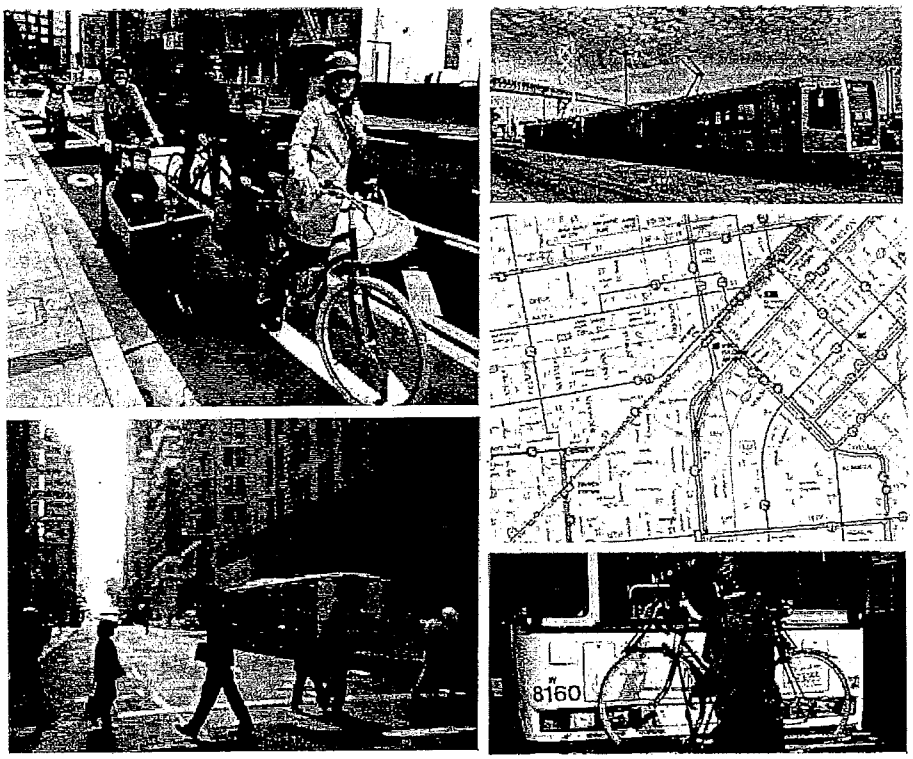
SAN FRANCISCO

Transportation Sustainability Fee: Economic Feasibility Study



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I. Introduction

The Association of Bay Area Governments (ABAG) estimates that the City of San Francisco will add 190,000 jobs and 100,000 households by 2040.[1] Much of this growth is already occurring – projects aimed at creating housing for upwards of 60,000 new residents are currently under construction or are being reviewed. More housing and more jobs means more travelers using the City's roads and transit lines, further straining the City's already-congested and overtaxed transportation system. To offset the impact of new development, San Francisco needs to invest in updated infrastructure, including transportation system improvements. In 2013, Mayor Edwin M. Lee convened a Transportation Task Force to investigate what San Francisco can do to update its transportation network and to prepare it for future travelers. The Task Force found that in order to meet current need and future demand, the City would need to invest $10 billion in transportation infrastructure through 2030, which will require $6.3 billion in new revenues.[2]

The Transportation Sustainability Program (TSP) is an initiative to improve and expand San Francisco's transportation system. This economic feasibility study presents findings of an economic evaluation of the potential impact of the proposed TSP on new development in San Francisco. The Transportation Sustainability Fee (TSF), the TSP component examined in this study, is a proposed citywide impact fee that will help fund new transit, bicycle and pedestrian improvement projects as well as capital maintenance. The TSF would provide additional revenue to help fill the City's transportation funding gap and ensure that new developments pay their fair share for impacts on the City's transportation system. Another TSP component examined in this study is the reform of the California Environmental Quality Act (CEQA) review process, which has the potential to enhance the City's ability to deliver new development in a more reliable, timely and cost efficient manner.

San Francisco is currently experiencing a surge in residential and commercial real estate construction and absorption, after a significant recessionary period that ended in 2012. Increased demand from both business expansion and new residents, combined with the relatively slow pace of development that has occurred for more than a decade, has contributed to rapidly escalating sales prices and rental rates. Recognizing the need for new development (particularly housing development) to meet the needs of a growing population and to ensure that prices do not continue to escalate to unsustainable levels, the goal of this study is to evaluate and inform the development of the TSP to ensure that the program will not impair development feasibility overall.

This report presents the following information:

I. **Introduction**– describes the purpose of the study and its organization.
II. **Summary of Findings**– summarizes the results of the economic feasibility analysis.
III. **Description of Proposed Transportation Sustainability Program**– provides an overview of the TSP and its three interrelated components: the Transportation Sustainability Fee (TSF), which will replace the current Transit Impact Development Fee (TIDF), California Environmental Quality Act (CEQA)/ Level of Service (LOS) reform, and Citywide Transportation Demand Management (TDM).

[1] Association of Bay Area Governments, *Projections 2013.*
[2] For more information on the Mayor's 2030 Transportation Task Force, please visit: http://transportation2030.sfplanning.org

IV. **Study Goals and Methodology**– presents the key goals for the study, along with a summary of the analysis methodology, including the selection of ten prototypical developments (prototypes) for evaluation.

V. **Cost and Time Savings from CEQA / Level of Service Reform**– describes the potential cost and time savings for environmental review that may occur with the TSP and analyzes what savings may occur for the ten development prototypes with TSP.

VI. **Results From Analysis of Base Case TSF Levels**– presents the financial results, assuming the TSF would be established at the fee rates listed in the 2012 Draft TSF Ordinance (after adjusting for inflation, to 2015 dollars) and assuming the proposed consolidation of non-residential fee categories, as described in the 2015 San Francisco Transportation Sustainability Fee Nexus Study. (For purposes of this study, these fee rates are referred to as "Base Case TSF.")

VII. **Sensitivity Analysis of Alternative TSF Levels**– compares the financial results, assuming alternative TSF levels at 125 percent (%), 150% and 250% of the Base Case TSF (2012 Draft TSF Ordinance levels inflated to 2015 Dollars).

VIII. **Conclusion**

II. Summary of Findings

This economic feasibility study evaluates the potential impact of the proposed Transportation Sustainability Program (TSP) on ten prototypical development types (prototypes) commonly found in San Francisco. This evaluation is done by analyzing how the proposed Transportation Sustainability Fee (TSF) would increase development costs and affect overall development feasibility, as measured by changes in residual land value.[3] This study also examines the potential economic benefits from streamlining the City's environmental review process as a result of California Environmental Quality Act (CEQA)/ Level of Service (LOS) reform.

A. Impact of Base Case TSF on New Development

The Transportation Sustainability Fee (TSF) is a proposed citywide impact fee on both residential and non-residential development that will replace the current Transit Impact Development Fee (TIDF), which currently applies to most non-residential development. This study first evaluates the economic impact of imposing transportation impact fees at rates based on the 2012 Draft TSF Ordinance, also referred to as the "Base Case TSF" scenario.[4] (See Section III.A for a more detailed description of the proposed TSF.)

For non-residential development, the Base Case TSF rates are roughly equivalent to the current TIDF rates. For residential development, the Base Case TSF would represent an additional cost burden of $6.19 per gross square foot (/GSF), although this may be partially offset by fee credits and/or environmental review time and cost savings. (Residential developments within certain plan areas, such as Eastern Neighborhoods or Market and Octavia, may be eligible for a fee reduction– referred to as a fee credit in this report– equal to the transit portion of the applicable area plan impact fee.) While the potential financial impact of the TSF on development projects varies according to factors such as use, location and certain key costs, the study found that:

- Non-residential development would experience the least financial impact from TSP, as the Base Case TSF is about the same as the existing TIDF for most land uses.
- The residential cost burden due to the imposition of the Base Case TSF is equivalent to an average increase in direct construction costs of about 1–2% depending on the type of construction. In neighborhoods where the bulk of development is occurring, this level of increase would not have a major impact on overall project feasibility or resulting housing costs.
- The impact of the additional fee on residential uses is partially mitigated in situations where a project is eligible for a prior-use credit, area plan fee credit or predevelopment time and cost savings due to CEQA/LOS Reform (as described in the next section).

[3] Residual land value is the difference between what a developer expects to receive in revenues, less all costs associated with developing the buildings. Land residual models are useful when comparing the impact of different policy options on land values because they can test and compare the economic impact under a variety of site-specific conditions and development assumptions.

[4] The Base Case TSF levels are defined as the fee rates in the 2012 Draft TSF Ordinance (Board File No. 120524), adjusted for inflation to 2015 dollars, with the proposed consolidation of non-residential fee categories as described in the 2015 draft San Francisco Transportation Sustainability Fee Nexus Study (2015 TSF Nexus Study). The 2012 Draft TSF Ordinance can be found here:
http://www.sfbos.org/ftp/uploadedfiles/bdsupvrs/committees/materials/lu120524tdr.pdf

- In neighborhoods where current market rent and/or sales prices are not high enough to warrant development investment, the TSF will further inhibit the ability of new development to become financially feasible. However, the TSF itself will not cause these developments to be infeasible.

B. Impact of CEQA/LOS Reform on New Development

Another component of the TSP is reform of the California Environmental Quality Act (CEQA) review process called for under Senate Bill (SB) 743, specifically the elimination of the transportation Level of Service (LOS) analysis requirement in Transit Priority Areas (which encompass most of the developable area of San Francisco). In analyzing this change, the study found that:

- If a project is currently required to undertake a transportation Level of Service (LOS) analysis, the TSP will provide modest economic benefits if the level of environmental review remains the same. In these cases, the elimination of LOS analysis could reduce consultant costs by $25,000 to $95,000 and result in a time savings of 5 months during the entitlement period, which would potentially decrease predevelopment carrying costs. This scenario applies to four of the ten prototypes evaluated in this study. For two of these prototypes, the combination of consultant cost savings and predevelopment savings could fully offset the impact of the Base Case TSF.
- Projects that would be eligible for a lesser level of environmental review as the result of CEQA/LOS reform would achieve the greatest economic benefit. For instance, one of the prototypes studied might be eligible for a Community Plan Exemption (CPE) under the TSP, as compared to a Focused Environmental Impact Report (FEIR) under current conditions. This could potentially result in direct cost savings of about $560,000 in environmental consultant/Planning Department fees and predevelopment time savings of 5 months, which could fully offset the impact of the Base Case TSF.
- The time and cost savings described above, combined with greater predevelopment predictability, could help offset the financial impact of the TSF for a subset of new development.
- For developments that do not currently need a transportation study (which is typically the case for smaller developments), no direct predevelopment cost or time savings would likely occur as a result of CEQA/LOS reform. However, these projects may experience indirect benefits, as CEQA/LOS reform would minimize the time spent on environmental review and reduce backlogs for City staff, potentially shortening the predevelopment process for all projects.

The study recognizes that predevelopment savings may or may not occur, due to environmental analysis of other topics or issues that may arise during the entitlement process, and thus the study analyzes the financial impact on RLV with and without predevelopment savings.

C. Transportation Sustainability Fee Sensitivity Analysis

Given the study findings that the TSF (at Base Case TSF levels) would not have a major impact on overall project feasibility and potential predevelopment savings from CEQA/LOS reform could help offset this financial impact, this report examines the impact of higher TSF levels that could provide increased funding for new transit, bicycle and pedestrian improvement projects. A sensitivity analysis was performed to test the effect of higher TSF levels– 125%, 150% and 250% of the Base Case TSF– which

are all well within the maximum justified fee amounts identified in the 2015 draft San Francisco Transportation Sustainability Fee Nexus Study (2015 TSF Nexus Study), as shown below:[5]

Alternative TSF Scenarios for Sensitivity Analysis (2015 Dollars)					
Use	***Base Case TSF ($/GSF)***	***125% TSF ($/GSF)***	***150% TSF ($/GSF)***	***250% TSF ($/GSF)***	***Maximum Justified Fee (not modeled)[6]***
Residential	$6.19	$7.74	$9.29	$15.48	$30.95
Non-residential	$14.43	$18.04	$21.65	$36.08	$87.52
PDR[7]	$7.61	n/a	n/a	n/a	$26.09

The sensitivity analysis results indicate that:

- The financial impact of fees at 125% of the Base Case TSF on new development is similar to the results found at Base Case TSF. Overall development costs would increase by about $1.60/GSF (to $7.74/GSF) for residential and by about $3.60/GSF (to $18.04/GSF) for non-residential development, without consideration of fee credits or predevelopment savings. This level of increase would not have a major impact on overall project feasibility or resulting housing costs in neighborhoods where most of new development is occurring.
- At 150% of the Base Case TSF, the fee does not impact overall project feasibility for the majority of prototypes, but development costs would substantively increase for both residential and non-residential uses. Potential predevelopment streamlining benefits only offset the fee increase under one prototype scenario. In some areas of the city and for certain land use and construction types, the TSF at this level could inhibit development feasibility.
- Fee increases to 250% of the Base Case TSF would more significantly increase the cost of development for most of the prototypes, to a level that could not be offset by potential time and cost savings under CEQA/LOS reform for any of the prototypes. In many areas of the city and for a broad range of development types, the TSF at this level could significantly inhibit development feasibility.
- If the City's real estate market were to experience a downturn and future revenue growth is not sufficient to cover construction and other development costs, new development will be more sensitive to higher impact fees.

For all of these reasons, and as further described in the final chapters of this report, the findings from the economic analysis indicate that the TSF should be established at no more than 125% of the initial fee level.

[5] All of these fee levels are within the maximum justified fee amounts identified in the 2015 San Francisco Transportation Sustainability Fee Nexus Study (2015 TSF Nexus Study).

[6] Maximum Justified Fee is not modeled but is presented in the San Francisco Transportation Sustainability Fee Nexus Study (2015).

[7] New development of PDR uses was not analyzed in the feasibility study.

III. Description of Proposed Transportation Sustainability Program

The Transportation Sustainability Program (TSP) is an initiative intended to improve and expand San Francisco's transportation system, which will help to keep people moving as the City grows. Today, San Francisco's streets are congested while transit lines are already at or near capacity, with record numbers of riders traveling on Muni, BART and Caltrain. If San Francisco does not change its current development practices and invest in transportation improvements citywide, future development could result in unprecedented traffic gridlock on San Francisco's streets and overcrowding on San Francisco's buses and trains. Without investing in transportation infrastructure, San Francisco will have more than 600,000 vehicles added to its streets every day by 2040, which is more traffic than all the vehicles traveling each day on the Bay Bridge and Golden Gate Bridge combined.[8] Caltrain ridership has grown by 60% in the last decade. Ridership on Muni is projected to increase by 300,000 trips per day (or 43%) by 2040.[9] Significant design measures need to be implemented to make it safer for cyclists and pedestrians to navigate San Francisco's heavily-trafficked streets.

The TSP will help fund transportation improvements so San Francisco's streets are safer and less congested and minimize new development's impact on the transportation system. Further, the TSP will help improve environmental performance from development by shifting trips away from cars to less polluting modes of transportation.

The TSP project goals include:

- Make it easier to safely, reliably and comfortably travel to get to work, school, home and other destinations.
- Help manage traffic congestion and crowding on local and regional transit.
- Improve air quality and reduce greenhouse gas emissions
- Enhance the safety of everyone's travel, no matter which mode of transportation they choose.

To help achieve these goals, the TSP seeks to:

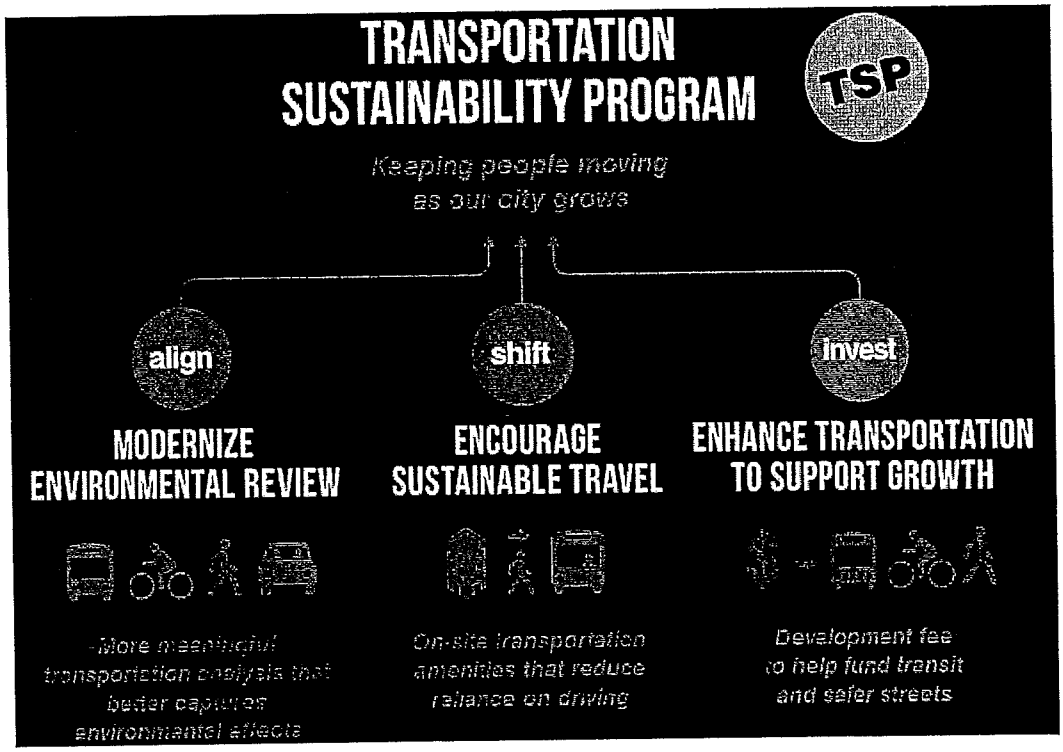
- **Enhance Transportation to Support Growth:** Fund citywide transportation improvements, including the addition of Muni buses and trains, helping to accommodate new residents and new members of the workforce.
- **Modernize Environmental Review:** Make the review process align with the City's longstanding environmental policies by changing how the City analyzes the impacts of new development on the transportation system under CEQA. The new practices will be more reliable and will emphasize travel options that create less traffic.
- **Encourage Sustainable Travel:** Make it easier for new residents, visitors and workers to get to their destination by means other than driving alone, and by integrating environmentally friendly travel options into new developments. New practices will provide on-site amenities so that people have options other than driving their cars by themselves (such as car-sharing and shuttle services).

The TSP consists of three policy components: 1) the Transportation Sustainability Fee (TSF), which will replace the current Transit Impact Development Fee (TIDF); 2) California Environmental Quality Act

[8] San Francisco County Transportation Agency, San Francisco Transportation Plan 2040.
[9] *Ibid.*

(CEQA) / Level of Service (LOS) reform; and, 3) Citywide Transportation Demand Management (TDM) development. The following sections briefly describe each of these three policy components. Figure 1 provides a brief overview of the TSP.

Figure 1. Overview of Transportation Sustainability Program



A. Transportation Sustainability Fee

The Transportation Sustainability Fee (TSF) is a citywide development impact fee intended to help offset the impact of new development on the City's transportation system. The TSF would apply citywide to most new development and to existing development where there is a change in land use. The proceeds from the TSF would fund projects that help reduce crowding on buses and trains while creating safer streets. When combined with other anticipated funds, improvements could include:

- **More Muni buses and trains.** Expand the Muni fleet by more than 180 vehicles to improve reliability and reduce travel times. The proceeds could also upgrade Muni maintenance facilities, as some facilities are more than 100 years old and are in need of renovation to accommodate a modern fleet.
- **Upgraded reliability on Muni's busiest routes.** Improve transit stops and reengineer city streets (Muni Forward projects) in a way that better organizes traffic, saving customers up to an hour a week in travel time.
- **Roomier and faster regional transit.** Retrofit or buy new BART train cars to provide more space for passengers and bikes. Invest in electrifying Caltrain to increase service into and out of San Francisco.

- **Improved bike infrastructure; safer walking and bicycling.** Expand bike lanes to reduce crowding on transit. Secure millions of dollars for bicycle infrastructure and pedestrian safety improvements.

The TSF would replace the existing Transit Impact Development Fee (TIDF), which currently applies to most non-residential development, and would include market-rate residential development, major hospitals and universities. The TSF would be assessed in proportion to the size and use of the proposed development. As described in the 2015 TSF Nexus Study, the TSF would also consolidate non-residential fee categories. (For further information on the TSF, please refer to the Transportation Sustainability Program website and the 2015 TSF Nexus Study.[10])

The TSF economic feasibility study evaluates the impact of the proposed TSF at various potential fee levels on prototypical developments. Table 1 compares the current TIDF fee rates (referred to as Base Case TIDF in this study) with the rates contained in the 2012 Draft TSF Ordinance (with dollar amounts adjusted for inflation to 2015 dollars), and assumes consolidated non-residential fee categories per the 2015 TSF Nexus Study (referred to as Base Case TSF in this study). Sensitivity analysis on higher TSF rates was also conducted, at 125%, 150%, and 250% of the Base Case TSF levels, as described in Chapter VII.[11]

Table 1. Existing TIDF vs. 2012 Draft TSF Ordinance Rates

Transit Impact Development Fee (TIDF) *(Base Case TIDF: Existing 2015 Fee)*		**Transportation Sustainability Fee (TSF)** *(Base Case TSF[1])*	
Use	Fee [$/GSF]	Use	Fee [$/GSF]
Management/Information/Professional Services (MIPS)	*$13.87*	Residential	*$6.19*
Retail/Entertainment	*$14.59*	Non-residential	*$14.43*
Cultural/Institution/Education	*$14.59*	PDR	*$7.61*
Medical	*$14.59*	**Note:** [1] Fee rates from the 2012 ordinance have been adjusted for inflation to 2015 dollars, and non-residential fee categories have been consolidated, consistent with other existing impact fees, as shown in the 2015 SF Transportation Sustainability Fee Nexus Study. These fee levels are also referred to as "Base Case TSF" in this study.	
Visitor services	*$13.87*		
Museum	*$12.12*		
Production/ Distribution/Repair (PDR)	*$7.46*		

Source: San Francisco Planning Department, 2015

[10] Transportation Sustainability Program website: http://tsp.sfplanning.org

[11] The Base Case TSF levels are defined as the fee rates in the 2012 Draft TSF Ordinance (Board File No. 120524), adjusted for inflation to 2015 dollars, with the proposed consolidation of non-residential fee categories as described in the 2015 TSF Nexus Study. The 2012 Draft TSF Ordinance can be found at: http://www.sfbos.org/ftp/uploadedfiles/bdsupvrs/committees/materials/lu120524tdr.pdf

A portion of the impact fee funding from certain area plans is dedicated to transit projects. Under the Transportation Sustainability Fee proposal, residential projects inside some plan areas would receive a credit for the transit portion of the area plan impact fee.[12]

B. California Environmental Quality Act and Level of Service Reform

Over the last 2 years, the City of San Francisco and the State of California have been actively working on Level of Service (LOS) reform and on improvements to the environmental review process under the California Environmental Quality Act (CEQA). With the adoption of the Sustainable Communities and Climate Protection Act of 2008 (SB 375), California is promoting land use and transportation planning decisions and investments that reduce vehicle miles traveled, thereby helping to lower greenhouse gas emissions as required by the California Global Warming Solutions Act of 2006 (AB 32).

On September 27, 2013, Governor Jerry Brown signed Senate Bill 743 (SB 743).[13] A key provision of SB 743 is the elimination of the use of LOS as a metric for measuring traffic impacts of projects in "transit priority areas" – defined as areas within ½ mile of a major transit stop, which encompasses most of the developable area of San Francisco.[14, 15] Senate Bill 743 also requires the California Office of Planning and Research (OPR) to develop revisions to the CEQA Guidelines establishing alternative criteria for determining the significance of transportation impacts of projects within transit priority areas that promote the "...reduction of greenhouse gas emissions, the development of multimodal transportation networks, and a diversity of land uses."

On August 6, 2014, OPR published the Updating Transportation Impacts Analysis in the CEQA Guidelines document, in response to SB 743.[16] These Draft CEQA guidelines indicate that the travel distance and amount of driving that a development project might cause should be the primary consideration when reviewing the project's transportation impact. Accordingly, OPR proposes that the LOS metric be replaced with a Vehicle Miles Traveled (VMT) metric. Level of Service analysis could be used for traffic engineering or transportation planning purposes, although not for environmental review.

Level of Service reform would eliminate the need for intersection LOS analysis for development projects that require a transportation impact study (TIS), which is typically required for larger developments. Level of Service analysis is a lengthy and costly process that can frequently drive the overall schedule for the TIS and broader CEQA analysis process. Level of Service analysis typically requires: identifying study

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[12] Projects in the Transit Center District Plan (TCDP) do not receive a TSF area plan fee reduction– referred to as a fee credit– as the Transit Center Transportation and Streets Fee is designated to address the substantial impacts on transit associated with such a high density development. Projects in the Rincon Hill and Visitacion Valley area plans also do not receive a TSF area plan fee credit, since these area plan fees do not include a transit component.

[13] SB 743 can be found on-line at:
http://leginfo.legislature.ca.gov/faces/billNavClient.xhtml?bill_id=201320140SB743

[14] Public Resources Code, Chapter 2.7, Division 13, Section 21099. "Modernization of Transportation Analysis for Transit-Oriented Infill Projects."

[15] A "transit priority area" is defined in as an area within one-half mile of an existing or planned major transit stop. A "major transit stop" is defined in Section 21064.3 of the *California Public Resources Code* as a rail transit station, a ferry terminal served by either a bus or rail transit service, or the intersection of two or more major bus routes with a frequency of service interval of 15 minutes or less during the morning and afternoon peak commute periods.

[16] Document available at:
http://www.opr.ca.gov/docs/Final_Preliminary_Discussion_Draft_of_Updates_Implementing_SB_743_080614.pdf

intersections; calculating the project's travel demand; distributing the project's trips on the surrounding roadway network; conducting traffic counts; and running a traffic simulation model that measures the impact of the project-related trips on study intersections.

The existing LOS analysis requirement creates uncertainty, as only toward the conclusion of a transportation impact analysis (well into the pre-entitlement process) does a developer fully realize if a project's traffic impact would necessitate a higher level of environmental review (such as an Environmental Impact Report). As the environmental approvals must be completed prior to project approval hearings, this situation represents a significant risk to the developer, who must invest time and money for environmental review of projects that could ultimately be rejected. Thus, time and cost savings for environmental review, as well as earlier certainty around the TIS findings, will help reduce the pre-entitlement risk taken on by project sponsors.

The overall effect of LOS reform is to more accurately measure the environmental impacts of new development, simplify the transportation impact analysis and environmental review process and increase development certainty. This economic feasibility analysis evaluates the direct time and cost savings that typical projects may experience in the preparation of the TIS and related CEQA documentation. Additionally, there may be indirect economic benefits for all projects, as the removal of LOS analysis from transportation and environmental review documents would minimize the time spent on environmental review (thereby reducing backlogs for City staff and facilitating new development).

C. Transportation Demand Management (TDM) Development

One goal of the TSP is to minimize single-driver car trips while maximizing trips (from new developments) made via sustainable modes of transportation, such as walking, biking, ridesharing and mass transit. Transportation Demand Management (TDM) measures aim to reduce single occupancy vehicle (SOV) trips through programming and policies that encourage walking, bicycling, public or private transit, carpooling, and other alternative modes. Transportation Demand Management measures include both project design measures (such as way-finding signage or bicycle parking) and operational measures (such as employer transportation programs). The California Office of Planning and Research has recommended the use of TDM trip reduction strategies in the preliminary CEQA guidelines to implement Senate Bill 743.[17]

San Francisco is studying the benefits of implementing TDM measures on the choice of transportation mode. The City's policies already require many TDM measures – for instance, the Planning Code requires residential developments to include a certain number of Class I and Class II bicycle parking facilities.[18]

For the purposes of this feasibility analysis, the development prototypes incorporate TDM measures that are currently required as part of City policy – for instance, all prototypes include the required level of bicycle parking facilities and carshare parking spaces, consistent with the Planning Code. However, this study does not separately calculate the direct costs (such as increased space for bicycle parking) and benefits (such as lower construction costs from less vehicular parking) associated with TDM measures, nor any potential legislative changes to TDM requirements, as these TDM measures and legislative changes are not yet defined.

[17] http://www.opr.ca.gov/docs/Final_Preliminary_Discussion_Draft_of_Updates_Implementing_SB_743_080614.pdf

[18] San Francisco Planning Code, Section 155.2

IV. Study Goals and Methodology

The purpose of this study is to evaluate the potential impact of the proposed TSP on new development in San Francisco. The study has three primary goals:

- Evaluate the potential impact of the TSP on development feasibility.
- Gather input from the development community on development revenues and costs, as well as how CEQA/LOS reform might help streamline the development process.
- Conduct sensitivity analysis on potential development scenarios (e.g. alternative TSF levels).

A. Methodology Overview

This section briefly describes the methodology and underlying data that Seifel Consulting Inc. (Seifel) used to perform the economic analyses. All of the core components of the methodology, assumptions and analysis were developed and vetted in collaboration with City staff and Urban Economics (the City's nexus study consultant) over a series of meetings held during 2014 and 2015. The methodology leverages prior economic analyses and reports that were prepared when the TSP was originally being conceptualized in 2009 through 2012, as well as other studies that the City has commissioned to evaluate proposed modifications to the City's impact fees, inclusionary housing programs and neighborhood land use plans. (For a more detailed discussion of the methodology, development assumptions and data sources used in this study, please refer to Appendix A.)

The data and analysis presented in this study and its appendices have been gathered from the most reliable sources available and are designed to represent current market conditions, taking in to account a long-range view of real estate cycles in San Francisco. This information has been assembled and analyzed for the sole purpose of performing an economic evaluation of the proposed adoption of the TSP. Actual potential financial impacts on new development may vary from the estimates presented in this study.

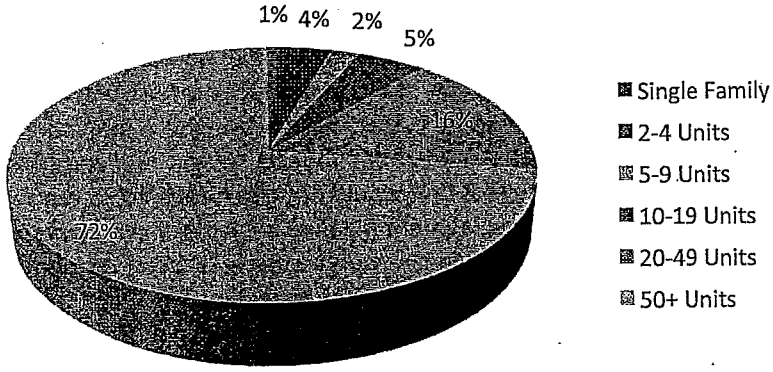
B. Selection of Development Prototypes

The first step in the analysis was to select a set of prototypical developments to be analyzed. Ten development prototypes – eight residential, two non-residential – were developed in order to represent the range of typical potential developments citywide that would see changes as a result of the TSP. The study placed greater emphasis on residential prototypes since the TSF proposal represents a new fee on residential uses. Seifel worked with City staff to identify common development types and locations by analyzing existing data sources, such as the San Francisco Planning Department's development pipeline, the Housing Inventory Report, Preliminary Project Assessments (PPAs), and market data sources.

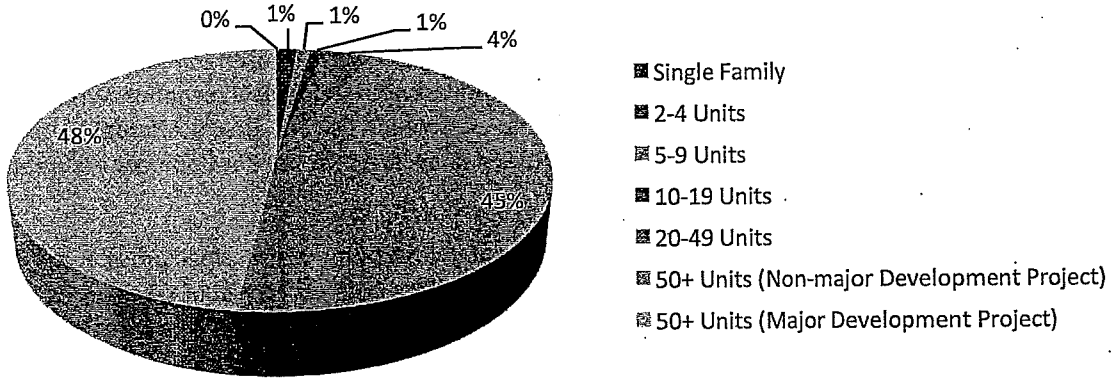
The residential prototypes were also designed to represent the broad range of development sizes that would likely be built in San Francisco. Figure 2 (following page) illustrates typical residential project sizes constructed in 2004–2014 and in the current development pipeline. As the top graph in Figure 2 shows, 72% of housing units constructed in the past decade are located in larger developments, sized 50 units or more. Less than 1% of housing units constructed during the last decade consist of single-family units, with about 11% of units located in developments sized between 2-19 units, and about 16% in developments 20-49 units in size.

Figure 2. Historical Housing Production and Current Development Pipeline, by Development Size

Distribution of Housing Units Constructed by Development Size, 2004-2014



Distribution of Housing Units in Pipeline by Development Size



Source: San Francisco Planning Department; 2014 San Francisco Housing Inventory Report; San Francisco Development Pipeline, Q3 2014.

Note that the following Major Development Projects are subject to agreements with developers to implement specific transportation improvements as a condition of project approval, and are specifically exempted from paying the TSF (per the terms of the applicable Redevelopment Plan or Development Agreement): CPMC; Candlestick Point/Hunters Point Shipyard Phases 1 and 2; Presidio, SF State; Transbay Redevelopment Project Area (Zone zone 1); Treasure Island/Yerba Buena Island (residential only); UCSF; and Park Merced (residential only).

According to the current development pipeline, the City can expect a reduced proportion of future residential development to be smaller-sized developments (19 units or fewer), representing about 3% of housing units. About 4% of new housing units are projected to occur in developments ranging in size from 20 to 49 units, while about 93% are anticipated to occur in larger developments (50 units or more).

About half of these housing units in larger developments (50 units or more) are located in major development projects with development agreements or other contracts that specifically exempt future development from having to pay the TSF. Those agreements specify other developer obligations to mitigate development impacts, such as construction of local transportation infrastructure. While these projects would not be subject to the TSF, they nonetheless will fund substantial improvements to the City's transportation system, helping to mitigate development impacts. Given this, none of the selected prototypes is located in major development projects that would not also be subject to the TSP. Most of the larger residential projects currently in the development pipeline are located in area plans, and three of the development prototypes (Prototypes 5, 8 and 9) are representative of larger residential developments with 100 or more housing units that are located in area plans.

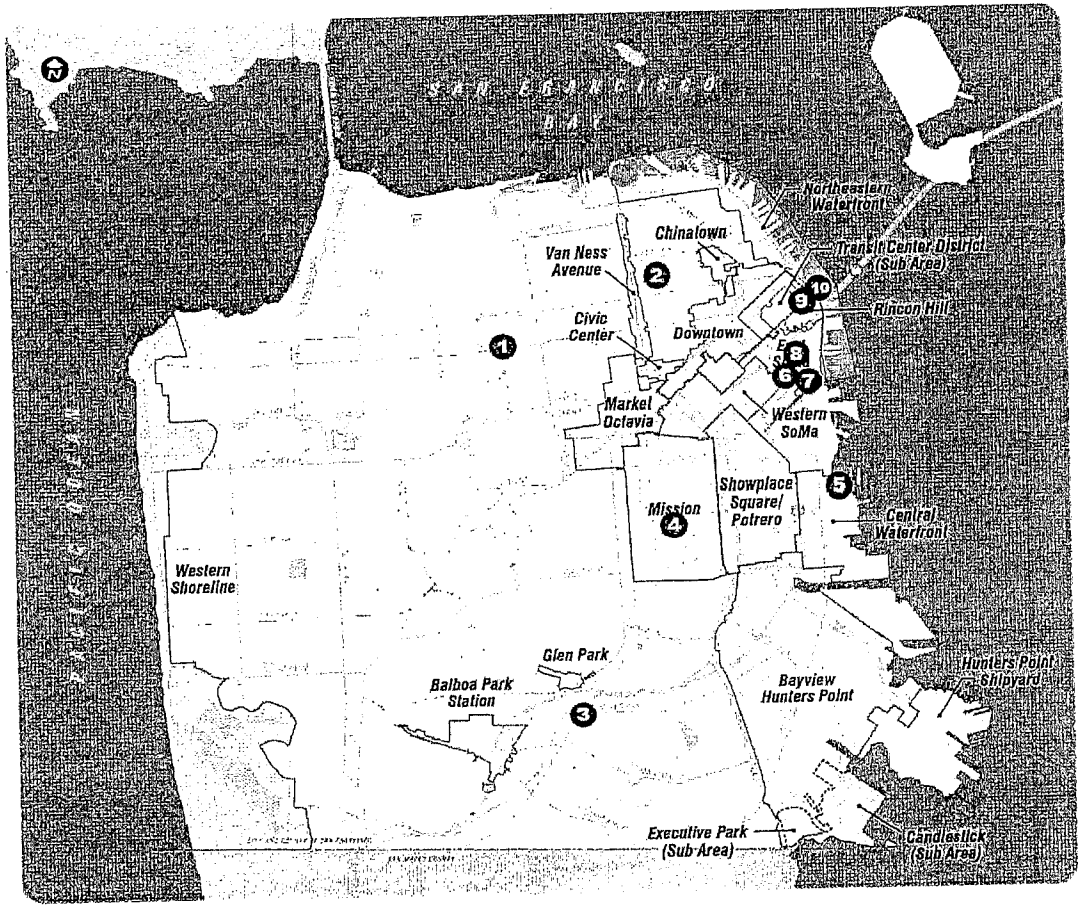
According to Planning Department data, most residential projects are mixed use developments, consisting of retail on the ground floor and residential on the upper floors. In addition, most of San Francisco's developable infill sites have zoning requirements that require active uses (such as retail) on street frontages. Thus, all but one of the residential prototypes is mixed use with retail development included on the ground floor.

The project team sought prototype locations both inside and outside of area plans in order to study different impact fee scenarios. In addition, prototype locations were chosen to represent varied transportation conditions in order to study different environmental review scenarios. Where possible, prototypes were selected to correspond with those analyzed in the concurrent Affordable Housing Bonus and Central SoMa feasibility analyses, in order to ensure that key development assumptions are consistent across these studies.

For purposes of distinguishing residential prototypes by development size, small projects are defined as consisting of 19 or fewer units (Prototypes 1 and 4), medium projects consist of 20–60 units (Prototypes 2, 3 and 6), and large projects consist of 61 or more units (Prototypes 5, 8, 9). The two non-residential prototypes are large office buildings with ground floor retail (Prototypes 7 and 10), which are reflective of typical office developments in the development pipeline.

The development revenue and cost assumptions were developed based on developer input and data gathered from a variety of real estate professionals, including market specialists, real estate brokers and general contractors. Figure 3 shows locations throughout the City of the development prototypes analyzed for the feasibility study and Table 2 provides an overview of the prototypes.

Figure 3. TSF Economic Feasibility Study Prototypes & Adopted Area Plans



1. **Geary Ave**[1]
   Small residential mixed-use, 8 units
2. **Van Ness Ave**[1]
   Medium residential mixed-use, 60 units
3. **Outer Mission**[1]
   Medium residential mixed-use, 24 units
4. **Mission**
   Small residential mixed-use, 15 units
5. **Central Waterfront**
   Large residential mixed-use, 156 units
6. **East SoMa**[1]
   Medium residential mixed-use, 60 units
7. **East SoMa**[1]
   Large office, 224k sq. ft.
8. **East SoMa**[1]
   Large residential mixed-use, 141 units
9. **Transit Center**
   Large residential, 229 units
10. **Transit Center**
    Large office, 320k sq. ft.

[1] Corresponds with Affordable Housing Bonus / Central SoMa feasibility studies.

Table 2. Overview of Economic Feasibility Study Prototypes[1]

Prototype	Lot Area (Square Feet)	Housing Units	Residential (Net Square Feet)	Non-residential (Net Square Feet)	Area Plan
1. Geary Ave[2] *(small residential mixed use)*	5,000	8	8,800	1,400 (retail)	None
2. Van Ness Ave[2] *(medium residential mixed use)*	24,300	60	59,800	8,100 (retail)	None
3. Outer Mission[2] *(small residential mixed use)*	14,400	24	30,000	2,900 (retail)	None
4. Mission *(small residential mixed use)*	6,000	15	14,300	2,300 (retail)	Eastern Neighborhoods
5. Central Waterfront *(large residential mixed use)*	35,000	156	118,800	4,500 (retail)	Eastern Neighborhoods
6. East SoMa[2] *(medium residential mixed use)*	10,000	60	43,100	4,500 (retail)	Eastern Neighborhoods
7. East SoMa[2] *(large office)*	35,000	-	-	224,400 (202,100 office and 22,300 retail)	Eastern Neighborhoods
8. East SoMa[2] *(large residential mixed use)*	15,000	128	119,800	6,800 (retail)	Eastern Neighborhoods
9. Transit Center *(large residential)*	15,000	229	241,300	-	Transit Center District Plan (TCDP)
10. Transit Center *(large office)*	20,000	-	-	320,300 (307,500 office and 12,800 retail)	TCDP

Source: San Francisco Planning Department.

Notes:

[1] Numbers rounded to nearest 100.

[2] Prototype corresponds with prototypes studied in the Affordable Housing Bonus / Central SoMa feasibility studies.

C. Transportation Impact Fees

In order to evaluate the impact of the TSF on new development, Seifel worked with City staff to calculate transportation impact fees and other development impact fees for each of the feasibility study prototypes. Table 3 compares the transportation fee obligation for each of the prototypes currently under the TIDF with the Base Case TSF levels, which are defined as the fee rates in the 2012 Draft TSF Ordinance (adjusted for inflation to 2015 dollars) with the proposed consolidation of non-residential fee categories. (Refer back to Section III.A for more information.)

D. Evaluation of Potential Time and Cost Savings with TSP

For each of these development prototypes, City staff documented the level of environmental review and associated costs that would likely be required currently (before consideration of the TSP) and what would be required with the adoption of the TSP. The potential costs and time spent on environmental review for each of these prototypes was then compared under these two conditions in order to understand the potential direct economic benefits from the adoption of the TSP. For example, if the prototype being analyzed might currently be required to do a transportation study that includes an LOS analysis (as was found to be the case for Prototypes 5, 7, 8, 9 and 10), City staff evaluated what predevelopment cost and time savings might occur if no LOS analysis was required. Chapter V describes in greater detail how the analysis of potential TSP savings was performed and summarizes the results for each development prototype.

Time saved during the development entitlement period can decrease the amount of predevelopment carrying costs that a developer would need to pay, which could increase the amount a developer would be willing to pay for land. The economic analysis assumes that predevelopment costs (including land) are equal to about 5% of development value (typically within a range of 5-15% of development value or total development cost, according to the Urban Land Institute).[19] While predevelopment costs vary by development (e.g. whether land is purchased up front or purchased at the end of an option period, with option payments made in the interim, and the extent of upfront predevelopment costs), this estimate is considered to be generally representative of a potential predevelopment carry scenario. The economic effect of predevelopment time savings is measured by multiplying estimated predevelopment costs by a 12% annual equity carrying cost (conservative assumption as equity during entitlement period often requires a higher return threshold) times the number of months saved divided by one year.[20]

As described further in Chapter V, transportation is just one of several topics that may be analyzed as part of a project's environmental review, so these predevelopment savings may not occur in all cases. Thus, the financial analysis evaluates each prototype assuming that the potential level of predevelopment cost and time savings would occur or would not occur.

[19] As described in Chapters 2 and 3 in "Finance for Real Estate Development," Charles Long, ULI, 2011.

[20] For example, five months in potential time savings would result in potential predevelopment carry savings equal to about 0.25% of development value or about 0.5% of direct construction costs.

Table 3. Comparison of Transit Impact Development Fee (TIDF) and Transportation Sustainability Fee (TSF) for Development Prototypes[1]

Prototype	TIDF (2015 fee) *[a]*	Base Case TSF[2] *[b]*	TSF Area Plan Credit[3] *[c]*	TSF Net Fee (Increase over existing fees) *[b – a + c]*
1. Geary Ave *(small residential mixed use)*	$18,900	$88,800	$0	**$69,900**
2. Van Ness Ave *(medium residential mixed use)*	$0	$458,900	$0	**$458,900**
3. Outer Mission *(small residential mixed use)*	$0	$42,400	$0	**$42,400**
4. Mission *(small residential mixed use)*	$17,800	$55,700	($14,300)	**$23,600**
5. Central Waterfront *(large residential mixed use)*	$3,600	$421,700	($168,300)	**$249,900**
6. East SoMa *(medium residential mixed use)*	$35,600	$263,800	($100,600)	**$127,600**
7. East SoMa *(large office)*	$3,388,100	$3,510,800	$0	**$122,700**
8. East SoMa *(large residential mixed use)*	$109,400	$1,041,400	($292,800)	**$639,200**
9. Transit Center *(large residential)*	$0	$2,059,700	$0	**$2,059,700**
10. Transit Center *(large office)*	$5,346,000	$5,551,200	$0	**$205,200**

Source: San Francisco Planning Department, 2014.

Notes:

[1] Numbers rounded to nearest $100. Some numbers may not precisely subtract due to rounding.

[2] Fee rates from the 2012 draft TSF ordinance have been adjusted for inflation to 2015, and non-residential fee categories have been consolidated, consistent with the SF Transportation Sustainability Fee Nexus Study. Prior use fee credits have been applied for eight prototypes (Prototypes 1 through 8), reflecting typical conditions for infill sites.

[3] Residential developments in some area plans may be eligible for a TSF area plan fee reduction– referred to as a fee credit– equivalent to the transit component of the applicable area plan impact fee. For residential projects in the Eastern Neighborhoods area plans (Prototypes 4, 5, 6, 7 and 8), the credit is 10% of the area plan fee. Projects in TCDP (Prototypes 9 and 10) are not eligible for a TSF area plan fee credit as the Transit Center Transportation and Street Improvement Fee is designated to address the substantial impacts on transit associated with such high-density development.

E. Residual Land Value Analysis

In order to evaluate the direct economic effect of the TSP, Seifel developed land residual models to estimate and compare the value of land before and after the proposed adoption of the TSP for the 10 prototypical developments described above. Residual land value (RLV) models calculate the potential amount a developer would be willing to pay for land, given anticipated development revenues, costs and a target developer margin. The developer margin represents a target return threshold that takes into account development risk, including the timeline it takes to complete the development, the uncertainty of future development revenues and costs and the level of returns that must be achieved to attract private capital. Developers commonly use RLV models at the initial stages of development to test feasibility and determine how much they can afford to pay for land.[21]

The RLV is the difference between what a developer expects to receive in revenues (e.g., sale of condominium units), less all costs associated with developing the buildings (e.g., predevelopment costs, hard construction costs, tenant improvements, construction financing, developer overhead, marketing/sales costs, other soft construction costs and target developer margin).[22] RLV models are useful tools to test the financial impact of different public policies on land values and development feasibility because they can compare the financial impact on land values given variable development scenarios, including variations in development land uses, revenues, costs and policy options.

The RLV analysis compares the potential land value for each development prototype under current conditions with the potential land value assuming the imposition of the TSF, both with and without the anticipated predevelopment savings.[23] The next chapter describes the potential predevelopment cost and time savings in greater detail.

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[21] The Urban Land Institute (ULI) has published literature that describes how developers analyze the feasibility of potential development projects, including the use of residual land value analysis. Refer to Chapters 2 and 3 in "Finance for Real Estate Development," Long, ULI, 2011.

[22] As part of the economic evaluation process, Seifel compared the projected development values, residual land values, target developer margins, and other financial metrics in the RLV models with current real estate data on similar transactions, including recent rental rates and sales prices, comparable land sales, market capitalization rates and financial pro forma information gathered from the development community. The RLVs for each prototype under current conditions were also compared to land values that are currently being assumed in recent developer pro formas, as well as information obtained from recent land sales and valuation input from Clifford Advisory. According to recent market information, the minimum market sales price for residentially zoned land in San Francisco is about $90,000 per unit ("per door"), and the RLV under the Base Case TIDF for residential units was found to be $100,000 or more for all prototypes except for Prototype 3, which is located in the Outer Mission area. (Current sales prices and rents in many of San Francisco's outer neighborhoods are not sufficiently high to support the higher cost of mid-rise construction and generate strong land values, particularly on sites where zoning restrictions significantly limit residential density (such as Prototype 3), which limits the number of units that can be built.) The calculated RLV for the two office prototypes is approximately $130/Building NSF, which is also within current market value range. For most prototypes, RLV ranges between 10 and 20% of development value or condominium sales price (after taking into account the cost of sale), which is also within the typical percentage ranges in development pro formas. For Prototype 3, the RLV is less than 5% of development value, which also indicates some developments in outer neighborhoods may not currently be feasible.

[23] Without predevelopment savings, the difference in RLV is directly attributable to the increase in development impact fees from the TSP, as no offsets to development costs are assumed from CEQA/LOS streamlining.

V. Cost and Time Savings from CEQA / Level of Service Reform

As previously described, the removal of LOS analysis under CEQA reform would eliminate the need for intersection LOS analysis for projects that require a transportation impact study (TIS), which is one of the main drivers of the overall schedule of the environmental review (and subsequently, the development entitlement process). Eliminating the LOS analysis could simplify the transportation analysis and decrease the amount of time spent on environmental review. This study evaluates the potential financial impact of both the direct time and cost savings that some projects may experience as a result of these improvements to the environmental review process from the TSP, as further described below.

A. Direct Time Savings

The time savings that an individual project may experience would vary depending on its level of required environmental review. Under CEQA, there are three major levels of environmental review documents, listed in ascending order of complexity and time required:

1. Exemption (i.e. a Categorical Exemption (Cat Ex) or Community Plan Exemption (CPE))
2. Mitigated Negative Declaration (MND)
3. Environmental Impact Report (EIR)

The level of required environmental review and type of document to be prepared largely depends on the size and scale of the proposed project, its location and whether or not it may benefit from – or be "tiered" from – a previous EIR, such as the City's Housing Element EIR or the Eastern Neighborhoods Area Plan and Rezoning EIR. For example, a Community Plan Exemption (CPE) document can only be prepared for a qualifying project within a plan area that does not result in any new significant impacts or require any new mitigation above and beyond what is analyzed in the Area Plan EIR.

After CEQA/LOS reform is implemented through the TSP, project sponsors may experience two types of potential direct time savings:

1. Time savings associated with not having to do an LOS analysis as part of the Transportation Impact Study.
2. Time savings associated with streamlining the overall environmental review process, with the greatest savings potentially occurring in situations where the level of environmental review for a project can be reduced (for example, a Mitigated Negative Declaration or Exemption instead of an EIR). This latter scenario is somewhat rare and would happen in instances where a project is required to undergo a more extensive level of environmental review solely due to transportation LOS impacts.

Table 4 shows that the potential average time savings due to the removal of the LOS analysis requirement in the overall CEQA document preparation ranges from zero to five months, assuming that this does not change the level of environmental review required.

Greater time savings may be possible in situations where the removal of the LOS analysis results in a lower level of environmental review than would otherwise be required. However, the CEQA review process is just one part of the overall predevelopment timeline, which also includes obtaining land use entitlements and other project approvals. For this reason, the overall project entitlement time savings may not be as great as the potential CEQA time savings.

Table 4. Average CEQA Document Time Savings due to CEQA/LOS Reform[3]

Type of Environmental Document	Average Document Preparation Time		
	Before CEQA Reform: With LOS Analysis	After CEQA Reform: Without LOS Analysis	Potential Time Savings
Community Plan Exemption (CPE)	11 months	6 months	5 months
Mitigated Negative Declaration (MND)	12 months	9 months	3 months
Environmental Impact Report (EIR) – Focused[1]	22 months	18 months	4 months
Environmental Impact Report (EIR) – Full[2]	32 months	32 months	0 months

Source: San Francisco Planning Department, 2014.

Notes:

[1] A "Focused EIR" would include the analysis of select environmental topics (typically four or fewer).

[2] A "Full EIR" would include the analysis of all or most of the environmental topics.

[3] The timeframes in this table assume that the TIS is the most time-consuming background study that is required for a project. If other background studies (such as Historic Resource Evaluation) are required and take longer than the TIS, the timeframes might need to be adjusted. This table shows timeframes from the date an environmental coordinator is assigned to a project.

B. Direct Cost Savings

Currently, the costs associated with environmental review include both Planning Department fees and environmental consultant fees. Planning Department fees include an environmental review fee, which is based on the type of environmental review document and the cost of project construction. Projects that require a transportation impact study must also pay Planning Department and SFMTA transportation study review fees, regardless of whether or not the study includes a LOS analysis.

Environmental review consultants represent an additional cost and are typically retained to prepare the environmental review document and the TIS, if required. Consultant fees vary based on the size and complexity of the project, the type of environmental review document being prepared and whether or not an LOS analysis is required as part of the TIS.[24]

Under CEQA/LOS reform, fee amounts for Planning Department environmental review and SFMTA transportation review will remain the same for projects that do not experience any change in the type of

[24] Based on Planning Department interviews with environmental consultants in 2014, the cost savings associated with the removal of the LOS analysis from the transportation study are estimated to be about 25% of the transportation study costs for all projects, regardless of size.

environmental document required. For instance, a project in an area plan may currently be required to prepare a TIS with a LOS analysis as part of a Community Plan Exemption (CPE). Under the proposed TSP, the project may still need to prepare a CPE, but it would include a simplified TIS without a LOS analysis. The Planning Department and SFMTA transportation fees would remain the same, but the project would benefit from consultant cost savings and time savings from not having to do the LOS analysis. As the environmental review document also incorporates technical analysis from the TIS, the consultant time required to prepare the environmental document would also be reduced, resulting in additional cost savings.

However, a project may experience greater cost savings if the removal of the LOS analysis results in a lesser level of environmental review being required. For instance, if a project no longer requires a focused EIR (which is conducted by environmental consultants) and could be eligible for a CPE (typically prepared in-house by Planning Department staff), the cost savings would be substantial.

C. Indirect Benefits

In addition to these direct benefits, CEQA/LOS reform would also result in greater certainty for project sponsors, as described earlier. As the environmental approvals must be completed prior to project approval hearings, these environmental approvals represent a significant risk to the developer, who must invest time and funds for environmental review of projects that might ultimately be rejected. Thus, any savings in environmental review time and costs can help reduce the pre-entitlement risk taken on by developers. Further, CEQA/LOS reform would simplify and minimize the time spent on environmental review, potentially reducing backlogs for City staff and shortening the predevelopment process for all projects, not just those benefitting from CEQA streamlining due to TSP.

While these indirect economic benefits could be significant to the development community, the financial analysis solely focuses on evaluating the direct time and cost savings in the preparation of the TIS and related CEQA documentation.

D. CEQA Streamlining Benefits for Feasibility Study Prototypes

The CEQA streamlining benefits associated with the implementation of the TSP were identified and analyzed for each of the development prototypes by comparing the scope of the environmental review with and without a LOS analysis. The level of environmental review for each prototype was determined based on the following information for each prototype:

- Project description, including land use, intensity of development, building envelope and project location.
- Environmental constraints associated with the project sites in these areas of the City.
- Programmatic EIRs (typically from area plans) from which the project-level environmental review documents could be tiered (where applicable).
- Planning Department guidelines and standard practices for environmental review as of March 2015.

The Planning Department identified the technical studies that would be required on the topics of transportation[25], air quality, noise, hazardous materials, wind, shadow, archeological resources, geology

[25] The type of transportation study required was based on a calculation of the PM peak-hour automobile trips that would be generated by the development program identified for each prototype.

and historic resources. The level of environmental review was based on the findings typically associated with the conclusions of those studies.

The current level of environmental review for each prototype was then compared to the anticipated level of environmental review and transportation analysis that would be needed with the TSP, assuming no other environmental topic area (such as historic resources) would result in impacts that would cause a more stringent environmental review process.

The potential time and cost savings for each prototype was then estimated by Planning Department staff based on recent environmental review costs incurred for similar projects, in consultation with outside environmental consultants. Table 5 at the end of this Chapter summarizes the type of environmental review document that would be required for each feasibility study prototype with and without LOS reform under TSP. Each of the prototypes except Prototype 5 would require the same type of environmental review document, with and without TSP.

Prototypes 1 through 4 and Prototype 6 are smaller projects that would not currently require a LOS analysis. Therefore, under TSP there is no change to the transportation study or the environmental review process and no environmental review time or cost savings.

Prototypes 7 through 10 are all large projects within area plans and would require LOS analysis, according to current practices, but would not require LOS analysis under TSP. [26] Thus, each of these prototypes experiences a time savings of approximately five months and varied consultant costs savings, both associated with the preparation of a streamlined TIS.

Prototype 5 is a medium-sized project located in the Central Waterfront area of the Eastern Neighborhoods. Based on the project size, the background traffic conditions in the surrounding streets and the level of new development anticipated in the area, a LOS analysis of this project would likely identify a significant unavoidable traffic impact that would trigger the preparation of a focused EIR under current practice. Prototype 5 is unlikely to result in other significant unavoidable impacts; therefore, under the TSP, this project would no longer need to conduct an EIR, resulting in substantial time and cost savings. The combined cost savings of reduced Planning Department fees and consultant fees is approximately $560,000 and the associated time savings is approximately five months.[27]

In summary, this analysis demonstrates the potential variation in potential direct time and cost savings for environmental and transportation review with the TSP for a variety of development types throughout San Francisco, summarized below and in Table 5.

- With TSP, no time or cost savings are anticipated for Prototypes 1 through 4 and Prototype 6, which is primarily attributable to the small-scale of development that each represents.
- Prototype 5 is estimated to potentially receive the most significant level of cost savings with TSP, as the environmental review document would be modified from a CPE and a Focused EIR to a

[26] For the purposes of this analysis, it was assumed that the governing environmental documents would enable this to occur.

[27] Although the change in the scope of the environmental review would reduce the CEQA documentation timeline from 22 months to 6 months (a 16-month time savings), the timeline for the required entitlements could likely only be reduced by 5 months given that some of steps in the technical analysis and the approval process take a certain amount of time and would not be able to be further shortened with TSP. Therefore, a conservative estimate of 5 months of time savings is estimated to occur within the overall predevelopment timeline.

CPE. It would also likely benefit from time savings of 5 months in the predevelopment review process.

- Prototypes 7 through 10 are anticipated to experience more modest cost savings given that their level of environmental review would remain the same under TSP. These prototypes would also likely benefit from time savings of 5 months in the predevelopment review process.

As described above, the projected time and cost savings presented for each prototype assumes that no other type of topic area (such as historic resources) would result in further intensification of environmental review. In order to take into account the possibility that no time or cost savings might occur, the land residual analysis evaluates the financial impact with and without the potential predevelopment time and cost savings that are described in this Chapter.

Table 5. Potential Environmental Review Time and Cost Savings from CEQA/LOS Reform by Prototype

Prototype	Environmental Review Time Savings[1]			Environmental Review Cost Savings[2]		
	Environmental Review Document: TIDF (Existing)	Environmental Review Document: TSP (Proposed)	Predevelopment Period Time Savings[3]	Planning Dept. Environmental Fee Savings	Estimated Consultant Cost Savings	Total Environmental Cost Savings
1. Geary Ave *(small residential mixed use)*	Class 32 CatEx	Class 32 CatEx	None	$0	$0	**$0**
2. Van Ness Ave *(medium residential mixed use)*	Class 32 CatEx	Class 32 CatEx	None	$0	$0	**$0**
3. Outer Mission *(small residential mixed use)*	Class 32 CatEx	Class 32 CatEx	None	$0	$0	**$0**
4. Mission *(small residential mixed use)*	CPE	CPE	None	$0	$0	**$0**
5. Central Waterfront *(large residential mixed use)*	CPE + Focused EIR	CPE	5 months	$386,300	$175,000	**$561,300**
6. East SoMa *(medium residential mixed use)*	CPE	CPE	None	$0	$0	**$0**
7. East SoMa *(large office)*	CPE + Focused EIR	CPE + Focused EIR	5 months[4]	$0	$95,000	**$95,000**
8. East SoMa *(large residential mixed use)*	CPE	CPE	5 months[4]	$0	$25,000	**$25,000**
9. Transit Center *(large residential)*	CPE	CPE	5 months[4]	$0	$25,000	**$25,000**
10. Transit Center *(large office)*	CPE	CPE	5 months[4]	$0	$50,000	**$50,000**

Source: San Francisco Planning Department, 2014

Note: Numbers rounded to nearest $100.

[1] This assumes that no other type of environmental review (such as historic resources) would result in further intensification of environmental review. As further described in this report, the land residual analysis accounts for an alternative environmental review situation where no time or cost savings would occur, as it evaluates the financial impact with and without the anticipated predevelopment savings from a streamlined CEQA process.

[2] These cost savings do not include potential predevelopment savings associated with lower predevelopment carrying costs due to a shorter entitlement timeline, which is evaluated in the land residual models.

[3] The predevelopment period includes both the environmental review and the entitlement process. Thus, changes to the environmental review timeline may not translate directly to equivalent time savings in the predevelopment period.

[4] Time savings due to dissolution of transportation LOS analysis requirement.

VI. Results From Analysis of Base Case TSF Levels

As described in Chapter IV on methodology, land residual models for ten typical developments were prepared to compare the estimated value of land before and after adoption of the proposed TSP. These development prototypes were chosen to best represent potential developments that might occur in different City neighborhoods, located inside and outside Plan Areas. The first stage of the analysis evaluates the potential financial impact by comparing the RLV under current conditions (referred to as Base Case TIDF) with the Base Case TSF scenario (with the introduction of the TSP, including the addition of fees at the "Base Case TSF" levels and CEQA/LOS reform).[28] Given the variability in key cost factors for real estate development across San Francisco and the challenging development climate that has resulted from the real estate recession followed by rapid price appreciation in recent years, a decrease in RLV of -10% or less with the introduction of the TSP has been chosen as a reasonable indicator of ongoing feasibility.

Non-residential development would experience the least financial impact from TSP, as the Base Case TSF is about the same as the existing TIDF for most land uses. For example, the net increase in the impact fee burden for new office use would be about $.56/GSF, and retail development would experience a slight decrease in fees of about -$0.16/GSF at the Base Case TSF levels. (Please refer back to Table 1 and Chapter III for more information regarding existing and proposed TSF levels.)

With TSP, residential development would be subject to a new development impact fee, which would increase development costs by $6.19/GSF for the Base Case TSF scenario without consideration of fee credits or predevelopment savings. Based on a typical residential unit size of 950 net square feet,[29] this translates to a potential increase in fees for the Base Case TSF scenario of about $7,400 per unit, or about 1-2% of direct construction cost depending on the type of construction and level of fee credits.

CEQA/LOS reform, once adopted, could help offset some of the financial impact of the TSF on new development or create an economic benefit for development. Based on the analysis presented in Chapter V, this streamlining could represent potential predevelopment cost and time savings for larger developments that currently require a transportation study as part of their environmental review in the following ways:

- Reduced City fees related to the current review of transportation studies.
- Reduced costs in professional services related to transportation and environmental analysis during the environmental process.
- Potential for reduced carrying costs (for private capital) on predevelopment expenses resulting from time savings of up to five months in the review process.[30]

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[28] As described in Chapter IV, the Base Case TSF scenario assumes the fee rates in the 2012 Draft TSF Ordinance, adjusted for inflation to 2015 dollars, taking into account the consolidation of non-residential fee categories.

[29] The fee is based on a gross residential square foot basis, and this typical unit size is assumed to be about 1188 GSF based on a typical 80% efficiency for low-rise and mid-rise developments, as indicated by this study. Building area (per gross and net square foot) does not include square footage related to parking.

[30] As described in Chapter IV, this analysis assumes predevelopment costs (including land) are equal to about 5% of development value, and the economic effect of predevelopment time savings is measured by multiplying the estimated predevelopment costs by a 12% annual equity carrying cost times the number of months saved divided by one year (i.e. 5 months/1 year or 42%) resulting in predevelopment savings at about 0.25% of development value, or about $2500 per unit for a condominium development with an average value of $1 million per unit.

Table 6 on the following page summarizes the economic evaluation of the TSP program under the Base Case TSF scenario. As it shows, the residual land values for most of the prototypes range from about 10-20% of revenues, which is consistent with many recent development pro formas that were reviewed for this study.[31] New development may not be currently feasible in City neighborhoods that have below-average price levels and rents, given the high cost of construction relative to potential revenues. The financial analysis indicates that this is the case for Prototype 3.[32] While the imposition of the Base Case TSF will not cause developments similar to Prototype 3 to be infeasible, the TSF further distances these areas from development feasibility as it lowers the potential RLV.

As Table 6 shows, five of the prototypes (due to their development size and location) are not anticipated to receive any CEQA streamlining benefits (Prototypes 1 through 4 and Prototype 6). The remaining five prototypes could potentially benefit from reduced transportation and environmental costs and 5 months in predevelopment time savings, which would lower predevelopment carry costs (Prototypes 5 and 7 through 10). For three of these prototypes (Prototypes 5, 7 and 10), the potential benefits from CEQA streamlining could more than offset the increase in impact fees, and this results in an increase in residual land value when predevelopment savings are assumed to occur (RLV with predevelopment savings). Without predevelopment savings, the RLV decreases for all prototypes, ranging from about -1% to -8%, which is within the -10% feasibility threshold.

As described in Chapter III, about half of new housing units are projected to be developed in larger developments within area plans, some of which may be eligible for a fee credit that would help offset a portion of the financial impact from the TSF. Four of the prototypes are located within area plans that would be eligible for an area plan fee credit for residential development (Prototypes 4, 5, 6 and 8). In summary, the impact on RLV varies among the prototypes depending on the following:

- **Land use:** non-residential prototypes (Prototypes 7 and 10) have the smallest increase in impact fees due to the TSF, as the Base Case TSF is about the same as the TIDF, while residential developments experience the greatest increase in impact fees under the TSP.
- **Environmental review & predevelopment savings:** larger developments could potentially benefit from reduced transportation and environmental costs plus decreased predevelopment carry costs as a result of time savings from CEQA/LOS reform (Prototypes 5 and 7 through 10). These potential financial benefits are modeled in the "with predevelopment savings" scenario, and they are not assumed to occur in the "without predevelopment savings" scenario.

[31] Please refer to Chapter IV and Appendix A for further information regarding the methodology used in this analysis. Revenues are equal to potential sales prices for condominiums or development values for rental property less sales expenses.

[32] The RLV for Prototype 3 is below 5% of total development value and is less than $40,000 per housing unit, which is below the typical asking prices for land in San Francisco and is less than land values for similarly located properties with existing uses. This finding indicates that similar developments in the outer neighborhoods may not generate sufficient development value to enable developers to pay for property at its current market value (particularly considering many infill sites have existing development that is generating rental income) or generate sufficient developer margin to warrant private investment.

Table 6. Summary of Economic Impact of Transportation Sustainability Program Under Base Case TSF Scenario

Prototype	Base Case TIDF		Impact on Residual Land Values (RLV) Under Base Case TSF Scenario								
					Predevelopment Savings (Credit)			RLV With Predevelopment Savings		RLV Without Predevelopment Savings	
	Base Case TIDF RLV [a]	Base Case TIDF RLV as % of Revenues	Fee Credit	Base Case TSF Fee Increase (Compared to Existing Fees Under Base Case TIDF) [b]	Environmental Cost Savings [c]	Time Savings (Predevelopment Carry Savings) [d]	Total Cost Savings [e=c+d]	Base Case TSF RLV [a-b-e]	% Change	Base Case TSF RLV [a-b]	% Change
1. Geary Ave (Small Res. Mixed-use)	$2,050,200	23%	Prior Use	**$69,900**	$0	$0	**$0**	$1,980,300	**(3%)**	$1,980,300	**(3%)**
2. Van Ness Ave (Medium Res. Mixed-use)	$7,017,300	10%	Prior Use	**$458,900**	$0	$0	**$0**	$6,558,400	**(7%)**	$6,558,400	**(7%)**
3. Outer Mission (Small Res. Mixed-use)	$920,600	4%	Prior Use	**$42,400**	$0	$0	**$0**	$878,200	**(5%)**	$878,200	**(5%)**
4. Mission (Small Res. Mixed-use)	$3,140,700	21%	Prior Use, Area Plan	**$23,600**	$0	$0	**$0**	$3,117,100	**(1%)**	$3,117,100	**(1%)**
5. Central Waterfront (Large Res. Mixed-use)	$22,869,100	21%	Prior Use, Area Plan	**$249,900**	($561,000)	($274,900)	**($835,900)**	$23,455,100	**3%**	$22,619,200	**(1%)**
6. East SoMa (Medium Res. Mixed-use)	$6,339,100	14%	Prior Use, Area Plan	**$127,600**	$0	$0	**$0**	$6,211,500	**(2%)**	$6,211,500	**(2%)**
7. East SoMa (Large Office)	$28,722,700	15%	Prior Use	**$122,700**	($95,000)	($479,500)	**($574,500)**	$29,174,500	**2%**	$28,600,000	**(0%)**
8. East SoMa (Large Res. Mixed-use)	$13,678,300	10%	Prior Use, Area Plan	**$639,200**	($25,000)	($331,100)	**($356,100)**	$13,395,200	**(2%)**	$13,039,100	**(5%)**
9. Transit Center (Large Residential)	$25,892,400	8%	None	**$2,059,700**	($25,000)	($769,100)	**($794,100)**	$24,626,800	**(5%)**	$23,832,700	**(8%)**
10. Transit Center (Large Office)	$42,188,700	13%	None	**$205,200**	($50,000)	($824,500)	**($874,500)**	$42,858,000	**2%**	$41,983,500	**(0%)**

Notes: Numbers rounded to nearest $100. Please refer to Chapters III and IV for further information on the prototype assumptions. (Table 3 summarizes the fee calculations for the Base Case TSF and Table 5 presents the environmental cost savings.)

Source: San Francisco Planning Department, 2015.

- **Area Plan fee credits**: residential developments located within certain Area Plans would be eligible for a partial fee credit (Prototypes 4, 5, 6 and 8) equivalent to the transit component of the Area Plan fee.
- **Prior use fee credits**: prototypes with existing buildings would be eligible to receive a fee credit for prior uses, which reduces the level of TIDF, TSF and area plan fees (Prototypes 1 through 8).

The financial analysis indicates that implementation of the proposed TSP at the Base Case TSF would have a modest financial impact on future development feasibility due to the combined effects described above under the potential development scenarios for each prototype:

- The difference in residual land values, with and without predevelopment savings, does not decrease by more than 10% for all prototypes.
- With predevelopment savings as a result of CEQA/LOS reform, residual land values could potentially increase under the TSP by about 2% to 3% where the streamlining benefits more than offset the increase in development costs with the TSP (Prototypes 5, 7 and 10).
    - If a project is currently required to undertake a transportation LOS analysis, the TSP will provide modest economic benefits if the level of environmental review remains the same. (As shown in this study, a transportation LOS analysis is typically required for larger sized developments.) In these cases, the elimination of LOS analysis could reduce consultant costs by $25,000 to $95,000 and result in a time savings of 5 months during the entitlement period, which would potentially decrease predevelopment carrying costs. This scenario applies to four of the ten prototypes (Prototypes 7 through 10) evaluated in this study. For the office prototypes (Prototypes 7 and 10), the combination of consultant cost savings and predevelopment savings could fully offset the impact of the Base Case TSF level.
    - Projects that would be eligible for a lesser level of environmental review as the result of CEQA/LOS reform would achieve the greatest economic benefit. For instance, one of the prototypes studied (Prototype 5) might be eligible for a Community Plan Exemption (CPE) under the TSP, as compared to a Focused Environmental Impact Report (FEIR) under current conditions. This could potentially result in direct cost savings of about $560,000 in environmental consultant/Planning Department fees and predevelopment time savings of 5 months, which could fully offset the impact of the Base Case TSF level.
- Without predevelopment time savings, residual land values are projected to decrease between about 0% to -8% for all prototypes.[33] The greatest decrease in RLV occurs for residential projects located Outside Plan Areas or Inside Plan Areas where fee credits do not substantially offset the TSF (Prototypes 2, 3, 8 and 9).

As described above, the extent of the financial impact will vary depending on land use, whether or not the development is located in a Plan Area, whether it will benefit from the potential predevelopment time and cost savings and the level of fee credits. These findings are generally consistent with the prior (2012) economic analysis of the proposed TSP.

[33] As no offsets to development costs are assumed from CEQA/LOS streamlining, the difference in RLV without predevelopment savings is directly attributable to the increase in development impact fees from the TSP.

VII. Sensitivity Analysis of Alternative TSF Levels

The sensitivity analysis studies the effect of higher TSF levels, modeled at 125%, 150% and 250% of the Base Case TSF levels, which are within the maximum justified fee levels from the 2015 TSF Nexus Study. Table 7 summarizes and compares the fee levels for each scenario with the maximum justified fee amounts. The table indicates that the TSF fee levels evaluated in this sensitivity analysis would range from $6.19 at the Base Case TSF to $15.48/GSF at 250% TSF for residential development and from $14.43 at the Base Case TSF to $36.08/GSF at 250% TSF for non-residential development.

Table 7. TSF Sensitivity Analysis Scenarios (2015 Dollars)

Use	*Base Case TSF ($/GSF)*	*125% TSF ($/GSF)*	*150% TSF ($/GSF)*	*250% TSF ($/GSF)*	*Maximum Justified Fee[1] (not modeled)*
Residential	$6.19	$7.74	$9.29	$15.48	$30.95
Non-residential	$14.43	$18.04	$21.65	$36.08	$87.52
PDR[2]	$7.61	n/a	n/a	n/a	$26.09

Note:
[1] Maximum Justified Fee is not modeled but is presented in the San Francisco Transportation Sustainability Fee Nexus Study (2015).
[2] New development of PDR uses was not analyzed in the feasibility study.

The financial results for each of these sensitivity analysis scenarios are summarized in tables that are presented at the end of this report:

- Table 8 summarizes the results from the sensitivity analysis, as measured by the percentage change in RLV for each of the four alternative TSF levels (Base Case TSF, 125% TSF, 150% TSF and 250% TSF) compared to current conditions without TSP (Base Case TIDF).
- Table 9 summarizes the key prototype characteristics and findings that contribute to the sensitivity analysis results shown in Table 8 and the supporting tables.
- Tables 10.1 through 10.10 present the financial results for each prototype, comparing the total revenues and development costs under current conditions without TSP (Base Case TIDF) to each of the alternative TSF fee scenarios.

A. 125% TSF Scenario

Under the 125% TSF scenario, the TSF would increase by about $1.60/GSF for residential and about $3.60/GSF for non-residential development over the Base Case TSF, without consideration of any predevelopment savings or fee credits. Based on a typical residential unit size of 950 NSF, this translates to a potential increase in impact fees of about $9,200 per unit (or about $8/GSF) as compared to current conditions (Base Case TIDF) or about 1-2% of direct construction cost, depending on the type of construction and whether fee credits apply.

As described in the previous section, the proposed fees for non-residential development under the Base Case TSF scenario are about the same as the fees currently being charged (Base Case TIDF) on new development. Under the 125% TSF scenario, these fees would increase by about $4/GSF over current fee

levels. This would represent a direct construction cost increase of about 1% or less, depending on the type of construction and whether fee credits apply.[34]

The results of the sensitivity analysis indicate that the financial impact on new development for the 125% TSF scenario are similar to the results that were found at the Base Case TSF levels.

- The decrease in residual land values, with and without predevelopment savings, is less than or equal to -10% for all prototypes.
- With predevelopment savings, only Prototype 5 would receive CEQA streamlining benefits that would more than offset the increase in development costs with the TSP (showing a 2% increase in RLV for Prototype 5). The RLV with predevelopment savings for all of the other prototypes decreases by -1% to -8%.
- Without predevelopment savings, the greatest decrease in RLV occurs for residential development where area plan fee credits would not be applied (-10% for Prototype 9 in TCDP), and for residential projects located Outside Plan Areas or Inside Plan Areas where fee credits do not substantially offset the TSF (Prototypes 2, 3 and 8).

B. 150% TSF Scenario

Under the 150% TSF scenario, the TSF would increase by about $3.10/GSF for residential and about $ 7.20/GSF for non-residential development above the Base Case TSF level, without consideration of any predevelopment savings or fee credits.[35] For the majority of prototypes, the change in RLV with and without predevelopment savings is less than 10%. However, two prototypes are more heavily impacted by fees at the 150% TSF level: the change in RLV exceeds -10% for Prototype 2 (with and without predevelopment savings) and for Prototype 9 (without predevelopment savings). Thus, TSF levels at 150% of the Base Case TSF could inhibit development feasibility in some cases, particularly if revenues were not at pace with development costs and fee credits do not substantially offset the TSF.

C. 250% TSF Scenario

Under the 250% TSF scenario, the TSF would increase by about $9.30/GSF for residential and about $21.65/GSF for non-residential development above the Base Case TSF level, without consideration of any predevelopment savings or fee credits.[36] TSF levels at 250% could significantly inhibit development feasibility, as the residual land values for most of the prototypes would decrease by 10% or more, with or without predevelopment savings. These higher TSF levels would not be offset by potential CEQA streamlining benefits for any of the prototypes. This level of impact fee increase would substantially increase development costs and exceed the typical contingency allowances for potential increases in development costs that developers include in their development pro formas.

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[34] As previously described, TSF fee levels for non-residential land uses are proposed to be consolidated. Thus, the fee change differs slightly for retail and office, and non-residential uses are not eligible for area plan fee credits.

[35] Under this 150% TSF scenario, development costs would increase by about $9/GSF for residential and about $8/GSF for non-residential compared to current conditions (Base Case TIDF) without consideration of fee credits or predevelopment savings, or an increase of about 2-3% of direct construction costs depending on the type of construction and whether fee credits apply.

[36] Under this 250% TSF scenario, development costs would increase by about $15/GSF for residential and about $22/GSF for non-residential as compared to current conditions (Base Case TIDF) without consideration of fee credits or predevelopment savings, or an increase of about 4-6% of direct construction costs depending on the type of construction and whether fee credits apply.

VIII. Conclusion

The Transportation Sustainability Program is designed to fund transportation projects to serve new growth and help streamline the transportation component of the City's environmental review process. Overall, the TSF Economic Feasibility Study finds that the TSF does not significantly impact project viability at the Base Case TSF levels or at 125% of Base Case TSF, either with or without the anticipated predevelopment savings. New development in certain neighborhoods in the City that have lower than average price levels and rents may not be currently feasible given the high cost of construction relative to potential revenues. While the TSF itself will not cause these developments to be infeasible, the TSF further distances these areas from development feasibility.

The study also evaluated the impact of potential CEQA/LOS reform on development, which in some cases may partially or fully offset the impact of the TSF. Since transportation is only one of the potential environmental impacts to be analyzed during the environmental review process, the level of predevelopment savings a project will experience depends on whether or not CEQA/LOS reform results in substantial changes to the environmental review required. All projects that currently need to conduct a LOS analysis will experience modest economic benefits after this requirement is eliminated. For some projects, the benefit of CEQA/LOS reform will be more dramatic – in cases where the elimination of LOS analysis means that projects can undergo a lesser level of environmental review (for instance, going from a CPE plus Focused EIR to just a CPE), the potential time and cost savings are substantial.

For developments that do not currently need a transportation study (typically smaller developments), no direct predevelopment cost or time savings would likely occur as a result of CEQA/LOS reform. These developments would not receive a direct economic benefit from the TSP and would be subject to an increased impact fee burden under TSF. However, these types of developments may experience indirect benefits as CEQA/LOS reform may potentially shorten backlogs for City staff and streamline the environmental review process for all projects.

If the city's real estate market were to experience a downturn and future revenue growth is not sufficient to cover construction costs and other development costs, then financial feasibility of new development will become more difficult, and new development will be more sensitive to higher impact fees. For all of these reasons, the study findings indicate that the TSF should be initially established at no more than 125% of the Base Case TSF level.

Table 8. Sensitivity Analysis Evaluating Economic Impact Under Alternative TSF Levels

Prototype	Percentage Impact on Residual Land Values (RLV) as Compared to Base Case TIDF										
	Base Case TIDF (Financial Indicators)			TSF Scenarios With Predevelopment Savings				TSF Scenarios Without Predevelopment Savings			
	Revenues /NSF [1]	RLV/NSF	RLV as % of Revenues	Base Case TSF	125% TSF	150% TSF	250% TSF	Base Case TSF	125% TSF	150% TSF	250% TSF
1. Geary Ave (Small Res. Mixed-use)	$857	$193	23%	(3%)	(4%)	(6%)	(10%)	(3%)	(4%)	(6%)	(10%)
2. Van Ness Ave (Medium Res. Mixed-use)	$922	$97	10%	(7%)	(8%)	(10%)	(16%)	(7%)	(8%)	(10%)	(16%)
3.Outer Mission (Small Res. Mixed-use)	$719	$27	4%	(5%)	(6%)	(7%)	(12%)	(5%)	(6%)	(7%)	(12%)
4. Mission (Small Res. Mixed-use)	$904	$188	21%	(1%)	(1%)	(2%)	(3%)	(1%)	(1%)	(2%)	(3%)
5. Central Waterfront (Large Res. Mixed-use)	$892	$190	21%	3%	2%	2%	(0%)	(1%)	(2%)	(2%)	(4%)
6. East SoMa (Medium Res. Mixed-use)	$913	$130	14%	(2%)	(3%)	(4%)	(8%)	(2%)	(3%)	(4%)	(8%)
7. East SoMa (Large Office)	$855	$130	15%	2%	(1%)	(5%)	(17%)	(0%)	(3%)	(7%)	(19%)
8. East SoMa (Large Res. Mixed-use)	$1,046	$106	10%	(2%)	(4%)	(6%)	(13%)	(5%)	(7%)	(8%)	(16%)
9. Transit Center (Large Residential)	$1,275	$102	8%	(5%)	(7%)	(9%)	(17%)	(8%)	(10%)	(12%)	(20%)
10. Transit Center (Large Office)	$1,030	$134	13%	2%	(2%)	(5%)	(18%)	(0%)	(4%)	(7%)	(20%)

Notes: Please refer to supporting tables 10.1 to 10.10 for a summary of financial results for each prototype and attached appendices for more detailed results.

1. Revenues are equal to potential sales prices for condominiums or development values for rental property less sales expenses and assume compliance with San Francisco's affordable housing policies, as further described in Appendix A.

Table 9. Summary of Findings From TSF Sensitivity Analysis for Each Prototype

Prototype	Summary of Key Prototype Characteristics								Key Contributors to RLV Results Under TSF Sensitivity Scenarios
	Predominant Use	Affordable Housing	Retail	Building Height	Under Base Case TIDF [1]	Area Plan	Fee Credit	Potential Predevelopment Savings from CEQA/LOS Reform	
1. Geary Ave (Small Res. Mixed-use)	Residential Condominium	None	Ground Floor	45 Feet	Strong RLV	None	Prior Use	None	Strong RLV and prior use fee credit helps offset impact of TSF at all fee levels.
2. Van Ness Ave (Medium Res. Mixed-use)	Residential Condominium	Onsite	Ground Floor	80 Feet	Moderate RLV	None	Prior Use	None	While prior use fee credit helps offset impact of TSF, RLV is significantly reduced at 150% and 250% scenarios.
3. Outer Mission (Small Res. Mixed-use)	Residential Condominium	Onsite	Ground Floor	65 Feet	Low RLV (Development not likely feasible)	None	Prior Use	None	While prior use fee credit helps offset impact of TSF, lower revenues in this area coupled with higher, mid-rise construction costs hamper development feasibility.
4. Mission (Small Res. Mixed-use)	Residential Condominium	Onsite	Ground Floor	50 Feet	Strong RLV	Eastern Neighborhoods	Prior Use, Area Plan	None	Strong RLV and fee credits help offset impact of TSF at all fee levels.
5. Central Waterfront (Large Res. Mixed-use)	Residential Rental	Onsite	Ground Floor	65 Feet	Strong RLV	Eastern Neighborhoods	Prior Use, Area Plan	Significant	Strong RLV, predevelopment savings and fee credits help offset impact of TSF at all fee levels.
6. East SoMa (Medium Res. Mixed-use)	Residential Rental	Onsite	Ground Floor	85 Feet	Moderate RLV	Eastern Neighborhoods	Prior Use; Area Plan	None	Fee credits and moderate RLV help offset impact of TSF at all fee levels.
7. East SoMa (Large Office)	Office	Jobs-Housing Linkage Fee	Ground Floor	160 Feet	Moderate RLV	Eastern Neighborhoods	Prior Use	Moderate	Minimal impact at lower TSF levels as non-residential TIDF is close to Base Case TSF levels. TSF levels at 250% significantly reduce RLV.
8. East SoMa (Large Res. Mixed-use)	Residential Condominium	Onsite	Ground Floor	160 Feet	Moderate RLV	Eastern Neighborhoods	Prior Use, Area Plan	Moderate	Predevelopment savings help offset impact, but without predevelopment savings, TSF levels at 250% significantly reduce RLV despite fee credits.
9. Transit Center (Large Residential)	Residential Condominium	Affordable Housing Fee	None	400 Feet	Moderate RLV	Transit Center District Plan	None	Moderate	Predevelopment savings help offset impact, but without predevelopment savings, TSF levels at 150% and 250% significantly reduce RLV.
10. Transit Center (Large Office)	Office	Jobs-Housing Linkage Fee	Ground Floor	400 Feet	Moderate RLV	Transit Center District Plan	None	Moderate	Minimal impact at lower TSF levels as non-residential TIDF is close to Base Case TSF levels. TSF levels at 250% significantly reduce RLV.

Notes: Please refer to supporting tables 10.1 to 10.10 for a summary of financial results for each prototype and attached appendices for more detailed results.

1. Strong RLV indicates values exceeding 15% of revenues, Moderate RLV indicates values between about 5-15% of revenues, and Low RLV indicates values below 5% of revenues.

Table 10.1

Summary Comparison of Results at Alternate Fee Levels

Prototype 1: Geary Small Residential Mixed-use

1: Geary Small Res. Mixed-use	Base Case TIDF	Base Case TSF	% Change from Base	125% TSF	% Change from Base	150% TSF	% Change from Base	250% TSF	% Change from Base
Revenues									
Residential For-Sale	$7,900,200	$7,900,200	0%	$7,900,200	0%	$7,900,200	0%	$7,900,200	0%
Residential Rental	$0	$0	-	$0	-	$0	-	$0	-
Subtotal Residential	$7,900,200	$7,900,200	0%	$7,900,200	0%	$7,900,200	0%	$7,900,200	0%
Office	$0	$0	-	$0	-	$0	-	$0	-
Retail	$870,900	$870,900	0%	$870,900	0%	$870,900	0%	$870,900	0%
Total Revenues	**$8,771,100**	**$8,771,100**	0%	**$8,771,100**	0%	**$8,771,100**	0%	**$8,771,100**	0%
Hard and Soft Costs									
Hard Construction Costs	$3,788,400	$3,788,400	0%	$3,788,400	0%	$3,788,400	0%	$3,788,400	0%
Tenant Improvements/Lease Up Costs	$144,000	$144,000	0%	$144,000	0%	$144,000	0%	$144,000	0%
Development Impact Fees/ Other Costs	$64,700	$134,600	108%	$156,800	142%	$179,000	177%	$267,800	314%
Environmental/ Transportation Review	$9,000	$9,000	0%	$9,000	0%	$9,000	0%	$9,000	0%
Construction Financing/ Predev. Carry	$364,300	$364,300	0%	$364,300	0%	$364,300	0%	$364,300	0%
Other Soft Costs	$947,100	$947,100	0%	$947,100	0%	$947,100	0%	$947,100	0%
Total Hard and Soft Costs	**$5,317,500**	**$5,387,400**	1%	**$5,409,600**	2%	**$5,431,800**	2%	**$5,520,600**	4%
Developer Margin	$1,403,400	$1,403,400	0%	$1,403,400	0%	$1,403,400	0%	$1,403,400	0%
Total Costs	**$6,720,900**	**$6,790,800**	1%	**$6,813,000**	1%	**$6,835,200**	2%	**$6,924,000**	3%
Residual Land Value (RLV)	**$2,050,200**	**$1,980,300**	(3%)	**$1,958,100**	(4%)	**$1,935,900**	(6%)	**$1,847,100**	(10%)
Without Predevelopment Savings	***$2,050,200***	***$1,980,300***	(3%)	***$1,958,100***	(4%)	***$1,935,900***	(6%)	***$1,847,100***	(10%)
RLV as Percent of Revenues	*23%*	*23%*		*19%*		*19%*		*19%*	
Without Predevelopment Savings	*23%*	*23%*		*19%*		*19%*		*19%*	

Note: Development Impact Fees/ Other Costs include all applicable impact fees (including TIDF or TSF), plus any upfront developer payment for TDR purchase and Mello Roos special tax.

Table 10.2

Summary Comparison of Results at Alternate Fee Levels

Prototype 2: Van Ness Medium Residential Mixed-use

2: Van Ness Medium Res. Mixed-use	Base Case TIDF	Base Case TSF	% Change from Base	125% TSF	% Change from Base	150% TSF	% Change from Base	250% TSF	% Change from Base
Revenues									
Residential For-Sale	$56,819,600	$56,819,600	0%	$56,819,600	0%	$56,819,600	0%	$56,819,600	0%
Residential Rental	$0	$0	-	$0	-	$0	-	$0	-
Subtotal Residential	$56,819,600	$56,819,600	0%	$56,819,600	0%	$56,819,600	0%	$56,819,600	0%
Office	$0	$0	-	$0	-	$0	-	$0	-
Retail	$5,740,900	$5,740,900	0%	$5,740,900	0%	$5,740,900	0%	$5,740,900	0%
Total Revenues	**$62,560,500**	**$62,560,500**	0%	**$62,560,500**	0%	**$62,560,500**	0%	**$62,560,500**	0%
Hard and Soft Costs									
Hard Construction Costs	$31,216,600	$31,216,600	0%	$31,216,600	0%	$31,216,600	0%	$31,216,600	0%
Tenant Improvements/Lease Up Costs	$808,700	$808,700	0%	$808,700	0%	$808,700	0%	$808,700	0%
Development Impact Fees/ Other Costs	$403,600	$862,500	114%	$977,400	142%	$1,092,300	171%	$1,551,200	284%
Environmental/ Transportation Review	$188,000	$188,000	0%	$188,000	0%	$188,000	0%	$188,000	0%
Construction Financing/ Predev. Carry	$3,235,600	$3,235,600	0%	$3,235,600	0%	$3,235,600	0%	$3,235,600	0%
Other Soft Costs	$7,804,200	$7,804,200	0%	$7,804,200	0%	$7,804,200	0%	$7,804,200	0%
Total Hard and Soft Costs	**$43,656,700**	**$44,115,600**	1%	**$44,230,500**	1%	**$44,345,400**	2%	**$44,804,300**	3%
Developer Margin	$11,886,500	$11,886,500	0%	$11,886,500	0%	$11,886,500	0%	$11,886,500	0%
Total Costs	**$55,543,200**	**$56,002,100**	1%	**$56,117,000**	1%	**$56,231,900**	1%	**$56,690,800**	2%
Residual Land Value (RLV)	**$7,017,300**	**$6,558,400**	(7%)	**$6,443,500**	(8%)	**$6,328,600**	(10%)	**$5,869,700**	(16%)
Without Predevelopment Savings	***$7,017,300***	***$6,558,400***	(7%)	***$6,443,500***	(8%)	***$6,328,600***	(10%)	***$5,869,700***	(16%)
RLV as Percent of Revenues	*11%*	*10%*		*10%*		*10%*		*9%*	
Without Predevelopment Savings	*11%*	*10%*		*10%*		*10%*		*9%*	

Note: Development Impact Fees/ Other Costs include all applicable impact fees (including TIDF or TSF), plus any upfront developer payment for TDR purchase and Mello Roos special tax.

Table 10.3

Summary Comparison of Results at Alternate Fee Levels
Prototype 3: Outer Mission Small Residential Mixed-use

3. Outer Mission Small Res. Mixed-use	Base Case TIDF	Base Case TSF	% Change from Base	125% TSF	% Change from Base	150% TSF	% Change from Base	250% TSF	% Change from Base
Revenues									
Residential For-Sale	$21,895,900	$21,895,900	0%	$21,895,900	0%	$21,895,900	0%	$21,895,900	0%
Residential Rental	$0	$0	-	$0	-	$0	-	$0	-
Subtotal Residential	$21,895,900	$21,895,900	0%	$21,895,900	0%	$21,895,900	0%	$21,895,900	0%
Office	$0	$0	-	$0	-	$0	-	$0	-
Retail	$1,739,400	$1,739,400	0%	$1,739,400	0%	$1,739,400	0%	$1,739,400	0%
Total Revenues	**$23,635,300**	**$23,635,300**	**0%**	**$23,635,300**	**0%**	**$23,635,300**	**0%**	**$23,635,300**	**0%**
Hard and Soft Costs									
Hard Construction Costs	$13,594,400	$13,594,400	0%	$13,594,400	0%	$13,594,400	0%	$13,594,400	0%
Tenant Improvements/Lease Up Costs	$287,600	$287,600	0%	$287,600	0%	$287,600	0%	$287,600	0%
Development Impact Fees/ Other Costs	$201,100	$243,500	21%	$254,200	26%	$264,800	32%	$307,300	53%
Environmental/ Transportation Review	$27,000	$27,000	0%	$27,000	0%	$27,000	0%	$27,000	0%
Construction Financing/ Predev. Carry	$1,188,000	$1,188,000	0%	$1,188,000	0%	$1,188,000	0%	$1,188,000	0%
Other Soft Costs	$3,398,600	$3,398,600	0%	$3,398,600	0%	$3,398,600	0%	$3,398,600	0%
Total Hard and Soft Costs	**$18,696,700**	**$18,739,100**	**0%**	**$18,749,800**	**0%**	**$18,760,400**	**0%**	**$18,802,900**	**1%**
Developer Margin	$4,018,000	$4,018,000	0%	$4,018,000	0%	$4,018,000	0%	$4,018,000	0%
Total Costs	**$22,714,700**	**$22,757,100**	**0%**	**$22,767,800**	**0%**	**$22,778,400**	**0%**	**$22,820,900**	**0%**
Residual Land Value (RLV)	**$920,600**	**$878,200**	**(5%)**	**$867,500**	**(6%)**	**$856,900**	**(7%)**	**$814,400**	**(12%)**
Without Predevelopment Savings	***$920,600***	***$878,200***	**(5%)**	***$867,500***	**(6%)**	***$856,900***	**(7%)**	***$814,400***	**(12%)**
RLV as Percent of Revenues	*4%*	*4%*		*4%*		*4%*		*3%*	
Without Predevelopment Savings	*4%*	*4%*		*4%*		*4%*		*3%*	

Note: Development Impact Fees/ Other Costs include all applicable impact fees (including TIDF or TSF), plus any upfront developer payment for TDR purchase and Mello Roos special tax.

Table 10.4

Summary Comparison of Results at Alternate Fee Levels
Prototype 4: Mission Small Residential Mixed-use

4: Mission Small Res. Mixed-use	Base Case TIDF	Base Case TSF	% Change from Base	125% TSF	% Change from Base	150% TSF	% Change from Base	250% TSF	% Change from Base
Revenues									
Residential For-Sale	$13,445,800	$13,445,800	0%	$13,445,800	0%	$13,445,800	0%	$13,445,800	0%
Residential Rental	$0	$0	-	$0	-	$0	-	$0	-
Subtotal Residential	$13,445,800	$13,445,800	0%	$13,445,800	0%	$13,445,800	0%	$13,445,800	0%
Office	$0	$0	-	$0	-	$0	-	$0	-
Retail	$1,530,900	$1,530,900	0%	$1,530,900	0%	$1,530,900	0%	$1,530,900	0%
Total Revenues	**$14,976,700**	**$14,976,700**	**0%**	**$14,976,700**	**0%**	**$14,976,700**	**0%**	**$14,976,700**	**0%**
Hard and Soft Costs									
Hard Construction Costs	$6,614,500	$6,614,500	0%	$6,614,500	0%	$6,614,500	0%	$6,614,500	0%
Tenant Improvements/Lease Up Costs	$225,000	$225,000	0%	$225,000	0%	$225,000	0%	$225,000	0%
Development Impact Fees/ Other Costs	$270,000	$293,600	9%	$307,600	14%	$321,500	19%	$377,200	40%
Environmental/ Transportation Review	$11,000	$11,000	0%	$11,000	0%	$11,000	0%	$11,000	0%
Construction Financing/ Predev. Carry	$665,600	$665,600	0%	$665,600	0%	$665,600	0%	$665,600	0%
Other Soft Costs	$1,653,600	$1,653,600	0%	$1,653,600	0%	$1,653,600	0%	$1,653,600	0%
Total Hard and Soft Costs	**$9,439,700**	**$9,463,300**	**0%**	**$9,477,300**	**0%**	**$9,491,200**	**1%**	**$9,546,900**	**1%**
Developer Margin	$2,396,300	$2,396,300	0%	$2,396,300	0%	$2,396,300	0%	$2,396,300	0%
Total Costs	**$11,836,000**	**$11,859,600**	**0%**	**$11,873,600**	**0%**	**$11,887,500**	**0%**	**$11,943,200**	**1%**
Residual Land Value (RLV)	**$3,140,700**	**$3,117,100**	**(1%)**	**$3,103,100**	**(1%)**	**$3,089,200**	**(2%)**	**$3,033,500**	**(3%)**
Without Predevelopment Savings	***$3,140,700***	***$3,117,100***	**(1%)**	***$3,103,100***	**(1%)**	***$3,089,200***	**(2%)**	***$3,033,500***	**(3%)**
RLV as Percent of Revenues	*21%*	*21%*		*21%*		*21%*		*20%*	
Without Predevelopment Savings	*21%*	*21%*		*21%*		*21%*		*20%*	

Note: Development Impact Fees/ Other Costs include all applicable impact fees (including TIDF or TSF), plus any upfront developer payment for TDR purchase and Mello Roos special tax.

Table 10.5

Summary Comparison of Results at Alternate Fee Levels

Prototype 5: Central Waterfront Large Residential Mixed-use

5: Central Waterfront Large Res. MU	Base Case TIDF	Base Case TSF	% Change from Base	125% TSF	% Change from Base	150% TSF	% Change from Base	250% TSF	% Change from Base
Revenues									
Residential For-Sale	$0	$0	-	$0	-	$0	-	$0	-
Residential Rental	$106,807,000	$106,807,000	0%	$106,807,000	0%	$106,807,000	0%	$106,807,000	0%
Subtotal Residential	$106,807,000	$106,807,000	0%	$106,807,000	0%	$106,807,000	0%	$106,807,000	0%
Office	$0	$0	-	$0	-	$0	-	$0	-
Retail	$3,126,600	$3,126,600	0%	$3,126,600	0%	$3,126,600	0%	$3,126,600	0%
Total Revenues	**$109,933,600**	**$109,933,600**	0%	**$109,933,600**	0%	**$109,933,600**	0%	**$109,933,600**	0%
Hard and Soft Costs									
Hard Construction Costs	$50,999,200	$50,999,200	0%	$50,999,200	0%	$50,999,200	0%	$50,999,200	0%
Tenant Improvements/Lease Up Costs	$450,000	$450,000	0%	$450,000	0%	$450,000	0%	$450,000	0%
Development Impact Fees/ Other Costs	$2,421,400	$2,671,300	10%	$2,777,100	15%	$2,882,700	19%	$3,304,500	36%
Environmental/ Transportation Review	$683,000	$122,000	(82%)	$122,000	(82%)	$122,000	(82%)	$122,000	(82%)
Construction Financing/ Predev. Carry	$4,642,300	$4,367,400	(6%)	$4,367,400	(6%)	$4,367,400	(6%)	$4,367,400	(6%)
Other Soft Costs	$9,179,900	$9,179,900	0%	$9,179,900	0%	$9,179,900	0%	$9,179,900	0%
Total Hard and Soft Costs	**$68,375,800**	**$67,789,800**	(1%)	**$67,895,600**	(1%)	**$68,001,200**	(1%)	**$68,423,000**	0%
Developer Margin	$18,688,700	$18,688,700	0%	$18,688,700	0%	$18,688,700	0%	$18,688,700	0%
Total Costs	**$87,064,500**	**$86,478,500**	(1%)	**$86,584,300**	(1%)	**$86,689,900**	0%	**$87,111,700**	0%
Residual Land Value (RLV)	**$22,869,100**	**$23,455,100**	3%	**$23,349,300**	2%	**$23,243,700**	2%	**$22,821,900**	0%
Without Predevelopment Savings	***$22,869,100***	***$22,619,200***	(1%)	***$22,513,400***	(2%)	***$22,407,800***	(2%)	***$21,986,000***	(4%)
RLV as Percent of Revenues	*21%*	*21%*		*21%*		*21%*		*21%*	
Without Predevelopment Savings	*21%*	*21%*		*20%*		*20%*		*20%*	

Note: Development Impact Fees/ Other Costs include all applicable impact fees (including TIDF or TSF), plus any upfront developer payment for TDR purchase and Mello Roos special tax.

Table 10.6

Summary Comparison of Results at Alternate Fee Levels

Prototype 6: East SoMa Medium Residential Mixed-use

6: East SoMa Medium Res. Mixed-use	Base Case TIDF	Base Case TSF	% Change from Base	125% TSF	% Change from Base	150% TSF	% Change from Base	250% TSF	% Change from Base
Revenues									
Residential For-Sale	$0	$0	-	$0	-	$0	-	$0	-
Residential Rental	$40,092,100	$40,092,100	0%	$40,092,100	0%	$40,092,100	0%	$40,092,100	0%
Subtotal Residential	$40,092,100	$40,092,100	0%	$40,092,100	0%	$40,092,100	0%	$40,092,100	0%
Office	$0	$0	-	$0	-	$0	-	$0	-
Retail	$3,382,800	$3,382,800	0%	$3,382,800	0%	$3,382,800	0%	$3,382,800	0%
Total Revenues	**$43,474,900**	**$43,474,900**	0%	**$43,474,900**	0%	**$43,474,900**	0%	**$43,474,900**	0%
Hard and Soft Costs									
Hard Construction Costs	$21,266,900	$21,266,900	0%	$21,266,900	0%	$21,266,900	0%	$21,266,900	0%
Tenant Improvements/Lease Up Costs	$450,000	$450,000	0%	$450,000	0%	$450,000	0%	$450,000	0%
Development Impact Fees/ Other Costs	$1,443,400	$1,571,000	9%	$1,637,100	13%	$1,703,100	18%	$1,966,900	36%
Environmental/ Transportation Review	$119,000	$119,000	0%	$119,000	0%	$119,000	0%	$119,000	0%
Construction Financing/ Predev. Carry	$1,768,300	$1,768,300	0%	$1,768,300	0%	$1,768,300	0%	$1,768,300	0%
Other Soft Costs	$3,828,000	$3,828,000	0%	$3,828,000	0%	$3,828,000	0%	$3,828,000	0%
Total Hard and Soft Costs	**$28,875,600**	**$29,003,200**	0%	**$29,069,300**	1%	**$29,135,300**	1%	**$29,399,100**	2%
Developer Margin	$8,260,200	$8,260,200	0%	$8,260,200	0%	$8,260,200	0%	$8,260,200	0%
Total Costs	**$37,135,800**	**$37,263,400**	0%	**$37,329,500**	1%	**$37,395,500**	1%	**$37,659,300**	1%
Residual Land Value (RLV)	**$6,339,100**	**$6,211,500**	(2%)	**$6,145,400**	(3%)	**$6,079,400**	(4%)	**$5,815,600**	(8%)
Without Predevelopment Savings	***$6,339,100***	***$6,211,500***	(2%)	***$6,145,400***	(3%)	***$6,079,400***	(4%)	***$5,815,600***	(8%)
RLV as Percent of Revenues	*15%*	*14%*		*14%*		*14%*		*13%*	
Without Predevelopment Savings	*15%*	*14%*		*14%*		*14%*		*13%*	

Note: Development Impact Fees/ Other Costs include all applicable impact fees (including TIDF or TSF), plus any upfront developer payment for TDR purchase and Mello Roos special tax.

Table 10.7

Summary Comparison of Results at Alternate Fee Levels

Prototype 7: East SoMa Large Office

7: East SoMa Large Office	Base Case TIDF	Base Case TSF	% Change from Base	125% TSF	% Change from Base	150% TSF	% Change from Base	250% TSF	% Change from Base
Revenues									
Residential For-Sale	$0	$0	-	$0	-	$0	-	$0	-
Residential Rental	$0	$0	-	$0	-	$0	-	$0	-
Subtotal Residential	$0	$0	-	$0	-	$0	-	$0	-
Office	$174,558,100	$174,558,100	0%	$174,558,100	0%	$174,558,100	0%	$174,558,100	0%
Retail	$17,231,000	$17,231,000	0%	$17,231,000	0%	$17,231,000	0%	$17,231,000	0%
Total Revenues	**$191,789,100**	**$191,789,100**	0%	**$191,789,100**	0%	**$191,789,100**	0%	**$191,789,100**	0%
Hard and Soft Costs									
Hard Construction Costs	$73,265,500	$73,265,500	0%	$73,265,500	0%	$73,265,500	0%	$73,265,500	0%
Tenant Improvements/Lease Up Costs	$19,410,500	$19,410,500	0%	$19,410,500	0%	$19,410,500	0%	$19,410,500	0%
Development Impact Fees/ Other Costs	$14,705,700	$14,828,400	1%	$15,706,700	7%	$16,585,000	13%	$20,095,800	37%
Environmental/ Transportation Review	$979,000	$884,000	(10%)	$884,000	(10%)	$884,000	(10%)	$884,000	(10%)
Construction Financing/ Predev. Carry	$10,831,600	$10,352,100	(4%)	$10,352,100	(4%)	$10,352,100	(4%)	$10,352,100	(4%)
Other Soft Costs	$13,187,800	$13,187,800	0%	$13,187,800	0%	$13,187,800	0%	$13,187,800	0%
Total Hard and Soft Costs	**$132,380,100**	**$131,928,300**	0%	**$132,806,600**	0%	**$133,684,900**	1%	**$137,195,700**	4%
Developer Margin	$30,686,300	$30,686,300	0%	$30,686,300	0%	$30,686,300	0%	$30,686,300	0%
Total Costs	**$163,066,400**	**$162,614,600**	0%	**$163,492,900**	0%	**$164,371,200**	1%	**$167,882,000**	3%
Residual Land Value (RLV)	**$28,722,700**	**$29,174,500**	2%	**$28,296,200**	(1%)	**$27,417,900**	(5%)	**$23,907,100**	(17%)
Without Predevelopment Savings	***$28,722,700***	***$28,600,000***	0%	***$27,721,700***	(3%)	***$26,843,400***	(7%)	***$23,332,600***	(19%)
RLV as Percent of Revenues	*15%*	*15%*		*15%*		*14%*		*12%*	
Without Predevelopment Savings	*15%*	*15%*		*14%*		*14%*		*12%*	

Note: Development Impact Fees/ Other Costs include all applicable impact fees (including TIDF or TSF), plus any upfront developer payment for TDR purchase and Mello Roos special tax.

Table 10.8

Summary Comparison of Results at Alternate Fee Levels

Prototype 8: East SoMa Large Residential Mixed-use

8: East SoMa Large Res. Mixed-use	Base Case TIDF	Base Case TSF	% Change from Base	125% TSF	% Change from Base	150% TSF	% Change from Base	250% TSF	% Change from Base
Revenues									
Residential For-Sale	$127,277,500	$127,277,500	0%	$127,277,500	0%	$127,277,500	0%	$127,277,500	0%
Residential Rental	$0	$0	-	$0	-	$0	-	$0	-
Subtotal Residential	$127,277,500	$127,277,500	0%	$127,277,500	0%	$127,277,500	0%	$127,277,500	0%
Office	$0	$0	-	$0	-	$0	-	$0	-
Retail	$5,162,500	$5,162,500	0%	$5,162,500	0%	$5,162,500	0%	$5,162,500	0%
Total Revenues	**$132,440,000**	**$132,440,000**	0%	**$132,440,000**	0%	**$132,440,000**	0%	**$132,440,000**	0%
Hard and Soft Costs									
Hard Construction Costs	$60,567,200	$60,567,200	0%	$60,567,200	0%	$60,567,200	0%	$60,567,200	0%
Tenant Improvements/Lease Up Costs	$675,000	$675,000	0%	$675,000	0%	$675,000	0%	$675,000	0%
Development Impact Fees/ Other Costs	$3,917,200	$4,556,400	16%	$4,817,200	23%	$5,077,900	30%	$6,119,300	56%
Environmental/ Transportation Review	$144,000	$119,000	(17%)	$119,000	(17%)	$119,000	(17%)	$119,000	(17%)
Construction Financing/ Predev. Carry	$9,179,700	$8,848,600	(4%)	$8,848,600	(4%)	$8,848,600	(4%)	$8,848,600	(4%)
Other Soft Costs	$15,141,800	$15,141,800	0%	$15,141,800	0%	$15,141,800	0%	$15,141,800	0%
Total Hard and Soft Costs	**$89,624,900**	**$89,908,000**	0%	**$90,168,800**	1%	**$90,429,500**	1%	**$91,470,900**	2%
Developer Margin	$29,136,800	$29,136,800	0%	$29,136,800	0%	$29,136,800	0%	$29,136,800	0%
Total Costs	**$118,761,700**	**$119,044,800**	0%	**$119,305,600**	0%	**$119,566,300**	1%	**$120,607,700**	2%
Residual Land Value (RLV)	**$13,678,300**	**$13,395,200**	(2%)	**$13,134,400**	(4%)	**$12,873,700**	(6%)	**$11,832,300**	(13%)
Without Predevelopment Savings	***$13,678,300***	***$13,039,100***	(5%)	***$12,778,300***	(7%)	***$12,517,600***	(8%)	***$11,476,200***	(16%)
RLV as Percent of Revenues	*10%*	*10%*		*10%*		*10%*		*9%*	
Without Predevelopment Savings	*10%*	*10%*		*10%*		*9%*		*9%*	

Note: Development Impact Fees/ Other Costs include all applicable impact fees (including TIDF or TSF), plus any upfront developer payment for TDR purchase and Mello Roos special tax.

Table 10.9

Summary Comparison of Results at Alternate Fee Levels

Prototype 9: Transit Center Large Residential

9: Transit Center Large Residential	Base Case TIDF	Base Case TSF	% Change from Base	125% TSF	% Change from Base	150% TSF	% Change from Base	250% TSF	% Change from Base
Revenues									
Residential For-Sale	$307,630,600	$307,630,600	0%	$307,630,600	0%	$307,630,600	0%	$307,630,600	0%
Residential Rental	$0	$0	-	$0	-	$0	-	$0	-
Subtotal Residential	$307,630,600	$307,630,600	0%	$307,630,600	0%	$307,630,600	0%	$307,630,600	0%
Office	$0	$0	-	$0	-	$0	-	$0	-
Retail	$0	$0	-	$0	-	$0	-	$0	-
Total Revenues	**$307,630,600**	**$307,630,600**	**0%**	**$307,630,600**	**0%**	**$307,630,600**	**0%**	**$307,630,600**	**0%**
Hard and Soft Costs									
Hard Construction Costs	$132,220,000	$132,220,000	0%	$132,220,000	0%	$132,220,000	0%	$132,220,000	0%
Tenant Improvements/Lease Up Costs	$0	$0	-	$0	-	$0	-	$0	-
Development Impact Fees/ Other Costs	$22,389,200	$24,448,900	9%	$24,964,700	12%	$25,480,400	14%	$27,540,200	23%
Environmental/ Transportation Review	$149,000	$124,000	(17%)	$124,000	(17%)	$124,000	(17%)	$124,000	(17%)
Construction Financing/ Predev. Carry	$26,246,300	$25,477,200	(3%)	$25,477,200	(3%)	$25,477,200	(3%)	$25,477,200	(3%)
Other Soft Costs	$33,055,000	$33,055,000	0%	$33,055,000	0%	$33,055,000	0%	$33,055,000	0%
Total Hard and Soft Costs	**$214,059,500**	**$215,325,100**	**1%**	**$215,840,900**	**1%**	**$216,356,600**	**1%**	**$218,416,400**	**2%**
Developer Margin	$67,678,700	$67,678,700	0%	$67,678,700	0%	$67,678,700	0%	$67,678,700	0%
Total Costs	**$281,738,200**	**$283,003,800**	**0%**	**$283,519,600**	**1%**	**$284,035,300**	**1%**	**$286,095,100**	**2%**
Residual Land Value (RLV)	**$25,892,400**	**$24,626,800**	**(5%)**	**$24,111,000**	**(7%)**	**$23,595,300**	**(9%)**	**$21,535,500**	**(17%)**
Without Predevelopment Savings	***$25,892,400***	***$23,832,700***	**(8%)**	***$23,316,900***	**(10%)**	***$22,801,200***	**(12%)**	***$20,741,400***	**(20%)**
RLV as Percent of Revenues	*8%*	*8%*		*8%*		*8%*		*7%*	
Without Predevelopment Savings	*8%*	*8%*		*8%*		*7%*		*7%*	

Note: Development Impact Fees/ Other Costs include all applicable impact fees (including TIDF or TSF), plus any upfront developer payment for TDR purchase and Mello Roos special tax.

Table 10.10

Summary Comparison of Results at Alternate Fee Levels

Prototype 10: Transit Center Large Office

10: Transit Center Large Office	Base Case TIDF	Base Case TSF	% Change from Base	125% TSF	% Change from Base	150% TSF	% Change from Base	250% TSF	% Change from Base
Revenues									
Residential For-Sale	$0	$0	-	$0	-	$0	-	$0	-
Residential Rental	$0	$0	-	$0	-	$0	-	$0	-
Subtotal Residential	$0	$0	-	$0	-	$0	-	$0	-
Office	$319,920,700	$319,920,700	0%	$319,920,700	0%	$319,920,700	0%	$319,920,700	0%
Retail	$9,881,600	$9,881,600	0%	$9,881,600	0%	$9,881,600	0%	$9,881,600	0%
Total Revenues	**$329,802,300**	**$329,802,300**	**0%**	**$329,802,300**	**0%**	**$329,802,300**	**0%**	**$329,802,300**	**0%**
Hard and Soft Costs									
Hard Construction Costs	$127,821,800	$127,821,800	0%	$127,821,800	0%	$127,821,800	0%	$127,821,800	0%
Tenant Improvements/Lease Up Costs	$32,030,000	$32,030,000	0%	$32,030,000	0%	$32,030,000	0%	$32,030,000	0%
Development Impact Fees/ Other Costs	$30,290,600	$30,495,800	1%	$31,884,600	5%	$33,273,300	10%	$38,824,600	28%
Environmental/ Transportation Review	$249,200	$199,200	(20%)	$199,200	(20%)	$199,200	(20%)	$199,200	(20%)
Construction Financing/ Predev. Carry	$21,445,700	$20,621,200	(4%)	$20,621,200	(4%)	$20,621,200	(4%)	$20,621,200	(4%)
Other Soft Costs	$23,007,900	$23,007,900	0%	$23,007,900	0%	$23,007,900	0%	$23,007,900	0%
Total Hard and Soft Costs	**$234,845,200**	**$234,175,900**	**0%**	**$235,564,700**	**0%**	**$236,953,400**	**1%**	**$242,504,700**	**3%**
Developer Margin	$52,768,400	$52,768,400	0%	$52,768,400	0%	$52,768,400	0%	$52,768,400	0%
Total Costs	**$287,613,600**	**$286,944,300**	**0%**	**$288,333,100**	**0%**	**$289,721,800**	**1%**	**$295,273,100**	**3%**
Residual Land Value (RLV)	**$42,188,700**	**$42,858,000**	**2%**	**$41,469,200**	**(2%)**	**$40,080,500**	**(5%)**	**$34,529,200**	**(18%)**
Without Predevelopment Savings	***$42,188,700***	***$41,983,500***	**0%**	***$40,594,700***	**(4%)**	***$39,206,000***	**(7%)**	***$33,654,700***	**(20%)**
RLV as Percent of Revenues	*13%*	*13%*		*13%*		*12%*		*10%*	
Without Predevelopment Savings	*13%*	*13%*		*12%*		*12%*		*10%*	

Note: Development Impact Fees/ Other Costs include all applicable impact fees (including TIDF or TSF), plus any upfront developer payment for TDR purchase and Mello Roos special tax.

Appendices

- Appendix A: Methodology and Sources
- Appendix Tables A-1 through A-10: Summary Results by Prototype
- Appendix Tables B-1 through B-10: Summary Financial Pro Forma by Prototype
- Appendix Tables C-1 through C-2: Development Revenue and Cost Assumptions by Prototype

Appendix A: Methodology and Sources

This appendix summarizes the methodology and sources used to evaluate the potential impact of the proposed Transportation Sustainability Program (TSP) on prototypical development types (prototypes) commonly found in San Francisco. As described in the main body of the report, a land residual analysis was performed to evaluate how the proposed Transportation Sustainability Fee (TSF) would increase development costs and affect overall development feasibility, as measured by changes in residual land value (RLV). This analysis also examines and models the potential economic benefits of streamlining the City's environmental review process as a result of California Environmental Quality Act (CEQA)/Level of Service (LOS) reform, which could result in predevelopment time and cost savings.

The financial analysis evaluates each prototype assuming that predevelopment cost and time savings would or would not occur as a result of TSP (with and without predevelopment savings). This reflects the possibility that no CEQA streamlining could occur if another type of environmental topic area (such as historic resources) would result in further intensification of environmental review.

Working in close collaboration with City staff, Seifel performed the following steps, each of which is further described below:

A. Selection of Prototypes
B. Preparation of Residual Land Value (RLV) Models
C. Overview of Development Assumptions for RLV Analysis
D. Information Sources

The following tables are included within this appendix and present the financial results for each prototype and the key development assumptions for each prototype used in the analysis:

- Appendix Tables A-1 through A-10 present the summary results for each prototype.
- Appendix Tables B-1 through B-10 present the summary financial pro forma for each prototype.
- Appendix Tables C-1 through C-2 present the development revenue and cost assumptions for each prototype.

A. Selection of Prototypes

A variety of prototypical development types (prototypes) were evaluated for potential inclusion in the study, based on a review of development pipeline data and an analysis of infill sites that may be suitable for development (that are either currently vacant or with existing buildings that are 1-2 stories tall). Based on a comprehensive analysis of prototypical projects, 10 prototypes were selected for analysis, representing a variety of lot sizes, building heights, development sizes, land use, zoning designations and locations. Eight of these prototypes are residential (seven of which are mixed-use with retail on the ground floor) and two are office prototypes (each with retail on the ground floor). Chapter IV of this report summarizes the key characteristics of each of these prototypes.

1. Definition of Development Program

A customized development program for each prototype was developed based on a typical site within a geographic area, which is considered to be generally representative of development opportunities in

that area.[1] The lot size and an assumed zoning designation were used to a) calculate the potential building envelope, b) define what would likely be built on the ground floor and on the upper floors, c) determine the likely location and number of parking spaces (including the potential use of stackers) and d) estimate gross and net building square footage, after taking account for key building requirements, including rear and/or side yard set backs that reduce the building footprint and vertical building step backs that reduce floor plates as the building increases in height. A brief overview of the prototypical building types, building efficiencies and parking is summarized below.

a. Building/Construction Type

Five building types, organized by height and construction type, encompass the majority of developments being built in San Francisco, and two prototypes were analyzed for each of these five building types:

- **Low-Rise 40-58 Feet**: Has the greatest geographic presence throughout the City and the greatest variety in size of development. Most Low-Rise development is residential, ranging from small projects with 5 or fewer units to large, 200-unit projects. Residential mixed-use Prototypes 1 and 4 represent this type of construction.
- **Mid-Rise 65-68 Feet**: Has become more prevalent in the City, particularly in the easternmost neighborhoods that are in Area Plans. Development for this building type is predominately residential (typically with 20 units or more) but some smaller office buildings are being built at this height. Residential mixed-use Prototypes 3 and 5 represent this type of construction.
- **Mid-Rise 80-85 Feet**: Has also become more prevalent in the easternmost neighborhoods. Development for this building type is predominately residential (typically with 50 units or more) but some smaller office buildings are being built at this height. Residential mixed-use Prototypes 2 and 6 represent this type of construction.
- **High-Rise 120-160 Feet**: Primarily allowed in the downtown, eastern SoMa and Mission Bay areas, and both office and residential buildings are being developed at this height. Office Prototype 7 and residential mixed-use Prototype 8 represent this type of construction.
- **High-Rise Above 240 Feet**: Only allowed in a few neighborhoods, primarily in the financial district and eastern SoMa areas. Residential Prototype 9 and office Prototype 10 represent this type of construction, both assumed to be located in the Transit Center District Plan Area.

b. Building Efficiency

Building efficiency refers to the percentage of building square footage that is sellable or rentable (net square footage or NSF) as compared to overall gross building square feet (GSF), reflecting a deduction for common area space such as lobbies, hallways and community spaces. Smaller projects tend to have lower efficiencies due to the high proportion of common area, and high-rise projects also tend to have lower efficiencies due to life safety measures and slim building profiles. Building efficiencies range from 73 percent (%) to 80% for the residential prototypes, with high-rise construction being the least efficient. Building efficiencies for the office prototypes range from 83% to 90%.[2]

[1] Although soft sites were analyzed in order to develop and test key development assumptions related to development capacity, the prototypes are designed to generally reflect what may be developed within each area (e.g. Prototype 1 reflects what might be prototypically developed along Geary Avenue).

[2] For the purposes of this analysis, the calculated building efficiencies were used to represent the leasable square footage for both residential and office uses. In the case of office, this is likely a conservative assumption as often a portion of common area, such as bathrooms, are included within the leasable area that is used to calculate the rent a tenant must pay. Based on a review of the development pro formas and discussions with office developers, the assumed efficiencies are within the range of what is typically being used by developers.

c. Parking

Building heights, the number of units and the applicable zoning requirements for parking affect the overall amount of parking provided and parking related construction costs. In order to best represent the variety of parking development options currently being utilized, the prototypes include parking that is constructed at-grade (podium parking) and below grade (underground parking). In recent years, developers have been increasingly using mechanical lift equipment that enables multiple parking spaces to be located in the same parking space footprint, referred to as parking "stackers." In addition, the ratio of parking spaces per unit/SF has decreased over the past decade as a result of changes in City zoning, as well as changes in consumer preference and development feasibility.

Based on these factors, only the Low-Rise Residential Mixed-Use Prototypes 1 and 4 have a parking ratio of 1.0 parking space per unit with the remaining residential prototypes having parking ratios ranging from 0.5 to 0.75 parking spaces per unit. Given their assumed zoning, parking square footage in the two office prototypes is limited to 7% of the gross floor area.

B. Preparation of Residual Land Value (RLV) Models

The residual land value (RLV) is the difference between what a developer expects to receive in revenues, (e.g., sale of condominium units after taking into account sales related expenses) less all costs associated with developing the buildings (e.g., predevelopment costs, hard construction costs, financing, developer overhead, marketing/sales costs, other soft construction costs and developer margin or return). Land residual models for each prototype were created to compare the potential financial impact on RLV of the TSF at various fee levels under two underlying economic benefit scenarios: with and without predevelopment savings from CEQA/LOS reform.

In summary, the RLV is calculated using the following formula, which represents a static basis for determining project feasibility:

Revenues (based on sales prices for condominiums or development value for rental property less sales-related costs)

Less: Basic Development Costs (including hard construction, tenant improvements, development impact fees, other development related costs, financing and other soft costs)

Less: Developer Margin (which represents the margin (or return) that needs to be achieved in order for the project to be considered potentially feasible by the development community)

= Residual Land Value

C. Overview of Development Assumptions for RLV Analysis

The next four sections describe how the revenues, basic development costs, developer margin and RLV were projected for each prototype. Appendix Tables C-1 and C-2 present the key development assumptions used to analyze each prototype.

Sensitivity analysis was performed during 2014 and 2015 on various development assumptions, and the RLV results were compared to data on land sales comparables in order to inform the analysis presented in the appendix tables. These findings are considered to be generally representative of real estate feasibility given a long-range view of real estate cycles in San Francisco.

1. Revenues

Development revenues were developed based on a review of market data for condominium sales and for apartment, office and retail rental property in San Francisco, interviews with developers and market professionals, as well as a review of numerous developer pro formas. The Concord Group, Polaris Pacific, The Mark Company and RealAnswers (formerly RealFacts) were key sources of market data for residential products, while CBRE, Colliers International and DTZ Retail Terranomics were key sources of market data for office and retail products. While many economists project continued growth in sales values and rental rates in the coming years, development revenues for the financial analysis are based on Winter 2014/Spring 2015 market values and have not been trended upwards to reflect improving future market conditions. Revenues are equal to potential sales prices for condominiums or development values for rental property less sales expenses, as further described below.[3]

a. Condominium

Condominium sales prices vary based on location, amenities associated with the building and whether or not units have a view premium. (Buildings with higher heights generally command higher prices due to potential view premiums.) Sales prices for each development prototype are based on anticipated sales value per net square foot for a typical new development of comparable height and target market for each neighborhood where the prototype is located. Condominium market sales prices range from $850/NSF (mid-rise, outer neighborhoods) to $1350/NSF (high-rise in the TCDP). All but one (Prototype 9, which is a high-rise in the TCDP) of the residential condominium prototypes are assumed to provide below market rate (BMR) housing units on-site, affordable to households at 90% Areawide Median Income (at a BMR purchase price of about $286,000). No parking revenues are assumed from condominium units.

b. Apartment

Residential rental revenues for apartments are based on the potential market value for each rental prototype based on stabilized net operating income (NOI) divided by a market capitalization rate. NOI equals gross income from the rental of apartments and parking spaces, less a vacancy allowance of 5% and less operating expenses, which are estimated at 30% of rental revenues. Capitalization rates are assumed at 4.5%, which is 0.5% above the current going in cap rate for San Francisco Class A multifamily developments, according to Integra Realty Resources (IRR) Viewpoint 2015. This cap rate cushion is used for all three rental prototypes and takes into account potential changes in interest rates and measures of risk by the investment community.

The monthly rental rate for the rental prototypes is assumed to range from $5.50/NSF to $5.75/NSF ($66/NSF to $69/NSF per year) based on market comparables for institutional grade properties in the eastern neighborhoods where most new apartments are located (the two residential rental Prototypes 4 and 5 are located in the eastern neighborhoods). All of the apartment prototypes are assumed to provide below market rate (BMR) housing units on-site, affordable to households at 55% Areawide Median Income (at a BMR monthly rent of $1139). Parking revenues are assumed to be $350 per space per month based on discussions with developers and pro forma review.

[3] Although soft sites were analyzed in order to develop and test key development assumptions, potential revenues for each prototype are designed to generally reflect potential prices and rents within the broader geographic areas and were also tested against minimum development feasibility thresholds provided by the development community.

c. Office

Office revenues are based on the potential market value for office based on stabilized net operating income (NOI) divided by a market capitalization rate. Given the significant demand from larger, technology-oriented tenants, pro formas for office developments are now more commonly using triple net rents (NNN) or something akin to modified gross (MG) rather than full service (FS) rents to calculate NOI. For purposes of this analysis, the following assumptions are made based on interviews with office developers and a review of pro formas for downtown office buildings submitted in response to the Transbay Joint Powers Authority developer solicitations.

Office NOI equals gross income from rents and parking spaces. Office NOI is calculated based on eastern SoMa and downtown office rents ranging from $54/NSF to $66/NSF per year less a vacancy allowance of 10% and less landlord operating expenses/contingency at 10% of rental revenues. (NOI ranges from $43/NSF to $53/NSF.) Parking revenues are assumed to be $450 per space per month with parking operating expenses at 30% of parking revenues. Capitalization rates are assumed at 5%, which is 0.5% above the current going in cap rate for San Francisco Class A CBD office, according to IRR Viewpoint 2015.

d. Retail

Retail revenues are based on the potential market value for office based on stabilized net operating income (NOI) divided by a market capitalization rate. Similar NOI equals gross income from rents and parking spaces, less a vacancy allowance of 5% and less operating expenses, which are estimated at 30% of rental revenues.

Retail rental rates range from $4.00/NSF to $5.00/NSF ($48/NSF to $60/NSF per year), which recognizes that some developments are likely to occur in areas that do not currently have established retail districts, and developers may need to incentivize occupancy with free rent or tenant improvement concessions. Retail NOI is calculated based on these rents less a vacancy allowance of 10% and less landlord operating expenses/contingency at 10% of rental revenues. (NOI ranges from $38/NSF to $48/NSF.) Monthly parking revenues range from $100 to $150 per space, with parking operating expenses at 30% of parking revenues, reflecting the fact that retail parking revenues are not anticipated to represent a significant source of income. Capitalization rates are assumed at 6%, which is 0.5% above the current going in cap rate for San Francisco Class A neighborhood retail according to IRR Viewpoint 2015.

e. Sales Expenses

Sales expenses include brokerage fees and City transfer taxes, and these expenses are deducted from the sales and rental revenue proceeds in order to generate net development revenues for the financial analysis. Transfer taxes are based on the City's transfer tax schedule, which is calculated according to building value, and are assumed to be paid by the developer. All of the condominium prototypes are assumed to have sales expenses equal to 5.5% of sales price, representing an allowance for sales related expenses and transfer tax. Office and apartment prototypes are assumed to have sales expenses equal to 3.5% percent of sales price, representing an allowance for transfer tax and brokerage fees. Sales expenses for retail space are assumed to be the same as the major land use type for each prototype, i.e. if retail is located on the ground floor of an apartment building, the sales expenses are equal to 3.5% of sales price.

2. Development Costs

Development costs consist of five key categories: hard construction costs and tenant improvements (collectively referred to as direct costs); development impact fees and other costs; environmental and transportation review costs; construction financing; and other soft costs. Land costs are calculated based on the RLV, as described above. Direct construction costs represent the majority of development costs.[4]

a. Direct Construction Costs

Direct construction costs include hard construction costs related to building, parking and site work (including general contractor overhead, profit and general conditions) plus tenant improvements. As the type and location of parking varies significantly across building types, parking hard construction costs are estimated separately from the hard construction costs for the residential, retail and/or office components. The parking costs were then added to the hard construction costs for each land use by prototype and compared with developer pro formas and contractor estimates for projects in this building type, as well as information on construction costs provided by the San Francisco Department of Building Inspection. These costs were also compared to the residential construction cost estimates assembled for the Mayor's Office of Housing in 2012, and the costs were found to be generally consistent, after taking into account an inflationary adjustment of 15-20% since 2012, reflecting the rapid increase in construction costs over the past three years.

Tenant improvements are assumed to be the landlord or developer's share of what is required to be installed in order to accommodate occupancy by retail and/or office tenants. The following costs for each building and land use type were developed based on interviews with a range of developers and general contractors, recent development pro formas and information on construction costs provided by the San Francisco Department of Building Inspection.

Hard Construction Cost Contingency

- A 10% contingency was added to all hard construction cost estimates, including parking.

Parking Hard Construction

- Podium Parking (at-grade or partially below grade at $120/GSF of Parking Area).
- Underground Parking (1 level below grade at $140/GSF of Parking Area).
- Underground Parking (2 level below grade at $160/GSF of Parking Area).
- Stackers (assumes puzzle stackers at cost of $15,000 per space for parking lift system plus additional costs related to mechanical and electrical systems, plus site accommodations).

Residential Hard Construction

- **Low-Rise 40-58 Feet:** Type V over Type I podium construction at $240/GSF to $260/GSF of Residential Area.[5]
- **Mid-Rise 65-68 Feet:** Type III/Modified Type III construction at $270/GSF of Residential Area.
- **Mid-Rise 80-85 Feet:** Type I construction at $300/GSF of Residential Area.

[4] Development cost information was provided by the San Francisco Department of Building Inspection and a range of real estate professionals, including developer members of the Urban Land Institute, SPUR and San Francisco Housing Action Coalition, as well as general contractors (including Webcor, Cahill, Swinerton and Build GC).

[5] This construction cost range assumes construction labor at prevailing wages and takes into account the fact that there may be site constraints, such as the need for pilings. The two low-rise prototypes have different heights and significantly different unit sizes as well as potential site conditions, given their locations. Citywide, low-rise developments may be able to achieve greater efficiencies and have significantly lower costs for wood frame development.

- **High-Rise 120-160 Feet:** Type I construction at $320/GSF of Residential Area (reflects added life safety requirements plus construction premium for smaller sized upper floors).
- **High-Rise Above 240 Feet:** Type I construction at $340/GSF of Residential Area (reflects added life safety requirements plus construction premium for additional smaller sized upper floors).

With parking construction costs, direct construction costs for the residential prototypes (including ground floor retail and associated tenant improvements) range from $290/GSF to $400/GSF, or between about $380/NSF to $550/NSF.

According to interviews with general contractors and developers, condominiums typically cost about 5% or more per square foot of residential building area than apartments because they have higher finishes and amenities, and some of this additional cost may be recaptured during the sales process as unit upgrades. Rental units are typically smaller in size than condominium developments and therefore typically cost more per square foot due to the higher ratio of kitchen and bathrooms to overall square footage. Based on reviewing numerous developer pro formas for both condominium and rental units, the above construction costs are assumed to be within the range of current construction costs for both condominium and rental units. In addition, as separately noted below, a contingency allowance of 10% is added to these costs to reflect the preliminary nature of these estimates.

Retail Hard Construction and Tenant Improvements

- **Retail on Ground Floor:** Podium construction at $225/GSF plus landlord paid Tenant Improvements at $100/NSF

Office Hard Construction and Tenant Improvements

- **High-Rise 160 Feet:** Type I construction with added life safety requirements at $250/GSF plus landlord paid tenant improvements at $85/NSF)
- **High-Rise 400 Feet:** Type I construction with added life safety requirements at $300/GSF, which takes in to account significant building step backs on the upper floors that translates to higher costs per GSF on upper floors, plus landlord paid tenant Improvements at $85/NSF)

With parking construction costs and contingency, hard construction costs for the office prototypes range from about $290/GSF to $330/GSF. With ground floor retail and associated tenant improvements, direct construction costs for the office prototypes range from $400/NSF to $500/NSF.

b. Development Impact Fees/Other Costs

Development impact fees and other costs include water and wastewater capacity fees, school fees, citywide and area plan specific impact fees and are calculated based on the 2014 Planning Department Fee Schedule. All but one prototype assumes the onsite provision of affordable housing; High-Rise Prototype 9 assumes the payment of an affordable housing fee. The two office prototypes, as well as ground floor retail uses, include the payment of a jobs-housing linkage fee.

For each prototype, the model assumes a variable level of development impact fees under the following scenarios:

- Base Case TIDF, which reflects current conditions without implementation of the TSP and continuation of TIDF.

- Base Case TSF, which assumes the TSP is implemented and assumes TSF fee rates based on the 2012 Draft TSF Ordinance Levels.[6]
- Sensitivity analysis at three alternative fee levels at 125%, 150% and 250% of Base Case TSF.

Where applicable, area plan and prior use fee credits were calculated and credited in the model of each TSF scenario.

Prototypes 9 and 10 are located in the Transit Center District Plan and are assumed to be part of its Mello Roos Community Facilities District. For Prototype 9, which is a residential condominium, the developer is assumed to pay the Mello Roos special tax starting at Certificate of Occupancy until the units are sold and then the homeowners would fully assume the annual special tax burden. For Prototype 10, the developer or landlord is also assumed to pay the Mello Roos special tax starting at Certificate of Occupancy until the office is leased. Upon lease-up, the landlord is assumed to either pass the special tax on to the tenants through a NNN lease or incorporate the special tax into its operating expenses (the operating expense allowance of $6.60/NSF would more than cover the $4.36/SF Mello Roos special tax for a 30 story office building).

c. Environmental and Transportation Review Costs

As described in Chapter V, City staff documented the level of environmental review and associated costs that would likely be currently required (i.e. before consideration of the TSP or Base Case TIDF) and what would be required with the adoption of the TSP (Base Case TSF). Then, the potential costs and time spent on environmental review for each of these prototypes was compared under these two cases in order to understand the potential direct economic benefits from the adoption of the TSP. The analysis also analyzes each prototype with and without predevelopment savings, which takes into account the possibility that no CEQA streamlining could occur if another type of environmental topic area (such as historic resources) would result in further intensification of environmental review.

d. Construction Financing and Predevelopment Carry Savings

Construction financing typically represents the major source of capital that pays for development costs during construction. Construction terms vary depending on market conditions, developer financial capacity, developer track record and the construction lender. The construction interest rate is assumed at 5.5% for all prototypes with a loan fee of 1-1.25%, depending on loan size. The loan amount is based on about a 60-65% loan to development cost (considered to be approximately equal to a 50% loan to value) at an average outstanding balance of 60% of development costs. The term of the construction loan is directly related to project timing, as the construction loan is the primary source of capital during the construction and absorption phase (sales for condominiums and lease-up for rentals).

The construction period for each prototype increases according to development size and complexity: with construction on the small residential projects assumed to occur in 18 months, construction on medium sized projects assumed at 21 months, and construction on the larger and high-rise developments taking 24-30 months. Absorption for each prototype is based on recent market trends and interviews with developers, with average unit absorption per month for condominiums ranging from about 2 (for small developments) to 9 (for 100-200 unit developments) and 20 units per month for apartments. Office absorption is assumed to average 200,000-250,000 square feet per year, with a small amount of pre-leasing assumed for office, retail and apartments.

[6] As described in Chapter III, the Base Case TSF scenario assumes the fee rates in the 2012 Draft TSF Ordinance, adjusted for inflation to 2015 dollars, taking into account the consolidation of non-residential fee categories.

As described in the main body of the report, predevelopment time savings due to CEQA/LOS reform are considered to reduce private carrying costs related to those developments that may benefit from CEQA streamlining. Consistent with the prior 2012 analysis, the study assumes predevelopment costs (including land) are equal to about 5% of development value (typically within a range of 5-15% of development value or total development cost according to the Urban Land Institute).[7]

Predevelopment cost savings are measured by multiplying these estimated predevelopment costs by a 12% annual equity carrying cost (conservative assumption as equity during entitlement period typically achieves a higher return threshold) times the number of months saved divided by one year (i.e. 5 months/1 year):[8]

5% of revenues multiplied by 12% carrying cost multiplied by 42% (5/12 months) = .252% of revenues

While predevelopment costs vary by development (e.g. whether land is purchased up front or purchased at the end of an option period, with option payments made in the interim, and the extent of upfront predevelopment costs), this estimate is considered to be generally representative of a potential predevelopment carry scenario.

e. Other Soft Costs

Other soft costs include all other indirect construction costs such as architectural design, engineering, legal fees, building permit fees, marketing and other sales/leasing related development costs. These costs are calculated as a percentage of hard construction costs based on a review of pro formas and interviews with developers and real estate professionals. Other soft costs for the residential condominium prototypes are assumed at 25% of hard construction costs while rental prototypes (both residential and commercial) that have less extensive sales and marketing costs are assumed at 18% of hard construction costs.

3. Developer Margin

Developers, lenders and investors evaluate and measure returns in several ways. Based on input from real estate developers, equity investors and lenders, and discussions with City staff, developer margin is measured in the following ways.

- Residential: Target developer margin, as measured by return on development cost and return on net sales price for condominiums:
  - **Low-Rise 40-58 Feet:** 15-20% return on total development cost (assumed at 19% return on development cost, or 16% threshold for return on net sales for condominiums)
  - **Mid-Rise 65 Feet:** 20-22% on total development cost (assumed at 21% return on development cost, or 17% threshold for return on net sales for condominiums)
  - **Mid-Rise and High-Rise, 80-160 Feet:** 22-24% on total development cost (assumed at 23% return on development cost, or 19% threshold for return on net sales for condominiums)
  - **High-Rise above 240 Feet:** 28-30% on total development cost (assumed at 29% return on development cost, or 22% threshold for return on net sales for condominiums)

[7] Refer to Chapters 2 and 3, Finance for Real Estate Development, Charles Long, Urban Land Institute, 2011.

[8] Conceptually, this means a five month time savings would translate to predevelopment savings of about $2,520/unit for a typically priced $1,000,000 condominium, which is approximately equal 0.5% of direct construction costs.

- Office: Target developer margin as measured by return on development cost at 19% or 16% on return on net value. (These returns take in to account the size and scale of development, as well as the building's long term cash flow potential.)
- Retail: Target returns in mixed-use projects are assumed to be the same as the predominant land use.

For rental property, typically the more important static return measure is referred to as Yield to Cost or Return on Cost, which is measured based on Net Operating Income (NOI, equal to rental income less vacancy less operating expenses) divided by total development costs. The target Yield (Return) on Cost for apartments in San Francisco is 5-7% while office return thresholds range between 6-7%, based on a review of project pro formas and discussions with developers and equity investors.

4. Residual Land Value (With and Without Predevelopment Savings)

As described above, the residual land value (RLV) is the difference between what a developer expects to receive in revenues less all costs associated with developing the buildings. Land residual models for each prototype were created to compare the potential financial impact on RLV of the TSF at various fee levels and under two underlying economic benefit scenarios: with and without predevelopment savings from CEQA/LOS reform. In summary, the Residual Land Value (RLV) is calculated using the following formula, which represents a static basis for determining project feasibility:

Revenues

Less: Basic Development Costs (taking into account the varying levels of development impact fees under the TSF scenarios, as well as potential predevelopment savings with the TSP)

Less: Developer Margin

= Residual Land Value (calculated for each scenario, with and without predevelopment savings)

D. Information Sources

Association of Bay Area Government (ABAG), Projections 2013.

Clifford Advisory, Land Value in Eastern Neighborhoods, April 14, 2008, plus updated data on land sales comparables and guidance on residual land value calculations provided during 2014 and 2015.

Integra Realty Resources, Viewpoint, 2015 Real Estate Value Trends.

Interviews with residential and office developers, as well as a range of general contractors, many of whom are members of the Urban Land Institute, SPUR and San Francisco Housing Action Coalition.

Interviews supplemented by reports on market trends: The Concord Group, Polaris Pacific, The Mark Company, RealAnswers (formerly RealFacts), CBRE, Colliers International and DTZ Retail Terranomics.

Keyser Marston Associates, Citywide Inclusionary Housing Study, July 2006.

Keyser Marston Associates, Sensitivity Analysis of New Development Impact Fees on Project Economics, August 12, 2008.

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San Francisco City Departments

- San Francisco Department of Building Inspection (SFDBI)
- San Francisco Planning Department (Planning Department)
- San Francisco Mayor's Office of Housing and Community Development
- San Francisco Municipal Transportation Agency (SFMTA)
- San Francisco Office of the Controller
- San Francisco Office of Economic and Workforce Development (OEWD)
- San Francisco Planning Department (Planning Department)
- San Francisco Public Utilities Commission (SFPUC)

Appendix Table A-1
Prototype 1 Summary Results
Comparison for Base Case TIDF and Base Case TSF

1a. Summary of Development Program - Geary Small Residential Mixed-use

Site Area and Constraints	
Lot Size	5,000 SF
Existing Prior Use	600 GSF
Development Program	
Description	Low-Rise
Maximum Height	45 Feet
Residential Units	8 Units
Average Unit Size (NSF)	1,100 NSF
Residential Density	70 Units per acre
Building Size (NSF)	10,240 NSF
Building Size GSF (without parking)	12,950 GSF
FAR	3.3
Residential Parking Ratio	1.0 Spaces per Unit
Total Parking Spaces	8
Parking Construction Type (# of levels)	Podium (1)

1b. Summary of Financial Analysis - Geary Small Residential Mixed-use

Prototype 1	Base Case TIDF		Base Case TSF		Difference	
1: Geary Small Res. Mixed-use	**Total**	**% of Revenues**	**TSF Total**	**% of Revenues**	**Total**	**% Change**
Revenues						
Residential For-Sale	$7,900,200	90%	$7,900,200	90%	$0	0.0%
Residential Rental	$0	0%	$0	0%	$0	-
Subtotal Residential	$7,900,200	90%	$7,900,200	90%	$0	0.0%
Office	$0	0%	$0	0%	$0	-
Retail	$870,900	10%	$870,900	10%	$0	0.0%
Total Revenues	**$8,771,100**	**100%**	**$8,771,100**	**100%**	**$0**	**0.0%**
Hard and Soft Costs						
Hard Construction Costs	$3,788,400	43%	$3,788,400	43%	$0	0.0%
Tenant Improvements/Lease Up Costs	$144,000	2%	$144,000	2%	$0	0.0%
Development Impact Fees/Other Costs	$64,700	1%	$134,600	2%	$69,900	108%
Environmental/Transportation Review	$9,000	0%	$9,000	0%	$0	0.0%
Construction Financing/Predev. Carry	$364,300	4%	$364,300	4%	$0	0.0%
Other Soft Costs	$947,100	11%	$947,100	11%	$0	0.0%
Total Hard and Soft Costs	**$5,317,500**	**61%**	**$5,387,400**	**61%**	**$69,900**	**1.3%**
Developer Margin	$1,403,400	16%	$1,403,400	16%	$0	0.0%
Total Costs	**$6,720,900**	**77%**	**$6,790,800**	**77%**	***$69,900***	**1.0%**
Residual Land Value	**$2,050,200**	**23%**	**$1,980,300**	**23%**	**($69,900)**	**(3.4%)**
Without Predevelopment Savings	***$2,050,200***	***23%***	***$1,980,300***	***23%***	***($69,900)***	***(3.4%)***
Developer Margin/ Total Dev. Costs	***19%***		***19%***			

Note: Numbers rounded to nearest $100. Development Impact Fees/ Other Costs include all applicable impact fees (including TIDF or TSF), plus any upfront developer payment for TDR purchase and Mello Roos special tax.

1c. Summary of Financial Indicators - Geary Small Residential Mixed-use

Prototype 1	Base Case TIDF				
1: Geary Small Res. Mixed-use	**Total**	**Soft Cost as % of HCC**	**Per Bldg GSF (w/o Parking)**	**Per Bldg NSF**	**Per Unit**
Revenues					
Residential For-Sale	$7,900,200		$610	$772	$987,525
Residential Rental	$0		$0	$0	$0
Subtotal Residential	$7,900,200		$610	$772	$987,525
Office	$0		$0	$0	$0
Retail	$870,900		$67	$85	$108,863
Total Revenues	**$8,771,100**		**$677**	**$857**	**$1,096,388**
Hard and Soft Costs					
Hard Construction Costs	$3,788,400	100%	$293	$370	$473,550
Tenant Improvements/Lease Up Costs	$144,000		$11	$14	$18,000
Development Impact Fees/Other Costs	$64,700	2%	$5	$6	$8,088
Environmental/Transportation Review	$9,000	0%	$1	$1	$1,125
Construction Financing/Predev. Carry	$364,300	10%	$28	$36	$45,538
Other Soft Costs	$947,100	25%	$73	$92	$118,388
Total Hard and Soft Costs	**$5,317,500**		**$411**	**$519**	**$664,688**
Developer Margin	$1,403,400		$108	$137	$175,425
Total Costs	**$6,720,900**		**$519**	**$656**	**$840,113**
Residual Land Value	**$2,050,200**		**$158**	**$200**	**$256,300**
Without Predevelopment Savings	***$2,050,200***		***$158***	***$200***	***$256,300***

Prototype 1	Base Case TSF				
1: Geary Small Res. Mixed-use	**Total**	**Soft Cost as % of HCC**	**Per Bldg GSF (w/o Parking)**	**Per Bldg NSF**	**Per Unit**
Revenues					
Residential For-Sale	$7,900,200		$610	$772	$987,525
Residential Rental	$0		$0	$0	$0
Subtotal Residential	$7,900,200		$610	$772	$987,525
Office	$0		$0	$0	$0
Retail	$870,900		$67	$85	$108,863
Total Revenues	**$8,771,100**		**$677**	**$857**	**$1,096,388**
Hard and Soft Costs					
Hard Construction Costs	$3,788,400	100%	$293	$370	$473,550
Tenant Improvements/Lease Up Costs	$144,000	4%	$11	$14	$18,000
Development Impact Fees/Other Costs	$134,600	4%	$10	$13	$16,825
Environmental/Transportation Review	$9,000	0%	$1	$1	$1,125
Construction Financing/Predev. Carry	$364,300	10%	$28	$36	$45,538
Other Soft Costs	$947,100	25%	$73	$92	$118,388
Total Hard and Soft Costs	**$5,387,400**		**$416**	**$526**	**$673,425**
Developer Margin	$1,403,400		$108	$137	$175,425
Total Costs	**$6,790,800**		**$524**	**$663**	**$848,850**
Residual Land Value	**$1,980,300**		**$153**	**$193**	**$247,500**
Without Predevelopment Savings	***$1,980,300***		***$153***	***$193***	***$247,500***

Appendix Table A-2
Prototype 2 Summary Results
Comparison for Base Case TIDF and Base Case TSF

2a. Summary of Development Program - Van Ness Medium Residential Mixed-use

Site Area and Constraints	
Lot Size	24,300 SF
Existing Prior Use	11,000 GSF
Development Program	
Description	Mid-Rise
Maximum Height	80 Feet
Residential Units	60 Units
Average Unit Size	997 NSF
Residential Density	108 Units/Acre
Building Size (NSF)	67,887 NSF
Building Size GSF (without parking)	86,124 GSF
FAR	3.6
Residential Parking Ratio	0.75 Spaces per Unit
Total Parking Spaces	64
Parking Construction Type (# of levels)	Underground (1)

2b. Summary of Financial Analysis - Van Ness Medium Residential Mixed-use

Prototype 2	Base Case TIDF		Base Case TSF		Difference	
2: Van Ness Medium Res. Mixed-use	**Total**	**% of Revenues**	**TSF Total**	**% of Revenues**	**Total**	**% Change**
Revenues						
Residential For-Sale	$56,819,600	91%	$56,819,600	91%	$0	0.0%
Residential Rental	$0	0%	$0	0%	$0	-
Subtotal Residential	$56,819,600	91%	$56,819,600	91%	$0	0.0%
Office	$0	0%	$0	0%	$0	-
Retail	$5,740,900	9%	$5,740,900	9%	$0	0.0%
Total Revenues	**$62,560,500**	**100%**	**$62,560,500**	**100%**	**$0**	**0.0%**
Development Costs						
Hard Construction Costs	$31,216,553	50%	$31,216,553	50%	$0	0.0%
Tenant Improvements/Lease Up Costs	$808,747	1%	$808,747	1%	$0	0.0%
Development Impact Fees/Other Costs	$403,600	1%	$862,500	1%	$458,900	114%
Environmental/Transportation Review	$188,000	0%	$188,000	0%	$0	0.0%
Construction Financing/Predev. Carry	$3,235,600	5%	$3,235,600	5%	$0	0.0%
Other Soft Costs	$7,804,200	12%	$7,804,200	12%	$0	0.0%
Total Hard and Soft Costs	**$43,656,700**	**70%**	**$44,115,600**	**71%**	**$458,900**	**1.1%**
Developer Margin	$11,886,500	19%	$11,886,500	19%	$0	0.0%
Total Costs	**$55,543,200**	**89%**	**$56,002,100**	**90%**	***$458,900***	**0.8%**
Residual Land Value	**$7,017,300**	**11%**	**$6,558,400**	**10%**	**($458,900)**	**(6.5%)**
Without Predevelopment Savings	***$7,017,300***	***11%***	***$6,558,400***	***10%***	***($458,900)***	***(6.5%)***
Developer Margin/ Total Dev. Costs	*23%*		*23%*			

Note: Numbers rounded to nearest $100. Development Impact Fees/ Other Costs include all applicable impact fees (including TIDF or TSF), plus any upfront developer payment for TDR purchase and Mello Roos special tax.

2c. Summary of Financial Indicators - Van Ness Medium Residential Mixed-use

Prototype 2	Base Case TIDF				
2: Van Ness Medium Res. Mixed-use	**Total**	**Soft Cost as % of HCC**	**Per Bldg GSF**	**Per Bldg NSF**	**Per Unit**
Revenues					
Residential For-Sale	$56,819,600		$660	$837	$946,993
Residential Rental	$0		$0	$0	$0
Subtotal Residential	$56,819,600		$660	$837	$946,993
Office	$0		$0	$0	$0
Retail	$5,740,900		$67	$85	$95,682
Total Revenues	**$62,560,500**		**$726**	**$922**	**$1,042,675**
Hard and Soft Costs					
Hard Construction Costs	$31,216,553	100%	$362	$460	$520,276
Tenant Improvements/Lease Up Costs	$808,747	3%	$9	$12	$13,479
Development Impact Fees/Other Costs	$403,600	1%	$5	$6	$6,727
Environmental/Transportation Review	$188,000	1%	$2	$3	$3,133
Construction Financing/Predev. Carry	$3,235,600	10%	$38	$48	$53,927
Other Soft Costs	$7,804,200	25%	$91	$115	$130,070
Total Hard and Soft Costs	**$43,656,700**		**$507**	**$643**	**$727,612**
Developer Margin	$11,886,500		$138	$175	$198,108
Total Costs	**$55,543,200**		**$645**	**$818**	**$925,720**
Residual Land Value	**$7,017,300**		**$81**	**$103**	**$117,000**
Without Predevelopment Savings	***$7,017,300***		***$81***	***$103***	***$117,000***

Prototype 2	Base Case TSF				
2: Van Ness Medium Res. Mixed-use	**Total**	**Soft Cost as % of HCC**	**Per Bldg GSF**	**Per Bldg NSF**	**Per Unit**
Revenues					
Residential For-Sale	$56,819,600		$660	$837	$946,993
Residential Rental	$0		$0	$0	$0
Subtotal Residential	$56,819,600		$660	$837	$946,993
Office	$0		$0	$0	$0
Retail	$5,740,900		$67	$85	$95,682
Total Revenues	**$62,560,500**		**$726**	**$922**	**$1,042,675**
Hard and Soft Costs					
Hard Construction Costs	$31,216,553	100%	$362	$460	$520,276
Tenant Improvements/Lease Up Costs	$808,747	3%	$9	$12	$13,479
Development Impact Fees/Other Costs	$862,500	3%	$10	$13	$14,375
Environmental/Transportation Review	$188,000	1%	$2	$3	$3,133
Construction Financing/Predev. Carry	$3,235,600	10%	$38	$48	$53,927
Other Soft Costs	$7,804,200	25%	$91	$115	$130,070
Total Hard and Soft Costs	**$44,115,600**		**$512**	**$650**	**$735,260**
Developer Margin	$11,886,500		$138	$175	$198,108
Total Costs	**$56,002,100**		**$650**	**$825**	**$933,368**
Residual Land Value	**$6,558,400**		**$76**	**$97**	**$109,300**
Without Predevelopment Savings	***$6,558,400***		***$76***	***$97***	***$109,300***

Appendix Table A-3
Prototype 3 Summary Results
Comparison for Base Case TIDF and Base Case TSF

3a. Summary of Development Program - Outer Mission Small Residential Mixed-use

Site Area and Constraints	
Lot Size	14,420 SF
Existing Prior Use	17,438 SF
Development Program	
Description	Mid-Rise
Maximum Height	65 Feet
Residential Units	24 Units
Average Unit Size	1,250 NSF
Residential Density	72 Units/Acre
Building Size (NSF)	32,876 NSF
Building Size GSF (without parking)	41,784 GSF
FAR	3.6
Residential Parking Ratio	1 Spaces per Unit
Total Parking Spaces	24
Parking Construction Type (# of levels)	Podium (1)

3b. Summary of Financial Analysis - Outer Mission Small Residential Mixed-use

Prototype 3	Base Case TIDF		Base Case TSF		Difference	
3. Outer Mission Small Res. Mixed-use	**Total**	**% of Revenues**	**TSF Total**	**% of Revenues**	**Total**	**% Change**
Revenues						
Residential For-Sale	$21,895,900	93%	$21,895,900	93%	$0	0.0%
Residential Rental	$0	0%	$0	0%	$0	-
Subtotal Residential	$21,895,900	93%	$21,895,900	93%	$0	0.0%
Office	$0	0%	$0	0%	$0	-
Retail	$1,739,400	7%	$1,739,400	7%	$0	0.0%
Total Revenues	**$23,635,300**	**100%**	**$23,635,300**	**100%**	**$0**	**0.0%**
Hard and Soft Costs						
Hard Construction Costs	$13,594,400	58%	$13,594,400	58%	$0	0.0%
Tenant Improvements/Lease Up Costs	$287,600	1%	$287,600	1%	$0	0.0%
Development Impact Fees/Other Costs	$201,100	1%	$243,500	1%	$42,400	21%
Environmental/Transportation Review	$27,000	0%	$27,000	0%	$0	0.0%
Construction Financing/Predev. Carry	$1,188,000	5%	$1,188,000	5%	$0	0.0%
Other Soft Costs	$3,398,600	14%	$3,398,600	14%	$0	0.0%
Total Hard and Soft Costs	**$18,696,700**	**79%**	**$18,739,100**	**79%**	**$42,400**	**0.2%**
Developer Margin	$4,018,000	17%	$4,018,000	17%	$0	0.0%
Total Costs	**$22,714,700**	**96%**	**$22,757,100**	**96%**	***$42,400***	**0.2%**
Residual Land Value	**$920,600**	**4%**	**$878,200**	**4%**	**($42,400)**	**(4.6%)**
Without Predevelopment Savings	***$920,600***	***4%***	***$878,200***	***4%***	***($42,400)***	***(4.6%)***
Developer Margin/ Total Dev. Costs	***20%***		***20%***			

Note: Numbers rounded to nearest $100. Development Impact Fees/ Other Costs include all applicable impact fees (including TIDF or TSF), plus any upfront developer payment for TDR purchase and Mello Roos special tax.

3c. Summary of Financial Indicators - Outer Mission Small Residential Mixed-use

Prototype 3	Base Case TIDF				
3. Outer Mission Small Res. Mixed-use	**Total**	**Soft Cost as % of HCC**	**Per Bldg GSF**	**Per Bldg NSF**	**Per Unit**
Revenues					
Residential For-Sale	$21,895,900		$524	$666	$912,329
Residential Rental	$0		$0	$0	$0
Subtotal Residential	$21,895,900		$524	$666	$912,329
Office	$0		$0	$0	$0
Retail	$1,739,400		$42	$53	$72,475
Total Revenues	**$23,635,300**		**$566**	**$719**	**$984,804**
Hard and Soft Costs					
Hard Construction Costs	$13,594,400	100%	$325	$414	$566,433
Tenant Improvements/Lease Up Costs	$287,600	2%	$7	$9	$11,983
Development Impact Fees/Other Costs	$201,100	1%	$5	$6	$8,379
Environmental/Transportation Review	$27,000	0%	$1	$1	$1,125
Construction Financing/Predev. Carry	$1,188,000	9%	$28	$36	$49,500
Other Soft Costs	$3,398,600	25%	$81	$103	$141,608
Total Hard and Soft Costs	**$18,696,700**		**$447**	**$569**	**$779,029**
Developer Margin	$4,018,000		$96	$122	$167,417
Total Costs	**$22,714,700**		**$544**	**$691**	**$946,446**
Residual Land Value	**$920,600**		**$22**	**$28**	**$38,400**
Without Predevelopment Savings	***$920,600***		***$22***	***$28***	***$38,400***

Prototype 3	Base Case TSF				
3. Outer Mission Small Res. Mixed-use	**Total**	**Soft Cost as % of HCC**	**Per Bldg GSF**	**Per Bldg NSF**	**Per Unit**
Revenues					
Residential For-Sale	$21,895,900		$524	$666	$912,329
Residential Rental	$0		$0	$0	$0
Subtotal Residential	$21,895,900		$524	$666	$912,329
Office	$0		$0	$0	$0
Retail	$1,739,400		$42	$53	$72,475
Total Revenues	**$23,635,300**		**$566**	**$719**	**$984,804**
Hard and Soft Costs					
Hard Construction Costs	$13,594,400	100%	$325	$414	$566,433
Tenant Improvements/Lease Up Costs	$287,600	2%	$7	$9	$11,983
Development Impact Fees/Other Costs	$243,500	2%	$6	$7	$10,146
Environmental/Transportation Review	$27,000	0%	$1	$1	$1,125
Construction Financing/Predev. Carry	$1,188,000	9%	$28	$36	$49,500
Other Soft Costs	$3,398,600	25%	$81	$103	$141,608
Total Hard and Soft Costs	**$18,739,100**		**$448**	**$570**	**$780,796**
Developer Margin	$4,018,000		$96	$122	$167,417
Total Costs	**$22,757,100**		**$545**	**$692**	**$948,213**
Residual Land Value	**$878,200**		**$21**	**$27**	**$36,600**
Without Predevelopment Savings	***$878,200***		***$21***	***$27***	***$36,600***

Appendix Table A-4
Prototype 4 Summary Results
Comparison for Base Case TIDF and Base Case TSF

4a. Summary of Development Program - Mission Small Residential Mixed Use

Site Area and Constraints	
Lot Size	6,000 SF
Existing Prior Use	13,500 GSF
Development Program	
Description	Low-Rise
Maximum Height	55 Feet
Residential Units	15 Units
Average Unit Size	955 NSF
Residential Density	109 Units/Acre
Building Size (NSF)	16,575 NSF
Building Size GSF (without parking)	22,264 GSF
FAR	4.0
Residential Parking Ratio	0.5 Spaces per Unit
Total Parking Spaces	8
Parking Construction Type (# of levels)	Podium (1)

4b. Summary of Financial Analysis - Mission Small Residential Mixed Use

Prototype 4	Base Case TIDF		Base Case TSF		Difference	
4: Mission Small Res. Mixed-use	**Total**	**% of Revenues**	**TSF Total**	**% of Revenues**	**Total**	**% Change**
Revenues						
Residential For-Sale	$13,445,800	90%	$13,445,800	90%	$0	0.0%
Residential Rental	$0	0%	$0	0%	$0	-
Subtotal Residential	$13,445,800	90%	$13,445,800	90%	$0	0.0%
Office	$0	0%	$0	0%	$0	-
Retail	$1,530,900	10%	$1,530,900	10%	$0	0.0%
Total Revenues	**$14,976,700**	**100%**	**$14,976,700**	**100%**	**$0**	**0.0%**
Development Costs						
Hard Construction Costs	$6,614,500	44%	$6,614,500	44%	$0	0.0%
Tenant Improvements/Lease Up Costs	$225,000	2%	$225,000	2%	$0	0.0%
Development Impact Fees/Other Costs	$270,000	2%	$293,600	2%	$23,600	8.7%
Environmental/Transportation Review	$11,000	0%	$11,000	0%	$0	0.0%
Construction Financing/Predev. Carry	$665,600	4%	$665,600	4%	$0	0.0%
Other Soft Costs	$1,653,600	11%	$1,653,600	11%	$0	0.0%
Total Hard and Soft Costs	**$9,439,700**	**63%**	**$9,463,300**	**63%**	**$23,600**	**0.3%**
Developer Margin	$2,396,300	16%	$2,396,300	16%	$0	0.0%
Total Costs	**$11,836,000**	**79%**	**$11,859,600**	**79%**	***$23,600***	**0.2%**
Residual Land Value	**$3,140,700**	**21%**	**$3,117,100**	**21%**	**($23,600)**	**(0.8%)**
Without Predevelopment Savings	***$3,140,700***	***21%***	***$3,117,100***	***21%***	***($23,600)***	***(0.8%)***
Developer Margin/ Total Dev. Costs	***19%***		***19%***			

Note: Numbers rounded to nearest $100. Development Impact Fees/ Other Costs include all applicable impact fees (including TIDF or TSF), plus any upfront developer' payment for TDR purchase and Mello Roos special tax.

4c. Summary Proforma - Mission Small Residential Mixed Use

Prototype 4	Base Case TIDF				
4: Mission Small Res. Mixed-use	**Total**	**Soft Cost as % of HCC**	**Per Bldg GSF**	**Per Bldg NSF**	**Per Unit**
Revenues					
Residential For-Sale	$13,445,800		$604	$811	$896,387
Residential Rental	$0		$0	$0	$0
Subtotal Residential	$13,445,800		$604	$811	$896,387
Office	$0		$0	$0	$0
Retail	$1,530,900		$69	$92	$102,060
Total Revenues	**$14,976,700**		**$673**	**$904**	**$998,447**
Hard and Soft Costs					
Hard Construction Costs	$6,614,500	100%	$297	$399	$440,967
Tenant Improvements/Lease Up Costs	$225,000	3%	$10	$14	$15,000
Development Impact Fees/Other Costs	$270,000	4%	$12	$16	$18,000
Environmental/Transportation Review	$11,000	0%	$0	$1	$733
Construction Financing/Predev. Carry	$665,600	10%	$30	$40	$44,373
Other Soft Costs	$1,653,600	25%	$74	$100	$110,240
Total Hard and Soft Costs	**$9,439,700**		**$424**	**$570**	**$629,313**
Developer Margin	$2,396,300		$108	$145	$159,753
Total Costs	**$11,836,000**		**$532**	**$714**	**$789,067**
Residual Land Value	**$3,140,700**		**$141**	**$189**	**$209,400**
Without Predevelopment Savings	***$3,140,700***		***$141***	***$189***	***$209,400***

Prototype 4	Base Case TSF				
4: Mission Small Res. Mixed-use	**Total**	**Soft Cost as % of HCC**	**Per Bldg GSF**	**Per Bldg NSF**	**Per Unit**
Revenues					
Residential For-Sale	$13,445,800		$604	$811	$896,387
Residential Rental	$0		$0	$0	$0
Subtotal Residential	$13,445,800		$604	$811	$896,387
Office	$0		$0	$0	$0
Retail	$1,530,900		$69	$92	$102,060
Total Revenues	**$14,976,700**		**$673**	**$904**	**$998,447**
Hard and Soft Costs					
Hard Construction Costs	$6,614,500	100%	$297	$399	$440,967
Tenant Improvements/Lease Up Costs	$225,000	3%	$10	$14	$15,000
Development Impact Fees/Other Costs	$293,600	4%	$13	$18	$19,573
Environmental/Transportation Review	$11,000	0%	$0	$1	$733
Construction Financing/Predev. Carry	$665,600	10%	$30	$40	$44,373
Other Soft Costs	$1,653,600	25%	$74	$100	$110,240
Total Hard and Soft Costs	**$9,463,300**		**$425**	**$571**	**$630,887**
Developer Margin	$2,396,300		$108	$145	$159,753
Total Costs	**$11,859,600**		**$533**	**$716**	**$790,640**
Residual Land Value	**$3,117,100**		**$140**	**$188**	**$207,800**
Without Predevelopment Savings	***$3,117,100***		***$140***	***$188***	***$207,800***

Appendix Table A-5
Prototype 5 Summary Results
Comparison for Base Case TIDF and Base Case TSF

5a. Summary of Development Program - Central Waterfront Large Residential MU

Site Area and Constraints	
Lot Size	35,000 SF
Existing Prior Use	40,000 GSF
Development Program	
Description	Mid-Rise
Maximum Height	65 Feet
Residential Units	156 Units
Average Unit Size	762 NSF
Residential Density	194 Units/Acre
Building Size (NSF)	123,300 NSF
Building Size GSF (without parking)	154,720 GSF
FAR	4.5
Parking Ratio	0.71 Spaces per Unit
Total Parking Spaces	111
Parking Construction Type (# of levels)	Underground (1)

5b. Summary of Financial Analysis - Central Waterfront Large Residential MU

Prototype 5	Base Case TIDF		Base Case TSF		Difference	
5: Central Waterfront Large Res. MU	**Total**	**% of Revenues**	**Base Case TSF Total**	**% of Revenues**	**Total**	**% Change**
Revenues						
Residential For-Sale	$0	0%	$0	0%	$0	-
Residential Rental	$106,807,000	97%	$106,807,000	97%	$0	0%
Subtotal Residential	$106,807,000	97%	$106,807,000	97%	$0	0%
Office	$0	0%	$0	0%	$0	-
Retail	$3,126,600	2.8%	$3,126,600	2.8%	$0	0%
Total Revenues	**$109,933,600**	**100%**	**$109,933,600**	**100%**	**$0**	**0%**
Hard and Soft Costs						
Hard Construction Costs	$50,999,200	46%	$50,999,200	46%	$0	0%
Tenant Improvements/Lease Up Costs	$450,000	0%	$450,000	0%	$0	0%
Development Impact Fees/Other Costs	$2,421,400	2%	$2,671,300	2%	$249,900	10%
Environmental/Transportation Review	$683,000	1%	$122,000	0%	($561,000)	(82%)
Construction Financing/Predev. Carry	$4,642,300	4%	$4,367,400	4%	($274,900)	(5.9%)
Other Soft Costs	$9,179,900	8%	$9,179,900	8%	$0	0.0%
Total Hard and Soft Costs	**$68,375,800**	**62%**	**$67,789,800**	**62%**	**($586,000)**	**(0.9%)**
Developer Margin	$18,688,700	17%	$18,688,700	17%	$0	0.0%
Total Costs	**$87,064,500**	**79%**	**$86,478,500**	**79%**	*($586,000)*	**(0.7%)**
Residual Land Value	**$22,869,100**	**21%**	**$23,455,100**	**21%**	**$586,000**	**2.6%**
Without Predevelopment Savings	***$22,869,100***	***21%***	***$22,619,200***	***21%***	***($249,900)***	***(1.1%)***
Return (Yield) on Cost	*5.7%*		*5.7%*			

Note: Numbers rounded to nearest $100. Development Impact Fees/ Other Costs include all applicable impact fees (including TIDF or TSF), plus any upfront developer payment for TDR purchase and Mello Roos special tax.

5c. Summary of Financial Indicators - Central Waterfront Large Residential MU

Prototype 5	Base Case TIDF				
5: Central Waterfront Large Res. MU	**Total**	**Soft Cost as % of HCC**	**Per Bldg GSF**	**Per Bldg NSF**	**Per Unit**
Revenues					
Residential For-Sale	$0		$0	$0	$0
Residential Rental	$106,807,000		$690	$866	$684,660
Subtotal Residential	$106,807,000		$690	$866	$684,660
Office	$0		$0	$0	$0
Retail	$3,126,600		$20	$25	$20,042
Total Revenues	**$109,933,600**		**$711**	**$892**	**$704,703**
Hard and Soft Costs					
Hard Construction Costs	$50,999,200	100%	$330	$414	$326,918
Tenant Improvements/Lease Up Costs	$450,000	1%	$3	$4	$2,885
Development Impact Fees/Other Costs	$2,421,400	5%	$16	$20	$15,522
Environmental/Transportation Review	$683,000	1%	$4	$6	$4,378
Construction Financing/Predev. Carry	$4,642,300	9%	$30	$38	$29,758
Other Soft Costs	$9,179,900	18%	$59	$74	$58,846
Total Hard and Soft Costs	**$68,375,800**		**$442**	**$555**	**$438,306**
Developer Margin	$18,688,700		$121	$152	$119,799
Total Costs	**$87,064,500**		**$563**	**$706**	**$558,106**
Residual Land Value	**$22,869,100**		**$148**	**$185**	**$146,600**
Without Predevelopment Savings	***$22,869,100***		***$148***	***$185***	***$146,600***

Prototype 5	Base Case TSF				
5: Central Waterfront Large Res. MU	**Total**	**Soft Cost as % of HCC**	**Per Bldg GSF**	**Per Bldg NSF**	**Per Unit**
Revenues			**$711**	**$0**	**$0**
Residential For-Sale	$0		$0	$0	$0
Residential Rental	$106,807,000		$690	$866	$684,660
Subtotal Residential	$106,807,000		$690	$866	$684,660
Office	$0		$0	$0	$0
Retail	$3,126,600		$20	$25	$20,042
Total Revenues	**$109,933,600**		**$711**	**$892**	**$704,700**
Hard and Soft Costs					
Hard Construction Costs	$50,999,200	100%	$330	$414	$326,918
Tenant Improvements/Lease Up Costs	$450,000	1%	$3	$4	$2,885
Development Impact Fees/Other Costs	$2,671,300	5%	$17	$22	$17,124
Environmental/Transportation Review	$122,000	0%	$1	$1	$782
Construction Financing/Predev. Carry	$4,367,400	9%	$28	$35	$27,996
Other Soft Costs	$9,179,900	18%	$59	$74	$58,846
Total Hard and Soft Costs	**$67,789,800**		**$438**	**$550**	**$434,550**
Developer Margin	$18,688,700		$121	$152	$119,799
Total Costs	**$86,478,500**		**$559**	**$701**	**$554,349**
Residual Land Value	**$23,455,100**		**$152**	**$190**	**$150,400**
Without Predevelopment Savings	***$22,619,200***		***$146***	***$183***	***$145,000***

Appendix Table A-6
Prototype 6 Summary Results
Comparison for Base Case TIDF and Base Case TSF

6a. Summary of Development Program - East SoMa Medium Residential Mixed-use

Site Area and Constraints	
Lot Size	10,000 SF
Existing Prior Use	62,500 GSF
Development Program	
Description	Mid-Rise
Maximum Height	85 Feet
Residential Units	60 Units
Average Unit Size	719 NSF
Residential Density	261 Units/Acre
Building Size (NSF)	47,625 NSF
Building Size GSF (without parking)	60,550 GSF
FAR	6.3
Parking Ratio	0.50 Spaces per Unit
Total Parking Spaces	36
Parking Construction Type (# of levels)	Underground (1)

6b. Summary of Financial Analysis - East SoMa Medium Residential Mixed-use

Prototype 6	Base Case TIDF		Base Case TSF		Difference	
6: East SoMa Medium Res. Mixed-use	Total	% of Revenues	Base Case TSF Total	% of Revenues	Total	% Change
Revenues						
Residential For-Sale	$0	0%	$0	0%	$0	-
Residential Rental	$40,092,100	92%	$40,092,100	92%	$0	0.0%
Subtotal Residential	$40,092,100	92%	$40,092,100	92%	$0	0.0%
Office	$0	0%	$0	0%	$0	-
Retail	$3,382,800	8%	$3,382,800	8%	$0	0.0%
Total Revenues	**$43,474,900**	**100%**	**$43,474,900**	**100%**	**$0**	**0.0%**
Hard and Soft Costs						
Hard Construction Costs	$21,266,900	49%	$21,266,900	49%	$0	0.0%
Tenant Improvements/Lease Up Costs	$450,000	1%	$450,000	1%	$0	0.0%
Development Impact Fees/Other Costs	$1,443,400	3%	$1,571,000	4%	$127,600	8.8%
Environmental/Transportation Review	$119,000	0%	$119,000	0%	$0	0.0%
Construction Financing/Predev. Carry	$1,768,300	4%	$1,768,300	4%	$0	0.0%
Other Soft Costs	$3,828,000	9%	$3,828,000	9%	$0	0.0%
Total Hard and Soft Costs	**$28,875,600**	**66%**	**$29,003,200**	**67%**	**$127,600**	**0.4%**
Developer Margin	$8,260,200	19%	$8,260,200	19%	$0	0.0%
Total Costs	**$37,135,800**	**85%**	**$37,263,400**	**86%**	***$127,600***	**0.3%**
Residual Land Value	**$6,339,100**	**15%**	**$6,211,500**	**14%**	**($127,600)**	**(2.0%)**
Without Predevelopment Savings	***$6,339,100***	***15%***	***$6,211,500***	***14%***	***($127,600)***	***(2.0%)***
Return (Yield) on Cost	***5.9%***		***5.9%***			

Note: Numbers rounded to nearest $100. Development Impact Fees/ Other Costs include all applicable impact fees (including TIDF or TSF), plus any upfront developer payment for TDR purchase and Mello Roos special tax.

6c. Summary of Financial Indicators - East SoMa Medium Residential Mixed-use

Prototype 6	Base Case TIDF				
6: East SoMa Medium Res. Mixed-use	**Total**	**Soft Cost as % of HCC**	**Per Bldg GSF**	**Per Bldg NSF**	**Per Unit**
Revenues					
Residential For-Sale	$0		$0	$0	$0
Residential Rental	$40,092,100		$662	$842	$668,202
Subtotal Residential	$40,092,100		$662	$842	$668,202
Office	$0		$0	$0	$0
Retail	$3,382,800		$56	$71	$56,380
Total Revenues	**$43,474,900**		**$718**	**$913**	**$724,582**
Hard and Soft Costs					
Hard Construction Costs	$21,266,900	100%	$351	$447	$354,448
Tenant Improvements/Lease Up Costs	$450,000	2%	$7	$9	$7,500
Development Impact Fees/Other Costs	$1,443,400	7%	$24	$30	$24,057
Environmental/Transportation Review	$119,000	1%	$2	$2	$1,983
Construction Financing/Predev. Carry	$1,768,300	8%	$29	$37	$29,472
Other Soft Costs	$3,828,000	18%	$63	$80	$63,800
Total Hard and Soft Costs	**$28,875,600**		**$477**	**$606**	**$481,260**
Developer Margin	$8,260,200		$136	$173	$137,670
Total Costs	**$37,135,800**		**$613**	**$780**	**$618,930**
Residual Land Value	**$6,339,100**		**$105**	**$133**	**$105,700**
Without Predevelopment Savings	***$6,339,100***		***$105***	***$133***	***$105,700***

Prototype 6	Base Case TSF				
6: East SoMa Medium Res. Mixed-use	**Total**	**Soft Cost as % of HCC**	**Per Bldg GSF**	**Per Bldg NSF**	**Per Unit**
Revenues					
Residential For-Sale	$0		$0	$0	$0
Residential Rental	$40,092,100		$662	$842	$668,202
Subtotal Residential	$40,092,100		$662	$842	$668,202
Office	$0		$0	$0	$0
Retail	$3,382,800		$56	$71	$56,380
Total Revenues	**$43,474,900**		**$718**	**$913**	**$724,582**
Hard and Soft Costs					
Hard Construction Costs	$21,266,900	100%	$351	$447	$354,448
Tenant Improvements/Lease Up Costs	$450,000	2%	$7	$9	$7,500
Development Impact Fees/Other Costs	$1,571,000	7%	$26	$33	$26,183
Environmental/Transportation Review	$119,000	1%	$2	$2	$1,983
Construction Financing/Predev. Carry	$1,768,300	8%	$29	$37	$29,472
Other Soft Costs	$3,828,000	18%	$63	$80	$63,800
Total Hard and Soft Costs	**$29,003,200**		**$479**	**$609**	**$483,387**
Developer Margin	$8,260,200		$136	$173	$137,670
Total Costs	**$37,263,400**		**$615**	**$782**	**$621,057**
Residual Land Value	**$6,211,500**		**$103**	**$130**	**$103,500**
Without Predevelopment Savings	***$6,211,500***		***$103***	***$130***	***$103,500***

Appendix Table A-7
Prototype 7 Summary Results
Comparison for Base Case TIDF and Base Case TSF

7a. Summary of Development Program - East SoMa Large Office

Site Area and Constraints	
Lot Size	35,000 SF
Existing Prior Use	6,000 GSF
Development Program	
Description	High-Rise
Maximum Height	160 Feet
Residential Units	N/A Units
Average Unit Size	N/A
Residential Density	0 Units/Acre
Building Size (Leaseable SF)	224,420 LSF
Building Size GSF (without parking)	249,300 GSF
FAR	6.7
Parking Ratio	N/A Spaces per Unit
Total Parking Spaces	86
Parking Construction Type (# of levels)	Underground (1)

7b. Summary of Financial Analysis - East SoMa Large Office

Prototype 7	Base Case TIDF		Base Case TSF		Difference	
7: East SoMa Large Office	**Total**	**% of Revenues**	**Base Case TSF Total**	**% of Revenues**	**Total**	**% Change**
Revenues						
Residential For-Sale	$0	0%	$0	0%	$0	-
Residential Rental	$0	0%	$0	0%	$0	-
Subtotal Residential	$0	0%	$0	0%	$0	-
Office	$174,558,100	91%	$174,558,100	91%	$0	0%
Retail	$17,231,000	9.0%	$17,231,000	9.0%	$0	0%
Total Revenues	**$191,789,100**	**100%**	**$191,789,100**	**100%**	**$0**	**0%**
Hard and Soft Costs						
Hard Construction Costs	$73,265,500	38%	$73,265,500	38%	$0	0%
Tenant Improvements	$19,410,500	10%	$19,410,500	10%	$0	0%
Development Impact Fees/Other Costs	$14,705,700	8%	$14,828,400	8%	$122,700	0.8%
Environmental/Transportation Review	$979,000	1%	$884,000	0%	($95,000)	(9.7%)
Construction Financing/Predev. Carry	$10,831,600	6%	$10,352,100	5%	($479,500)	(4.4%)
Other Soft Costs	$13,187,800	7%	$13,187,800	7%	$0	0.0%
Total Hard and Soft Costs	**$132,380,100**	**69%**	**$131,928,300**	**69%**	**($451,800)**	**(0.3%)**
Developer Margin	$30,686,300	16%	$30,686,300	16%	$0	0.0%
Total Costs	**$163,066,400**	**85%**	**$162,614,600**	**85%**	***($451,800)***	**(0.3%)**
Residual Land Value	**$28,722,700**	**15%**	**$29,174,500**	**15%**	**$451,800**	**1.6%**
Without Predevelopment Savings	***$28,722,700***	***15%***	***$28,600,000***	***15%***	***($122,700)***	***(0.4%)***
Return (Yield) on Cost	***6.3%***		***6.3%***			

Note: Numbers rounded to nearest $100. Development Impact Fees/ Other Costs include all applicable impact fees (including TIDF or TSF), plus any upfront developer' payment for TDR purchase and Mello Roos special tax.

7c. Summary of Financial Indicators - East SoMa Large Office

Prototype 7	Base Case TIDF				
7: East SoMa Large Office	**Total**	**Soft Cost as % of HCC**	**Per Bldg GSF**	**Per Bldg LSF**	**Per Unit**
Revenues					
Residential For-Sale	$0		$0	$0	N/A
Residential Rental	$0		$0	$0	N/A
Subtotal Residential	$0		$0	$0	N/A
Office	$174,558,100		$700	$778	N/A
Retail	$17,231,000		$69	$77	N/A
Total Revenues	**$191,789,100**		**$769**	**$855**	N/A
Hard and Soft Costs					
Hard Construction Costs	$73,265,500	100%	$294	$326	N/A
Tenant Improvements	$19,410,500	26%	$78	$86	N/A
Development Impact Fees/Other Costs	$14,705,700	20%	$59	$66	N/A
Environmental/Transportation Review	$979,000	1%	$4	$4	N/A
Construction Financing/Predev. Carry	$10,831,600	15%	$43	$48	N/A
Other Soft Costs	$13,187,800	18%	$53	$59	N/A
Total Hard and Soft Costs	**$132,380,100**		**$531**	**$590**	N/A
Developer Margin	$30,686,300		$123	$137	N/A
Total Costs	**$163,066,400**		**$654**	**$727**	N/A
Residual Land Value	**$28,722,700**		**$115**	**$128**	N/A
Without Predevelopment Savings	***$28,722,700***		***$115***	***$128***	***N/A***

Prototype 7	Base Case TSF				
7: East SoMa Large Office	**Total**	**Soft Cost as % of HCC**	**Per Bldg GSF**	**Per Bldg LSF**	**Per Unit**
Revenues					
Residential For-Sale	$0		$0	$0	N/A
Residential Rental	$0		$0	$0	N/A
Subtotal Residential	$0		$0	$0	N/A
Office	$174,558,100		$700	$778	N/A
Retail	$17,231,000		$69	$77	N/A
Total Revenues	**$191,789,100**		**$769**	**$855**	N/A
Hard and Soft Costs					
Hard Construction Costs	$73,265,500	100%	$294	$326	N/A
Tenant Improvements	$19,410,500	26%	$78	$86	N/A
Development Impact Fees/Other Costs	$14,828,400	20%	$59	$66	N/A
Environmental/Transportation Review	$884,000	1%	$4	$4	N/A
Construction Financing/Predev. Carry	$10,352,100	14%	$42	$46	N/A
Other Soft Costs	$13,187,800	18%	$53	$59	N/A
Total Hard and Soft Costs	**$131,928,300**		**$529**	**$588**	N/A
Developer Margin	$30,686,300		$123	$137	N/A
Total Costs	**$162,614,600**		**$652**	**$725**	N/A
Residual Land Value	**$29,174,500**		**$117**	**$130**	N/A
Without Predevelopment Savings	***$28,600,000***		***$115***	***$127***	***N/A***

Appendix Table A-8
Prototype 8 Summary Results
Comparison for Base Case TIDF and Base Case TSF

8a. Summary of Development Program - East SoMa Large Residential Mixed-use

Site Area and Constraints	
Lot Size	15,000 SF
Existing Prior Use	0 GSF
Development Program	
Description	High-Rise
Maximum Height	160 Feet
Residential Units	128 Units
Average Unit Size (NSF)	942 NSF
Residential Density	372 Units per acre
Building Size (NSF)	126,575 NSF
Building Size GSF (without parking)	160,950 GSF
FAR	10.7
Parking Ratio	0.7 Spaces per unit
Total Parking Spaces	38
Parking Construction Type (# of levels)	Underground (1)

8b. Summary of Financial Analysis - East SoMa Large Residential Mixed-use

Prototype 8	**Base Case TIDF**		**Base Case TSF**		**Difference**	
8: East SoMa Large Res. Mixed-use	**Total**	**% of Revenues**	**TSF Total**	**% of Revenues**	**Total**	**% Change**
Revenues						
Residential For-Sale	$127,277,500	96%	$127,277,500	96%	$0	0%
Residential Rental	$0	0%	$0	0%	$0	-
Subtotal Residential	$127,277,500	96%	$127,277,500	96%	$0	0%
Office	$0	0%	$0	0%	$0	-
Retail	$5,162,500	3.9%	$5,162,500	3.9%	$0	0%
Total Revenues	**$132,440,000**	**100%**	**$132,440,000**	**100%**	**$0**	**0%**
Hard and Soft Costs						
Hard Construction Costs	$60,567,200	46%	$60,567,200	46%	$0	0%
Tenant Improvements/Lease Up Costs	$675,000	1%	$675,000	1%	$0	0%
Development Impact Fees/Other Costs	$3,917,200	3%	$4,556,400	3%	$639,200	16%
Environmental/Transportation Review	$144,000	0%	$119,000	0%	($25,000)	(17%)
Construction Financing/Predev. Carry	$9,179,700	7%	$8,848,600	7%	($331,100)	(3.6%)
Other Soft Costs	$15,141,800	11%	$15,141,800	11%	$0	0.0%
Total Hard and Soft Costs	**$89,624,900**	**68%**	**$89,908,000**	**68%**	**$283,100**	**0.3%**
Developer Margin	$29,136,800	22%	$29,136,800	22%	$0	0%
Total Costs	**$118,761,700**	**90%**	**$119,044,800**	**90%**	***$283,100***	**0.2%**
Residual Land Value	**$13,678,300**	**10%**	**$13,395,200**	**10%**	**($283,100)**	**(2.1%)**
Without Predevelopment Savings	***$13,678,300***	***10%***	***$13,039,100***	***10%***	***($639,200)***	***(4.7%)***
Developer Margin/ Total Dev. Costs	***28%***		***28%***			

Note: Numbers rounded to nearest $100. Development Impact Fees/ Other Costs include all applicable impact fees (including TIDF or TSF), plus any upfront developer' payment for TDR purchase and Mello Roos special tax.

8c. Summary of Financial Indicators - East SoMa Large Residential Mixed-use

Prototype 8	Base Case TIDF				
8: East SoMa Large Residential Mixed-use	**Total**	**Soft Cost as % of HCC**	**Per Bldg GSF**	**Per Bldg NSF**	**Per Unit**
Total Net Revenues					
Residential For-Sale	$127,277,500		$804	$1,006	$994,355
Residential Rental	$0		$0	$0	$0
Subtotal Residential	$127,277,500		$804	$1,006	$994,355
Office	$0		$0	$0	$0
Retail	$5,162,500		$33	$41	$40,332
Total Revenues	**$132,440,000**		**$837**	**$1,046**	**$1,034,688**
Development Costs					
Hard Construction Costs	$60,567,200	100%	$383	$479	$473,181
Tenant Improvements/Lease Up Costs	$675,000	1%	$4	$5	$5,273
Development Impact Fees/Other Costs	$3,917,200	6%	$25	$31	$30,603
Environmental/Transportation Review	$144,000	0%	$1	$1	$1,125
Construction Financing/Predev. Carry	$9,179,700	15%	$58	$73	$71,716
Other Soft Costs	$15,141,800	25%	$96	$120	$118,295
Total Hard and Soft Costs	**$89,624,900**		**$566**	**$708**	**$700,195**
Developer Margin	$29,136,800		$184	$230	$227,631
Total Costs	**$118,761,700**		**$750**	**$938**	**$927,826**
Residual Land Value	**$13,678,300**		**$86**	**$108**	**$106,900**
Without Predevelopment Savings	***$13,678,300***		***$86***	***$108***	***$106,900***

Prototype 8	Base Case TSF				
8: East SoMa Large Residential Mixed-use	**Total**	**Soft Cost as % of HCC**	**Per Bldg GSF**	**Per Bldg NSF**	**Per Unit**
Total Net Revenues					
Residential For-Sale	$127,277,500		$804	$1,006	$994,355
Residential Rental	$0		$0	$0	$0
Subtotal Residential	$127,277,500		$804	$1,006	$994,355
Office	$0		$0	$0	$0
Retail	$5,162,500		$33	$41	$40,332
Total Revenues	**$132,440,000**		**$1,046**	**$1,046**	**$1,034,688**
Development Costs					
Hard Construction Costs	$60,567,200	100%	$383	$479	$473,181
Tenant Improvements/Lease Up Costs	$675,000	1%	$4	$5	$5,273
Development Impact Fees/Other Costs	$4,556,400	8%	$29	$36	$35,597
Environmental/Transportation Review	$119,000	0%	$1	$1	$930
Construction Financing/Predev. Carry	$8,848,600	15%	$56	$70	$69,130
Other Soft Costs	$15,141,800	25%	$96	$120	$118,295
Total Hard and Soft Costs	**$89,908,000**		**$568**	**$710**	**$702,406**
Developer Margin	$29,136,800		$184	$230	$227,631
Total Costs	**$119,044,800**		**$752**	**$941**	**$930,038**
Residual Land Value	**$13,395,200**		**$85**	**$106**	**$104,700**
Without Predevelopment Savings	***$13,039,100***		***$82***	***$103***	***$101,900***

Appendix Table A-9
Prototype 9 Summary Results
Comparison for Base Case TIDF and Base Case TSF

9a. Summary Development Pro Forma - Transit Center Large Residential

Site Area and Constraints	
Lot Size	15,000 SF
Existing Prior Use	0 GSF
Development Program	
Description	High-Rise
Maximum Height	400 Feet
Residential Units (Size)	229 Units
Average Unit Size (NSF)	1,053 NSF
Residential Density	665 Units per acre
Building Size (NSF)	241,250 NSF
Building Size GSF (without parking)	332,750 GSF
FAR	22.5
Parking Ratio	0.7 Spaces per unit
Total Parking Spaces	163
Parking Construction Type (# of levels)	Underground (2)

9b. Summary of Financial Analysis - Transit Center Large Residential

Prototype 9	Base Case TIDF		Base Case TSF		Difference	
9: Transit Center Large Residential	**Total**	**% of Revenues**	**TSF Total**	**% of Revenues**	**Total**	**% Change**
Revenues						
Residential For-Sale	$307,630,600	100%	$307,630,600	100%	$0	0.0%
Residential Rental	$0	0%	$0	0%	$0	-
Subtotal Residential	$307,630,600	100%	$307,630,600	100%	$0	0.0%
Office	$0	0%	$0	0%	$0	-
Retail	$0	0%	$0	0%	$0	-
Total Revenues	**$307,630,600**	**100%**	**$307,630,600**	**100%**	**$0**	**0.0%**
Hard and Soft Costs						
Hard Construction Costs	$132,220,000	43%	$132,220,000	43%	$0	0.0%
Tenant Improvements/Lease Up Costs	$0	0%	$0	0%	$0	-
Development Impact Fees/Other Costs	$22,389,200	7%	$24,448,900	8%	$2,059,700	9.2%
Environmental/Transportation Review	$149,000	0%	$124,000	0%	($25,000)	(17%)
Construction Financing/Predev. Carry	$26,246,300	9%	$25,477,200	8%	($769,100)	(2.9%)
Other Soft Costs	$33,055,000	11%	$33,055,000	11%	$0	0.0%
Total Hard and Soft Costs	**$214,059,500**	**70%**	**$215,325,100**	**70%**	**$1,265,600**	**0.6%**
Developer Margin	$67,678,700	22%	$67,678,700	22%	$0	0.0%
Total Costs	**$281,738,200**	**92%**	**$283,003,800**	**92%**	***$1,265,600***	**0.4%**
Residual Land Value	**$25,892,400**	**8%**	**$24,626,800**	**8%**	**($1,265,600)**	**(4.9%)**
Without Predevelopment Savings	***$25,892,400***	***8%***	***$23,832,700***	***8%***	***($2,059,700)***	***(8.0%)***
Developer Margin/ Total Dev. Costs	***28%***		***28%***			

Note: Numbers rounded to nearest $100. Development Impact Fees/ Other Costs include all applicable impact fees (including TIDF or TSF), plus any upfront developer' payment for TDR purchase and Mello Roos special tax.

9c. Summary of Financial Indicators - Transit Center Large Residential

Prototype 9	Base Case TIDF				
9: Transit Center Large Residential	**Total**	**Soft Cost as % of HCC**	**Per Bldg GSF**	**Per Bldg NSF**	**Per Unit**
Revenues					
Residential For-Sale	$307,630,600		$925	$1,275	$1,343,365
Residential Rental	$0		$0	$0	$0
Subtotal Residential	$307,630,600		$925	$1,275	$1,343,365
Office	$0		$0	$0	$0
Retail	$0		$0	$0	$0
Total Revenues	**$307,630,600**		**$925**	**$1,275**	**$1,343,365**
Hard and Soft Costs					
Hard Construction Costs	$132,220,000	100%	$397	$548	$577,380
Tenant Improvements/Lease Up Costs	$0	0%	$0	$0	$0
Development Impact Fees/Other Costs	$22,389,200	17%	$67	$93	$97,769
Environmental/Transportation Review	$149,000	0%	$0	$1	$651
Construction Financing/Predev. Carry	$26,246,300	20%	$79	$109	$114,613
Other Soft Costs	$33,055,000	25%	$99	$137	$144,345
Total Hard and Soft Costs	**$214,059,500**		**$643**	**$887**	**$934,758**
Developer Margin	$67,678,700		$203	$281	$295,540
Total Costs	**$281,738,200**		**$847**	**$1,168**	**$1,230,298**
Residual Land Value	**$25,892,400**		**$78**	**$107**	**$113,100**
Without Predevelopment Savings	***$25,892,400***		***$78***	***$107***	***$113,100***

Prototype 9	Base Case TSF				
9: Transit Center Large Residential	**Total**	**Soft Cost as % of HCC**	**Per Bldg GSF**	**Per Bldg NSF**	**Per Unit**
Revenues					
Residential For-Sale	$307,630,600		$925	$1,275	$1,343,365
Residential Rental	$0		$0	$0	$0
Subtotal Residential	$307,630,600		$925	$1,275	$1,343,365
Office	$0		$0	$0	$0
Retail	$0		$0	$0	$0
Total Revenues	**$307,630,600**		**$925**	**$1,275**	**$1,343,365**
Hard and Soft Costs					
Hard Construction Costs	$132,220,000	100%	$397	$548	$577,380
Tenant Improvements/Lease Up Costs	$0	0%	$0	$0	$0
Development Impact Fees/Other Costs	$24,448,900	18%	$73	$101	$106,764
Environmental/Transportation Review	$124,000	0%	$0	$1	$541
Construction Financing/Predev. Carry	$25,477,200	19%	$77	$106	$111,254
Other Soft Costs	$33,055,000	25%	$99	$137	$144,345
Total Hard and Soft Costs	**$215,325,100**		**$647**	**$893**	**$940,284**
Developer Margin	$67,678,700		$203	$281	$295,540
Total Costs	**$283,003,800**		**$850**	**$1,173**	**$1,235,824**
Residual Land Value	**$24,626,800**		**$74**	**$102**	**$107,500**
Without Predevelopment Savings	***$23,832,700***		***$72***	***$99***	***$104,100***

Appendix Table A-10
Prototype 10 Summary Results
Comparison for Base Case TIDF and Base Case TSF

10a. Summary of Development Program - Transit Center Large Office

Site Area and Constraints	
Lot Size	20,000 SF
Existing Prior Use	0 GSF
Development Program	
Description	High-Rise
Maximum Height	400 Feet
Residential Units	N/A Units
Average Unit Size	N/A NSF
Residential Density	0 Units/Acre
Building Size (Leaseable SF)	320,300 LSF
Building Size GSF (without parking)	384,700 GSF
FAR	19.39
Parking Ratio	N/A Spaces per Unit
Total Parking Spaces	93
Parking Construction Type (# of levels)	Underground (2)

10b. Summary of Financial Analysis - Transit Center Large Office

Prototype 10	Base Case TIDF		Base Case TSF		Difference	
10: Transit Center Large Office	**Total**	**% of Revenues**	**Base Case TSF Total**	**% of Revenues**	**Total**	**% Change**
Revenues						
Residential For-Sale	$0	0%	$0	0%	$0	-
Residential Rental	$0	0%	$0	0%	$0	-
Subtotal Residential	$0	0%	$0	0%	$0	-
Office	$319,920,700	97%	$319,920,700	97%	$0	0.0%
Retail	$9,881,600	3%	$9,881,600	3%	$0	0.0%
Total Revenues	**$329,802,300**	**100%**	**$329,802,300**	**100%**	**$0**	**0.0%**
Hard and Soft Costs						
Hard Construction Costs	$127,821,800	39%	$127,821,800	39%	$0	0.0%
Tenant Improvements/Lease Up Costs	$32,030,000	10%	$32,030,000	10%	$0	0.0%
Development Impact Fees/Other Costs	$30,290,600	9%	$30,495,800	9%	$205,200	0.7%
Environmental/Transportation Review	$249,200	0%	$199,200	0%	($50,000)	(20%)
Construction Financing/Predev. Carry	$21,445,700	7%	$20,621,200	6%	($824,500)	(3.8%)
Other Soft Costs	$23,007,900	7%	$23,007,900	7%	$0	0.0%
Total Hard and Soft Costs	**$234,845,200**	**71%**	**$234,175,900**	**71%**	**($669,300)**	**(0.3%)**
Developer Margin	$52,768,400	16%	$52,768,400	16%	$0	0.0%
Total Costs	**$287,613,600**	**87%**	**$286,944,300**	**87%**	***($669,300)***	**(0.2%)**
Residual Land Value	**$42,188,700**	**13%**	**$42,858,000**	**13%**	**$669,300**	**1.6%**
Without Predevelopment Savings	***$42,188,700***	***13%***	***$41,983,500***	***13%***	***($205,200)***	**(0.5%)**
Return (Yield) on Cost	***6.2%***		***6.2%***			

Note: Numbers rounded to nearest $100. Development Impact Fees/ Other Costs include all applicable impact fees (including TIDF or TSF), plus any upfront developer' payment for TDR purchase and Mello Roos special tax.

10c. Summary of Financial Indicators - Transit Center Large Office

Prototype 10	Base Case TIDF				
10: Transit Center Large Office	**Total**	**Soft Cost as % of HCC**	**Per Bldg GSF**	**Per Bldg NSF**	**Per Unit**
Revenues					
Residential For-Sale	$0		$0	$0	N/A
Residential Rental	$0		$0	$0	N/A
Subtotal Residential	$0		$0	$0	N/A
Office	$319,920,700		$832	$999	N/A
Retail	$9,881,600		$26	$31	N/A
Total Revenues	**$329,802,300**		**$857**	**$1,030**	**N/A**
Hard and Soft Costs					
Hard Construction Costs	$127,821,800	100%	$332	$399	N/A
Tenant Improvements/Lease Up Costs	$32,030,000	25%	$83	$100	N/A
Development Impact Fees/Other Costs	$30,290,600	24%	$79	$95	N/A
Environmental/Transportation Review	$249,200	0%	$1	$1	N/A
Construction Financing/Predev. Carry	$21,445,700	17%	$56	$67	N/A
Other Soft Costs	$23,007,900	18%	$60	$72	N/A
Total Hard and Soft Costs	**$234,845,200**		**$610**	**$733**	**N/A**
Developer Margin	$52,768,400		$137	$165	N/A
Total Costs	**$287,613,600**		**$748**	**$898**	**N/A**
Residual Land Value	**$42,188,700**		**$110**	**$132**	**N/A**
Without Predevelopment Savings	***$42,188,700***		***$110***	***$132***	***N/A***

Prototype 10	Base Case TSF				
10: Transit Center Large Office	**Total**	**Soft Cost as % of HCC**	**Per Bldg GSF**	**Per Bldg NSF**	**Per Unit**
Revenues					
Residential For-Sale	$0		$0	$0	N/A
Residential Rental	$0		$0	$0	N/A
Subtotal Residential	$0		$0	$0	N/A
Office	$319,920,700		$832	$999	N/A
Retail	$9,881,600		$26	$31	N/A
Total Revenues	**$329,802,300**		**$857**	**$1,030**	**N/A**
Hard and Soft Costs					
Hard Construction Costs	$127,821,800	100%	$332	$399	N/A
Tenant Improvements/Lease Up Costs	$32,030,000	25%	$83	$100	N/A
Development Impact Fees/Other Costs	$30,495,800	24%	$79	$95	N/A
Environmental/Transportation Review	$199,200	0%	$1	$1	N/A
Construction Financing/Predev. Carry	$20,621,200	16%	$54	$64	N/A
Other Soft Costs	$23,007,900	18%	$60	$72	N/A
Total Hard and Soft Costs	**$234,175,900**		**$609**	**$731**	**N/A**
Developer Margin	$52,768,400		$137	$165	N/A
Total Costs	**$286,944,300**		**$746**	**$896**	**N/A**
Residual Land Value	**$42,858,000**		**$111**	**$134**	**N/A**
Without Predevelopment Savings	***$41,983,500***		***$109***	***$131***	***N/A***

Appendix Table B-1
Prototype 1 Proforma Comparison for
Base Case TIDF and Base Case TSF

1d. Summary Development Pro Forma - Geary Small Residential Mixed-use

1: Geary Small Res. Mixed-use	Prototype 1			
	Base Case TIDF	Base Case TSF	Difference	Percent
Revenues				
Residential	$7,900,200	$7,900,200	$0	0.0%
Office	$0	$0	$0	-
Retail	$870,900	$870,900	$0	0.0%
Total Revenues	**$8,771,100**	**$8,771,100**	**$0**	0.0%
Development Costs				
Hard Construction Costs	**$3,788,400**	**$3,788,400**	**$0**	0.0%
Residential	*$2,724,000*	*$2,724,000*	$0	0.0%
Office	*$0*	*$0*	$0	-
Retail	*$360,000*	*$360,000*	$0	0.0%
Parking	*$360,000*	*$360,000*	$0	0.0%
Hard Cost Contingency	*$344,400*	*$344,400*	$0	0.0%
Tenant Improvements/Lease Up Costs	**$144,000**	**$144,000**	**$0**	0.0%
Office	*$0*	*$0*	*$0*	-
Retail	*$144,000*	*$144,000*	*$0*	*0.0%*
Subtotal: Direct Costs	**$3,932,400**	**$3,932,400**	**$0**	0.0%
Soft Costs				
Environmental and Transportation Review	**$9,000**	**$9,000**	$0	0.0%
Transportation Component	*$0*	*$0*		
Environmental Review	*$9,000*	*$9,000*	*$0*	*0.0%*
Development Impact Fees/ Other Costs	**$64,700**	**$134,600**	**$69,900**	108%
Transit Impact Development Fee	*$23,344*	$0	($23,344)	
TIDF Prior Use Credit	*($4,476)*	*$0*	$4,476	
Transportation Sustainability Fee	*$0*	*$93,345*	$93,345	-
TSF Prior Use Credit	*$0*	*($4,566)*	($4,566)	-
Area Plan Impact Fees	*$0*	*$0*	$0	-
Area Plan TSF Credit	*$0*	*$0*	$0	-
TDR Purchase for FAR Increase	*$0*	*$0*	$0	-
Affordable Housing Fee	*$0*	*$0*	$0	-
Jobs-Housing Linkage Fee	*$0*	*$0*	$0	-
Childcare Requirement	*$0*	*$0*	$0	-
Downtown Parks	*$0*	*$0*	$0	-
Public Art Fee	*$0*	*$0*	$0	-
School Impact Fee	*$33,417*	*$33,417*	$0	0.0%
Wastewater/Water Capacity Charges	*$12,367*	*$12,367*	$0	0.0%
Construction Financing/ Predev. Carry	**$364,300**	**$364,300**	**$0**	0.0%
Predevelopment Carry (Savings)	*$0*	*$0*	$0	-
Construction Loan Interest	*$306,293*	*$306,293*	$0	0.0%
Construction Loan Fees (Points)	*$58,010*	*$58,010*	$0	0.0%
Other Soft Costs	**$947,100**	**$947,100**	**$0**	0.0%
Developer Margin	**$1,403,400**	**$1,403,400**	**$0**	**0.0%**
Total Cost	**$6,720,900**	**$6,790,800**	**$69,900**	**1.0%**
Residual Land Value (RLV)				
With Predevelopment Savings				
Residual Land Value	**$2,050,200**	**$1,980,300**	**($69,900)**	(3.4%)
Per Gross Building Square Foot	$158 /GSF	$153 /GSF	($5)	(3.4%)
Per Net Building Square Foot	$200 /NSF	$193 /NSF	($7)	(3.4%)
Without Predevelopment Savings				
Residual Land Value	**$2,050,200**	**$1,980,300**	**($69,900)**	(3.4%)
Per Gross Building Square Foot	$158 /GSF	$153 /GSF	($5)	(3.4%)
Per Net Building Square Foot	$200 /NSF	$193 /NSF	($7)	(3.4%)

Note: Key numbers rounded to nearest $100. Development Impact Fees/ Other Costs include all applicable impact fees (including TIDF or TSF), plus any upfront developer payment for TDR purchase and Mello Roos special tax.

Appendix Table B-2
Prototype 2 Proforma Comparison for
Base Case and Base Case TSF

2d. Summary Development Pro Forma - Van Ness Medium Residential Mixed-use

2: Van Ness Medium Res. Mixed-use	Prototype 2			
	Base Case TIDF	Base Case TSF	Difference	Percent
Revenues				
Residential	$56,819,600	$56,819,600	$0	0.0%
Office	$0	$0	$0	-
Retail	$5,740,900	$5,740,900	$0	0.0%
Total Revenues	**$62,560,500**	**$62,560,500**	**$0**	0.0%
Development Cost				
Hard Construction Costs	**$31,216,600**	**$31,216,600**	**$0**	0.0%
Residential	*$22,759,200*	*$22,759,200*	$0	0.0%
Office	*$0*	*$0*	$0	-
Retail	*$1,819,681*	*$1,819,681*	$0	0.0%
Parking	*$3,799,880*	*$3,799,880*	$0	0.0%
Hard Cost Contingency	*$2,837,876*	*$2,837,876*	$0	0.0%
Tenant Improvements/Lease Up Costs	**$808,747**	**$808,747**	$0	0.0%
Office	*$0*	*$0*	$0	-
Retail	*$808,747*	*$808,747*	$0	0.0%
Subtotal: Direct Costs	**$32,025,300**	**$32,025,300**	$0	0.0%
Soft Costs				
Environmental and Transportation Review	**$188,000**	**$188,000**	$0	0.0%
Transportation Component	*$28,000*	*$28,000*	*$0*	0.0%
Environmental Review	*$160,000*	*$160,000*	*$0*	*0.0%*
Development Impact Fees/ Other Costs	**$403,600**	**$862,500**	**$458,900**	114%
Transit Impact Development Fee	*$149,693*	*$0*	($149,693)	
TIDF Prior Use Credit	*($149,693)*	*$0*	$149,693	
Transportation Sustainability Fee	*$0*	*$617,650*	$617,650	-
TSF Prior Use Credit	*$0*	*($158,730)*	($158,730)	-
Area Plan Impact Fees	*$0*	*$0*	$0	-
Area Plan TSF Credit	*$0*	*$0*	$0	-
TDR Purchase for FAR Increase	*$0*	*$0*	$0	-
Affordable Housing Fee	*$0*	*$0*	$0	-
Jobs-Housing Linkage Fee	*$0*	*$0*	$0	-
Childcare Requirement	*$0*	*$0*	$0	-
Downtown Parks	*$0*	*$0*	$0	-
Public Art Fee	*$0*	*$0*	$0	-
School Impact Fee	*$223,257*	*$223,257*	$0	0.0%
Wastewater/Water Capacity Charges	*$180,298*	*$180,298*	$0	0.0%
Construction Financing/ Predev. Carry	**$3,235,600**	**$3,235,600**	$0	0.0%
Predevelopment Carry (Savings)	*$0*	*$0*	$0	-
Construction Loan Interest	*$2,821,839*	*$2,821,839*	$0	0.0%
Construction Loan Fees (Points)	*$413,759*	*$413,759*	$0	0.0%
Other Soft Costs	**$7,804,200**	**$7,804,200**	*$0*	0.0%
Developer Margin	**$11,886,500**	**$11,886,500**	$0	0.0%
Total Cost	**$55,543,200**	**$56,002,100**	**$458,900**	0.8%
Residual Land Value (RLV)				
With Predevelopment Savings				
Residual Land Value	**$7,017,300**	**$6,558,400**	**($458,900)**	(6.5%)
Per Gross Building Square Foot	$81 /GSF	$76 /GSF	($5)	(6.5%)
Per Net Building Square Foot	$103 /NSF	$97 /NSF	($7)	(6.5%)
Without Predevelopment Savings				
Residual Land Value	**$7,017,300**	**$6,558,400**	**($458,900)**	(6.5%)
Per Gross Building Square Foot	$81 /GSF	$76 /GSF	($5)	(6.5%)
Per Net Building Square Foot	$103 /NSF	$97 /NSF	($7)	(6.5%)

Note: Key numbers rounded to nearest $100. Development Impact Fees/ Other Costs include all applicable impact fees (including TIDF or TSF), plus any upfront developer payment for TDR purchase and Mello Roos special tax.

Appendix Table B-3
Prototype 3 Proforma Comparison for
Base Case TIDF and Base Case TSF

3d. Summary Development Pro Forma - Outer Mission Small Residential Mixed-use

3. Outer Mission Small Res. Mixed-use	Prototype 3			
	Base Case TIDF	Base Case TSF	Difference	Percent
Revenues				
Residential	$21,895,900	$21,895,900	$0	0.0%
Office	$0	$0	$0	-
Retail	$1,739,400	$1,739,400	$0	0.0%
Total Revenues	**$23,635,300**	**$23,635,300**	**$0**	0.0%
Development Cost				
Hard Construction Costs	**13,594,400**	**13,594,400**	$0	0.0%
Residential	*$10,458,180*	*$10,458,180*	$0	0.0%
Office	*$0*	*$0*	$0	-
Retail	*$647,100*	*$647,100*	$0	0.0%
Parking	*$1,253,280*	*$1,253,280*	$0	0.0%
Hard Cost Contingency	*$1,235,856*	*$1,235,856*	$0	0.0%
Tenant Improvements/Lease Up Costs	**$287,600**	**$287,600**	$0	0.0%
Office	*$0*	*$0*	$0	-
Retail	*$287,600*	*$287,600*	$0	0.0%
Subtotal: Direct Costs	**$13,882,000**	**$13,882,000**	$0	0.0%
Soft Costs				
Environmental and Transportation Review	**$27,000**	**$27,000**	$0	0.0%
Transportation Component	*$0*	*$0*	$0	-
Environmental Review	*$27,000*	*$27,000*	*$0*	*0.0%*
Development Impact Fees/ Other Costs	**$201,100**	**$243,500**	**$42,400**	21%
Transit Impact Development Fee	*$44,500*	*$0*	($44,500)	
TIDF Prior Use Credit	*($44,500)*	*$0*	$44,500	
Transportation Sustainability Fee	*$0*	*$283,775*	$283,775	-
TSF Prior Use Credit	*$0*	*($241,330)*	($241,330)	-
Area Plan Impact Fees	*$0*	*$0*	$0	-
Area Plan TSF Credit	*$0*	*$0*	$0	-
TDR Purchase for FAR Increase	*$0*	*$0*	$0	-
Affordable Housing Fee	*$0*	*$0*	$0	-
Jobs-Housing Linkage Fee	*$0*	*$0*	$0	-
Childcare Requirement	*$0*	*$0*	$0	-
Downtown Parks	*$0*	*$0*	$0	-
Public Art Fee	*$0*	*$0*	$0	-
School Impact Fee	*$113,457*	*$113,457*	$0	0.0%
Wastewater/Water Capacity Charges	*$87,598*	*$87,598*	$0	0.0%
Construction Financing/ Predev. Carry	**$1,188,000**	**$1,188,000**	$0	0.0%
Predevelopment Carry (Savings)	*$0*	*$0*	$0	-
Construction Loan Interest	*$1,031,699*	*$1,031,699*	$0	0.0%
Construction Loan Fees (Points)	*$156,318*	*$156,318*	$0	0.0%
Other Soft Costs	**$3,398,600**	**$3,398,600**	**$0**	0.0%
Developer Margin	**$4,018,000**	**$4,018,000**	**$0**	0.0%
Total Cost	**$22,714,700**	**$22,757,100**	**$42,400**	0.2%
Residual Land Value (RLV)				
With Predevelopment Savings				
Residual Land Value	**$920,600**	**$878,200**	**($42,400)**	(4.6%)
Per Gross Building Square Foot	$22	$21 /GSF	($1)	(4.6%)
Per Net Building Square Foot	$28	$27 /NSF	($1)	(4.6%)
Without Predevelopment Savings				
Residual Land Value	**$920,600**	**$878,200**	**($42,400)**	(4.6%)
Per Gross Building Square Foot	$22	$21 /GSF	($1)	(4.6%)
Per Net Building Square Foot	$28	$27 /NSF	($1)	(4.6%)

Note: Key numbers rounded to nearest $100. Development Impact Fees/ Other Costs include all applicable impact fees (including TIDF or TSF), plus any upfront developer payment for TDR purchase and Mello Roos special tax.

Appendix Table B-4
Prototype 4 Proforma Comparison for
Base Case and Base Case TSF

4d. Summary Development Pro Forma - Mission Small Residential Mixed Use

4: Mission Small Res. Mixed-use	Prototype 4			
	Base Case TIDF	Base Case TSF	Difference	Percent
Revenues				
Residential	$13,445,800	$13,445,800	$0	0.0%
Office	$0	$0	$0	-
Retail	$1,530,900	$1,530,900	$0	0.0%
Total Revenues	**$14,976,700**	**$14,976,700**	**$0**	0.0%
Development Cost				
Hard Construction Costs	**$6,614,500**	**$6,614,500**	**$0**	0.0%
Residential	*$5,138,640*	*$5,138,640*	$0	0.0%
Office	*$0*	*$0*	$0	-
Retail	*$562,500*	*$562,500*	$0	0.0%
Parking	*$312,000*	*$312,000*	$0	0.0%
Hard Cost Contingency	*$601,314*	*$601,314*	$0	0.0%
Tenant Improvements/Lease Up Costs	**$225,000**	**$225,000**	$0	0.0%
Office	*$0*	*$0*	$0	-
Retail	*$225,000*	*$225,000*	$0	0.0%
Subtotal: Direct Costs	**$6,839,500**	**$6,839,500**	**$0**	0.0%
Soft Costs				
Environmental and Transportation Review	**$11,000**	**$11,000**	$0	0.0%
Transportation Component	*$0*	*$0*	$0	-
Environmental Review	*$11,000*	*$11,000*	*$0*	*0.0%*
Development Impact Fees/ Other Costs	**$270,000**	**$293,600**	**$23,600**	9%
Transit Impact Development Fee	*$36,475*	*$0*	($36,475)	
TIDF Prior Use Credit	*($18,650)*	*$0*	$18,650	
Transportation Sustainability Fee	*$0*	*$158,414*	$158,414	-
TSF Prior Use Credit	*$0*	*($102,735)*	($102,735)	-
Area Plan Impact Fees	*$160,968*	*$160,968*	$0	0.0%
Area Plan TSF Credit	*$0*	*($14,277)*	($14,277)	-
TDR Purchase for FAR Increase	*$0*	*$0*	$0	-
Affordable Housing Fee	*$0*	*$0*	$0	-
Jobs-Housing Linkage Fee	*$0*	*$0*	$0	-
Childcare Requirement	*$0*	*$0*	$0	-
Downtown Parks	*$0*	*$0*	$0	-
Public Art (% of Hard cost)	*$0*	*$0*	$0	-
School Impact Fee	*$58,121*	*$58,121*	$0	0.0%
Wastewater/Water Capacity Charge	*$33,099*	*$33,099*	$0	0.0%
Construction Financing/ Predev. Carry	**$665,600**	**$665,600**	**$0**	0.0%
Predevelopment Carry (Savings)	*$0*	*$0*	$0	-
Construction Loan Interest	*$566,578*	*$566,578*	$0	0.0%
Construction Loan Fees (Points)	*$99,052*	*$99,052*	$0	0.0%
Other Soft Costs	**$1,653,600**	**$1,653,600**	**$0**	0.0%
Developer Margin	**$2,396,300**	**$2,396,300**	**$0**	0.0%
Total Cost	**$11,836,000**	**$11,859,600**	**$23,600**	0.2%
Residual Land Value (RLV)				
With Predevelopment Savings				
Residual Land Value	**$3,140,700**	**$3,117,100**	**($23,600)**	(0.8%)
Per Gross Building Square Foot	$141	$140 /GSF	($1)	(0.8%)
Per Net Building Square Foot	$189	$188 /NSF	($1)	(0.8%)
Without Predevelopment Savings				
Residual Land Value	**$3,140,700**	**$3,117,100**	**($23,600)**	(0.8%)
Per Gross Building Square Foot	$141	$140 /GSF	($1)	(0.8%)
Per Net Building Square Foot	$189	$188 /NSF	($1)	(0.8%)

Note: Key numbers rounded to nearest $100. Development Impact Fees/ Other Costs include all applicable impact fees (including TIDF or TSF), plus any upfront developer payment for TDR purchase and Mello Roos special tax.

Appendix Table B-5
Prototype 5 Proforma Comparison for
Base Case TIDF and Base Case TSF

5d. Summary Development Pro Forma - Central Waterfront Large Residential MU

5: Central Waterfront Large Res. MU	Prototype 5			
	Base Case TIDF	Base Case TSF	Difference	Percent
Revenues				
Residential	$106,807,000	$106,807,000	$0	0.0%
Office	$0	$0	$0	-
Retail	$3,126,600	$3,126,600	$0	0.0%
Total Revenues	**$109,933,600**	**$109,933,600**	$0	0.0%
Development Cost				
Hard Construction Costs	**$50,999,200**	**$50,999,200**	**$0**	0.0%
Residential	*$40,424,400*	*$40,424,400*	$0	0.0%
Office	*$0*	*$0*	$0	-
Retail	*$1,012,500*	*$1,012,500*	$0	0.0%
Parking	*$4,926,000*	*$4,926,000*	$0	0.0%
Hard Cost Contingency	*$4,636,290*	*$4,636,290*	$0	0.0%
Tenant Improvements/Lease Up Costs	**$450,000**	**$450,000**	**$0**	0.0%
Office	*$0*	*$0*	$0	-
Retail	*$450,000*	*$450,000*	$0	0.0%
Subtotal: Direct Costs	**$51,449,200**	**$51,449,200**	**$0**	0.0%
Soft Costs				
Environmental and Transportation Review	**$683,000**	**$122,000**	**($561,000)**	(82%)
Transportation Analysis	*$128,000*	*$103,000*	($25,000)	(20%)
Environmental Review	*$555,000*	*$19,000*	*($536,000)*	*(97%)*
Development Impact Fees/ Other Costs	**$2,421,400**	**$2,671,300**	**$249,900**	10%
Transit Impact Development Fee	*$72,950*	*$0*	*($72,950)*	
TIDF Prior Use Credit	*($69,350)*	*$0*	$69,350	
Transportation Sustainability Fee	*$0*	*$998,917*	*$998,917*	-
TSF Prior Use Credit	*$0*	*($577,200)*	($577,200)	-
Area Plan Impact Fees	*$1,682,573*	*$1,682,573*	$0	0.0%
Area Plan TSF Credit	*$0*	*($168,257)*	($168,257)	-
TDR Purchase for FAR Increase	*$0*	*$0*	$0	-
Affordable Housing Fee	*$0*	*$0*	*$0*	-
Jobs-Housing Linkage Fee	*$0*	*$0*	*$0*	-
Childcare Requirement	*$0*	*$0*	*$0*	-
Downtown Parks	*$0*	*$0*	*$0*	-
Public Art Fee	*$0*	*$0*	*$0*	-
School Impact Fee	*$436,900*	*$436,900*	*$0*	0.0%
Wastewater/Water Capacity Charges	*$298,371*	*$298,371*	*$0*	0.0%
Construction Financing/ Predev. Carry	**$4,642,300**	**$4,367,400**	**($274,900)**	(5.9%)
Predevelopment Carry (Savings)	*$0*	*($274,834)*	*($274,834)*	-
Construction Loan Interest	*$4,072,668*	*$4,072,668*	*$0*	0.0%
Construction Loan Fees (Points)	*$569,604*	*$569,604*	*$0*	0.0%
Other Soft Costs	**$9,179,900**	**$9,179,900**	*$0*	0.0%
Developer Margin	**$18,688,700**	**$18,688,700**	*$0*	0.0%
Total Cost	**$87,064,500**	**$86,478,500**	**($586,000)**	(0.7%)
Residual Land Value (RLV)				
With Predevelopment Savings				
Residual Land Value	**$22,869,100**	**$23,455,100**	**$586,000**	2.6%
Per Gross Building Square Foot	$148	$152 /GSF	$4	2.6%
Per Net Building Square Foot	$185	$190 /NSF	$5	2.6%
Without Predevelopment Savings				
Residual Land Value	**$22,869,100**	**$22,619,200**	**($249,900)**	(1.1%)
Per Gross Building Square Foot	$148	$146 /GSF	($2)	(1.1%)
Per Net Building Square Foot	$185	$183 /NSF	($2)	(1.1%)

Note: Key numbers rounded to nearest $100. Development Impact Fees/ Other Costs include all applicable impact fees (including TIDF or TSF), plus any upfront developer payment for TDR purchase and Mello Roos special tax.

Appendix Table B-6
Prototype 6 Proforma Comparison for
Base Case TIDF and Base Case TSF

6d. Summary Development Pro Forma - East SoMa Medium Residential Mixed-use

6: East SoMa Medium Res. Mixed-use	Prototype 6			
	Base Case TIDF	Base Case TSF	Difference	Percent
Revenues				
Residential	$40,092,100	$40,092,100	$0	0.0%
Office	$0	$0	$0	-
Retail	$3,382,800	$3,382,800	$0	0.0%
Total Revenues	**$43,474,900**	**$43,474,900**	**$0**	0.0%
Development Cost				
Hard Construction Costs	**$21,266,900**	**$21,266,900**	**$0**	0.0%
Residential	*$16,665,000*	*$16,665,000*	$0	0.0%
Office	*$0*	*$0*	$0	-
Retail	*$1,012,500*	*$1,012,500*	$0	0.0%
Parking	*$1,656,000*	*$1,656,000*	$0	0.0%
Hard Cost Contingency	*$1,933,350*	*$1,933,350*	$0	0.0%
Tenant Improvements/Lease Up Costs	**$450,000**	**$450,000**	**$0**	0.0%
Office	*$0*	*$0*	$0	-
Retail	*$450,000*	*$450,000*	$0	0.0%
Subtotal: Direct Costs	**$21,716,900**	**$21,716,900**	**$0**	0.0%
Soft Costs				
Environmental and Transportation Review	**$119,000**	**$119,000**	**$0**	0.0%
Transportation Component	*$103,000*	*$103,000*	*$0*	*0.0%*
Environmental Review	*$16,000*	*$16,000*	*$0*	*0.0%*
Development Impact Fees/ Other Costs	**$1,443,400**	**$1,571,000**	**$127,600**	8.8%
Transit Impact Development Fee	*$72,950*	*$0*	*($72,950)*	
TIDF Prior Use Credit	*($37,300)*	*$0*	*$37,300*	
Transportation Sustainability Fee	*$0*	*$416,005*	*$416,005*	-
TSF Prior Use Credit	*$0*	*($152,200)*	*($152,200)*	-
Area Plan Impact Fees	*$1,090,931*	*$1,090,936*	*$5*	*0.0%*
Area Plan TSF Credit	*$0*	*($100,589)*	*($100,589)*	-
TDR Purchase for FAR Increase	*$0*	*$0*	*$0*	-
Affordable Housing Fee	*$0*	*$0*	*$0*	-
Jobs-Housing Linkage Fee	*$0*	*$0*	*$0*	-
Childcare Requirement	*$0*	*$0*	*$0*	-
Downtown Parks	*$0*	*$0*	*$0*	-
Public Art Fee	*$0*	*$0*	*$0*	-
School Impact Fee	*$162,866*	*$162,866*	*$0*	*0.0%*
Wastewater/Water Capacity Charge	*$153,983*	*$153,983*	*$0*	*0.0%*
Construction Financing/ Predev. Carry	**$1,768,300**	**$1,768,300**	**$0**	0.0%
Predevelopment Carry (Savings)	*$0*	*$0*	*$0*	-
Construction Loan Interest	*$1,486,706*	*$1,486,706*	*$0*	*0.0%*
Construction Loan Fees (Points)	*$281,573*	*$281,573*	*$0*	*0.0%*
Other Soft Costs	**$3,828,000**	**$3,828,000**	**$0**	0.0%
Developer Margin	**$8,260,200**	**$8,260,200**	**$0**	**0.0%**
Total Cost	**$37,135,800**	**$37,263,400**	**$127,600**	**0.3%**
Residual Land Value (RLV)				
With Predevelopment Savings				
Residual Land Value	**$6,339,100**	**$6,211,500**	**($127,600)**	**(2.0%)**
Per Gross Building Square Foot	$104.69	$103 /GSF	($2)	(2.0%)
Per Net Building Square Foot	$133	$130 /NSF	($3)	(2.0%)
Without Predevelopment Savings				
Residual Land Value	**$6,339,100**	**$6,211,500**	**($127,600)**	**(2.0%)**
Per Gross Building Square Foot	$105	$103 /GSF	($2)	(2.0%)
Per Net Building Square Foot	$133	$130 /NSF	($3)	(2.0%)

Note: Key numbers rounded to nearest $100. Development Impact Fees/ Other Costs include all applicable impact fees (including TIDF or TSF), plus any upfront developer payment for TDR purchase and Mello Roos special tax.

Appendix Table B-7
Prototype 7 Proforma Comparison for
Base Case TIDF and Base Case TSF

7d. Summary Development Pro Forma - East SoMa Large Office

7: East SoMa Large Office	Prototype 7			
	Base Case TIDF	Base Case TSF	Difference	Percent
Revenues				
Residential	$0	$0	$0	-
Office	$174,558,100	$174,558,100	$0	0.0%
Retail	$17,231,000	$17,231,000	$0	0.0%
Total Revenues	**$191,789,100**	**$191,789,100**	**$0**	0.0%
Development Costs				
Hard Construction Costs	**$73,265,500**	**$73,265,500**	$0	0.0%
Residential	*$0*	*$0*	$0	-
Office	*$56,125,000*	*$56,125,000*	$0	0.0%
Retail (and PDR Space)	*$5,580,000*	*$5,580,000*	$0	0.0%
Parking	*$4,900,000*	*$4,900,000*	$0	0.0%
Hard Cost Contingency	*$6,660,500*	*$6,660,500*	$0	0.0%
Tenant Improvements/Lease Up Costs	**$19,410,500**	**$19,410,500**	$0	0.0%
Office	*$17,178,500*	*$17,178,500*	$0	0.0%
Retail	*$2,232,000*	*$2,232,000*	$0	0.0%
Subtotal: Direct Costs	**$92,676,000**	**$92,676,000**	**$0**	0.0%
Soft Costs				
Environmental and Transportation Review	**$979,000**	**$884,000**	**($95,000)**	(10%)
Transportation Component	*$228,000*	*$178,000*	($50,000)	(22%)
Environmental Review	*$751,000*	*$706,000*	*($45,000)*	*(6.0%)*
Development Impact Fees/ Other Costs	**$14,705,700**	**$14,828,400**	**$122,700**	0.8%
Transit Impact Development Fee	*$3,475,647*	*$0*	($3,475,647)	
TIDF Prior Use Credit	*($87,540)*	*$0*	$87,540	
Transportation Sustainability Fee	*$0*	*$3,597,399*	$3,597,399	-
TSF Prior Use Credit	*$0*	*($86,580)*	($86,580)	-
Area Plan Impact Fees	*$4,133,667*	*$4,133,667*	$0	0.0%
Area Plan TSF Credit	*$0*	*$0*	$0	-
TDR Purchase for FAR Increase	*$0*	*$0*	$0	-
Affordable Housing Fee	*$0*	*$0*	$0	-
Jobs-Housing Linkage Fee	*$5,816,231*	*$5,816,231*	$0	0.0%
Childcare Requirement	*$271,645*	*$271,645*	$0	0.0%
Downtown Parks	*$0*	*$0*	$0	-
Public Art Fee	*$732,655*	*$732,655*	$0	0.0%
School Impact Fee	*$93,357*	*$93,357*	$0	0.0%
Wastewater/Water Capacity Charges	*$270,026*	*$270,026*	$0	0.0%
Construction Financing/ Predev. Carry	**$10,831,600**	**$10,352,100**	**($479,500)**	(4.4%)
Predevelopment Carry (Savings)	*$0*	*($479,473)*	*($479,473)*	-
Construction Loan Interest	*$9,837,887*	*$9,837,887*	*$0*	0.0%
Construction Loan Fees (Points)	*$993,726*	*$993,726*	*$0*	0.0%
Other Soft Costs	**$13,187,800**	**$13,187,800**	***$0***	0.0%
Developer Margin	**$30,686,300**	**$30,686,300**	**$0**	0.0%
Total Cost	**$163,066,400**	**$162,614,600**	**($451,800)**	(0.3%)
Residual Land Value (RLV)				
With Predevelopment Savings				
Residual Land Value	**$28,722,700**	**$29,174,500**	**$451,800**	1.6%
Per Gross Building Square Foot	$115	$117	$2	1.6%
Per Net Building Square Foot	$128	$130	$2	1.6%
Without Predevelopment Savings				
Residual Land Value	**$28,722,700**	**$28,600,000**	**($122,700)**	(0.4%)
Per Gross Building Square Foot	$115	$115	($0)	(0.4%)
Per Net Building Square Foot	$128	$127	($1)	(0.4%)

Note: Key numbers rounded to nearest $100. Development Impact Fees/ Other Costs include all applicable impact fees (including TIDF or TSF), plus any upfront developer payment for TDR purchase and Mello Roos special tax.

Appendix Table B-8
Prototype 8 Proforma Comparison for
Base Case TIDF and Base Case TSF

8d. Summary Development Pro Forma - East SoMa Large Residential

8: East SoMa Large Res. Mixed-use	Prototype 8			
	Base Case TIDF	Base Case TSF	Difference	Percent
Revenues				
Residential	$127,277,500	$127,277,500	$0	0.0%
Office	$0	$0	$0	-
Retail	$5,162,500	$5,162,500	$0	0.0%
Total Revenues	**$132,440,000**	**$132,440,000**	**$0**	0.0%
Development Cost			$0	-
Hard Construction Costs	**$60,567,200**	**$60,567,200**	**$0**	0.0%
Residential	*$48,243,200*	*$48,243,200*	$0	0.0%
Office	*$0*	*$0*	$0	-
Retail	*$1,687,500*	*$1,687,500*	$0	0.0%
Parking	*$5,130,400*	*$5,130,400*	$0	0.0%
Hard Cost Contingency	$5,506,110	$5,506,110	$0	0.0%
Tenant Improvements/Lease Up Costs	**$675,000**	**$675,000**	**$0**	0.0%
Office	*$0*	*$0*	$0	-
Retail	*$675,000*	*$675,000*	$0	0.0%
Subtotal: Direct Costs	**$61,242,200**	**$61,242,200**	**$0**	0.0%
Soft Costs				
Environmental and Transportation Review	**$144,000**	**$119,000**	**($25,000)**	(17%)
Transportation Component	*$128,000*	*$103,000*	*($25,000)*	*(20%)*
Environmental Review	*$16,000*	*$16,000*	*$0*	*0.0%*
Development Impact Fees/ Other Costs	**$3,917,200**	**$4,556,400**	**$639,200**	16%
Transit Impact Development Fee	*$109,425*	*$0*	($109,425)	(100%)
TIDF Prior Use Credit	*$0*	*$0*	$0	-
Transportation Sustainability Fee	*$0*	*$1,041,429*	$1,041,429	-
TSF Prior Use Credit	*$0*	*$0*	$0	-
Area Plan Impact Fees	*$3,055,184*	*$3,055,189*	$5	0.0%
Area Plan TSF Credit	$0	($292,776)	($292,776)	-
TDR Purchase for FAR Increase	$0	$0	$0	-
Affordable Housing Fee	*$0*	*$0*	$0	-
Jobs-Housing Linkage Fee	*$0*	*$0*	$0	-
Childcare Requirement	*$0*	*$0*	$0	-
Downtown Parks	*$0*	*$0*	$0	-
Public Art Fee	*$0*	*$0*	$0	-
School Impact Fee	*$440,534*	*$440,534*	$0	0.0%
Wastewater/Water Capacity Charges	*$312,023*	*$312,023*	$0	0.0%
Construction Financing/ Predev. Carry	**$9,179,700**	**$8,848,600**	**($331,100)**	(3.6%)
Predevelopment Carry (Savings)	*$0*	*($331,100)*	($331,100)	-
Construction Loan Interest	*$8,478,963*	*$8,478,963*	$0	0.0%
Construction Loan Fees (Points)	*$700,741*	*$700,741*	$0	0.0%
Other Soft Costs	**$15,141,800**	**$15,141,800**	**$0**	0.0%
Developer Margin	**$29,136,800**	**$29,136,800**	**$0**	0.0%
Total Cost	**118,761,700**	**119,044,800**	**$283,100**	0.2%
Residual Land Value (RLV)				
With Predevelopment Savings				
Residual Land Value	**$13,678,300**	**$13,395,200**	**($283,100)**	(2.1%)
Per Gross Building Square Foot	$86	$85 /GSF	($2)	(2.1%)
Per Net Building Square Foot	$108	$106 /NSF	($2)	(2.1%)
Without Predevelopment Savings				
Residual Land Value	**$13,678,300**	**$13,039,100**	**($639,200)**	(4.7%)
Per Gross Building Square Foot	$86	$82 /GSF	($4)	(4.7%)
Per Net Building Square Foot	$108	$103 /NSF	($5)	(4.7%)

Note: Key numbers rounded to nearest $100. Development Impact Fees/ Other Costs include all applicable impact fees (including TIDF or TSF), plus any upfront developer payment for TDR purchase and Mello Roos special tax.

Appendix Table B-9
Prototype 9 Proforma Comparison for
Base Case TIDF and Base Case TSF

9d. Summary of Financial Indicators - Transit Center Large Residential

9: Transit Center Large Residential	Prototype 9			
	Base Case TIDF	Base Case TSF	Difference	Percent
Revenues				
Residential	$307,630,600	$307,630,600	$0	0.0%
Office	$0	$0	$0	-
Retail	$0	$0	$0	-
Total Revenues	**$307,630,600**	**$307,630,600**	**$0**	0.0%
Development Costs				
Hard Construction Costs	**$132,220,000**	**$132,220,000**	$0	0.0%
Residential	*$113,135,000*	*$113,135,000*	$0	0.0%
Office	*$0*	*$0*	$0	-
Retail	*$0*	*$0*	$0	-
Parking	*$7,065,000*	*$7,065,000*	$0	0.0%
Hard Cost Contingency	*$12,020,000*	*$12,020,000*	$0	0.0%
Tenant Improvements/Lease Up Costs	**$0**	**$0**	**$0**	-
Office	*$0*	*$0*	$0	-
Retail	*$0*	*$0*	$0	-
Subtotal: Direct Costs	**$132,220,000**	**$132,220,000**	**$0**	0.0%
Soft Costs				
Environmental and Transportation Review	**$149,000**	**$124,000**	**($25,000)**	(20%)
Transportation Component	*$128,000*	*$103,000*	($25,000)	(24%)
Environmental Review	*$21,000*	*$21,000*	*$0*	*0.0%*
Development Impact Fees/ Other Costs	**$22,389,200**	**$24,448,900**	**$2,059,700**	8.4%
Transit Impact Development Fee	*$0*	*$0*	$0	-
TIDF Prior Use Credit	*$0*	*$0*	$0	-
Transportation Sustainability Fee	*$0*	*$2,059,723*	$2,059,723	100%
TSF Prior Use Credit	*$0*	*$0*	$0	-
Area Plan Impact Fees	*$3,879,437*	*$3,879,444*	$7	0.0%
Area Plan TSF Credit	*$0*	*$0*	$0	-
TDR Purchase for FAR Increase	*$1,350,000*	*$1,350,000*	$0	0.0%
Affordable Housing Fee	*$12,117,716*	*$12,117,716*	$0	0.0%
Jobs-Housing Linkage Fee	*$0*	*$0*	$0	-
Childcare Requirement	*$0*	*$0*	$0	-
Downtown Parks	*$0*	*$0*	$0	-
Public Art Fee	*$1,256,090*	*$1,256,090*	$0	0.0%
School Impact Fee	*$968,303*	*$968,303*	$0	0.0%
Wastewater/Water Capacity Charges	*$477,622*	*$477,622*	$0	0.0%
Mello Roos Special Tax Contribution	*$2,340,019*	*$2,340,019*	$0	0.0%
Construction Financing/ Predev. Carry	**$26,246,300**	**$25,477,200**	**($769,100)**	(3.0%)
Predevelopment Carry	*$0*	*($769,077)*	($769,077)	100%
Construction Loan Interest	*$24,618,584*	*$24,618,584*	$0	0.0%
Construction Loan Fees (Points)	*$1,627,675*	*$1,627,675*	$0	0.0%
Other Soft Costs	**$33,055,000**	**$33,055,000**	**$0**	**0.0%**
Developer Margin	**$67,678,700**	**$67,678,700**	**$0**	**0.0%**
Total Cost	**$281,738,200**	**$283,003,800**	**$1,265,600**	0.4%
Residual Land Value (RLV)				
With Predevelopment Savings				
Residual Land Value	**$25,892,400**	**$24,626,800**	**($1,265,600)**	(5.1%)
Per Gross Building Square Foot	$78	$74 /GSF	($4)	(5.1%)
Per Net Building Square Foot	$107	$102 /NSF	($5)	(5.1%)
Without Predevelopment Savings				
Residual Land Value	**$25,892,400**	**$23,832,700**	**($2,059,700)**	(8.6%)
Per Gross Building Square Foot	$78	$72 /GSF	($6)	(8.6%)
Per Net Building Square Foot	$107	$99 /NSF	($9)	(8.6%)

Note: Key numbers rounded to nearest $100. Development Impact Fees/ Other Costs include all applicable impact fees (including TIDF or TSF), plus any upfront developer payment for TDR purchase and Mello Roos special tax.

Appendix Table B-10
Prototype 10 Proforma Comparison for
Base Case TIDF and Base Case TSF

10d. Summary Development Pro Forma - Transit Center Large Office

10: Transit Center Large Office	Prototype 10			
	Base Case TIDF	Base Case TSF	Difference	Percent
Revenues				
Residential	*$0*	*$0*	$0	-
Office	*$319,920,700*	*$319,920,700*	$0	0.0%
Retail	*$9,881,600*	*$9,881,600*	$0	0.0%
Total Revenues	**$329,802,300**	**$329,802,300**	**$0**	0.0%
Development Costs				
Hard Construction Costs	**$127,821,800**	**$127,821,800**	**$0**	0.0%
Residential	*$0*	*$0*	$0	-
Office	*$111,150,000*	*$111,150,000*	$0	0.0%
Retail	*$2,880,000*	*$2,880,000*	$0	0.0%
Parking	*$2,171,680*	*$2,171,680*	$0	0.0%
Hard Cost Contingency	*$11,620,168*	*$11,620,168*	$0	0.0%
Tenant Improvements/Lease Up Costs	**$32,030,000**	**$32,030,000**	**$0**	0.0%
Office	*$30,750,000*	*$30,750,000*	$0	0.0%
Retail	*$1,280,000*	*$1,280,000*	$0	0.0%
Subtotal: Direct Costs	**$159,851,800**	**$159,851,800**	**$0**	0.0%
Soft Costs				
Environmental and Transportation Review	**$249,200**	**$199,200**	**($50,000)**	(25%)
Transportation Component	*$228,000*	*$178,000*	($50,000)	(28%)
Environmental Review	*$21,239*	*$21,239*	*$0*	*0.0%*
Development Impact Fees/ Other Costs	**$30,290,600**	**$30,495,800**	**$205,200**	0.7%
Transit Impact Development Fee	*$5,346,013*	*$0*	($5,346,013)	-
TIDF Prior Use Credit	*$0*	*$0*	$0	-
Transportation Sustainability Fee	*$0*	*$5,551,221*	$5,551,221	100%
TSF Prior Use Credit	*$0*	*$0*	$0	-
Area Plan Impact Fees	*$9,182,904*	*$9,182,908*	$4	0.0%
Area Plan TSF Credit	*$0*	*$0*	$0	-
TDR Purchase for FAR Increase	*$1,800,000*	*$1,800,000*	$0	0.0%
Affordable Housing Fee	*$0*	*$0*	$0	-
Jobs-Housing Linkage Fee	*$9,221,479*	*$9,221,479*	$0	0.0%
Childcare Requirement	*$448,305*	*$448,305*	$0	0.0%
Downtown Parks	*$900,315*	*$900,315*	$0	0.0%
Public Art Fee	*$1,278,218*	*$1,278,218*	$0	0.0%
School Impact Fee	*$147,575*	*$147,575*	$0	0.0%
Wastewater/Water Capacity Charges	*$292,972*	*$292,972*	$0	0.0%
Mello Roos Special Tax Contribution	*$1,672,808*	*$1,672,808*	$0	0.0%
Construction Financing/ Predev. Carry	**$21,445,700**	**$20,621,200**	**($824,500)**	(4.0%)
Predevelopment Carry (Savings)	*$0*	*($824,506)*	($824,506)	100%
Construction Loan Interest	*$19,736,871*	*$19,736,871*	$0	0.0%
Construction Loan Fees (Points)	*$1,708,820*	*$1,708,820*	$0	0.0%
Other Soft Costs	**$23,007,900**	**$23,007,900**	**$0**	0.0%
Developer Margin	**$52,768,400**	**$52,768,400**	**$0**	0.0%
Total Cost	**$287,613,600**	**$286,944,300**	**($669,300)**	(0.2%)
Residual Land Value (RLV)				
With Predevelopment Savings				
Residual Land Value	**$42,188,700**	**$42,858,000**	**$669,300**	1.6%
Per Gross Building Square Foot	$110	$111 /GSF	$2	1.6%
Per Net Building Square Foot	$132	$134 /NSF	$2	1.6%
Without Predevelopment Savings				
Residual Land Value	**$42,188,700**	**$41,983,500**	**($205,200)**	(0.5%)
Per Gross Building Square Foot	$110	$109 /GSF	($1)	(0.5%)
Per Net Building Square Foot	$132	$131 /NSF	($1)	(0.5%)

Note: Key numbers rounded to nearest $100. Development Impact Fees/ Other Costs include all applicable impact fees (including TIDF or TSF), plus any upfront developer payment for TDR purchase and Mello Roos special tax.

Appendix Table C-1a
Revenue Assumptions

General Development Assumptions (Height)	Prototype 1 45'	Prototype 2 80'	Prototype 3 65'	Prototype 4 55'	Prototype 5 65'
Primary Land Use Type	Residential	Residential	Residential	Residential	Residential
Construction Type	Low-Rise	Mid-Rise	Mid-Rise	Low-Rise	Mid-Rise
Geography	Geary	Van Ness	Outer Mission	Mission	Central Waterfront
Land Use	Mixed-use	Mixed-use	Mixed-use	Mixed-use	Mixed-use
Housing Type / Units or Nonresidential SF	Owner 8	Owner 60	Owner 24	Owner 15	Rental 156
Revenue Assumptions					
Typical Residential Unit Size	1,100 NSF	997 NSF	1,250 NSF	955 NSF	762 NSF
Sale Price Per Unit	*$1,045,000 Per Unit*	*$1,096,700 Per Unit*	*$1,062,500 Per Unit*	*$1,050,500 Per Unit*	- *Per Unit*
Sales Price / NSF	$950 /NSF	$1,100 /NSF	$850 /NSF	$1,100 /NSF	- /NSF
Sales Expense Rate	5.5%	5.5%	5.5%	5.5%	3.5%
Residential Rental					
Annual Lease Rate/SF					$66.00 /NSF
Net Operating Income					$42.90 /NSF
Capitalization Rate					4.5%
Typical Market Value/SF					*$953 /NSF*
Office					
Annual Lease Rate/SF (NNN)					
Net Operating Income					
Capitalization Rate					
Typical Market Value/SF					
Retail					
Annual Lease Rate/SF	$48.00 /NSF	$54.00 /NSF	$48.00 /NSF	$54.00 /NSF	$54.00 /NSF
Net Operating Income	$38.40 /NSF	$43.20 /NSF	$38.40 /NSF	$43.20 /NSF	$43.20 /NSF
Capitalization Rate	6.0%	6.0%	6.0%	6.0%	6.0%
Typical Market Value/SF	*$640 /NSF*	*$720 /NSF*	*$640 /NSF*	*$720 /NSF*	*$720 /NSF*
Parking Revenue/Space/year					
Residential					$4,200
Retail	$1,200	$1,200	$1,200	$1,200	$1,800
Office					

Source: San Francisco Planning Department, San Francisco Municipal Transportation Agency, San Francisco Office of the Controller, San Francisco Office of Economic and Workforce Development, San Francisco Mayor's Office of Housing and Community Development, San Francisco Unified School District, San Francisco Public Utilities Commission, Keyser Marston Associates, The Concord Group, Polaris Pacific, The Mark Company, CBRE, Colliers International and DTZ Retail Terranomics, Clifford Advisory and Seifel Consulting Inc.

Appendix Table C-1b
Revenue Assumptions

General Development Assumptions (Height)	Prototype 6 85'	Prototype 7 160'	Prototype 8 160'	Prototype 9 400'	Prototype 10 400'
Primary Land Use Type	Residential	Office	Residential	Residential	Office
Construction Type	Mid-Rise	High-Rise	High-Rise	High-Rise	High-Rise
Geography	East SoMa	East SoMa Office	East SoMa	Transit Center	Transit Center
Land Use	Mixed-use	Office	Mixed-use	Residential	Office
Housing Type / Units or Nonresidential SF	Rental 60	N/A 224,420	Owner 128	Owner 229	N/A 320,300
Revenue Assumptions					
Typical Residential Unit Size	719 NSF	-	942 NSF	1,053 NSF	-
Sale Price Per Unit	- *Per Unit*	-	*$1,153,950 Per Unit*	*$1,421,550 Per Unit*	-
Sales Price / NSF	- /NSF	-	$1,225 /NSF	$1,350 /NSF	- /NSF
Sales Expense Rate	3.5%	3.5%	5.5%	5.5%	3.5%
Residential Rental					
Annual Lease Rate/SF	$69.00 /NSF	-			
Net Operating Income	$44.85 /NSF				
Capitalization Rate	4.5%				
Typical Market Value/SF	*$997 /NSF*				
Office					
Annual Lease Rate/SF (NNN)		$54.00 /NSF			$66.00 /NSF
Net Operating Income		$43.20 /NSF			$52.80 /NSF
Capitalization Rate		5.0%			5.0%
Typical Market Value/SF		*$864 /NSF*			*$1,056 /NSF*
Retail					
Annual Lease Rate/SF	$54.00 /NSF	$60.00 /NSF	$60.00 /NSF	$60.00 /NSF	$60.00 /NSF
Net Operating Income	$43.20 /NSF	$48.00 /NSF	$48.00 /NSF	$48.00 /NSF	$48.00 /NSF
Capitalization Rate	6.0%	6.0%	6.0%	6.0%	6.0%
Typical Market Value/SF	*$720 /NSF*	*$800 /NSF*	*$800 /NSF*	*$800 /NSF*	*$800 /NSF*
Parking Revenue/Space/year					
Residential	$4,200				
Retail	$1,800	$1,800	$1,800	$1,800	$1,800
Office		$5,400			$5,400

Source: San Francisco Planning Department, San Francisco Municipal Transportation Agency, San Francisco Office of the Controller, San Francisco Office of Economic and Workforce Development, San Francisco Mayor's Office of Housing and Community Development, San Francisco Unified School District, San Francisco Public Utilities Commission, Keyser Marston Associates, The Concord Group, Polaris Pacific, The Mark Company, CBRE, Colliers International and DTZ Retail Terranomics, Clifford Advisory and Seifel Consulting Inc.

Appendix Table C-2a
Development Cost Assumptions

General Development Assumptions (Height)	Prototype 1 45'	Prototype 2 80'	Prototype 3 65'	Prototype 4 55'	Prototype 5 65'
Primary Land Use Type	Residential	Residential	Residential	Residential	Residential
Construction Type	Low-Rise	Mid-Rise	Mid-Rise	Low-Rise	Mid-Rise
Geography	Geary	Van Ness	Outer Mission	Mission	Central Waterfront
Land Use	Mixed-use	Mixed-use	Mixed-use	Mixed-use	Mixed-use
Housing Type / Units or Nonresidential SF	Owner 8	Owner 60	Owner 24	Owner 15	Rental 156
Development Costs					
Hard Construction Costs					
Residential	$240	$300	$270	$260	$270
Office					
Retail	$225 /GSF	$225 /GSF	$225 /GSF	$225 /GSF	$225 /GSF
Parking	$120 /GSF	$140 /GSF	$120 /GSF	$120 /GSF	$140 /GSF
Stacker cost	$15,000 /space	$15,000 /space	$15,000 /space	$15,000 /space	$15,000 /space
Parking Construction Type	Podium (1)	Underground (1)	Podium (1)	Podium (1)	Underground (1)
Hard Construction Costs/ GSF	**$293** /GSF	**$362** /GSF	**$325** /GSF	**$297** /GSF	**$330** /GSF
Office Tenant Improvements/Lease Up Costs	$85 /LSF	$85 /LSF	$85 /LSF	$85 /LSF	$85 /LSF
Retail Tenant Improvements/Lease Up Costs	$100 /LSF	$100 /LSF	$100 /LSF	$100 /LSF	$100 /LSF
Direct Construction Costs/ NSF	**$384** /NSF	**$472** /NSF	**$422** /NSF	**$413** /NSF	**$417** /NSF
Direct Construction Costs/ Unit	**$491,550** /Unit	**$533,755** /Unit	**$578,417** /Unit	**$440,967** /Unit	**$329,803** /Unit
Soft Costs					
Transportation and Environmental Review					
Transportation Review					
SF Planning	$0 Value	$23,365 Value	$0 Value	$0 Value	$23,365 Value
SFMTA	$0 Value	$4,494 Value	$0 Value	$0 Value	$4,494 Value
Transp. Consultant	$0 Value	$0 Value	$0 Value	$0 Value	$100,000 Value
TSP Cost Savings	*$0* Value	*$0* Value	*$0* Value	*$0* Value	*$25,000* Value
Environmental Review					
SF Planning	$9,295 Value	$84,855 Value	$27,347 Value	$11,466 Value	$405,346 Value
TSP Cost Savings	*$0* Value	*$0* Value	*$0* Value	*$0* Value	*$386,280* Value
CEQA Consultant	$0 Value	$75,000 Value	$0 Value	$0 Value	$150,000 Value
TSP Cost Savings	*$0* Value	*$0* Value	*$0* Value	*$0* Value	*$150,000* Value
Development Impact Fees/ Other Costs					
Transit Impact Development Fee					
Residential	$0.0 /GSF	$0.0 /GSF	$0.0 /GSF	$0.0 /GSF	$0.0 /GSF
Office	$13.87 /GSF	$13.87 /GSF	$13.87 /GSF	$13.87 /GSF	$13.87 /GSF
Retail	$14.59 /GSF	$14.59 /GSF	$14.59 /GSF	$14.59 /GSF	$14.59 /GSF
Transportation Sustainability Fee					
Residential	$6.19 /GSF	$6.19 /GSF	$6.19 /GSF	$6.19 /GSF	$6.19 /GSF
Non-Residential (Office)	$14.43 /GSF	$14.43 /GSF	$14.43 /GSF	$14.43 /GSF	$14.43 /GSF
Non-Residential (Retail)	$14.43 /GSF	$14.43 /GSF	$14.43 /GSF	$14.43 /GSF	$14.43 /GSF
Area Plan Impact Fees	$0 Value	$0 Value	$0 Value	$160,968 Value	$1,682,573 Value
TDR Purchase for FAR					
Affordable Housing Fee	$0.0 Value	$0 Value	$0.0 Value	$0.0 Value	$0 Value
Jobs-Housing Linkage Fee					
Office					
Retail					
Childcare Fee (Office)					
Downtown Parks Fee (Office)					
Public Art Fee (Non-Residential)					
School Impact Fee					
Residential	$2.91 /GSF	$2.91 /GSF	$2.91 /GSF	$2.91 /GSF	$2.91 /GSF
Office	$0.389 /GSF	$0.389 /GSF	$0.389 /GSF	$0.389 /GSF	$0.389 /GSF
Retail	$0.243 /GSF	$0.243 /GSF	$0.243 /GSF	$0.243 /GSF	$0.243 /GSF
Wastewater/Water Capacity Charges					
Total Charges	$12,367 Value	$180,298 Value	$87,598 Value	$33,099 Value	$298,371 Value
Mello Roos Special Tax During Sale/Lease-Up					
Construction Financing					
Construction Timing	24 Months	31 Months	30 Months	26 Months	26 Months
Construction Interest Rate	5.5%	5.5%	5.5%	5.5%	5.5%
Loan Fee (Points) as a % of Loan Amount	1.25%	1.25%	1.25%	1.25%	1.00%
Other Soft Costs (as a % of Hard Costs)	25%	25%	25%	25%	18%
Target Return on Total Development Cost	19%	23%	21%	19%	21%
Developer Margin (as a % of Value/Net Proceeds)	16%	19%	17%	16%	17%

Appendix Table C-2b
Development Cost Assumptions

General Development Assumptions (Height)	Prototype 6 85'	Prototype 7 160'	Prototype 8 160'	Prototype 9 400'	Prototype 10 400'
Primary Land Use Type	Residential	Office	Residential	Residential	Office
Construction Type	Mid-Rise	High-Rise	High-Rise	High-Rise	High-Rise
Geography	East SoMa	East SoMa Office	East SoMa	Transit Center	Transit Center
Land Use	Mixed-use	Office	Mixed-use	Residential	Office
Housing Type / Units or Nonresidential SF	Rental 60	N/A 224,420	Owner 128	Owner 229	N/A 320,300
Retail	$225 /GSF	$225 /GSF	$225 /GSF	$225 /GSF	$225 /GSF
Parking	$140 /GSF	$140 /GSF	$160 /GSF	$160 /GSF	$160 /GSF
Stacker cost	$15,000 /space	$15,000 /space	$15,000 /space	$15,000 /space	$15,000 /space
Parking Construction Type	Underground (1)	Underground (1)	Underground (2)	Underground (2)	Underground (2)
Hard Construction Costs/ GSF	**$351** /GSF	**$294** /GSF	**$383** /GSF	**$397** /GSF	**$332** /GSF
Office Tenant Improvements/Lease Up Costs	$85 /LSF	$85 /LSF	$85 /LSF	$85 /LSF	$85 /LSF
Retail Tenant Improvements/Lease Up Costs	$100 /LSF	$100 /LSF	$100 /LSF	$100 /LSF	$100 /LSF
Direct Construction Costs/ NSF	**$456** /NSF	**$413** /NSF	**$484** /NSF	**$548** /NSF	**$499** /NSF
Direct Construction Costs/ Unit	**$361,948** /Unit	NA /Unit	**$478,455** /Unit	**$577,380** /Unit	NA /Unit
Soft Costs					
Transportation and Environmental Review					
Transportation Review					
SF Planning	$23,365 Value	$23,365 Value	$23,365 Value	$23,365 Value	$23,365 Value
SFMTA	$4,494 Value	$4,494 Value	$4,494 Value	$4,494 Value	$4,494 Value
Transp. Consultant	$75,000 Value	$200,000 Value	$100,000 Value	$100,000 Value	$200,000 Value
TSP Cost Savings	*$0* Value	*$50,000* Value	*$25,000* Value	*$25,000* Value	*$50,000* Value
Environmental Review					
SF Planning	$16,386 Value	$450,852 Value	$16,368 Value	$21,239 Value	$21,239 Value
TSP Cost Savings	*$0* Value	*$0* Value	*$0* Value	*$0* Value	*$0* Value
CEQA Consultant	$0 Value	$300,000 Value	$0 Value	$0 Value	$0 Value
TSP Cost Savings	*$0* Value	*$45,000* Value	*$0* Value	*$0* Value	*$0* Value
Development Impact Fees/ Other Costs					
Transit Impact Development Fee					
Residential	$0.0 /GSF	$0.0 /GSF	$0.00 /GSF	$0.0 /GSF	$0.0 /GSF
Office	$13.87 /GSF	$13.87 /GSF	$13.87 /GSF	$13.87 /GSF	$13.87 /GSF
Retail	$14.59 /GSF	$14.59 /GSF	$14.59 /GSF	$14.59 /GSF	$14.59 /GSF
Transportation Sustainability Fee					
Residential	$6.19 /GSF	$6.19 /GSF	$6.19 /GSF	$6.19 /GSF	$6.19 /GSF
Non-Residential (Office)	$14.43 /GSF	$14.43 /GSF	$14.43 /GSF	$14.43 /GSF	$14.43 /GSF
Non-Residential (Retail)	$14.43 /GSF	$14.43 /GSF	$14.43 /GSF	$14.43 /GSF	$14.43 /GSF
Area Plan Impact Fees	$1,090,931 Value	$4,133,667 Value	$3,055,184 values	$3,879,437 Value	$9,182,904 Value
TDR Purchase for FAR				$1,350,000 Value	$1,800,000 Value
Affordable Housing Fee	$3,460,928 Value	$0.0 Value	$7,036,437 Value	$12,117,716 Value	$0.0 Value
Jobs-Housing Linkage Fee					
Office		$24.03 /GSF			$24.03 /GSF
Retail					$22.42 /GSF
Childcare Fee (Office)		$1.21 /Office GSF	$1.16 /Office GSF	$1.16 /Office GSF	$1.21 /Office GSF
Downtown Parks Fee (Office)		$0.00 /Office GSF	$2.31 /Office GSF	$2.31 /Office GSF	$2.43 /Office GSF
Public Art Fee (Non-Residential)		1% of Hard costs		1% of Hard costs	1% of Hard costs
School Impact Fee					
Residential	$2.91 /GSF	$2.91 /GSF	$2.91 /GSF	$2.91 /GSF	$0.0 /GSF
Office	$0.389 /GSF	$0.389 /GSF	$0.39 /GSF	$0.389 /GSF	$0.39 /GSF
Retail	$0.243 /GSF	$0.243 /GSF	$0.24 /GSF	$0.243 /GSF	$0.24 /GSF
Wastewater/Water Capacity Charges					
Total Charges	$153,983 Value	$270,026 Value	$312,023 Value	$477,622 Value	$292,972 Value
Mello Roos Special Tax During Sale/Lease-Up				$6.88 /Resid. NSF	$4.36 /Office NSF
Construction Financing					
Construction Timing	24 Months	36 Months	44 Months	55 Months	42 Months
Construction Interest Rate	5.5%	5.5%	5.5%	5.5%	5.5%
Loan Fee (Points) as a % of Loan Amount	1.25%	1.0%	1.0%	1.0%	1.0%
Other Soft Costs (as a % of Hard Costs)	18%	18%	25%	25%	18%
Target Return on Total Development Cost	23%	19%	29%	29%	19%
Developer Margin (as a % of Value/Net Proceeds)	19%	16%	22%	22%	16%

TSF Outreach: Spring/Summer 2015			
Updated: August 6, 2015			
Internal Stakeholders			
Who	**Format**	**When**	
Ed Reiskin, John Rahaim, Tilly Chang, Gillian Gillett, Ken Rich, Gil Kelley, Tom Maguire	Briefing	complete	
Steve Kawa, Nicole Wheaton	Briefing	complete	
Sup. Wiener, Andres	Briefing	complete	
Sup. Yee, Matthias	Briefing	complete	
Sup. Avalos, Aide(s)	Briefing	complete	
Sup. Kim, Sunny	Briefing	complete	
Sup. Mar, Peter	Briefing	complete	
Sup. Campos, Aide(s)	Briefing	complete	
Sup. Farrell, Aide(s)	Briefing	complete	
Sup. Breed, Connor	Briefing	complete	
Sup. Tang, Aide(s)	Briefing	complete	
Sup. Cohen, Andrea	Briefing	complete	
Sup. Christensen, Aide(s)	Briefing	complete	
Kate Howard, Ben Rosenfield	Briefing	complete	
Tom Nolan, Gwyneth Borden	Briefing	complete	
Naomi Kelly, Brian Strong	Briefing	complete	
MOH (Olsen, Sophie)	Briefing	complete	
External Stakeholders			
Muni equity group (CCHO, CCDC,HSN, TRU)	Meeting with discussion	complete	
HAC	Presentation	complete	
SPUR: Ratna and Kristy	Meeting with discussion	complete	
RBA	Meeting with discussion	complete	
Chamber of Commerce	Meeting with discussion	complete; follow-up meeting secheduled for 8/20	
Regina Dick-Endrizzi	Meeting with discussion	complete	
SFBC, Walk SF, League of Conservation Voters	Meeting with discussion	complete	
Hospital Council	Meeting with discussion	complete	
BART	Meeting with discussion	complete	

Land use attorneys (Reuben & Junius lunchtime forum)	Meeting with discussion	complete	
Large developers (presentation at SFCTA)	Meeting with discussion	complete	
SFMTA Board Policy and Governance Committee	Presentation	complete	
Cindy Wu, Rodney Fong (Planning Commissioners)	Briefing	complete	
T. Radulovich	Briefing	complete	
N. Josefowitz, J. Kass	Briefing	complete	
CACs and Committees			
EN CAC	Informational Presentation	complete	
MO CAC	Informational Presentation	complete	
TA CAC	Presentation	complete	
MTA CAC	Presentation	complete	
Small Business Commission	Presentation	August 10, 2015	
Capital Planning Committee	Presentation	September 14, 2015	
SFCTA Board	Presentation	July 29, 2015	
M/O and EN CAC	Presentation	August 17th, 2015	
Legislative Hearings			
Legislation introduced		July 21, 2015	
Planning Commission - informational	Hearing	August 6, 2015	
MTAB	Hearing	September 1, 2015	
Planning Commission - fee adoption	Hearing	September 10, 2015	
Land Use	Hearing	September 21, 2015	
Full BOS - 1st read	Hearing	September 29, 2015	
Full BOS - 2nd read	Hearing	October 6, 2015	

August 26, 2015

Planning Commission
Commission Chambers
Room 400, City Hall
1 Dr. Carlton B. Goodlett Place

RE: Support for the Transportation Sustainability Project

Dear Commissioners,

The Market Octavia Community Advisory Committee supports the adoption of the Transportation Sustainability Project, and its Transportation Sustainability Fee component.

The Market and Octavia Plan necessitates investments in transportation infrastructure to achieve its goals of encouraging travel by public transit and other sustainable transportation modes, and reducing traffic congestion.

Over the next 20 years, the Market and Octavia Plan anticipates roughly 6,000 new housing units, and transit service will need to enhanced to meet this demand. Current transit service within the plan area is at or exceeding capacity.

Successful implementation of the Market and Octavia plan requires adequate investment in transportation improvements in coordination with new development. The proposed Transportation Sustainability Fee will provide revenue to help meet the need for transportation and complete streets improvements generated by new development in San Francisco. Additionally, the expenditure of funds generated by the proposed Transportation Sustainability Fee prioritizes specific projects identified in Area Plans.

The Market and Octavia Community Advisory Committee asks the Commission to support the Transportation Sustainability Project, its Transportation Sustainability Fee component and the policy of prioritizing projects in the areas of the city where new growth is occurring, such as the Market and Octavia Plan Area.

Sincerely,

Jason Henderson, Chair
Krute Singa, Vice Chair

SAN FRANCISCO
PLANNING DEPARTMENT

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DATE:	**September 9, 2015**
TO:	**Members, Planning Commission**
FROM:	**Adam Varat, Senior Planner; and Lisa Chen, Planner; Citywide Division, San Francisco Planning Department**
RE:	**Changes to Proposed Transportation Sustainability Fee Ordinance in September 8, 2015 Substitute Legislation [Board of Supervisors (BOS) file no. 150790]**

On July 21, 2015, Mayor Lee and co-sponsoring Supervisors Wiener, Breed, and Christensen introduced legislation at the Board of Supervisors that would establish a Citywide impact fee, the Transportation Sustainability Fee (TSF), which would replace the Transit Impact Development Fee (TIDF) and expand applicability to market-rate residential projects and some institutional uses. The TSF is one component of the Transportation Sustainability Program (TSP), an interagency effort by the Mayor's Office, the Planning Department, the San Francisco County Transportation Authority, and the San Francisco Municipal Transportation Agency aimed at improving and expanding the transportation system to accommodate new growth through three policy initiatives: 1) the TSF; 2) the Level of Service (LOS) reform effort in coordination with statewide changes to the California Environmental Quality Act (CEQA); and, 3) a Transportation Demand Management (TDM) program to encourage use of more environmentally-friendly modes of travel such as transit, walking, and biking. The Planning Commission heard an informational presentation on the TSP at the August 6th, 2015 hearing.

The proposed TSF will be heard by the Planning Commission on September 10, 2015 for Commission action. On September 8, 2015, Supervisors Wiener, Breed, and Christensen introduced substitute legislation to BOS Ordinance no. 150790, adding clarifying language intended to improve administration and application of the proposed TSF. These modifications are minor and non-substantive in nature, and include language on the timing of payment, the exemptions for small businesses and HOPE SF projects, grandfathering projects that have submitted a development application, and the middle-income housing eligibility threshold. This memo explains these modifications to proposed TSF Ordinance.

Timing of payment

The substitute Ordinance added language to state explicitly that the fee must be paid by project sponsors at the time the City issues the first construction document (Planning Code Section 411A.3(c)). This does not represent a change to the proposal, and it only serves to make the TSF fee timing explicit and consistent with all other fees in Planning Code Article 4.

Application of the middle-income housing fee exemption

The Ordinance as introduced included language in Section 406 (Waiver, Reduction or Adjustment of Development Project Requirements) that would exempt middle-income residential projects (targeting households earning up to 150% of Area Median Income) from the TSF and a number of Area Plan fees under Article 4. The substitute ordinance modified this language to clarify that this exemption would only be available for the TSF, and not for any Area Plan fees.

Application of the exemption for HOPE SF projects

The substitute Ordinance added language in Section 406 that would explicitly exempt all uses within a HOPE SF Project Area from paying the TSF. In other words, all residential uses, whether affordable or market-rate, as well as non-residential and PDR uses would be exempt. The previous Ordinance as introduced exempted only market-rate and affordable housing units. The substitute Ordinance also clarifies that HOPE SF projects would still be required to pay all other applicable fees under Article 4, including Area Plan fees.

Application of the small business exemption:

The substitute Ordinance added language to Section 411A.3(b)6 to clarify that the small business exemption (defined as less than 5,000 gross square feet) would also apply to multiple qualifying spaces within a single building or project (for example, it would apply to multiple small businesses that co-locate in a single facility). In the Ordinance as introduced, the exemption would only apply to multiple small businesses if their spaces are cumulatively less than 5,000 gross square feet.

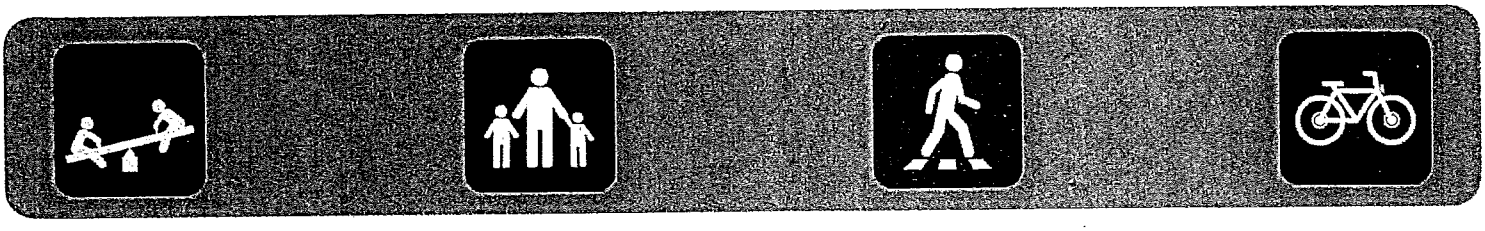
Grandfathering provision:

The substitute Ordinance provided clarification on grandfathering Production, Distribution, Repair (PDR) uses that have submitted a development application. The Ordinance as introduced only specified grandfathering processes for Residential and Non-Residential uses, and did not have language grandfathering PDR uses. Section 411A.3(e) of the substitute legislation states that PDR uses are grandfathered at the same rate as Non-Residential uses (i.e., they pay the current TIDF rate).

The substitute Ordinance also clarified that grandfathered projects that are subject to the TIDF will also be subject to all applicable TIDF rules and procedures.

San Francisco Citywide Nexus Analysis

March 2014



SAN FRANCISCO
PLANNING DEPARTMENT

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Building Our Future

AECOM

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LIST OF ACRONYMS

AB	Assembly Bill
ACS	American Community Survey
AICCIE	Annual Infrastructure Construction Cost Inflation Estimate
BSP	San Francisco Better Streets Plan (2010)
CIP	Capital Improvement Program
CPAC	San Francisco Child Care Planning and Advisory Council
CPC	Capital Planning Committee
DOF	Department of Finance
DPW	Department of Public Works
FCCH	Family license care home
GSF	Gross square feet
LIIF	Low Income Investment Fund
LOS	Level(s) of service
LTS	Level of Traffic Stress
MTC	Metropolitan Transportation Commission
OECE	Office of Early Care and Education
PEQI	Pedestrian Environmental Quality Index
ROSE	Recreation and Open Space Element
RPD	San Francisco Recreation and Parks Department
SFMTA	San Francisco Municipal Transportation Agency
TIDF	Transit Impact Development Fee

1. Introduction

In 2013, AECOM was retained by the San Francisco Planning Department and the San Francisco Capital Improvements Program, with direction from the City Attorney's Office, to update the City's nexus analysis. This nexus analysis update was done in conjunction with AECOM's 2014 *San Francisco Infrastructure Level of Service Analysis* report[1], a study that established citywide provision standards for various infrastructure elements. The level of service (LOS) targets for infrastructure presented in this report build directly on the standards developed as part of the *San Francisco Infrastructure Level of Service Analysis* report, as well as existing nexus studies for certain infrastructure types for the City of San Francisco and the City's capital plan.

REPORT PURPOSE

The purpose of this report is to present the nexus analysis findings of new growth's connection (nexus) to facilities for recreation and open space, childcare, streetscape and pedestrian infrastructure, and bicycle infrastructure. This analysis measures the need for community infrastructure generated by new population and employment growth, using a methodology that meets the requirements for development impact fees under applicable law. The fee program estimates development's fair share of the City's new facility needs to maintain levels of service for community infrastructure that contribute to the livability and overall quality of life in San Francisco.

The citywide nexus analysis, building upon existing adopted nexus studies, aims to develop a consistent, standards-based methodology for most existing impact fees, thus facilitating the City's future administration of impact fees, including meeting the five year reporting and updating requirements.

The Planning Code currently covers more than 20 development impact fees – including several single-purpose fees and several community impact fees that were established as components of larger planning processes for the City's geographic Area Plans.[2] As a result of many separately developed impact fees, the City has revised the Planning Code to ensure that each program is administered consistently. The impact fees and the administrative procedures governing them are found in Article IV of the Planning Code. This study aims to further standardize the analysis supporting development impact fees (specifically for recreation and open space, childcare, streetscape and pedestrian infrastructure, and bicycle infrastructure) to ensure consistent administration of existing and future development impact fees and their supporting studies.

In addition to developing a more standardized development impact fee assessment methodology, this study also satisfies the requirements of Section 410 of the City Planning Code which requires that all nexus studies be

[1] Although the report was finalized in 2014, the bulk of the analysis and report was produced in 2013.
[2] Area Plans, or Specific Area Plans, are detailed plans for city neighborhoods. Area Plans are identified in the City's General Plan, and include area-specific land use policies and regulations that guide development.

updated on a five year basis: the nexus analysis presented in this report aims to verify most impact fees in Article 4 of the Planning Code except those pertaining to affordable housing, community stabilization, libraries, and the Citywide Transportation Development Impact Fee. The nexus analysis complied with the requirements of the Mitigation Fee Act, and state and national constitutional law.

REPORT STRUCTURE

The remainder of the introduction will provide background on nexus fees, catalogue San Francisco's existing impact fees, outline the nexus fee determination methodology, and summarize the maximum supportable nexus fees. The following chapters of the report address each of the four infrastructure elements – recreation and open space, childcare, streetscape and pedestrian infrastructure, and bicycle infrastructure.[3]

BACKGROUND ON DEVELOPMENT IMPACT FEE PROGRAMS

Cities are authorized by law to levy development impact fees – which are monetary exactions, charged by a local government to a development applicant as a condition of approval for the development project. In most cases, the law requires the fee amount be reasonably related to the cost of the infrastructure provided by the government collecting the fee. The collected fee monies are allocated to pay for, or defray the costs of, the infrastructure improvements necessitated by the new development. Development impact fees may not be levied to pay for existing infrastructure deficiencies unrelated to the impacts of new development. Also a jurisdiction must normally legislatively adopt findings of a reasonable relationship between fee and impact to enact a fee program.

Although local governments began levying impact fees in the 1920s as a way to finance infrastructure, in 1987, the California legislature passed the Mitigation Fee Act (Assembly Bill 1600 or the Act) to establish principles governing impact fee exactions and, to some extent, codify existing constitutional requirements. The related Government Code Sections 66000-66025 establish legal requirements to implement a development fee program for fees that meet the terms of the Act. While not all of the fees analyzed in this report are necessarily subject to the Mitigation Fee Act, the City has concluded that, in most instances, establishing a nexus for any fee imposed by the City as a condition of development is prudent practice. According to the Act, to establish a development fee program, a jurisdiction must legislatively accept a nexus study that identifies:

- the **purpose** of any fees;
- how fees will be **used**;
- a **reasonable relationship** between the fee-funded infrastructure and the type of development paying the fee;
- a reasonable relationship between the **need** for particular infrastructure and the type of development paying the fee; and
- a reasonable relationship between the amount of the fee and the **proportionality** of the cost specifically attributed to development.

Development impact fees are common among California cities (including San Francisco) and are a well-accepted way to fund a variety of infrastructure such as recreation and open space, childcare, streetscape and pedestrian infrastructure, and bicycle infrastructure.

[3] Note that a transit infrastructure fee study is currently being undertaken in an ongoing update of the 2012 *San Francisco Transportation Sustainability Fee Nexus Study*, and, is therefore omitted from this analysis.

EXISTING DEVELOPMENT IMPACT FEES

San Francisco currently has more than 20 development impact fees, many of which the City established as a component of a larger planning process (either at the city or neighborhood level), and supported by a specific nexus study. Some existing impact fees are single-issue fees imposed citywide or in a limited area; others are components of community infrastructure fees. Table 1 catalogues the existing impact fees in San Francisco for the four infrastructure components studied in this report (recreation and open space; childcare, streetscape and pedestrian infrastructure, and bicycle infrastructure). In Table 1, single-issue fees for any of the four infrastructure items are reported, and community infrastructure fees are apportioned by infrastructure item.[4] Table 1 also highlights the maximum fee charged in each infrastructure category.

Table 1. Existing Related Impact Fees in San Francisco for Four Infrastructure Categories (2013 Fee Rates)

Fee Area	Recreation and Open Space	Childcare	Streetscape and Pedestrian Infrastructure	Bicycle Infrastructure	Other [1]	Total Community Impact Fee, where relevant, 2013 [2] (GSF)
Residential Fees ($/GSF)						
Rincon Hill	$2.85	$0.00	$6.66	-	-	**$9.51**
Market and Octavia	$2.12	$0.83	$4.12	$0.05	$2.83	**$9.95**
Eastern Neighborhoods	$8.85	$1.24	$0.35	-	$7.26	**$17.70**
Balboa Park	$2.66	$1.68	$3.36	-	$1.15	**$8.85**
Maximum Residential Fee by Category ($/GSF)	**$8.85**	**$1.68**	**$6.66**	**$0.05**	**$7.26**	-
Commercial Fees ($/GSF)						
Downtown Park Fee	$2.21	-	-	-	-	-
Child Care: Citywide - Commercial	-	$1.11	-	-	-	-
Transit Impact Development Fee (TIDF)					$13.30	-
Market and Octavia	$0.52	-	$2.14	$0.02	$1.11	**$3.76**
Eastern Neighborhoods	$1.08	$0.46	$0.51	-	$13.42	**$15.48**
Balboa Park	$0.50	$0.32	$0.63	-	$0.22	**$1.66**
Visitacion Valley	$1.67	$1.12	$1.42		$0.86	**$5.07**
Maximum Commercial Fee by Category	**$2.21**	**$1.12**	**$2.14**	**$0.02**	**$13.42**	-

Source: San Francisco Citywide Development Impact Fee Register, January 1, 2013, and the San Francisco Planning Department.

1. Table 1 focuses on the four infrastructure categories analyzed in this nexus report. It does not include all fees included in Article 4 of the Planning Code (for example, it omits transit fees and affordable housing fees), or expenditures that are analyzed elsewhere (for example, it omits library fees, program administration, and transit fees).

2. The City annually adjusts all developer impact fees using an Annual Infrastructure Construction Cost Inflation estimate (AICCIE), as per Article 4 of the Planning Code.

The residential fees range across the neighborhoods from no fee (i.e., neighborhoods without community infrastructure fees) to almost $18 per GSF; the commercial fees range across the neighborhoods from no fee (i.e.,

[4] Apportionment of community infrastructure fees is based on the Planning Code (Section 4), as provided by Kearstin Dischinger, Senior Community Development Specialist of the Planning Department, in a spreadsheet entitled max_fee_by Category_Planned.xls. This spreadsheet is appended for informational purposes.

neighborhoods without community infrastructure fees) to more than $15 per GSF. Two additional downtown fees exist for childcare and parks, of $1.11 and $2.21 per GSF. A transit impact fee of as much as $13.30 per GSF is also charged citywide.[5]

STANDARDS-BASED NEXUS METHODOLOGY

Impact fees can be calculated several ways, but the foundation of all methodologies is determining an appropriate level of infrastructure for future development, the cost to provide this infrastructure, and a reasonable relationship between growth and cost, by which to apportion the cost burden.

With one exception, this study focuses on a standards-based approach, which relies on an explicit infrastructure LOS to derive a maximum supportable fee level. A per-unit provision standard is established by the City – for example, a certain number of acres of open space per person (or service population unit[6]) – and subsequent development must adhere to the standard. The nexus fee for development is based on development's share of the cost to provide this level of provision.[7] Applying standards-based metrics to impact fees allows the City to streamline the fee analysis process, creating a consistent methodology across all infrastructure types that can be easily understood, repeated and updated as necessary. This streamlined approach reduces costs, and strengthens the link between new development and demand for new infrastructure. Recreation and open space, childcare, and streetscape and pedestrian infrastructure nexus fees are established using this standards-based approach.

The *San Francisco Infrastructure Level of Service Analysis* report sets the foundation for the nexus, by exploring various metrics and LOS standards for select infrastructure items, and by providing a comprehensive study of San Francisco's infrastructure elements, current LOS provision, long-term aspirations, and short-term infrastructure LOS targets. The short-term targets are the standards used for the nexus analysis. These standards were developed through a review of existing City policies, interviews with City departments, and research on existing precedents. Note that setting citywide standards for infrastructure LOS is a complex undertaking that few cities have undertaken rigorously, making San Francisco an exemplar in its nexus approach.[8]

A more traditional project-based approach, in contrast, takes a list of planned infrastructure projects, and bases the nexus fee on the apportionment of their cost. This project-based approach is used for bicycle infrastructure. For bicycle infrastructure, the SFMTA has developed a comprehensive policy document that outlines specific capital projects for bicycle infrastructure. At the direction of the agency and with the support of stakeholders, the nexus for bicycle infrastructure relies on this policy document (SFMTA's 2013 *Bicycle Strategy*).[9] (Note that, although the bicycle nexus relies on a discrete list of projects rather than a per-population or per-service-population LOS, the cost is apportioned between residential and commercial development via service population. That is, the bicycle infrastructure requirements are determined by a project list (13 miles of upgraded bikeway, 13 upgraded

[5] The Transit Impact Development Fee (TIDF) ranges from $6.80 per GSF to $13.30 per GSF, depending on the land use (Economic Activity Category or Subcategory), as per San Francisco Planning Code Section 4.11.3 (e).
[6] Service population is discussed in more detail in the section, Additional Assumptions: Service Population.
[7] As long as the standard is not above the existing LOS conditions (i.e. as long as the existing LOS is not deficient per the standard), new development may bear the full burden of providing the LOS associated with its development. When a standard *is* above the existing LOS conditions, the City may require the development to bear the portion of the cost related to its fair share of the cost. In this case, best practice dictates that the City should demonstrate how it will fund the remaining cost to elevate the existing infrastructure to the LOS standard. The City cannot charge new development to increase an LOS for existing residents.
[8] San Diego applies a standards approach for park infrastructure and many California cities that are not built-out use level of service standards to inform master planned areas on the periphery of their respective cities.
[9] While this document is still a draft, SFMTA staff directed the consultant to use it because SFMTA is developing the Capital Improvement Program (CIP) project list to be put forward for board approval in April 2014 based on this document. Although no plans exist to take the 2013 *Bicycle Strategy* to the board for adoption, the project list derived from it will be taken to the board for CIP approval in April 2014.

intersections, etc.) as opposed to a per-service-population LOS; but, the cost of the bicycle infrastructure projects in the project list is allocated to development based on the increase in service population attributable to new development.)

INFRASTRUCTURE CATEGORIES

A nexus between development and maximum supportable impact fees has been determined for the following infrastructure types:


Recreation and open space


Streetscape and pedestrian infrastructure


Childcare


Bicycle infrastructure

All of these four infrastructure elements (recreation and open space, childcare, streetscape and pedestrian infrastructure, and bicycle infrastructure) represent areas where existing impact fees are charged – that is, areas identified by the City where development will require new capital investment.

CITYWIDE APPROACH TO IMPACT FEES

Although many existing impact fees result from the City's planning processes in various Area Plans, and thus are neighborhood-specific, the City seeks a nexus analysis that applies consistent nexus methodologies across varying fee programs and geographies. This nexus study is therefore conducted at a citywide level. While the City acknowledges that the actual implementation of fee programs may still vary based on specific considerations of individual Area Plans, a citywide nexus model provides a consistent nexus architecture that affords the City an over-arching structure and a program that can easily be administered and updated (with revised cost and demographic inputs) on a five-year basis.

INFRASTRUCTURE LOS

The LOS standards for each infrastructure element are shown in Table 2. Recreation and open space and streetscape and pedestrian infrastructure improvements are based on demographic projections through 2030, as a reasonable development timeframe, while childcare and bicycle improvements are based on shorter-term projections, due to the changing distribution of children in the city, and the proposed bicycle improvement strategy upon which the bike measures are built. In terms of childcare, because the number of children in San Francisco is projected to decrease after 2020, the childcare LOS provision is based on 2020 demographics to avoid under-providing childcare at the child population's projected peak.[10] For bicycle infrastructure, SFMTA's *Bicycle Strategy*

[10] Unlike the general population, the child population in San Francisco is projected to begin a slow decline within the next five to seven years. As a result, if longer-term projections were used, childcare facilities in the short-term would be under-provided. In addition, the City has many policies to encourage families to stay and live in San Francisco, such that the population of children may not necessarily decline as projected. A shorter timeframe to 2020 affords the opportunity to revisit the projections in several years without under-providing in the short-term. Avoiding short-term under-provision is especially prudent if the projected trend of a declining child population does not materialize.

that outlines their proposed projects is based on a five-year timescale, and has been extrapolated to the nearest decade end.

Table 2 includes the infrastructure LOS for the infrastructure categories using a standards-based approach (recreation and open space, childcare, and streetscape and pedestrian infrastructure), and the capital improvements list for the infrastructure category using a projects-based approach (bicycle infrastructure).

Table 2. LOS Metrics for Infrastructure Categories

Infrastructure Element	LOS Standard / Capital Improvement	Measure	Target Year for Nexus Evaluation
Recreation and Open Space	LOS	• 4.0 acres of open space / 1,000 service population units • 3.5 acres of open space / 1,000 service population units • 0.5 acres of improved open space / 1,000 service population units	2030
Childcare	LOS	• Childcare provided for 37% of demand for infant/toddler (age 0-2) care • Childcare provided for 99.6% of demand for preschooler (age 3-5) care	2020
Streetscape and Pedestrian Infrastructure	LOS	• 88 square feet of improved sidewalk / service population unit	2030
Bicycle Infrastructure	Capital Improvements List	Complete build-out as per "Bicycle Plan Plus Scenario" of SFMTA's *Bicycle Strategy* (extrapolated through 2020) • Upgrade 13 miles of bikeway to premium facilities • Install bicycle signals at 13 intersections • Add 5,333 bike parking spaces • Pilot bike share program of 67 stations and 667 bicycles	2020

Source: AECOM *San Francisco Infrastructure Level of Service Analysis* report (March 2014)

GROWTH PROJECTIONS

The nexus analysis is predicated on a demographic forecast that helps determine the need for future infrastructure. The following population and employment projections from 2013 through 2030 (Table 3) were developed by the City and AECOM, based on U.S. Census, American Community Survey (ACS) data and information from the California Department of Finance (DOF). The projections below are consistently applied throughout all of the nexus analyses. Based on the low residential and commercial vacancy rates in San Francisco, it is reasonable to assume that population and employment growth will result in new physical development. [11]

[11] San Francisco's apartment vacancy rate is 3.1 percent according to a Reis Report by Justin Peterson entitled "San Francisco Apartment Sector Amongst the Strongest" (October 2012). San Francisco's office vacancy rate (approximately 11 percent) is the lowest in the US office market, according to rankings done by Jones Lang Lasalle in their report "Office Outlook: United States. Q2 2013". San Francisco's retail vacancy rate is reported as 2.7 percent (second quarter of 2013) by CoStar in their article "Market Trend: San Francisco's Retail Vacancy Decreases to 2.7%" (July 2013). Note that all markets, including the housing market and the office space market, have a natural rate of vacancy that allows movement within the system. Full (100 percent) absorption would result in an inflationary market. The vacancy rates in San Francisco's apartment, office, and retail markets are below common metrics of natural vacancy, making it a reasonable premise that there is a one-to-one relationship between population and employment growth and new physical development (Krainer, John. Natural Vacancy Rates in Commercial Real Estate Markets. Federal Reserve Bank of San Francisco. October 5, 2001; Belsky, Eric. Rental Vacancy Rates: A Policy Primer. National Association of Home Builders. Housing Policy Debate, Volume 3, Issue 3. 793-813. 1992.).

Table 3. Population and Employment Projections for San Francisco (2010 - 2030)

Year	2013	2020	2030
Population			
Total Population	820,585	872,451	947,625
Employment			
Jobs	600,740	677,531	706,848

Source: Overall population and employment taken directly from the San Francisco Planning Department 2013 projections received by AECOM on May 14, 2013 from Aksel Olson, Planner/Geographer in Citywide Information and Analysis Group, San Francisco Planning Department. Projections were given at five year intervals beginning in 2010, so AECOM used linear interpolation to arrive at 2013 estimates.
Note: All values rounded to the nearest integer.

ADDITIONAL ASSUMPTIONS

In addition to the population and employment projections presented above, there are a number of other assumptions that are applied in the nexus analyses for each infrastructure area. For example, this nexus analysis ascribed demand for infrastructure on a gross square footage basis that is consistent with current density assumptions (residents or employees per GSF). These assumptions are summarized in Table 4.

Table 4. General Nexus Assumptions

*	Metric	Value	Source
*	**Residential Assumptions**		
A	Residents per service population unit	1	*Service Population Concept Memorandum* (September 24, 2013)
B	Residents per housing unit	2.32	American Community Survey 3-Year, 2000-2011, DP02: Selected Social Characteristics for San Francisco County
C	GSF per average residential housing unit	1,156	Weighted average from Eastern Neighborhoods Impact Fee and Affordable Housing Analysis (2008)[1]
D	GSF per residential service population	498	C / B
	Commercial Assumptions		
E	Employees per service population unit (streetscape and pedestrian infrastructure; bicycle infrastructure)	0.5	*Service Population Concept Memorandum* (September 24, 2013)
F	Employees per service population unit (recreation and open space)	0.19	*Service Population Concept Memorandum* (September 24, 2013)
G	GSF commercial space per employee	327	San Francisco Planning Department assumptions received via email from Aksel Olsen, Planner/Geographer, on July 15, 2013
H	GSF per commercial service population (streetscape and pedestrian infrastructure; bicycle infrastructure)	654	G / E
I	GSF per commercial service population (recreation and open space)	1,721	G / F

Source: AECOM, 2013; other sources as noted.

1. The GSF per average residential housing unit is calculated by dividing the average unit size of 925 net square feet by a building efficiency rate of 80 percent. A building's efficiency rate reflects the ratio of leasable or rentable area to gross floor area. The average unit size (925 square feet) and building efficiency rate (80 percent) assumptions are taken from the *Eastern Neighborhoods Impact Fee and Affordable Housing Analysis*, which Kearstin Dischinger, Senior Community Development Specialist with the San Francisco Planning Department has concluded still reflect current conditions. Kearstin Dischinger, in a meeting on July 16, 2013, directed the consultant to use this square footage and efficiency rate.

2. Unlike the streetscape and pedestrian infrastructure and bicycle infrastructure categories which use a standard discount factor for employees of 0.5 to calculate service population, the frequency of use between residents and employees is adjusted downwards for recreation and open space to reflect the findings of a study performed by the Hausrath Economics Group. The study indicates that employees use park facilities at a rate of 0.19 times that of residents.[12] As a result, the service population for recreation and open space is calculated as one times the number of residents plus 0.19 times the number of employees. For a more detailed discussion of the service population concept, refer to the Service Population section of the report.

Service Population

Two of the included nexus methodologies (recreation and open space, and streetscape and pedestrian infrastructure) rely on the "service population" concept for their LOS. Service population is a relatively standardized concept, which determines the level of capital infrastructure demand placed on given infrastructure by additional development, including both residents and employees.[13] Service population can be estimated either at a building level, by estimating the typical population and/or worker density of the building use, or at a citywide level. For purposes of this study, the city's total service population is calculated as one times the resident population plus 0.19 times the employment population (1:0.19 ratio) for recreation and open space, and, as one times the resident population plus half of the employment population (1:0.5 ratio) for streetscape and pedestrian infrastructure.

[12] Hausrath Economics Group, "Phoenix Park and Library EDU Factors Study": A Report to City of Phoenix Planning Department. September 1998. The park usage factor of 0.19 from the Hausrath study was applied to the San Francisco context by both the *Eastern Neighborhoods Impact Fee and Affordable Housing Analysis* and the 2008 *City and County of San Francisco Citywide Development Impact Fee Study*.

[13] *Service Population Concept Memorandum*, September 24, 2013, listed in Appendix A and included in the accompanying background materials compact disc.

This approach evaluates infrastructure demand based on both place of residence and place of work. Under this model, resident-employees (i.e. persons that both live and work in San Francisco) are counted twice, once for their home location, and once for where they work. This methodology accounts for the infrastructure need generated both at their place of work and at their place of residence (e.g. required parks and sidewalks near their homes and near their offices). While employees require similar capital improvements (e.g. parks and sidewalks) as residents, the employee factor has been discounted (to 0.19 or to 0.5) to reflect a conservative approach to employee capital infrastructure demand. These 1:019 and 1:0.5 ratios serve as the basis for the service population calculations.

For streetscape and pedestrian infrastructure, the service population calculation discounts employees to 0.5, relative to residents (weighted as 1). This discounting represents an industry standard discount factor for employees in service population calculations.[14] For recreation and open space, the service population calculation discounts employees further to 0.19, relative to residents (weighted as 1). This discounting represents the finding, as analyzed by the Hausrath Economics Group (see Footnote 12), that people require and use recreation and open space near their homes much more than near their workplace. As a result, the recreation and open space chapter applies a modified service population calculation which weights employees less than the standard (0.5) discount factor.

Note that although bicycle infrastructure relies on a project-based approach to determine bicycle infrastructure requirements, the nexus methodology for bicycle infrastructure uses the "service population" concept to apportion cost. The total cost for all bicycle infrastructure projects is allocated to new development based on new development's share of the growth in service population. In this case, the conventional service population calculation (of ascribing one unit to residents and 0.5 units to employees) is applied.

Administrative Costs

For each fee calculation, five percent of the calculated cost is added to cover administrative services, as directed by the San Francisco Planning Department, which oversees the fee calculation.[15] Five percent reflects the average administrative cost across all citywide and neighborhood fees.[16]

Gross Square Feet

Consistent with current City practices, all fees are presented in terms of cost ($) per gross square foot (GSF). For neighborhoods which have a considerably lower or higher residential efficiency rate[17] than the 80 percent applied in the assumptions in Table 4, the Planning Department reserves the right to recalculate fees based on adjusted assumptions.

SUMMARY OF CITYWIDE IMPACT FEES

The impact fees determined in this nexus analysis are tabulated below (Table 5). The fees range from a few cents per square foot (bicycle infrastructure fee) to almost fifteen dollars per square foot (residential recreation and open space fee).

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[14] *Service Population Concept Memorandum*, September 24, 2013, listed in Appendix A and included in the accompanying background materials compact disc.
[15] *Administrative Cost Memorandum*, November 4, 2013, listed in Appendix A and included in the accompanying background materials compact disc.
[16] Five percent was used in the 2008 *Citywide Development Impact Fee Study*, as well as in the 2008 *Eastern Neighborhoods Impact Fee and Affordable Housing Analysis*.
[17] A building's efficiency rate reflects the ratio of leasable or rentable area to gross floor area.

Table 5. Maximum Supportable Citywide Impact Fees per GSF, 2013

Citywide Nexus Fees	
Recreation and Open Space	
Residential ($/GSF)	$14.99
Non-Residential ($/GSF)	$4.34
Childcare	
Residential ($/GSF)	$1.86
Non-Residential ($/GSF)	$1.58
Streetscape and Pedestrian Infrastructure	
Residential ($/GSF)	$7.98
Non-Residential ($/GSF)	$6.08
Bicycle Infrastructure	
Residential ($/GSF)	$0.06
Non-Residential ($/GSF)	$0.04

Source: AECOM, 2013

Note: All values rounded to the nearest cent.

COMPARISON OF CITYWIDE IMPACT FEES WITH EXISTING IMPACT FEES

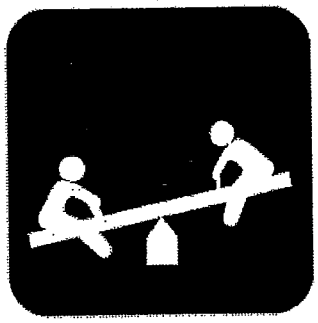
The calculated citywide impact fees support the existing impact fees in all categories. Additionally, all calculated citywide fees exceed the maximum existing neighborhood fee by at least 10%, as shown in Table 6. Note that both existing and maximum supportable citywide fees are expressed in $/GSF.

Table 6. Comparing Maximum Supportable Citywide Fees to Existing Fees

	Maximum supportable Citywide Fee (determined by this Nexus)	Highest Existing Fee (2013 fee rates)	Percent of Maximum Supportable Nexus Recovered by Existing Fee (Existing/Proposed)
Recreation and Open Space			
Residential ($/GSF)	$14.99	$8.85	59%
Non-Residential ($/GSF)	$4.34	$2.21	51%
Childcare Infrastructure			
Residential ($/GSF)	$1.86	$1.68	90%
Non-Residential ($/GSF)	$1.58	$1.12	70%
Streetscape and Pedestrian Infrastructure			
Residential ($/GSF)	$7.98	$6.66	83%
Non-Residential ($/GSF)	$6.08	$2.14	35%
Bicycle Infrastructure			
Residential ($/GSF)	$0.06	$0.05	83%
Non-Residential ($/GSF)	$0.04	$0.02	50%

Source: AECOM, 2013

Note: All fee values rounded to the nearest cent; all percentages rounded to the nearest integer.



2. Recreation and Open Space

This chapter summarizes the nexus analysis for recreation and open space. After providing a brief background, this chapter will outline the relevant growth assumptions, the LOS standard developed in the associated *San Francisco Infrastructure Level of Service Analysis*, the methodology used to determine the nexus fee, and the final determination of the maximum supportable nexus fee.

INTRODUCTION

RECREATION AND OPEN SPACE BACKGROUND

Recreation and open space is a common, City-provided, public amenity. San Francisco, like most cities, aims to provide adequate quality open space for the broader public health and quality of life of its citizens and workforce. As new development occurs, it attracts new residents and employees, who, in turn, require new (or expanded and enhanced) open space. This relationship between new development, an influx of residents and workers, and a demand for open space provides the nexus for an impact fee.

The impact of new residential development on the need for open space is widely understood in California and development impact fees for open space are commonly imposed in many California jurisdictions. In addition to serving the residential population, the City has a longstanding commercial development impact fee, the Downtown Park Fee, initiated in 1985, which supports recreation space in the downtown area for the neighborhood's daytime employee population.[18] In adopting the Downtown Park Fee, the Board of Supervisors recognized that continued office development in the Downtown increased the daytime population and created a need for additional public park and recreation facilities in the downtown. The Board recognized at that time that, while the open space requirements imposed on individual office and retail developments through the Planning Code addressed the need for plazas and other local outdoor sitting areas to serve employees and visitors in the district, such open space could not provide the same recreational opportunities as a public park. The City thus created the Downtown Park fund in order to provide the City and County of San Francisco with the financial resources to acquire and develop public park and recreation facilities necessary to serve the burgeoning daytime population in the Downtown. The City continued its commitment to insuring that recreation and open space facilities increased apace with new commercial development when it adopted open space fees on commercial development as a part of various Area Plans such as Market and Octavia, Eastern Neighborhoods, Balboa Park and Visitacion Valley (Table 1.)

[18] Planning Code Section 412. http://www.amlegal.com/nxt/gateway.dll/California/planning/article4developmentimpactfeesandprojectr?f=templates$fn=default.htm$3.0$vid=amlegal:sanfrancisco_ca$anc=JD_412

Providing recreation and open space – such as baseball diamonds, soccer fields, parks, playgrounds, tennis courts, flower gardens, community gardens, and greenways – is a capital intensive undertaking, especially in San Francisco where land availability is low and land prices are high. Recreation and open space fees, levied on new development, are collected to fund the acquisition and construction of new or expanded recreation capacity for the additional residents and workers directly attributable to new development.

Note that the terms "park space", "recreation space" or "open space" may be used in this chapter as shorthand to denote any and all recreation and open space.

PURPOSE AND USE OF REVENUES

The primary purpose of the recreation and open space development impact fee revenue is to fund expansion of San Francisco's recreation capacity to meet the demand from new development. Recreation and open space capacity can be increased either through the acquisition and construction of new park land, or through capacity enhancements to existing open space. Both types of open space investments increase the capacity of San Francisco's open space network to accommodate new development. Examples of how development impact fees would be used include:

- Acquisition and construction of new park and recreation land;
- Lighting improvements to existing parks, which extend hours of operation on play fields and allow for greater capacity;
- Recreation center construction, or adding capacity to existing facilities; and
- Converting passive open space[19] to active open space[20] through addition of trails, play fields, playgrounds, etc.

The recreation and open space impact fee aims to ensure that new development contributes its fair share of funding to recreation and open space. Because the LOS metric upon which the nexus is developed directly ties infrastructure to the service population, there is a clear relationship between new development, which increases housing and employment space, and an increase in demand for recreation capacity.

As with all impact fees, the fee may not be used to address existing infrastructure deficiencies, and, as such, no portion of the funds will be used for RPD's deferred maintenance tasks. Unlike capacity enhancements that make the open space usable by more people, deferred maintenance efforts simply restore open space to its initial capacity. For example, as noted above, a park enhancement might be adding lighting to a tennis court, which extends the effective hours of operation of the tennis court, allowing more people to use the court. By contrast, re-flooring a tennis court as part of a maintenance effort simply maintains the tennis court's capacity, and thus would not be a permitted use of funds in the development impact fee context.

This nexus analysis assumes that the City will fund 100 percent of the development-based demand for open space through the fee. This study estimates the maximum supportable fee based on the relationship between the cost to provide open space and the LOS provision to accommodate new development. However, the City may choose to adopt a lower fee as appropriate.

[19] Lawn or forested areas dedicated for "general enjoyment of outdoors", as per RPD's *Parks Acquisition Policy* (August 2011).
[20] Recreational space construct to accommodate "team sports and athletics, children's play areas, courses and courts, bike, pedestrian and equestrian paths", as per RPD's *Parks Acquisition Policy* (August 2011).

NEXUS DETERMINATION

The maximum supportable fee calculation for recreation and open space infrastructure combines the proposed recreation and open space LOS metric with residential growth projections and the cost to provide recreation and open space.

LOS METRIC

Although recreation and open space infrastructure comprises a wide range of components, from playgrounds, lawn areas and recreation centers, to baseball diamonds and forested areas, the LOS metric put forth in the *San Francisco Infrastructure Level of Service Analysis* – acres of open space per service population unit – encompasses, undifferentiated, all types of park-related improvements.

As noted in the *San Francisco Infrastructure Level of Service Analysis*, the City is currently responsible for providing 4.0 acres of open space per 1,000 service population units, and aims to maintain this provision into the future.[21] This metric assumes that for each new service population unit, the City will provide an equivalent level of service, whether it comes in the form of new open space or capacity improvements to existing open space (see Nexus Methodology & Fee Calculation section below for more detail).

GROWTH PROJECTIONS

The development horizon for recreation and open space is 2030. Between 2013 and 2030, San Francisco is projected to house 127,040 more people and employ 106,108 more workers (Table 7).

[21] City-provided park land includes land owned by the Recreation and Parks Department, the Department of Public Works, the Port, and the Redevelopment Agency/Successor Agency to the San Francisco Redevelopment Agency.

Table 7. Growth Projections for Recreation and Open Space (2013 - 2030)

	2013	2030	Growth (2013 - 2030)	Percent Increase
Population				
Population	820,585	947,625	127,040	15%
Employment				
Jobs	600,740	706,848	106,108	18%
Service Population				
Service population[1]	934,726	1,081,926	147,200	16%

Source: Overall population and employment taken directly from the San Francisco Planning Department 2013 projections from Aksel Olsen, Planner/Geographer in Citywide Information and Analysis Group, received May 14, 2013. See appended documents for files. Projections were given at five year intervals beginning in 2010, so AECOM used linear interpolation to arrive at 2013 estimates.

Note: all values are rounded to the nearest integer.

1. Service population is a weighted sum of residents and employees. Unlike the streetscape and pedestrian infrastructure and bicycle infrastructure categories which use a standard discount factor for employees of 0.5 to calculate service population, the frequency of use between residents and employees is adjusted downwards for recreation and open space to reflect the findings of a study performed by the Hausrath Economics Group. The study indicates that employees use park facilities at a rate of 0.19 times that of residents.[22] As a result, the service population for recreation and open space is calculated as one times the number of residents plus 0.19 times the number of employees. For a more detailed discussion of the service population concept, refer to the Service Population section of the report, under the Additional Assumptions section.

NEXUS METHODOLOGY & FEE CALCULATION

The fee calculation methodology (Table 8) calculates the total cost of increasing open space acreage for the new service population (2013-2030), and distributes the cost between residential and non-residential land uses based on their associated contributions to total incremental service population growth. The residential fee is based on the percentage of service population units arising from the new resident population; the non-residential (commercial) fee is based on the percentage of service population units arising from the increase in employee population.

Note that, to maintain the LOS at 4.0 acres of open space per 1,000 service population units, an equivalent of 566 new acres of open space would need to be constructed (Table 8, Row G). Given the size of San Francisco, the building density, and expensive land costs, constructing 566 new acres of open space within San Francisco is infeasible.[23] RPD has determined that it can reasonably acquire 55 new acres of open space within San Francisco. The remaining 511 acres demanded by the LOS (566 minus 55) will be accommodated not through the construction of new park acres, but through the capacity improvement of existing acres.[24] The capacity

[22] Hausrath Economics Group, "Phoenix Park and Library EDU Factors Study". A Report to City of Phoenix Planning Department. September 1998. The park usage factor of 0.19 from the Hausrath study was applied to the San Francisco context by both the San Francisco Eastern Neighborhoods Nexus Study and the 2008 City and County of San Francisco Citywide Development Impact Fee Study.

[23] RPD staff members Dawn Kamalanathan, Planning Director, Stacey Bradley, Planner, and Taylor Emerson, Analyst, noted in meetings that RPD could not feasibly acquire and construct 566 acres of new open space within San Francisco. Dawn Kamalanathan confirmed this assertion in an email dated February 13, 2014.

[24] If land were available for 566 acres of new open space in San Francisco, developers would be charged the acquisition and improvement cost ($9,365,400 per acre for acquisition (Table 8, Row J) plus $939,197 per acre for capacity improvement (Table 8, Row K)) for the full 566 acres. Given the constraints, the stated approach of charging developers the full cost (acquisition plus improvement) for only 55 acres, and a capacity improvement cost only for the remaining acres (511) represents a discounted nexus and more accurately reflects how much land RPD will acquire and improve.

improvements of existing acres must add capacity to the existing land (refer to Purpose and Use of Revenues section above).[25]

Table 8. Nexus Methodology for Recreation and Open Space Fee

	Measure	Value	Source/Calculation
Service Population			
A	Total service population projected for 2030	1,081,926	Table 7
B	Total projected service population growth (2013-2030)	147,200	Table 7
Unit Conversions			
C	Residential (GSF/service population)	498	Table 4
D	Commercial (GSF/service population)	1,721	Table 4
Metric			
E	Total acres of open space (all City owners, 2013)	3,762	RPD[1]
F	Acres of park improvements per 1,000 Service Population Units	4.0	*San Francisco Infrastructure Level of Service Analysis* (March 2014)
Cost			
G	Incremental acres of open space required to maintain LOS (2013-2030)	566	A / 1000 * F - E
H	Feasible new acres of open space (2013-2030)	55	RPD[2]
I	Acres of open space to be improved (2013-2030)	511	G - H
J	City estimate of unit acquisition cost ($/acre of open space acquired)	$9,365,400	*RPD Cost Assumptions Memorandum (March 2014)*
K	City estimate of unit improvement cost ($/acre of open space improved)	$939,197	*RPD Cost Assumptions Memorandum* (March 2014)
L	Total cost for new open space	$566,753,000	H * (J + K)
M	Total cost for improved open space	$479,930,000	I * K
N	Cost attributable to incremental growth	$1,046,683,000	L + M
O	Administrative costs (5% of fee)	$52,334,000	*Administrative Cost Memorandum* (November 4, 2013)
P	Total attributable cost with administrative costs	$1,099,017,000	N + O
Nexus Fee Maximums			
Residential ($/GSF)		**$14.99**	P / (B * C)
Non-Residential ($/GSF)		**$4.34**	P / (B * D)

Source: AECOM, 2013

Note: All numbers and percentages are rounded to the nearest integer. All dollar values (except those specified by the City, i.e. Lines M and N, and the nexus fee maximums) are rounded to the nearest thousand. Nexus fee maximums are rounded to the nearest cent.

1. RPD staff members Dawn Kamalanathan, Planning Director, Stacey Bradley, Planner, and Taylor Emerson, Analyst, noted in a meeting on November 14, 2013, that RPD owns 3,437.28 acres of open space within San Francisco, and that other City agencies (the Port, DPW, and the Redevelopment Agency/Successor Agency to the San Francisco Redevelopment Agency) own another 324.4 acres of open space within San Francisco, for a total of 3,762 acres of open space within San Francisco.

2. RPD staff members Dawn Kamalanathan, Planning Director, and Stacey Bradley, Planner, advised in meetings that RPD could feasibly acquire and construct 55 new acres of open space. Dawn Kamalanathan confirmed this via email dated February 13, 2013.

[25] To fully maintain the LOS, the capacity improvements would need to double the open space capacity. Capacity improvements to parks vary in effectiveness, with typical enhancements improving park capacity by 20 to 30 percent, according to RPD staff (Dawn Kamalanathan, Planning Director, Stacey Bradley, Planner, via email received January 10, 2014, from Kearstin Dischinger, Senior Community Development Specialist of the Planning Department). Therefore, improvement acreage and cost represents a conservative, discounted nexus. One of the challenges with the application of this approach is that it will become difficult to measure how the LOS has been maintained moving forward. The Planning Department has advised AECOM that it will work with RPD to develop a clear set of equivalency units, which identify the relationship between improvements and increased capacity. These equivalencies will help ensure that the fees are used to directly address proportional capacity increases.

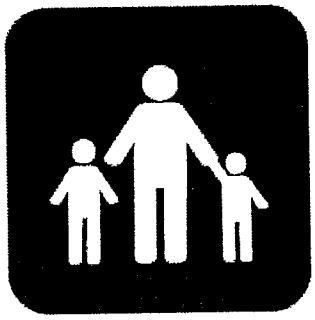
NEXUS FINDINGS

Based on the approach summarized in Table 8, the maximum estimated cost per residential square foot is $14.99 per gross square foot, and the estimated non-residential fee is $4.34 gross square foot.

As Table 9 demonstrates, both determined maximum supportable fees are above the highest existing fee for recreation and open space. The highest existing recreation and open space fees recover 50 to 60 percent of the maximum supportable nexus.

Table 9. Comparing Proposed Maximum Supportable Recreation and Open Space Fees to Existing (2013) Fees

	Proposed (Max)	Existing (Max)	Percent of Maximum Supportable Nexus Recovered by Existing Fee (Existing/Proposed)	Proposed Max > 10% Above Existing
Residential ($/GSF)	$14.99	$8.85	59%	YES
Non-Residential ($/GSF)	$4.34	$2.21	51%	YES



3. Childcare

This chapter summarizes the nexus analysis for childcare infrastructure. After providing a brief background, this chapter will outline the relevant growth assumptions, the LOS standard developed in the associated *San Francisco Infrastructure Level of Service Analysis*, the methodology used to determine the nexus fee, and the final determination of the nexus fee.

INTRODUCTION

CHILDCARE SPACE BACKGROUND

For families with children – especially those with children under the age of thirteen – childcare is a key concern. In San Francisco particularly, with high housing costs, many families have working parents and, therefore, require non-parent childcare. The City recognizes the importance of childcare as a community-serving amenity, and first adopted a childcare inclusionary zoning ordinance with an in-lieu fee option in 1986 as part of the Downtown Plan.[26] In addition to the City's childcare ordinance, there are four City Areas with Community Infrastructure Impact Fees that include a childcare component – Market & Octavia, the Eastern Neighborhoods, Visitacion Valley, and Balboa Park. These fees are used to help provide facilities for childcare demand resulting from new commercial and residential developments. The City will continue to plan for resident and employee childcare needs and articulate this commitment in local policy.

As new development occurs, it attracts new residents and employees, some of whom have children who require non-parent childcare. This relationship between new development, an influx of residents and workers, and a demand for childcare facilities provides the nexus for an impact fee. While childcare is not a mandated public service, the City government is involved in some capacities in the provision of licensed childcare options. Childcare fees, levied on new development, are collected to help fund childcare slots in the city, demand for which is directly attributable to new development.

[26] The ordinance applies to office and hotel development in the Downtown Area of the General Plan and the 2013 fee level is $1.11 per gross square foot. The City's ordinance establishes a separate fund for the collection of fee revenues, called the Child Care Capital Fund. Under this ordinance, "all monies in the fund shall be used solely to increase and/or improve the supply of child care facilities affordable to households of low and moderate income" (Section 414 of the City Planning Code). Since adoption, the City has collected $7.1 million in childcare in-lieu fees (through Fiscal Year 2010-2011). During the same time period, the Child Care Capital Fund has expended $6.5 million. The City currently contracts with the Low Income Investment Fund (LIIF) to administer the expenditures of the Fund (FY 2010-2011 Development Impact Fee Report, Controller's Office, City and County of San Francisco, December 1, 2011).

PURPOSE AND USE OF REVENUES

The primary purpose of the childcare development impact fee is to fund expansion of San Francisco's childcare capacity to meet the demand from new development. That is, impact fee revenues are intended to be used to mitigate the childcare demands of the increasing population. Monies from the childcare impact fee may only be used to fund capital childcare projects and facilities.

Through discussions with City staff, it was determined that, while there is a need for additional school-age childcare capacity in the City, the needs are for operations assistance, not for additional facilities. After-school care is typically provided at school sites, using school facilities. Given that impact fee revenues must be spent on capital costs to maintain or increase the supply of facilities, they are not an appropriate source of funding for expanding after-school care capacity. The City does not intend to assist in the creation of new facilities providing after-school care; instead, the City intends to use other funding sources to assist the operation of after-school programs. Due to the fact that childcare impact fees are limited to capital improvements, this analysis is limited to infant, toddlers, and preschool-age children only and does not address the childcare needs of school-age children (ages 6 to 17).

This study estimates the maximum supportable fee based on the relationship between the cost to provide childcare and the LOS provision to accommodate new development. However, the City may choose to adopt a lower fee as appropriate.

NEXUS DETERMINATION

The maximum supportable fee calculation for childcare combines the proposed childcare LOS metrics with residential growth projections and the cost to provide licensed childcare.

LOS METRIC

Two LOS metrics, developed with the City and described in detail in the *San Francisco Infrastructure Level of Service Analysis,* are applied in this fee determination: (1) childcare demand accommodation for infants and toddlers (ages 0 to 2), and (2) childcare demand accommodation for preschoolers (ages 3 to 5). In both cases, the LOS target that the City aims to achieve in the relevant timeframe, and which will be applied in the calculation of the maximum supportable development impact fee, is to maintain the existing level of service provision.

In terms of infant and toddler childcare, the existing number of childcare slots available represents capacity for 37 percent of the infant and toddler childcare demand in the city. For preschoolers, the current number of childcare slots available in the city represents capacity for 99.6 percent of the preschool childcare demand in the city.[27] The City aims to maintain this provision into the future as the population and workforce grows, providing capacity for 37 percent of infant and toddler childcare demand and capacity for 99.6 percent of preschooler childcare demand.

GROWTH PROJECTIONS

The development horizon for childcare is 2020. This shortened timeframe, compared to the 2030 timeframe used for analysis of recreation and open space and streetscape and pedestrian infrastructure, is used for childcare because of irregularities in the projected growth trends for children in San Francisco. Unlike the general population, which is projected to increase steadily, the child population in San Francisco is projected to rise through 2020, and then begin a slow decline over the following decade.[28] Nonetheless, while the population of

[27] Childcare Demand Estimates for Licensed Care are calculated in the 2014 *San Francisco Infrastructure Level of Service Analysis* report (Appendix: Childcare Demand Calculations).
[28] California Department of Finance P-3: State and County Total Population Projections by Race/Ethnicity and Detailed Age, 2010-2060.

children is projected to decline after 2020, the City has many policies to encourage families to stay and live in San Francisco, such that the population of children may not necessarily decline as projected. A shorter timeframe to 2020 affords the opportunity to revisit the projections in several years without under-providing in the short-term. Avoiding short-term under-provision is especially prudent if the projected trend of a declining child population does not materialize.

Table 10. Growth Projections and Demand Estimates for Childcare (2013 – 2020)

	2013	2020	Growth (2013 - 2020)	Percent Increase
Population				
Population	820,585	872,451	51,866	6%
Employment				
Jobs	600,740	677,531	76,791	13%
Childcare Demand Estimates (for Licensed Care)[1]				
Infants/Toddlers Requiring Care in San Francisco	8,005[2]	10,534	2,529	32%
Preschoolers Requiring Care in San Francisco	14,717[3]	17,002	2,285	17%

Source: Overall population and employment taken directly from the San Francisco Planning Department 2013 projections from Aksel Olsen, Planner/Geographer in Citywide Information and Analysis Group, received May 14, 2013. See appended documents for files. Projections were given at five year intervals beginning in 2010, so AECOM used linear interpolation to arrive at 2013 estimates.

Note: All values rounded to the nearest integer.

1. Childcare Demand Estimates for Licensed Care are calculated in the 2014 *San Francisco Infrastructure Level of Service Analysis* report, (Appendix: Childcare Demand Calculations). Note that childcare demand numbers are rounded to the nearest integer. Note also that these totals represent demand for childcare *in San Francisco*. Some San Francisco residents with children are employed outside of San Francisco, and demand childcare outside of San Francisco. Some people with children, who are employed in San Francisco but live elsewhere, demand childcare outside of San Francisco. These childcare demands of San Francisco residents and employees for childcare outside of San Francisco are not included in the totals above.

2. Of the 8,005 infants and toddlers requiring care in San Francisco, 4,144 are *resident* infants and toddlers (i.e. the children of San Francisco residents; see A in Table 11), and 3,861 are *non-resident* infant and toddlers (i.e. the children of people who work in San Francisco but live elsewhere; see B in Table 11). These demand estimates are calculated in the 2014 *San Francisco Infrastructure Level of Service Analysis* report (Appendix: Childcare Demand Calculations).

3. Of the 14,717 preschoolers requiring care in San Francisco, 10,878 are *resident* preschoolers (i.e. the children of San Francisco residents; see C in Table 11), and 3,839 are *non-resident* preschoolers (i.e. the children of people who work in San Francisco but live elsewhere; see D in Table 11). These demand estimates are calculated in the 2014 *San Francisco Infrastructure Level of Service Analysis* report (Appendix: Childcare Demand Calculations).

Unlike other infrastructure categories, which are required by residents and employees at multiple locations (both at home and at work), childcare facilities are required in only one location per child in need of care. As a result, an LOS based on service population (like recreation and open space, and streetscape and pedestrian infrastructure) is not relevant to childcare.[29] Instead, the childcare nexus is based on future childcare demand estimates. Between

[29] In the service population calculation, both residents and employees are counted (residents at a weight of one and employees at a discounted weight). A resident-employee – i.e. someone who both lives and works in San Francisco – would be counted more than once. For recreation and open space and streetscape and pedestrian infrastructure, this "double-counting" represents the fact that a person requires, for example, parks and sidewalks at home as well as at work; for childcare, because a childcare slot is required only *either* at home or at work, this "double-counting" would overestimate the infrastructure requirements. Therefore, a childcare LOS cannot be based on the service population calculation like recreation and open space and streetscape and pedestrian infrastructure.

2013 and 2020, San Francisco is projected to generate demand for 2,529 new licensed infant and toddler childcare slots and 2,285 new licensed preschooler childcare slots.[30]

NEXUS METHODOLOGY & FEE CALCULATION

The childcare nexus analysis seeks to estimate the cost of maintaining the current LOS for childcare in the city as the demand for childcare grows over time (as population and employment grows), and to assign this cost to residential and non-residential construction on a per-square foot basis. Specifically, the childcare nexus analysis applies the existing ratio of capacity to demand by age group to the new childcare demand expected in the city over the next seven years to estimate the increased need for childcare spaces in the city. It then calculates the capital costs required to provide these childcare spaces to accommodate the new population (at the same ratio of capacity to demand). Lastly, the costs are assigned to new housing units and new non-residential development on a per-square-foot basis. Residential development assumes the cost of providing childcare that is required near the home, while commercial development assumes the cost of providing childcare that is required near the place of work. Based on survey data collected for the Child Care Planning and Advisory Council (CPAC) San Francisco Child Care Needs Assessment report, 80.5 percent of resident parents prefer childcare near their home, while 19.5 percent of resident parents prefer childcare near their place of work.[31] Non-resident parents who require childcare in San Francisco are assumed to require childcare at their place of work.[32] Based on these childcare location preferences, as shown in Table 11, residential development assumes 42 percent of the cost of providing infant and toddler care and 60 percent of the cost of providing preschooler care; non-residential development assumes 58 percent of the cost of providing infant and toddler care and 40 percent of the cost of providing preschooler care.

[30] See the *San Francisco Infrastructure Level of Service Analysis* report (Appendix: Childcare Demand Calculations), which contains a detailed summary of childcare demand calculations and assumptions for both 2013 and future (2020) demand.

[31] Survey data from the Resource and Referral Agency Parent Follow-up Survey (2007) indicates that 71 percent of parents prefer childcare at home, while 10 percent of parents prefer childcare at work (or en route to work). The remaining 19 percent prefer childcare either on the way to work or on the way home, near a sibling's school, or some other location. This outstanding 19 percent was apportioned equally between 'home' and 'work' designations for the purposes of this analysis, resulting in the assumption that 80.5 percent of parents prefer childcare near the home, while 19.5 percent of parents prefer childcare near their place of work. See CPAC San Francisco Child Care Needs Assessment Report, 2007 (Section V. Parent Choice).

[32] Non-resident parents who require childcare in San Francisco have homes outside San Francisco. Since they are demanding childcare in San Francisco, they are assumed to require care near their place of work. More detail about non-resident parents who require childcare in San Francisco is included in the *San Francisco Infrastructure Level of Service Analysis* report, Appendix Childcare Demand Calculations.

Table 11. Apportionment of Childcare Demand Between Residential and Non-Residential Development

*	Measure	Value	Source/Calculation
Infant-Toddlers (0-2) Requiring Care in San Francisco			
A	Resident-Children	4,144	Table 10 (see Table Note 2)
B	Non-Resident-Children	3,861	
Preschoolers (3-5) Requiring Care in San Francisco			
C	Resident-Children	10,878	Table 10 (see Table Note 3)
D	Non-Resident-Children	3,839	
Childcare Location			
E	Childcare near home	80.5%	CPAC San Francisco Child Care Needs Assessment 2007 (Chapter V. Parent Choice)
F	Childcare near work	19.5%	
Infant-Toddlers (0-2) Childcare Demand Attribution			
Childcare Attributable to Residential Development		42%	(A * E) / (A + B)
Childcare Attributable to Non-Residential Development		58%	(A * F + B) / (A + B)
Preschooler (3-5) Childcare Demand Attribution			
Childcare Attributable to Residential Development		60%	(C * E) / (C + D)
Childcare Attributable to Non-Residential Development		40%	(C * F + D) / (C + D)

Source: AECOM, 2013

Note: Values in Lines A to D represent 2013 demand estimates (see Table 10); values in lines E and F represent childcare location information from the 2007 CPAC San Francisco Child Care Needs Assessment Report (see Footnote 31). The childcare demand attribution percentages calculated based on these values are assumed to be relatively constant over time. All values rounded to the nearest integer, except for lines E and F, which are rounded to the nearest tenth.

Table 12. Nexus Methodology for Infant and Toddler Childcare Fee

*	Measure	Value	Source/Calculation
Service Population			
A	Total new infants and toddlers (2013-2020)	2,529	Table 10
Metric			
B	% of Capacity for Infant and Toddler Care Demand (0-2)	37%	LOS Metric
Cost			
C	Incremental # of childcare spaces (2013-2020)	936	A * B
D	City estimate of unit cost ($/childcare space)	$26,250	LIIF, OECE [1]
E	Total cost for new childcare spaces	$24,570,000	C * D
F	Cost attributable to incremental growth	$24,570,000	100% E[4]
G	Administrative costs (5% of fee)	$1,229,000	*Administrative Cost Memorandum* (November 4, 2013)
H	Total attributable cost with administrative costs	$25,799,000	F + G
Attributable Amounts			
I	Percent attributable to residential development based on preferred childcare location	42%	Table 11
J	Percent attributable to commercial development based on preferred childcare location	58%	Table 11
K	Amount attributable to residential development	$10,836,000	H * I
L	Amount attributable to non-residential development	$14,963,000	H * J
Unit Conversions			
M	Total new estimated residential development (GSF)	25,829,000[2]	See Table Note 2.
N	Total new estimated commercial development (GSF)	25,111,000[3]	See Table Note 3.
Nexus Fee Maximums			
Residential ($/GSF)		$0.42	K / M
Non-Residential ($/GSF)		$0.60	L / N

Source: AECOM, 2013

Note: All numbers and percentages are rounded to the nearest integer. All dollar values (except those specified by the City, i.e. Line D, and the nexus fee maximums) are rounded to the nearest thousand. Nexus fee maximums are rounded to the nearest cent.

1. This amount was determined by Asian Neighborhood Design, with updated cost estimates from the San Francisco Child Care Facilities Interagency Committee. As of 2013 (per email dated October 3, 2013 from Graham Dobson, Administrative Analyst for Office of Early Child Care and Education), the average cost of new construction per childcare space is estimated to be $350 per square foot. Licensing requires 35 square feet indoors per child and 75 square feet outdoors per child; however LIIF uses 75 square feet per child both indoor and outdoor as a measure of a quality child care environment. The resulting fee is $26,250 ($350 per square foot multiplied by 75 square feet). This same cost is used regardless of age of children served.

2. Estimated new residential development is calculated at the average GSF per residential person (498, see Table 4) times the total 2013-2020 new residential population (51,866, Table 10).

3. Estimated new commercial development is calculated at the average GSF per commercial employee (327, see Table 4) times the total 2013-2020 new employee population (76,791, Table 10).

4. Refer to the report section entitled Growth Projections for a discussion of the one-to-one relationship between population and employment growth and physical development.

Table 13. Nexus Methodology for Preschooler Childcare Fee

*	Measure	Value	Source/Calculation
Service Population			
A	Total new preschool age children (2013-2020)	2,256	Table 10
Metric			
B	% of Capacity for Preschool Age Care Demand (3-5)	99.6%	LOS Metric
Cost			
C	Incremental # of childcare spaces (2013-2020)	2,247	A * B
D	City estimate of unit cost ($/childcare space)	$26,250	LIIF, OECE [1]
E	Total cost for new childcare spaces	$58,984,000	C * D
F	Cost attributable to incremental growth	$58,984,000	100% E
G	Administrative costs (5% of fee)	$2,949,000	*Administrative Cost Memorandum* (November 4, 2013)
H	Total attributable cost with administrative costs	$61,933,000	F + G
Attributable Amounts			
I	Percent attributable to residential development based on preferred childcare location	60%	Table 11
J	Percent attributable to commercial development based on preferred childcare location	40%	Table 11
K	Amount attributable to residential development	$37,160,000	H * I
L	Amount attributable to non-residential development	$24,773,000	H * J
Unit Conversions			
M	Residential (GSF/residential service population)	498	Table 4
N	Total new residential population (2013-2020)	51,866	Table 10
O	Total new estimated residential development (GSF)	25,829,000	M * N
P	Commercial (GSF/employee)	327	Table 4
Q	Total new employee population (2013-2020)	76,791	Table 10
R	Total new estimated commercial development (GSF)	25,111,000	P * Q
Nexus Fee Maximums			
Residential ($/GSF)		$1.44	K / O
Non-Residential ($/GSF)		$0.99	L / R

Source: AECOM, 2013

Note: All numbers and percentages are rounded to the nearest integer. All dollar values (except those specified by the City, i.e. Line D, and the nexus fee maximums) are rounded to the nearest thousand.

1. This amount was determined by Asian Neighborhood Design, with updated cost estimates from the San Francisco Child Care Facilities Interagency Committee. As of 2013 (per email dated October 3, 2013 from Graham Dobson, Administrative Analyst for Office of Early Child Care and Education), the average cost of new construction per childcare space is estimated to be $350 per square foot. Licensing requires 35 square feet indoors per child and 75 square feet outdoors per child; however LIIF uses 75 square feet per child both indoor and outdoor as a measure of a quality child care environment. The resulting fee is $26,250 ($350 per square foot multiplied by 75 square feet). This same cost is used regardless of age of children served.

NEXUS FINDINGS

Based on the above methodology, the maximum estimated nexus is $1.86 per gross square foot for residential buildings and $1.59 per gross square foot for non-residential buildings (Table 14). Charging both residential and commercial development the maximum supportable fee would not result in double-counting the impact on childcare because the total impact has been allocated proportionally to the two development types (as per Table 11).

Table 14. Maximum Supportable Impact Fees for Childcare

	Maximum supportable Citywide Fee
Childcare for Infant and Toddler Care Demand (0-2)	
Residential ($/GSF)	$0.42
Non-Residential ($/GSF)	$0.60
Childcare for Preschooler Care (3-5)	
Residential ($/GSF)	$1.44
Non-Residential ($/GSF)	$0.99
Total Childcare Fee	
Residential ($/GSF)	$1.86
Non-Residential ($/GSF)	$1.59

Source: AECOM, 2013

Note: All values rounded to the nearest cent.

As Table 15 demonstrates, the highest current fees are less than the maximum amount supported by the nexus analysis. The highest existing residential nexus fee represents 90 percent of the maximum supportable amount, and the highest existing non-residential fee represents 70 percent of the maximum supportable amount.

Table 15. Comparing Proposed Maximum Supportable Childcare Fees to Existing (2013) Fees

	Proposed (Max)	Existing (Max)	Percent of Maximum Supportable Nexus Recovered by Existing Fee (Existing/Proposed)	Proposed Max > 10% Above Existing
Residential ($/GSF)	$1.86	$1.68	90%	YES
Non-Residential ($/GSF)	$1.59	$1.12	70%	YES

Source: AECOM, 2013

Note: All fee values rounded to the nearest cent; all percentages rounded to the nearest integer.

4. Streetscape and Pedestrian Infrastructure

This chapter summarizes the nexus analysis for streetscape and pedestrian infrastructure. After providing brief background, this chapter will outline the relevant growth assumptions, the LOS standard developed in the associated *San Francisco Infrastructure Level of Service Analysis*, the methodology used to determine the nexus fee, and the final determination of the nexus fee.

INTRODUCTION

STREETSCAPE AND PEDESTRIAN INFRASTRUCTURE BACKGROUND

Streetscape and pedestrian infrastructure encompasses a wide range of right-of-way facilities, and plays an important role in the City's transportation goals, health and safety promotion, and environmental objectives. In 2010, the City of San Francisco published the Better Streets Plan (BSP) with design and maintenance guidelines for the pedestrian environment. Constructing "complete streets"[33] – considering safety, creation of social space on the sidewalk, and pedestrian aesthetic – is broadly the main motivator underlying the BSP recommendations. City stakeholders rely heavily on the BSP as their foremost streetscape policy document, representing thorough analysis and much design and engineering consideration.

As new development occurs, it attracts new residents and employees, who, in turn, require new (or expanded and improved) streetscape and pedestrian infrastructure. This relationship between new development, an influx of residents and workers, and a demand for streetscape and pedestrian infrastructure provides the nexus for an impact fee. Providing streetscape and pedestrian is a capital intensive undertaking. Streetscape and pedestrian infrastructure fees, levied on new development, are collected to help fund the construction of new streetscape and pedestrian infrastructure for the additional residents and workers directly attributable to new development.

[33] Complete Streets are defined as streets which "are safe, comfortable, and convenient for travel for everyone, regardless of age or ability – motorists, pedestrians, bicyclists, and public transportation riders." Metropolitan Transportation Commission, "MTC One Bay Area Grant: Complete Streets Policy Development Workshop." 16 October 2012. Section 2.4.13 of San Francisco's Public Works Code outlines San Francisco's complete streets policy, which includes the construction of transit, bicycle, stormwater, and pedestrian environment improvements, where pedestrian environment improvements are defined as sidewalk lighting, pedestrian safety measures, traffic calming devices, landscaping, and other pedestrian elements as defined in the Better Streets Plan.

Note that the terms "streetscape" or "pedestrian infrastructure" may be used in this section as shorthand to denote both streetscape and pedestrian infrastructure. Streetscape and pedestrian infrastructure includes sidewalk space and relevant streetscape and pedestrian amenities in that space, such as lighting, pedestrian signals, street trees, bulb-outs, sidewalk furniture, and any other pedestrian elements defined in the Better Streets Plan (BSP) or Section 2.4.13 of San Francisco's Public Works Code.

PURPOSE AND USE OF REVENUES

The primary purpose of the streetscape and pedestrian infrastructure development impact fee is to fund capital improvements to San Francisco's streetscape and pedestrian infrastructure. As discussed in the BSP, the City aims to improve the pedestrian environment for all of San Francisco's residents and employees. The impact fees will be used to make improvements to San Francisco's pedestrian infrastructure. Acceptable uses of the fees include (but are not limited to) sidewalk paving, lighting installation, pedestrian signalization of crosswalks or intersections, street tree planting, bulb-out construction, street furnishing, landscaping, traffic calming, and other streetscape improvements cited in the BSP or Public Works Code (Section 2.4.13).

In addition to the streetscape and pedestrian infrastructure fee analyzed here, Planning Code Section 138.1 contains urban design requirements that authorize the Planning Department to require a project to provide physical streetscape and pedestrian improvements in certain instances and only for certain projects. Section 138.1 and the development impact fee may cover similar infrastructure but, as described more thoroughly in the *Streetscape Cost Memorandum* (March 20, 2014), the Section 138.1 requirements and the fee analyzed here will not overlap for several reasons. First, Section 138.1's requirements have limited application in that, in most instances, they apply only to larger projects and are not mandatory. Second, the cost estimates outlined in this analysis anticipate both requirements and insure that they do not overlap by removing the cost of items in Section 138.1 from the costs used to calculate the fee. Thus, even if a particular development is subject to both Section 138.1 and this fee, the City is not requiring a project sponsor to pay for pedestrian and streetscape improvements already required as part of its project under Section 138.1.[34]

The maximum supportable impact fee aims to ensure that new development contributes its fair share of funding to pedestrian and streetscape improvements. Because the LOS metric upon which the nexus is developed addresses demand of the entire service population, existing and projected, there is a clear relationship between new development, which increases housing and employment space, and an increase in pedestrian infrastructure.

This study estimates the maximum supportable fee based on the relationship between the cost to provide streetscape and pedestrian infrastructure and the LOS provision to accommodate new development. However, the City may choose to adopt a lower fee as appropriate.

NEXUS DETERMINATION

The maximum supportable fee calculation for streetscape and pedestrian infrastructure combines the proposed streetscape and pedestrian infrastructure provision LOS metric with total population and employment growth projections and the cost to provide streetscape and pedestrian infrastructure.

LOS METRIC

Because streetscape and pedestrian infrastructure encompasses a wide range of components the LOS metric put forth in the *San Francisco Infrastructure Level of Service Analysis* – square feet of improved sidewalk per service

[34] Refer to the *Streetscape Cost Memorandum* (March 20, 2014) for a more detailed discussion.

population unit – serves as a proxy for all types of pedestrian-related improvements, and reflects the level of investment that the City has committed to making in the pedestrian environment.

'Improved sidewalk' is a term that denotes sidewalk with some amount of streetscape and pedestrian infrastructure, where streetscape and pedestrian infrastructure includes sidewalk space and relevant streetscape and pedestrian amenities in that space, such as lighting, pedestrian signals, street trees, bulb-outs, sidewalk furniture, and any other pedestrian elements defined in the Better Streets Plan (BSP) or Section 2.4.13 of San Francisco's Public Works Code. While the proscription for improved sidewalk is not uniform across San Francisco (i.e. the BSP calls for different streetscape and pedestrian infrastructure improvements depending on the site considerations, the street type, the traffic patterns, and so on), the intent of the BSP is to improve all San Francisco streetscape. Therefore, the basic square footage of sidewalk is denoted 'improved sidewalk' to reflect the investments the City is committed to make in the pedestrian right-of-way in terms of streetscape and pedestrian infrastructure.

As noted in the *San Francisco Infrastructure Level of Service Analysis*, the City intends to provide 88 square feet of improved sidewalk per service population unit into the future. This metric assumes that, by 2030, the City will improve its current amount of sidewalk hardscape (115 million square feet[35]), where the level of improvement will vary across streetscape segments based on street type, site conditions, built environment constraints, traffic patterns, and so on, as per the BSP.

GROWTH PROJECTIONS

The development horizon for streetscape and pedestrian infrastructure is 2030. Between 2013 and 2030, San Francisco is projected to house 127,040 more people and employ 106,108 more workers, as shown in Table 16.

Table 16. Growth Projections for Streetscape and Pedestrian Infrastructure (2013 - 2030)

	2013	2030	Growth (2013 - 2030)	Percent Increase
Population				
Population	820,585	947,625	127,040	15%
Employment				
Jobs	600,740	706,848	106,108	18%
Service Population				
Service population[1]	1,120,955	1,301,049	180,094	16%

Source: Overall population and employment taken directly from the San Francisco Planning Department 2013 projections from Aksel Olsen, Planner/Geographer in Citywide Information and Analysis Group, received May 14, 2013. See appended documents for files. Projections were given at five year intervals beginning in 2010, so AECOM used linear interpolation to arrive at 2013 estimates.

Note: All values rounded to the nearest integer.

1. Service population is a weighted sum of residents and employees, where residents are weighted at 100% and employees are weighted at 50%. Service population equals one times the number of residents plus 0.5 times the number of employees. For a more detailed discussion of the service population concept, refer to the Service Population section of the report, under the Additional Assumptions section.

[35] This value is based on AECOM's analysis of DPW's database of sidewalk data (Stwidths1.xls). Refer to the *San Francisco Infrastructure Level of Service Analysis* report.

NEXUS METHODOLOGY & FEE CALCULATION

The fee calculation methodology (Table 17) calculates the total cost of providing adequate pedestrian and streetscape elements for San Francisco's service population (2013-2030).

In order to assign a development cost to the new infrastructure, a conservative value of $43 per square feet of improved sidewalk is applied. This number is based on DPW estimates for the cost of undertaking streetscape improvements, in accordance with the BSP.[36] The value does not reflect the cost of installing all possible streetscape improvements or the cost of constructing a complete street as per the Public Works Code (Section 2.4.13); rather, this value reflects the cost of installing some streetscape amenities, representative of the average San Francisco sidewalk improvement project. To develop the cost estimate, DPW provided costs for five prototypical streetscape and pedestrian infrastructure improvement projects. The five prototypical projects include: (1) a project where no streetscape and pedestrian infrastructure improvements are undertaken; (2) a project where curb ramps are installed or upgraded; (3) a project where sidewalks are repaved and bulb-outs constructed; (4) a project where sidewalks are repaved, bulb-outs are constructed, and streetscape amenities such as benches, trash cans, lighting, and street trees are installed; and (5) a project where sidewalks are repaved and widened, bulb-outs are constructed, and streetscape amenities such as benches, trash cans, lighting, street trees, medians, special crosswalk paving, pedestrian signals, and accessible pedestrian signals are installed. These five projects range from basic to elaborate. The average cost across these five prototypical projects represents an average cost to construct improved sidewalk. This cost was applied to reflect that not all sidewalks offer all streetscape amenities, and to ensure that developers are held to a reasonable standard that reflects what the City provides. Note that although an average cost value is used, reflecting a suite of possible streetscape elements, the fees may be used for any streetscape and pedestrian improvement measure outlined in the BSP or Public Works Code (Section 2.4.13).

The residential fee is based on the percentage of service population units arising from the new resident population, and the non-residential (commercial) fee is based on the percentage of service population units arising from the employee population.

[36] Refer to the *Streetscape Cost Memorandum* (March 20, 2014) – listed in Appendix A and included in the accompanying background materials compact disc – for a detailed discussion of the streetscape cost estimate.

Table 17. Nexus Methodology for Streetscape and Pedestrian Infrastructure Fee

*	Measure	Value	Source / Calculation
Service Population			
A	Total projected service population (2030)	1,301,049	Table 16
B	Total new service population (2013-2030)	180,094	Table 16
Unit Conversions			
C	Residential (SF/service population)	498	Table 4
D	Commercial (SF/service population)	654	Table 4
Metric			
E	SF of improved sidewalk per service population	88	*San Francisco Infrastructure Level of Service Analysis* report (March 2014)
Cost			
F	City estimate of unit cost ($/SF of improved sidewalk)	$43	*Streetscape Cost Memorandum* (March 20, 2014)
G	Total cost for new streetscape improvements	$681,476,000	B * E * F
H	Cost attributable to incremental growth	$681,476,000	G * 100%
I	Administrative costs (5% of fee)	$34,074,000	*Administrative Cost Memorandum* (November 4, 2013)
J	Total attributable cost with administrative costs	$715,550,000	H* (1 + I)
Justified Nexus Fee Maximums			
Residential ($/GSF)		$7.98	J / (B * C)
Non-Residential ($/GSF)		$6.08	J / (B * D)

Source: AECOM, 2013

Note: All numbers and percentages are rounded to the nearest integer. All dollar values are rounded to the nearest thousand (except those specified by the City, i.e. Line I (which is rounded to the nearest dollar), and the nexus fee maximums (which are rounded to the nearest cent)).

NEXUS FINDINGS

Based on the approach summarized in Table 17, the maximum supportable residential fee is $7.98 per gross square foot, and the maximum supportable non-residential fee is $6.08 per gross square foot

Table 18. Maximum Supportable Impact Fees for Streetscape and Pedestrian Infrastructure

	Maximum supportable Citywide Fee
Total Streetscape Fee	
Residential ($/GSF)	$7.98
Non-Residential ($/GSF)	$6.08

Source: AECOM, 2013

Note: All values rounded to the nearest cent.

As Table 19 demonstrates, both the residential and the non-residential maximum supportable nexus fees are above the highest fees currently charged. The highest existing residential fee for streetscape and pedestrian infrastructure recovers 83 percent of the maximum supportable nexus; the highest existing non-residential fee recovers 35 percent of the maximum supportable nexus.

Table 19. Comparing Proposed Maximum Supportable Streetscape and Pedestrian Infrastructure Fees to Existing (2013) Fees

	Proposed (Max)	Existing (Max)	Percent of Maximum Supportable Nexus Recovered by Existing Fee (Existing/Proposed)	Proposed Max > 10% Above Existing
Residential ($/GSF)	$7.98	$6.66	83%	YES
Non-Residential ($/GSF)	$6.08	$2.14	35%	YES

Source: AECOM, 2013

Note: All fee values rounded to the nearest cent; all percentages rounded to the nearest integer.

5. Bicycle Infrastructure

This chapter summarizes the nexus analysis for bicycle infrastructure. After providing a brief background, this chapter will outline the relevant growth assumptions, the methodology used to determine the nexus fee, and the final determination of the nexus fee.

INTRODUCTION

BICYCLE INFRASTRUCTURE BACKGROUND

Bicycle infrastructure refers primarily to the City's bicycle network of bike lanes, bike paths, and sharrows, but also includes bicycle parking spaces, bicycle signals, and bicycle-sharing bikes and stations. Like streetscape and pedestrian infrastructure, bicycle infrastructure plays an important role in the City's transportation goals, health and safety promotion, and environmental objectives. While not all residents and employees use bike infrastructure on a regular basis, improving the bicycle network benefits all, as it reduces congestion in other forms of transportation, and lowers the carbon emissions from the transportation sector.[37]

As new development occurs, it attracts new residents and employees, who, in turn, require new (or expanded and improved) bicycle infrastructure. This relationship between new development, an influx of residents and workers, and a demand for bicycle facilities provides the nexus for an impact fee. However, providing bicycle infrastructure – such as bicycle parking, bicycle signals, bicycle lanes, and bicycle-share bikes and stations – is a capital intensive undertaking. Bicycle infrastructure fees, levied on new development, are collected to help fund the construction of new bicycle infrastructure for the additional residents and workers directly attributable to new development. Other sources of funding for bicycle infrastructure include Caltrans, the Metropolitan Transportation Commission (MTC), the Bay Area Air Quality Management District, City propositions, and SFMTA.[38]

PURPOSE AND USE OF REVENUES

The primary purpose of a bicycle infrastructure development impact fee is to fund capital improvements to San Francisco's bicycle infrastructure. As is thoroughly discussed in San Francisco's 2013 *SFMTA Bicycle Strategy*, the City aims to improve the bike environment for all of San Francisco's residents and employees to promote a

[37] San Francisco Municipal Transportation Agency, "San Francisco Bicycle Plan." 26 June, 2009.
[38] San Francisco Municipal Transportation Agency, "SFMTA Bicycle Strategy." January 2013. While this document is still a draft, SFMTA staff directed the consultant to use it because SFMTA is developing the CIP project list to be put forward for San Francisco Board of Supervisors (Board) approval in April 2014 based on this document. Although no plans exist to take the 2013 *Bicycle Strategy* to the Board for adoption, the project list derived from it will be taken to the Board for CIP approval (in April 2014).

higher bike mode share. The impact fees will be used to make improvements to San Francisco's bicycle infrastructure in line with the discrete implementation strategies of the *SFMTA Bicycle Strategy*.

The proposed maximum supportable impact fee aims to ensure that new development contributes its fair share of funding to bicycle infrastructure improvements.

As with all impact fees, the fee revenue may not be used to address existing infrastructure deficiencies.

This analysis assumes that the City will fund 100 percent of the development-based demand for bicycle infrastructure improvements through the fee. This study presents a maximum supportable fee assignment – however, the City may choose to adopt a lower fee as appropriate.

NEXUS DETERMINATION

The maximum supportable fee calculation for bicycle infrastructure combines the proposed bicycle infrastructure project list with total population and employment growth projections, as well as the cost to provide bicycle infrastructure.

LOS METRIC

In 2013, the SFMTA produced the *SFMTA Bicycle Strategy*, outlining the proposed plan for San Francisco's bike network. This document sets the direction for bicycle infrastructure, and sets a distinct bicycle infrastructure goal for 2018. The *Bicycle Strategy* represents a comprehensive effort by SFMTA that has been accepted by SFMTA as its roadmap forward. As a result, the objectives of this policy form the basis for the nexus as opposed to an LOS metric standard.

The *Bicycle Strategy* outlines three potential scenarios for build-out of San Francisco's bike network by 2018. Of the three potential scenarios, the "Bicycle Plan Plus" scenario was selected, in consultation with SFMTA staff, as the best short-term infrastructure target for this nexus study. The Bicycle Plan Plus proposes upgrading the existing bicycle network to premium bike facilities, installing bike signals, adding bike parking spaces, and deploying a bike sharing system.[39] While the Bicycle Plan Plus improvements are through 2018, for the purposes of this nexus, it is assumed that the average annual improvements proposed in the Bicycle Plan Plus will continue through 2020, to allow for the impact fee to be calculated on an incremental basis through 2020. Table 20 summarizes the four improvement types expected as a result of the Bicycle Plan Plus strategy through 2020. The provision of these four items is the basis of the nexus.

[39] Premium facilities are bikeways rated Level of Traffic Street (LTS) 1 or LTS 2, based on San Francisco's Comfort Index rating of bikeways. Refer to the appended SFMTA presentation – "Bicycle Strategy Update Needs Assessment & Next Steps" (June 18, 2013) – for a more detailed description of bikeway classification in San Francisco. For further information on the bike sharing network see the *San Francisco Infrastructure Level of Service Analysis* report (March 2014).

Table 20. Bicycle Plan Plus Improvements

Improvements	Bicycle Plan Plus Proposal (2013-2018)	Assumed Incremental Improvements (2019-2020)[1]	Total Improvements Expected (2013-2020)
Incremental miles of premium bike lanes (2013-2020)	10	3	13
Incremental upgraded intersections (2013-2020)	10	3	13
Incremental bicycle parking (2013-2020)	4,000	1,333	5,333
Incremental bicycle share program bicycles (2013-2020)[2]	500	167	667

Source: *SFMTA Bicycle Strategy*; AECOM, 2013.

1. These numbers reflect AECOM's projections based on the average annual infrastructure improvements identified by the Bicycle Plan Plus proposal.

2. The bicycle share program, in addition to 667 bicycles, includes 67 stations – i.e. 50 bicycle share program stations in the Bicycle Plan Plus proposal (2013-2018) plus 17 assumed incremental stations (2019-2020).

GROWTH PROJECTIONS

The development horizon for bicycle infrastructure is 2020. This shorter-term development horizon mirrors the timeframe of the *SFMTA Bicycle Strategy*. Between 2013 and 2020, San Francisco will house 51,866 more people and employ 76,791 more workers, as shown in Table 21.

Table 21. Growth Projections for Bicycle Infrastructure (2013 – 2020)

	2013	2020	Growth (2013 - 2020)	Percent Increase
Population				
Population	820,585	872,451	51,866	6%
Employment				
Jobs	600,740	677,531	76,791	13%
Service Population				
Service population[1]	1,120,955	1,211,217	90,261	8%

Source: Overall population and employment taken directly from the San Francisco Planning Department 2013 projections from Aksel Olsen, Planner/Geographer in Citywide Information and Analysis Group, received May 14, 2013. See appended documents for files. Projections were given at five year intervals beginning in 2010, so AECOM used linear interpolation to arrive at 2013 estimates.

1. Service population is a weighted sum of residents and employees, where residents are weighted at 100% and employees are weighted at 50%. Service population equals one times the number of residents plus 0.5 times the number of employees. For a more detailed discussion of the service population concept, refer to the Service Population section of the report, under the Additional Assumptions section.

NEXUS METHODOLOGY & FEE CALCULATION

The fee calculation methodology (Table 22 to Table 25) calculates the total cost of providing adequate bicycle infrastructure elements for San Francisco's service population (2013-2020). Because the new facilities will be used by both existing and new service population, the total cost of providing the bicycle improvements is split proportionally, and only the proportional cost of the improvements are assigned to new development. The costs are distributed between residential and non-residential land uses based on their associated contributions to total incremental service population growth.

The residential fee is based on the percentage of service population units arising from the new resident population, and the non-residential (commercial) fee is based on the percentage of service population units arising from the employee population.

Table 22. Nexus Methodology for Upgrading Bikeway Miles to Premium Facilities Fee

*	Measure	Value	Source / Calculation
Service Population			
A	Total projected service population (2020)	1,211,217	Table 21
B	Total new service population (2013-2020)	90,261	Table 21
C	New growth as % of total service population (2020)	7.5%	B / A
Unit Conversions			
D	Residential (GSF new development/service population)	498	Table 4
E	Commercial (GSF new development/service population)	654	Table 4
Metric			
F	Incremental miles of premium bike lanes (2013-2020)	13	*SFMTA Bicycle Strategy*
Cost			
G	City estimate of unit cost ($/mile of upgraded premium lane)	$1,852,000	SFMTA Bicycle Strategy Cost Estimates[1]
H	Total cost for upgraded lanes	$24,076,000	F * G
I	Cost attributable to incremental growth	$1,806,000	C * H
J	Administrative costs (5% of fee)	$90,000	*Administrative Cost Memorandum* (November 4, 2013)
K	Total attributable cost with administrative costs	$1,896,000	I + J
Nexus Fee Maximums			
Residential ($/GSF)		$0.042	K / (B * D)
Non-Residential ($/GSF)		$0.032	K / (B * E)

Source: AECOM, 2013

Note: All numbers and percentages are rounded to the nearest integer. All dollar values are rounded to the nearest thousand (except those specified by the City, i.e. Line G, and the nexus fee maximums). Nexus fee maximums are rounded to the nearest tenth of a cent.

1. Cost based on data from Seleta Reynolds, Section Leader of Livable Streets within the Sustainable Streets Division of SFMTA (received via email attachment on June 26, 2013, as spreadsheet entitled Bike Strategy Cost Estimate 20121101.xls).

Table 23. Nexus Methodology for Upgrading Intersections Fee

	Measure	Value	Source / Calculation
Service Population			
A	Total projected service population (2020)	1,211,217	Table 21
B	Total new service population (2013-2020)	90,261	Table 21
C	New growth as % of total service population (2020)	7.5%	B / A
Unit Conversions			
D	Residential (GSF new development/service population)	498	Table 4
E	Commercial (GSF new development/service population)	654	Table 4
Metric			
F	Incremental upgraded intersections (2013-2020)	13	*SFMTA Bicycle Strategy*
Cost			
G	City estimate of unit cost ($/upgraded intersection)	$71,250	SFMTA Bicycle Strategy Cost Estimates[1]
H	Total cost for upgraded intersection	$926,000	F * G
I	Cost attributable to incremental growth	$69,000	C * H
J	Administrative costs (5% of fee)	$3,000	*Administrative Cost Memorandum* (November 4, 2013)
K	Total attributable cost with administrative costs	$72,000	I + J
Nexus Fee Maximums			
Residential ($/GSF)		$0.002	K / (B * D)
Non-Residential ($/GSF)		$0.001	K / (B * E)

Source: AECOM, 2013

Note: All numbers and percentages are rounded to the nearest integer. All dollar values are rounded to the nearest thousand (except those specified by the City, i.e. Line G, and the nexus fee maximums). Nexus fee maximums are rounded to the nearest tenth of a cent.

1. Cost based on data from Seleta Reynolds, Section Leader of Livable Streets within the Sustainable Streets Division of SFMTA (received via email attachment on June 26, 2013, as spreadsheet entitled Bike Strategy Cost Estimate 20121101.xls).

Table 24. Nexus Methodology for Bicycle Parking Fee

*	Measure	Value	Source / Calculation
Service Population			
A	Total projected service population (2020)	1,211,217	Table 21
B	Total new service population (2013-2020)	90,261	Table 21
C	New growth as % of total service population (2020)	7.5%	B / A
Unit Conversions			
D	Residential (GSF new development/service population)	498	Table 4
E	Commercial (GSF new development/service population)	654	Table 4
Metric			
F	Incremental bicycle parking (2013-2020)	5,333	*SFMTA Bicycle Strategy*
Cost			
G	City estimate of unit cost ($/parking space)	$280	SFMTA Bicycle Strategy Cost Estimates[1]
H	Total cost for bicycle parking spaces	$1,493,000	F * G
I	Cost attributable to incremental growth	$112,000	C * H
J	Administrative costs (5% of fee)	$6,000	*Administrative Cost Memorandum* (November 4, 2013)
K	Total attributable cost with administrative costs	$118,000	I + J
Nexus Fee Maximums			
Residential ($/GSF)		$0.003	K / (B * D)
Non-Residential ($/GSF)		$0.002	K / (B * E)

Source: AECOM, 2013

Note: All numbers and percentages are rounded to the nearest integer. All dollar values are rounded to the nearest thousand (except those specified by the City, i.e. Line G, and the nexus fee maximums). Nexus fee maximums are rounded to the nearest cent.

1. Cost based on data from Seleta Reynolds, Section Leader of Livable Streets within the Sustainable Streets Division of SFMTA (received via email attachment on June 26, 2013, as spreadsheet entitled Bike Strategy Cost Estimate 20121101.xls).

Table 25. Nexus Methodology for Bicycle Sharing System Fee

*	Measure	Value	Source / Calculation
Service Population			
A	Total projected service population (2020)	1,211,217	Table 21
B	Total new service population (2013-2020)	90,261	Table 21
C	New growth as % of total service population (2020)	7.5%	B / A
Unit Conversions			
D	Residential (GSF new development/service population)	498	Table 4
E	Commercial (GSF new development/service population)	654	Table 4
Metric			
F	Incremental bicycle share program stations (2013-2020)	667	*SFMTA Bicycle Strategy*
Cost			
G	City estimate of unit cost ($/bicycle share program stations)	$6,600	SFMTA Bicycle Strategy Cost Estimates[1]
H	Total cost for stations	$4,402,200	F * G
I	Cost attributable to incremental growth	$330,000	C * H
J	Administrative costs (5% of fee)	$17,000	*Administrative Cost Memorandum* (November 4, 2013)
K	Total attributable cost with administrative costs	$347,000	I + J
Nexus Fee Maximums			
Residential ($/GSF)		$0.008	K / (B * D)
Non-Residential ($/GSF)		$0.006	K / (B * E)

Source: AECOM, 2013

Note: All numbers and percentages are rounded to the nearest integer. All dollar values are rounded to the nearest thousand (except those specified by the City, i.e. Line G, and the nexus fee maximums). Nexus fee maximums are rounded to the nearest tenth of a cent.

1. Cost based on data from Seleta Reynolds, Section Leader of Livable Streets within the Sustainable Streets Division of (received via email attachment on June 26, 2013, as spreadsheet entitled Bike Strategy Cost Estimate 20121101.xls).

NEXUS FINDINGS

Based on the approach summarized in Table 22 to Table 25, the maximum supportable residential fee is $0.06 per GSF, and the maximum supportable non-residential fee is $0.04 per GSF.

Table 26. Maximum Supportable Impact Fees for Bicycle Infrastructure

	Maximum Citywide Fee
Premium (LTS 1, 2) Network Miles	
Residential ($/GSF)	$0.042
Non-Residential ($/GSF)	$0.032
Upgraded Intersections	
Residential ($/GSF)	$0.002
Non-Residential ($/GSF)	$0.001
Bicycle Parking	
Residential ($/GSF)	$0.003
Non-Residential ($/GSF)	$0.002
Bicycle Share Bicycles (with Accompanying Stations)	
Residential ($/GSF)	$0.008
Non-Residential ($/GSF)	$0.006
Total Bicycle Infrastructure Fee	
Residential ($/GSF)	$0.06
Non-Residential ($/GSF)	$0.04

Source: AECOM, 2013

Note: All values rounded to the tenth of a cent, except for the fee totals which are rounded to the nearest cent.

As Table 27 demonstrates, both determined maximum supportable fees are above the highest existing fee for bicycle infrastructure. For both residential and non-residential fees, the highest existing fee recovers under 85 percent of the maximum supportable nexus.

Table 27. Comparing Proposed Maximum Supportable Bicycle Infrastructure Fees to Existing (2013) Fees

	Proposed (Max)	Existing (Max)	Percent of Maximum Supportable Nexus Recovered by Existing Fee (Existing/Proposed)	Proposed Max > 10% Above Existing
Residential ($/GSF)	$0.06	$0.05	83%	YES
Non-Residential ($/GSF)	$0.04	$0.02	50%	YES

Source: AECOM, 2013

Note: All fee values rounded to the nearest cent; all percentages rounded to the nearest integer.

6. Conclusion

As described in the previous sections, the maximum supportable fees determined for the four infrastructure categories (recreation and open space, childcare, streetscape and pedestrian infrastructure, and bicycle infrastructure) all exceed the highest current fees charged at either the citywide or neighborhood level. While the City may choose to charge a lesser fee to new residential or non-residential development, this report demonstrates that the current fees continue to be supported through a demonstrated nexus between new development and the scale of the fee.

Table 28. Potential Maximum Supportable Fees Per Infrastructure Category (2013)

	Citywide Nexus Fees	Maximum Supportable Fee
	**Recreation and Open Space Provision**	
	Residential ($/GSF)	$14.99
	Non-Residential ($/GSF)	$4.34
	**Childcare**	
	Residential ($/GSF)	$1.86
	Non-Residential ($/GSF)	$1.59
	**Streetscape and Pedestrian Infrastructure**	
	Residential ($/GSF)	$7.98
	Non-Residential ($/GSF)	$6.08
	**Bicycle Infrastructure**	
	Residential ($/GSF)	$0.06
	Non-Residential ($/GSF)	$0.04

Source: AECOM, 2013

Note: All values rounded to the nearest cent.

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Addendum

The bulk of this report was completed in 2013, using 2013 data, costs, and demographic projections. However, since the report was finalized in 2014 and will face adoption in 2014, the maximum supportable nexus fees in Table 28 must be adjusted from 2013 dollars to 2014 dollars.

The City annually adjusts all developer impact fees using an Annual Infrastructure Construction Cost Inflation estimate (AICCIE). To derive an appropriate AICCIE, the Capital Planning Committee (CPC) reviews cost inflation data, market trend analyses, the Planning Department's pipeline report, and a variety of national, state, and local commercial and institutional construction cost inflation indices. In 2014, the CPC adopted an AICCIE of 4.5%. Therefore, all maximum supportable nexus fees determined in this report in 2013 dollars (Table 28) must be increased by 4.5% as an adjustment to 2014 dollars. The adjusted maximum supportable nexus fees for 2014 are shown in Table 29.

Table 29. Potential Maximum Supportable Fees Per Infrastructure Category (2014)

	Citywide Nexus Fees	Maximum Supportable Fee
	**Recreation and Open Space Provision**	
	Residential ($/GSF)	$15.66
	Non-Residential ($/GSF)	$4.54
	**Childcare**	
	Residential ($/GSF)	$1.94
	Non-Residential ($/GSF)	$1.66
	**Streetscape and Pedestrian Infrastructure**	
	Residential ($/GSF)	$8.34
	Non-Residential ($/GSF)	$6.35
	**Bicycle Infrastructure**	
	Residential ($/GSF)	$0.06
	Non-Residential ($/GSF)	$0.04

Source: AECOM, 2014

Note: All values rounded to the nearest cent.

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Appendix A

This appendix includes a list of all documents, presentations, emails, spreadsheets, webpages, and other reference sources cited in the text of this report. For the full-text copies of any of the listed documents, refer to the accompanying compact disc.

List of Documents Cited

Document Title / Citation	File Name
Service Population Concept Memorandum (September 24, 2013)	Service_Population_Concept_Memorandum_20130924.doc
Belsky, Eric. *Rental Vacancy Rates: A Policy Primer*. National Association of Home Builders. Housing Policy Debate, Volume 3, Issue 3. 793-813. 1992.	Rental_Vacancy_Rates_Belsky_1992.pdf
Eastern Neighborhoods Impact Fee and Affordable Housing Analysis	EN_Nexus_2008.pdf
Hausrath Economics Group. *Phoenix Park and Library EDU Factors Study*. A Report to City of Phoenix Planning Department. September 1998.	Phoenix_Library_Report_1998.pfd
Administrative Cost Memorandum (November 4, 2013)	Administrative_Cost_Memo_20131104.pdf
Parks Acquisition Policy (August 2011)	RPD_Acquisition_Policy_2011.pdf
RPD Cost Assumptions Memorandum (March 26, 2014)	RPDCostAssumptionsMemo_20140326.pdf
FY 2010-2011 Development Impact Fee Report. Controller's Office. City and County of San Francisco. December 1, 2011.	Development_Impact_Fee_Report_2011.pdf
CPAC *San Francisco Child Care Needs Assessment* (2007)	ChildCareNeedsAssessment_2007.pdf
San Francisco Better Streets Plan (December 7, 2010)	BetterStreetsPlan_20101207.pdf
Streetscape Cost Memorandum (March 20, 2014)	StreetscapeCostMemo_20140320.pdf
SFMTA Bicycle Strategy (January 2013)	SFMTABicycleStrategy_20130129.pdf
San Francisco Bicycle Plan (June 26, 2009)	SFBicyclePlan_20090626.pdf

List of Presentations Cited

Presentation Description	File Name
Slides from MTC's complete streets policy workshop	MTC_Complete_Streets_Policy_Workshop _slides.pdf
Slides from CPC presentation of 2014 AICCIE	2014_AICCIE_Presentation.pdf
SFMTA presentation entitled "Bicycle Strategy Update Needs Assessment & Next Steps" (June 18, 2013)	SFMTA_BicycleStrategyUpdatePresentation_20130618.pdf

List of Emails Cited

Email Description	File Name
Average employment densities	EmploymentDensities_Email_FromAOlsen_ToVLauf_20130715.pdf
Average residential unit size	AvgResUnitSize_Email_FromKDischinger_ToARoth_20130626.pdf
Confirmation from RPD regarding the commitment to construct 55 acres of recreation and open space by 2030 and the infeasibility of constructing 566 acres	RPDAcreages_Email_FromDKamalanathan_ToVLAuf_20140214.pdf
Bicycle Strategy as the basis for bicycle infrastructure CIP project list	BicycleStrategybasisforCIPprojectlist_Email_FromSReynolds_ToVLauf_20140116.pdf
Cost per child care slot	ChildCareSlotCost_Email_FromGDobson_ToARoth_20131003.pdf

List of Spreadsheets Cited

Spreadsheet Description	File Name
Apportionment of existing community fees among infrastructure categories	Max_fee_by Category_Planned.xlsx
Population and employment projections from San Francisco Planning Department received by AECOM on May 14, 2013 from Aksel Olson, Planner/Geographer in Citywide Information and Analysis Group, San Francisco Planning Department (GIS export)	Pop&EmplProjections_GISExport_20130611.xlsx
Supporting spreadsheet for RPD Cost Assumptions Memorandum	RPDCostAssumptionsMemoCalcs_20140321.xlsx
DPW spreadsheet of sidewalk widths across the city	Stwidths1.xls
AECOM analysis of DPW's sidewalk width data	20130814_SFNexus_sidewalks.xlsx
Cost estimate for bicycle infrastructure	Bike_Strategy_Cost_Estimate_20121101.xlsx
AECOM analysis of cost estimate for bicycle infrastructure	Bike_Strategy_Cost_Estimate_20121101_AECOM.xlsx
Average household size from ACS data (DP02)	ACS_11_3YR_DP02.pdf
Child population projections from DOF data	P-3_Total_DetailedAge_CAProj_2010-2060.pdf

List of Webpages Cited

Webpage Citation	File Name
Peterson, Justin. San Francisco Apartment Sector Amongst the Strongest. Reis Report.	San_Francisco_Apartment_Sector_ReisReport_20121003.pdf
Jones Lang Lasalle. Office Outlook: United States. Q2 2013.	USOO_Q2_2013.pdf
CoStar. Market Trend: San Francisco's Retail Vacancy Decreases to 2.7%.	San_Francisco's_Retail_Vacancy_Decreases_Costar_20130726.pdf
Krainer, John. Natural Vacancy Rates in Commercial Real Estate Markets. Federal Reserve Bank of San Francisco. October 5, 2001.	Natural_Vacancy_Rates_FRBSF_20011005.pdf

List of Meeting Notes Cited

Meeting Notes Description	File Name
Meeting notes showing acreage of City-owned recreation and open space	CityOwnedAcreage_MtgNotes_20131114.pdf