monitoring at the site as needed. The frequency of sampling and the duration of monitoring will depend upon site-specific conditions and the degree of volatile chemical contamination. The screening level and site-specific evaluations shall be conducted under the oversight of DPH and methods for compliance shall be specified in the site mitigation plan prepared in accordance with this measure, and subject to review and approval by the DPH. The deed restriction, if required, shall be recorded at the San Francisco Office of the Assessor-Recorder after approval by the DPH and DTSC.				
M-HZ-3: Hazardous Building Materials Abatement. The project sponsor of any development project in the Plan area shall ensure that any building planned for demolition or renovation is surveyed for hazardous building materials including PCB-containing electrical equipment, fluorescent light ballasts containing PCBs or DEHP, and fluorescent light tubes containing mercury vapors. These materials shall be removed and properly disposed of prior to the start of demolition or renovation. Old light ballasts that are proposed to be removed during renovation shall be evaluated for the presence of PCBs and in the case where the presence of PCBs in the light ballast cannot be verified, they shall be assumed to contain PCBs, and handled and disposed of as such, according to applicable laws and regulations. Any other hazardous building materials identified either before or during demolition or renovation shall be abated according to federal, state, and local laws and regulations.	Project sponsor of any subsequent development project pursuant to the Transit Center District Plan.	Prior to building demolition.	Planning Department, S.F. Department of Public Health (DPH).	Considered complete upon ERO and DPH review and approval of project's sponsor's documentation regarding hazardous building materials, to be submitted prior to building demolition.

EXHIBIT C:
MITIGATION MONITORING AND REPORTING PROGRAM
(Including the Text of the Mitigation Measures Adopted as Conditions of Approval and Proposed Improvement Measures)

2. MITIGATION MEASURES DETERMINED TO BE INFEASIBLE	Responsibility for Implementation	Mitigation Schedule	Monitoring/Report Responsibility	Status/Date Completed
M-TR-1I: Mid-Block Signalized Intersection Improvements. At the signalized intersections proposed in the public realm plan at Second / Natoma Streets; First / Minna Streets; First / Natoma Streets; Fremont / Tehama Streets; and Fremont Street / Transit Center Bus Plaza, the following improvements could improve traffic operations: ▪ At Second / Natoma Streets, the Municipal Transportation Agency (MTA) could install bulb-outs on the north and south crosswalks to reduce pedestrian crossing distances and times, allowing more green time for through traffic along Second Street; ▪ At First / Minna Streets and First / Natoma Streets, the Municipal Transportation Agency (MTA) could provide additional lane capacity on First Street; ▪ At Fremont / Natoma Streets and Fremont Street at the Transit Center Bus Plaza, the signal could be designed with two signal phases instead of three.	N/A	N/A	N/A	N/A
The following measures were also determined infeasible: ▪ New Montgomery / Mission Streets (Optimize signal timing) ▪ Third / Howard Streets (Optimize signal timing) ▪ New Montgomery / Howard Streets (Optimize signal timing) ▪ Fremont / Howard Streets (Prohibit eastbound p.m. peak left turns and optimize signal) ▪ Main / Howard Streets (Prohibit eastbound p.m. peak left turns and optimize signal) ▪ Spear / Howard Streets (Add northbound and southbound left-turn pockets, prohibit eastbound p.m. peak left turns and optimize signal)	N/A	N/A	N/A	N/A

EXHIBIT 1, ATTACHMENT A:
MITIGATION MONITORING AND REPORTING PROGRAM
(Including the Text of the Mitigation Measures Adopted as Conditions of Approval and Proposed Improvement Measures)

3. PROPOSED IMPROVEMENT MEASURES	Responsibility for Implementation	Mitigation Schedule	Monitoring/Report Responsibility	Status/Date Completed
N. Biological Resources				
I-BI-2: Night Lighting Minimization. In compliance with the voluntary San Francisco Lights Out Program, the Planning Department could encourage buildings developed pursuant to the draft Plan to implement bird-safe building operations to prevent and minimize bird strike impacts, including but not limited to the following measures: ▪ Reduce building lighting from exterior sources by: - Minimizing amount and visual impact of perimeter lighting and façade up-lighting and avoid up-lighting of rooftop antennae and other tall equipment, as well as of any decorative features; - Installing motion-sensor lighting; - Utilizing minimum wattage fixtures to achieve required lighting levels. ▪ Reduce building lighting from interior sources by: - Dimming lights in lobbies, perimeter circulation areas, and atria; - Turning off all unnecessary lighting by 11:00 p.m. through sunrise, especially during peak migration periods (mid-March to early June and late August through late October); - Utilizing automatic controls (motion sensors, photo-sensors, etc.) to shut off lights in the evening when no one is present; - Encouraging the use of localized task lighting to reduce the need for more extensive overhead lighting; - Scheduling nightly maintenance to conclude by 11:00 p.m.; - Educating building users about the dangers of night lighting to birds.	Planning Department, working with project sponsors of each subsequent development project	During the environmental review process	Planning Department	Considered complete upon approval of building plans by Planning Department.