



1/27/2022

Angela Calvillo, Clerk of the Board of Supervisors  
City Hall  
1 Dr. Carlton B. Goodlett Place, Room 244  
San Francisco, CA 94102

Re: **Citywide Infrastructure Nexus Analysis Update**

Dear **Ms. Calvillo**:

Pursuant to the San Francisco Planning Code Section 410, an update to the citywide infrastructure nexus analysis has been completed. Please include the enclosed nexus analysis in Board of Supervisors file nos. 150149 and 150790.

Consistent with the legal requirements of the California Mitigation Fee Act, Government Code Sections 66000 et seq., the City prepares nexus studies that document the nexus, or relationship, between new development in the City and the need for additional facilities to serve the demand that comes with new growth, periodically. The attached Citywide Infrastructure Nexus Analysis (“Nexus Analysis”) for San Francisco has been prepared by Hatch Associates Consultants, Inc. Six infrastructure categories are included in the Nexus Analysis: recreational and open space, child care, complete streets, transit, library, and fire stations. This Nexus Analysis update accompanies the Infrastructure Level of Service Analysis (“LOS Analysis”) also prepared by Hatch, which studied the current levels at which various infrastructure elements are provided across the City.

This study is an update to the most recent Citywide Infrastructure and Sustainable Transportation Fee studies that were completed in 2014 and 2015, respectively. This study satisfies the requirements of Section 410 of the City Planning Code, which requires that all nexus studies be updated on a five-year basis. This Nexus Analysis provides justification for most of the City’s development impact fees for infrastructure. It does not provide support for the affordable housing and community stabilization fees, which are covered by separate studies.

This memorandum and supporting documents are provided to you as background information and in support of the current impact fees. No changes to any impact fees infrastructure categories are proposed at this time, and there is no action you need to take with regard to this Nexus Analysis or LOS Analysis at this time. Please feel free to reach out to Lily Langlois, Principal Planner, at [lily.langlois@sfgov.org](mailto:lily.langlois@sfgov.org) or 628.652.7472 if you have any

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questions about these documents.

Attachments:

- [2021 Citywide Infrastructure Nexus Analysis](#)
- [2021 Infrastructure Level of Service Analysis](#)



# San Francisco Infrastructure Nexus Analysis

DECEMBER 2021

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## Acronyms

ACS.....	American Community Survey
AICCIE.....	Annual Infrastructure Construction Cost Inflation Estimate
BART.....	Bay Area Rapid Transit
BSP.....	Better Streets Plan
CIP.....	Capital Improvement Program
CPC.....	Capital Planning Committee
DCYF.....	Department of Children, Youth and Their Families
DTX.....	Downtown Extension
EMS.....	Emergency Medical Services
FAR.....	Floor Area Ratio
GSF.....	Gross Square Feet
LEHD.....	Longitudinal Employer-Household Dynamics
LOS.....	Level of Service
PDR.....	Production, Distribution, and Repair
SFDPW.....	San Francisco Department of Public Works
SFFD.....	San Francisco Fire Department
SFHSA.....	San Francisco Human Services Agency
SFMTA.....	San Francisco Municipal Transportation Agency
SFOECE.....	San Francisco Office of Early Care and Education
SFPL.....	San Francisco Public Library
SFRPD.....	San Francisco Recreation and Parks Department
SOGR.....	State Of Good Repair
SPU.....	Service Population Unit(s)
SUD.....	Special Use District
TIDF.....	Transportation Impact Development Fee
TSF.....	Transportation Sustainability Fee

# 1 Introduction

In 2019, the San Francisco Planning Department, the Office of Resilience and Capital Planning, and the City Attorney's Office retained Hatch Consulting to update the nexus analysis for the City and County of San Francisco ("City"). This nexus analysis update accompanies the *2021 San Francisco Infrastructure Level of Service Analysis* report also prepared by Hatch, which established the levels at which various infrastructure elements are provided across the City. The level of service ("LOS") targets for infrastructure presented in this report build directly on the standards developed as part of the *2021 San Francisco Infrastructure Level of Service Analysis* report, as well as existing nexus studies for certain infrastructure types in San Francisco.

## 1.1 Report Purpose

The purpose of this report is to document the nexus, or relationship, between new development in the City and the need for additional facilities for: recreational and open space, child care, complete streets, transit, library, and fire department infrastructure. As new residential and non-residential development occurs, it brings an increased demand for new (or expanded and improved) community infrastructure. This analysis measures the need for community infrastructure using a methodology that meets the requirements for development impact fees under applicable law, including the California Mitigation Fee Act. The analysis estimates the impacts created by new development on the City's needs for new facilities and 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 an objective methodology for evaluating impact fees, thus justifying the City's future administration of impact fees, and meet the requirements of Article 4 of the Planning Code.

This study satisfies the requirements of Section 410 of the City Planning Code, which requires that all nexus studies be updated on a five-year basis: the nexus analysis presented in this report aims to justify most impact fees in Article 4 of the Planning Code going forward, except those pertaining to affordable housing and community stabilization. The nexus analysis complies with the requirements of California's Mitigation Fee Act, and state and federal constitutional law.

### 1.1.1 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 six infrastructure elements: (1) recreational and open space, (2) child care, (3) complete streets, (4) transit, (5) library, and (6) fire department infrastructure.

## 1.2 Background on Development Impact Fee Programs

Although local governments began charging 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. Government Code Sections 66000-66025 establish legal requirements to implement a development fee program for fees that meet the terms of the Act. According to the Act, to establish a development fee program, a jurisdiction must legislatively accept a nexus study that identifies:

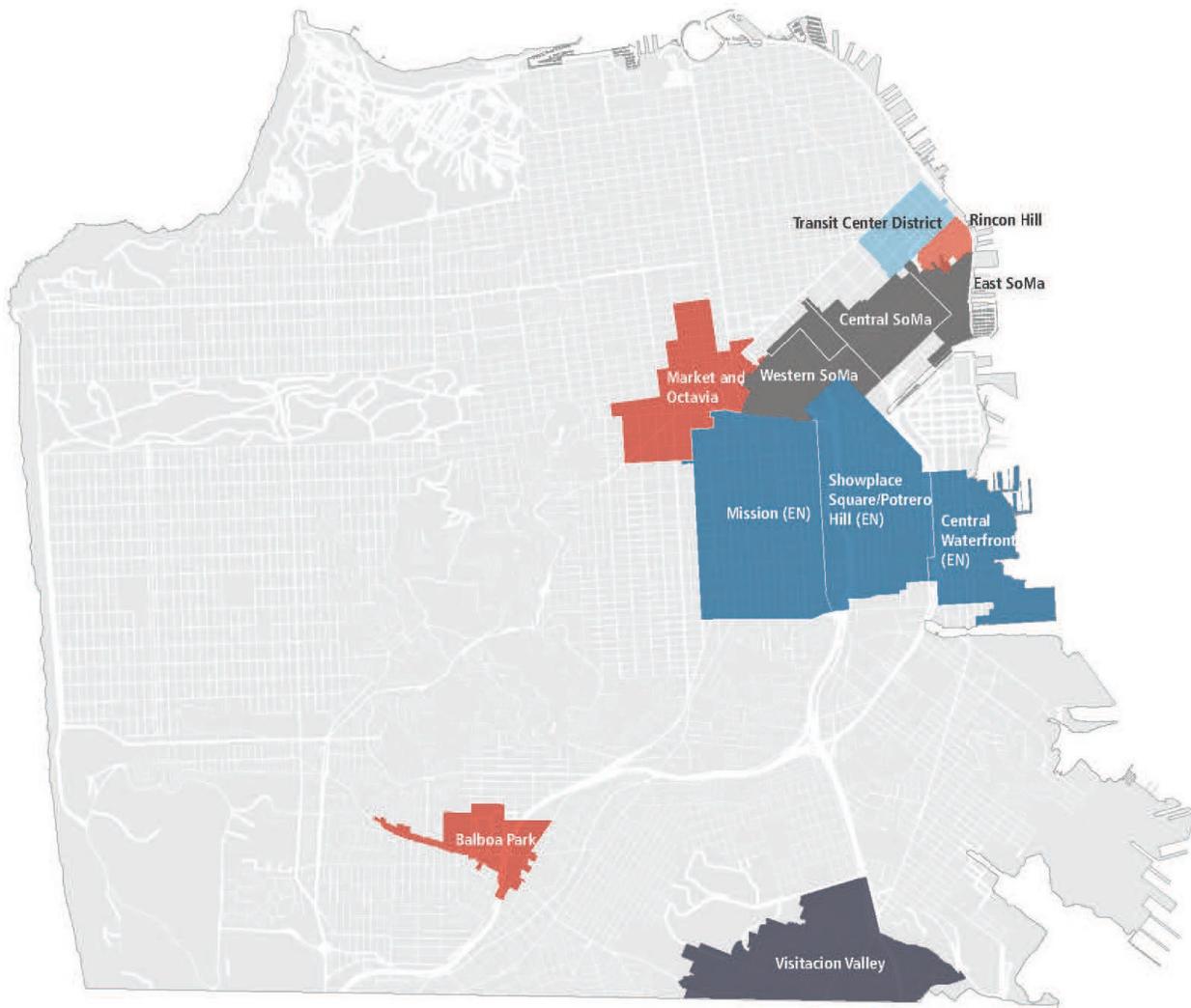
- The **purpose** of any fees;
- How fees will be **used**;
- A **reasonable relationship** between the fee-funded infrastructure and the type of development paying the fee;

- 
- 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 **proportion** of the cost specifically attributed to development.

### 1.2.1 Existing Development Impact Fees

Table 1 catalogues San Francisco’s current impact fees in San Francisco for the infrastructure components studied in this report (recreational and open space, child care, complete streets, and transit infrastructure). Fire department infrastructure and libraries do not currently have impact fees in San Francisco, but are also studied in this report.

Fees in San Francisco typically fit into one of two categories: citywide fees that usually address a single improvement type, and geographically-based Area Plan fees where a single fee usually includes multiple improvement types. Any development that is subject to impact fees must pay the fees for any Area Plan within which it is located (infrastructure categories in which Area Plan-based impact fees can be spent sometimes overlap, and certain parts of the City do not have any Area Plan fees), in addition to citywide fees. Figure 1 shows the location of Area Plan fee areas across the City. Note that in areas where the geographically-based Area Plan fee includes a child care component, the citywide child care fee is reduced proportionally.

FIGURE 1: MAP OF AREA PLAN FEE AREAS<sup>1</sup>

In Table 1, single-issue fees for any of the relevant infrastructure items are reported, and fees with multiple improvement types are apportioned by infrastructure item.<sup>2</sup> At the bottom, Table 1 displays the maximum total fee charged in each infrastructure category. For certain infrastructure categories, multiple fees may be charged. In these cases, Table 1 highlights the fees that combine to form the maximum possible fee.

<sup>1</sup> This map of area plan fee areas was provided by Mat Snyder, SF Planning staff, on January 14, 2021.

<sup>2</sup> Apportionment of community infrastructure fees was provided by Mat Snyder, SF Planning staff, on December 6<sup>th</sup>, 2019.

TABLE 1: EXISTING RELATED IMPACT FEES IN SAN FRANCISCO (2019)<sup>3</sup>

Fee Area	Recreational and Open Space	Child Care	Complete Streets	Transit	Total Impact Fee
<b>Residential Fees (\$/GSF)</b>					
Child Care: Citywide	-	\$2.15	-	-	\$2.15
Transit Center - Transportation <sup>4</sup>	-	-	\$5.00	\$9.00	\$14.00
Transit Center - Open Space	\$3.38	-	-	-	\$3.38
Transportation Sustainability Fee	-	-	\$0.32	\$9.98	\$10.29
Balboa Park	\$3.66	\$1.89	\$4.80	\$1.64	\$12.00
Eastern Neighborhoods	\$12.00	\$1.64	\$7.83	\$2.53	\$24.00
Market/Octavia	\$2.98	\$1.14	\$6.25	\$3.12	\$13.49
Market/Van Ness SUD	\$5.00	\$2.01	\$10.48	\$5.00	\$22.49
Rincon Hill	\$2.17	-	\$10.73	-	\$12.90
Visitacion Valley	\$2.27	\$1.51	\$3.09	-	\$6.87
Central SoMa - Infrastructure <sup>5</sup>	\$10.47	-	-	\$9.53	\$20.00
<b>Maximum Fee</b>	<b>\$22.47</b>	<b>\$2.15</b>	<b>\$17.04</b>	<b>\$22.04</b>	<b>-</b>
<b>Commercial Fees (\$/GSF)</b>					
Child Care: Citywide	-	\$1.85	-	-	\$1.85
Downtown Park Fee	\$3.00	-	-	-	\$3.00
Union Square Park Fee	\$6.00	-	-	-	\$6.00
Transit Center - Transportation <sup>4</sup>	-	-	\$11.00	\$21.00	\$32.00
Transit Center - Open Space	\$12.00	-	-	-	\$12.00
Transportation Sustainability Fee	-	-	\$0.74	\$23.30	\$24.04
Balboa Park	\$0.69	\$0.36	\$0.90	\$0.31	\$2.25
Eastern Neighborhoods	\$1.33	\$0.44	\$7.52	\$11.72	\$21.00

<sup>3</sup> The cells highlighted in yellow show fees that combine to form the maximum possible fee. Source: San Francisco Citywide Development Impact Fee Register, January 1, 2019, and the San Francisco Planning Department. The City annually adjusts all development impact fees using an Annual Infrastructure Construction Cost Inflation estimate (AICCIE), as per Article 4 of the Planning Code. Although this report is being published in 2021, the substantive fee calculations were performed in 2019, so the body of this report lists all fees at their 2019 rates. The addendum at the end inflates the fees to their 2021 values.

<sup>4</sup> The Transit Center – Transportation fee increases as a building’s Floor Area Ratio (FAR) increases. The fee amounts listed here are based on an FAR of 32.75, rounded up to the nearest dollar. The 32.75 FAR was provided by Planning as the largest FAR planned for the area to which the fee applies.

<sup>5</sup> Pursuant to Planning Code section 431 et seq. the Central SoMa Infrastructure fee may be used for public transit, recreation, and open space improvements. In Ordinance No. 47-21, the Board of Supervisors amended Section 433.4 to clarify that the permissible uses of the Central SoMa Infrastructure fee includes recreation and open space infrastructure projects, as envisioned by the Central SoMa Implementation Strategy. Therefore, the Central SoMa Infrastructure Fee is apportioned as shown here. For additional detail, refer to the ‘Note-to-File: Distribution of Funds Collected from the Central SoMa Infrastructure Fee’ from SF Planning included in section 10.3 of the Appendix.

Market/Octavia	\$0.75	-	\$3.27	\$1.07	<b>\$5.10</b>
Market/Van Ness SUD	\$4.73	-	\$7.10	\$10.65	<b>\$22.49</b>
Rincon Hill	\$2.17	-	\$10.73	-	<b>\$12.90</b>
Visitacion Valley	\$2.27	\$1.51	\$3.09	-	<b>\$6.87</b>
Central SoMa - Infrastructure	-	-	-	\$41.50	<b>\$41.50</b>
<b>Maximum Fee</b>	<b>\$15.00</b>	<b>\$1.85</b>	<b>\$11.74</b>	<b>\$76.52</b>	<b>-</b>

### 1.2.2 Nexus Methodology

The nexus analysis establishes the relationship between new development and the increased demand for certain categories of infrastructure needed to serve the new development. 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 the exception of child care, this study uses a Level Of Service (LOS) based approach to derive a maximum supportable fee. For the Recreational and Open Space, Complete Streets, Transit, Libraries, and Fire Department infrastructure categories, the infrastructure LOS is determined based on current provision of an infrastructure type relative to each resident or service population unit (SPU). An explanation of service population is provided in the next section. A per-unit provision standard is established by the City – for example, a certain number of acres of open space per SPU – and subsequent development may be required to fund the maintenance of that standard (i.e., development may be charged the cost of maintaining that standard for the new residents or service population units it will draw). The nexus represents the maximum fee that could potentially be charged to new development based on that development’s share of the cost to provide this level of service. 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. The City, however, may choose to adopt a lower fee than the maximum determined in this study.

The *2021 San Francisco Infrastructure Level of Service Analysis* report sets the foundation for the nexus analysis, 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 best practices.

The child care fee uses a linkage approach to the nexus analysis. This approach does not consider the current LOS, but rather charges new development for the cost of meeting the new demand created by that development. For more information on the linkage methodology, including a discussion on the usage of the linkage methodology, see the Child Care Facilities section.

### 1.2.3 Service Population

Three of the included nexus analyses (recreational and open space, complete streets, and fire department facilities) 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. 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 the purposes of this study, the city’s total service population is calculated as one times the resident population plus half of the employment population (1:0.5 ratio). This discounting represents an

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industry standard discount factor for employees in service population calculations.<sup>6</sup>

This methodology accounts for the infrastructure need generated both at an individual’s 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 0.5) to reflect a conservative approach to employee capital infrastructure demand. This 1:0.5 ratio serves as the basis for the service population calculations.

### 1.3 Infrastructure Categories

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

- Recreational and Open Space
- Child Care
- Complete Streets
- Transit
- Libraries
- Fire Department

The first four infrastructure elements (recreational and open space, child care, complete streets, and transit) represent infrastructure categories where existing impact fees are charged. The last two elements (libraries and fire department facilities) represent infrastructure categories where the City does not have existing impact fees.

#### 1.3.1 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, this nexus study is conducted at a citywide level, and where relevant accounts for the various neighborhood specific fees. While the implementation of fee programs may 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.

#### 1.3.2 Infrastructure Metrics and Target Years

For each infrastructure element, the metrics and the target year are shown in Table 2. Each infrastructure category is based on demographic projections through 2025, the year of the “short-term target” in the *2021 San Francisco Infrastructure Level of Service Analysis* report, except Transit, which uses the year 2040.

TABLE 2: LOS METRICS FOR INFRASTRUCTURE CATEGORIES<sup>7</sup>

Infrastructure Element	Metric	Target Level of Service	Target Year for Nexus Evaluation
Recreational and Open Space	City-owned open space per 1,000 service population units	3 acres	2025
Child Care	Child care demand created by new development	100% of demand created by new	2025

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<sup>6</sup> For further information, see the *2021 San Francisco Infrastructure Level of Service Analysis* report.

<sup>7</sup> Source: *2021 San Francisco Infrastructure Level of Service Analysis* report

		development	
Complete Streets	Square feet of Complete Streets Sidewalk <sup>8</sup> per 1,000 service population units	118 square feet	2025
Transit	Revenue service hours per average daily vehicle (transit & auto) trip	1.45 hours	2040
	Share of total daily transit passenger miles in crowded conditions	15%	2040
Libraries	Square feet of library space per resident	0.6 square feet	2025
Fire Department Facilities	Fire department facilities <sup>9</sup> per 1,000 service population units	0.034 fire department facilities	2025

### 1.3.3 Growth Projections

This nexus analysis contains projections and estimates of employment and population growth within San Francisco through 2025 and 2040. The 2025 estimates, which are used in the maximum supportable fee calculations, are intended to reflect a typical five-year period of City growth based on the long-term 2040 population and employment estimates. The forecasts are based on reasonable assumptions for population and employment growth, but the actual population and employment growth may vary. While the nexus analysis is based on projected population and employment growth, those projections are used to calculate impact fees on a per-square-foot basis. Differences between the projected and actual population and employment growth may result in proportional changes to the amount of fees collected. Regardless of projected population and employment growth, the impact fees charged will be proportional to actual new development to ensure development pays its share for needed infrastructure improvements, and the services delivered will be proportional as well.

The nexus analysis is predicated on a demographic forecast that helps determine the need for future infrastructure. The following population and employment projections from 2019 through 2040 (Table 3) were provided by the City. The projections below are consistently applied throughout the nexus analysis because as new residential and non-residential development occurs, it brings an increased demand for new (or expanded and improved) community infrastructure.

<sup>8</sup> See definition of Complete Streets Sidewalk in Section 4.2.1.

<sup>9</sup> Fire department facilities consist of fire houses, department vehicles, an ambulance deployment center. For more information, see Table 39.

TABLE 3: POPULATION AND EMPLOYMENT PROJECTIONS FOR SAN FRANCISCO (2019 – 2040)<sup>10</sup>

Year	2019	2025	2040
<b>Population</b>			
Total Residents	908,336	981,920	1,169,485
<b>Employment</b>			
Jobs	768,360	823,505	872,510

### 1.3.4 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 analysis for each infrastructure category. For example, this nexus analysis ascribed demand for infrastructure on a gross square footage (GSF) 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

*	Measure	Value	Source/Calculation
<b>Residential Assumptions</b>			
A	Residents per service population unit	1	<i>2021 San Francisco Infrastructure Level of Service Analysis</i>
B	Residents per housing unit	2.26	Demographic data from San Francisco Planning Department (2019)
C	GSF per average residential housing unit (new construction)	1,000	New Construction Average Housing Unit Size Memorandum (2020)
D	GSF per residential service population	443	C / B
<b>Commercial Assumptions</b>			
E	Employees per service population unit	0.5	<i>2021 San Francisco Infrastructure Level of Service Analysis</i>
F	GSF commercial space per employee	310	Table 44
G	GSF per commercial service population	620	G / E

#### 1.3.4.1 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. Five percent reflects the average administrative cost across all citywide and neighborhood impact fees.<sup>11</sup> This is consistent with the *2014 San Francisco Citywide Nexus Analysis*.

<sup>10</sup> Source: San Francisco Planning Department. Projections included number of households and jobs, in addition to a total population estimate for 2040. The Hatch team used the projected number of households in 2025, along with the average household size in 2019 and 2040, to estimate the total population in 2025.

<sup>11</sup> The San Francisco Planning Department verified that five percent is the average administrative cost for impact fees in an email from Mathew Snyder on September 4<sup>th</sup>, 2019.

### 1.3.4.2 Gross Square Feet

Consistent with current City practices, all fees are presented in terms of infrastructure cost (\$) relative to gross square foot (GSF) of new development. For neighborhoods that have a considerably lower or higher number of GSF per residential housing unit than assumed in Table 4, the Planning Department reserves the right to recalculate fees for the relevant geographically-based Area Plan fees based on adjusted assumptions.

## 1.4 Summary of Citywide Impact Fees

The impact fees determined in this nexus analysis are tabulated below (Table 5).

TABLE 5: MAXIMUM SUPPORTABLE CITYWIDE IMPACT FEES PER GSF (2019)

Citywide Nexus Fees	Maximum Supportable Fee
<b>Recreational and Open Space</b>	
Residential (\$/GSF)	\$46.22
Non-Residential (\$/GSF)	\$33.05
<b>Child Care</b>	
Residential (\$/GSF)	\$2.47
Non-Residential (\$/GSF)	\$4.86
<b>Complete Streets: Citywide</b>	
Residential (\$/GSF)	\$16.19
Non-Residential (\$/GSF)	\$11.58
<b>Complete Streets: Downtown</b>	
Downtown Area: Residential (\$/GSF)	\$19.42
Downtown Area: Non-Residential (\$/GSF)	\$13.89
<b>Transit</b>	
Residential (\$/GSF)	\$24.24
Production, Distribution, and Repair (PDR) (\$/GSF)	\$46.82
Non-Residential (ex. PDR) (\$/GSF)	\$83.75
<b>Libraries</b>	
Residential (\$/GSF)	\$2.50
Non-Residential (\$/GSF)	N/A
<b>Fire Department Facilities</b>	
Residential (\$/GSF)	\$1.51
Non-Residential (\$/GSF)	\$1.08

### 1.4.1 Comparison of Maximum Supportable Impact Fees with Existing Impact Fees

The maximum supportable citywide impact fees exceed the existing impact fees, including Area Plan fees, in every category. Additionally, the maximum supportable citywide impact fees exceed the existing impact fees by at least 10 percent, as shown in Table 6. Note that both existing and maximum supportable impact fees are expressed in \$/GSF.

TABLE 6: COMPARING MAXIMUM SUPPORTABLE CITYWIDE FEES TO EXISTING FEES (2019)

	Maximum Supportable Fee (determined by this Nexus)	Highest Existing Fee (2019 fee rates)	Percent of Existing Fee Covered by Maximum Supportable Nexus (Maximum/Existing)
<b>Recreational and Open Space</b>			
Residential (\$/GSF)	\$46.22	\$22.47 <sup>12</sup>	206%
Non-Residential (\$/GSF)	\$33.05	\$15.00	220%
<b>Child Care</b>			
Residential (\$/GSF)	\$2.47	\$2.15	115%
Non-Residential (\$/GSF)	\$4.86	\$1.85	263%
<b>Complete Streets: Non-Downtown</b>			
Residential (\$/GSF)	\$16.19	\$8.15	199%
Non-Residential (\$/GSF)	\$11.58	\$8.25	140%
<b>Complete Streets: Downtown</b>			
Residential (\$/GSF)	\$19.42	\$17.04	114%
Non-Residential (\$/GSF)	\$13.89	\$11.74	118%
<b>Transit</b>			
Residential (\$/GSF)	\$24.24	\$22.04 <sup>12</sup>	110%
PDR (\$/GSF)	\$46.82	\$9.45	495%
Non-Residential (ex. PDR) (\$/GSF)	\$83.75	\$76.52	110%
<b>Libraries</b>			
Residential (\$/GSF)	\$2.50	N/A	N/A
Non-Residential (\$/GSF)	N/A	N/A	N/A
<b>Fire Department Facilities</b>			
Residential (\$/GSF)	\$1.51	N/A	N/A
Non-Residential (\$/GSF)	\$1.08	N/A	N/A

## 2 Recreational 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 2021 *San Francisco Infrastructure Level of Service Analysis*, the methodology used to determine the maximum supportable impact fee, and the final determination of the maximum supportable impact fee.

<sup>12</sup> Note: Pursuant to Planning Code section 431 et seq. the Central SoMa Infrastructure fee may be used for public transit, recreation, and open space improvements. In Ordinance No. 47-21, the Board of Supervisors amended Section 433.4 to clarify that the permissible uses of the Central SoMa Infrastructure fee include recreation and open space infrastructure projects, as envisioned by the Central SoMa Implementation Strategy. As stated in section 10.3 of the Appendix in the 'Note-to-File: Distribution of Funds Collected from the Central SoMa Infrastructure Fee', of the \$20 Residential Central SoMa Infrastructure fee for Tier B projects (in 2019 dollars) no more than \$9.53 would go toward transit, leaving at least \$10.47 to go toward Recreation and Open Space.

## 2.1 Introduction

### 2.1.1 Recreational and Open Space Background

Recreational and open space is a common, City-provided, public amenity. San Francisco, like most cities, aims to provide adequate quality open space for the public health and quality of life of its citizens and workforce. As new residential and non-residential development occurs, it brings an increased demand for 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.

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.<sup>13</sup> In adopting the Downtown Park Fee, the Board of Supervisors recognized that continued office development in the Downtown area increases the daytime population and creates a need for additional public park and recreation facilities in the Downtown. The Board recognized at the 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 area. The City continued its commitment to ensuring that recreational 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/Octavia, Eastern Neighborhoods, Balboa Park and Visitacion Valley (Table 1).

Providing recreational 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. Recreational and open space fees, charged to 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” and “open space” may be used in this chapter as shorthand to denote any and all recreational and open space.

### 2.1.2 Purpose and Use of Revenues

The primary purpose of the recreational and open space development impact fee revenue is to fund expansion of San Francisco's park capacity to meet the demand from new development. Recreational 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

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<sup>13</sup> Planning Code Section 412.

[http://www.amlegal.com/nxt/gateway.dll/California/planning/article4developmentimpactfeesandproject?f=templates\\$fn=default.htm\\$3.0\\$vid=amlegal:sanfrancisco\\_ca\\$anc=JD\\_412](http://www.amlegal.com/nxt/gateway.dll/California/planning/article4developmentimpactfeesandproject?f=templates$fn=default.htm$3.0$vid=amlegal:sanfrancisco_ca$anc=JD_412)

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- Converting passive open space<sup>14</sup> to active open space<sup>15</sup> through addition of trails, play fields, playgrounds, etc.

The recreational 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 SFRPD'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, reflooring 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 examines how much would have to be charged to new development to satisfy 100 percent of the development-based demand for open space. 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.

## 2.2 Nexus Determination

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

### 2.2.1 LOS Metric

Although recreational 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 *2021 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 *2021 San Francisco Infrastructure Level of Service Analysis*, the City currently provides 3 acres of open space per 1,000 service population units, and aims to maintain this provision into the future.<sup>16</sup> 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).

### 2.2.2 Growth Projections

The horizon for projected growth in demand for recreational and open space is 2025. Between 2019 and 2025, San Francisco is projected to gain 73,584 more residents and 55,145 more jobs (Table 7). Note that, although

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<sup>14</sup> Lawn or forested areas dedicated for “general enjoyment of outdoors,” as per SFRPD’s Parks Acquisition Policy (August 2011).

<sup>15</sup> Recreational space constructed to accommodate “team sports and athletics, children’s play areas, courses and courts, bike, pedestrian and equestrian paths”, as per SFRPD’s Parks Acquisition Policy (August 2011).

<sup>16</sup> City-provided park land includes land owned or controlled by the Recreation and Parks Department, the Department of Public Works, the Port, the Municipal Transportation Agency, the Public Library, the Public Utilities Commission, the Office of Community Investment and Infrastructure, the Treasure Island Development Authority, and the Transbay Joint Powers Authority.

the development and fee collection is projected to occur between 2019 and 2025, infrastructure acquisition and development cannot occur until after fee collection, and may not be completed by 2025.

TABLE 7: GROWTH PROJECTIONS FOR RECREATIONAL AND OPEN SPACE (2019 - 2025)<sup>17</sup>

	2019	2025	Growth (2019 - 2025)	Percent Increase
<b>Population</b>				
Residents	908,336	981,920	73,584	8.1%
<b>Employment</b>				
Jobs	768,360	823,505	55,145	7.2%
<b>Service Population Units (SPU)</b>				
SPU <sup>18</sup>	1,292,516	1,393,673	101,157	7.8%

### 2.2.3 Nexus Methodology & Fee Calculation

The fee calculation methodology (Table 8) calculates the total cost of increasing open space acreage for the increase in service population (2019-2025), 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 3 acres of open space per 1,000 service population units, an equivalent of 301 new acres of open space would need to be constructed (Table 8, Row G). Given the size of San Francisco, the building density, absolute land availability, and expensive land costs, constructing 301 new acres of open space within San Francisco by 2025 is infeasible. SFRPD and the Planning Department have determined that for purposes of this analysis, the City can reasonably acquire 1.6 new acres of open space within San Francisco by 2025.<sup>19</sup> The remaining 299 acres demanded by the LOS (301 minus 1.6, rounded) will be accommodated not through the construction of new park acres, but through the capacity improvement of existing acres, as described in Section 2.1.2. The capacity improvements on existing acres must add capacity to the existing land (refer to Purpose and Use of Revenues section above).

TABLE 8: NEXUS METHODOLOGY FOR RECREATIONAL AND OPEN SPACE FEE

*	Measure	Value	Source/Calculation
<b>Service Population</b>			
A.1	Current residential population (2019)	908,339	Table 7
A.2	Projected residential population growth (2019-2025)	73,584	Table 7
B.1	Current service population (2019)	1,292,516	Table 7
B.2	Projected service population growth (2019-2025)	101,157	Table 7
<b>Unit Conversions</b>			
C	GSF of residential development per SPU	443	Table 4

<sup>17</sup> Based on population projections from Table 3.

<sup>18</sup> Equal to the number of residents plus half the number of jobs (number of residents + 0.5 \* number of jobs).

<sup>19</sup> This determination was made based on open space acquisition over the past 10 years through the Interagency Plan Implementation Committee, and includes a discount for open space that may be acquired through other funding sources.

D	GSF of commercial development per SPU	620 <sup>20</sup>	Table 4
<b>Metric</b>			
E	Total acres of open space (all City owners, 2019)	3,844	SFRPD
F	Acres of park improvements per 1,000 Service Population Units	3.0	<i>2021 San Francisco Infrastructure Level of Service Analysis</i>
<b>Cost</b>			
G	Incremental acres of open space required to maintain LOS (2019-2025)	301	$(B.2 / 1,000) * F$
H	Feasible new acres of open space (2019-2025)	1.6	Historical acquisitions, from SF Planning
I	Acres of open space to be improved <sup>21</sup>	299	G - H
J	City estimate of unit acquisition cost (\$/acre of open space acquired)	\$5,267,880	Historical acquisition prices from SFRPD
K	City estimate of unit improvement cost (\$/acre of open space improved)	\$6,534,000	Email from Stacy Bradley, SFRPD staff, 11/21/2019
L	Total cost for new open space	\$19,219,508	$H * (J + K)$
M	Total Cost for improved open space	\$1,955,073,503	$I * K$
N	Cost attributable to incremental growth	\$1,974,293,011	L + M
O	Administrative costs (5% of fee)	\$98,714,651	SF Planning
P	Total attributable cost with administrative costs	\$2,073,007,662	N + O
<b>Maximum Supportable Impact Fees</b>			
<b>Residential (\$/GSF)</b>		<b>\$46.22</b>	$P / (B.2 * C)$
<b>Non-Residential (\$/GSF)</b>		<b>\$33.05</b>	$P / (B.2 * D)$

### 2.3 Nexus Findings

Based on the approach in Table 8, the maximum estimated cost of providing recreational and open space is \$46.22 per gross square foot of residential development, and \$33.05 per gross square foot of non-residential development.

As Table 9 demonstrates, both determined maximum supportable fees are more than 10 percent above the highest existing fee for recreation and open space.

<sup>20</sup> Note that the number of square feet per service population unit, as defined in Table 4, takes into account the 0.5 employees per service population unit ratio for purposes of determining the maximum fee.

<sup>21</sup> See explanation of improvement that expands capacity in Section 2.1.2.

TABLE 9: COMPARING PROPOSED MAXIMUM SUPPORTABLE RECREATION AND OPEN SPACE FEES TO EXISTING (2019) FEES

	Proposed (Max)	Existing (Max)	Percent of Existing Fee Covered by Maximum Supportable Nexus (Maximum/Existing)	Proposed Max > 10% Above Existing
<b>Residential (\$/GSF)</b>	\$46.22	\$22.47 <sup>22</sup>	206%	YES
<b>Non-Residential (\$/GSF)</b>	\$33.05	\$15.00	220%	YES

## 3 Child Care Facilities

This chapter summarizes the nexus analysis for child care infrastructure. After providing a brief background, this chapter will outline the relevant growth assumptions, the LOS standard developed in the associated *2021 San Francisco Infrastructure Level of Service Analysis*, the methodology used to determine the maximum supportable impact fee, and the final determination of the maximum supportable impact fee.

### 3.1 Introduction

#### 3.1.1 Child Care Facilities Background

For families with children – especially those with children under the age of thirteen – child care is a key concern. In San Francisco, with high housing costs, many families have working parents and, therefore, require non-parent child care. The City has long recognized the importance of child care as a community-serving amenity, and first adopted a child care inclusionary zoning ordinance with an in-lieu fee option for certain non-residential uses in 1985.<sup>23</sup> The child care fee was expanded to include residential development in 2016.<sup>24</sup> In addition to the City’s child care ordinance, there are four Plan Areas with Community Infrastructure Impact Fees that include a child care component – Market/Octavia, the Eastern Neighborhoods, Visitacion Valley, and Balboa Park. These fees are used to help provide facilities for child care demand resulting from new commercial and residential developments.

As new non-residential and residential development occurs, it attracts new residents and employees, some of whom have children who require non-parent child care. There is a relationship, or nexus, between new development, an influx of residents and workers, and a demand for child care facilities. The nexus provides a theoretical maximum for the impact fee. While child care is not a mandated public service, the City is involved in supporting the provision of licensed child care options by helping to fund capital projects that create new child care slots in the City.

#### 3.1.2 Purpose and Use of Revenues

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

<sup>22</sup> Note: The permissible uses of the Central SoMa Infrastructure fee includes recreation and open space infrastructure projects, as envisioned by the Central SoMa Implementation Strategy. As noted in Table 1 of this report, the highest existing fee for recreation and open space includes \$10.47 of the \$20 Residential Central SoMa Infrastructure fee for Tier B projects (in 2019 dollars).

<sup>23</sup> The original ordinance (Ord. 411-85, App. 9/6/82) only applied to hotel and office development. See Section 414 of the City Planning Code for more information.

<sup>24</sup> Ordinance 002-16, enacted on 1/19/2016.

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This nexus is limited to new demand for infants, toddlers, and preschool-age child care only. The nexus does not address the child care needs of school-age children (ages 5 to 17). Although there is a need for additional school-age child care capacity in the City, those needs tend to be for operations assistance, not for additional facilities. After-school care is typically provided at existing school sites, using school facilities. Given that impact fee revenues must be spent on capital costs to maintain or increase the supply of facilities, expanding such operational assistance would not be an appropriate use of nexus funds. At this time, 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.<sup>25</sup>

This study estimates the maximum supportable fee based on the relationship between new development and the costs to provide additional child care and the demand created by new development. However, the City may choose to adopt a lower fee as appropriate.

## 3.2 Nexus Determination

The maximum supportable fee calculation for child care combines the child care demand estimation with residential and employment growth projections and the cost to provide licensed child care.

### 3.2.1 Linkage Analysis

The child care fee uses a linkage approach to the nexus analysis. A linkage analysis for the nexus determination addresses the indirect social impacts caused by the addition of residents and businesses associated with new development, as compared to the direct public facility impacts addressed by traditional development fees.<sup>26</sup> Indirect impacts typically addressed by a linkage analysis include the additional affordable housing and expanded licensed child care required to accommodate new development. Whereas local agencies use revenue from traditional impact fees to expand public facilities, they use linkage fee revenue to incentivize the expansion of social services such as housing and child care. Although linkage fees were novel in the 1980s, professional practice now deems that “there are no fundamental differences between linkage and impact fees” other than the types of services and facilities funded by each.<sup>27</sup> The nexus analysis for both types of fees relies on an estimate of demand for services and facilities generated by new development, the available supply of those services and facilities, and new development’s proportionate share of the expansion of those services and facilities.

Although the most common type of linkage fee is the affordable housing linkage fee on nonresidential development, several cities impose linkage fees for child care facilities. The City of Palm Desert imposes a child care linkage fee on nonresidential development only while the cities of Santa Monica and South San Francisco impose the fee on both residential and nonresidential development. In a similar manner, the child care linkage approach to the San Francisco nexus analysis demonstrates that new development brings an increased demand for expanded child care facilities to provide non-parent child care for families in new development. The City does not directly provide these facilities but provides financial incentives for construction and operation of child care slots to serve low-income families. As demonstrated in the *2021 San Francisco Infrastructure Level of Service Analysis*, current licensed child care facilities meet 19 percent of infant/toddler care demand and 88 percent of preschool demand. The lack of sufficient capacity to meet existing demand demonstrates the need for new development to fund additional child care capacity.

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<sup>25</sup> *San Francisco Early Care and Education Needs Assessment*, 2017.

<sup>26</sup> William W. Abbott, et al., *Exactions and Impact Fee in California*, Solano Press Books, 2012, pp. 26-27.

<sup>27</sup> *Ibid.* See also Nelson, Arthur C., James C. Nicholas, and Julian C. Juergensmeyer, *Impact Fees: Principals and Practice of Proportional-Share Development Fees*, Routledge, 2019, p.107.

### 3.2.2 Growth Projections

The horizon for projected growth in demand for child care infrastructure is 2025. Unlike other infrastructure categories, which are required by residents and employees at multiple locations (both at home and at work), child care facilities are required in only one location per child in need of care. As a result, a service population-based nexus (like recreational and open space) is not relevant to child care. Instead, the child care nexus is based on future child care demand estimates. Between 2019 and 2025, new development in San Francisco is projected to generate demand for 486 new licensed infant and toddler child care slots and 1,119 new licensed preschooler child care slots.<sup>28</sup> Note that, although the development and fee collection is projected to occur between 2019 and 2025, infrastructure acquisition and development cannot occur until after fee collection, and may not be completed by 2025.

TABLE 10: GROWTH PROJECTIONS AND DEMAND ESTIMATES FOR CHILD CARE (2019 – 2025)

	2019	2025	Growth (2019 - 2025)	Percent Increase
<b>Population</b>				
Residents	908,336	981,920	73,584	8.1%
Resident Children	48,377	52,296	3,919	8.1%
<b>Employment</b>				
Jobs <sup>29</sup>	768,360	823,505	55,145	7.2%
Jobs Held by Non-Residents	463,040	496,272	33,232	7.2%
Children of Non-Resident Employees Seeking Care	23,152	24,814	1,662	7.2%
<b>Child Care Demand Estimates (for Licensed Care)</b>				
Resident Children Aged 0-2 Requiring Care	5,999	6,485	486	8.1%
Resident Children Aged 3-5 Requiring Care	13,813	14,932	1,119	8.1%
Non-Resident Children Aged 0-5 Requiring Care	23,152	24,814	1,662	7.2%

### 3.2.3 Nexus Methodology & Fee Calculation

The child care nexus analysis seeks to estimate the cost to the City of meeting new demand for child care in San Francisco as the demand for child care 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. It then calculates the capital costs required to provide these child care spaces to accommodate the new population, based on the City's cost of funding new child care facilities. Lastly, the costs are assigned to new housing units and new non-residential development on a per-square-foot basis.

The residential child care fee is calculated to account for children of all San Francisco residents who work within the City, including those San Francisco residents who work within the City and seek child care near their place of work. This is because the childcare nexus evaluates childcare demand on a citywide basis, and not by

<sup>28</sup> See the *2021 San Francisco Infrastructure Level of Service Analysis* for a detailed explanation of the child care demand calculations and assumptions. The methodology is summarized in Appendix Section **Error! Reference source not found.**

<sup>29</sup> The child care demand methodology and calculations, summarized in Table 11, Table 12, and Table 13, assumes that 5 percent of non-resident workers coming in to the City will seek licensed care for a child in the City. This is based on the 2014 San Francisco Nexus Study methodology.

discrete neighborhoods. Thus, residential development creates the citywide need for child care to serve children of resident workers, regardless of the location of the parents' employment within San Francisco. The commercial child care fee does not include any demand from resident children in order to avoid double-counting.

TABLE 11: NEXUS METHODOLOGY FOR RESIDENT INFANT AND TODDLER (0-2) CHILD CARE FEE

Step	Description	Value	Source/Calculation
<b>Total Resident-Children (0-2)</b>			
1	Residents	908,336	SF Planning Estimates
1A	Resident children 5 and under	48,377	SF Planning Estimates <sup>30</sup>
1B	Percent of resident children 5 and under who are between 0-2	54%	2017 ACS 5-Year Estimates, B09001
1C	Resident children 0-2	26,124	1A * 1B
<b>Resident-Children (0-2) Needing Care</b>			
1D	Percent of resident children 0-2 in working households	71%	2017 ACS 5-Year Estimates, B23008
1E	Number of resident children 0-2 in working households	18,637	1C * 1D
<b>Resident-Children (0-2) Needing Licensed Care Outside of San Francisco</b>			
1F	Percent of SF Residents who are employed	58%	Total Employed SF Residents (504,914) (source: 2017 ACS 5-Year Estimates, DP03) divided by Total SF Residents (864,263) (source: 2017 ACS 5-Year Estimates, S0101)
1G	Employed SF Residents	530,662	1 * 1F
1H	Percent of Employed Residents working outside SF	24%	2017 ACS 5-Year Estimates, S0801
1I	Employed SF Residents working outside SF	125,767	1G * 1H
1J	Percent of Workers who seek child care where they work rather than where they live	5%	2014 San Francisco Nexus Study <sup>31</sup>
1K	Resident children (all 0-5) needing child care outside SF (assumes one child per working adult)	6,288	1I * 1J
1L	Resident children (0-2) needing child care outside SF	3,396	1B * 1K
<b>Resident-Children (0-2) Needing Licensed Care in San Francisco</b>			
1M	Remaining resident children (0-2) potentially	22,728	1C – 1L

<sup>30</sup> The number of children in each age group (i.e., 0-2, 3-4, 5) from the 2017 ACS 5-Year Estimates, B09001 was apportioned to the total SF resident population to determine the number of resident children in each age group.

<sup>31</sup> Based on the 2014 San Francisco Nexus Study, South San Francisco Child Care Facilities Impact Fee Nexus Study and surveys of corporate employees and other child care studies, reviewed by Brion & Associates, including Santa Monica's New Child Care Fee Nexus Study (as cited in Table 6 of Child Care Nexus Study for San Francisco by Brion & Associates); this study assumes one child needing care per employee).

	needing child care		
1N	Percent of young children in households with all working parents	71%	2017 ACS 5-Year Estimates, B23008
1O	Resident children (0-2) with working parents	16,215	1M * 1N
1P	Percent of children (0-2) with working parents needing licensed care	37%	2014 San Francisco Nexus Study <sup>32</sup>
1Q	Resident children (0-2) needing licensed care in SF	5,999	1O * 1P
<b>Resident Children (0-2) Childcare Fee</b>			
1R	Cost of child care slot	\$50,000	Email from Graham Dobson, SFOECE Staff, September 17 2019
1S	Total cost of child care slots near residents	\$299,972,268	1Q * 1R
1T	Child care slot cost per resident	\$330.24	1S / "1"
1U	Resident per unit	2.26	Table 4: B
1V	Child care slot cost per unit	\$746.35	1T * 1U
1W	Square feet per unit	1,000	Table 4: C
1X	Child care slot cost per square foot	\$0.75	1V/ 1W

TABLE 12: NEXUS METHODOLOGY FOR RESIDENT PRESCHOOLER (3-5) CHILD CARE FEE

Step	Description	Value	Source/Calculation
<b>Total Resident-Children (3-5)</b>			
2	Residents	908,336	SF Planning Estimates
2A	Resident children 5 and under	48,377	SF Planning Estimates <sup>33</sup>
2B	Percent of resident children 5 and under who are aged 3-5	46%	2017 ACS 5-Year Estimates, B09001
2C	Resident children 3-5	22,253	A*B
<b>Resident-Children (3-5) Needing Care</b>			
2D	Percent of resident children 3-5 in working households	71%	2017 ACS 5-Year Estimates, B23008
2E	Number of resident children 3-5 in working households	15,876	2C * 1S
<b>Resident-Children (3-5) Needing Licensed Care Outside of San Francisco</b>			
2F	Percent of SF Residents who are employed	58%	Total Employed SF Residents (504,914) (source: 2017 ACS 5-Year Estimates, DP03) divided

<sup>32</sup> Based on the 2014 San Francisco Nexus Study, 37% of children (0-2) with working parents need licensed care (as cited in Table 7 of Child Care Nexus Study for San Francisco by Brion & Associates, which is based on a detailed review of 12 child care studies, including impact fee studies; demand factors developed in concert with Dept. of Human Services and DCYP). DCYP refers to the San Francisco Department of Children, Youth and Their Families (DCYF).

<sup>33</sup> The number of children in each age group (i.e., 0-2, 3-4, 5) from the 2017 ACS 5-Year Estimates, B09001 was apportioned to the total SF resident population to determine the number of resident children in each age group.

			by Total SF Residents (864,263) (source: 2017 ACS 5-Year Estimates, S0101)
2G	Employed SF Residents	530,662	2E * 2F
2H	Percent of Employed Residents working outside SF	24%	2017 ACS 5-Year Estimates, S0801
2I	Employed SF Residents working outside SF	125,767	2G * 2H
2J	Percent of Workers who seek child care where they work rather than where they live	5%	2014 San Francisco Nexus Study <sup>34</sup>
2K	Resident children (all 0-5) needing child care outside SF (assumes one child per working adult)	6,288	2I * 2J
2L	Resident children (0-5) needing child care outside SF	2,893	2B * 2K
<b>Resident-Children (3-5) Needing Licensed Care in San Francisco</b>			
2M	Remaining resident children (0-5) potentially needing child care	19,361	2C - 2L
2N	Percent of young children in households with all working parents	71%	2017 ACS 5-Year Estimates, B23008
2O	Resident children (3-5) with working parents	13,813	2M * 2N
2P	Percent of children (3-5) with working parents needing licensed care	100%	2014 San Francisco Nexus Study <sup>35</sup>
2Q	Resident children (3-5) needing licensed care in SF	13,813	2O * 2P
<b>Resident Children (3-5) Childcare Fee</b>			
2R	Cost of child care slot	\$50,000	Email from Graham Dobson, SFOECE Staff, September 17 2019
2S	Total cost of child care slots near residents	\$690,626,843	2Q * 2R
2T	Child care slot cost per resident	\$760.32	2S / "2"
2U	Resident per unit	2.26	Table 4: B
2V	Child care slot cost per unit	\$1,718.33	2T * 2U
2W	Square feet per unit	1,000	Table 4: C
2X	Child care slot cost per square foot	\$1.72	2V / 2W

<sup>34</sup> Based on the 2014 San Francisco Nexus Study, South San Francisco Child Care Facilities Impact Fee Nexus Study and surveys of corporate employees and other child care studies, reviewed by Brion & Associates, including Santa Monica's New Child Care Fee Nexus Study (as cited in Table 6 of Child Care Nexus Study for San Francisco by Brion & Associates); assumes one child needing care per employee.

<sup>35</sup> Based on the 2014 San Francisco Nexus Study, 100% of children (3-5) with working parents need licensed care (as cited in Table 7 of Child Care Nexus Study for San Francisco by Brion & Associates, which is based on a detailed review of 12 child care studies, including impact fee studies; demand factors developed in concert with Dept. of Human Services and DCYP). DCYP refers to the San Francisco Department of Children, Youth and Their Families (DCYF).

TABLE 13: NEXUS METHODOLOGY FOR CHILDREN OF WORKERS (0-5) CHILD CARE FEE

Step	Description	Value	Source/Calculation
<b>Non-Resident Children (0-5) Needing Licensed Care in San Francisco</b>			
3A	SF Workers who live elsewhere	463,040	Percent of jobs filled by non-SF residents (60%) (source: LEHD 2015) * SF Jobs (2019) (768,360) (source: SF Planning)
3B	Percent of Workers who live elsewhere and seek child care in SF	5%	2014 San Francisco Nexus Study <sup>36</sup>
3C	Number of Workers who live elsewhere and seek child care in SF	23,152	3A * 3B
<b>Non-Resident Children (0-5) Childcare Fee</b>			
3D	Cost per child care slot	\$50,000	Table 12 and 13: D
3E	Total cost of slots for workers who live outside SF	\$1,157,600,000	3C * 3D
3F	Number of SF Workers	768,360	SF Planning
3G	GSF per worker	310	Table 4: F
3H	SF of commercial development	238,191,600	3F * 3G
<b>3I</b>	<b>Total Cost per SF (children 3-5)</b>	<b>\$4.86</b>	<b>3E / 3H</b>

### 3.3 Nexus Findings

Based on the above methodology, the maximum estimated nexus is \$2.47 per gross square foot for residential buildings and \$4.86 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 child care because the total impact has been allocated proportionally to the two development types.

TABLE 14: MAXIMUM SUPPORTABLE IMPACT FEES FOR CHILD CARE

	Maximum Supportable Citywide Fee
<b>Residential Demand</b>	
Child Care for Infant and Toddler Care (0-2) (\$/GSF)	\$0.75
Child Care for Preschool Care (3-5) (\$/GSF)	\$1.72
<b>Non-Residential Demand</b>	
Child Care for Infant, Toddler, and Preschool Care (0-5) (\$/GSF)	\$4.86
<b>Total Child Care Fee</b>	
Residential (\$/GSF)	\$2.47
Non-Residential (\$/GSF)	\$4.86

<sup>36</sup> Based on the 2014 San Francisco Nexus Study, based on South San Francisco Child Care Facilities Impact Fee Nexus Study and surveys of corporate employees and other child care studies, reviewed by Brion & Associates, including Santa Monica's New Child Care Fee Nexus Study (as cited in Table 6 of Child Care Nexus Study for San Francisco by Brion & Associates); assumes one child needing care per employee. The assumptions from the 2014 San Francisco Nexus Study source have been used as a review of various nexus studies and the research conducted for these studies confirms that these are widely used, standard assumptions.

As Table 15 demonstrates, both the highest current residential and non-residential fees are less than the maximum amount supported by the nexus analysis by more than 10 percent.

TABLE 15: COMPARING PROPOSED MAXIMUM SUPPORTABLE CHILD CARE FEES TO EXISTING (2019) FEES

	Proposed (Max)	Existing (Max)	Percent of Existing Fee Covered by Maximum Supportable Nexus (Maximum/Existing)	Proposed Max > 10% Above Existing
Residential (\$/GSF)	\$2.47	\$2.15	115%	YES
Non-Residential (\$/GSF)	\$4.86	\$1.85	263%	YES

## 4 Complete Street Infrastructure

This chapter summarizes the nexus analysis for complete streets infrastructure. After providing brief background, this chapter will outline the relevant growth assumptions, the LOS standard developed in the associated *2021 San Francisco Infrastructure Level of Service Analysis*, the methodology used to determine the maximum supportable impact fee, and the final determination of the maximum supportable impact fee.

### 4.1 Introduction

#### 4.1.1 Complete Streets Background

Complete streets 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”<sup>37</sup> – 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 design and engineering considerations.

As new residential and non-residential development occurs, it brings an increased demand for new (or expanded and improved) complete streets infrastructure. This relationship between new development, an influx of residents and workers, and a demand for complete streets infrastructure provides the nexus for an impact fee. Providing complete streets is a capital-intensive undertaking. Complete streets impact fees, imposed on new development, help fund the construction of new and enhanced complete streets infrastructure for the additional residents and workers directly attributable to new development.

Note that this nexus analysis represents the first time the City of San Francisco has combined all of the complete streets components into a single nexus metric. In the *2014 San Francisco Citywide Nexus Analysis*,

<sup>37</sup> 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.” October 16, 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.

“streetscape and pedestrian infrastructure” was a separate category from bicycle infrastructure. Although the terms streetscape and pedestrian infrastructure indicate more than sidewalk improvements (encompassing BSP elements such as lighting, landscaping, and safety measures<sup>38</sup>), “complete streets” encompasses sustainable street elements more broadly, including bike lanes, sidewalk paving and gutters, lighting, street trees and other landscaping, bulb-outs, and curb ramps. The “Complete Streets Sidewalk” metric, used to encompass all of these streetscape improvements and assign their costs to sidewalk square footage as a single all-encompassing metric, is described in more detail in Section 4.2.1.

#### 4.1.2 Purpose and Use of Revenues

The purpose of the complete streets development impact fee is to fund capital improvements to San Francisco’s complete streets infrastructure. As discussed in the BSP, the City aims to improve the pedestrian environment for all of San Francisco’s residents and employees. 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, bike lane improvements, and other streetscape improvements cited in the BSP or Public Works Code (Section 2.4.13).

In addition to the complete streets infrastructure impact fee analyzed here, Planning Code Section 138.1 contains urban design requirements that authorize the Planning Department to require a project to provide physical complete streets improvements in certain instances. Due to the fact that Section 138.1 improvements are a type of complete streets infrastructure, the complete streets nexus calculation includes a 9.2 percent deduction to account for potential Section 138.1 improvements, as shown in Section 4.2.5. This deduction is based on a sampling of 88 projects under development as of the second quarter of 2019, and represents the value of complete streets improvements they were required to provide as a percentage of the maximum complete streets impact fee they could have been charged under the methodology described in Section 4.2.5. The data and calculation were provided by the San Francisco Planning Department.

The maximum supportable impact fee aims to ensure that new development contributes its fair share of funding to complete streets improvements. Because the LOS metric upon which the nexus is based 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 demand for complete streets infrastructure.

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

## 4.2 Nexus Determination

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

### 4.2.1 LOS Metric

Because complete streets infrastructure encompasses a wide range of components, the LOS metric put forth in the *2021 San Francisco Infrastructure Level of Service Analysis* – square feet of Complete Streets Sidewalk per service population unit – serves as a proxy for all types of complete streets improvements, and reflects the level of investment that the City has committed to making in the sustainable street environment.

“Complete Streets Sidewalk” is a term that denotes sidewalk with some amount of sustainable street

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<sup>38</sup> *San Francisco Better Streets Plan*, 2010.

infrastructure, including components such as lighting, pedestrian signals, street trees, bulb-outs, sidewalk furniture, bike lanes, 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 Complete Streets Sidewalk is not uniform across San Francisco (i.e. the BSP calls for different complete streets 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 of San Francisco’s streetscape.<sup>39</sup> Therefore, the basic square footage of sidewalk is denoted “Complete Streets Sidewalk” to reflect the investments the City is committed to make in the pedestrian and bicycle right-of-way in terms of complete streets infrastructure.

#### 4.2.2 Growth Projections

The horizon for projected growth in demand for complete streets infrastructure is 2025. Between 2019 and 2025, San Francisco is projected to gain 73,584 residents and 55,145 jobs (Table 16). Note that, although the development and fee collection is projected to occur between 2019 and 2025, infrastructure acquisition and development cannot occur until after fee collection, and may not be completed by 2025.

TABLE 16: GROWTH PROJECTIONS FOR COMPLETE STREETS INFRASTRUCTURE (2019 - 2025)<sup>40</sup>

	2019	2025	Growth (2019 - 2025)	Percent Increase
<b>Population</b>				
Residents	908,336	981,920	73,584	8.1%
<b>Employment</b>				
Jobs	768,360	823,505	55,145	7.2%
<b>Service Population Units (SPU)</b>				
SPU	1,292,516	1,393,673	101,157	7.8%

#### 4.2.3 Complete Streets Costs

In order to assign a development cost to the new infrastructure, a value of \$64 per square foot of Complete Streets Sidewalk is applied. This number is based on San Francisco’s current inventory of selected complete streets elements, and the cost of building those elements.<sup>41</sup> Table 17 illustrates the full calculation.

TABLE 17: SELECT COMPLETE STREETS ELEMENTS AND COSTS

Infrastructure Category	Unit Type	Amount	Unit Cost	Total Cost	Source
Sidewalk Area	Square Feet	152,044,639	\$35	\$5,321,562,350	SFDPW
Sidewalk Curb & Gutter	Linear Feet	11,969,859	\$110	\$1,316,684,523	SFDPW
Street Trees	Count	125,891	\$2,150	\$270,665,650	SFDPW
Curb Ramps	Count	28,826	\$32,000	\$922,432,000	SFDPW
Class I Bikelanes	Linear Miles	62	\$596,250	\$37,021,163	SFRPD
Class II Bikelanes	Linear Miles	139	\$400,000	\$55,768,000	SFMTA
Class III Bikelanes	Linear Miles	209	\$200,000	\$41,700,000	SFMTA
Class IV Bikelanes	Linear Miles	20	\$800,000	\$15,896,000	SFMTA

<sup>39</sup> San Francisco Planning Code, Section 138.1.

<sup>40</sup> Based on population projections from Table 3.

<sup>41</sup> This inventory is based on data from the San Francisco Planning Department, Department of Public Works, Public Utilities Commission, and Municipal Transportation Agency.

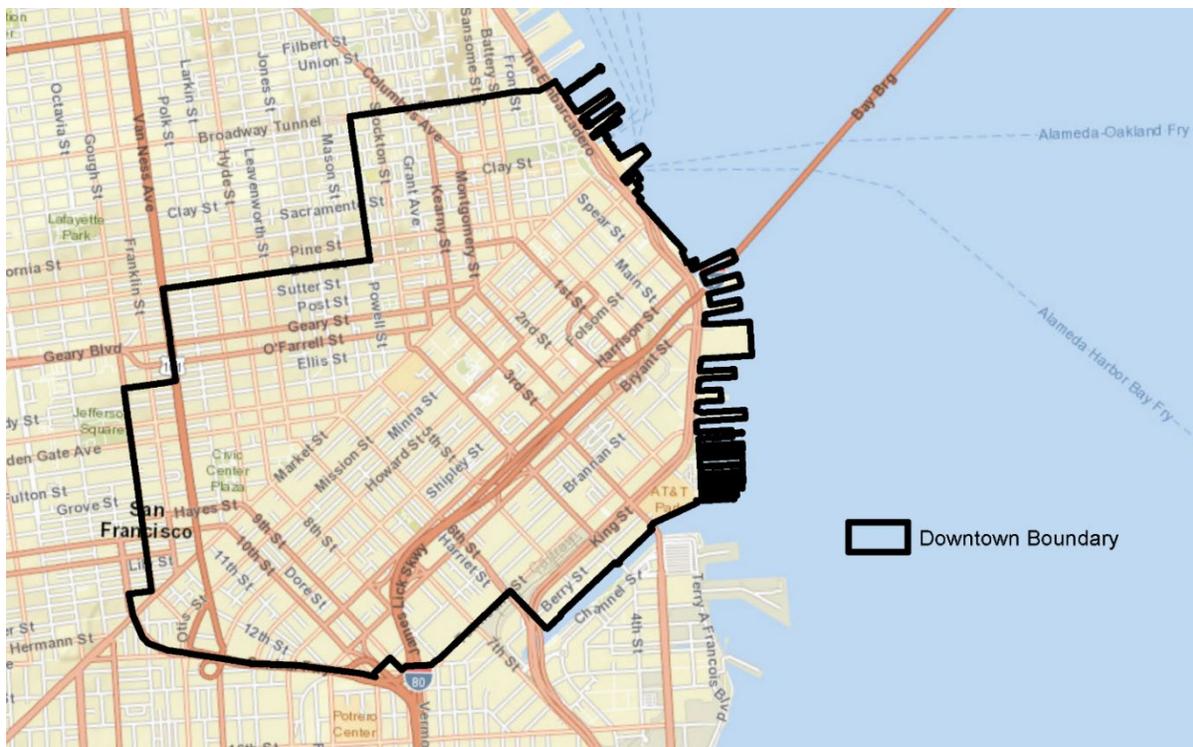
Street Lights	Count	24,046	\$42,000	\$1,009,932,000	SFDPW
Bulbouts	Count	1,095	\$673,545	\$737,531,775	SFDPW
<b>Total Infrastructure Cost</b>				\$9,729,193,461	
Total Square Feet of Complete Streets Sidewalk				152,044,639	
<b>Complete Streets Cost per Improved Sidewalk Square Foot</b>				<b>\$64</b>	

#### 4.2.4 The Downtown Boundary

The cost of building complete streets infrastructure improvements, more so than for other infrastructure categories examined in this analysis, varies significantly by location. Sub-sidewalk basements, underground utilities, and overhead trolley coach wires are just some of the obstacles that may exist in the right of way and make building complete streets infrastructure more complex and expensive. More densely populated neighborhoods tend to have a higher density of these obstacles, making complete streets infrastructure more costly to build in these neighborhoods.

In order to account for this variation in cost, the complete streets fee calculation includes a 20 percent markup for the downtown area (see Table 18) based on information from the Department of Public Works, shown below in Figure 2. Representative complete streets projects located in the downtown area were determined to have costs 20 percent higher, on average, than projects deemed to be representative of typical citywide costs.<sup>42</sup> The downtown area boundary was determined in consultation with the San Francisco Planning Department and includes the most densely populated parts of the City, including areas that are expected to become more densely populated by 2025.

FIGURE 2: THE COMPLETE STREETS DOWNTOWN BOUNDARY



<sup>42</sup> Confirmed in an email from SFDPW staff on December 16<sup>th</sup>, 2019.

#### 4.2.5 Nexus Methodology & Fee Calculation

The fee calculation methodology (Table 18) calculates the total cost of providing adequate complete streets elements for San Francisco’s service population (2019-2025). 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 18: NEXUS METHODOLOGY FOR COMPLETE STREETS INFRASTRUCTURE FEE

*	Measure	Value	Source/Calculation
<b>Service Population</b>			
A.1	Current residential population (2019)	908,339	Table 16
A.2	Projected residential population growth (2019-2025)	73,584	Table 16
B.1	Current service population (2019)	1,292,516	Table 16
B.2	Projected service population growth (2019-2025)	101,157	Table 16
<b>Unit Conversions</b>			
C	GSF of residential development per SPU	443	Table 4
D	GSF of commercial development per SPU	620	Table 4
<b>Metric</b>			
E	Total square feet of Complete Streets Sidewalk citywide	152,044,639	2021 San Francisco Infrastructure Level of Service Analysis
F	Square feet of Complete Streets Sidewalk per SPU	118	2021 San Francisco Infrastructure Level of Service Analysis
<b>Cost</b>			
G	Unit cost (\$/square foot of Complete Streets Sidewalk)	\$64	Complete Streets Breakdown
H	Total cost for new streetscape improvements	\$761,438,279	B.2 * F * G
I	Cost attributable to incremental growth	\$761,438,279	H * 100%
J	Discount for Better Streets Plan Improvements	9.2%	SF Planning <sup>43</sup>
K	Discounted attributable cost	\$691,419,165	I * (1 - J)
L	Administrative costs (5% of fee)	\$34,570,958	SF Planning
M	Total attributable cost with administrative costs	\$725,990,123	K + L
<b>Maximum Supportable Impact Fees: Citywide</b>			
Residential (\$/GSF)		\$16.19	J / (B.2 * D)
Non-Residential (\$/GSF)		\$11.58	J / (B.2 * C)
<b>Maximum Supportable Impact Fees: Downtown</b>			
Downtown Markup		20%	Email from SFDPW staff, 12/16/2019
Residential (\$/GSF)		\$19.42	
Non-Residential (\$/GSF)		\$13.89	

<sup>43</sup> Based on complete streets improvements required of projects under construction in Q2 2019. See Section 4.1.2 for more details.

### 4.3 Nexus Findings

Based on the approach in Table 18, the maximum supportable citywide impact fees for complete streets infrastructure are \$16.19 per gross square foot for residential development and \$11.58 per gross square foot for non-residential development. The maximum supportable downtown impact fees are \$19.42 per gross square foot for residential development and \$13.89 per gross square foot for non-residential development.

TABLE 19: MAXIMUM SUPPORTABLE IMPACT FEES FOR COMPLETE STREETS INFRASTRUCTURE

	Maximum Supportable Citywide Fee
<b>Total Complete Streets Fee: Citywide</b>	
Residential (\$/GSF)	\$16.19
Non-Residential (\$/GSF)	\$11.58
<b>Total Complete Streets Fee: Downtown</b>	
Residential (\$/GSF)	\$19.42
Non-Residential (\$/GSF)	\$13.89

As Table 20 demonstrates, the maximum supportable impact fee is above the highest fee currently charged for both residential and non-residential development, citywide and in downtown. Furthermore, the maximum supportable impact fee is more than 10 percent higher than each existing fee.

TABLE 20: COMPARING PROPOSED MAXIMUM SUPPORTABLE COMPLETE STREETS INFRASTRUCTURE FEES TO EXISTING (2019) FEES

	Proposed (Max)	Existing (Max)	Percent of Existing Fee Covered by Maximum Supportable Fee (Maximum/Existing)	Proposed Max > 10% Above Existing
<b>Citywide</b>				
Residential (\$/GSF)	\$16.19	\$8.15	199%	YES
Non-Residential (\$/GSF)	\$11.58	\$8.25	140%	YES
<b>Downtown</b>				
Residential (\$/GSF)	\$19.42	\$17.04	114%	YES
Non-Residential (\$/GSF)	\$13.89	\$11.74	118%	YES

## 5 Transit Infrastructure

### 5.1 Introduction

This chapter summarizes the nexus analysis for transit infrastructure. After providing a brief background, this chapter will outline the relevant growth assumptions, the LOS standard developed in the associated *2021 San Francisco Infrastructure Level of Service Analysis*, the methodology used to determine the maximum supportable impact fee, and the final determination of the maximum supportable impact fee.

The Transportation Sustainability Fee (TSF) is a citywide development fee that funds costs associated with increased transit service provided by the San Francisco Municipal Transportation Agency (SFMTA) to accommodate development impacts. The TSF is an update of the former Transit Impact Development Fee (TIDF) which was initially adopted in 1981 and applied only to downtown office development. In 2004 the City

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substantially revised and expanded the TIDF to apply to most nonresidential development citywide. In 2015 the City revised its transportation fee, introducing the Transportation Sustainability Fee, that, among other things, introduced the transportation fee to residential development, and would over time, replace the existing TIDF fee for commercial development. The TSF establishes the maximum justifiable fee that the City may charge for transit infrastructure. The TSF applies to development in all areas of the City, in addition to an Area Plan with a separately specified transit fee. Area Plan transit fees and the TSF added together may not exceed the nexus amount to ensure compliance with the Mitigation Fee Act.

### 5.1.1 Transit Infrastructure Background

San Francisco has a mature, built-out transportation network providing rights-of-way (streets, sidewalks, bike paths, and separate light rail corridors) for all modes of travel. On a typical weekday, this network accommodates about 3.2 million trips to, from, or within the City.<sup>44</sup> The SFMTA is responsible for regulating or providing all modes of surface transportation within the City including public transit, bicycling, pedestrian planning (partnering with the Department of Public Works), accessibility, parking and traffic management, and taxi regulation. The transportation system is the citywide network of public facilities<sup>45</sup> that support transportation services for all modes of travel (auto, transit, bicycle, and pedestrian). The SFMTA seeks to provide mobility for its customers through whatever mode they choose.

The Municipal Railway (Muni) is San Francisco’s extensive local transit system and is the largest SFMTA operating division. San Francisco is the nation’s second most densely populated major city, and Muni is one of the most heavily ridden transit systems in the country on a per capita basis. The system has over 700,000 boardings on an average weekday. Muni focuses on serving downtown employment centers during the morning and afternoon peak periods and also provides cross-town and neighborhood service. With over 70 bus routes and rail lines nearly all city residents are within two blocks of a Muni stop. With nearly 1,000 vehicles, the Muni fleet is unique and includes historic streetcars, biodiesel and electric hybrid buses, electric trolley coaches, light rail vehicles, paratransit cabs and vans, and cable cars.

The City is a major regional destination for employment, shopping, tourism, and recreation. As a result, connections with other parts of the Bay Area are also critical components of the City’s transportation system. Due to constraints from water bodies and topography, regional gateways for road vehicles are limited to the Golden Gate Bridge to the north, the Bay Bridge to the east, and two highways (Interstate 280 and Hwy. 101) extending south. Caltrans owns and operates the freeways and funds maintenance of the local highway network within San Francisco, including Hwy. 101 (including Van Ness Avenue and Lombard Street), Hwy. 280, Hwy. 1, and Route 35 (Skyline Boulevard).

There is also a transit rail tunnel under the Bay operated by Bay Area Rapid Transit (BART) and terminals to accommodate ferry travel. The primary regional transit operators that serve the City include:

- Alameda-Contra Costa Transit District (“AC Transit” serving Alameda and Contra Costa counties)
- Bay Area Rapid Transit District (“BART” serving Alameda, Contra Costa, and San Mateo counties)
- Golden Gate Bridge, Highway and Transportation District (“Golden Gate Bus” and “Golden Gate Ferry” serving Marin and Sonoma counties)
- Peninsula Corridor Joint Powers Board (“Caltrain” serving San Mateo and Santa Clara counties)
- San Mateo County Transit District (“SamTrans” serving San Mateo County).
- San Francisco Bay Area Water Emergency Transportation Authority (“WETA” or “San Francisco Bay Ferry”)

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<sup>44</sup> San Francisco Transportation Sustainability Fee (TSF) Nexus Study, May 2015. The data cited refers to “trips”, not “trip ends”, as explained in the *Trip Generation* section of Chapter 2.

<sup>45</sup> Private parking lots, shuttles, ride hailing companies, garages, and a few private streets are the only non-public components of the City’s transportation facilities.

servicing Alameda, Marin, and San Mateo counties)

### 5.1.2 Purpose and Use of Revenues

The City's transportation system is already highly congested, including significant transit crowding, under current conditions. Congestion occurs particularly during morning and afternoon commute hours in the same eastern areas of the City that are also expected to experience the most development. Pedestrian and bicycle activity will also increase in congested areas. This increased travel activity will directly affect the performance of the City's transportation system and constrain the City's ability to achieve its transportation system goals.

As a dense and built-out urban environment, the City does not have the option of physically expanding its roadways to accommodate more automobiles. Instead, the City's *Transit First* policy directs investments to transit, bike, and pedestrian modes of travel to improve transportation services within the City and shift travel away from the use of single-occupant autos.<sup>46</sup> These investments include increased transit capacity to relieve crowding on key lines as well as pedestrian and bicycle improvements to support increased walk and bike trips. This investment policy thus benefits all travel modes. Those choosing to travel by transit, bicycle, or walking benefit from improvements to the facilities associated with these modes. Those choosing to drive benefit from the congestion reduction caused by the increased use of transit, bicycle, or pedestrian modes associated with these improvements.

To determine the maximum possible transit fee supported by the nexus, this analysis updates two components of the TSF: one component to fund transit capital maintenance, and one component to fund transit capital facilities, discussed below. Each component is calculated separately and then summed to calculate the TSF. Taken together these two components represent the potential use of fee revenues from either the TSF or any of the Area Plan transit fees. Though the TSF is calculated based on transit maintenance and facilities, fee revenues may be used for pedestrian and bicycle improvements to complement revenue from the Complete Streets fee, including Area Plan complete street fees. Increased pedestrian and bicycle activity have the effect of reducing both auto congestion and transit overcrowding, both of which improve transit levels of service.

#### 5.1.2.1 SFMTA Transit Capital Maintenance Component

The transit capital maintenance component of the TSF is based on the same methodology used in the *2015 TSF Nexus Study* updated using the most currently available input data. Revenues are used for capital maintenance operating costs to improve vehicle reliability thereby expanding transit services. The relationship between development and the transit capital maintenance component is summarized below:

- Need for transit capital maintenance: The impact of development on the need for additional transit capital maintenance is based on maintaining the existing transit level of service (transit LOS) as growth occurs. The existing transit LOS is the current ratio of the supply of transit services (measured by transit revenue service hours) to the level of transportation demand (measured by number of auto plus transit trips). As development generates new trips, the SFMTA must increase the supply of transit services and therefore capital maintenance expenditures to maintain the existing transit LOS.
- Use of TSF transit capital maintenance revenue: The benefit to development from the use of fee revenues comes from improving transit vehicle maintenance that increases the availability of vehicles to increase transit service. SFMTA's transit vehicles include motor coaches (buses), trolley coaches (electric buses), light rail vehicles, historic streetcars, and cable cars. Improved vehicle maintenance directly increases revenue service hours by reducing the amount of time that a vehicle is out of service. Fee revenues associated with the Transit Capital Maintenance Component may not fund capital facilities costs to avoid overlap with the transit capital facilities component of the TSF (see description

<sup>46</sup> City and County of San Francisco, *1996 Charter* (as amended through November 2013), Section 8A.115.

of use of revenues in Section 5.1.2.2, below), nor costs in the two categories excluded from the level of service calculation in Table 5.3 (non-vehicle maintenance costs and general administration).

### 5.1.2.2 Transit Capital Facilities Component

The transit capital facilities component of the TSF is based on the same methodology used in the *2015 TSF Nexus Study*, updated to include the most currently available input data. This component is based on new development’s fair share of transit expansion capital project costs based on the most current list of planned capital projects and programs, constrained to reasonably anticipated funding including the TSF. Examples include transit fleet expansion, improvements to increase SFMTA transit speed and reliability, and improvements to regional transit operators such as Caltrain. The relationship between development and the transit capital facilities component of the TSF is summarized below:

- Need for expanded transit capital facilities: Development increases the need for expanded transit facilities due to increased transit and auto trips. The fair share cost of planned transit facilities is allocated to new development based on trip generation from new development as a percent of total trip generation served by the planned facility, including existing development.
- Use of TSF transit capital facilities component revenue: Fee revenues will benefit new development by funding new or expanded transit capital facilities that will support increased transit services.

## 5.2 Nexus Determination

### 5.2.1 Growth Projections

The TSF nexus analysis is based on citywide development estimates for 2019 and development projections for 2040 to be consistent with projections used for regional transportation planning and provided by the Association of Bay Area Governments (ABAG). These 21-year projections are consistent with the summary projections presented in Section 1.3.3 and used elsewhere in this report, but they are broken down differently for the purposes of the transit infrastructure category. Estimates of growth in dwelling units and jobs, the metrics used to estimate impacts on the transportation system, are summarized in Table 21. In the appendix, Table 44 and Table 45 provide additional detail on the source of the 2019 estimates and 2040 projections.

TABLE 21: GROWTH PROJECTIONS FOR TRANSIT INFRASTRUCTURE (2019 – 2040)<sup>47</sup>

	2019	2040	2019 – 2040 Growth	
			Amount	Percent
<b>Residential</b>				
Households	402,772	483,693	80,921	20%
Housing Units	402,800	509,200	106,400	26%
Vacancy Rate	0.0%	5.0%		
<b>Nonresidential (Jobs)</b>				
Management, Information & Professional Services	422,273	498,633	76,360	18%
Retail/Entertainment	118,350	117,192	(1,158)	(1%)
Cultural/Institution/Education	91,319	90,848	(471)	(1%)
Medical and Health Services	49,064	67,292	18,228	37%
Visitor Services	25,581	24,788	(793)	(3%)
Production, Distribution, Repair	61,773	73,757	11,984	19%
<b>Total Employment</b>	<b>768,360</b>	<b>872,510</b>	<b>104,150</b>	<b>14%</b>

<sup>47</sup> Table 44 and Table 45.

The growth projections summarized in Table 21 are converted to motorized vehicle trip generation and summarized in Table 22. In the appendix, Table 44 through Table 46 provide detail on the calculation of trip generation based on the land use data and the trip generation rates shown in Appendix Table 47.

TABLE 22: SUMMARY OF TRIP GENERATION<sup>48</sup>

	Trip Generation 2019	Trip Generation 2040	Growth in Trip Generation
Housing	2,066,000	2,439,000	373,000
Nonresidential (ex. PDR)	5,018,000	5,304,000	286,000
Production, Distribution, Repair (PDR)	237,000	282,000	45,000
Total	7,321,000	8,025,000	704,000

## 5.2.2 LOS Metric

### 5.2.2.1 SFMTA Transit Capital Maintenance Component

As explained in the *2021 San Francisco Infrastructure Level of Service Analysis*, the LOS metric for transit capital maintenance is the current ratio of the supply of transit services (measured by transit revenue service hours) to the level of transportation demand (measured by number of auto plus transit trips). The calculation includes both transit and auto trips because an increase in the former generates additional demand for transit, and an increase in the latter generates additional transit delays due to increased auto congestion causing a need for additional transit service. The current LOS standard is 1.45 revenue service hours per 1,000 daily trips.

### 5.2.2.2 Transit Capital Facilities Component

As explained in the *2021 San Francisco Infrastructure Level of Service Analysis*, the LOS metric for transit capital facilities is measured in terms of passenger miles traveled in crowded versus uncrowded conditions systemwide on an average daily basis. The analysis in that report indicated that in 2040, despite improvements in transit infrastructure, crowding will increase to 20 percent from the existing LOS standard of 15 percent.

## 5.2.3 Nexus Methodology & Fee Calculation

### 5.2.3.1 Transit Capital Maintenance Component

The TSF accommodates the impact of development by funding additional SFMTA transit capital maintenance to maintain the existing SFMTA transit LOS. As discussed above, transit LOS is based on the existing number of revenue service hours per trip (amount of transit service divided by transit plus auto person trips). The net cost per revenue service hour is shown in Table 23. Non-vehicle maintenance costs and general administrative costs are deducted because these costs are not directly related to providing expanded transit service. Fare box revenue is also deducted because transit system users from development projects would pay fares to offset costs. Other SFMTA funding is not deducted because it is not restricted to uses that increase service. Capital expenditures and funding are not included in the transit capital maintenance component of the TSF. The transit capital impacts of development are addressed separately in the transit capital facilities component of the TSF (see next section).

<sup>48</sup> Table 44, Table 45, and Table 46: San Francisco Development and Trip Generation 2040.

TABLE 23: NET ANNUAL COST PER REVENUE SERVICE HOUR<sup>49</sup>

	Formula	Amount
Total Operating Costs	a	\$819,700,000
Excluded Operating Costs & Deduct Farebox Revenue		
Non-Vehicle Maintenance	b	\$ (82,900,000)
General Administration	c	(145,400,000)
Farebox Revenue	d	(197,000,000)
Subtotal	e = b + c + d	(425,300,000)
Net Annual Costs	f = a + e	\$394,400,000
Average Daily Revenue Service Hours	g	10,646
Net Annual Cost per Daily Revenue Service Hour	h = f / g	\$37,047

The maximum justified fee for the transit capital maintenance component is based on the net annual cost per revenue service hour converted to a cost per trip. The cost per trip takes into account that the fee is paid once when a development project receives a building permit, but transit service must be provided for years following to serve that development project. The net annual cost per trip is multiplied by a net present value factor representing the funding needed over a 45-year period to provide the additional transit service. These calculations are shown in Table 24, with supporting calculations shown in the appendix, Table 48 and Table 49.

TABLE 24: TRANSIT CAPITAL MAINTENANCE COST PER TRIP<sup>50</sup>

	Formula	Amount
Net Annual Cost per Revenue Service Hour	a	\$37,047
Revenue Service Hours per 1,000 Average Daily Trips	b	1.45
Net Annual Cost per Average Daily Trip <sup>51</sup>	c = a * b / 1,000	\$53.72
Net Present Value Factor <sup>52</sup>	d	73.93
Total Cost per Trip	e = c * d	\$3,972

The maximum justified transit capital maintenance component of the TSF is based on the cost per trip shown in Table 24 multiplied by the trip generation rates for each economic activity category from Table 46: San Francisco Development and Trip Generation 2040 46. Because cost inputs from Table 24 are based on 2017 data, the fee is inflated to 2020 using the City's annual infrastructure construction cost inflation index. The maximum justified fee is shown in Table 25. The variance in the fee by economic activity category based on trip generation, and the scaling of the fee based on the size of the development project, supports a reasonable relationship between the amount of the fee and the share of transit capital maintenance attributable to each development project.

<sup>49</sup> U.S. Department of Transportation, Federal Transit Administration, National Transit Database, 2017 Annual Database Operating Expense (<https://www.transit.dot.gov/ntd/data-product/2017-annual-database-operating-expense>); Table 21.

<sup>50</sup> 2021 San Francisco Infrastructure Level of Service Analysis, Table 18; Table 23 and Table 49.

<sup>51</sup> Auto and transit trips only. Excludes bicycle and pedestrian trips.

<sup>52</sup> Net present value factor represents the multiplier for \$1.00 in annual costs to be fully funded over a 45-year period, given interest earnings and inflation.

TABLE 25: TRANSIT CAPITAL MAINTENANCE COMPONENT MAXIMUM JUSTIFIED FEE<sup>53</sup>

Economic Activity Category	Cost per Trip	Trip Generation Rate (per 1,000 sq. ft.)	Maximum Justified Transit Capital Maintenance Fee (2017\$) (per sq. ft.)	Maximum Justified Transit Capital Maintenance Fee (2020\$) (per sq. ft.)
Residential	\$3,972	3.48	\$13.82	\$16.34
Nonresidential (ex. PDR)	\$3,972	12.02	\$47.74	\$56.46
Production, Distribution, Repair (PDR)	\$3,972	6.72	\$26.69	\$31.56

### 5.2.3.2 Transit Capital Facilities Component

The impact of increased trip generation from development on the need for expanded transit capital facilities is accommodated by a list of major proposed projects and programs drawn from the SFMTA's most recent long-range plan, the Transportation 2045 report (T2045). Only projects and programs that directly address transit overcrowding by maintaining or expanding transit facilities or that otherwise improve transit service are anticipated to be funded in part by TSF revenue are included in this nexus analysis. The total cost of each project or program is allocated to new development and the TSF is based on one of the following two fair share cost allocation methods:

- Method 1: If the project or program includes both replacement and expansion of an existing transit facility then the total cost is allocated to trips generated by existing and new (2019-2040) development because all development is assumed to be associated with the need for the project or program. Existing development is based on 2019 land use and new development includes all development, Citywide.
- Method 2: If the project or program only provides expanded transit capacity needed to serve demand from new development then the total cost is allocated only to trips generated by new development, because only new development is associated with the need for the project or program.

As shown in Table 26, Method 1 results in an allocation of 8.8 percent of the total cost to new development and the TSF. Method 2 results in an allocation of 100 percent of total cost to new development and the TSF.

TABLE 26: TRIP GENERATION SHARES<sup>54</sup>

Development	Trip Generation	Method 1	Method 2
		Growth Share of 2040 Total	Growth Only
2019 Development	7,321,000	91.2%	NA
2019-2040 Development	704,000	8.8%	100.0%
2040 Development	8,025,000	100.0%	NA

The planned projects and programs used to calculate the transit capital facilities component of the TSF are

<sup>53</sup> Table 24, Table 46: San Francisco Development and Trip Generation 2040, and One SF, *2020 Annual Infrastructure Construction Cost Inflation Estimate*, October 21, 2019.

<sup>54</sup> Table 44, Table 45, and Table 46: San Francisco Development and Trip Generation 2040.

shown in Table 27. The planned facilities and costs are identified in supporting documents for the T2045 report (*San Francisco Transportation 2045 Task Force Report*, January 2018). All costs reflect 2017 dollars. The planned projects and programs are shown in three major facility categories:

- Muni Fleet, Facilities and Infrastructure
- Transit Optimization and Expansion
- Regional Transit and Smart Systems Management

Total costs are reduced by 19 percent (to 81 percent of total) to adjust from a 2045 to a 2040 planning horizon, consistent with the growth projections used in this analysis. Furthermore, based on the 2045 projections of costs and funding, currently anticipated funding from existing revenue sources is about 30 percent of total estimated costs. Therefore, total costs are reduced to a level where existing anticipated revenue sources excluding TSF revenue are 70 percent of total costs. Remaining costs would be funded by the TSF and new revenue sources to be identified over the 20-year period.

TABLE 27: TRANSIT CAPITAL FACILITIES (\$ MILLION)<sup>55</sup>

Expenditure Category / Project or Program	Total 2045 Cost (in millions)	Total 2040 Cost (in millions)	Total 2040 Cost (Revised) <sup>56</sup> (in millions)
<b>Muni Fleet, Facilities and &amp; Infrastructure</b>			
Facilities, New	\$1,111	\$900	\$141
Facilities, State of Good Repair	3,593	2,910	1,471
Fixed Guideway, State of Good Repair	1,363	1,104	853
Fleet, New	827	670	289
Fleet, State of Good Repair	5,862	4,748	2,234
Subtotal	\$12,756	\$10,332	\$4,988
<b>Transit Optimization &amp; Expansion</b>			
Core Capacity & Transit Enhancements	\$1,743	\$1,412	\$1,177
Major Capital Projects	\$5,853	\$4,741	\$1,397
Muni Forward	525	425	87
Subtotal	\$8,121	\$6,578	\$2,661
<b>Regional Transit &amp; Smart Systems Management</b>			
Caltrain Modernization & SOGR, SF share	\$285	\$231	\$130
BART Vehicles (SF Share)	200	162	-
Downtown Caltrain Extension (DTX) (SF share)	387	313	43
Smart Technology	210	170	54
Transportation Demand Management	145	117	41
Subtotal	\$1,227	\$994	\$268
<b>Total</b>	<b>\$22,103</b>	<b>\$17,904</b>	<b>\$7,917</b>

<sup>55</sup> SFMTA supporting documents prepared for the *San Francisco Transportation 2045 Task Force Report*, January 2018. "SOGR" is "State of Good Repair".

<sup>56</sup> To reflect funding constraints, total 2040 costs are reduced so that reasonably anticipated funding by 2040 (see Table 29), exclusive of TSF revenue and new revenue sources to be identified, is 70 percent of costs.

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Table 28 displays the reasonably anticipated funding from existing transit capital facilities revenue sources other than TSF revenue for each of the projects and programs listed in Table 27. Other anticipated sources of revenue include federal, state, regional and local revenues, and were identified in supporting documents for the T2045 report. The “Local” column in the table does not include TSF funding.

The total CIP cost is then allocated to new development and existing development based on the allocation methods discussed above depending on whether the capital improvement item is needed solely as a result of new development, or if the improvement is needed to serve both existing and future development. This allocation is detailed in Table 29.

TABLE 28: TRANSIT CAPITAL FACILITIES ANTICIPATED FUNDING (\$ MILLION)<sup>57</sup>

Expenditure Category / Project or Program	Federal	State	Regional	Local <sup>58</sup>	2045 Total Anticipated Funding	2040 Total Anticipated Funding <sup>59</sup>
<b>Muni Fleet, Facilities &amp; Infrastructure</b>						
Facilities, New	\$ -	\$123	\$ -	\$ -	\$ 123	\$ 99
Facilities, State of Good Repair	583	267	-	422	1,272	1,030
Fixed Guideway, State of Good Repair	262	212	100	163	737	597
Fleet, New	81	123	-	45	249	202
Fleet, State of Good Repair	1,203	267	-	460	1,931	1,564
Subtotal	\$2,130	\$991	\$100	\$1,090	\$4,311	\$3,492
<b>Transit Optimization and Expansion</b>						
Core Capacity & Transit Enhancements	\$659	\$246	\$ -	\$113	\$1,017	\$824
Major Capital Projects	628	442	-	137	1,207	978
Muni Forward	-	-	-	75	75	61
Subtotal	\$1,288	\$688	\$ -	\$325	\$2,300	\$1,863
<b>Regional Transit and Smart Systems Management</b>						
Caltrain Modernization & SOGR (SF share)	\$20	\$49	\$ -	\$42	\$112	\$91
BART Vehicles (SF share)	-	-	-	-	-	-
Downtown Caltrain Extension (DTX) (SF share)	-	-	-	37	37	30
Smart Technology	-	-	26	21	47	38
Transportation Demand Management	-	30	-	6	36	29
Subtotal	\$20	\$79	\$26	\$105	\$231	\$188
<b>Total</b>	<b>\$3,438</b>	<b>\$1,758</b>	<b>\$126</b>	<b>\$1,521</b>	<b>\$6,842</b>	<b>\$5,543</b>

<sup>57</sup> SFMTA supporting documents prepared for the *San Francisco Transportation 2045 Task Force Report*, January 2018. “SOGR” is “State of Good Repair”.

<sup>58</sup> Excludes TSF revenue.

<sup>59</sup> T2045 costs reduced 19 percent to reflect 2040 planning horizon.

TABLE 29: TRANSIT CAPITAL FACILITIES FAIR SHARE COST ALLOCATION (\$ MILLION)<sup>60</sup>

Expenditure Category / Project or Program	Total CIP Cost (in millions)	Allocation Method <sup>61</sup>	Fair Share Cost Allocation	Existing Development (2019)	Potential TSF Cost Share
<b>Muni Fleet, Facilities &amp; Infrastructure</b>					
Facilities, New	\$ 141	2	100.0%	\$ -	\$ 141
Facilities, State of Good Repair	1,471	1	8.8%	1,342	129
Fixed Guideway, State of Good Repair	853	1	8.8%	778	75
Fleet, New	289	2	100.0%	-	289
Fleet, State of Good Repair	2,234	1	8.8%	2,037	197
Subtotal	\$4,988			\$4,157	\$ 831
<b>Transit Optimization and Expansion</b>					
Core Capacity & Transit Enhancements	\$1,177	2	100.0%	\$ -	\$1,177
Major Capital Projects	1,397	2	100.0%	-	1,397
Muni Forward	87	1	8.8%	-	87
Subtotal	\$2,661			\$ -	\$2,661
<b>Regional Transit and Smart Systems Management</b>					
Caltrain Modernization & SOGR (SF share)	\$ 130	1	8.8%	\$ 119	\$ 11
BART Vehicles (SF share)	-	2	100.0%	-	-
Downtown Caltrain Extension (DTX) (SF share)	43	1	8.8%	39	4
Smart Technology	54	1	8.8%	49	5
Transportation Demand Management	41	1	8.8%	37	4
Subtotal	\$ 268			\$244	\$ 24
<b>Total</b>	<b>\$7,917</b>			<b>\$4,401</b>	<b>\$3,516</b>

<sup>60</sup> Table 26 and Table 27.<sup>61</sup> Method 1 allocates costs based on total trip generation in 2040 (existing and new development). Method 2 allocates costs based only on trip generation from new development (2019-2040).

The potential TSF cost share shown in Table 30 must be adjusted for anticipated funding to calculate the maximum justified funding that could be provided by the TSF. Maximum justified TSF funding is based on applying any estimated funding from existing revenue sources after funding of the existing development cost share. Anticipated funding is first allocated to the existing development cost share. Any funding remaining after allocation to the existing development cost share is then deducted from the TSF cost share. Table 30 shows the maximum justified TSF funding for the transit capital facilities component based on this approach.

TABLE 30: TRANSIT CAPITAL FACILITIES MAXIMUM JUSTIFIED TSF FUNDING SHARE (\$ MILLION)<sup>62</sup>

Expenditure Category / Project or Program	Total Programmed Funding	Existing Development Cost Share	Net Programmed Funding Available For TSF Cost Share	Potential TSF Cost Share	Maximum Justified TSF Funding
<i>Formula</i>	<i>a</i>	<i>b</i>	<i>c = a - b<sup>63</sup></i>	<i>d</i>	<i>e = d - c</i>
<b>Muni Fleet, Facilities &amp; Infrastructure</b>					
Facilities, New	\$99	\$ -	\$99	\$141	\$42
Facilities, State of Good Repair	1,030	1,342	-	129	129
Fixed Guideway, State of Good Repair	597	778	-	75	75
Fleet, New	202	-	202	289	87
Fleet, State of Good Repair	1,564	2,037	-	197	197
Subtotal	\$3,492	\$4,157	\$301	\$831	\$530
<b>Transit Optimization and Expansion</b>					
Core Capacity & Transit Enhancements	\$824	\$ -	\$824	\$1,177	\$353
Major Capital Projects	978	-	978	1,397	419
Muni Forward	61	-	61	87	26
Subtotal	\$1,863	\$ -	\$1,863	\$2,661	\$798
<b>Regional Transit and Smart Systems Management</b>					
Caltrain Modernization & SOGR	\$91	\$119	\$ -	\$11	\$11
BART Vehicles (SF share)	-	-	-	-	-
Downtown Caltrain Extension (DTX)	30	39	-	4	4
Smart Technology	38	49	-	5	5
Transportation Demand Management	29	37	-	4	4
Subtotal	\$188	\$ 244	\$ -	\$24	\$24
<b>Total</b>	<b>\$5,543</b>	<b>\$4,401</b>	<b>\$2,164</b>	<b>\$3,516</b>	<b>\$1,352</b>

The fee schedule for the TSF transit capital facilities component is based on the maximum justified cost per trip and is shown in Table 31. The cost per trip is based on the maximum justified TSF and the total number of trips generated by new development.

<sup>62</sup> Table 28 and Table 29.

<sup>63</sup> Unless negative, then \$0.

TABLE 31: TRANSIT CAPITAL FACILITIES COST PER TRIP<sup>64</sup>

	Amount
Maximum Justified TSF Funding	\$1,352,000,000
Total Trip Generation	704,000
Cost per Trip	\$1,920

The maximum justified fee for each economic activity category is based on the cost per trip shown in Table 31 multiplied by the trip generation rates for each category. The maximum justified fee schedule is shown in Table 32. The variance in the fee by economic activity category based on trip generation, and the scaling of the fee based on the size of the development project, supports a reasonable relationship between the amount of the fee and the share of transit capital facilities attributable to each development project.

TABLE 32: TRANSIT CAPITAL FACILITIES COMPONENT MAXIMUM JUSTIFIED FEE<sup>65</sup>

Economic Activity Category	Cost per Trip	Trip Generation Rate (per 1,000 sq. ft.)	Maximum Justified Transit Capital Facilities Fee (2017 \$) (per sq. ft.)	Maximum Justified Transit Capital Facilities Fee (\$2020) (per sq. ft.)
Residential	\$1,920	3.48	\$6.68	\$7.90
Nonresidential (excl. PDR)	\$1,920	12.02	\$23.08	\$27.29
Production, Distribution, Repair (PDR)	\$1,920	6.72	\$12.90	\$15.26

### 5.3 Nexus Findings

The maximum justified Transportation Sustainability Fee is the sum of the two component fees presented in this chapter. The maximum justified TSF is shown in Table 33 per square foot of building space. As explained in the introduction to this chapter, the TSF establishes the maximum justifiable fee that the City may charge for transit infrastructure. The City also imposes various transit fees through area plans in addition to the citywide TSF. Area Plan transit fees and the TSF added together may not exceed the nexus amount to ensure compliance with the Mitigation Fee Act Area. Thus, the maximum justified TSF represents the maximum justified transit fee that the City can adopt either citywide or through an area plan.

<sup>64</sup> Table 22 and Table 30.

<sup>65</sup> Table 31 and Table 46.

TABLE 33: MAXIMUM JUSTIFIED TSF

Economic Activity Category	Maximum Justified Transit Fee per Square Foot including Area Plan Fees		
	Maximum Justified Transit Sustainability Fee		
	Transit Capital Maintenance	Transit Capital Facilities	Total
	Residential	\$16.34	\$7.90
Nonresidential (ex. PDR)	\$56.46	\$27.29	\$83.75
Production, Distribution, Repair (PDR)	\$31.56	\$15.26	\$46.82

As Table 34 demonstrates, the highest current total transit impact fees are less than the maximum amount supported by the nexus analysis for non-residential development. The maximum supportable non-residential nexus fee is 110 percent of the existing highest non-residential transit fee. For residential development, the highest existing transit fee occurs in areas subject to the combined TSF, Eastern Neighborhoods, and Central SoMa Infrastructure fees. In those areas the existing transit fee is higher than the maximum supported by the nexus analysis. The maximum supportable residential nexus fee is 74 percent of the combined transit fees in those areas. In Ordinance No. 47-21, the Board of Supervisors amended Section 433.3 to clarify that the permissible uses of the Central SoMa Infrastructure fees include recreation and open space infrastructure projects, as envisioned by the Central SoMa Implementation Strategy. As stated in the ‘Note-to-File: Distribution of Funds Collected from the Central SoMa Infrastructure Fee’ from SF Planning included in section 10.3 of the Appendix, of the \$20 Residential Central SoMa Infrastructure fee for Tier B projects (in 2019 dollars) no more than \$9.53 would go toward transit, leaving at least \$10.47 to go toward Recreation and Open Space. Therefore, the combination of the EN Infrastructure Fee revenue going toward transit, the Central SoMa Infrastructure Fee revenue going toward transit and the TSF is no greater than the nexus amount established in Table 34 below.

Table 34: Comparing Proposed Maximum Supportable Transit Infrastructure Fees to Existing (2019) Fees

	Proposed (Max)	Existing (Max)	Percent of Existing Fee Covered by Maximum Supportable Nexus (Maximum/Existing)	Proposed Max > 10% Above Existing
Residential (\$/GSF)	\$24.24	\$22.04	110%	YES
PDR (\$/GSF)	\$46.82	\$9.45	495%	YES
Non-Residential (ex. PDR) (\$/GSF)	\$83.75	\$76.52	110%	YES

## 6 Library Facilities

This chapter summarizes the nexus analysis for library facilities. After providing brief background, this chapter will outline the relevant growth assumptions, the LOS standard developed in the associated *2021 San Francisco Infrastructure Level of Service Analysis*, the methodology used to determine the nexus fee, and the final determination of the nexus fee.

## 6.1 Introduction

### 6.1.1 Library Facilities Background

Library facilities serve a vital role in the San Francisco community fabric. In addition to traditional offerings like recreational books and research resources, libraries serve as community gathering sites, aid patrons in accessing government resources such as employment services and tax filing, and provide internet services to the San Francisco public, especially important for those who do not have access to the internet elsewhere in their life. Essential to all these offerings is the infrastructure necessary to provide space and equipment.

As new residential and non-residential development occurs, it brings an increased demand for new (or expanded and improved) library infrastructure. This relationship between new development, an influx of residents, and a demand for library infrastructure provides the nexus for an impact fee. Library facility fees, imposed on new development, are collected to help fund the construction of new library infrastructure for the additional residents directly attributable to new development.

Note that the library facilities methodology analyzes increased demand based on projected residential growth, rather than growth in both residents and employees. This is because, although any California resident can obtain a San Francisco library card, library users typically use libraries closer to their home, and non-resident workers in San Francisco are no more likely to use San Francisco libraries than other residents of the Bay Area who live outside of the City.<sup>66</sup> Furthermore, a survey of infrastructure standards in other cities across North America found that library infrastructure is typically measured against residents, not service population units. For more information, see the *2021 San Francisco Infrastructure Level of Service Analysis*.

### 6.1.2 Purpose and Use of Revenues

Currently, the City does not charge development impact fees for library infrastructure. The primary purpose of a library facilities impact fee would be to fund expansion of San Francisco's public library capacity to meet the demand generated by new development. That is, impact fee revenues would be intended to mitigate the library demands of the increasing population. Monies from the library impact fee may only be used to fund capital library projects and facilities.

Note that library facilities include a wide range of capital needs: buildings to house library branches and central destinations, computers to provide internet access to the public, tables and chairs to provide study areas and community meeting spaces, bookshelves, and of course lending and reference materials such as books, magazines, and newspapers.<sup>67</sup> In addition, providing internet for job applications and other necessary functions for individuals with no other internet access is a vital function for City residents.<sup>68</sup> Serving as a community gathering site is also rapidly becoming one of the most important characteristics public libraries offer the San Francisco community.<sup>69</sup>

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

## 6.2 Nexus Determination

The maximum supportable fee calculation for library facilities combines the proposed library infrastructure

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<sup>66</sup> Conversation with SFPL staff on June 26, 2019.

<sup>67</sup> A sample of San Francisco Public Library infrastructure items can be found in the Main Library Fact Sheet: <https://sfpl.org/sites/default/files/pdf/libraries/main/about/mainlibraryfactsheet.pdf>. Accessed March 11, 2020.

<sup>68</sup> American Library Association, *State of America's Libraries Report 2019*.

<sup>69</sup> Discussion with Planning Department and library staff, October 23, 2019, and April 16, 2020.

provision LOS metric with total population growth projection and the cost to provide library facilities.

### 6.2.1 LOS Metric

Although library infrastructure comprises a wide range of components as discussed in Purpose and Use of Revenues above, the LOS metric put forth in the *2021 San Francisco Infrastructure Level of Service Analysis* – square feet of library space per resident – encompasses, undifferentiated, library facilities of all types.

As noted in the *2021 San Francisco Infrastructure Level of Service Analysis*, the City currently provides 0.67 square feet of library space per City resident, and has a short-term goal of continuing to provide at least 0.6 square feet of library space per new resident. Note that this short-term goal represents a 10 percent reduction from the current level of service, and is in line with San Francisco Public Library (SFPL)’s plans for expansion in the near future.<sup>70</sup> For more information, see the *2021 San Francisco Infrastructure Level of Service Analysis*. This metric assumes that for each new resident, the City will provide an equivalent level of service, whether it comes in the form of new library space or capacity improvements to existing library space (see Nexus Methodology & Fee Calculation section below for more detail).

### 6.2.2 Growth Projections

The horizon for projected growth in demand for library facilities is 2025. Between 2019 and 2025, San Francisco is projected to gain 73,584 residents (Table 35). Note that, although the development and fee collection is projected to occur between 2019 and 2025, infrastructure acquisition and development cannot occur until after fee collection, and may not be completed by 2025.

TABLE 35: GROWTH PROJECTIONS FOR LIBRARY INFRASTRUCTURE (2019 - 2025)

	2019	2025	Growth (2019 - 2025)	Percent Increase
<b>Population</b>				
Residents	908,336	981,920	73,584	8.1%

### 6.2.3 Nexus Methodology & Fee Calculation

The fee calculation methodology (Table 36) calculates the total cost of increasing library space to serve new residents (2019-2025). The fee is based on the gross square feet (GSF) of residential development due to the new resident population.

TABLE 36: NEXUS METHODOLOGY FOR LIBRARY INFRASTRUCTURE FEE

*	Measure	Value	Source/Calculation
<b>Service Population</b>			
A	Current residential population (2019)	908,339	Table 35
B	Projected residential population growth (2019-2025)	73,584	Table 35
<b>Unit Conversions</b>			
C	GSF of residential development per SPU	443	Table 4
D	GSF of commercial development per SPU	N/A	N/A
<b>Metric</b>			
E	Total square feet of all libraries (2019)	605,574	<i>2021 San Francisco</i>

<sup>70</sup> Confirmed in a meeting with SFPL staff on April 16<sup>th</sup>, 2020.

			<i>Infrastructure Level of Service Analysis</i>
F	Square feet of library per resident	0.6	<i>2021 San Francisco Infrastructure Level of Service Analysis</i>
<b>Cost</b>			
G	Incremental square feet of library required to maintain LOS	44,152	B * F
H	Cost of adding library space (\$/square foot)	\$1,760	Email from Randle McClure, SFPL, 9/16/2019
I	Total Cost for incremental library space	\$77,706,842.66	G * H
J	Administrative costs (5% of fee)	\$3,885,342	SF Planning
K	Total attributable cost with administrative costs	\$81,592,185	I + J
<b>Maximum Supportable Impact Fees</b>			
Residential (\$/GSF)		\$2.50	K / (B * C)
Non-Residential (\$/GSF)		N/A	N/A

### 6.3 Nexus Findings

Based on the approach in Table 36, the maximum supportable residential fee is \$2.50 per gross square foot. This study does not consider the supportability of a library facilities fee for commercial development.

TABLE 37: MAXIMUM SUPPORTABLE IMPACT FEES FOR LIBRARY INFRASTRUCTURE

	Maximum Supportable Citywide Fee
<b>Total Library Fee</b>	
Residential (\$/GSF)	\$2.50
Non-Residential (\$/GSF)	N/A

## 7 Fire Department Facilities

This chapter summarizes the nexus analysis for fire department facilities. After providing brief background, this chapter will outline the relevant growth assumptions, the LOS standard developed in the associated *2021 San Francisco Infrastructure Level of Service Analysis*, the methodology used to determine the maximum supportable impact fee, and the final determination of the maximum supportable impact fee.

### 7.1 Introduction

#### 7.1.1 Fire Department Facilities Background

The San Francisco Fire Department (SFFD) provides vital emergency services to residents and employees in the City of San Francisco. Its services can largely be divided into two categories: fire suppression and emergency medical services (EMS). EMS in particular has been a rapidly-growing need over the last several years in the City.<sup>71</sup> For both fire suppression and EMS, fire department facilities play an essential role in providing emergency services. Stations must be located throughout the City to ensure response times are sufficiently

<sup>71</sup> Meeting with Jesus Mora and Olivia Scanlon, Fire Department staff, September 6, 2019.

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fast. Ambulances and fire engines need to be available to transport personnel and equipment necessary to perform services.

As new residential and non-residential development occurs, it brings an increased demand for new (or expanded and improved) fire department infrastructure. This relationship between new development, an influx of residents and employees, and a demand for fire department infrastructure provides the nexus for an impact fee. Fire department facility fees, imposed on new development, help fund the construction of new fire department infrastructure for the additional residents and employees directly attributable to new development.

### 7.1.2 Purpose and Use of Revenues

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

Fire department facilities include two main categories of capital needs: buildings and vehicles. Examples of fire department buildings include fire houses and ambulance deployment centers, both essential facilities for providing fire suppression and EMS services. Vehicles primarily consist of fire engines and ambulances, and tend to move around different fire department buildings and other parts of the City depending on need.<sup>72</sup>

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

## 7.2 Nexus Determination

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

### 7.2.1 LOS Metric

Because department infrastructure encompasses a wide range of components, the LOS metric put forth in the *2021 San Francisco Infrastructure Level of Service Analysis* – fire department facilities per service population unit – serves as a proxy for all types of fire department infrastructure, and reflects the level of investment that the City has committed to making in fire suppression and EMS infrastructure.

As noted in the *2021 San Francisco Infrastructure Level of Service Analysis*, the City is currently responsible for providing 0.034 fire department facilities per service population unit, and aims to maintain this provision into the future. 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 fire department buildings or capacity improvements to existing fire department facilities by adding new capital infrastructure such as vehicles.

### 7.2.2 Growth Projections

The horizon for projected growth in demand for fire department facilities is 2025. Between 2019 and 2025, San Francisco is projected to gain 73,584 residents and 55,145 jobs (Table 38). Note that, although the development and fee collection is projected to occur between 2019 and 2025, infrastructure acquisition and development cannot occur until after fee collection, and may not be completed by 2025.

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<sup>72</sup> Meeting with Jesus Mora and Olivia Scanlon, Fire Department staff, September 6, 2019.

TABLE 38: GROWTH PROJECTIONS FOR FIRE DEPARTMENT INFRASTRUCTURE (2019 - 2025)

	2019	2025	Growth (2019 - 2025)	Percent Increase
<b>Population</b>				
Residents	908,336	981,920	73,584	8.1%
<b>Employment</b>				
Jobs	768,360	823,505	55,145	7.2%
<b>Service Population Units (SPU)</b>				
SPU	1,292,516	1,393,673	101,157	7.8%

### 7.2.3 Nexus Methodology & Fee Calculation

The fee calculation methodology (Table 40) calculates the total cost of providing adequate fire department facilities for San Francisco's service population (2019-2025).

In order to assign a development cost to the new infrastructure, Table 39 estimates the total replacement cost of existing fire department infrastructure. Table 40 then apportions this cost per fire department facility and applies that cost to the new facilities necessary to maintain the current level of service into 2025.

TABLE 39: SELECT FIRE DEPARTMENT INFRASTRUCTURE INVENTORY AND COSTS<sup>73</sup>

SFFD Infrastructure Type	Number	Unit Cost	Total Replacement Cost
<b>Vehicles</b>			
Ambulance <sup>74</sup>	82	\$133,802	\$10,971,764
Chief <sup>75</sup>	19	\$42,324	\$804,156
Engine <sup>76</sup>	81	\$586,939	\$47,542,059
Specialty <sup>77</sup>	23	\$723,824	\$16,647,952
Truck <sup>78</sup>	42	\$1,324,545	\$55,630,890
<b>Buildings</b>			
Fire Houses	43	\$15,000,000	\$645,000,000
Ambulance Deployment Center	1	\$45,000,000	\$45,000,000
<b>Totals</b>			
<b>Vehicle Subtotal</b>			\$131,596,821
<b>Building Subtotal</b>			\$690,000,000
<b>Total Infrastructure Cost</b>			\$821,596,821

<sup>73</sup> Fire Department infrastructure inventory and costs provided by Jesus Mora, SFFD staff, in an email from September 12, 2019.

<sup>74</sup> "The Medic Unit's [Ambulance's] priority is emergency medical assistance." *San Francisco Fire Department Apparatus Inventory*, August 2009.

<sup>75</sup> "The Chief Vehicle is used by Battalions and Divisions. It is the command vehicle and has the capacity to serve as a command post." *San Francisco Fire Department Apparatus Inventory*, August 2009.

<sup>76</sup> "The Engine's first priority is fire extinguishment. Subsequent priorities include rescue and emergency medical assistance." *San Francisco Fire Department Apparatus Inventory*, August 2009.

<sup>77</sup> Specialty vehicles consist of a number of other SFFD unit types, including CO2 Unit, Mini Pumper, Mobile Air, Pollution Control Unit, Utility Unit, Surf Rescue Unit, Fireboat, and Hazardous Materials Unit. *San Francisco Fire Department Apparatus Inventory*, August 2009.

<sup>78</sup> "The Truck's first priority is rescue. Subsequent priorities include ventilation, salvage and overhaul." *San Francisco Fire Department Apparatus Inventory*, August 2009.

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 40: NEXUS METHODOLOGY FOR FIRE DEPARTMENT INFRASTRUCTURE FEE

*	Measure	Value	Source/Calculation
<b>Service Population</b>			
A.1	Current residential population (2019)	908,339	Table 38
A.2	Projected residential population growth (2019-2025)	73,584	Table 38
B.1	Current service population (2019)	1,292,516	Table 38
B.2	Projected service population growth (2019-2025)	101,157	Table 38
<b>Unit Conversions</b>			
C	GSF of residential development per SPU	443	Table 4
D	GSF of commercial development per SPU	620	Table 4
<b>Metric</b>			
E	Total number of fire department facilities (2019)	44	2021 San Francisco Infrastructure Level of Service Analysis
F	SFFD facilities per 1,000 service population units	0.034	2021 San Francisco Infrastructure Level of Service Analysis
<b>Cost</b>			
G	Incremental fire department facilities required to maintain LOS	3.4	$(B.2 / 1,000) * F$
H	Total cost of providing fire department facilities at current LOS	\$821,596,821	Table 39
I	Cost per current facility	\$18,672,655	H / E
J	Cost attributable to incremental growth	\$64,300,836	I * G
K	Administrative costs (5% of fee)	\$3,215,042	SF Planning
L	Total attributable cost with administrative costs	\$67,515,877	N + O
<b>Maximum Supportable Impact Fees</b>			
Residential (\$/GSF)		<b>\$1.51</b>	$L / (B * C)$
Non-Residential (\$/GSF)		<b>\$1.08</b>	$L / (B * D)$

### 7.3 Nexus Findings

Based on the approach in Table 40, the maximum supportable residential fee is \$1.51 per gross square foot, and the maximum supportable non-residential fee is \$1.08 per gross square foot.

TABLE 41: MAXIMUM SUPPORTABLE IMPACT FEES FOR FIRE DEPARTMENT INFRASTRUCTURE

	Maximum Supportable Citywide Fee
<b>Total Firefighting Fee</b>	
Residential (\$/GSF)	\$1.51
Non-Residential (\$/GSF)	\$1.08

## 8 Conclusion

As described in the previous sections, the maximum supportable fees determined for the six infrastructure categories (recreational and open space, child care, complete streets, transit, library, and fire department infrastructure) mostly exceed the highest current fees charged at either the citywide or neighborhood level, with the exception of the residential child care and transit fees. 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, and establishes a nexus for two new fees to be added.

TABLE 42: MAXIMUM SUPPORTABLE FEES PER INFRASTRUCTURE CATEGORY (2019)

Citywide Nexus Fees	Maximum Supportable Fee
<b>Recreational and Open Space</b>	
Residential (\$/GSF)	\$46.22
Non-Residential (\$/GSF)	\$33.05
<b>Child Care</b>	
Residential (\$/GSF)	\$2.47
Non-Residential (\$/GSF)	\$4.86
<b>Complete Streets: Citywide</b>	
Residential (\$/GSF)	\$16.19
Non-Residential (\$/GSF)	\$11.58
<b>Complete Streets: Downtown</b>	
Residential (\$/GSF)	\$19.42
Non-Residential (\$/GSF)	\$13.89
<b>Transit</b>	
Residential (\$/GSF)	\$24.24
Production, Distribution, and Repair (PDR) (\$/GSF)	\$46.82
Non-Residential (ex. PDR) (\$/GSF)	\$83.75
<b>Libraries</b>	
Residential (\$/GSF)	\$2.50
Non-Residential (\$/GSF)	N/A
<b>Fire Department Facilities</b>	
Residential (\$/GSF)	\$1.51
Non-Residential (\$/GSF)	\$1.08

## 9 Addendum

The bulk of this report was completed in 2019, using 2019 data, costs, and demographic projections. However, since the report was finalized in 2021 and will face adoption in 2021, the maximum supportable impact fees in Table 42 must be adjusted from 2019 dollars to 2021 dollars.

The City annually adjusts all development 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. For 2020, the CPC adopted an AICCIE of 5.5%. For 2021, the CPC adopted an AICCIE of 3.5%. Combined, these constitute an inflation factor of 9.2%. Therefore, all maximum supportable nexus fees determined in this report in 2019 dollars (Table 42) must be increased by 9.2% as an adjustment to 2021 dollars. The adjusted maximum supportable impact fees for 2021 are shown in Table 43 below.

TABLE 43: POTENTIAL MAXIMUM SUPPORTABLE FEES PER INFRASTRUCTURE CATEGORY (2021)

Citywide Nexus Fees	Maximum Supportable Fee (2019 dollars)	Maximum Supportable Fee (2021 dollars)
<b>Recreational and Open Space</b>		
Residential (\$/GSF)	\$46.22	\$50.47
Non-Residential (\$/GSF)	\$33.05	\$36.09
<b>Child Care</b>		
Residential (\$/GSF)	\$2.47	\$2.70
Non-Residential (\$/GSF)	\$4.86	\$5.31
<b>Complete Streets: Citywide</b>		
Residential (\$/GSF)	\$16.19	\$17.67
Non-Residential (\$/GSF)	\$11.58	\$12.64
<b>Complete Streets: Downtown</b>		
Residential (\$/GSF)	\$19.42	\$21.21
Non-Residential (\$/GSF)	\$13.89	\$15.17
<b>Transit</b>		
Residential (\$/GSF)	\$24.24	\$26.47
PDR (\$/GSF)	\$46.82	\$51.12
Non-Residential (ex. PDR) (\$/GSF)	\$83.75	\$92.45
<b>Libraries</b>		
Residential (\$/GSF)	\$2.50	\$2.73
Non-Residential (\$/GSF)	N/A	N/A
<b>Fire Department Facilities</b>		
Residential (\$/GSF)	\$1.51	\$1.64
Non-Residential (\$/GSF)	\$1.08	\$1.18

## 10 Appendix

### 10.1 Supplementary Transit Infrastructure Tables

TABLE 44: SAN FRANCISCO DEVELOPMENT AND TRIP GENERATION 2019<sup>79</sup>

	2019 Households & Jobs	Residential Vacancy Rate <sup>80</sup> or Gross Sq. Ft. per Employee	2019 Housing Units & 1,000 Sq. Ft. <sup>81</sup>	Trip Generation Rate (per Housing Unit or 1,000 Sq. Ft.) <sup>82</sup>	2019 Trip Generation (average daily trips) <sup>82</sup>
<i>Residential</i>					
Housing	402,772	0.0%	402,800	5.13	2,066,000
<i>Nonresidential</i>					
Management, Information & Professional Services	422,350	240	101,400	9.87	1,000,000
Retail/Entertainment	118,350	350	41,400	68.00	2,815,000
Cultural/Institution/Education	91,319	350	32,000	23.00	736,000
Medical and Health Services	49,064	350	17,200	22.00	378,000
Visitor Services	25,581	440	11,300	7.84	89,000
Subtotal Nonresidential (ex. PDR)	706,664	288	203,300	24.69	5,018,000
Production, Distribution, Repair	61,773	570	35,200	6.72	237,000
Total Nonresidential	768,360	310	238,500		5,255,000
<b>Total</b>					<b>7,321,000</b>

<sup>79</sup> Source: San Francisco Planning Department; Table 51.

<sup>80</sup> Based on U.S. Census data, the residential vacancy rate in San Francisco was 4.9% in 2000 and 8.2% in 2010. The low estimated rate for 2019 reflects the current high demand for housing in the City.

<sup>81</sup> "1,000 Sq. Ft." is thousand building square feet and applies to nonresidential development.

<sup>82</sup> Trip generation rate and trip generation is for motorized trips only (auto and transit) and excludes bicycle and pedestrian trips.

TABLE 45: SAN FRANCISCO DEVELOPMENT AND TRIP GENERATION 2040<sup>83</sup>

	2040 Households & Jobs	Residential Vacancy Rate <sup>84</sup> or Gross Sq. Ft. per Employee	2040 Housing Units & 1,000 Sq. Ft. <sup>85</sup>	Trip Generation Rate (per Housing Unit or 1,000 Sq. Ft.) <sup>86</sup>	2040 Trip Generation (average daily trips)
<i>Residential</i>					
Housing	483,693	5.0%	509,200	4.79	2,439,000
<i>Nonresidential</i>					
Management, Information & Professional Services	498,633	240	119,700	9.87	1,181,000
Retail/Entertainment	117,192	350	41,000	68.00	2,788,000
Cultural/Institution/Education	90,848	350	31,800	23.00	731,000
Medical and Health Services	67,292	350	23,600	22.00	519,000
Visitor Services	24,788	440	10,900	7.84	85,000
Subtotal Nonresidential (ex. PDR)	798,753	284	227,000	23.37	5,304,000
Production, Distribution, Repair	73,757	570	42,000	6.72	282,000
<b>Total Nonresidential</b>	<b>872,510</b>	<b>308</b>	<b>269,000</b>		<b>5,586,000</b>
<b>Total</b>					<b>8,025,000</b>

<sup>83</sup> Sources: San Francisco Planning Department; Table 51.

<sup>84</sup> Residential vacancy rate reflects a reasonable supply/demand balance in the housing market and not the current low supply/high demand market in the City.

<sup>85</sup> "1,000 Sq. Ft." is thousand building square feet and applies to nonresidential development.

<sup>86</sup> Trip generation rate and trip generation is for motorized trips only (auto and transit) and excludes bicycle and pedestrian trips.

TABLE 46: SAN FRANCISCO DEVELOPMENT AND TRIP GENERATION 2040<sup>87</sup>

	2019-2040 Households & Jobs	Residential Vacancy Rate <sup>88</sup> or Gross Sq. Ft. per Employee	2040-2019 Housing Units & 1,000 Sq. Ft. <sup>89</sup>	Trip Generation Rate (per Housing Unit or 1,000 Sq. Ft.) <sup>90</sup>	2019-2040 Trip Generation (average daily trips) <sup>90</sup>
<i>Residential</i>					
Housing	80,921	NA	106,400	3.48	373,000
<i>Nonresidential</i>					
Management, Information & Professional Services	76,283	240	18,300	9.87	183,000
Retail/Entertainment	(1,158)	350	(400)	68.00	(27,000)
Cultural/Institution/Education	(471)	350	(200)	23.00	(5,000)
Medical and Health Services	18,228	350	6,400	22.00	141,000
Visitor Services	(793)	440	(400)	7.84	(4,000)
Subtotal Nonresidential (ex. PDR)	92,089	257	23,700	12.02	286,000
Production, Distribution, Repair	11,984	570	6,800	6.72	45,000
Total Nonresidential	104,073	293	30,500		331,000
<i>Total</i>					704,000

<sup>87</sup> Sources: San Francisco Planning Department; Table 51.

<sup>88</sup> Residential vacancy rate reflects a reasonable supply/demand balance in the housing market and not the current low supply/high demand market in the City.

<sup>89</sup> "1,000 Sq. Ft." is thousand building square feet and applies to nonresidential development.

<sup>90</sup> Trip generation rate and trip generation is for motorized trips only (auto and transit) and excludes bicycle and pedestrian trips.

TABLE 47: TRIP GENERATION RATES<sup>91</sup>

Economic Activity Category	Trip Generation Rate (average daily person trips)		Motorized Mode Share				Motorized Trip Generation Rate
			Place Type 1	Place Type 2	Place Type 3	Average <sup>92</sup>	
<b>Residential</b>							
Existing 2019 <sup>93</sup>	8.4	per housing unit	59%	62%	62%	61%	5.13
Growth 2019-2040 <sup>94</sup>	5.7	per housing unit	59%	62%	62%	61%	3.48
Future 2040 <sup>95</sup>	7.8	per housing unit	59%	62%	62%	61%	4.79
<b>Nonresidential</b>							
Management, Information & Professional Services <sup>96</sup>	15.7	per 1,000 sq. ft.	54%	80%	94%	63%	9.87
Retail/Entertainment <sup>97</sup>	150.0	per 1,000 sq. ft.	41%	39%	71%	45%	68.00
Cultural/Institution/Education <sup>97</sup>	23.0	per 1,000 sq. ft.			NA		23.00
Medical and Health Services <sup>98</sup>	22.0	per 1,000 sq. ft.			NA		22.00
Visitor Services <sup>98</sup>	16.8	per 1,000 sq. ft.	45%	62%	53%	47%	7.84
Production, Distribution, Repair (PDR) <sup>99</sup>	7.9	per 1,000 sq. ft.	85%	85%	85%	85%	6.72

<sup>91</sup> Sources: San Francisco Planning Department, Traffic Impact Analysis Guidelines (TIA Guidelines), Appendix F, 2019, Table 1; U.S. Census Bureau, 2013-2017 American Community Survey 5-Year Estimates for San Francisco; Jan A. deRoos, Planning and Programming a Hotel, Cornell School of Hotel Administration, 2011, Figure 21.3.

<sup>92</sup> Mode share by place type from TIA Guidelines. Weighted average rate based on land use across 981 traffic analysis zones (each assigned to one of the three place types) that comprise the City's transportation model. Average rate for nonresidential uses based on 2040 land use. No mode share for Cultural and Medical categories because trip rate based on survey of development projects that counted vehicles only.

<sup>93</sup> Trip rate based on 2019 *TIA Guidelines* (4.5 per bedroom) converted to ADT per housing unit using 1.86 bedrooms per unit derived from recent U.S. Census housing estimates for San Francisco.

<sup>94</sup> Trip rate based on 2019 *TIA Guidelines* (4.5 per bedroom) converted to ADT per housing unit using 1.27 bedrooms per unit, the average of recent San Francisco housing projects.

<sup>95</sup> Motorized trip generation rate based on sum of total citywide motorized trips for existing (2019) and growth (2019-2040) divided by total 2040 housing units. Total trip generation rate (motorized and non-motorized) based on motorized trip generation rate divided by motorized mode share.

<sup>96</sup> Trip rates based on 2019 *TIA Guidelines*.

<sup>97</sup> Trip rates not indicated in 2019 *TIA Guidelines*. Rate drawn from 2015 *TSF Nexus Study* and is an average of recent development projects that surveyed only motorized trips.

<sup>98</sup> Trip rate based on 2019 *TIA Guidelines* (8.4 trips per room) and 500 square feet per room based on hotel space programming research paper that indicates a range of 420 to 780 square feet per room, and a recent San Francisco hotel project that has 450 square feet per room.

<sup>99</sup> Trip rate not indicated in 2019 *TIA Guidelines* so used rate from 2002 *TIA Guidelines*.

The following two tables provide support for the calculations presented in Section 5 for the transit capital maintenance component of the TSF. Table 48 provides the source for the inflation and interest rates that are inputs to the model for the net present value factor shown in Table 24. Table 49 provides a truncated version of the model used to calculate the net present value factor.

TABLE 48: INFLATION AND INTEREST RATES<sup>100</sup>

Cost Inflation <sup>101</sup>			Interest Earned <sup>102</sup>		
Calendar Year	Index	Annual Rate	Fiscal Year Ending	Index	Annual Rate
2018	285.6	3.89%	2018	104.8	1.63%
2017	274.9	3.23%	2017	103.1	0.93%
2016	266.3	2.98%	2016	102.2	0.67%
2015	258.6	2.62%	2015	101.5	0.75%
2014	252.0	2.86%	2014	100.7	0.73%
2013	245.0		2013	100.0	
Five-Year Compounded Annual Average		3.11%	Five-Year Compounded Annual Average		0.94%

TABLE 49: NET PRESENT VALUE FACTOR<sup>103</sup>

	Year	1	2	3	...	43	44	45
Beginning Fund Balance <sup>104</sup>	a	73.93	73.62	73.29	...	10.99	7.47	3.81
Interest Earnings <sup>105</sup>	b = a * 0.94%	0.69	0.69	0.69	...	0.10	0.07	0.04
Expenditures <sup>106</sup>	c = c (prior yr) * 3.11%	<u>(1.00)</u>	<u>(1.03)</u>	<u>(1.06)</u>	...	<u>(3.62)</u>	<u>(3.73)</u>	<u>(3.85)</u>
Ending Fund Balance	d = a + b - c	73.62	73.29	72.91	...	7.47	3.81	0.00
Net Present Value Factor <sup>104</sup>		73.93						

<sup>100</sup> Sources: Association of Bay Area Governments (<https://abag.ca.gov/tools-resources/data-tools/consumer-price-index>); S.F. Treasurer's Office (<http://sftreasurer.org/reports-plans>).

<sup>101</sup> San Francisco Bay Area Consumer Price Index (index 1982-84 = 100).

<sup>102</sup> Average annual interest earning on City and County of San Francisco pooled fund balances (index 2013 = 100).

<sup>103</sup> Note: This table models the amount necessary to collect in Year 1 such that \$1.00 in expenditures can be sustained for 45 years given inflation and interest earnings. Source: Table 48.

<sup>104</sup> Beginning fund balance in Year 1 is solved for to calculate the net present value factor. The Year 1 value is set such that the Year 45 ending fund balance equals \$0.00. In all other years the beginning fund balance equals the ending fund balance from the prior year.

<sup>105</sup> Assumes interest earned on beginning fund balance and all expenditures made at end of year.

<sup>106</sup> Expenditures at beginning of Year 1 equal \$1.00 and are inflated assuming all costs represent end of year (inflated) values.

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## 10.2 New Construction Average Housing Unit Size Memorandum

To: Seung Yen Hong & Mat Snyder (Planning Dept.)  
From: Robert D. Spencer, Urban Economics  
CC: Humberto Castro & Asher Butnik (HATCH Engineering)  
Date: January 13, 2020  
Subject: New Construction Average Housing Unit Size

The purpose of this memo is to provide the supporting data for a planning assumption of 1,000 square feet on average per new housing unit for use in the nexus study. This assumption is used throughout the nexus study to convert public facility needs per capita or per housing unit to a fee imposed per building square foot.

The *2014 San Francisco Citywide Nexus Analysis* and *2015 TSF Nexus Study* used 1,156 square feet per housing unit based on an average rentable area size of 925 square feet per unit and a building efficiency rate of 80 percent. This factor was used in in the 2008 Eastern Neighborhoods Impact Fee and Affordable Housing Analysis. At the time of the *2014 San Francisco Citywide Nexus Analysis*, Planning Department staff (Kearstin Dischinger) had concluded that this assumption still reflected current conditions.

Forces related to demographics (smaller housing size) and market economics (increasing housing costs) in the city are likely pushing average unit size lower since the 1,156 square feet per unit factor was developed. Indeed, a 2017 SPUR report estimates 800 square feet per unit (640 rentable area and 80 percent building efficiency). A July 2019 article by Curbed San Francisco cites rental apartment data from Zumper and Rent Café that results in an estimate of 921 square feet per unit (737 square feet per unit rentable area and 80 percent building efficiency).

To test this hypothesis, I pulled available data from the Planning Department's past two annual housing inventory reports (2017 and 2018). These reports include two appendix tables (Table A.3, Major Housing Projects Reviewed and Entitled by Planning Department, and Table A.4, Major Housing Projects Filed at Planning Department) with project descriptions that include data for building area allocated to residential uses and number of housing units. This data is not available for most projects. However, between the two reports a total of 15 projects had this data, which provides a reasonable sample size assuming there is no bias regarding which projects report this data. The results are shown in Table 50, on the following page.

Based on this data and given that the trend towards smaller unit sizes is likely to continue, we suggest using a rounded factor of 1,000 square feet per unit for the purposes of the nexus study.

TABLE 50: AVERAGE HOUSING UNIT SIZE

Project	Units	Square Feet	SF/Unit
<i>2018 San Francisco Housing Inventory Report</i>			
30 Otis St.	406	380,173	936
524 Howard St.	284	300,052	1,057
555 Golden Gate Ave.	48	60,000	1,250
230 7th St.	44	42,710	971
235 Valencia St.	37	28,545	771
1144 Harrison St.	371	366,802	989
<i>2017 San Francisco Housing Inventory Report</i>			
150 Van Ness Ave.	420	441,577	1,051
975 Bryant St.	120	160,000	1,333
1298 Howard St.	124	128,650	1,038
950 Tennessee St.	100	99,075	991
555 Howard St.	63	150,275	2,385
2444 Lombard St.	53	41,875	790
875 California St. / 770 Powell St.	44	52,400	1,191
980 Folsom St.	33	36,494	1,106
1055 Geary St.	120	103,200	860
<b>Total / Average</b>	<b>2,267</b>	<b>2,391,828</b>	<b>1,055</b>
Sources: San Francisco Planning Department, <i>San Francisco Housing Inventory Report</i> (2017 and 2018), Tables A.3 and A.4.			

### 10.3 Note-to-File: Distribution of Funds Collected from the Central SoMa Infrastructure Fee



## NOTE-TO-FILE

**Date:** December 9, 2021  
**Case No.:** 2018-003594CWP  
**Subject:** Distribution of Funds Collected from the Central SoMa Infrastructure Fee

### Summary

This note-to-file establishes a staff-level policy determination on the distribution of funds collected under the Central SoMa Infrastructure Fee from residential projects, consistent with recent amendments to Planning Code Section 433.

### Background

In December 2018 the Board of Supervisors approved several Ordinances to implement the Central SoMa Plan. The Board of Supervisors' approvals included a comprehensive set of Planning Code amendments, that, in part, created new fees specific to Central SoMa, including the Central SoMa Infrastructure Fee (Planning Code Section 433). Although the stated purpose of the fee was to support the expansion of open space, recreation, and transit infrastructure, as originally adopted, the Central SoMa Planning Code amendments limited the use of funds collected through the Central SoMa Infrastructure Fee to transit projects only.

As a part of the same approval package, the Board of Supervisors also adopted the Central SoMa Plan and Implementation Strategy ("Implementation Document"), which, in part, laid out a comprehensive infrastructure and community benefits package to be implemented over the Central SoMa Plan's 20-year timeframe. The Implementation Document included a financing plan for the community benefits package, which included funding from both existing sources and new sources created by the Central SoMa Plan. The Implementation Document indicated that funds raised by the Central SoMa Infrastructure Fee would be used for recreation and open space as well as transit projects, pending trailing legislation

On April 6, 2021, the Board of Supervisors adopted Ordinance No. 47-21, "Administrative Code, Planning Code – Technical Corrections; Amendments to Various Central South of Market Zoning Provisions," which corrected, clarified, and updated the Administrative and Planning Code where there were inadvertent errors in the original Central SoMa Planning Code legislation. Through this legislation, Planning Code Section 433 was amended to enable Central SoMa Infrastructure Fee funds to go to both transit or recreation and open space projects,

**Note-To-File**

**Re: Central SoMa Infrastructure Fee Distribution**

**Case No. 2018-003594CWP**

**Page 2**

consistent with the Central SoMa Implementation Document. The legislation did not require a particular percentage of the fee to go to transit projects or recreation and open space projects.

## **Distribution Policy Going Forward**

The Planning Department is currently completing a Citywide Nexus Study to establish the maximum supportable impact fees for different types of improvements, pursuant to the California Mitigation Fee Act. For transit projects, the Nexus study supports a maximum \$24.24 per square foot fee to residential development projects to fund transit infrastructure projects. To ensure this amount is not exceeded, staff analyzed all impact fees that contribute to transit projects to make sure that all the fees taken together in their entirety do not exceed the nexus maximum. For residential development projects in the Central SoMa Plan area, the potentially applicable transit fees include the Eastern Neighborhoods Infrastructure fee, the portion of the Central SoMa Infrastructure Fee going to transit, and the Transportation Sustainability Fee.

As noted above, Planning Code Section 433 does not require that a specific percentage the Central SoMa Infrastructure Fee go to transit and recreation and open space projects. This Note-To-File hereby establishes that for residential projects that are charged the Central SoMa Infrastructure Fee (i.e., Tier B projects), no more than \$9.53 (or 48%) of the total fee shall go toward transit projects, while the remaining \$10.47 (or 52%) shall be used for recreation and open space projects.

## **Next Steps**

Planning staff recommends Planning Code text amendments to codify the specified allocations for the uses of the Central SoMa Infrastructure Fee.

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## 10.4 Child Care Nexus Study for City of San Francisco (2007)



BRION & ASSOCIATES

**Final Report:**

**CHILD CARE NEXUS STUDY FOR  
CITY OF SAN FRANCISCO**

**Prepared by Brion & Associates  
in conjunction with**

**FCS Group, Inc.  
Nilsson Consulting**

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## **Executive Summary**

The City and County of San Francisco (City) expects to add about 55,900 new residents and 83,800 new employees between 2006 and 2025, including development expected at Mission Bay, Rincon Hill, and Visitation Valley. A portion of these new residents and employees will need child care for their children 0 to 13 years of age. Based on a variety of demand factors that are discussed in this chapter, the following findings are made concerning the need for and the nexus to establish a citywide child care linkage fee in San Francisco. The Department of Children, Youth, and Their Families proposes to expand the Child Care Linkage Fee Program to apply to all land uses citywide. This is in contrast to the existing child care fee that only applies to office and hotel uses in the downtown area.

This child care nexus analysis estimates the number of children associated with residential growth (including residents that work in the City) and employees that work in the City but live elsewhere. The need for these children to have licensed child care is based on a variety of demand factors that are described in more detail below. In summary, 44% of 0 to 13 year old children of residents are assumed to need formal child care and 5% of the children of non-resident employees are assumed to need child care, assuming one child per employee. The analysis does not double-count residents that also work in the City.

The analysis estimates child care demand for three age groups—infants, preschool, and school age—based on industry standards of categorizing care. Child care supply analyzed in this report includes licensed child care centers, family child care homes, school age programs, both licensed and license-exempt, and some private afterschool care facilities.<sup>1</sup>

In general, under the proposed child care program, new development would have two choices: 1. provide child care space on- or offsite at certain rates that vary by land use; or 2. pay a linkage fee that would vary by land use. Monies generated by the fee program would be used to fund new child care facilities throughout the City. These options are currently available in the existing child care fee program.

To summarize, the following steps and assumptions are used to estimate the nexus for establishing the child care linkage fee by land use:

- ◆ Total population and non-resident employment growth are estimated by land use category.

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<sup>1</sup> It also includes spaces in the San Francisco Unified School District's afterschool program spaces and in the Recreation and Park Department's Latchkey program.

- ◆ Density assumptions are applied to estimate new dwelling units and square feet of non-residential space (i.e., persons per household and square feet per employee).
- ◆ Child care demand factors are applied to this estimate of new population and employment growth by land use category to estimate number of total children, 0 to 13 years old, needing licensed care.
- ◆ An assumption is made regarding San Francisco's policy target for child care. This assumption is that San Francisco plans to fund 100% of the need for new licensed child care created by growth in population and employment. This is consistent with most other cities' child care fees, including the proposed fee in Alameda County and the current fee in Palm Desert.
- ◆ The State licensing requirements for child care indoor and outdoor space are applied to the estimated need for child care spaces by land use.
- ◆ The total child care space requirements are divided by the amount of development expected in each land use category, i.e., units of residential and by 1,000 square feet for non-residential. This becomes the child care space requirement per land use for indoor and outdoor space.
- ◆ The average cost per child care space<sup>2</sup> is applied to the estimated demand for child care spaces by land use to derive total costs by land use.
- ◆ The total cost of child care by land use is divided by the number of units or amount of square footage of new development in each land use category to derive the maximum linkage fee rate by land use justified by this nexus study.
- ◆ An administration fee is added to fund the cost of administering the linkage fee program, which is estimated at 5% of total facility costs. The total child care facility costs, including administrative costs, is estimated by land use and then divided by the amount of development in each land use category to estimate the maximum possible linkage fee on a per unit or per square foot basis. This is the maximum child care linkage fee that could be charged to new development at the issuance of building permits.

The following items summarize and highlight the results of the child care nexus analysis for the City and County of San Francisco.<sup>3</sup>

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<sup>2</sup> See **Table 10**.

<sup>3</sup> Please note that many figures throughout this document are rounded to the nearest 100.

- ◆ As shown in **Table S-1**, the City will experience a need for an additional 3,780 formal child care spaces between 2006 and 2025. About 60% of these will come from residential uses or 2,271 spaces and about 40% or 1,509 spaces from non-residential uses.
- ◆ On average, the City will need to add about 199 new child care spaces per year to address demand from expected new development. These spaces are expected to cost an average of about \$2.57 million per year to construct (see **Table S-1**).
- ◆ **Table S-2** summarizes the demand for child care spaces as allocated to different types of child care and the associated cost for each type of care. As shown, child care centers are the most costly type of child care to build with an average cost per space of about \$27,400. Because the City wants to provide a mix of different types of care with varying costs and settings, the average cost per space overall would be \$12,325, or significantly less than the average center-based space.
- ◆ **Table S-3** summarizes the costs of providing child care by land use based on the demand factors for each land use, which vary based on resident and employee densities. Residential uses will generate about 60% of the new cost of child care or about \$29.4 million, and non-residential uses will generate the remaining 40% of revenues or \$19.5 million. These revenues will cover the total combined costs of \$48.9 million needed to provide new child care facilities (including administrative costs) to serve child care needs associated with new development.
- ◆ **Table S-4** summarizes the child care requirements for residential and non-residential uses. The requirements are expressed as square feet per dwelling unit by type of unit and square feet per 1,000 square feet of non-residential building space. The child care requirement would include indoor and outdoor space, as shown.
  - Residential uses would fund a range of 12.6 to 19.1 square feet of indoor child care space and 8.7 to 13.2 square feet of outdoor space per dwelling unit based on the nexus analysis.
  - Non-residential uses would fund an average of 9.3 square feet of indoor child care space and 6.4 square feet of outdoor space per 1,000 square feet of building space based on the nexus analysis. Actual rates vary by land use category.

**Table S-5** shows the maximum child care linkage fee rates based on this nexus study, which include the following:

○ Single Family:	\$2,272 per unit
○ Multi-Family, 0 to 1 bedrooms:	\$1,493 per unit
○ Multi-Family, 2+ bedrooms:	\$1,704 per unit
○ <i>Average, Residential</i>	<i>\$1,595 per unit or \$1.72 per sqft<sup>4</sup></i>
○ Civic, Institutional, Educational:	\$1.29 per square foot
○ Hotel:	\$0.72 per square foot
○ Industrial:	\$0.83 per square foot
○ Medical:	\$1.29 per square foot
○ Office:	\$1.29 per square foot
○ Retail:	\$0.97 per square foot

These fee rates include 5% for administrative costs.

- ◆ The City has the option to adopt fee rates that are lower than those included in this nexus study. The fee rates discussed in this study reflect the maximum amount of fee that could be charged based on nexus requirements for establishing fees.

Thus, a 100-unit new multi-family (0 to 1 bedrooms) residential project would generate about \$149,000 in linkage fees to be used to construct new child care or expand existing child care facilities. The average residential fee of \$1,595 per unit is also estimated at \$1.72 per square foot for comparison purposes and is based on the assumption that the average size of a new residential unit is 925 square feet. A new 100,000-square foot office project would generate about \$129,000 in linkage fee revenue. The existing child care fee for an office in the downtown district is \$1.00 per square foot, and that fee has not been increased since its adoption in 1986, although changes have been made to the ordinance for administration purposes. The potential maximum child care linkage impact fee represents a 29% increase over the prior child care fee for office space, and also expands coverage to a full range of non-residential uses located throughout San Francisco.

### **Policy Options**

Several policy options developed by the Department of Children, Youth, and Their Families and the Consultant are included in this nexus study, which would be at the discretion of the Board of Supervisors to consider and adopt as part of implementing the updated Child Care Linkage Fee. These include:

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<sup>4</sup> This is for comparison only and assumes an average sized dwelling unit of 925 square feet. The fee would be a “per dwelling unit” fee.

1. *The child care impact fee will address 100% of the need for projected child care demand from 2006 to 2025.*
2. *The child care fee would apply to all land uses citywide. The current child care fee applies to office and hotel uses located only in the downtown area.*
3. *The provision of child care facilities instead of paying the in-lieu fee is limited to non-residential projects that generate demand for at least 14 child care spaces (the equivalent of a large family child care home) or a residential project that wanted to provide a small family child care home within the project, which serves up to 8 children.*

**Table S-1  
Child Care Requirement and Costs for Residential and Non-Residential Uses  
From Net New Growth 2006 to 2025  
San Francisco Child Care Linkage Fee Nexus Study**

Land Use	Required Child Care Spaces (1)		Total Cost of New of Child Care (2)		Average per Year 2006-2025	
	Amount	Percent	Amount	Percent	Spaces	Funding
Residential	2,271	60%	\$29,392,103	60%	120	\$1,546,953
Non Residential	1,509	40%	\$19,522,825	40%	79	\$1,027,517
Totals	3,780	100%	\$48,914,928	100%	199	\$2,574,470

(1) Based on incremental growth in population and employment as estimated in Tables 1 through 8.

(2) Costs includes administrative cost of 5%.

Source: Brion & Associates.

**Table S-2**  
**Summary of Potential Child Care Costs**  
**From New Development 2006 to 2025**  
**San Francisco Child Care Linkage Fee Nexus Study**

<b>Type of Child Care</b>	<b>Number of Child Care Spaces</b>	<b>Average Cost Per Space (1)</b>	<b>Total Child Care Costs</b>
1 Build New Centers: Spaces	1,070	\$27,406	\$29,335,081
2 New Centers in Existing or New Commercial Space	344	\$13,703	\$4,713,908
3 Expand at Existing Centers: Spaces	397	\$13,703	\$5,442,160
4 New Small Family Child Care Homes: Spaces	756	\$500	\$377,963
5 New Large Family Child Care Home Spaces	378	\$1,429	\$539,947
6 Expand FCCH from 8 to 14: Spaces	155	\$3,333	\$516,741
7 School Age at Existing Schools	679	\$8,333	\$5,659,846
Average Child Care Cost per Space		\$12,325	
Total Spaces and Costs	3,780		\$46,585,646
Administrative Costs (5%)			\$2,329,282
Total Child Care Costs			\$48,914,928

(1) See Table 10 for detailed estimates of demand by type of facility and cost factors.  
Source: Brion & Associates.

**Table S-3**  
**Summary of New Child Care Costs Generated by New Development by Land Use**  
**San Francisco Child Care Linkage Fee Nexus Study**

Type of Development	Density Assumptions (1)		Allocated Costs by Land Use	Percent Distribution
	Factor	Type		
<b><u>Residential Uses</u></b>				
Single-Family	3.50	persons/household	\$1,084,959	2%
Multi-Family, 0 to 1 Bedroom	2.30	persons/household	\$16,135,758	33%
Multi-Family, 2 + Bedrooms	<u>2.63</u>	persons/household	<u>\$12,171,386</u>	<u>25%</u>
Total Residential	2.35	persons/household	\$29,392,103	60%
<b><u>Non-Residential Uses</u></b>				
Civic, Institutional, Education	225	sqft per employee	\$25,867	0%
Hotel	400	sqft per employee	\$680,037	1%
Industrial/PDR	225	sqft per employee	\$3,885,985	8%
Medical	225	sqft per employee	\$1,115,442	2%
Office	300	sqft per employee	\$11,783,734	24%
Retail	350	sqft per employee	<u>\$2,031,761</u>	<u>4%</u>
Total Non-Residential			\$19,522,825	40%
Total Child Care Costs with Admin. Costs			\$48,914,928	100%

(1) Costs are allocated to land uses based on their population and employment densities.

See Tables 14 and 15.

Source: Brion & Associates.

**Table S-4**  
**Summary of New Child Care Space Requirements by Land Use**  
**San Francisco Child Care Linkage Fee Nexus Study**

<b>Type of Development</b>	<b>Child Care Requirements</b>		
	<b>Indoor Space</b>	<b>Outdoor Space</b>	
<b><u>Residential Uses</u></b>			
Single-Family	19.1	13.2	sqft per dwelling unit
Multi-Family, 0 to 1 Bedroom	12.6	8.7	sqft per dwelling unit
Multi-Family, 2 + Bedrooms	14.4	9.9	sqft per dwelling unit
<b><u>Non-Residential Uses</u></b>			
Civic, Institutional, Education	10.8	7.5	sqft per 1,000 sqft of gross building space
Hotel	6.1	4.2	sqft per 1,000 sqft of gross building space
Industrial/PDR	7.0	4.8	sqft per 1,000 sqft of gross building space
Medical	10.8	7.5	sqft per 1,000 sqft of gross building space
Office	10.8	7.5	sqft per 1,000 sqft of gross building space
Retail	8.1	5.6	sqft per 1,000 sqft of gross building space
 Average Non-Residential (1)	 9.3	 6.4	 sqft per 1,000 sqft of gross building space

*Note: Child Care demand by land use is based on population and employment densities and other child care demand factors.*

(1) The average would apply to uses that do not fit in the above land use categories.

Source: Brion & Associates.

**Table S-5  
Summary of Maximum New Child Care Linkage Fees by Type of Development  
San Francisco Child Care Linkage Fee Nexus Study**

<b>Type of Development</b>	<b>Maximum Potential Child Care Linkage Fee</b>
<b><u>Residential Linkage Fee (1)</u></b>	
Single-Family	\$2,272 per dwelling unit
Multi-Family, 0 to 1 Bedroom	\$1,493 per dwelling unit
Multi-Family, 2 + Bedrooms	\$1,704 per dwelling unit
Average, All Units	\$1,595 per dwelling unit
Average Per Sqft of Residential Space	\$1.72 (3)
<b><u>Non-Residential Linkage Fee (1)</u></b>	
Civic, Institutional, Education	\$1.29 per sqft of gross building space
Hotel	\$0.72 per sqft of gross building space
Industrial/PDR	\$0.83 per sqft of gross building space
Medical	\$1.29 per sqft of gross building space
Office	\$1.29 per sqft of gross building space
Retail	\$0.97 per sqft of gross building space
Average Non-Residential (2)	\$1.06 per sqft of gross building space

*Note: Costs are allocated to land uses based on their population and employment densities.*

*While the non-residential requirement is per 1,000 sqft, the fee is \$ per sqft of space.*

(1) Residential fees are by unit type; non-residential fees are per square foot.

(2) The average would apply to uses that do not fit in the above categories.

(3) Assumes the average size unit is 925 sqft per dwelling unit.

Source: Brion & Associates.

## **1. Introduction and Purpose of Study**

The City and County of San Francisco (City) currently has a child care inclusionary zoning ordinance with a linkage fee option, which was adopted in 1986. The child care program applies to office and hotel uses only in the downtown district at \$1.00 per square foot for projects with a net addition of 50,000 square feet of gross building space or more. The goal of the program is to “foster the expansion of and ease access to child care facilities affordable to households of low or moderate income.”<sup>5</sup>

The child care requirement was originally adopted in 1986, prior to the adoption of AB1600 in 1987, which is now commonly called The Mitigation Fee Act (Government Code 66000). This Act generally requires that a nexus be established for a public entity to adopt a development impact fee. While it is the City’s position that a nexus analysis is not needed for the Child Care Linkage Fee Program, the City does want to ensure that the fee is fair and equitable and meets the principles of nexus. The City’s child care ordinance was last updated and revised in 2003.<sup>6</sup>

The requirements of the existing zoning ordinance can be summarized as follows:

- ◆ Overall, the child care requirement is for a minimum of 3,000 square feet of child care facility space onsite.
- ◆ For hotel or office projects less than 300,000 square feet, a 2,000 square foot child care facility is required onsite.
- ◆ The child care facility must be a licensed facility.
- ◆ The formula for determining the amount of child care space is:  
  
net addition gross square feet of hotel/office space x .01 = square feet of child care space facility required or the minimums listed above.
- ◆ A project sponsor or group of project sponsors within 0.5 miles of each other may elect to provide a child care facility at the above rates offsite, within 1.0 miles of the project(s) to meet the requirement.
- ◆ The child care facility must be provided for the life of the development project for which the facility is required or as long as there is demonstrated demand.
- ◆ The child care facility must be reasonably accessible to public transportation or transportation provided by the project sponsors.

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<sup>5</sup> See Section 314.4.(a)(1) Imposition of Child Care Requirement, page 42, dated April, 9, 2003.

<sup>6</sup> This update included changes to the Transit Impact, Housing, Child Care, Park, and Inclusionary Housing Fees to transfer the collection and enforcement of the said fees to the City Treasurer’s Office.

- ◆ In all cases above, proof must be provided that the child care facility is leased to a non-profit child care provider without charge for rent, utilities, property taxes, building services, repairs, or any other charges of any nature for a minimum of three years.
- ◆ The project sponsor may elect to pay an in-lieu fee at the following rate:  
  
*net addition of gross hotel/office space x \$1.00 = total in-lieu fee requirement.*
- ◆ Payment of the in-lieu fee is made to the City Treasurer, and the Treasurer prepares a certification which the project sponsor submits to the Planning Department as proof of child care mitigation prior to the issuance of the project's building permit.
- ◆ A project sponsor may elect to provide a combination of child care space and an in-lieu fee, singly or in conjunction with other project sponsors.
- ◆ A project sponsor may enter into an agreement with a nonprofit child care provider to provide a child care facility within the city to meet the conditions of the requirement; the agreement must be for a period of 20 years, with the first three years being made available free of rent, utilities, property taxes, building services, repairs or other charges. To facilitate this agreement, the project sponsor may pay to the nonprofit an amount equal to or in excess of the sum of the in-lieu fee due for the development project.

Since 1986, the City has collected approximately \$4.8 million in child care in-lieu fees. Over this period, no revenue was collected during seven of the years. The average annual amount of revenue collected in the last 20 years was \$241,000 per year. During the years when revenue was generated, the largest amount of revenue collected in one year was \$1.01 million in Fiscal Year 1990/91 and the lowest amount collected was about \$26,000 in Fiscal Year 1992/93. Given that the existing fee only applies to downtown office and hotel development, much of the new development in the City over the last 20 years has not paid child care impact fees.

## **2. Nexus Findings**

This section describes the findings which establish the nexus between the need for the Child Care Linkage Fee, the maximum amount of the fee, the need for the facilities to be funded with the fee, and new development. The City's current position is that the present Child Care Linkage Program, including the in-lieu fee provision offered as an alternative to providing child care on- or offsite, is not subject to the requirements of the Mitigation Fee Act or Government Code Section 66000. The City does not expect to alter its position on this matter. However, because the City agreed to sponsor a supporting nexus analysis as part of the citywide fee study effort, and because there is interest in determining whether the Inclusionary Program can be supported by a nexus type analysis as an additional support measure, the City has contracted for the preparation of a nexus analysis at this time. The nexus findings include:

1. The purpose of the fee and related description of the child care facilities for which the revenue will be used;
2. The specific use of the child care fee;
3. The reasonable relationship between the child care facility to be funded and the type of development to be charged the fee;
4. The need for the child care facility and the type of development; and
5. The reasonable relationship between the amount of the child care fee and the proportionality of the cost specifically attributable to new and existing development.

Each of these findings is addressed below.

### **Purpose of the Child Care Linkage Fee**

The purpose of the Child Care Linkage Fee is to fund required capital improvements to create new child care facilities or new spaces at existing child care facilities. These facilities will be available to serve all new residents and employees that require child care in San Francisco.

### **Use of the Child Care Linkage Fee**

The Child Care Linkage Fee revenue will be used by the City and County of San Francisco to construct new child care facilities or provide funding for the expansion of existing child care facilities in the City. This study identifies seven potential options for creating new child care spaces and the fee revenue that will be used to fund these options in the City over the next 19 years, including:

1. Build new centers (free standing);
2. Build new centers in existing or new commercial space;
3. Expand existing centers;
4. Assist new small Family Child Care Homes;
5. Assist new large Family Child Care Homes;
6. Expand Family Child Care Homes from 8 to 14 spaces; and
7. Support school age care at existing schools or community facilities.

The Child Care Linkage Fee revenue will be combined with other City revenues and private funding to fund new child care facilities. A series of grants and loans will be used to allocate funding to child care providers, as is the City's practice with the current child care fee program.

### **Relationship of the Child Care Linkage Fee to New Development**

New child care facilities are required to serve existing development as well as new development. The demand for new child care spaces is based on current projections of child care need prepared as part of this nexus study. The demand for child care from new development uses the same assumptions that have been used for existing development and is based on the methodology discussed at the beginning of this chapter and other research conducted for this study. The fee revenue will be used to fund new development's fair share of required child care facilities and/or new spaces at existing facilities. For development projects which require more than 14 spaces, the developer would have the option of providing the facility on- or offsite or paying the linkage fee. The City's current child care fee allows for either providing child care space or paying an in-lieu linkage fee.

### **Need for the Child Care Linkage Fee**

Each new residential or commercial project that is developed in the City and County of San Francisco will generate new residents and non-resident employees. Current data on the supply of child care in the City shows that approximately two-thirds (or 64%) of the children needing licensed care have an available space. New development will add to this unmet demand for child care and aggravate the existing shortage of child care. The Child Care Linkage Fee will provide or fund new development's share of required child care facilities and spaces over the next 19 years. The linkage fee, however, will not be used to address existing deficiencies.

**Proportionality of the Child Care Linkage Fee**

This analysis assumes that the City and County of San Francisco will fund 100% of the total potential demand for child care in the City arising from new development through the Child Care Linkage Fee program. New development is being assessed fees only for their proportional share of the cost of providing new child care facilities and spaces in the City, assuming the same cost and demand factors that are applied to existing development. The child care linkage fee program addresses the impact of new development and not existing development. This study presents the maximum amount of fees by land use that could be charged to new development based on its impacts. However, the City can choose to adopt a fee rate that is less than the amounts discussed in this study.

### 3. Summary of Study Approach

This study estimates the current number of children ages 0 to 13 years old who require child care and the future demand for child care from new development, both residential and non-residential, through 2025.

- ◆ Children are analyzed in three age groups:
  1. Birth to 24 months old, or **Infants**
  2. 2 to 5 years old, or **Preschool**
  3. 6 to 13 years old or **School Age**
  
- ◆ Several types of child care spaces and providers are discussed:
  - **Small Family Child Care Home** that serves up to 8 children and can serve all age groups with limits on number of spaces per age group;
  - **Large Family Child Care Home** that serves up to 14 children and can serve all age groups with limits on number of spaces per age group;
  - **Child Care Center** that can serve all age groups, depending on its license(s); infants require a separate license from other age groups; and
  - **School Age**, which typically just serve school age children but may also serve preschool-age children
  
- ◆ Children as a percent of total population is a key factor in the child care demand analysis. These rates are taken from the California Department of Finance’s P-3 Report, which forecasts population by age. The following represents a summary of the rates assumed in the analysis:

<b>Year</b>	<b>Infants</b>	<b>Preschool</b>	<b>School Age</b>	<b>Total, 0 to 13</b>
2006	2.3%	4.1%	6.1%	12.5%
2006-2025 <sup>7</sup>	1.5%	3.3%	7.2%	12.1%

- ◆ While the overall rate does not change very much during the analysis period, the rate by age group does change significantly. In particular, infants and preschool-age children decrease, and school age children increase.

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<sup>7</sup> These rates are the average by age over the time period (to 2025).

- ◆ All child care spaces analyzed in this report are either licensed or license-exempt<sup>8</sup> child care and spaces provided by the City’s Latchkey program run by the Recreation and Park Department. The City’s Recreation and Park Department’s program is also not considered formally license-exempt but is a main source of school age care in the City. Private school afterschool spaces are not included in the supply data, because it is not possible to determine if they are already counted in other license or license exempt supply data.
- ◆ This analysis estimates that 37% of infants with working parents need licensed child care,<sup>9</sup> and 66% of school age children with working parents<sup>10</sup> require licensed child care. For preschool, a total of 100% of all preschool-age children with working parents are assumed to need a licensed preschool space.
- ◆ In addition to residents, this study also estimates that 5% of non-resident employees in San Francisco need licensed care, and each of these employees generates one child needing a licensed child care space on average. This factor is based on data derived from child care nexus studies from South San Francisco and Santa Monica.<sup>11</sup>
- ◆ The Department of Children, Youth, and Their Families proposes that the child care inclusionary requirement and linkage fee will apply citywide to all new development—and redevelopment where building space increases overall—and will apply to all land uses, residential and non-residential, including:
  - Single Family
  - Multi-Family, Units with 0 to 1 bedroom
  - Multi-Family, Units with 2 or more bedrooms
  - Civic, Institutional, Educational
  - Hotel
  - Industrial

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<sup>8</sup> License-exempt spaces are child care providers that are generally associated with a public agency such as a unified school district; typically only school age care is license-exempt. This is a different status than unlicensed care. The local Child Care Resource & Referral Agency collects some data on license-exempt providers, but these providers are not required to register with the State. This analysis uses data collected by the Low Income Investment Fund (LIIF) on license-exempt providers, and from City’s Recreation and Park Department’s Latchkey program.

<sup>9</sup> Based on a study prepared for Santa Clara County, which surveyed 1,400 working families. Also see Appendix A for more information.

<sup>10</sup> Based on local San Francisco surveys and other child care studies. See Appendix A for more information.

<sup>11</sup> Information on South San Francisco is from “South San Francisco Child Care Facility Impact Free Study” by Brion & Associates, 2002. For the City of Santa Monica, see “Child Care Linkage Program,” prepared for the City of Santa Monica by Keyser Marston Associates, Inc., November 2005.

- Medical
- Office
- Retail

For this analysis, single resident occupancy (SRO) units and senior units are not assumed to generate any children by definition and are thus not included in the fee calculations.<sup>12</sup>

- ◆ The Consultant and the Department of Children, Youth, and Their Families suggest that a new non-residential project would have to generate the need for at least 14 child care spaces in order to provide child care space to meet its impact or for a residential project, a unit could be set aside for a small family child care home, serving up to 8 children. It is suggested that any project with an impact lower than 14 spaces would pay the linkage fee with the exception of the residential project that prefers to provide a unit onsite for a small family child care home. It is further suggested that projects with an impact of over 14 spaces could choose either option, i.e., pay the fee or build the space, onsite or offsite, consistent with the current child care fee ordinance. It also suggested that residential projects could have the option, at the City's discretion, of setting aside units that could be designated for family child care home units, either small or large, as a means of meeting the requirements of the child care ordinance. The rationale for 14 spaces is that this represents the size of a large family child care home.
- ◆ For indoor child care space requirements, a factor of 109 square feet of gross building space per child is required based on the average of 13 recent San Francisco child care projects partially funded through the City's existing Child Care Facilities Fund. This factor includes the 35 square feet of play space per child based on State licensing requirements combined with additional ancillary space, such as kitchens, halls, bathrooms, storage, and lobbies. For outdoor space requirements, a total of 75 square feet of outdoor space per child is required based on State licensing requirements.

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<sup>12</sup> It is recognized that some single resident occupancy units do house children, but the intent of this type of housing is not family housing, and, thus, they are excluded; senior housing generally has age restrictions that exclude children.

## **4. Existing and Projected Demographics**

**Table 1** shows current (2006) and future (2025) data on population, households/housing units, and employment for San Francisco. The forecast and land use data are based on a recent forecast by Moody's "Economy.com" and adjusted by Brion & Associates, and other land use information and data from the City and County of San Francisco Planning Department. (For further information, refer to the separate section of the consolidated report for the Citywide Development Impact Fee Study: "City Growth Forecast and Demographic Data.") There are an estimated 777,000 residents and 536,000 jobs as of 2006. Future population is estimated at about 833,000 residents and 620,000 jobs by 2025.

Total new development expected to occur from 2006 to 2025 would include the following:

- ◆ 55,871 new residents;
- ◆ 24,505 new dwelling units; and
- ◆ 83,807 new employees.

Given that Mission Bay, Rincon Hill, and Visitation Valley, unlike other areas of the City, are already subject to project specific development impact fees and are therefore excluded from the development assumed to be subject to any of the new fees analyzed in this report, as shown in **Table 1**.

Net new development without Mission Bay, Rincon Hill, and Visitation Valley from 2006 to 2025 that would be subject to the child care fee includes:

- ◆ 46,108 new residents;
- ◆ 19,146 new dwelling units; and
- ◆ 67,367 new employees.

**Table 2** presents the number of children in San Francisco based on 2000 U.S. Census data. The percentage of children by age group is based on the breakdown of children by age group from the Census and divided by the total population. Overall, children 0 to 13 years old comprise 11.3% of the population as of 2000. This table also shows the labor force participation rates of parents with children for each age group as of 2000. In calculating these rates, we count households with children in which there are two working parents or a single working parent. The Census breaks this down for households with children under the age of 6 and children ages 6 and over. On average, 57.6% of children under the age of 6 have working parents, and 63.2% of children ages 6 and over have working parents in San Francisco.

For this analysis, the number of children by age for children 0 to 13 years old is estimated based on percentages from the California Department of Finance P-3 Report for the City

and County of San Francisco. **Table 3** first applies the percent of children by age group to the total 2006 population estimate of 760,673 (excluding Mission Bay, Rincon Hill, and Visitation Valley<sup>13</sup>). This 2006 population estimate is based on data from the City's Planning Department and the forecast prepared for the Citywide Development Impact Fee Project and has been adjusted to be in-line with the employment estimates which are from Moody's "Economy.com." Next, the percent of total estimated employed residents in the City and residents who work outside the City (based on 2000 Census data) is applied to the 2006 population estimate to determine the number of children who might need care outside of San Francisco and those that require care in San Francisco. The "Net Residents" or those residents who are presumed to require care for their children in San Francisco is approximately 753,500. Based on this methodology, which discounts the population of those needing care outside of the City, it is estimated that there are approximately 88,000 children between the ages of 0 and 13 in San Francisco as of 2006.

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<sup>13</sup> The number of children for Mission Bay, Rincon Hill, and Visitation Valley is included for information purposes in Appendix B, Table F.

**Table 1**  
**Projected Growth in San Francisco from 2006-2025**  
**San Francisco Child Care Linkage Fee Nexus Study**

Item		Existing Conditions 2006	Projected Growth 2006-2025		Incremental Average Persons per Household	Total At 2025	Project Area Percent Buildout
			Amount (3)	Avg. Annual Growth Rate			
<b><u>Total Population</u></b>	(1)	777,121	55,871	0.37%		832,992	na
Visitation Valley		11,501	1,242	0.54%		12,743	90%
Mission Bay		2,112	3,711	5.48%		5,823	65%
Rincon Hill		<u>2,835</u>	<u>4,810</u>	5.36%		<u>7,645</u>	100%
Subtotal		16,448	9,763			26,211	
Total w/out MB/RH/VV	(2)	760,673	<b>46,108</b>	0.31%		806,781	na
<b><u>Total Housing Units</u></b>	(1)	341,052	24,505	0.37%	2.28	365,557	na
Visitation Valley		3,100	276	0.45%	4.51	3,376	91%
Mission Bay		1,200	1,983	5.27%	1.87	3,183	65%
Rincon Hill		<u>1,500</u>	<u>3,100</u>	6.08%	1.55	<u>4,600</u>	100%
Subtotal		5,800	5,359			11,159	
Total w/out MB/RH/VV	(2)	335,252	<b>19,146</b>	0.29%	2.27	354,399	na
<b><u>Total Employment</u></b>	(1)	536,224	83,807	0.77%		620,031	na
Visitation Valley		1,268	149	0.59%		1,417	100%
Mission Bay		8,901	15,118	5.36%		24,020	100%
Rincon Hill		<u>17,811</u>	<u>1,172</u>	0.34%		<u>18,983</u>	100%
Subtotal		27,981	16,440			44,420	
Total w/out MB/RH/VV	(2)	508,243	<b>67,367</b>	0.66%		575,611	na

(1) Employment Projections are from Moody's Economy.com for 2006 to 2025 by industry sector.

Residential (population and household) projections are adjusted to be in line with the employment projections by Economy.com; base data are from the San Francisco Planning Department (October, 2006) based on the Land Use Allocation Study - 2002.

(2) Mission Bay, Rincon Hill and Visitation Valley/Executive Park have separate agreements in terms of fees and have requirements to meet their child care impacts through project mitigation and are excluded from the fee analysis.

(3) The amount of growth shown in boxes would be subject to the Child Care Requirement and Linkage Fee, after additional adjustments in subsequent tables.

Sources: Moody's Economy.com; San Francisco Department of City Planning; David Taussig & Associates, Inc.; Brion & Associates.

**Table 2**  
**Children as Percent of Total Population in 2000 and**  
**Labor Force Participation Rates for Parents with Children Under 6 and 6-17 Years in 2000**  
**San Francisco Child Care Linkage Fee Nexus Study**

<b>2000 Census Data</b>	<b>Population by Age as of 2000</b>					<b>2000 Total Population</b>
	<b>0 to 24 Mos. Years</b>	<b>2 to 5 Years</b>	<b>6 to 9 Years</b>	<b>10 to 13 Years</b>	<b>Total 0-13 Years</b>	
San Francisco Population	13,001	24,267	25,140	25,501	87,909	776,733
Percentage of Total Population	1.7%	3.1%	3.2%	3.3%	11.3%	
Labor Force Participation Rates (1)	57.6%	57.6%	63.2%	63.2%		

(1) Labor Force Participation Rates are calculated for children with two working parents or a working single parent.  
LFPRs are calculated for children under age 6 and for children ages 6 to 17.

Sources: Census 2000; Brion & Associates.

**Table 3**  
**Number of Children and Total Population of San Francisco for 2006 and 2006 to 2025**  
**San Francisco Child Care Linkage Fee Nexus Study**

San Francisco	Total Population All Ages	Population by Age (1)			Total 0-13
		0 to 24 Mos. (infants)	2 to 5 (preschool)	6 to 13 (school age)	
<b><u>Children as of 2006 (w/out MB, RH, VV)</u></b>					
Children as % of Population by Age Group (1)		2.3%	4.1%	6.1%	12.5%
Total Population at 2006 (2)	760,673	17,261	31,182	46,569	95,012
Total Estimated Employed Residents in City	41%	315,351 (3)			
SF Employed Residents Working Outside SF (5)	23%	72,739			
Those Needing Child Care Outside SF (5)	5%	7,214 (4)	3,607	3,607	
Net Residents		753,459			
<b>Estimated Children at 2006 (5)</b>		<b>13,654</b>	<b>27,575</b>	<b>46,569</b>	<b>87,798</b>
<b><u>New Children 2006-2025 (w/out MB, RH, VV)</u></b>					
Children as % of Population by Age Group (6)		1.5%	3.3%	7.2%	12.1%
Net New Population	46,108				
Senior and SRO Population	1,081				
Net Population with Children	45,027				
Estimated Children of New Residents		696	1,505	3,244	5,445
New Employed Residents (7)	50%	22,432			
New Employed Residents Working Outside SF	23%	5,174			
Those Needing Child Care Outside SF (5)	5%	259	129	129	259
Net New Residents Possibly Needing Care		44,768			
<b>Net New Children 2006 to 2025</b>		<b>566</b>	<b>1,375</b>	<b>3,244</b>	<b>5,186</b>
<b><u>Total Children at 2025 (w/ MB, RH, VV)</u></b> (8)					
Total Population	832,992				
Senior and SRO Population	24,990				
Net Population with Children	808,003				
Children as Percent of Total Population at 2025		1.2%	2.3%	5.8%	9.3%
Estimated Children of New Residents		9,480	18,666	47,102	75,248
New Employed Residents	50%	402,546			
New Employed Residents Working Outside SF	23%	92,852			
Those Needing Child Care Outside SF (5)	5%	4,643	2,321	2,321	4,643
Total Residents Possibly Needing Care		803,360			
<b>Total Children 2025</b>		<b>7,158</b>	<b>16,345</b>	<b>47,102</b>	<b>70,605</b>

(1) Based on the percent of children by age group for San Francisco from DOF P-3 Report and applied to DCP's estimate of existing population as of 2006 (See Appendix Table D).  
(2) Excludes Mission Bay, Rincon Hill and Visitation Valley areas as they have special agreements regarding child care.  
(3) Based on Employed Residents as percent of total population as of 2000 Census and this rate times 2006 Population estimate.  
(4) Based on non-resident employee demand for child care in SF. See Table 6.  
(5) Based on Journey to Work data - see Table 5 and Table 6.  
(6) Based on total population as estimated times the average percentage of children per age group from above.  
(7) Based on forecasts of Employed Residents at 2025 by ABAG.  
(8) Note that the analysis for 2025 is based total population at 2025 and includes Mission Bay, Rincon Hill and Visitation Valley to provide an estimate of total demand for child care; these figures are not used in the impact fee calculations but rather for information of total future conditions.  
Sources: California Department of Finance; SF City Planning Department; Brion & Associates.

**Table 3** also estimates the number of children expected in San Francisco between 2006 and 2025, based on the changes in the percent population that are children, 0 to 13, through 2025. Not including the Single Resident Occupancy population and excluding children assumed to need care outside of San Francisco, it is estimated that there will be 5,186 additional children associated with new development from 2006 to 2025. Using the same methodology, and as shown at the bottom of **Table 3**, the number of total children at 2025 is expected to total approximately 70,605.

Overall, children 0 to 13 in the City as a percent of total population will decline from 12.5% to 9.3% by 2025. This trend is forecast by the California Department of Finance based on changes in demographics, such as the age women have children and the number of children they have. The Association of Bay Area Governments (ABAG) forecasts a reduction of 16,000 in children 0 to 5 for the nine-county region.<sup>14</sup> Almost all counties are forecast to have a net reduction in children ages 0 to 14 by 2025. For instance; Marin County is forecast to lose about 3,200 children 0 to 14, Santa Clara County will lose about 3,900 children 0 to 5, San Mateo County will lose about 4,500 children 0 to 14, Alameda County will lose about 1,500 children 0 to 14, and Contra Costa County will lose 9,800 children 5 to 14. Only Solano and Napa Counties are expected to add children overall from 2005 to 2025.

Even though the City will lose children overall, new development will generate new children, albeit at lower rates than currently, and generate new demand for child care. After accounting for the child care spaces planned to be funded through the proposed fee program, there will still be an unmet demand for child care as discussed further in this study (see **Table 9**).

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<sup>14</sup> See *ABAG Projections 2005*, population by age and county.

## 5. Existing Child Care Demand and Supply

### Current Child Care Supply

**Table 4** presents the current supply of child care in San Francisco. This data are summarized by type of facility and number of spaces by age group and was provided by the San Francisco Department of Children, Youth, and Their Families and the Department of Human Services. These data are consistent with the supply data being used for preparation of the City's updated Child Care Needs Assessment.

Overall, there are approximately 31,800 child care spaces at a total of 1,012 child care facilities. These facilities do not include the private afterschool programs for school age children. The breakdown of facilities and spaces is (see **Table 4**):

- ◆ 303 child care centers with 18,161 spaces;
- ◆ 562 small family child care homes with 4,430 spaces;
- ◆ 147 large family child care homes with 1,956 spaces; and
- ◆ 7,295 school age spaces through the San Francisco Unified School District and the City's Recreation and Park Department's Latchkey programs.

Spaces at child care centers make up over half of all spaces (57%), with small and large family child care homes making up about 20% and school age license-exempt care making up the remaining 23%. The amount and distribution of existing supply includes:

- ◆ Infant spaces, at 2,646 or 8% of total;
- ◆ Preschool spaces, at 14,410 or 45% of total; and
- ◆ School age spaces, at 14,789 or 46% of total.

### Non-Resident Employees

**Table 5** uses Journey-to-Work data from the 2000 U.S. Census to determine the number of residents who both live and work in San Francisco and the number of residents who work outside of San Francisco. This is the total count of employed residents who live in San Francisco. **Table 5** also shows the total estimated number of employees in San Francisco. Based on these numbers, it is estimated that 55.2% of employees live and work in the City, and 44.8% of employees who work in San Francisco live elsewhere.

For 2006, it is estimated that there are 508,243 jobs in the City, excluding those in Mission Bay, Rincon Hill, and Visitation Valley. Of these jobs, 227,616 are held by individuals that reside outside of the City or 44.8%. Based on employment projections (see **Table 1**) and the estimated percentage of employees who live outside of the City, it is estimated that of the total 575,611 jobs in 2025, the number of jobs held by individuals who do not live in the City will total 257,787. These estimates are used in **Tables 6 through 8** to calculate the estimated number of children of non-resident employees that

need licensed child care in San Francisco. Overall, there will be an increase in jobs held by individuals that do not live in the City, or non-resident employees of about 30,170 through 2025.

In 2006, there are an estimated 227,600 employees who work in the City and live elsewhere. For this analysis, we estimate child care demand for non-resident employees who work in San Francisco. Employees who work and live in San Francisco are counted under population demand estimates below. It is estimated that 5% of these employees in San Francisco have children requiring licensed-based care in the City. This percentage is based on the South San Francisco child care fee nexus study and surveys of corporate employees as well as the recent Santa Monica child care nexus fee study.<sup>15</sup> Of those needing licensed care, the analysis also assumes one child per employee ages 0 to 5. Based on this data, approximately 11,381 children, whose parents work in San Francisco but reside elsewhere, require child care in San Francisco in 2006. By 2025, this number will increase by approximately 1,509 to a total of 12,889 children needing spaces.

### **Existing Child Care Demand and Supply Comparison**

Current child care demand, as well as the current supply of child care in San Francisco, is summarized in this section. **Table 7** calculates the existing demand for child care based on the estimated number of children in 2006 and applying demand factors, including labor force participation rates of parents, and estimates of the need for licensed care by age group. This is calculated by taking the estimated number of children by age group and multiplying it by the labor force participation rates by age. The product of these numbers is considered the number of infant, preschool, and school age children with working parents who need some type of child care.

The percent of children requiring licensed care is then calculated by applying percentages based on a review of several child care studies, including child care impact fee studies (see **Appendix A**). For this study, we assume that, for residents, 37% of infants, 100% of preschool, and 66% of school age children with working parents require licensed care.

For non-resident employee child care demand, which is from 0 to 5 years old, we estimate that 25% of that demand is for infants, and 75% is for preschool-age children. It is assumed that school age children of non-resident employees receive care near their places of residence or near or at their neighborhood schools and not in San Francisco.

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<sup>15</sup> Information on South San Francisco is from “South San Francisco Child Care Facility Impact Fee Study” by Brion & Associates, 2002. For the City of Santa Monica, see “Child Care Linkage Program,” prepared for the City of Santa Monica by Keyser Marston Associates, Inc., November 2005.

**Table 4**  
**Child Care Supply Data for San Francisco as of June 2006**  
**San Francisco Child Care Linkage Fee Nexus Study**

Type of Child Care Facility	Number of Facilities - Providers	Number of Child Care Spaces by Age				Total Spaces, 0 to 13	Percent Distribution of Spaces by Type
		Birth to 24 Mos. or Infant	2 to 5 or Preschool	6 to 13 or School Age			
<b>Child Care Center</b> Percent Distribution	303	1,080 6%	11,248 62%	5,833 32%	18,161 100%	57.0%	
<b>Sm. Family Child Care Home</b> (1) Percent Distribution	562	1,124 25%	2,182 49%	1,124 25%	4,430 100%	13.9%	
<b>Lg. Family Child Care Home</b> (1) Percent Distribution	147	441 23%	978 50%	537 27%	1,956 100%	6.1%	
<b>School Age Care (2)</b> SFUSD Programs (Excel/SF Team) Rec & Park LatchKey	na na			6,895 400			
<b>Total School Age</b> Percent Distribution				7,295 100%	7,295 100%	22.9%	
<b>Total, All Facilities</b> Percent Distribution	<b>1,012</b>	<b>2,646</b> 8%	<b>14,410</b> 45%	<b>14,789</b> 46%	<b>31,842</b> 100%	<b>100.0%</b>	

(1) Distribution of these spaces is based on licensing restrictions by age; actual spaces by age may vary from these estimates.

The ages served by FCCCHs are not reported to the local Resource and Referral Agency.

(2) From Department of Children, Youth and Their Families (October 2006); excludes some unlicensed community based organizations such as Boys & Girls Clubs and other non licensed or licensed exempt care due to inability to verify total capacity at these programs. Excel/SF Team data is from the San Francisco Unified School District School Health Program Data, 2005-2006. Rec & Park LatchKey Data is from the San Francisco Rec and Park Staff Survey in 2005.

Sources: SF Department of Children, Youth and Their Families; and Brion & Associates.

**Table 5**  
**Journey to Work Data and Employees Living Elsewhere but Working in San Francisco by Year**  
**San Francisco Child Care Linkage Fee Nexus Study**

San Francisco	Amount	Rates	Notes
Employed Residents that Live & Work in San Francisco in 2000 (1)	322,009 <i>a</i>	76.9%	
Employed Residents that Work Outside San Francisco in 2000 (1)	96,544 <i>b</i>	23.1%	
Total # of Employed Residents in 2000 (1)	418,553 <i>c</i>	100.0%	$a + b = c$
Estimated Total Employees in City as of 2000 Census	583,190 <i>d</i>		
Percent of Employees that Live and Work in City in 2000	55.2% <i>e</i>		$a / d = e$
Percent of Employees that Live Elsewhere and Work in the City in 2000	44.8% <i>f</i>		$100\% - e$
Estimated Current Jobs as of 2006 (2)	508,243 <i>g</i>		
Employees Living Elsewhere Working in San Francisco in 2006 (3)	227,616 <i>h</i>		$g * f = h$
Projected total Jobs at 2025 (2)	575,611 <i>i</i>		
Employees Living Elsewhere Working in San Francisco in 2025	257,787 <i>j</i>		$i * f = j$

- (1) Based on Journey-to-Work data from the 2000 U.S. Census.  
 (2) See Table 1. Excludes Mission Bay, Rincon Hill and Visitation Valley as they have separate child care arrangements through project mitigation.  
 (3) Assumes same ratio of employed residents living and working in San Francisco from 2000.

Sources: SF Department of City Planning; Census 2000; Brion & Associates.

**Table 6**  
**Existing and Future Child Care Demand from Non-Resident Employees: 2006 and 2025**  
**San Francisco Child Care Linkage Fee Nexus Study**

Item	Existing Conditions 2006	Future Conditions 2025	Net Growth, 2006-2025
Employees that live elsewhere but work in San Francisco (1)	227,616	257,787	30,170 (4)
<b>Estimated Number of Children of Employees Needing Licensed Care</b>			
Estimated % of Employees with Children Needing Care (2)	5%	5%	na
Children Needing Licensed Care (3)	11,381	12,889	1,509

- (1) Based on SF DCP Projections (Table 1) and U.S. Census Journey-to-Work data (see Table 5).
- (2) Based on South San Francisco Child Care Facilities Impact Fee Nexus Study and surveys of corporate employees and other child care studies, reviewed by Brion & Associates, including Santa Monica's New Child Care Fee Nexus Study.
- (3) Assumes one child per employee.
- (4) See Table 1. Excludes Mission Bay, Rincon Hill and Visitation Valley as they have separate child care arrangements through project mitigation.

Sources: SF Department of City Planning; Census 2000; Brion & Associates.

**Table 7  
Existing Child Care Demand and Supply in San Francisco in 2006  
San Francisco Child Care Linkage Fee Nexus Study**

<b>Existing Conditions at 2006</b>	<b>Child Care Demand &amp; Supply by Age</b>				
	<b>Birth to 24 Mos. or Infant</b>	<b>2 to 5 or Preschool</b>	<b>6 to 13 or School Age</b>	<b>Total. 0 to 13 Years Old</b>	
<b><i>EXISTING DEMAND at 2006</i></b>					
Resident Children Potentially Needing Care	(1)	13,654	27,575	46,569	87,798
Average Labor Force Participation Rates	(2)	57.6%	57.6%	63.2%	
Children With Working Parents		7,864	15,881	29,454	53,199
% Children Needing Licensed Care	(3)	37%	100%	66%	72%
Children Needing Licensed Care		2,910	15,881	19,498	38,289
Percent of Children by Age Needing Care		21%	58%	42%	44%
Non-Resident Employee's Children Needing Care	(4)	2,845	8,536	-	11,381
<b>Total Demand for Child Care Spaces</b>		<b>5,755</b>	<b>24,417</b>	<b>19,498</b>	<b>49,670</b>
Percent Distribution		12%	49%	39%	100%
<b><i>EXISTING SUPPLY at 2006</i></b>					
Family Child Care Homes	(5)				
Small, Licensed for 8		1,124	2,182	1,124	4,430
Large, Licensed for 14		441	978	537	1,956
Child Care Centers		1,080	11,248	5,833	18,161
School Age Care		-	-	7,295	7,295
<b>Current Available Spaces</b>		<b>2,645</b>	<b>14,408</b>	<b>14,789</b>	<b>31,842</b>
Percent Distribution		8%	45%	46%	100%
<b><i>EXISTING SURPLUS/(SHORTAGE) at 2006</i></b>					
Percent Distribution		<b>(3,110)</b>	<b>(10,009)</b>	<b>(4,709)</b>	<b>(17,828)</b>
Percentage of Demand Met		17%	56%	26%	100%
by Existing Facilities/Spaces		46%	59%	76%	64%

- (1) Based on estimated number of children by age categories for San Francisco from CA Dept. of Finance P-3 Report and applied to City Planning Department's estimate of existing population for 2006. Excludes residents that work outside of SF and need child care outside SF (see Table 3) and excludes Mission Bay, Rincon Hill and Visitation Valley existing development as estimated through 2006.
- (2) Labor force participation rates (LFPRs) are from the 2000 Census and include children with two working parents or single working parents. The Census calculates LFPRs for all children under 6 years, and children 6 to 17 years old. Therefore, LFPRs for infants and preschool are the same. (See Table 2 for more information.)
- (3) Not all children with working parents are assumed to need licensed care: the assumptions - % - under each age category are used. The remaining children are assumed to be cared for by family members, nannies, friends, and unlicensed care. Percentages are based on a detailed review of 12 other child care studies, including impact fee studies. Infant and preschool demand factors have been developed with the staff of the Dept. of Human Services and DCYF. School age Demand factor is from San Francisco Rec and Park Staff Survey in 2005.
- (4) Includes demand from employees that work in the San Francisco but live elsewhere (see Tables 5 and 6). This analysis assumes one child per employee that needs care residence at the rate of: 25% infants 75% preschool 0% school age. School age children are assumed to have care near their home and school.
- (5) See Table 4 for more detail and sources of supply.

Sources: California Department of Finance-P-3 Report; SF City Planning Department; and Brion & Associates.

Applying these assumptions regarding the percent of children needing licensed care for residents and employees generates the total number of children requiring licensed child care spaces by age. The number of existing required spaces totals 49,670. Accounting for the current supply of child care, which is summarized in **Table 4**, we find that there is a shortage of 17,828 spaces overall for children ages 0 to 13 in San Francisco. Most of this shortage is for preschool-age and school age care. Overall, there are child care spaces available for about 64% of the children needing care. This does not account for whether they can afford these child care spaces, however. For infant care, 46% of demand is being met; for preschool, 59% of overall demand is met currently; and for school age children, 76% of demand is being met. Overall, one-third of children that need a licensed child care space may not have one available, irrespective of affordability.

In summary, of total children 0 to 13 living in the City, which equals 87,800; 44%, or slightly less than half, are assumed to require licensed child care outside the home. Overall, there is demand for nearly 50,000 child care spaces. With a supply of about 31,800 spaces, there is a significant shortfall of spaces in the City as of 2006.

Another measure of the unmet need for child care in the City includes the current waiting list for child care. The San Francisco Centralized Eligibility List publishes a monthly report which includes information on the number of children who are eligible for subsidized child care.<sup>16</sup> To be eligible for the List, families must be low-income (i.e., at or below 75% of the State Median Income) and meet at least one of the following needs: working, looking for work, attending school or in training, homeless, medically incapacitated, or receiving Child Protective Services.<sup>17</sup> Thus, not all the children estimated above needing a child care space are eligible for this List because it focuses on low-income children.

As of January 2007, there were 3,039 eligible children on the Centralized Eligibility List. This is over 1.5 times the 1,833 children currently enrolled in subsidized child care in the City. Of the total eligible children in January 2007, 1,242 (41%) were in families that earned 25% or less of the State Median Income. Approximately 45%, or 1,358 children, were in families which earned 25% to 50% of the State Median Income and 374 children (12%) were in families earning 50% to 75% of the State Median Income. Less than 2% of children came from families who earned over 75% of the State Median Income.

### **Future Child Care Demand**

The future demand for child care is shown in **Table 8** and is based on projected population growth between 2006 and 2025 as discussed above. Demand is calculated using the same methodology and assumptions as in the previous tables for current

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<sup>16</sup> See *San Francisco Centralized Eligibility List Monthly Report* (as of 1/01/2007) for further explanation on the different categories and more detailed information.

<sup>17</sup> Please see the San Francisco Centralized Eligibility List website: [www.celsf.org](http://www.celsf.org).

demand and supply, with the exception of children as a percent of the total population, which is forecast to decline very slightly by 2025 from 12.5% in 2006 to 12.1% for the period 2006 to 2025 (see **Table 3**).<sup>18</sup>

Because we do not have estimates of future supply, the future demand analysis only presents future demand. **Table 8** calculates the total new demand for child care between 2006 and 2025, which is expected to equal 3,780 licensed child care spaces. Over half of these spaces, or 2,271 spaces, are generated by San Francisco residents. By age, the breakdown is as follows:

- ◆ 498 infant spaces, or 13% of total
- ◆ 1,923 preschool spaces, or 51% of total
- ◆ 1,358 school age spaces, or 36% of total

**Table 9** shows the total child care demand at 2025, based on current and future demand, including the estimated 3,780 spaces to be added through the fee program. Assuming the child care fee program is updated as proposed herein and funds the 3,780 spaces needed, there would be an estimated shortfall of approximately 6,400 spaces at 2025, due to existing deficiencies. By age group, the estimated shortfalls equal:

- ◆ 1,228 infant spaces, or 19%;
- ◆ 1,618 preschool spaces, or 25%; and
- ◆ 3,574 school age spaces, or 56%.

The child care needs of Mission Bay, Rincon Hill, and Visitation Valley, which are excluded from the analysis as discussed above, are estimated for informational purposes and included in **Appendix B: Tables F and G**.

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<sup>18</sup> The average rates for children as a percent of the total population from the Department of Finance vary slightly from year to year, and this analysis uses the average rates between 2010 and 2025 for the net new growth in the City.

**Table 8  
Future Demand for Child Care: 2006 to 2025  
San Francisco Child Care Linkage Fee Nexus Study**

Future Growth - 2006 to 2025	New Population & Employment	% Distri- bution	New Child Care Demand by Age			Total. 0 to 13 Years Old
			Birth to 24 Mos. or Infant	2 to 5 or Preschool	6 to 13 or School Age	
<b>Future Child Care Need</b>						
New Population with Children - 2006 to 2025	(1) 44,768	(see Table 3)				
Resident Children Potentially Needing Care						
Estimated Number of Children by Age	(2) (see Table 3)		566	1,375	3,244	5,186
Average Labor Force Participation Rates	(3)		57.6%	57.6%	63.2%	
Children With Working Parents			326	792	2,052	3,170
% Children Needing Licensed Care	(4)		37%	100%	66%	72%
Children Needing Licensed Care			121	792	1,358	2,271
Percent of Children by Age Needing Care			21%	58%	42%	44%
Non-Resident Employee's Children Needing Care	(5) (see Table 6)		377	1,131		1,509
<i>Distributed by Land Use Category</i>						
Civic, Institutional, Education	89	0%	0	1	-	2
Hotel-Motel	2,347	3%	13	39	-	53
Industrial/PDR	13,409	20%	75	225	-	300
Medical	3,849	6%	22	65	-	86
Office	40,662	60%	228	683	-	911
Retail	7,011	10%	39	118	-	157
Total Future Employee Demand for Child Care	67,367	100%	377	1,131	-	1,509
<b>Total New Demand for Child Care Spaces</b>			<b>498</b>	<b>1,923</b>	<b>1,358</b>	<b>3,780</b>
Percent Distribution			13%	51%	36%	100%

- (1) Excludes residents that work outside of SF and need child care outside SF (see Table 3) and represents population associated with SF and MF unit development and excludes SRO and senior units and excludes Mission Bay, Rincon Hill and Visitation Valley existing development as estimated through 2006.
- (2) Based on the estimated average number of children by age categories for 2010 to 2015 for San Francisco from CA Dept. of Finance P-3 Report and applied to City Planning Department's estimate of expected new population between 2006 and 2025.
- (3) Labor force participation rates are from the 2000 Census and include children with two working parents or single working parents. Rates vary by age, under 6 years and over 6 years (see Table 2).
- (4) Not all children with working parents are assumed to need licensed care: the assumptions - % - under each age category are used. The remaining children are assumed to be cared for by family members, nannies, friends, and unlicensed care. Percentages are based on a detailed review of 12 other child care studies, including impact fee studies. Infant and preschool demand factors have been developed with the staff of the Dept. of Human Services and DCYF. School age Demand factor is from San Francisco Rec and Park Staff Survey in 2005.
- (5) Includes demand from employees that work in the San Francisco but live elsewhere (see Tables 5 and 6). This analysis assumes one child per employee that needs care residence at the rate of: 25% infants 75% preschool 0% school age. School age children are assumed to have care near their home and school.

Sources: California Department of Finance-P-3 Report; SF City Planning Department; and Brion & Associates.

**Table 9  
Total Child Care Demand at 2025  
San Francisco Child Care Linkage Fee Nexus Study**

Existing Conditions	Child Care Demand & Supply by Age			
	Birth to 24 Mos. or Infant	2 to 5 or Preschool	6 to 13 or School Age	Total. 0 to 13 Years Old
<b>DEMAND at 2025</b>				
Resident Children Potentially Needing Care (1)	7,158	16,345	47,102	70,605
Average Labor Force Participation Rates (2)	57.6%	57.6%	63.2%	
Children With Working Parents	4,123	9,414	29,791	43,327
% Children Needing Licensed Care (3)	37%	100%	66%	71%
Children Needing Licensed Care	1,525	9,414	19,721	30,660
Percent of Children by Age Needing Care	21%	58%	42%	43%
Non-Resident Employee's Children Needing Care (4)	2,845	8,536	-	11,381
Total Demand for Child Care Spaces at 2025	4,371	17,949	19,721	42,041
Percent Distribution	10%	43%	47%	100%
<b>EXISTING &amp; FUTURE SUPPLY at 2025 (5)</b>				
Family Child Care Homes				
Small, Licensed for 8	1,124	2,182	1,124	4,430
Large, Licensed for 14	441	978	537	1,956
Child Care Centers	1,080	11,248	5,833	18,161
School Age Care	-	-	7,295	7,295
Future Supply Funded with Fee Program (6)	498	1,923	1,358	3,780
Total Expected Spaces at 2025	3,143	16,331	16,147	35,622
Percent Distribution	9%	46%	45%	100%
<b>ESTIMATED SURPLUS/(SHORTAGE) at 2025</b>				
Percent Distribution	19%	25%	56%	100%
Percentage of Demand Met by Existing & Planned Facilities/Spaces	72%	91%	82%	85%

- (1) Based on estimated number of children by age categories for San Francisco from CA Dept. of Finance P-3 Report and applied to City Planning Department's estimate of total future population at 2025. (See Tables 1 and 3).  
Note: includes Mission Bay, Rincon Hill and Visitation Valley existing development so as to give a full estimate of total demand at 2025.
- (2) Labor force participation rates are from the 2000 Census and include children with two working parents or single working parents. Rates vary by age, under 6 years and over 6 years.
- (3) Not all children with working parents are assumed to need licensed care: the assumptions - % - under each age category are used. The remaining children are assumed to be cared for by family members, nannies, friends, and unlicensed care. Percentages are based on a detailed review of 12 other child care studies, including impact fee studies. Demand for preschool is based on the Universal Preschool approach which is a policy goal of the Dept. of Human Services and DCYF. School age Demand factor is from San Francisco Rec and Park Staff Survey in 2005.
- (4) Includes demand from employees that work in the San Francisco but live elsewhere (see Tables 5 and 6). This analysis assumes one child per employee that needs care residence at the rate of:           25% infants           75% preschool           0% school age  
School age children are assumed to have care near their home and school.
- (5) See Table 4 for more detail and sources of supply.
- (6) Includes future supply expected to be constructed through the Linkage Fee Program (see Table 8).
- Sources: California Department of Finance-P-3 Report; SF City Planning Department; and Brion & Associates.

## 6. Child Care Facilities Master Plan

As part of this effort, a plan for how the City would provide new child care spaces given the existing supply of child care by type, and the cost of providing new child care by type, has been prepared. The breakdown of new child care spaces by type of facility and age is shown for projected future demand in **Table 10**. This distribution of future spaces reflects the current supply by type of facility and age as well as the likelihood of each type of supply to expand or add more spaces. **Table 10** shows the breakdown of spaces by facility and age for the estimated 3,780 licensed spaces that will be required by new residents and non-resident employees in San Francisco. About 48% of the new spaces will be center-based through new centers, expansions of existing centers, or new centers in new or existing commercial space. About 34% of the spaces will be created through new and expanding family child care homes. For school age children, half of the new spaces are assumed to be school age care onsite at existing schools, and the other half will be split between center-based and family child care homes. Based on this breakdown of spaces, **Table 10** also calculates the total costs by type of care for new child care spaces. Child care spaces at new child care centers are the most expensive at approximately \$27,400 per space based on data from other San Francisco child care projects over the last several years.<sup>19</sup> The costs per space by type of care are:

- ◆ \$27,400 per space for new child care center spaces;
  - ◆ \$13,700 for spaces in existing or new commercial space;
  - ◆ \$13,700 per space for existing child care centers which choose to expand;
  - ◆ \$500 per space for new small family child care homes;
  - ◆ \$1,429 per space for new large family child care homes;
  - ◆ \$3,333 per space for small family child care homes to expand to large family child care homes (net increase of 6 spaces per home); and
  - ◆ \$8,333 per space for school age care at existing schools.
- ◆ *Average: \$12,325 per space across all types of care.*

If San Francisco were to have a higher proportion of new center spaces, the average cost per space would be higher. The total cost of new required child care facilities equals about \$46.6 million, based on the above rates and distribution of spaces by facility type. Taking the average cost among these various types of care, however, is reasonable, given that the type of care that will actually be built is difficult to predict. This method reflects a reasonable estimate of what the City will build with the fee revenues given the distribution of demand by type of care, age, and the supply of existing types of child care. For instance, only a portion of small family child care homes can be assumed to be interested in or capable of expanding to large child care homes.

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<sup>19</sup> These costs have been adjusted for inflation and expressed in 2006 dollars.

**Table 10**  
**Estimated Cost of Child Care Spaces by Type of Space and Age: 2006 to 2025**  
**San Francisco Child Care Linkage Fee Nexus Study**

Type of Facility or Program	Average Cost per Space by Facility Type	Birth to 2 or Infant	3 to 5 or Preschool	6 to 13 or School Age	Totals, 0 to 13 Years Old	Percents of Totals
Target Number of Spaces	(see Table 8)	498	1,923	1,358	3,780	
1. Build New Centers: Spaces		199	769	102	1,070	28.3%
Costs (1)	\$27,406	\$5,457,364	\$21,085,657	\$2,792,060	\$29,335,081	63.0%
2. New Centers in Existing or New Commercial Space		50	192	102	344	9.1%
Costs (1)	\$13,703	\$682,170	\$2,635,707	\$1,396,030	\$4,713,908	10.1%
3. Expand at Existing Centers: Spaces		75	289	34	397	10.5%
Costs (2)	\$13,703	\$1,023,256	\$3,953,561	\$465,343	\$5,442,160	11.7%
4. New Small Family Child Care Homes: Spaces		100	385	272	756	20.0%
Costs (3)	\$500	\$49,782	\$192,344	\$135,836	\$377,963	0.8%
5. New Large Family Child Care Home Spaces		50	192	136	378	10.0%
Costs (4)	\$1,429	\$71,118	\$274,778	\$194,052	\$539,947	1.2%
6. Expand FCCH from 8 to 14: Spaces		25	96	34	155	4.1%
Costs (5)	\$3,333	\$82,971	\$320,574	\$113,197	\$516,741	1.1%
7. School Age at Existing Schools		-	-	679	679	18.0%
Costs (6)	\$8,333			\$5,659,846	\$5,659,846	12.1%
<b>Total Spaces</b>	na	498	1,923	1,358	3,780	100%
<b>Total Costs</b>	na	\$7,366,661	\$28,462,621	\$10,756,364	\$46,585,646	100%
<b>Average Cost by Age Group</b>	na	\$14,798	\$14,798	\$7,919	\$12,325	

Note: This matrix of child care spaces is derived by evaluating the current supply of spaces and estimating how many facilities might expand; based on past development of spaces and the demand for child care by age group, as determined by the consultant and DCYF.

- (1) Based on actual project costs for 13 projects that have received some funding from the City of San Francisco's low-interest loan program for child care facilities (See Appendix Table B).
- (2) Expansion is assumed to cost 50% of new child care center spaces.
- (3) Assumes cost based on approximation of \$4,000 to set up a new small family child care home for 8 children.
- (4) Assumes cost based on approximation of \$20,000 to set up a new large family child care home for 14 children. based on data from actual grant programs administered by the Child Care Development Fund and DCYF/LIIF (See Appendix Table E).
- (5) Assumes cost based on approximation of \$20,000 to expand from a small to a large family child care home. based on data from actual grant programs administered by the Child Care Development Fund and DCYF/LIIF (See Appendix Table E).
- (6) Assumes \$350,000 per portable serving 36 children on average for before- and after-school care.

Sources: City of San Francisco; LINCC; Brion & Associates.

**Table 11** summarizes the new child care spaces and costs and shows the average number of spaces and costs per year over the study period or 2006 to 2025. As shown, infant and preschool spaces cost more on average than school age spaces. Over the 19-year period, on average, there will be an annual need for 26 infant spaces, 101 preschool spaces, and 71 school age spaces, or an overall total of about 199 per year. The average annual cost of these spaces would be approximately \$2.6 million per year. In reality, new development will be higher or lower in any given year, and the actual child care needs would be more or less than the averages presented here.

**Table 11**  
**Summary of New Demand for Child Care and Costs 2006 to 2025**  
**San Francisco Child Care Linkage Fee Nexus Study**

Item	Child Care Demand - 2006 to 2025			Total Estimated Child Care Need in Spaces	
	Birth to 23 months or Infant	2 to 5 or Preschool	6 to 13 or School Age		
Total New Demand from 2006 to 2025 for Child Care by Age	498	1,923	1,358	3,780	
City's Target as % of Total	100%	498	1,923	1,358	3,780
Average Facility Cost per Space	\$14,798	\$14,798	\$7,919	\$12,325	
Total Cost of Child Care Spaces (excluding administrative costs)	\$7,366,661	\$28,462,621	\$10,756,364	\$46,585,646	
With Administrative Costs (5%)	\$7,734,994	\$29,885,752	\$11,294,183	\$48,914,928	
Average No. of Spaces per Year (1)	26	101	71	199	
Average Cost per Year (1)	\$407,105	\$1,572,934	\$594,431	\$2,574,470	

(1) Assumes growth occurs evenly over the 2006 to 2025 period; in reality, development will be higher or lower in any given year.  
Sources: City of San Francisco; Brion & Associates.

## **7. Child Care Requirements**

**Table 12** calculates demand for child care spaces by type of future residential development. Assuming the City will fund 100% of the future demand for child care, it will need to fund 2,271 spaces generated by residential demand. As discussed above under **Section 3**, single resident occupancy and senior units are not assumed to generate children by definition and are therefore not included; these units are expected to make up 2-3% of the total new dwelling units in the City through 2025. There will be 45,014 new residents who are expected to generate 5,186 children 0 to 13 years old. Of these children, 44%, or 2,271 children, are assumed to need licensed care based on the methodology discussed above. This amount of children will generate a need for a total of 247,551 square feet of new child care space of various types and about 170,333 square feet of outdoor space.

Based on State child care licensing requirements, new residential units would be required to provide the following amounts of indoor and outdoor child care space:

- ◆ Single Family: 19.1 square feet of indoor space and 13.2 square feet of outdoor space;
- ◆ Multi-Family 0 to 1 bedroom: 12.6 square feet of indoor space and 8.7 square feet of outdoor space; and
- ◆ Multi-Family 2+ bedrooms: 14.4 square feet of indoor space and 9.9 square feet of outdoor space.

The breakdown is based on the persons per household factors for each of these three types of residential units. The San Francisco Planning Department estimates slightly more than 40% of new multi-family units will be larger units with 2 or more bedrooms, based on the City's housing policy requirements for most of the areas with development potential within the City.

The child care space requirement varies slightly between single family and multi-family units, based on population density or persons per household per unit. The City forecasts about 95% of the new development to be multi-family units, which include apartments, condos, live/work units, lofts, and flats. This forecast is based on historical development patterns, current applications and proposed projects, and current zoning in the City (see **Appendix C: Table C**).

Table 12  
 Child Care Requirement for Residential Uses  
 San Francisco Child Care Linkage Fee Nexus Study

Item	Assumptions - Percents	Residential Uses				
		Total Residential Uses	Single Family Units	Multi-Family Units - 0-1 Bedrooms	Multi-Family Units - 2+ Bedrooms	SRO/Senior Units
Future Dwelling Units (w/out MB, RH, VV)		19,146	477	10,806	7,142	721
Persons Per Household Factors		2.35	3.50	2.30	2.63	1.16
Total Population	See Table 1	46,108	1,671	24,854	18,748	836
Percent Distribution		100%	4%	54%	41%	2%
Total Population Minus SR/SRO Population		45,273	1,671	24,854	18,748	
Percent Distribution		100%	4%	55%	41%	
Residents Needing Care Outside SF	See Table 3	(259)	(10)	(142)	(107)	
Future Population Subject to Fee		45,014	1,662	24,712	18,641	
Percent Distribution		100%	4%	55%	41%	
Estimated Total Children (1)	0.0%	5,186	191	2,847	2,148	
Children Needing Licensed Care (2)	43.8%	2,271	84	1,247	940	
City's Policy Target: % of Demand	100%	2,271	84	1,247	940	
Dwelling Units Subject to Fee		18,426	477	10,806	7,142	
Child Care Requirement in Sqft by Land Use (3)						
Building Space		247,551	9,138	135,901	102,512	
Outdoor Space		170,333	6,288	93,510	70,536	
<b>Child Care Space Requirement per Unit (4)</b>						
Building Space in Sqft		<b>13.4</b>	<b>19.1</b>	<b>12.6</b>	<b>14.4</b>	
Outdoor Space in Sqft		<b>9.2</b>	<b>13.2</b>	<b>8.7</b>	<b>9.9</b>	

Note: SRO and Senior units would be exempt from the child care fee as they do not generate children by definition.

However, it is true that children do occasionally live in SROs.

(1) See Table 8; children as % of total population citywide.

(2) See Table 8; represents average factor for all child care age groups.

(3) Assumes an average building sqft per space of 109 based on recent projects in San Francisco (See Appendix Table B) and includes support space: halls, storage, restrooms, kitchen, etc. and the average sqft per space from recent San Francisco Projects Assumes an average outdoor space sqft of 75 based on state licensing requirements.

(4) If less than 14 spaces for Residential project and 24 spaces for Commercial Projects are required by a "project" then the in-lieu fee would be levied; otherwise a "project" could pay either the in-lieu fee or provide the child care spaces on or off-site, with deed restrictions for a specified term, to be defined in the fee ordinance.

Sources: Brion & Associates.

The demand for child care spaces from non-residential uses is calculated in **Table 13** by type of land use, for a total of 1,509 child care spaces. The child care requirements for non-residential development are expressed as square feet of child care space per 1,000 square feet of non-residential space, as shown in **Table 13** and summarized below:

- ◆ Civic, Institutional, Educational: 10.8 square feet of indoor space and 7.5 square feet of outdoor space;
- ◆ Hotel: 6.1 square feet of indoor space and 4.2 square feet of outdoor space;
- ◆ Industrial: 7.0 square feet of indoor space and 4.8 square feet of outdoor space;
- ◆ Medical: 10.8 square feet of indoor and 7.5 square feet of outdoor space;
- ◆ Office: 10.8 square feet of indoor space and 7.5 square feet of outdoor space; and
- ◆ Retail: 8.1 square feet of indoor space and 5.6 square feet of outdoor space.
  
- ◆ *Average: 9.3 square feet of indoor space and 6.4 square feet of outdoor space.*

The space requirements vary by land use because the employment densities vary by land use. The higher the density, or the more employees per square foot, the greater the child care requirements for that land use. The density assumptions (square feet per employee) are shown in **Appendix B: Table A** and are from the San Francisco Planning Department.

For projects that 1) are too small to create demand for a reasonably sized child care project (under 14 spaces); 2) do not want to provide child care space directly; or 3) cannot provide child care onsite, giving them the option of paying a linkage fee, which is calculated based on the space requirements shown in **Tables 12** and **13**, is suggested. This approach is consistent with the current child care fee program in the City. The proposed in-lieu or linkage fee rates are shown in **Tables 14** and **15**.

**Table 13**  
**Child Care Requirement for Non-Residential Uses**  
**San Francisco Child Care Linkage Fee Nexus Study**

Item	New Non-Residential Uses						Total Non-Residential Space (Sq. Ft.)
	Civic, Institutional, Education	Hotel-Motel	Industrial/PDR	Medical	Office	Retail	
Future Development: Sqft of Space (1)	20,083	938,640	4,693,270	866,036	9,148,962	2,103,296	17,770,286
Child Care Space Demand (2)	2	53	300	86	911	157	1,509
City's Policy Target: % of Demand	100%	53	300	86	911	157	1,509
Child Care Requirement in Sqft by Land Use (3)							
Building Space	218	5,728	32,729	9,395	99,247	17,112	164,428
Outdoor Space	150	3,941	22,520	6,464	68,289	11,774	113,139
<b>Child Care Space Requirement (4)</b>							
CC Building Space in Sqft per 1,000 Sqft	<b>10.8</b>	<b>6.1</b>	<b>7.0</b>	<b>10.8</b>	<b>10.8</b>	<b>8.1</b>	<b>9.3</b>
CC Outdoor Space in Sqft per 1,000 Sqft	<b>7.5</b>	<b>4.2</b>	<b>4.8</b>	<b>7.5</b>	<b>7.5</b>	<b>5.6</b>	<b>6.4</b>

(1) Based on projections by SF Department of City Planning (July 2006); See Appendix Table A.

The cost of non-resident employee child care demand is spread over all expected non-residential space as it is not possible to distinguish which space is used by resident employees versus non-resident employees.

(2) See Tables 5 and 6. Assumes that about 5% of employees need child care and of those, one child per employee, age 0 to 5.

(3) Assumes an average building sqft per space of 109 based on recent projects in San Francisco (See Appendix Table B) and includes support space: halls, storage, restrooms, kitchen, etc. and the average sqft per space from recent San Francisco Projects Assumes an average outdoor space sqft of 75 based on state licensing requirements.

(4) If less than 14 spaces were required by a "project" then the in-lieu fee would be levied; otherwise a "project" could pay either the in-lieu fee or provide the child care spaces on- or off-site, with deed restrictions for a specified term, to be defined in the fee ordinance.

Sources: Brion & Associates.

Table 14  
 Potential Maximum Residential Child Care Linkage Fee by Type of Unit  
 San Francisco Child Care Linkage Fee Nexus Study

Item	Assumptions - Percents	Residential Uses				SRO/Senior Units
		Total - Residential	Single Family Units	Multi-Family Units - 0-1 Bedrooms	Multi-Family Units - 2+ Bedrooms	
Future Dwelling Units (w/out MB, RH, VV)		19,146	477	10,806	7,142	721
Persons Per Household Factors		2.35	3.50	2.30	2.63	1.16
Total Population	See Table 1	46,108	1,671	24,854	18,748	836
Percent Distribution		100%	3.6%	53.9%	40.7%	1.8%
Total Population Minus SR/SRO Population		45,273	1,671	24,854	18,748	
Percent Distribution		100%	3.7%	54.9%	41.4%	
Residents Needing Care Outside SF	See Table 3	(259)	(10)	(142)	(107)	
Future Population Subject to Fee		45,014	1,662	24,712	18,641	
Percent Distribution		100%	3.7%	55%	41.4%	
Estimated Total Children (1)	0.0%	5,186	191	2,847	2,148	
Children Needing Licensed Care (2)	43.8%	2,271	84	1,247	940	
City's Policy Target: % of Demand	100%	2,271	84	1,247	940	
Cost of Child Care by Land Use (3)		\$27,992,479	\$1,033,294	\$15,367,388	\$11,591,797	
Administrative Cost Factor (4)		\$1,399,624	\$51,665	\$768,369	\$579,590	
<b>Total Child Care Costs</b>		<b>\$29,392,103</b>	<b>\$1,084,959</b>	<b>\$16,135,758</b>	<b>\$12,171,386</b>	
Dwelling Units Subject to Fee		18,426	477	10,806	7,142	-
Potential Maximum Linkage Fee Per Unit		\$1,519	\$2,164	\$1,422	\$1,623	
Administrative Cost per Unit	5.0%	\$76	\$108	\$71	\$81	
<b>Total Potential Maximum Linkage Fee per Dwelling Unit</b>		<b>\$1,595</b>	<b>\$2,272</b>	<b>\$1,493</b>	<b>\$1,704</b>	<b>\$0</b>

Note: SRO and Senior units would be exempt from the child care fee as they do not generate children by definition.

However, it is true that children do occasionally live in SROs.

(1) See Table 8; children as % of total population citywide.

(2) See Table 8; represents average factor for all child care age groups.

(3) Assumes an average cost per space of \$12,325 (see Table 11).

(4) Assumes an administrative cost factor of 5.0% of total costs for administration of child care fee fund.

Sources: Brion & Associates.

**Table 15**  
**Potential Maximum Non-Residential Child Care Linkage Fee by Land Use Category**  
**San Francisco Child Care Linkage Fee Nexus Study**

Item	New Non-Residential Uses							Total Non-Residential Space (Sq. Ft.)
	Civic, Institutional, Education	Hotel-Motel	Industrial/PDR	Medical	Office	Retail		
Future Development: Sqft of Space	(1)	20,083	938,640	4,693,270	866,036	9,148,962	2,103,296	17,770,286
Child Care Space Demand	(2)	2	53	300	86	911	157	1,509
City's Policy Target: % of Demand		100%						
Cost of Child Care by Land Use (3)		\$24,635	\$647,654	\$3,700,938	\$1,062,325	\$11,222,604	\$1,935,011	\$18,593,167
Administrative Cost Factor (4)		\$1,232	\$32,383	\$185,047	\$53,116	\$561,130	\$96,751	\$929,658
<b>Total Child Care Costs</b>		\$25,867	\$680,037	\$3,885,985	\$1,115,442	\$11,783,734	\$2,031,761	\$19,522,825
Potential Maximum Linkage Fee Per Sqft of Space		\$1.23	\$0.69	\$0.79	\$1.23	\$1.23	\$0.92	\$1.05
Administrative Cost per Space		5.0%	\$0.03	\$0.04	\$0.06	\$0.06	\$0.05	\$0.05
<b>Potential Maximum Fee per Sqft of Development</b>		<b>\$1.29</b>	<b>\$0.72</b>	<b>\$0.83</b>	<b>\$1.29</b>	<b>\$1.29</b>	<b>\$0.97</b>	<b>\$1.06</b>

(1) Based on projections by SF Department of City Planning (July 2006).

The cost of non-resident employee child care demand is spread over all expected non-residential space as it is not possible to distinguish which space is used by resident employees versus non-resident employees.

(2) See Tables 5 and 6. Assumes that about 5% of employees need child care and of those, one child per employee, age 0 to 5.

(3) Assumes an average cost per space of \$12,325 (see Table 11).

(4) Assumes an administrative cost factor of 5% of total costs for administration of child care fee fund.

Sources: Brion & Associates.

## 8. Proposed Maximum Child Care Linkage Fee by Land Use

The total estimated maximum residential child care linkage fees by land use are calculated in **Table 14** based on the average cost per space calculated in **Table 10**. Total costs of new required child care for residential uses equal \$29.4 million, assuming an average cost per space of \$12,325 and a 5% administration cost. Most of these costs, about \$28.3 million, are estimated to be associated with multi-family development because the City is expected to add very few single family units. These proposed fee rates represent the maximum amount that the City could charge based on nexus. These maximum fee rates are comparable with child care fees in other locations as discussed in **Chapter II: Fee Comparisons**. Many of these fees have not been updated in a number of years and/or were adopted prior to the adoption of the Mitigation Fee Act. In summary, other cities' current child care fees range from:

- ◆ \$100 to \$1,736 for a single family residence;
- ◆ \$115 to \$1,624 for a multi-family residence; and
- ◆ \$0.01 to \$1.15 per square foot for non-residential uses.

The proposed San Francisco child care residential linkage fees are as follows:

- ◆ Single Family: \$2,272 per unit;
- ◆ Multi-Family 0 to 1 bedroom: \$1,493 per unit; and
- ◆ Multi-Family 2+ bedrooms: \$1,704 per unit.
- ◆ *Average: \$1,595 per residential unit or \$1.72 per square foot of residential development.*<sup>20</sup>

**Table 15** calculates the maximum proposed non-residential linkage fee per square foot for non-residential land uses. The maximum fees range from \$0.72 per square foot for hotel/motel uses to \$1.29 per square foot for office, medical, and civic, institutional, educational. The cost of providing child care to non-resident employees that work in the City is divided by the total amount of expected gross building space by land use category to derive the non-residential linkage fees. The proposed fee rates are:

- ◆ Civic, Institutional, Educational: \$1.29 per square foot of building space;
- ◆ Hotel/Motel: \$0.72 per square foot of building space;
- ◆ Industrial: \$0.83 per square foot of building space;
- ◆ Medical: \$1.29 per square foot of building space;
- ◆ Office: \$1.29 per square foot of building space; and
- ◆ Retail: \$0.97 per square foot of building space.
- ◆ *Average: \$1.06 per square foot of building space.*

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<sup>20</sup> The residential development factor of \$1.72 per square foot is for comparison purposes and assumes the average residential unit to be 925 square feet.

The total projected revenues funded by non-residential uses would equal \$19.5 million over the 2006 to 2025 period, including 5% for administration. These maximum fees assume an estimated amount of new non-residential development that totals approximately 17.8 million new square feet of non-residential space over existing conditions, not including development approved at Mission Bay, Visitation Valley, and Rincon Hill (see **Appendix B: Table A**).

The amount of projected new development expected from 2006 to 2025 equals about 1.1 million square feet per year on average, of which about 605,000 square feet per year would be office space. These figures exclude non-residential space associated with Mission Bay, Rincon Hill and Visitation Valley as discussed elsewhere in the report. The City's Proposition M, which regulates office development in the City, allows for up to 875,000 square feet of office space per year. Even with the inclusion of the three project areas, the projected office development would total about 481,000 square feet per year, or within the Proposition M limit.

It should be noted that for those projects that choose to provide the child care space directly and not pay the linkage fee, the administrative fee would still need to be applied to cover the cost of the City's monitoring the project's mitigation.

It is important to understand that the methodology used to estimate child care demand and the maximum linkage fee requirement and fee rate is not dependent on the total overall amount of growth expected. With other types of impact fees, this may not be the case. For instance, if the City is trying to fund \$100 million worth of needed traffic improvements, the fee rate would be derived by dividing the total costs by the expected growth in trips, after making allocation assumptions to each land use. Thus, a fixed cost is allocated over a certain amount of growth to derive the fee rate. In this example, if the growth is less, the City would receive less money than needed or the fee rate would have to be increased to reflect lower growth.

With child care, we calculated the child care need per one new dwelling unit or per employee and applied an average cost per child care space to that demand to derive the maximum fee rates by land use. If actual growth is lower than analyzed in this report, the child care fee revenue generated will be less than estimated, but the child care fee rate would remain the same. The analysis does not presume some fixed amount of child care facilities that are needed independent of growth and then allocate those costs over the new growth as with other types of impact fees. The methodology presumes a bottom-up approach to derive child care costs or facility needs. Thus, if growth is less than analyzed herein, then child care demand would be commensurate with the amount of child care fee revenue collected.

It is important to note that the Department of Children, Youth, and Their Families proposes that each land use would pay the proposed fee rate listed in the **Tables 14 and 15**, unless the new development could not be categorized into one of these categories. In that situation, the average fee would apply respectively to residential or non-residential

uses. In total, it is assumed that the new child care fee will generate over \$46.6 million (plus administrative costs) to San Francisco over the next 19 years (through 2025) assuming development occurs as projected. If development is less than projected, the child care fee revenue collected will also be less, but demand for child care will be less as well.

## **9. Linkage Fee Implementation**

This section discusses potential funding mechanisms the City of San Francisco could adopt to implement the Child Care Linkage Fee Program and other policy and implementation issues discussed in this report.

### **Proposed Funding Mechanisms for Fee Program**

The expected development linkage fee revenue (i.e., \$48.9 million<sup>21</sup>) could be allocated to a variety of “funding mechanisms” the City could adopt to provide for new child care, which are discussed below. Should the child care fee be updated as proposed, the Board of Supervisors would set the priorities, choose the funding mechanisms, and the amounts allocated to each mechanism during the annual review of the fee program with input from the Department of Children, Youth, and Their Families. The City’s current Child Care Facilities Fund, which is administered by the Low Income Investment Fund, provides a variety of funding mechanisms and programs as outlined below. With the additional funding that would be generated by this fee update, the dollar amounts available for new child care would increase. These include, but are not limited to, the following:

1. **Direct City Funding** of new projects through joint development agreements with developers, non-profit providers/agencies, or City contributions towards private projects. This type of funding would include additional requirements concerning affordability and access to spaces. The City is not expected to build and own any child care facilities outright, except perhaps those developed through the Recreation and Park Department’s programs.
2. **Low-Interest Loans** to new or existing child care providers/facilities. There are a few options here. The first is a straight low-interest loan, with no special requirements. The second option includes a low interest loan with certain requirements or restrictions. For instance, there could be a payment waiver clause: if new spaces eligible to very low income children are created and maintained, then no loan payment would be required; however, if the provider eliminates the low income spaces, the loan repayment would become due. With low interest loans, the revenue would be used to create a revolving loan fund that would regenerate itself though the low interest charged on the loans.
3. **No-Interest Loans** with income/profit limits similar to those required to qualify for housing loan funds. These funds could be offered to existing child care providers at risk of going out of business because they are losing their space or to providers that will provide infant care, subsidized care, or spaces for children with special needs, assuming they expand their facilities.

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<sup>21</sup> This includes the administrative costs at 5% of total fee revenue through the year 2025.

4. **Grants with Matching Requirements** to new or existing child care providers. These funds would be available if the project provides infant care along with other age groups. To the extent that providers find additional monies or grants for expanding or creating new child care spaces, these spaces would count toward the City's existing need for spaces.
  
5. **Outright Grants** could be available to new or existing providers that provide spaces for children with special needs and/or new subsidized spaces. However, conditions and restrictions should be placed on the child care provider that receives outright grants to ensure that not only are new spaces being provided, but other goals of the City are being met also.

The amount of money allocated to each of these funding mechanisms would be in proportion to the amount of revenue needed to put each mechanism into operation. Revolving loan funds would generate interest and the revenue would be returned to the fund; thus, less revenue would be allocated to this option. Outright grants and the provision of new centers would be more costly, and more revenue should be allocated to these mechanisms. The ultimate allocation formula should be one that maximizes the provision of new spaces with the least cost to the overall program.

## **10. Use of Potential Child Care Linkage Fee Revenue**

The \$48.9 million estimated to be generated by the Child Care Linkage Fee will accrue through 2025. In the first few years, the City will need to establish a priority list for the above funding mechanisms. Not all of the mechanisms will be created immediately. A special Child Care Linkage Fee Fund will need to be created so that the funds can be kept separately, and any interest earned on the fee revenue will become part of the fee fund. Up to 5% of the total fee amount collected from a project would be set aside for administration of the fee program.

Once a sufficient amount of fee revenue has been generated to construct a project, the City will need to determine how it will participate in the project. If development were to occur equally over the next 19 years, the City would receive about \$2.6 million per year in child care linkage fee revenue. In reality, real estate development varies year to year in business cycles, and the amount of fee revenue collected in any given year will vary. These are a few of the potential options available to the City:

1. The City currently contracts with the Low Income Investment Fund to manage the child care fee fund. The City could continue to work with the Low Income Investment Fund to manage and implement the program.
2. The City could partner with other child care agencies and non-profits for one of their child care projects.
3. The City could team with a local provider or developer that wants to build a new center and apply the revenue toward the project.
4. The City could issue a Request for Proposals to child care providers and developers that are interested in building a new center or expanding an existing center.
5. The City could develop a grant and low-interest loan program for providers in need of funding to create new child care facilities.

**Appendix A: Summary of Child Care Demand Factors  
from Recent Child Care Studies**

Appendix A  
 Table 1  
 Summary of Child Care Demand Factors  
 San Francisco Child Care Linkage Fee Nexus Study

#	Study Name and Location	Residential/Population Demand					Employment Demand Factors	Other Demand Factors/Comments
		Licensed Care by Age Group (1)						
		0-1 years	2-5 years	6-9 years	10-13 years	Labor Force Participation Rates		
1	<i>Child Care Master Plan, City of Santa Monica, June 1991</i> . Prepared by Moore Iacofano Gollisman, Inc.	40%	64%	59%	59%	56% under 6 and 73% over 6	Study breaks down ages from 0-2 years, 3-4 years, and 5-14 years.	
2	<i>Child Care Linkage Program, City of Santa Monica, November 2005</i> . Prepared by Keyser Marston Associates, Inc.					Assumes 14% of employees have children who demand child care in the City.	Fee applies to non-residential uses only.	
3	<i>A New Assessment of Child Care Need for Children Age 5 and Under in Santa Clara County</i> , Sponsored by FIRST 5 Santa Clara County and prepared by International Child Resource Institute, September 2002.	29% Center-based care, 8% FCCCH; 37% total	29% Center-based care, 8% FCCCH; 37% total	na	na	na	na	
4	<i>City of Alameda Child Care Needs</i> , February 2003 and County of Alameda <i>Meeting the Child Care Needs of Alameda County's Children</i> , February 2002, prepared by Berkeley Policy Associates. (2)	16%	33%	51%	51%	63% of families with children are considered "working" families where both parents or a single parent work.	The study employs a Conservative Demand Estimate and Broad Demand Estimate. Figures shown here are for the Conservative Demand Estimate which does not assume that every "working" family requires licensed care.	
5	<i>Who's Minding the Kids? Child Care Arrangements: Winter 2002</i> . Issued October 2005 by the U.S. Census Bureau based on the Survey of Income and Program Participation (SIPP).	24.2% in organized care; 6.2% FCCCH. (3)	24.2% in organized care; 6.2% FCCCH. (3)	5% in organized care; 5% in after-school enrichment programs.	5% in organized care; 5% in after-school enrichment programs.	Doesn't discuss LFPR.	This study is based on data from the Survey of Income and Program Participation (SIPP) which is collected by the U.S. Census.	

**Appendix A**  
**Table 1**  
**Summary of Child Care Demand Factors**  
**San Francisco Child Care Linkage Fee Nexus Study**

#	Study Name and Location	Residential/Population Demand					Employment Demand Factors	Other Demand Factors/Comments
		Licensed Care by Age Group (1)		Labor Force Participation Rates				
		0-1 years	2-5 years	6-9 years	10-13 years			
6	<i>Methodology: Child Care Demand</i> , from Tompkins County, NY, <a href="http://www.daycarecouncil.org">www.daycarecouncil.org</a> (3)	47%-69%	47%-69%	na	na	na	This study looks at children under age 6 who require care and summarizes results from four other studies which looked at demand.	
7	<i>Primary Child Care Arrangements of Employed Parents: Findings from the 1999 National Survey of America's Families</i> , 2002, The Urban Institute.	73%	73%	80%	80%	na	These percentages refer to the number of children receiving care, both licensed and unlicensed.	
8	<i>The Demand and Supply of Child Care in 1990</i> , Joint Findings of the National Child Care Survey 1990 and A Profile of Child Care Settings, 1991.	na	na	na	na	The report finds that 83% of children 0 to 5 years old have working parents, which is much higher than labor force participation rates we have found.	na No demand estimates are stated.	
9	<i>Linking Development and Child Care: A Toolkit for Developers and Local Governments</i> , 2005, Prepared for Local Investment in Child Care (LINCC) by Bay Area Economics. Mission Bay Project Only	29.9% for center-based care and FCCCH care	29.9% for center-based care and FCCCH care	na	na	Does not appear to use LFPRs.	This study also looks at employee demand, which most studies do not consider.	
10	<i>Survey of Parents/Guardians and Childcare Providers</i> , January 2006, Conducted for the City of San Jose and the San Jose Public Library, by Godbe Research.	28%	28%	na	na	This is a survey of actual use patterns and not an estimate of demand, therefore LFPRs are irrelevant.	Overall, 43% of respondents said that they used child care, but that included care provided by anyone who was not the parent/guardian.	

Appendix A  
 Table 1  
 Summary of Child Care Demand Factors  
 San Francisco Child Care Linkage Fee Nexus Study

#	Study Name and Location	Residential/Population Demand				Employment Demand Factors	Other Demand Factors/Comments
		Licensed Care by Age Group (1)					
		0-1 years	2-5 years	6-9 years	10-13 years		
	<i>Child Care and Housing Linkage Research Study</i> , June 2003, Prepared for the County of San Mateo Office of Housing in conjunction with the San Mateo Child Care Coordinating Council, by Brion & Associates with Vermazza Wolfe, Inc.	75%	100%	38%	25%	LFPs vary by community area.	This study looks at a variety of policies and programs that can be implemented in order to increase the supply of child care at the same time new housing is developed.
1.1							
	<i>Kern County Child Care Policy Analysis and Strategy Study</i> , October 2005, prepared by Brion & Associates.	37%	50%	50%	25%	LFPs vary by community area.	
1.2							
	<i>City of Palm Desert Child Care Facilities Impact Fee Nexus Study</i> , August 2005, prepared by Brion & Associates.	37%	80%	50%	25%	53% for children under the age of 6 years and 59% for children over 6 years old.	This study looks at both residential and employment demand, although a fee was only established for non-residential development, as requested by the City.
1.3							
	<i>City of South San Francisco Child Care Facilities Impact Fee Nexus Study</i> , September 2001, prepared by Brion & Associates.	100%	100%	100%	100%	na	Data was taken directly from the then current Needs Assessment, which assumed 100% of children with working parents needed licensed care. The city however targeted 50% of this figure because it felt that some parents desire and use unlicensed care.
1.4							
	<i>PROPOSED Alameda County Child Care In-Lieu Fee Study</i> , May 2007, prepared by Brion & Associates.	37%	75%	38%	38%	60% for children under the age of 6 years and 66% for children over 6 years old.	Study looks at unincorporated areas of Alameda County and calculates demand for both residential and non-residential uses.
1.5							

(1) Represents demand for licensed care of children with working parents; and not the percentage of total children unless otherwise stated.  
 (2) The City of Alameda based their child care needs assessment on the study done for Alameda County in 2002; therefore their demand factors are the same.  
 (3) Organized care includes day care center, nursery or preschool, or Head Start/school programs.  
 Source: Compiled by Brion & Associates.

## **Appendix B: Child Care Model Background and Detailed Supporting Data**

**Appendix B: Table A  
Development Projections  
for Non-Residential Uses  
San Francisco Child Care  
Linkage Fee Nexus Study**

Land Use	Existing Conditions 2006 (1)			Future Jobs - 2006 to 2025 (2)			Total Jobs at 2025		
	Estimated Jobs - 2006	2006 Jobs in Mission Bay/Rincon Hill/Visitation Valley (4)	Net Jobs 2006 (w/out MB, RH, VV)	Total Projected New Jobs -2006-2025	Mission Bay / Rincon Hill/Visitation Valley Growth (4)	Net New Jobs Subject to Fee - 2006-2025 (w/out MB, RH, VV)	Total Projected Jobs at 2025	Total Jobs in Mission Bay/Rincon Hill/Visitation Valley at 2025 (4)	Total Net Jobs at 2025 (w/out MB, RH, VV)
	<i>a</i>			<i>b</i>		<i>c</i>			
<b>Non-Res. Development</b>									
CIE	94,127	2,107	92,019	4,442	4,353	89	98,568	6,460	92,108
Hotel	18,761	16	18,745	2,347	0	2,347	21,107	16	21,091
Medical	36,772	52	36,720	3,855	6	3,849	40,627	58	40,569
Office	225,676	18,100	207,576	51,122	10,460	40,662	276,798	28,561	248,238
Retail	97,205	5,186	92,019	8,297	1,286	7,011	105,502	6,472	99,030
Industrial/PDR	63,684	2,519	61,165	13,744	335	13,409	77,429	2,854	74,575
<b>TOTAL/AVG.</b>	<b>536,224</b>	<b>27,981</b>	<b>508,243</b>	<b>83,807</b>	<b>16,440</b>	<b>67,367</b>	<b>620,031</b>	<b>44,421</b>	<b>575,610</b>
<b>Avg. Per Yr - 2006 to 2025</b>				<b>4,411</b>	<b>865</b>	<b>3,546</b>		<b>(5)</b>	<b>(5)</b>

(1) Land use categories and base data are from the San Francisco Department of City Planning (October 2006).

Data from 2006 is extrapolated from the 2000 to 2025 projections, based on average annual growth rates by land use category.

(2) New job growth is from Moody's Economy.com forecast for San Francisco, 2006 to 2025.

(3)

Based on typical new sqft per employee factors derived by reviewing proposed projects and actual projects in SF and other Silicon Valley cities by Brion & Associates. The sqft per employee factors that exist currently are lower density factors than those used for the future analysis. It is assumed that in the future employees will use less sqft than they use currently.

(4) Visitation Valley, Rincon Hill and Mission Bay would not be subject to the new impact fee and the remaining square footage of development potential associated with these projects is removed for the analysis.

(5) The totals above are off by one job from the totals in Table 1 due to rounding.

(6) This amount of expected office space development would be within the limits of that allowed by Proposition M, which restricts office development to 875,000 sqft per year. There is also an accumulation of 2.2 million sqft credit that can also be developed.

Sources: Moody's Economy.com; San Francisco Department of City Planning; David Taussig & Associates, Inc.; Brion & Associates.

**Appendix B: Table A**  
**Development Projections**  
**for Non-Residential Uses**  
**San Francisco Child Care**  
**Linkage Fee Nexus Study**

Land Use	Estimated Sqft in 2006 <i>d</i>	Future Average Sqft per Employee (3) <i>e</i>	Projected New Sqft-2006-2025 Sqft (2) <i>a * e = f</i>	Mission Bay / Rincon Hill/Visitation Valley Growth (3) <i>b * e = g</i>	Net Development Potential Subject to Fee - 2006-2025 <i>f - g = h</i>	Total Sqft of Bldg. Space at 2025 <i>d + f = i</i>	Total at 2025 w/out MBRH, VV
<b>Non-Res. Development</b>							
CIE	19,295,974	225	999,400	979,317	20,083	20,295,373	18,841,873
Hotel	7,279,093	400	938,640	-	938,640	8,217,733	8,211,333
Medical	10,810,895	225	867,404	1,368	866,036	11,678,298	11,665,248
Office	90,270,440	225	11,502,528 (6)	2,353,565	9,148,962	101,772,968	95,346,846
Retail	31,494,307	300	2,489,072	383,776	2,103,296	33,983,378	32,041,778
Industrial/PDR	30,186,311	350	4,810,529	117,259	4,693,270	34,996,840	33,998,001
<b>TOTAL/AVG.</b>	<b>189,337,019</b>		<b>21,607,571</b>	<b>3,837,285</b>	<b>17,770,286</b>	<b>210,944,590</b>	<b>200,105,080</b>
<b>Avg. Per Yr - 2006 to 2025</b>			<b>1,137,241</b>	<b>201,962</b>	<b>935,278</b>		

**Appendix B: Table B**  
**Summary of Recent Child Care**  
**Projects with City Funding**  
**San Francisco Child Care Linkage Fee Nexus Study**

LO	Loan #	Borrower	SPONSOR	Project Name	Project Costs	Costs Adjusted for Inflation per CPI for Region (1)	Square footage	Square footage cost	Inflation Adjusted Square Footage Cost	Total Child Care Spaces
BP	10288-14	San Francisco Women's Centers, Inc.	San Francisco Women's Centers, Inc.	SAN FRANCISCO WOMEN'S CENTER	\$333,457	\$398,070	1,485	\$225	\$268	23
BP	10297-14	Housing Services Affiliate Of The Bernal Heights Neighborhood Center	Housing Services Affiliate Of The Bernal Heights Neighborhood Center	THE FAMILY SCHOOL	\$213,568	\$247,654	2,600	\$82	\$95	23
BP	10299-14	Frandelja Enrichment Center	Frandelja Enrichment Center	FRANDELJA ENRICHMENT CENTER	\$716,104	\$842,452	6,700	\$107	\$126	40
DL	10300-14	1st Place 2 Start	Family Service Agency Of San Francisco	1ST PLACE 2 START	\$335,026	\$397,466	1,530	\$219	\$260	40
DL	10295-14	Wu Yee Children's Services	Wu Yee Children's Services	CHINATOWN EARLY HEAD START	\$1,382,290	\$1,659,536	6,700	\$206	\$248	40
DL	10296-14	Portola Family Connection Center, Inc.	Portola Family Connection Center, Inc.	PORTOLA FAMILY CONNECTION	\$1,396,280	\$1,642,636	7,500	\$186	\$219	63
DL	10311.02-14	Compass Community Services	Compass Community Services	TENDERLOIN CHILD CARE CENTER	\$3,855,900	\$4,450,496	11,277	\$342	\$395	63
BP	10310.02-14	Mission Neighborhood Centers, Inc	Mission Neighborhood Centers, Inc	ORLANDO CEPEDA PLACE CHILDREN'S CENTER	\$1,042,313	\$1,137,903	6,900	\$151	\$165	40
BP	10351.02-14	Coleman Children And Youth Services (dba Coleman Advocates For Children & Youth)	Coleman Children And Youth Services (dba Coleman Advocates For Children & Youth)	JEAN JACOBS CHILDCARE CENTER	\$1,018,859	\$1,124,240	6,700	\$152	\$168	40
BP	10298-14	899 Guerrero Street, Inc.	Catholic Charities Diocese Of San Diego	ST. JOSEPH'S VILLAGE	\$1,547,700	\$1,925,032	5,000	\$310	\$385	121
DL	10304-14	Visitacion Valley Community Center	Visitacion Valley Community Center	HERITAGE HOMES CHILDREN'S CENTER	\$634,323	\$698,468	3,414	\$186	\$205	44
DL	10303.02-14	Visitacion Valley Community Center	Visitacion Valley Community Center	JOHN KING CHILD AND FAMILY DEVELOPMENT CENTER	\$1,030,000	\$1,136,533	3,518	\$293	\$323	42
DL	10324.02-14	Cross Cultural Family Center	Cross Cultural Family Center	ONE CHURCH CHILD DEVELOPMENT CENTER	\$868,918	\$947,624	2,775	\$313	\$341	27
<b>Totals, All Projects</b>					<b>\$14,374,738</b>	<b>\$16,608,111</b>	<b>66,099</b>	<b>\$213</b>	<b>\$246</b>	<b>606</b>
<b>Averages, All Projects</b>					<b>\$1,105,749</b>	<b>\$1,277,547</b>	<b>5,085</b>	<b>\$213</b>	<b>\$246</b>	<b>47</b>

(1) For CPI factors see [http://data.bls.gov/PDO/servlet/SurveyOutputServlet?data\\_tool=dropmap&series\\_id=CUURA422SA0](http://data.bls.gov/PDO/servlet/SurveyOutputServlet?data_tool=dropmap&series_id=CUURA422SA0)

Sources: Low Income Investment Fund - San Francisco; Brion & Associates.

**Appendix B: Table B**  
**Summary of Recent Child Care**  
**Projects with City Funding**  
**San Francisco Child Care Linkage Fee Nexus Study**

L.O	Loan #	Borrower	Average Cost per Space in 2006 \$\$	Average Sqft per Child Care Space	Type of Child Care Slots	Loan closing dates	CPI Index (1)	Change in CPI to August 2006 (1)	% Change
BP	10288-14	San Francisco Women's Centers, Inc.	\$17,307	65	23 Preschoolers	2/1/2000	176.5	34.2	19.4%
BP	10297-14	Housing Services Affiliate Of The Bernal Heights Neighborhood Center	\$10,768	113	23 Preschoolers	8/23/2000	181.7	29	16.0%
BP	10299-14	Frandelja Enrichment Center	\$21,061	168	8 infant, 8 toddler, 18 Preschoolers, 8 SA = 40	5/25/2000	179.1	31.6	17.6%
DL	10300-14	1st Place 2 Start	\$9,937	38	8 infant, 8 toddler, 18 Preschoolers, 8 SA = 40	3/28/2000	177.6	33.1	18.6%
DL	10295-14	Wu Yee Children's Services	\$41,488	168	8 infant, 8 toddler, 18 Preschoolers, 8 SA = 40	1/13/2000	175.5	35.2	20.1%
DL	10296-14	Portola Family Connection Center, Inc.	\$26,074	119	18 Preschooler, 45 school age = 63	5/4/2000	179.1	31.6	17.6%
DL	10311.02-14	Compass Community Services	\$70,643	179	27 infant toddlers, 36 preschool = 63	9/28/2000	182.55	28.15	15.4%
BP	10310.02-14	Mission Neighborhood Centers, Inc	\$28,448	173	40 pre-school	4/19/2002	193	17.7	9.2%
BP	10351.02-14	Coleman Children And Youth Services (dba Coleman Advocates For Children & Youth)	\$28,106	168	40 pre-school	1/25/2002	190.95	19.75	10.3%
BP	10298-14	899 Guerrero Street, Inc.	\$15,909	41	21 infants, 28 toddlers, 48 preschool, 24 school age = 121 total	2/1/1999	169.4	41.3	24.4%
DL	10304-14	Visitation Valley Community Center	\$15,874	78	20 infants & toddlers, 24 Preschooler=44 total	9/3/2001	191.35	19.35	10.1%
DL	10303.02-14	Visitation Valley Community Center	\$27,060	84	18 infant toddlers, 24 preschoolers =42 total	1/7/2002	190.95	19.75	10.3%
DL	10324.02-14	Cross Cultural Family Center	\$35,097	103	27 infant toddlers	6/28/2002	193.2	17.5	9.1%
<b>Totals, All Projects</b>			na	na					
<b>Averages, All Projects</b>			<b>\$27,406</b>	<b>109</b>					

**Appendix B: Table C  
Historical and Current Housing Unit Development in San Francisco by Type of Unit  
San Francisco Child Care Linkage Fee Nexus Study**

Year	All		MF		MF		MF		MF		Total		MF		Total	
	SF	Units	2 unit	3-9 unit	10-19 unit	20+ unit	Units	%	Units	%	Units	%	Units	%	Units	%
<b><u>HISTORIC</u></b>																
produced 2001	73	108	297	249	892	1,619	61	4%	73	5%	1,485	92%	1,619	100%	1,485	92%
produced 2002	59	134	358	230	1,479	2,260	=	=	59	3%	2,140	95%	2,260	100%	2,140	95%
produced 2003	67	104	176	152	2,231	2,730	=	=	67	2%	2,601	95%	2,730	100%	2,601	95%
produced 2004	55	84	91	120	1,430	1,780	=	=	55	3%	1,660	93%	1,780	100%	1,660	93%
	3%	5%	5%	7%	80%	100%	4%	4%	3%	3%	93%	100%				
<b><u>CURRENT</u></b>																
authorized 2005	SF	2 unit	3-9 unit	10-19 unit	20+ unit	5,571										
	82	50	32	172	5,235											
	1%	1%	1%	3%	94%	100%										
produced 2005	46	38	117	38	1,633	1,872	=	=	46	2%	1,591	85%	1,872	100%	1,591	85%
	2%	2%	6%	2%	87%	100%			2%	2%	85%	100%				
<b>Average Produced</b>																
2001 to 2005	60	94	208	158	1,533	2,052	97		60		1,895		2,052		1,895	
<b><u>RECOMMENDED DISTRIBUTION FOR GROWTH 2006 TO 2025</u></b>																
Average (past 4yrs)	Sr/SRO	SF	MF	Total												
Recommended	5%	3%	92%	100%												
Housing Distribution	735	490	23,280	24,505												

\* Note: All numbers from San Francisco Planning Department: '01-04 numbers from Housing Inventory 2001-2004 published July 2005, and '05 numbers from Housing Inventory 2005 pending

Sources: San Francisco Planning Department; Brion & Associates.

**Appendix B: Table D**  
**San Francisco Growth Forecast by Age, 0 to 13 and Total Population (1)**  
**Department of Finance P-3 Reports**  
**San Francisco Child Care Linkage Fee Nexus Study**

Age	2000 Total	Children as % of Pop.	2006 Total	Children as % of Pop.	2010 Total	Children as % of Pop.	2015 Total	Children as % of Pop.	2020 Total	Children as % of Pop.	2025 Total	Children as % of Pop.	Averages 2010-2025
<b>0</b>	7,224	0.9%	9,287	1.2%	8,929	1.1%	6,273	0.8%	4,830	0.6%	4,773	0.6%	0.6%
<b>1</b>	6,398	0.8%	8,872	1.1%	9,281	1.1%	6,868	0.8%	4,892	0.6%	4,737	0.6%	0.6%
<b>2</b>	5,927	0.8%	8,372	1.0%	9,408	1.2%	7,454	0.9%	4,974	0.6%	4,698	0.6%	0.6%
<b>3</b>	5,993	0.8%	8,026	1.0%	9,334	1.1%	7,953	1.0%	5,190	0.6%	4,671	0.6%	0.6%
<b>4</b>	5,844	0.7%	8,013	1.0%	9,067	1.1%	8,354	1.0%	5,577	0.7%	4,666	0.6%	0.6%
<b>5</b>	5,963	0.8%	8,393	1.0%	8,638	1.1%	8,714	1.1%	6,065	0.7%	4,691	0.6%	0.6%
<b>6</b>	5,974	0.8%	7,181	0.9%	8,132	1.0%	9,055	1.1%	6,647	0.8%	4,746	0.6%	0.6%
<b>7</b>	5,970	0.8%	6,327	0.8%	7,778	1.0%	9,175	1.1%	7,226	0.9%	4,825	0.6%	0.6%
<b>8</b>	6,127	0.8%	5,842	0.7%	7,748	0.9%	9,095	1.1%	7,717	0.9%	5,040	0.6%	0.6%
<b>9</b>	6,087	0.8%	5,905	0.7%	8,111	1.0%	8,816	1.1%	8,104	1.0%	5,425	0.7%	0.7%
<b>10</b>	6,220	0.8%	5,754	0.7%	6,898	0.8%	8,393	1.0%	8,469	1.0%	5,920	0.7%	0.7%
<b>11</b>	6,116	0.8%	5,920	0.7%	6,074	0.7%	7,907	1.0%	8,829	1.1%	6,518	0.8%	0.8%
<b>12</b>	6,066	0.8%	6,015	0.8%	5,650	0.7%	7,595	0.9%	8,991	1.1%	7,126	0.9%	0.9%
<b>13</b>	5,897	0.8%	6,048	0.8%	5,785	0.7%	7,617	0.9%	8,961	1.1%	7,653	0.9%	0.9%
<b>Total 0-13</b>	85,806	11.0%	99,955	12.5%	110,833	13.6%	113,269	13.7%	96,472	11.8%	75,489	9.3%	9.3%
<b>0-1</b>	13,622	1.7%	18,159	2.3%	18,210	2.2%	13,141	1.6%	9,722	1.2%	9,510	1.2%	1.5%
<b>2-5</b>	23,727	3.0%	32,804	4.1%	36,447	4.5%	32,475	3.9%	21,806	2.7%	18,726	2.3%	3.3%
<b>6-13</b>	48,457	6.2%	48,992	6.1%	56,176	6.9%	67,653	8.2%	64,944	7.9%	47,253	5.8%	7.2%
<b>Total 0-13</b>	85,806	11.0%	99,955	12.5%	110,833	13.6%	113,269	13.7%	96,472	11.8%	75,489	9.3%	12.1%
<b>Total Population</b>	781,174	100.0%	800,244	100.0%	816,230	100.0%	825,614	100.0%	820,545	100%	810,595	100%	100%

(1) The actual numbers of children and total population from DOF is not used in the analysis but rather the relationships between children and total population.

The percentages calculated above are applied to the City Planning Department's forecast of population growth.

Sources: California Department of Finance; Brion & Associates.

**Appendix B: Table E  
 Cost of Family Child Care Home Expansions Funded with Existing Child Care Fee Grants  
 San Francisco Child Care Linkage Fee Nexus Study**

<i>Project &amp; Year</i>	<i>Project Budget</i>	<i>Grant/Loan Amount</i>	<i>Slots Created</i>	<i>Slots Enhanced</i>	<i>Slots Preserved</i>	<i>Total Slots</i>	<i>Cost per Space</i>	<i>Notes</i>
<b>FY 04</b>								
#04-1	\$4,434	\$3,500	5		7	12	\$887	Purchase of sprinkler heads for Large FCC Fire Regulations
#04-2	\$27,500	\$12,500	6	8		14	\$4,583	Permits and Sprinkler System for Expansion- includes \$15,000 below for Fire Clearance
<b>FY06 Subtotal</b>	<b>\$31,934</b>	<b>\$16,000</b>	<b>11</b>	<b>8</b>	<b>7</b>	<b>26</b>	<b>\$2,903</b>	
<b>FY 05</b>								
#05-1	\$15,159	\$4,500	6	7		13	\$2,527	Purchase of equipment to meet the needs of larger group of children following expansion.
#05-2	\$20,000	\$6,000	6	6		12	\$3,333	Creation of a second exit to obtain fire clearance for expansion
#04-2*R		\$4,500	R	R		R		Replacement of electric garage door with manually operated door in order to receive fire clearance for expansion
<b>FY05 Subtotal</b>	<b>\$35,159</b>	<b>\$15,000</b>	<b>12</b>	<b>13</b>	<b>0</b>	<b>25</b>	<b>\$2,930</b>	
<b>FY 06</b>								
#06-1	\$15,082	\$15,000	5		7	12	\$3,016	To buy equipment and renovate first floor to meet Licensing and Fire Department requirements for expansion
<b>FY06 Subtotal</b>	<b>\$15,082</b>	<b>\$15,000</b>	<b>5</b>	<b>0</b>	<b>7</b>	<b>12</b>	<b>\$3,016</b>	
	<b>\$82,175</b>	<b>\$46,000</b>	<b>28</b>	<b>21</b>	<b>14</b>	<b>63</b>	<b>2,935</b>	
	<b>\$20,544</b>							

\*R = Repeated - provider received a previous grant, slots not counted to avoid duplicates

Sources: Local Income Investment Fund, Child Care Capital Facilities Fund; Brion & Associates.

**Appendix B: Table F**

**Number of Children and Total Population for Mission Bay, Rincon Hill and Visitation Valley for 2006 and 2006 to 2025**

**San Francisco Child Care Linkage Fee Nexus Study**

San Francisco	Total Population All Ages	Population by Age (1)			
		0 to 24 Mos. (infants)	2 to 5 (preschool)	6 to 13 (school age)	Total 0-13
<b><u>Children as of 2006 (only MB, RH, VV)</u></b>					
Children as % of Population by Age Group (1)		2.3%	4.1%	6.1%	12.5%
Total Population at 2006 (2)	16,448	373	674	1,007	2,054
Total Estimated Employed Residents in City	41% 6,819 (3)				
SF Employed Residents Working					
Outside SF (5)	23% 1,573				
Those Needing Child Care Outside SF (5)	5% 199 (4)	99	99		
Net Residents	16,249				
<b>Estimated Children at 2006 (5)</b>		<b>274</b>	<b>575</b>	<b>1,007</b>	<b>1,856</b>
<b><u>New Children 2006-2025 (only MB, RH, VV)</u></b>					
Children as % of Population by Age Group (6)		1.5%	3.3%	7.2%	12.1%
Net New Population	9,763				
Senior and SRO Population	195				
Net Population with Children	9,568				
Estimated Children of New Residents		148	320	689	1,157
New Employed Residents (7)	50% 4,767				
New Employed Residents Working Outside SF	23% 1,100				
Those Needing Child Care Outside SF (5)	5% 55	27	27		55
Net New Residents Possibly Needing Care	9,513				
<b>Net New Children 2006 to 2025</b>		<b>120</b>	<b>292</b>	<b>689</b>	<b>1,102</b>
<b><u>Total Children at 2025 (only MB, RH, VV)</u></b> (8)					
Total Population	26,211				
Senior and SRO Population	786				
Net Population with Children	25,425				
Children as Percent of Total Population at 2025		1.2%	2.3%	5.8%	9.3%
Estimated Children of New Residents		298	587	1,482	2,368
New Employed Residents	50% 12,667				
New Employed Residents Working Outside SF	23% 2,922				
Those Needing Child Care Outside SF (5)	5% 146	73	73		146
Total Residents Possibly Needing Care	25,279				
<b>Total Children 2025</b>		<b>225</b>	<b>514</b>	<b>1,482</b>	<b>2,222</b>

(1) Based on the percent of children by age group for San Francisco from DOF P-3 Report and applied to DCP's estimate of existing population as of 2006 (See Appendix Table D).

(2) For Mission Bay, Rincon Hill and Visitation Valley areas only.

(3) Based on Employed Residents as percent of total population as of 2000 Census and this rate times 2006 Population estimate.

(4) Based on non-resident employee demand for child care in SF. See Table 6.

(5) Based on Journey to Work data - see Table 5 and Table 6.

(6) Based on total population as estimated times the average percentage of children per age group from above.

(7) Based on forecasts of Employed Residents at 2025 by ABAG.

(8) Note that the analysis for 2025 is based total population at 2025 and includes Mission Bay, Rincon Hill and Visitation Valley to provide an estimate of total demand for child care; these figures are not used in the impact fee calculations but rather for information of total future conditions.

Sources: California Department of Finance; SF City Planning Department; Brion & Associates.

**Appendix B: Table G**  
**Future Demand for Child Care for Mission Bay, Rincon Hill, and Visitation Valley: 2006 to 2025**  
**San Francisco Child Care Linkage Fee Nexus Study**

Future Growth - 2006 to 2025	New Child Care Demand by Age					Total. 0 to 13 Years Old
	New Population with Children - 2006 to 2025	Population & Employment	% Distribution or Infant	Birth to 24 Mos.	2 to 5 or Preschool	
<b>Future Child Care Need</b>						
New Population with Children - 2006 to 2025	(1) 9,513 (see Table 3)					
Resident Children Potentially Needing Care						1,102
Estimated Number of Children by Age	(2) (see Table 3)	120	292	689		
Average Labor Force Participation Rates	(3)	57.6%	57.6%	63.2%		
Children With Working Parents		69	168	436		674
% Children Needing Licensed Care	(4)	37%	100%	66%		72%
Children Needing Licensed Care		26	168	289		483
Percent of Children by Age Needing Care		21%	58%	42%		44%
Non-Resident Employee's Children Needing Care	(5)	205	616			822
<i>Distributed by Land Use Category</i>						
Civic, Institutional, Education		4,353	26%	54	163	218
Hotel-Motel		-	0%	-	-	-
Industrial/PDR		6	0%	0	0	0
Medical		10,460	64%	131	392	523
Office		1,286	8%	16	48	64
Retail		335	2%	4	13	17
Total Future Employee Demand for Child Care		16,440	100%	205	616	822
<b>Total New Demand for Child Care Spaces</b>				<b>231</b>	<b>785</b>	<b>1,305</b>
Percent Distribution				18%	60%	100%

(1) Represents population associated with Mission Bay, Rincon Hill and Visitation Valley.  
(2) Based on the estimated average number of children by age categories for 2010 to 2015 for San Francisco from CA Dept. of Finance P-3 Report and applied to City Planning Department's estimate of expected new population between 2006 and 2025.  
(3) Labor force participation rates are from the 2000 Census and include children with two working parents or single working parents.  
Rates vary by age, under 6 years and over 6 years (see Table 2).  
(4) Not all children with working parents are assumed to need licensed care: the assumptions - % - under each age category are used. The remaining children are assumed to be cared for by family members, nannies, friends, and unlicensed care.  
Percentages are based on a detailed review of 12 other child care studies, including impact fee studies.  
Infant and preschool demand factors have been developed with the staff of the Dept. of Human Services and DCYF.  
School age Demand factor is from San Francisco Rec and Park Staff Survey in 2005.  
(5) Includes demand from employees that work in these three areas but live elsewhere. This analysis assumes one child per employee that needs care at the rate of:  
25% infants 75% preschool 0% school age  
School age children are assumed to have care near their home and school.  
Sources: California Department of Finance-P-3 Report; SF City Planning Department; and Brion & Associates.

## **Appendix C: Land Use Data and Growth Forecasts**

**APPENDIX C-1**  
**LAND USE BREAKDOWN BASED ON SF PLANNING DEPARTMENT DEMOGRAPHIC DATA**  
**Citywide Forecast**

**I. Existing Data (1)**

Land Use Type	2006	2006	2006
	Number of Residents/Employees	Residents Per Unit/Sqft per Employee	Number of Units/Non-Res SF
Single Family	291,000	3.11	93,520 *
Sr/SRO	22,400	1.00	22,292 *
Multi-Family (0-1 BR)	274,721	2.03	135,152 *
Multi-Family (2 or > BR)	<u>189,000</u>	<u>2.10</u>	<u>90,089</u> *
<i>Subtotal</i>	777,121	2.28	341,052 *
Commercial (CIE)	94,127	205	19,295,974 *
Commercial (Motel/Hotel)	18,761	388	7,279,093 *
Commercial (Medical)	36,772	294	10,810,895 *
Commercial (Office)	225,676	400	90,270,440 *
Commercial (Retail)	97,205	324	31,494,307 *
Industrial	<u>63,684</u>	<u>474</u>	<u>30,186,311</u> *
<i>Subtotal</i>	536,224	353	189,337,019 *

**II. Future Data (2)**

Land Use Type	2006-2025	2006-2025	2006-2025
	Number of Residents/Employees	Residents Per Unit/Sqft per Employee	Number of Units/Non-Res SF
Single Family	1,733	3.53	490 *
Sr/SRO	860	1.17	735 *
Multi-Family (0-1 BR)	30,464	2.18	13,968 *
Multi-Family (2 or > BR)	22,814	<u>2.45</u>	9,312 *
<i>Subtotal</i>	55,871	2.28	24,505 *
Commercial (CIE)	4,442	225	999,400 *
Commercial (Motel/Hotel)	2,347	400	938,640 *
Commercial (Medical)	3,855	225	867,404 *
Commercial (Office)	51,122	225	11,502,528 *
Commercial (Retail)	8,297	300	2,489,072 *
Industrial	<u>13,744</u>	350	<u>4,810,529</u> *
<i>Subtotal</i>	83,807	258	21,607,571 *

**III. Total at 2025**

Land Use Type	2025	2025	2025
	Number of Residents/Employees	Residents Per Unit/Sqft per Employee	Number of Units/Non-Res SF
Single Family	292,733	3.11	94,010
Sr/SRO	23,260	1.01	23,026
Multi-Family (0-1 BR)	305,185	2.05	149,119
Multi-Family (2 or > BR)	<u>211,814</u>	<u>2.13</u>	<u>99,402</u>
<i>Subtotal</i>	832,992	2.28	365,557
Commercial (CIE)	98,568	206	20,295,373 *
Commercial (Motel/Hotel)	21,107	389	8,217,733 *
Commercial (Medical)	40,627	287	11,678,298 *
Commercial (Office)	276,798	368	101,772,968 *
Commercial (Retail)	105,502	322	33,983,378 *
Industrial	<u>77,429</u>	<u>452</u>	<u>34,996,840</u> *
<i>Subtotal</i>	620,031	340	210,944,590 *

\* Note may not add up due to rounding.

(1) Existing base data are from the San Francisco Planning Department (October, 2006) and are based on the Land Use Allocation Study (2002). Data have been adjusted to 2006 numbers assuming average annual growth from 2000 to 2025.

(2) Employment Projections are from Moody's Economy.com for 2006 to 2025 by industry sector. Residential (population and household) projections are adjusted to be in line with the employment projections by Economy.com; adjustments were prepared by Brion & Associates and reviewed by DTA and City Staff. Residential data based on City of San Francisco Demographic Data provided by the Planning Department. Non-Residential data provided by Dun & Bradstreet. Also, please note that the total Multi-Family Residential Land Use Class figures were split assuming 60% of existing and future MF are/will be 0-1 BR and 40% are/will be 2 or more bedrooms.

Prepared by David Taussig Associates, Inc.; Brion & Associates.

**APPENDIX C-2**  
**LAND USE BREAKDOWN BASED ON SF PLANNING DEPARTMENT DEMOGRAPHIC DATA**  
**Moody's Mission Bay Area Only**

**I. Existing Data (1)**

Land Use Type	2006	2006	2006
	Number of Residents/Employees	Residents Per Unit/Sqft per Employee	Number of Units/Non-Res SF
Single Family Sr/SRO			
Multi-Family (0-1 BR)	1,267	1.76	720 *
Multi-Family (2 or > BR)	<u>845</u>	<u>1.76</u>	<u>480</u> *
<i>Subtotal</i>	<i>2,112</i>	<i>1.76</i>	<i>1,200</i> *
Commercial (CIE)	1,425	225	320,733 *
Commercial (Motel/Hotel)	0	400	0 *
Commercial (Medical)	34	225	7,749 *
Commercial (Office)	4,573	225	1,028,928 *
Commercial (Retail)	1,081	300	324,300 *
Industrial	<u>1,787</u>	<u>350</u>	<u>625,554</u> *
<i>Subtotal</i>	<i>8,901</i>	<i>259</i>	<i>2,307,265</i> *

**II. Future Data (2)**

Land Use Type	2006-2025	2006-2025	2006-2025
	Number of Residents/Employees	Residents Per Unit/Sqft per Employee	Number of Units/Non-Res SF
Single Family Sr/SRO			
Multi-Family (0-1 BR)	2,227	1.87	1,190 *
Multi-Family (2 or > BR)	<u>1,485</u>	<u>1.87</u>	<u>793</u> *
<i>Subtotal</i>	<i>3,711</i>	<i>1.87</i>	<i>1,983</i> *
Commercial (CIE)	4,220	225	949,392 *
Commercial (Motel/Hotel)	0	400	0 *
Commercial (Medical)	5	225	1,026 *
Commercial (Office)	9,598	225	2,159,598 *
Commercial (Retail)	1,026	300	307,800 *
Industrial	<u>270</u>	<u>350</u>	<u>94,539</u> *
<i>Subtotal</i>	<i>15,118</i>	<i>232</i>	<i>3,512,355</i> *

**III. Total at 2025**

Land Use Type	2025	2025	2025
	Number of Residents/Employees	Residents Per Unit/Sqft per Employee	Number of Units/Non-Res SF
Single Family Sr/SRO			
Multi-Family (0-1 BR)	3,494	1.83	1,910 *
Multi-Family (2 or > BR)	<u>2,329</u>	<u>1.83</u>	<u>1,273</u> *
<i>Subtotal</i>	<i>5,823</i>	<i>1.83</i>	<i>3,183</i> *
Commercial (CIE)	5,645	225	1,270,125 *
Commercial (Motel/Hotel)	0	400	0 *
Commercial (Medical)	39	225	8,775 *
Commercial (Office)	14,171	225	3,188,527 *
Commercial (Retail)	2,107	300	632,100 *
Industrial	<u>2,057</u>	<u>350</u>	<u>720,093</u> *
<i>Subtotal</i>	<i>24,020</i>	<i>242</i>	<i>5,819,620</i> *

\* Note may not add up due to rounding.

(1) Existing base data are from the San Francisco Planning Department (October, 2006) and are based on the Land Use Allocation Study (2002). Data have been adjusted to 2006 numbers assuming average annual growth from 2000 to 2025.

(2) Employment Projections are from Moody's Economy.com for 2006 to 2025 by industry sector. Residential (population and household) projections are adjusted to be in line with the employment projections by Economy.com; adjustments were prepared by Brion & Associates and reviewed by DTA and City Staff. Residential data based on City of San Francisco Demographic Data provided by the Planning Department. Non-Residential data provided by Dun & Bradstreet. Also, please note that the total Multi-Family Residential Land Use Class figures were split assuming 60% of existing and future MF are/will be 0-1 BR and 40% are/will be 2 or more bedrooms.

Prepared by David Taussig Associates, Inc.; Brion & Associates.

**APPENDIX C-3**  
**LAND USE BREAKDOWN BASED ON SF PLANNING DEPARTMENT DEMOGRAPHIC DATA**  
**Moody's Rincon Hill Area Only**

**I. Existing Data (1)**

Land Use Type	2006	2006	2006
	Number of Residents/Employees	Residents Per Unit/Sqft per Employee	Number of Units/Non-Res SF
Single Family Sr/SRO			
Multi-Family (0-1 BR)	1,701	1.89	900 *
Multi-Family (2 or > BR)	<u>1,134</u>	<u>1.89</u>	<u>600</u> *
<i>Subtotal</i>	2,835	1.89	1,500 *
Commercial (CIE)	309	225	69,498 *
Commercial (Motel/Hotel)	0	400	0 *
Commercial (Medical)	15	225	3,483 *
Commercial (Office)	13,469	225	3,030,521 *
Commercial (Retail)	3,923	300	1,176,756 *
Industrial	<u>95</u>	350	33,346 *
<i>Subtotal</i>	17,811	242	4,313,604 *

**II. Future Data (2)**

Land Use Type	2006-2025	2006-2025	2006-2025
	Number of Residents/Employees	Residents Per Unit/Sqft per Employee	Number of Units/Non-Res SF
Single Family Sr/SRO			
Multi-Family (0-1 BR)	2,886	1.55	1,860 *
Multi-Family (2 or > BR)	<u>1,924</u>	<u>1.55</u>	<u>1,240</u> *
<i>Subtotal</i>	4,810	1.55	3,100 *
Commercial (CIE)	123	225	27,702 *
Commercial (Motel/Hotel)	0	400	0 *
Commercial (Medical)	2	225	342 *
Commercial (Office)	814	225	183,100 *
Commercial (Retail)	226	300	67,944 *
Industrial	<u>7</u>	<u>350</u>	<u>2,522</u> *
<i>Subtotal</i>	1,172	240	281,610 *

**III. Total at 2025 [5]**

Land Use Type	2025	2025	2025
	Number of Residents/Employees	Residents Per Unit/Sqft per Employee	Number of Units/Non-Res SF
Single Family Sr/SRO			
Multi-Family (0-1 BR)	4,587	1.66	2,760 *
Multi-Family (2 or > BR)	<u>3,058</u>	<u>1.66</u>	<u>1,840</u> *
<i>Subtotal</i>	7,645	1.66	4,600 *
Commercial (CIE)	432	225	97,200 *
Commercial (Motel/Hotel)	0	400	0 *
Commercial (Medical)	17	225	3,825 *
Commercial (Office)	14,283	225	3,213,621 *
Commercial (Retail)	4,149	300	1,244,700 *
Industrial	<u>102</u>	<u>350</u>	<u>35,868</u> *
<i>Subtotal</i>	18,983	242	4,595,214 *

\* Note may not add up due to rounding.

(1) Existing base data are from the San Francisco Planning Department (October, 2006) and are based on the Land Use Allocation Study (2002). Data have been adjusted to 2006 numbers assuming average annual growth from 2000 to 2025.

(2) Employment Projections are from Moody's Economy.com for 2006 to 2025 by industry sector. Residential (population and household) projections are adjusted to be in line with the employment projections by Economy.com; adjustments were prepared by Brion & Associates and reviewed by DTA and City Staff. Residential data based on City of San Francisco Demographic Data provided by the Planning Department. Non-Residential data provided by Dun & Bradstreet. Also, please note that the total Multi-Family Residential Land Use Class figures were split assuming 60% of existing and future MF are/will be 0-1 BR and 40% are/will be 2 or more bedrooms.

Prepared by David Taussig Associates, Inc.; Brion & Associates.

**APPENDIX C-4**  
**LAND USE BREAKDOWN BASED ON SF PLANNING DEPARTMENT DEMOGRAPHIC DATA**  
**Moody's Visitation Valley Area Only**

**I. Existing Data (1)**

Land Use Type	2006	2006	2006
	Number of Residents/Employees	Residents Per Unit/ Sqft per Employee	Number of Units/Non-Res SF
Single Family	5,751	4.01	1,434 *
Sr/SRO	230	1.50	153 *
Multi-Family (0-1 BR)	2,645	3.50	756 *
Multi-Family (2 or > BR)	<u>2,875</u>	<u>3.80</u>	<u>757</u> *
<i>Subtotal</i>	<i>11,501</i>	<i>3.71</i>	<i>3,100</i> *
Commercial (CIE)	373	225	83,952 *
Commercial (Motel/Hotel)	16	400	6,400 *
Commercial (Medical)	2	225	450 *
Commercial (Office)	58	225	13,107 *
Commercial (Retail)	183	300	54,768 *
Industrial	<u>636</u>	<u>350</u>	<u>222,679</u> *
<i>Subtotal</i>	<i>1,268</i>	<i>301</i>	<i>381,355</i> *

**II. Future Data (2)**

Land Use Type	2006-2025	2006-2025	2006-2025
	Number of Residents/Employees	Residents Per Unit/ Sqft per Employee	Number of Units/Non-Res SF
Single Family	62	4.80	13 *
Sr/SRO	25	1.80	14 *
Multi-Family (0-1 BR)	497	4.45	112 *
Multi-Family (2 or > BR)	<u>658</u>	<u>4.80</u>	<u>137</u> *
<i>Subtotal</i>	<i>1,242</i>	<i>4.51</i>	<i>276</i> *
Commercial (CIE)	10	225	2,223 *
Commercial (Motel/Hotel)	0	400	0 *
Commercial (Medical)	0	225	0 *
Commercial (Office)	48	225	10,867 *
Commercial (Retail)	33	300	10,032 *
Industrial	<u>58</u>	<u>350</u>	<u>20,199</u> *
<i>Subtotal</i>	<i>149</i>	<i>290</i>	<i>43,321</i> *

**III. Total at 2025**

Land Use Type	2025	2025	2025
	Number of Residents/Employees	Residents Per Unit/ Sqft per Employee	Number of Units/Non-Res SF
Single Family	5,813	4.02	1,447 *
Sr/SRO	255	1.52	167 *
Multi-Family (0-1 BR)	3,142	3.62	867 *
Multi-Family (2 or > BR)	<u>3,534</u>	<u>3.95</u>	<u>894</u> *
<i>Subtotal</i>	<i>12,743</i>	<i>3.78</i>	<i>3,376</i> *
Commercial (CIE)	383	225	86,175 *
Commercial (Motel/Hotel)	16	400	6,400 *
Commercial (Medical)	2	225	450 *
Commercial (Office)	107	225	23,974 *
Commercial (Retail)	216	300	64,800 *
Industrial	<u>694</u>	<u>350</u>	<u>242,878</u> *
<i>Subtotal</i>	<i>1,417</i>	<i>300</i>	<i>424,676</i> *

\* Note may not add up due to rounding.

(1) Existing base data are from the San Francisco Planning Department (October, 2006) and are based on the Land Use Allocation Study (2002). Data have been adjusted to 2006 numbers assuming average annual growth from 2000 to 2025.

(2) Employment Projections are from Moody's Economy.com for 2006 to 2025 by industry sector. Residential (population and household) projections are adjusted to be in line with the employment projections by Economy.com; adjustments were prepared by Brion & Associates and reviewed by DTA and City Staff. Residential data based on City of San Francisco Demographic Data provided by the Planning Department. Non-Residential data provided by Dun & Bradstreet. Also, please note that the total Multi-Family Residential Land Use Class figures were split assuming 60% of existing and future MF are/will be 0-1 BR and 40% are/will be 2 or more bedrooms.

Prepared by David Taussig Associates, Inc.; Brion & Associates.

**APPENDIX C-5**  
**LAND USE BREAKDOWN BASED ON SF PLANNING DEPARTMENT DEMOGRAPHIC DATA**  
**Moody's Total Forecast without Mission Bay, Rincon Hill and Visitation Valley Areas**

**I. Existing Data (1)**

Land Use Type	2006	2006	2006
	Number of Residents/Employees	Residents Per Unit/Sqft per Employee	Number of Units/Non-Res SF
Single Family	285,250	3.10	92,085 *
Sr/SRO	22,170	1.00	22,138 *
Multi-Family (0-1 BR)	269,108	2.03	132,776 *
Multi-Family (2 or > BR)	184,146	2.09	88,253 *
<i>Subtotal</i>	760,673	2.27	335,252 *
Commercial (CIE)	92,019	205	18,821,791 *
Commercial (Motel/Hotel)	18,745	388	7,272,693 *
Commercial (Medical)	36,720	294	10,799,213 *
Commercial (Office)	207,576	415	86,197,884 *
Commercial (Retail)	92,019	325	29,938,483 *
Industrial	61,165	479	29,304,732 *
<i>Subtotal</i>	508,243	359	182,334,794 *

**II. Future Data (2)**

Land Use Type	Number of Residents/Employees	Residents Per Unit/Sqft per Employee	Number of Units/Non-Res SF
	Single Family	1,671	3.500
Sr/SRO	836	1.159	721 *
Multi-Family (0-1 BR)	24,854	2.300	10,806 *
Multi-Family (2 or > BR)	18,748	2.625	7,142 *
<i>Subtotal</i>	46,108	2.408	19,146 *
Commercial (CIE)	89	225	20,083 *
Commercial (Motel/Hotel)	2,347	400	938,640 *
Commercial (Medical)	3,849	225	866,036 *
Commercial (Office)	40,662	225	9,148,962 *
Commercial (Retail)	7,011	300	2,103,296 *
Industrial	13,409	350	4,693,270 *
<i>Subtotal</i>	67,367	264	17,770,286 *

**III. Total at 2025**

Land Use Type	Number of Residents/Employees	Residents Per Unit/Sqft per Employee	Number of Units/Non-Res SF
	Single Family	286,921	3.10
Sr/SRO	23,005	1.01	22,859 *
Multi-Family (0-1 BR)	293,962	2.05	143,582 *
Multi-Family (2 or > BR)	202,894	2.13	95,395 *
<i>Subtotal</i>	806,781	2.28	354,399 *
Commercial (CIE)	92,108	205	18,841,873 *
Commercial (Motel/Hotel)	21,091	389	8,211,333 *
Commercial (Medical)	40,569	288	11,665,248 *
Commercial (Office)	248,238	384	95,346,846 *
Commercial (Retail)	99,030	324	32,041,778 *
Industrial	74,575	456	33,998,001 *
<i>Subtotal</i>	575,611	348	200,105,080 *

\* Note may not add up due to rounding.

(1) Existing base data are from the San Francisco Planning Department (October, 2006) and are based on the Land Use Allocation Study (2002). Data have been adjusted to 2006 numbers assuming average annual growth from 2000 to 2025.

(2) Employment Projections are from Moody's Economy.com for 2006 to 2025 by industry sector. Residential (population and household) projections are adjusted to be in line with the employment projections by Economy.com; adjustments were prepared by Brion & Associates and reviewed by DTA and City Staff. Residential data based on City of San Francisco Demographic Data provided by the Planning Department. Non-Residential data provided by Dun & Bradstreet. Also, please note that the total Multi-Family Residential Land Use Class figures were split assuming 60% of existing and future MF are/will be 0-1 BR and 40% are/will be 2 or more bedrooms.

Prepared by David Taussig Associates, Inc.; Brion & Associates.

**Appendix E:**  
**Citywide Growth Forecast**

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# **CITY-WIDE DEVELOPMENT IMPACT FEE STUDY GROWTH FORECAST**

PREPARED FOR THE  
**CITY AND COUNTY OF SAN FRANCISCO**  
SAN FRANCISCO, CALIFORNIA

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JANUARY 7, 2008

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The purpose of this report is to describe and document employment and population forecasts developed for the City-wide Development Impact Fee Study. Brion & Associates, working with other team members, the City Controller's Office, and the Planning Department prepared this forecast specifically for the City-wide Fee Study. The growth forecasts represent a moderate growth scenario that considers both historical growth in the City and future growth as forecast by an independent economic firm, Moody's Economy.com.

This report describes the moderate growth scenario used in each of the fee nexus studies, explains its major assumptions and sources of data, and provides the rationale for its use. The growth forecasts for employment, households, and population are derived from an employment forecast by Moody's Economy.com.

## Employment Growth

Moody's Economy.com forecasts the City's employment base will grow at an average annual rate of 0.77% per year from 2006 to 2025. **Exhibit 1** summarizes this forecast, broken down by industries that use office, retail, warehouse, high tech space, and other space. This forecast is also broken down by total jobs. Historic employment growth figures are also shown from 1980 to 2005 in five year increments.

Historical growth from Moody's compares to the data provided by the San Francisco Controller's Office, which is from the California Economic Development Department. On an annual basis, from 1995 to 2005, there is less than a one percent difference in the two employment counts for any given year.

As shown in **Exhibit 1**, the City has a total of about 533,220 jobs as of 2006, which compares nicely to the City Planning Department's estimate of about 536,224 jobs for 2006. For this analysis, we are using the City's land use database by Traffic Analysis Zone and Neighborhood to estimate 2006 data for this new forecast.<sup>1</sup> Approximately 57% of the Moody's forecast is comprised of office related jobs, 22% retail and 15% high tech. Very little growth is forecast in warehouse related jobs (less than one percent), and the remaining 6% is "other" jobs.

As shown in **Exhibit 2**, the forecast applies the 0.77% average annual growth rate to existing 2006 employment for an estimated total of 620,031 total jobs at 2025 or a net increase of 83,807 new jobs over the 19-year period.

For job growth in the three special planning areas, the analysis assumes that employment uses in Mission Bay, Rincon Hill and Visitation Valley will reach build-out by 2025. Visitation Valley and Rincon Hill do not have a significant amount of planned new employment growth over the existing base. In contrast, Mission Bay includes a large amount of new non-residential development potential and is poised nicely to capture a significant amount of future employment growth in the City.

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<sup>1</sup> The City's estimate of 2006 development is based on the Planning Department's Land Use Allocation Study – 2002, and extrapolates 2006 figures based on the average annual growth expected from 2000 to 2025.

## Population Growth

The analysis considers population growth in relation to employment growth, given that population growth requires some job growth and *vice versa*. For the population forecast we have reviewed the relationship between jobs and population from the new *ABAG 2007 Projections*, which forecast approximately 2.0 jobs per each new resident between 2006 and 2025. However, population growth in San Francisco is not solely driven by employment growth. Thus, the analysis uses a jobs-per-population factor of 1.5, which presumes that some portion of population growth will not be employment-dependent. To estimate expected population growth dependant on new jobs, we have divided by 1.5 for an estimated increase in population of about 55,871 residents. This forecast of population is 62% of ABAG's new 2007 projection for population growth through 2025.

## Growth in Housing Stock

For housing units, the new population forecast is divided by persons per household factors from Department of City Planning, which vary by project area and the city as a whole. Based on this approach, the City would add about 24,505 new housing units or about 1,290 units per year on average. Historical dwelling unit growth averaged about 2,052 units per year from 2001 to 2005. Thus, our forecast would be about 63% of that recent average annual growth rate in units and reflects the recent slow down in the residential market.

For the three project areas that will be exempt from the new impact fees, the analysis does not assume all of the residential uses will be developed in Mission Bay and Visitation Valley. Based on discussions with Planning Staff we have developed the following assumptions:

- ◆ Mission Bay: 100% employment uses and about 65% of residential uses achieve build-out by 2025.
- ◆ Rincon Hill: 100% of both employment and residential uses achieve build-out by 2025.
- ◆ Visitation Valley: 100% of employment and 90% of residential uses achieve build-out by 2025.

## Growth of Non-Residential Space

**Exhibit 3** summarizes the employment forecast by land use category, area and year, and then converts it into square feet of space by land use category. Shown first are 2006 estimates of existing jobs by land use category with and without Mission Bay, Rincon Hill and Visitation Valley. Net new jobs through 2025 are also shown by land use category. These jobs are converted into estimates of building space based on average square feet per employee assumptions in the second half of the table.

The net new building square feet is used to calculate the non-residential impact fee. As shown, the City is expected to add about 1.1 million square feet of space per year on average over the forecast period for a total of 21.6 million square feet of total non-residential space. Of this amount, office space is expected to total about 11.5 million square feet. Proposition M which controls and regulates how much office space can be developed per year in the City limits office space per year to 875,000 square feet per year.<sup>2</sup> Our average annual expected office growth would equal about 605,000 square feet per year or less than the Proposition M

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<sup>2</sup> Per Sarah Dennis, San Francisco Planning Department, correspondence dated March 9, 2007.

limit. The three project areas of Mission Bay, Rincon Hill and Visitation Valley would add about 3.8 million square feet of this growth in space and this space would be exempt from the impact fees.

## Comparison of the Moderate Growth Scenario to Other Growth Forecasts

**Exhibit 4** presents the comparison of all the forecasts reviewed to date for this effort. These include:

- ◆ ABAG 2005 Projections
- ◆ ABAG 2007 Projections
- ◆ Planning Department's Land Use Study Forecast, 2000 to 2035
- ◆ Historical Forecast, based on Controller's Office data on historical growth in the City
- ◆ Moody's Forecast

As shown, the Moody's forecast jobs per population factor is less than ABAG's forecast but higher than the Historical forecast, and much lower than the Planning Department's forecast. This table also estimates the average annual growth rates implied in each forecast by demographic category.

**Exhibit 5** presents a summary of historical growth from the California Department of Finance and Moody's employment data for the City and compares it to the future forecast proposed for the fee studies. Jobs per resident or population are shown by five year intervals, and for 2006 and 2025. As shown, the job per resident factors implied in the forecast and planning data are similar to historical figures for the City. The data for 2005 and 2006 are lower than other years, due to the impacts of the dot.com crash, where the City lost a significant amount of jobs relative to population.

## Development by Land Use by Year and Area

**Exhibits 6-10** present the forecast for the entire City, each of the three special planning areas (Mission Bay, Rincon Hill and Visitation Valley) and the entire city net of the three planning areas. In each table residential and non-residential development, and population, housing units and employment is shown by year. The analysis is presented for 2006, 2006 to 2025, and total at 2025.

**Exhibit 1**  
**Historical and Projected Employment**  
**for San Francisco: 1980 to 2025**  
**from Moody's Economy.com**  
**San Francisco Citywide Development**  
**Impact Fee Study**

Employment Category	Historical Employment					Projected Employment					Net Change				
	1980	1985	1990	1995	2000	2005	2006	2010	2015	2020	2025	1980-2005 Amount/P ercent	2006-2025 Amount/Pe rcent	2006-2025 Avg. Annual % Growth	1980-2025 Avg. Annual % Growth
<b>Office Employment</b>	224.53	227.59	226.09	208.90	253.36	189.44	191.18	201.68	214.29	226.22	238.96	-35.08	-0.68%	47.78	1.18%
<b>Net Growth</b>	3.07	-1.51	-17.18	-7.6%	44.46	-63.92	1.73	10.50	12.61	11.93	12.74	-15.6%	-15.6%	25.0%	
<b>% Growth</b>	1.4%	-0.7%	-7.6%	-21.3%	21.3%	-25.2%	0.9%	5.5%	6.3%	5.6%	5.6%	-15.6%	-15.6%	25.0%	
<b>Retail Employment</b>	94.13	95.97	99.70	95.71	118.36	106.22	107.88	111.68	115.40	121.00	126.61	12.09	0.48%	18.73	0.85%
<b>Net Growth</b>	1.84	3.73	-3.99	-3.99	22.65	-12.14	1.66	3.80	3.72	5.60	5.61	12.8%	12.8%	17.4%	
<b>% Growth</b>	2.0%	3.9%	-4.0%	-4.0%	23.7%	-10.3%	1.6%	3.5%	3.3%	4.8%	4.6%	12.8%	12.8%	17.4%	
<b>Warehouse Employment</b>	40.44	35.53	31.24	23.13	22.90	19.99	20.42	20.82	20.90	20.82	20.45	-20.45	-2.78%	0.03	0.01%
<b>Net Growth</b>	-4.90	-8.11	-2.91	-2.91	-0.23	-2.91	0.43	0.40	0.08	-0.08	-0.37	-50.6%	-50.6%	0.2%	
<b>% Growth</b>	-12.1%	-12.1%	-26.0%	-26.0%	-1.0%	-12.7%	2.2%	2.0%	0.4%	-0.4%	-1.8%	-50.6%	-50.6%	0.2%	
<b>High Tech Employment</b>	21.69	22.33	19.32	20.21	41.48	22.34	22.39	25.07	28.59	31.68	34.53	0.65	0.12%	12.14	2.31%
<b>Net Growth</b>	0.64	-3.01	0.89	0.89	21.27	-19.14	0.05	2.68	3.52	3.09	2.86	3.0%	3.0%	54.2%	
<b>% Growth</b>	3.0%	-13.5%	4.6%	4.6%	105.3%	-46.1%	0.2%	12.0%	14.0%	10.8%	9.0%	3.0%	3.0%	54.2%	
<b>Other Employment</b>	189.57	184.06	191.08	180.78	170.92	188.11	191.36	195.91	195.43	196.37	196.01	-1.46	-0.03%	4.65	0.13%
<b>Net Growth</b>	-5.51	7.02	-10.30	-9.86	17.19	17.19	3.25	4.55	-0.47	0.94	-0.36	-0.8%	-0.8%	2.4%	
<b>% Growth</b>	-2.9%	3.8%	-5.4%	-5.4%	10.1%	10.1%	1.7%	2.4%	-0.2%	0.5%	-0.2%	-0.8%	-0.8%	2.4%	
<b>Total Employment (1)</b>	570.36	565.49	567.41	528.72	607.02	526.10	533.22	555.16	574.62	596.09	616.56	-44.26	-0.32%	83.34	0.77%
<b>Net Growth</b>	-4.87	1.93	-38.69	78.30	-80.92	-80.92	7.12	21.93	19.46	21.47	20.48	-44.26	-44.26	83.34	0.77%
<b>% Growth</b>	-0.9%	0.3%	-6.8%	14.8%	-15.3%	-15.3%	1.4%	4.1%	3.5%	3.7%	3.4%	-44.26	-44.26	83.34	0.77%

(1) Includes total payroll employment, including non-BLS sectors.  
 From Moody's Economy.com for the City and County of San Francisco.

Sources: Moody's Economy.com; Brion & Associates.

**Exhibit 2**  
**Projected Growth in San Francisco from 2006-2025**  
**San Francisco Citywide Development Impact Fee Study**

Item	Existing Conditions 2006	Projected Growth 2006-2025		Incremental Average Persons per Household	Total At 2025	Project Area Percent Buildout
		Amount (3)	Avg. Annual Growth Rate			
<b><u>Total Population</u></b> (1)	777,121	55,871	0.00%		832,992	na
Visitation Valley	11,501	1,242	-99.94%		12,743	90%
Mission Bay	2,112	3,711	5.48%		5,823	65%
Rincon Hill	<u>2,835</u>	<u>4,810</u>	5.36%		<u>7,645</u>	100%
Subtotal	16,448	9,763			26,211	
Total w/out MB/RH/V (2)	760,673	<b>46,108</b>	-0.02%		806,781	na
<b><u>Total Housing Units</u></b> (1)	341,052	24,505	0.52%	2.28	365,557	na
Visitation Valley	3,100	276	0.88%	4.80	3,376	91%
Mission Bay	1,200	1,983	5.27%	1.87	3,183	65%
Rincon Hill	<u>1,500</u>	<u>3,100</u>	-99.94%	1.55	<u>4,600</u>	100%
Subtotal	5,800	5,359			11,159	
Total w/out MB/RH/V (2)	335,252	<b>19,146</b>	0.51%	2.09	354,399	na
<b><u>Total Employment</u></b> (1)	536,224	83,807	0.00%		620,031	na
Visitation Valley	1,268	149	0.46%		1,417	100%
Mission Bay	8,901	15,118	0.74%		24,020	100%
Rincon Hill	<u>17,811</u>	<u>1,172</u>	0.38%		<u>18,983</u>	100%
Subtotal	27,981	16,440			44,420	
Total w/out MB/RH/V (2)	508,243	<b>67,367</b>	-0.03%		575,611	na

(1) Employment Projections are from Moody's Economy.com for 2006 to 2025 by industry sector.

Residential (population and household) projections are adjusted to be in line with the employment projections by

Economy.com; base data are from the San Francisco Planning Department (October, 2006) based on the Land Use Allocation Study - 2002.

(2) Mission Bay, Rincon Hill and Visitation Valley/Executive Park have separate agreements in terms of fees and have requirements to meet their child care impacts through project mitigation and are excluded from the fee analysis.

(3) The amount of growth shown in boxes would be subject to the Child Care Requirement and Linkage Fee, after additional adjustments in subsequent tables.

Sources: Moody's Economy.com; San Francisco Department of City Planning; David Taussig & Associates, Inc.; Brion & Associates.

**Exhibit 3  
Development Projections  
for Non-Residential Uses  
San Francisco Citywide  
Development Impact Fee Study**

Land Use	Existing Conditions 2006 (1)			Future Jobs - 2006 to 2025 (2)			Total Jobs at 2025		
	Estimated Jobs - 2006	2006 Jobs in Mission Bay/Rincon Hill/Visitation Valley (4)	Net Jobs 2006 (w/out MB, RH, VV)	Total Projected New Jobs - 2006-2025	Mission Bay / Rincon Hill/Visitation Valley Growth (4)	Net New Jobs Subject to Fee - 2006-2025 (w/out MB, RH, VV)	Total Projected Jobs at 2025	Total Jobs in Mission Bay/Rincon Hill/Visitation Valley at 2025 (4)	Total Net Jobs at 2025 (w/out MB, RH, VV)
	<i>a</i>	<i>b</i>	<i>c</i>						
<b>Non-Res. Development</b>									
CIE	94,127	2,107	92,019	4,442	4,353	89	98,568	6,460	92,108
Hotel	18,761	16	18,745	2,347	0	2,347	21,107	16	21,091
Medical	36,772	52	36,720	3,855	6	3,849	40,627	58	40,569
Office	225,676	18,100	207,576	51,122	10,460	40,662	276,798	28,561	248,238
Retail	97,205	5,186	92,019	8,297	1,286	7,011	105,502	6,472	99,030
Industrial/PDR	63,684	2,519	61,165	13,744	335	13,409	77,429	2,854	74,575
<b>TOTAL/AVG.</b>	<b>536,224</b>	<b>27,981</b>	<b>508,243</b>	<b>83,807</b>	<b>16,440</b>	<b>67,367</b>	<b>620,031</b>	<b>44,421</b>	<b>575,610</b>
<b>Avg. Per Yr - 2006 to 2025</b>				<b>4,411</b>	<b>865</b>	<b>3,546</b>		<b>(5)</b>	<b>(5)</b>

(1) Land use categories and base data are from the San Francisco Department of City Planning (October 2006).

Data from 2006 is extrapolated from the 2000 to 2025 projections, based on average annual growth rates by land use category.

(2) New job growth is from Moody's Economy.com forecast for San Francisco, 2006 to 2025.

(3)

Based on typical new sqft per employee factors derived by reviewing proposed projects and actual projects in SF and other Silicon Valley cities by Brion & Associates. The sqft per employee factors that exist currently are lower density factors than those used for the future analysis. It is assumed that in the future employees will use less sqft than they use currently.

(4) Visitation Valley, Rincon Hill and Mission Bay would not be subject to the new impact fee and the remaining square footage of development potential associated with these projects is removed for the analysis.

(5) The totals above are off by one job from the totals in Exhibit 1 due to rounding.

(6) This amount of expected office space development would be within the limits of that allowed by Proposition M, which restricts office development to 875,000 sqft per year. There is also an accumulation of 2.2 million sqft credit that can also be developed.

Sources: Moody's Economy.com; San Francisco Department of City Planning; David Taussig & Associates, Inc.; Brion & Associates.

**Exhibit 3**  
**Development Projections**  
**for Non-Residential Uses**  
**San Francisco Citywide**  
**Development Impact Fee Study**

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Land Use	Estimated Sqft in 2006 <i>d</i>	Future Average Sqft per Employee (3) <i>e</i>	Projected New Sqft-2006-2025 (2) <i>a * e = f</i>	Mission Bay / Rincon Hill/Visitation Valley Growth (3) <i>b * e = g</i>	Net Development Potential Subject to Fee - 2006-2025 <i>f - g = h</i>	Total Sqft of Bldg. Space at 2025 <i>d + f = i</i>	Total at 2025 w/out MB, RH, VV
<b>Non-Res. Development</b>							
CIE	19,295,974	225	999,400	979,317	20,083	20,295,373	18,841,873
Hotel	7,279,093	400	938,640	-	938,640	8,217,733	8,211,333
Medical	10,810,895	225	867,404	1,368	866,036	11,678,298	11,665,248
Office	90,270,440	225	11,502,528 (6)	2,353,565	9,148,962	101,772,968	95,346,846
Retail	31,494,307	300	2,489,072	385,776	2,103,296	33,983,378	32,041,778
Industrial/PDR	30,186,311	350	4,810,529	117,259	4,693,270	34,996,840	33,998,001
<b>TOTAL/AVG.</b>	<b>189,337,019</b>		<b>21,607,571</b>	<b>3,837,285</b>	<b>17,770,286</b>	<b>210,944,590</b>	<b>200,105,080</b>
<b>Avg. Per Yr - 2006 to 2025</b>			<b>1,137,241</b>	<b>201,962</b>	<b>935,278</b>		

**Exhibit 4**  
**Comparison of Four Growth Projections**  
**in San Francisco from 2006-2025**  
**San Francisco Citywide Development Impact Fee Study**

Item		Existing Conditions 2006	Projected Growth 2006-2025		Total At Buildout 2025	Average Annual Growth Rate
			Amount	% Change		
<b>Population</b>						
ABAG 2005	(1)	800,540	89,860	11.2%	890,400	0.56%
ABAG 2007	(2)	798,380	90,020	11.3%	888,400	0.56%
City Planning	(3)	777,221	57,327	7.4%	834,448	0.37%
Historical	(4)	777,221	57,327	7.4%	834,448	0.37%
Moody's	(5)	777,221	55,871	7.2%	832,992	0.37%
<b>Households</b>						
ABAG 2005	(1)	340,126	43,524	12.8%	383,650	0.64%
ABAG 2007	(2)	340,802	36,248	10.6%	377,050	0.53%
City Planning	(3)	341,052	25,159	7.4%	366,211	0.38%
Historical	(4)	341,052	25,159	7.4%	366,211	0.38%
Moody's	(5)	341,052	24,505	7.2%	365,557	0.37%
<b>Employment (1)</b>						
ABAG 2005	(1)	585,450	190,650	32.6%	776,100	1.49%
ABAG 2007	(2)	553,090	179,930	32.5%	733,020	1.49%
City Planning	(3)	536,225	224,712	41.9%	760,937	1.86%
Historical	(4)	525,466	20,310	3.9%	545,776	0.20%
Moody's	(5)	536,224	83,807	15.6%	620,031	0.77%
<b>Jobs per Population</b>						
ABAG 2005		0.73	2.12	290.1%	0.87	0.93%
ABAG 2007		0.69	2.00	288.5%	0.83	0.92%
City Planning		0.69	3.92	568.2%	0.91	1.48%
Historical		0.68	0.35	52.4%	0.65	-0.17%
Moody's		0.69	1.50	217.4%	0.74	0.40%

Note: There is not a different population and household forecast for the City Planning and Historical forecasts.

Note: City estimate of households is actually housing units and ABAG is households. The difference could be related to vacancies

(1) Based on ABAG Projections 2005.

(2) Based on the recently released ABAG Projections 2007.

(3) City data and projections are from SF Planning Department as provided by David Taussig & Associates, Inc. (July 2006).

Note: There is not a different population and household forecast for the City Planning and Historical forecasts.

(4) Based on historical average annual growth rate for employment of .2% and applied to existing employment; population and housing is the same as for Planning forecast.

(5) Based on employment forecast for 2006 to 2025 by Moody's Economy.com.

Population and households estimates are based on historical housing growth, and comparison of population to employment by Brion & Associates.

Sources: ABAG; San Francisco Planning Department; David Taussig & Associates, Inc.; Brion & Associates.

**Exhibit 5****Historical Population Growth for San Francisco: 1990 to 2005  
San Francisco Citywide Development Impact Fee Study**

	<b>Historical Population &amp; Employment (1)</b>				<b>Moderate Forecast (2)</b>	
	<b>1990</b>	<b>1995</b>	<b>2000</b>	<b>2005</b>	<b>2006</b>	<b>2025</b>
<b>Total Population</b>	723,959	751,899	779,124	792,952	777,121	832,992
<b>Net Growth</b>		27,940	27,225	13,828	(15,831)	40,040
<b>% Growth</b>		3.9%	3.6%	1.8%	-2.0%	5.2%
<b>Total Employment</b>	567,415	528,721	607,023	526,101	536,224	620,031
<b>Net Growth</b>		(38,694)	78,303	(80,923)	10,123	93,930
<b>% Growth</b>		-7%	15%	-13%	1.9%	17.5%
<b>Jobs per Resident</b>	0.78	0.70	0.78	0.66	0.69	0.74
<b>Net Growth</b>		(0.08)	0.08	(0.12)	0.03	0.08
<b>% Growth</b>		-10%	11%	-15%	4.0%	11.7%

(1) Population is from the Department of Finance E-5 Report

Note that DOF's estimate of population is higher than the City's estimate for 2000 and 2005.

Planning data for population at 2000 is 756,967.

Employment is from Moody's Economy.com data for San Francisco.

(2) Employment forecast is from Moody's Economy.com; population forecast is based on

adjustments to the Planning Department's forecast based on Moody's employment forecast, as prepared by Brion & Associates.

Sources: California Department of Finance E-5 Summary Report; Moody's Economy.com; Brion & Associates.

**Exhibit 6**

**Projections Citywide by Land Use, Demographics and Year**

**San Francisco Citywide Development Impact Fee Study**

**I. Existing Data (1)**

Land Use Type	2006	2006	2006
	Number of Residents/Employees	Residents Per Unit/ Sqft per Employee	Number of Units/Non-Res SF
Single Family	291,000	3.11	93,520 *
Sr/SRO	22,400	1.00	22,292 *
Multi-Family (0-1 BR)	274,721	2.03	135,152 *
Multi-Family (2 or > BR)	<u>189,000</u>	<u>2.10</u>	<u>90,089</u> *
<i>Subtotal</i>	777,121	2.28	341,052 *
Commercial (CIE)	94,127	205	19,295,974 *
Commercial (Motel/Hotel)	18,761	388	7,279,093 *
Commercial (Medical)	36,772	294	10,810,895 *
Commercial (Office)	225,676	400	90,270,440 *
Commercial (Retail)	97,205	324	31,494,307 *
Industrial	<u>63,684</u>	<u>474</u>	<u>30,186,311</u> *
<i>Subtotal</i>	536,224	353	189,337,019 *

**II. Future Data (2)**

Land Use Type	2006-2025	2006-2025	2006-2025
	Number of Residents/Employees	Residents Per Unit/ Sqft per Employee	Number of Units/Non-Res SF
Single Family	1,733	3.53	490 *
Sr/SRO	860	1.17	735 *
Multi-Family (0-1 BR)	30,464	2.18	13,968 *
Multi-Family (2 or > BR)	22,814	<u>2.45</u>	9,312 *
<i>Subtotal</i>	55,871	2.28	24,505 *
Commercial (CIE)	4,442	225	999,400 *
Commercial (Motel/Hotel)	2,347	400	938,640 *
Commercial (Medical)	3,855	225	867,404 *
Commercial (Office)	51,122	225	11,502,528 *
Commercial (Retail)	8,297	300	2,489,072 *
Industrial	<u>13,744</u>	350	<u>4,810,529</u> *
<i>Subtotal</i>	83,807	258	21,607,571 *

**III. Total at 2025**

Land Use Type	2025	2025	2025
	Number of Residents/Employees	Residents Per Unit/ Sqft per Employee	Number of Units/Non-Res SF
Single Family	292,733	3.11	94,010
Sr/SRO	23,260	1.01	23,026
Multi-Family (0-1 BR)	305,185	2.05	149,119
Multi-Family (2 or > BR)	<u>211,814</u>	<u>2.13</u>	<u>99,402</u>
<i>Subtotal</i>	832,992	2.28	365,557
Commercial (CIE)	98,568	206	20,295,373 *
Commercial (Motel/Hotel)	21,107	389	8,217,733 *
Commercial (Medical)	40,627	287	11,678,298 *
Commercial (Office)	276,798	368	101,772,968 *
Commercial (Retail)	105,502	322	33,983,378 *
Industrial	<u>77,429</u>	<u>452</u>	<u>34,996,840</u> *
<i>Subtotal</i>	620,031	340	210,944,590 *

\* Note may not add up due to rounding.

(1) Existing base data are from the San Francisco Planning Department (October, 2006) based on the Land Use Allocation Study - 2002 and has been adjusted to 2006 assuming average annual growth from 2000 to 2025.

(2) Employment Projections are from Moody's Economy.com for 2006 to 2025 by industry sector. Residential (population and household) projections are adjusted to be in line with the employment projections by Economy.com; adjustments were prepared by Brion & Associates and reviewed by DTA and City Staff.

Residential data based on City of San Francisco Demographic Data provided by the Planning Department. Non-Residential data provided by Dun & Bradstreet. Also, please note that the total Multi-Family Residential Land Use Class figures were split assuming 60% of existing and future Multi-Family units are/will be 0-1 BR and 40% are/will be 2 or more bedrooms.

Prepared by David Taussig Associates, Inc.; Brion & Associates.

**Exhibit 7**

**Projections Mission Bay by Land Use, Demographics and Year  
San Francisco Citywide Development Impact Fee Study**

<b>I. Existing Data (1)</b>			
Land Use Type	<b>2006</b> Number of Residents/Employees	<b>2006</b> Residents Per Unit/ Sqft per Employee	<b>2006</b> Number of Units/Non-Res SF
Single Family Sr/SRO			
Multi-Family (0-1 BR)	1,267	1.76	720 *
Multi-Family (2 or > BR)	<u>845</u>	<u>1.76</u>	<u>480</u> *
<i>Subtotal</i>	<i>2,112</i>	<i>1.76</i>	<i>1,200</i> *
Commercial (CIE)	1,425	225	320,733 *
Commercial (Motel/Hotel)	0	400	0 *
Commercial (Medical)	34	225	7,749 *
Commercial (Office)	4,573	225	1,028,928 *
Commercial (Retail)	1,081	300	324,300 *
Industrial	<u>1,787</u>	<u>350</u>	<u>625,554</u> *
<i>Subtotal</i>	<i>8,901</i>	<i>259</i>	<i>2,307,265</i> *
<b>II. Future Data (2)</b>			
Land Use Type	<b>2006-2025</b> Number of Residents/Employees	<b>2006-2025</b> Residents Per Unit/ Sqft per Employee	<b>2006-2025</b> Number of Units/Non-Res SF
Single Family Sr/SRO			
Multi-Family (0-1 BR)	2,227	1.87	1,190 *
Multi-Family (2 or > BR)	<u>1,485</u>	<u>1.87</u>	<u>793</u> *
<i>Subtotal</i>	<i>3,711</i>	<i>1.87</i>	<i>1,983</i> *
Commercial (CIE)	4,220	225	949,392 *
Commercial (Motel/Hotel)	0	400	0 *
Commercial (Medical)	5	225	1,026 *
Commercial (Office)	9,598	225	2,159,598 *
Commercial (Retail)	1,026	300	307,800 *
Industrial	<u>270</u>	<u>350</u>	<u>94,539</u> *
<i>Subtotal</i>	<i>15,118</i>	<i>232</i>	<i>3,512,355</i> *
<b>III. Total at 2025</b>			
Land Use Type	<b>2025</b> Number of Residents/Employees	<b>2025</b> Residents Per Unit/ Sqft per Employee	<b>2025</b> Number of Units/Non-Res SF
Single Family Sr/SRO			
Multi-Family (0-1 BR)	3,494	1.83	1,910 *
Multi-Family (2 or > BR)	<u>2,329</u>	<u>1.83</u>	<u>1,273</u> *
<i>Subtotal</i>	<i>5,823</i>	<i>1.83</i>	<i>3,183</i> *
Commercial (CIE)	5,645	225	1,270,125 *
Commercial (Motel/Hotel)	0	400	0 *
Commercial (Medical)	39	225	8,775 *
Commercial (Office)	14,171	225	3,188,527 *
Commercial (Retail)	2,107	300	632,100 *
Industrial	<u>2,057</u>	<u>350</u>	<u>720,093</u> *
<i>Subtotal</i>	<i>24,020</i>	<i>242</i>	<i>5,819,620</i> *

\* Note may not add up due to rounding.

(1) Existing base data are from the San Francisco Planning Department (October, 2006) based on the Land Use Allocation Study - 2002 and has been adjusted to 2006 assuming average annual growth from 2000 to 2025.

(2) Employment Projections are from Moody's Economy.com for 2006 to 2025 by industry sector.

Residential (population and household) projections are adjusted to be in line with the employment projections by Economy.com; adjustments were prepared by Brion & Associates and reviewed by DTA and City Staff.

Prepared by David Taussig Associates, Inc.; Brion & Associates.

**Exhibit 8**

**Projections Rincon Hill by Land Use, Demographics and Year  
San Francisco Citywide Development Impact Fee Study**

<b>I. Existing Data (1)</b>			
Land Use Type	<b>2006</b> Number of Residents/Employees	<b>2006</b> Residents Per Unit/ Sqft per Employee	<b>2006</b> Number of Units/Non-Res SF
Single Family Sr/SRO			
Multi-Family (0-1 BR)	1,701	1.89	900 *
Multi-Family (2 or > BR)	<u>1,134</u>	<u>1.89</u>	<u>600</u> *
<i>Subtotal</i>	<i>2,835</i>	<i>1.89</i>	<i>1,500</i> *
Commercial (CIE)	309	225	69,498 *
Commercial (Motel/Hotel)	0	400	0 *
Commercial (Medical)	15	225	3,483 *
Commercial (Office)	13,469	225	3,030,521 *
Commercial (Retail)	3,923	300	1,176,756 *
Industrial	<u>95</u>	350	33,346 *
<i>Subtotal</i>	<i>17,811</i>	<i>242</i>	<i>4,313,604</i> *
<b>II. Future Data (2)</b>			
Land Use Type	<b>2006-2025</b> Number of Residents/Employees	<b>2006-2025</b> Residents Per Unit/ Sqft per Employee	<b>2006-2025</b> Number of Units/Non-Res SF
Single Family Sr/SRO			
Multi-Family (0-1 BR)	2,886	1.55	1,860 *
Multi-Family (2 or > BR)	<u>1,924</u>	<u>1.55</u>	<u>1,240</u> *
<i>Subtotal</i>	<i>4,810</i>	<i>1.55</i>	<i>3,100</i> *
Commercial (CIE)	123	225	27,702 *
Commercial (Motel/Hotel)	0	400	0 *
Commercial (Medical)	2	225	342 *
Commercial (Office)	814	225	183,100 *
Commercial (Retail)	226	300	67,944 *
Industrial	<u>7</u>	<u>350</u>	<u>2,522</u> *
<i>Subtotal</i>	<i>1,172</i>	<i>240</i>	<i>281,610</i> *
<b>III. Total at 2025 [5]</b>			
Land Use Type	<b>2025</b> Number of Residents/Employees	<b>2025</b> Residents Per Unit/ Sqft per Employee	<b>2025</b> Number of Units/Non-Res SF
Single Family Sr/SRO			
Multi-Family (0-1 BR)	4,587	1.66	2,760 *
Multi-Family (2 or > BR)	<u>3,058</u>	<u>1.66</u>	<u>1,840</u> *
<i>Subtotal</i>	<i>7,645</i>	<i>1.66</i>	<i>4,600</i> *
Commercial (CIE)	432	225	97,200 *
Commercial (Motel/Hotel)	0	400	0 *
Commercial (Medical)	17	225	3,825 *
Commercial (Office)	14,283	225	3,213,621 *
Commercial (Retail)	4,149	300	1,244,700 *
Industrial	<u>102</u>	<u>350</u>	<u>35,868</u> *
<i>Subtotal</i>	<i>18,983</i>	<i>242</i>	<i>4,595,214</i> *

\* Note may not add up due to rounding.

(1) Existing base data are from the San Francisco Planning Department (October, 2006) based on the Land Use Allocation Study - 2002 and has been adjusted to 2006 assuming average annual growth from 2000 to 2025.

(2) Employment Projections are from Moody's Economy.com for 2006 to 2025 by industry sector.

Residential (population and household) projections are adjusted to be in line with the employment projections by Economy.com; adjustments were prepared by Brion & Associates and reviewed by DTA and City Staff.

Prepared by David Taussig Associates, Inc.; Brion & Associates.

**Exhibit 9****Projections Visitation Valley by Land Use, Demographics and Year  
San Francisco Citywide Development Impact Fee Study**

<b>I. Existing Data (1)</b>			
Land Use Type	<b>2006</b> Number of Residents/Employees	<b>2006</b> Residents Per Unit/ Sqft per Employee	<b>2006</b> Number of Units/Non-Res SF
Single Family	5,751	4.01	1,434 *
Sr/SRO	230	1.50	153 *
Multi-Family (0-1 BR)	2,645	3.50	756 *
Multi-Family (2 or > BR)	<u>2,875</u>	<u>3.80</u>	<u>757</u> *
<i>Subtotal</i>	<i>11,501</i>	<i>3.71</i>	<i>3,100</i> *
Commercial (CIE)	373	225	83,952 *
Commercial (Motel/Hotel)	16	400	6,400 *
Commercial (Medical)	2	225	450 *
Commercial (Office)	58	225	13,107 *
Commercial (Retail)	183	300	54,768 *
Industrial	<u>636</u>	<u>350</u>	<u>222,679</u> *
<i>Subtotal</i>	<i>1,268</i>	<i>301</i>	<i>381,355</i> *
<b>II. Future Data (2)</b>			
Land Use Type	<b>2006-2025</b> Number of Residents/Employees	<b>2006-2025</b> Residents Per Unit/ Sqft per Employee	<b>2006-2025</b> Number of Units/Non-Res SF
Single Family	62	4.80	13 *
Sr/SRO	25	1.80	14 *
Multi-Family (0-1 BR)	497	4.45	112 *
Multi-Family (2 or > BR)	<u>658</u>	<u>4.80</u>	<u>137</u> *
<i>Subtotal</i>	<i>1,242</i>	<i>4.51</i>	<i>276</i> *
Commercial (CIE)	10	225	2,223 *
Commercial (Motel/Hotel)	0	400	0 *
Commercial (Medical)	0	225	0 *
Commercial (Office)	48	225	10,867 *
Commercial (Retail)	33	300	10,032 *
Industrial	<u>58</u>	<u>350</u>	<u>20,199</u> *
<i>Subtotal</i>	<i>149</i>	<i>290</i>	<i>43,321</i> *
<b>III. Total at 2025</b>			
Land Use Type	<b>2025</b> Number of Residents/Employees	<b>2025</b> Residents Per Unit/ Sqft per Employee	<b>2025</b> Number of Units/Non-Res SF
Single Family	5,813	4.02	1,447 *
Sr/SRO	255	1.52	167 *
Multi-Family (0-1 BR)	3,142	3.62	867 *
Multi-Family (2 or > BR)	<u>3,534</u>	<u>3.95</u>	<u>894</u> *
<i>Subtotal</i>	<i>12,743</i>	<i>3.78</i>	<i>3,376</i> *
Commercial (CIE)	383	225	86,175 *
Commercial (Motel/Hotel)	16	400	6,400 *
Commercial (Medical)	2	225	450 *
Commercial (Office)	107	225	23,974 *
Commercial (Retail)	216	300	64,800 *
Industrial	<u>694</u>	<u>350</u>	<u>242,878</u> *
<i>Subtotal</i>	<i>1,417</i>	<i>300</i>	<i>424,676</i> *

\* Note may not add up due to rounding.

(1) Existing base data are from the San Francisco Planning Department (October, 2006) based on the Land Use Allocation Study - 2002 and has been adjusted to 2006 assuming average annual growth from 2000 to 2025.

(2) Employment Projections are from Moody's Economy.com for 2006 to 2025 by industry sector.

Residential (population and household) projections are adjusted to be in line with the employment projections by Economy.com; adjustments were prepared by Brion & Associates and reviewed by DTA and City Staff.

Prepared by David Taussig Associates, Inc.; Brion & Associates.

**Exhibit 10**

**Projections Citywide without Mission Bay, Rincon Hill, & Visitation Valley by Land Use, Demographics and Year  
San Francisco Citywide Development Impact Fee Study**

**I. Existing Data (1)**

Land Use Type	2006 Number of Residents/Employees	2006 Residents Per Unit/ Sqft per Employee	2006 Number of Units/Non-Res SF
Single Family	285,250	3.10	92,085 *
Sr/SRO	22,170	1.00	22,138 *
Multi-Family (0-1 BR)	269,108	2.03	132,776 *
Multi-Family (2 or > BR)	<u>184,146</u>	<u>2.09</u>	<u>88,253</u> *
<i>Subtotal</i>	<i>760,673</i>	<i>2.27</i>	<i>335,252</i> *
Commercial (CIE)	92,019	205	18,821,791 *
Commercial (Motel/Hotel)	18,745	388	7,272,693 *
Commercial (Medical)	36,720	294	10,799,213 *
Commercial (Office)	207,576	415	86,197,884 *
Commercial (Retail)	92,019	325	29,938,483 *
Industrial	<u>61,165</u>	<u>479</u>	<u>29,304,732</u> *
<i>Subtotal</i>	<i>508,243</i>	<i>359</i>	<i>182,334,794</i> *

**II. Future Data (2)**

Land Use Type	Number of Residents/Employees	Residents Per Unit/ Sqft per Employee	Number of Units/Non-Res SF
Single Family	1,671	3.500	477 *
Sr/SRO	836	1.159	721 *
Multi-Family (0-1 BR)	24,854	2.300	10,806 *
Multi-Family (2 or > BR)	18,748	<u>2.625</u>	<u>7,142</u> *
<i>Subtotal</i>	<i>46,108</i>	<i>2.408</i>	<i>19,146</i> *
Commercial (CIE)	89	225	20,083 *
Commercial (Motel/Hotel)	2,347	400	938,640 *
Commercial (Medical)	3,849	225	866,036 *
Commercial (Office)	40,662	225	9,148,962 *
Commercial (Retail)	7,011	300	2,103,296 *
Industrial	<u>13,409</u>	<u>350</u>	<u>4,693,270</u> *
<i>Subtotal</i>	<i>67,367</i>	<i>264</i>	<i>17,770,286</i> *

**III. Total at 2025**

Land Use Type	Number of Residents/Employees	Residents Per Unit/ Sqft per Employee	Number of Units/Non-Res SF
Single Family	286,921	3.10	92,563 *
Sr/SRO	23,005	1.01	22,859 *
Multi-Family (0-1 BR)	293,962	2.05	143,582 *
Multi-Family (2 or > BR)	<u>202,894</u>	<u>2.13</u>	<u>95,395</u> *
<i>Subtotal</i>	<i>806,781</i>	<i>2.28</i>	<i>354,399</i> *
Commercial (CIE)	92,108	205	18,841,873 *
Commercial (Motel/Hotel)	21,091	389	8,211,333 *
Commercial (Medical)	40,569	288	11,665,248 *
Commercial (Office)	248,238	384	95,346,846 *
Commercial (Retail)	99,030	324	32,041,778 *
Industrial	<u>74,575</u>	<u>456</u>	<u>33,998,001</u> *
<i>Subtotal</i>	<i>575,611</i>	<i>348</i>	<i>200,105,080</i> *

\* Note may not add up due to rounding.

(1) Existing base data are from the San Francisco Planning Department (October, 2006) based on the Land Use Allocation Study - 2002 and has been adjusted to 2006 assuming average annual growth from 2000 to 2025.

(2) Employment Projections are from Moody's Economy.com for 2006 to 2025 by industry sector.

Residential (population and household) projections are adjusted to be in line with the employment projections by Economy.com; adjustments were prepared by Brion & Associates and reviewed by DTA and City Staff.

Residential data based on City of San Francisco Demographic Data provided by the Planning Department. Non-Residential data provided by Dun & Bradstreet. Also, please note that the total Multi-Family Residential Land Use Class figures were split assuming 60% of existing and future MF are/will be 0-1 BR and 40% are/will be 2 or more bedrooms.

Prepared by David Taussig Associates, Inc.; Brion & Associates.

## 10.5 City of Santa Monica Child Care Linkage Program Report (2005)

Report

**Child Care Linkage  
Program**

*Prepared for:*  
**City of Santa Monica**

*Prepared by:*  
**Keyser Marston Associates, Inc.**

**November 2005**

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## **EXECUTIVE SUMMARY**

The City of Santa Monica directed Keyser Marston Associates, Inc. (KMA) to prepare an analysis of the impacts of new development on child care needs in the City of Santa Monica. The purpose of the analysis and report is to demonstrate and quantify the nexus between new development and child care demand as a basis for charging a child care impact fee on new development in Santa Monica, should the City wish to adopt a child care mitigation program. The City contracted for the report in June 2002 and the report was largely prepared in 2003 with portions updated in 2005; KMA believes that none of the earlier information has changed in a manner that would in any way undermine the conclusions of the analysis.

The objectives of the study were therefore as follows: (1) to assemble data and determine whether development of new commercial and residential space impacts demand for child care, (2) to quantify the demand related to newly constructed space, (3) to quantify the costs of mitigating the demand, or the costs to increase the supply of child care facilities in Santa Monica, and (4) to provide information to assist the City in selecting an appropriate fee level.

The analysis concludes that construction of commercial space or "Workplace Buildings" (office, retail and hotel, etc.) does increase the need for child care in the city and that new residential construction does not. The main body of this report, therefore, addresses development of commercial space and child care demand, mitigation costs, and fee setting issues. The analysis for residential development and child care demand is provided in an appendix section in addition to other supporting material.

Following are the key findings of the analysis.

### **Nexus Analysis for Workplace Buildings**

- The linkages between the construction of workplace buildings in Santa Monica, the employees who work in them and the demand for care of children while the employees are at work, have been demonstrated and quantified in the analysis.
- A widely accepted interpretation of the California Governmental Code is that linkage fees may be used to address capital facilities only, not operational or programmatic costs. As a result, the linkage analysis quantifies the demand for spaces in child care center facilities and the cost of developing new child care center spaces.
- Child care centers at or near the workplace meet the child care needs of workers for infants, toddlers and preschool age children. Thus, the workplace analysis addresses these age groups only.

- An analytical approach is to examine a group or "universe" of 1,000 employees. The demand for child care from a universe of 1,000 employees finds that there are 140.21 children of infant, toddler and preschool age. The demand for child care spaces near the place of work is 35.68 spaces per 1,000 employees.
- A survey was conducted of the cost of West Los Angeles area recently developed and planned child care centers. A cost analysis for a prototypical child care center in Santa Monica was also prepared. The conclusion from the two approaches is that the cost of developing a child care center in Santa Monica is at least \$35,000 per space on average in 2003. An update evaluation places the cost of each child care center space in Santa Monica at \$18,500, excluding land and \$55,400 including land.

When employees are converted to workplace building area using standard density averages, the demand for child care space associated with each square foot of workspace building area can be quantified. In addition, the cost of mitigation through development of child care facility space is also quantified using the updated 2005 costs as follows:

<b>Child Care Center Cost per Sq. Ft. Building Area</b>		<b>Excluding</b>	<b>Including</b>
	<u>Density</u>	<u>Land</u>	<u>Land</u>
Office	250 sq. ft./Employee	\$2.64	\$7.91
Retail/Entertainment	350 sq. ft./Employee	\$1.89	\$5.65
Hotel/Lodging	500 sq. ft./Employee	\$1.32	\$3.95

Total child care linkage costs are provided with and without land in recognition that some child care centers may be developed on land either donated or already owned by the City. To reflect the mix, an average linkage cost for the two assumptions is recommended for establishing the maximum ceiling. Results are as follows:

Office..... \$5.27 per sq. ft.  
 Retail/Entertainment..... \$3.77 per sq. ft.  
 Hotel/Lodging ..... \$2.64 per sq. ft.

These are the total child care nexus or linkage costs and represent the ceiling below which the City may set fee levels. Keyser Marston Associates does not recommend that these figures be used for actual fee levels but recommends that the City use these numbers for guidance in considering fee levels.

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## **Additional Information to Assist in Designing a Fee Program**

The following information is provided to assist policy makers.

- The total cost of development of commercial space in Santa Monica might be taken into account in considering fee levels. The cost (in 2003) to develop retail, office, and hotel space in Santa Monica was at least \$300 to \$400 per square foot, due to high land costs, high density building configurations and parking requirements. The fee amounts likely to be under consideration for child care will have very little impact on total development cost and decisions about whether to proceed with projects in Santa Monica.
- A survey of other jurisdictions with child care impact fees has identified 16 cities or counties with programs. Most of these jurisdictions are in Northern California, most were adopted 10 or more years ago, and a few fund operating expenses as well as new child care centers. The highest fee in California is \$1.15 per square foot of commercial area recently adopted in the City of Palm Desert. Fees of \$1.00 per square foot have been adopted in San Francisco, Berkeley, and the City of San Mateo. Seattle has a downtown bonus program that entails a higher amount, roughly \$2 per square foot averaged over the total building area.
- Fee collection projections have been estimated for informational purposes. If Santa Monica commercial construction continues at the rate of 100,000 to 150,000 square feet of per year, a fee in the \$2.50 to \$3.50 range would generate approximately \$250,000 to \$450,000 per year. This revenue would be sufficient to build about 10 new child care center spaces per year, or a new 75 space child care center once every seven or eight years. (This estimate does not take into account any potential exemption for small projects.)
- Over the past 15 years, Santa Monica has included child care requirements in Development Agreements for six large scale projects. The Development Agreements were the result of project specific negotiations and do not reflect a child care mitigation program. The analysis and findings contained in this analysis could be used to apply more consistent mitigation requirements for large projects in the future.

### **Nexus Analysis for Residential Units**

An analysis was conducted for residential units similar to the analysis for workplace building space. However, a child care linkage fee on residential construction is not recommended at this time due to the lack of growth in the number of preschool children (children under age 5) in Santa Monica, per the 1990 and 2000 U.S. Census.

An analysis of the child care facility costs associated with each residential unit plus programmatic costs based on current City expenditures was conducted for informational purposes. Should the City wish to pursue a linkage program in the future, or use the information for other purposes such as for the negotiation of development agreements, the findings may be useful to the City.

The child care facility linkage cost is quantified, using 2005 costs, in the same manner as with the workplace buildings. The cost of each child care center facility space, with and without land, is applied to the conclusion that there is demand for 0.003 child care spaces per residential unit,

Child Care Cost excluding land	\$56 Per Residential Unit
Child Care Cost including land	\$166 Per Residential Unit
Average	\$111 Per Residential Unit

For informational purposes, the program costs per child were calculated. Following are the City funded program costs allocated to each residential unit in Santa Monica. These costs cover all children up through high school age.

<b>Child Care and Youth Service Costs</b>	<b>Cost per Residential Unit</b>
City Assistance to Pre-School, School-age Programs and Scholarships *	\$581
Other City Expenditures for Child Care and Youth Services*	<u>\$2,640</u>
Total Per Residential Unit	<u>\$3,221</u>

\*From 2002/03 Budget, City of Santa Monica

**KMA Recommendations**

- Based on all the factors summarized in this report, KMA suggests maximum fees in the range of the average for each building type: Office \$5.27, Retail \$3.77, Hotel \$2.64
- KMA does not recommend establishing a fee for new residential construction at this time.
- For consistency, we recommend the same thresholds as with other standards or impact fees. The threshold for Development Review is 7,500 square feet. The Housing and Open Space Fee has lower fees below a 15,000 square foot threshold. The City may wish to reconsider all thresholds at this time.

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## **INTRODUCTION**

### **A. Background/Context**

The following report analyzing the linkages between child care demand and new development in the City of Santa Monica has been prepared by Keyser Marston Associates, Inc. (KMA) pursuant to Santa Monica City Council direction, and the ensuing contract dated June 26, 2002. The report was prepared in 2003, with portions updated in 2005. This report covers a range of topics related to establishing and quantifying relationships between new construction in the City and the demand for child care, and the costs of mitigating that demand.

The City of Santa Monica has a history of supporting both the supply and quality of child care within the City. The City has played an active role in funding and assisting various projects, programs and activities for the children of City residents, and children who attend school in the City. In 1991, the City adopted a Child Care Master Plan, which identified the possibility of exploring the relationship between new development and increased demand for child care services, and thus the possibility of establishing a development fee that would mitigate the cost of the increased demand. This report summarizes the work program designed to meet the Council's objective.

### **B. Process**

The City's Child Care and Early Education Task Force met with KMA personnel several times over the course of the work program. The Task Force provided direction and generally acted as a "sounding board" as findings and early recommendations emerged.

KMA staff also met extensively with City staff groups from Planning and Human Services Divisions throughout the work program. In addition, KMA and City staff met with representatives from the City Attorney's office to discuss legal directives related to impact fees and California State Law. This report presents the data, analysis, and professional recommendations resulting from all of these sources.

### **C. Report Organization**

This document contains the linkage analysis for Workplace Buildings (office, retail, hotel) and a section providing materials to assist policy makers in deliberating fee levels and other linkage program terms. Sections I through IV, as described below, contain the analysis and report to meet the needs of AB 1600, as contained in Section 66000 of the California Code.

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The report is divided into five sections as follows:

- *Section I* – outlines the concept and legal framework and summarizes the analysis parameters and the methodology for conducting the analysis. Major assumptions underlying the analysis are also provided in this section.
- *Section II* – presents the demand linkages for workplace buildings, starting with a given universe of employees, the incidence of children in various age groups, a discussion of how child care needs are met and, finally, the demand for child care center space near the parent's place of work.
- *Section III* – addresses the costs of mitigating child care demand through adding physical capacity in new child care centers. This section focuses on the capital cost of developing new child care centers in Santa Monica, based on both recent experience and an examination of the cost components.
- *Section IV* – links the findings regarding demand for child care to the findings regarding mitigation costs (Section II with Section III) relative to various types of buildings including office buildings, retail buildings, and hotels. The conclusion of Section IV provides total child care linkage costs per square foot of building area (for commercial buildings). This is the maximum amount that can be charged per square foot to mitigate new child care facility demands, per this analysis.
- *Section V* - is a brief recapitulation of the analysis and conclusions contained in Sections II through IV. It provides a summary of the major steps for linking employees to demand for child care center spaces near the work place to the cost of developing the new spaces.
- *Section VI* – presents some considerations and data to assist policy makers with decisions about setting fees and designing a linkage program for Santa Monica. Topics include fee amounts in the context of total development costs, other impact fees in Santa Monica, potential funding generation, and child care linkage programs in other jurisdictions. Unlike the prior sections, the material in this section does not address linkage per se.

An Appendix section provides the residential analysis and other supporting material, including a glossary of terms used in this report. An Executive Summary precedes the main report document.

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#### **D. Disclaimers**

The analyses in this report have been prepared using the best and most recent data available. Secondary sources, such as the U.S. Census 2000 and surveys by the Urban Institute, were extensively used. Local information from the City of Santa Monica was also utilized whenever it was available. While KMA believes these sources of data are sufficiently accurate for the purposes of the analyses, KMA cannot guarantee their complete accuracy. As a result, KMA assumes no liability for conclusions drawn from these sources.

This report was originally prepared in 2003. Portions have been updated to reflect increases in land value and other adjustments. KMA believes that none of the earlier information has changed in a manner that would in any way undermine the conclusion of this analysis.

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## **SECTION I - ANALYSIS CONCEPT, PARAMETERS AND METHODOLOGY**

### **A. Overview of the Concept and Methodology**

This report summarizes the analysis and findings of the linkages between commercial construction and impacts on child care demand, as well as additional information of interest to policy makers in designing a linkage program for the City of Santa Monica.

The basic concept is a series of linkages that moves from construction of new buildings to new employees, new employees to families with children age 5 or under, to the number of children needing child care, to those with needs that can be met at or near the workplace. The conclusion of the impact analysis is the need or demand for child care spaces in relation to building area, or per square foot building area. The cost to mitigate the impact is the cost to build a child care facility prorated in proportion to the demand generated.

An approach used in this analysis is to analyze a group or "universe" of 1,000 employees that is applicable to the workers in all types of workplace buildings in the analysis. There is no suitable database that enables a differentiation as to how the employees in different types of buildings have different child care needs. The universe of 1,000 workers is selected because it enables the analysis to quantify children and child care in readily understandable whole numbers, rather than the very awkward fractions that an analysis on the per employee level would entail. At the end of the analysis, the findings are translated to costs per square foot of building area, to express a "linkage cost" or maximum fee level supported by the analysis.

Using U.S. Census information, a demographic analysis is conducted on the employees to determine what share have children of preschool age or under and what share of those have need for child care due to working parents (both parents work if a two-parent household or a single parent who is working). For the analysis of workers in Santa Monica, the demographic profile of Los Angeles County is used, since workers in Santa Monica come from all over the greater area and are more likely to have a demographic profile similar to the County as a whole than to the residents of Santa Monica.

### **B. Analysis Parameters**

#### **1. Building Types**

The analysis is conducted for three major workplace building types — office, retail and hotel. These three types are short name versions of broad categories. The key variable in the definition is similarity of employment density. Office is inclusive of R&D (of the type likely to be drawn to Santa Monica), and also entertainment industry production space. Employment density

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is assumed similar to the density factors utilized elsewhere in Santa Monica applications, such as for parking analysis.

The retail categories are more broadly inclusive of restaurants, bars and entertainment facilities, including cinemas and other commercial entertainment venues. Retail density is generally more varied than office density, and covers the spectrum from high volume small eating outlets to furniture stores where employment density is far less. The 350 square foot average per employee is an average of this broad spectrum.

Hotel categories cover the range of lodging types, including resorts. The major employment density variable with hotels is the service level. Given the high room rate structure of the Santa Monica hotel market, most newly developed facilities will have a high service level, probably higher than the one employee per room average used in the analysis. In applying a fee program to hotel space, the City has the option of treating all space within the hotel equally or of separating out retail, restaurant and office areas for different fee levels.

## 2. Infants, Toddlers and Preschool Children Only

The analysis must focus on the child care services relevant to the various building types addressed. For workplace buildings, including office buildings, retail projects and hotels or other lodging, the relevant child care is related to employees who need child care while at work. For purposes of this program, this means child care at or near the workplace (as opposed to near home). Essentially, this limits the universe to child care for infants, toddlers and preschool children; child care at (or near) the workplace is usually no longer a viable option once the child is in school, unless the school is close by. Most workers enroll their children in school in their home community or near their place of residence.

It is known that some workers in Santa Monica do enroll their children in Santa Monica schools despite living in another jurisdiction. From a conceptual standpoint, these children and the cost of mitigating their demands on the before and after school facilities and programs in Santa Monica schools could be included in the analysis. KMA and City staff agreed not to include them due to the following considerations:

- If the children of non-resident workers in Santa Monica were included in the analysis, it would be necessary to assemble data on children enrolled in Santa Monica schools, by age and grade level, who are there because their parents work in Santa Monica (as opposed to living outside the City and selecting Santa Monica schools for some other reason).
- Of the children enrolled in Santa Monica schools who meet the above criteria, it would be necessary to sort for (or identify the share of) children whose parents work in

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commercial buildings as opposed to governmental or other types of structures not included in the analysis.

- Of the children who meet the above criteria, the analysis would then need to quantify all non-resident workers in commercial structures who enroll their children in Santa Monica schools as a share of all workers in these buildings. KMA believes this would be a very, very small share.
- Of those children quantified from the previous step, the analysis would apply the cost of increasing the capacity of facilities used to accommodate the before and after school programs.
- The result of the analysis would be a very small addition to the total linkage cost conclusion.

In addition to the technical requirements of including school age children in the analysis as summarized above, there may be policy issues as well. For example, if the school related linkage cost were included in the analysis, then the City would be obligated to expend a portion of linkage fee monies on school related facilities at some point. This could dilute limited resources for building new child care centers.

### **C. Capital Costs Only**

The child care linkage program being explored for the City of Santa Monica is an impact fee program, with possible alternatives to paying a fee. As such, the program will need to meet the requirements of the Mitigation Fee Act, AB 1600 as written into California Government Code, Section 66000 and following. The generally accepted interpretation of the Code language is that impact fees in California can be levied to fund capital projects only. This means that only the costs of developing child care facilities may be used in determining impact fee amount. Also, collected funds may only be used for capital development.

Some jurisdictions have interpreted the law to allow other types of costs, such as programmatic costs, to be part of a linkage program. Examples include operating subsidies for child care centers, programs to assist lower income households in affording child care (such as Santa Monica's "scholarship" programs), programs to improve the compensation and benefits of child care workers, and so forth. It would be desirable to include these costs in a child care linkage program, but a broader interpretation of the law would be required. Appendix D presents an analysis of residential linkage that includes programmatic expenditures.

In summary, this analysis focuses on demand for new child care facility space and the costs of providing new space.

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## **D. Implications on Use of Fee Monies**

The calculation of impact mitigations and design of fee programs must be consistent with the expenditure of collected fee revenues. If the City designs the impact fee based on demand for child care facilities, the City can only spend impact fee revenues on increasing the supply of child care facilities.

Furthermore, impact fees generated by the development of new workplace buildings (fees on new construction) must be spent to mitigate child care demands associated with workplace buildings. This translates to increasing the supply of child care facilities for people who work in Santa Monica. Such facilities probably need not be restricted exclusively to workers, any more than existing child care centers are restricted to residents.

## **E. Other Nexus Concept Issues**

The nexus analysis yields a causal connection between the construction of new buildings and the need for additional child care, a connection that is quantified in terms of the number of child care spaces and the associated child care facility costs.

The analysis and the nexus established by the analysis do not address existing child care shortages; the analysis addresses only new demands for child care associated with the construction of new workplace building area and new residences.

The analysis should not be construed to suggest that development is the only cause of child care supply problems; nor should it be construed to suggest that the development community should bear the full cost of addressing child care facility supply. An ordinance that implements the linkage program by levying a fee would be one component of a comprehensive program to address child care needs in Santa Monica.

There are several fundamental concepts and assumptions that are important underpinnings to the nexus concept and methodology. Following is a brief summary of these concepts and key assumptions.

- The relationship between construction and job growth in Santa Monica and the Los Angeles region is fundamental to the workplace buildings nexus. While employment growth does not occur due to any single cause or generator, construction of new workspaces does play a critical role in enabling growth to occur. Construction encourages growth, particularly in conjunction with the political and regulatory environment. Finally the provision of workplace buildings is a condition precedent to job growth and therefore bears a unique relationship to growth.

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- The analysis assumes that new child care facilities are not being added to the supply in sufficient quantities to meet new needs. Surveys conducted by the City confirm that shortages are prevalent.
  - The nexus analysis counts only “direct” employees, or employees that work within a building. Office, retail and hotel buildings are all serviced by a range of additional employees such as janitorial, security services, window washers, landscape maintenance personnel, etc. These employees are not counted in the analysis nor are indirect impacts on employment, such as might result from purchase of supplies, or food for a restaurant, etc. To be conservative, no multipliers or recognition of the multiplier effect of new developments is accounted for in the analysis. Construction employment is also not factored into the analysis.

#### **F. Standard of Research and Data on Child Care**

Child care as a concern of society and government has only come to the forefront in recent decades and many child care advocates would argue it is not yet enough at the forefront. The State has a licensing program, the federal government recognizes child care expenditures in the form of tax credits on personal income tax returns, and there are a number of federal, State and local assistance programs. On the non-governmental side there are a number of child care research and advocacy organizations working to advance child care. In addition, there are the child care provider associations, both for profit and non-profit. These entities all make valuable contributions to the data and “literature” on the state of child care in the U.S. today. However, in contrast to housing or employment where the federal government has played an active role for well over half a century, the state of child care data in the form of widely accepted governmental surveys is limited and lags far behind. As a result, U.S. Census data had to be supplemented by research findings from non-profit research institutes and other organizations. KMA believes the data used in this analysis is sufficiently reliable for the purposes for which it is used.

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## SECTION II - THE DEMAND FOR CHILD CARE ASSOCIATED WITH WORKPLACES

Placing child care centers in workplace locations such as downtowns, in business parks and other employment centers is still a pioneering concept in the United States. The vast majority of child care centers are located in residential areas or near residential neighborhoods. However, experience and in depth surveys have borne out that parents generally prefer work located child care solutions for infants, toddlers, and preschool children when they are available, affordable and of comparable quality to other child care center alternatives. In fact, there are significant benefits to all parties, including:

- *Child and the Family* – More time with the child during the commute and at break time; less time required than taking a child to a center elsewhere.
- *Employer* – Better morale; enhances recruitment among employees; decreases absenteeism, tardiness, and turnover.
- *Developer* – A marketing advantage to enhance project attraction vis-à-vis the competition; improves leasing.
- *Community* – Improves the image of the community as a good place for families and business together.
- *Traffic Reduction and Air Quality Improvement* – Studies have found that, on average, families drive fewer miles if they can take their children to child care at work than if they use child care centers elsewhere.

Because of these benefits, many of the child care facilities located near workplaces have been built voluntarily by the private sector. Some firms with large numbers of employees provide child care centers to accommodate worker needs and enhance workforce attraction. Developers of large projects for multiple tenants sometimes add child care centers to attract tenants and add value to their projects.

### A. Demand Analysis – Starting with 1,000 Employees

The methodology used in this analysis quantifies the demand for child care associated with a universe of workers. For ease of analysis and understanding, a universe of 1,000 workers was used. A universe of this size avoids having to describe children and child care needs in terms of tiny fractions carried out to four to five decimal places.

The major source of data is the U.S. Census 2000. Since workers in Santa Monica are drawn from all over the Los Angeles area, Los Angeles County population characteristics are deemed more appropriate than the characteristics of Santa Monica residents. Because the U.S. Census

provides only limited information on how families meet their child care needs, other national surveys are utilized as documented throughout.

**B. Number of Worker Households Represented**

The first step translates the number of employees or workers to worker households. This step recognizes that most households have more than one worker. Double counting of two-parent households is therefore avoided.

The factor of 1.44 workers per worker household was determined from the Census by taking the number of workers living in Los Angeles County and dividing them by the number of worker households in Los Angeles County. Worker households factor out or eliminate households comprised of retired or elderly people, households comprised of students, households of people on public assistance, and other types of households that do not contain workers.

*Conclusion: The universe of 1,000 employees is reduced to 694.11 employee households. (1,000 divided by 1.44 = 694.11)*

**C. Employee Households with Children Needing Child Care**

The next three steps calculate the number of children needing child care. The calculations are shown in Table 1 and described below.

**Table 1  
Demand for Child Care**

Per 1,000 Employees or Per 694.11 Employee Households	Ages 0-2	Ages 3-5 <sup>1</sup>	Total
Step 1. Employee Households with Children in Age Categories			
Factor	13.56%	12.83%	
Number	94.11	89.07	183.18
Step 2. Employee Households Needing Child Care (Parent(s) work)			
Factor	56.47%	68.45%	
Number	53.14	60.97	114.11
Step 3. Children Needing Child Care (Adjusts for more than one child in age group)			
Factor	1.27	1.19	
Number	67.51	72.70	140.21
<sup>1</sup> Five year old children from the Census data are distributed at 50% to the 3-5 year age group.			
Source: U.S. Census, Los Angeles County 2000			

*Step 1:* The first step is based on the incidence of worker households having children in each of the preschool age groups. Half of the five year olds are included in the age 3-5 preschool group

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and half are assumed to be enrolled in kindergarten and no longer a candidate for child care near the parent's workplace. The age 0 to 2 group actually covers three years: under age 1, age 1, and age 2, or the infant and toddler groups. The age 3 to 5 group covers only two and a half years since only half of the five year olds are counted. This assumption is from the Urban Institute, *Assessing the New Federalism* series, discussed below.

*Step 2:* The second step factors out the share of the households with children that have all parents working. These are both two-parent households with both parents working and single parent households with one parent working. As to be expected, the percent increases as children get older. These are households with children needing child care.

*Step 3:* The last step adjusts for the fact that some of these households with children needing child care include more than one child per age group who needs child care.

*Conclusion:* From the universe of 1,000 workers, there is a demand for child care for 140.21 children.

#### **D. How Child Care Needs Are Met**

The next steps in the analysis address how child care needs are met. For this portion of the analysis, the U.S. Census does not provide adequate information. To obtain the best and most recent surveys on this question, KMA conducted a literature search and consulted organizations concerned with the analysis of child care needs.

##### **1. National Studies**

On a national level, the best data for this analysis purpose appears to be assembled by the Urban Institute, *Assessing the New Federalism* series. One publication in particular, entitled *Primary Child Care Arrangements of Employed Parents: Findings from the 1999 Survey of America's Families*, Occasional Paper Number 59, May 2002 was the best source for this purpose. The surveys in this series draw from a large national scope and have been updated periodically since the early 1990's. Some special reports in the series have focused on specific age groups; other surveys have tracked differences among states.

Table 2 presents key findings of interest from the above survey. Figures are provided for both the national average, and for California. In California, use of child care centers appears to be lower than the national average. The differences are believed to be a function of availability, affordability and to some extent cultural differences. The two columns on the right refer to above and below 200% Federal Poverty Level (FPL), which for a family of four is an extremely low income level by California standards.

**Table 2**  
**Primary Child Care Arrangements of Employed Parents**

	U.S.	CA	CA – Below 200% FPL*	CA – Above 200% FPL*
Parent	27%	31%	45%	25%
Relative	27%	27%	25%	28%
Child Care Center	28%	22%	17%	24%
Family Child Care Home	14%	13%	10%	15%
Nanny/Other	4%	7%	3%	8%

\*Federal Poverty Level is approximately \$18,400 for a family of four, 200% is \$36,800 per year.  
Source: Urban Institute, *Primary Child Care Arrangements of Employed Parents: Findings from the 1999 Survey of America's Families*, Occasional Paper Number 59, May 2002.

The most notable finding is that more than half of all families use either a parent or a relative to meet their child care needs. Since the survey is of families with working parents, the solution for many families is for parents to either work different shifts or hours, or to take a child to work. Use of relatives to tend for children is a solution for another very large proportion of families as well. Nationally, the two arrangements combined represent 54%, and 58% in California.

The U.S. Census has done some surveys on child care, such as the *Who's Minding the Kids? Child Care Arrangements, Spring 1997* (p. 70-86), but this study covers all child care arrangements used by parents and does not single out the primary arrangement. As a result it is not possible to identify the primary arrangements among working parents and to sort out a useful distribution of among child care options based on Census information.

## 2. California Studies

A few studies in California have addressed the question of how child care needs are met and have found similar results to the national studies. One report prepared by the UCLA Center for Healthier Children, Families and Communities, entitled *Public Opinion on Child Care and Early Childhood Education, California 2001*, prepared for the California Children and Families Commission, found that approximately 26% of children 0 to 5 years were in child care centers.

Selected findings from this report include:

- The primary child care arrangement varies by parent education, parent ethnicity, family income, and children's age.
- Children in families with higher incomes or whose parents have greater educational attainment are more likely than other children to be in center-based care/preschool. For

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example, the primary arrangement is a private preschool or center for 33% of children in families with household income of \$75,000 or above and for 13% of children when the household income is below \$75,000.

- Younger children are more likely than older children to be cared for by their parents or to be in home-based arrangements. This is particularly true of infants. Older children, ages 3 to 5, are more likely to be in center-based care.
- Meeting child care needs sometimes varies by ethnicity. For example, a larger percentage of Hispanic children (24%) than non-Hispanic children (16%) are cared for by a relative.

The report covers a number of topics related to parental attitudes toward child care arrangements, importance of learning activities offered, affordability and government assistance availability and so forth. As an overview statement, the report findings contribute to the general recognition that center-based care offers a better learning environment than most alternatives but that affordability is a major obstacle.

#### **E. Child Care Demand – 1,000 Employees**

Drawing from the findings of the above surveys, national figures are utilized as a conservative estimate of demand among the child care arrangements for persons working in Santa Monica. The estimates are conservative in the sense that it is likely that the percent who would use child care centers were they available and affordable is understated. Were child care centers available and affordable, the literature strongly suggests that a large share of those who use parents and relatives would use child care centers and Family Child Care Homes. Needless to say, nanny and baby sitter arrangements are typically least affordable to most workers.

Table 3 indicates, by age level, the distribution of child care arrangements for the universe of 1,000 employees in Santa Monica. The first line in the table is drawn from Table 1, Demand for Child Care.

**Table 3**  
**Distribution of How Child Care Needs are Met**

	Ages 0-2	Ages 3-5	Total
Children Needing Child Care (Table 1)	67.51	72.70	140.21
How Child Care Needs Will Be Met			
Parent/Relative	54.00%	35.00%	
Child Care Center	22.00%	45.00%	
Family Child Care Home	17.00%	14.00%	
Other	<u>7.00%</u>	<u>6.00%</u>	
	100.00%	100.00%	
Child Care Center			
Factor	22.00%	45.00%	
Number	14.85	32.72	47.57
Sources: US Census 2000; Urban Institute <i>Primary Child Care Arrangements of Employed Parents: Findings from the 1999 Survey of America's Families</i> , Occasional Paper Number 59, May 2002.			

*Conclusion: The demand for child care spaces in child care centers associated with a universe of 1,000 employees is 14.85 infant and toddler spaces and 32.72 preschool spaces, or a total of 47.57 spaces in child care centers.*

**F. Demand for Child Care Center Spaces near the Workplace**

The last step in the analysis is an allocation of the child care center space demand to two generic locations – near place of work or near place of residence.

There is limited availability of good survey information to enable a split between demand for home based or work based child care. Current experience is a poor guide because there is so little work based child care available.

The UCLA study referenced earlier contained a helpful finding on this question.

- "Relatively few parents say they use employer based child care arrangements [because so few are available]. However, about 76% of parents report that they would be either very likely or somewhat likely to use a child care service offered at their place of work, and 62% say they would use it on a regular basis."

This finding is from a survey of parents using all types of child care arrangements, not of those using only child care centers. Thus, the percent of those using child care centers who would prefer them at place of work would presumably be far higher. However, there is another distinction in that "employer based" implies at the workplace location (as opposed to near the

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workplace as is the analysis focus here) and may imply for some, an employer role in cost contribution.

Other surveys confirm a high level of preference for child care located near the workplace for the preschool child, for reasons indicated at the beginning of this section. Most of the surveys and research on this subject do not conclude with quantified distribution of demand. Based on the available information, KMA utilized a 75% share of the demand for child care centers to be located at or near the workplace.

	<u>Age 0-2</u>	<u>Age 3-5</u>	<u>Total</u>
Child Care Center Spaces Demanded (Table 3)	14.85	32.72	47.57
Share Near Place of Work @ 75% of Demand	11.14	24.54	35.68

Sources: US Census, Urban Institute, Keyser Marston Associates.

*Conclusion: From the universe of 1,000 employees, 140.21 children need child care. Of all children needing child care, the demand for spaces in child care centers is 47.57. As shown in the lines above, 75% of the demand for child care center space is for a center located at or near the place of work or 35.68 spaces.*

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## **SECTION III - CHILD CARE CENTER FACILITY COSTS**

### **A. Introduction**

In this section, KMA presents an analysis of the cost of child care center facilities. It is recalled that in Section I, we established that the prevalent interpretation of the California Code is that linkage fee programs may only address capital or facility costs. In Section I, KMA also clarified that the linkage for workplace buildings to child care must address demand for the preschool child only, or child care centers near the place of work for the children of employees. As such, the facility cost linkage for workplace buildings is for child care center facilities, or cost per child care center space.

#### **1. Demand Conclusions Restated**

In Section II, KMA quantified the demand for spaces in child care centers associated with a universe of 1,000 employees. KMA concluded that there was a demand for approximately 36 children in child care centers near the workplace. In this section, KMA quantifies the cost to develop each of these spaces, and, in that way, determines the cost to mitigate the child care impacts generated by new workplace development.

#### **2. Analysis Approaches**

Two different approaches are utilized to determine the costs of child care centers. The first approach is to examine the costs of developing child care centers by analyzing the component parts — building shell, equipment, land, etc. The second approach is to examine the cost experience of other recently developed West Los Angeles area child care centers. Further confirmation is made by looking at the costs of child care center development in other high cost areas.

The information in this section was assembled with the assistance of City of Santa Monica staff and the Child Care and Early Education Task Force. Survey and analysis results were presented to the Task Force and a number of adjustments were made per staff and Task Force input.

### **B. A Prototypical Child Care Center in Santa Monica**

#### **1. Development Space Requirements**

To be licensed, child care facilities must meet minimum space requirements mandated by the State of California. These requirements, which differ by age of child, are briefly summarized below:

- 
- Building Space
    - Infants and toddlers (ages 0-2) – 35 square feet plus an allowance of 15 square feet for bathroom and circulation space per child plus 15 square feet to allow for sleeping area, or 65 square feet per child.
    - Preschool and school age (ages 3 to 12) – 35 square feet per child plus an allowance of 15 square feet for bathrooms and circulation space.
  - Outdoor play area – 75 square feet per child; 50 square feet for infants and toddlers.

Child care center operators agree that these are minimum space requirements and do not provide adequate space for a high quality child care center. The minimum requirement provides insufficient space for different simultaneous activities and for necessary administrative functions and other needs to be accommodated. As a result most child care centers are built to a slightly higher standard as the charts at the end of this section demonstrate. According to child care education experts, a good amount is 100 square feet per child. For the purpose of this analysis, the City of Santa Monica chose 70 square feet per child as an appropriate figure, and clarified that the figure does not reflect a city policy or standard for other applications.

## 2. Land Area Required

City of Santa Monica Zoning Code was used by City staff to determine the site size required for a child care center of an average workable size. Site coverage and parking requirements are particularly influential in determining total site needs.

Since Santa Monica land parcels are predominantly 7,500 square feet, or multiples of that size, total parcel size for a child care center was selected accordingly. A 15,000 square foot site would accommodate a 65-space child care center per City standards for parking and drop-off spaces and other site coverage requirements. A prototype of a 65-space child care center was selected for the analysis, which at 70 square feet per child is a 4,550 square foot center (65 children x 70 sq. ft. per child = 4,550 square feet).

The size of the land parcel and land cost estimate are for nexus analysis purposes. It is anticipated that centers may well be built on smaller parcels and have solutions for parking and drop-off spaces other than surface spaces. The prototypical child care center analyzed is a one-story building configuration with outdoor play areas and surface parking. To confirm these costs compared to costs for other more urban configurations, information on other prototypes was

assembled and compared. (See end of this section.) It is important to note that the total site cost is the key assumption, not the per square foot land area cost.<sup>1</sup>

At the time the analysis was prepared in 2003, a land cost of \$80 per square foot was used, or the lower end of the range at that time. The 2003 figures in the inset Table 4 applied to a 15,000 square foot site area for a total of \$1.2 Million. See footnote below.

### 3. Development Costs

The main components and unit costs are shown in Table 4.

**Table 4**  
**Child Care Facility Development Cost Summary (2003)**

	PSF Bldg. Area	Bldg. Area	Total
Building Shell	\$170/SF	4,550 SF	\$773,500
Furnishings, Equipment and Indirects	\$70/SF	4,550 SF	\$318,500
Site (Land and Parking)	<u>\$264/SF</u>	<u>4,550 SF</u>	<u>\$1,200,000</u>
Total	\$500/SF	4,550 SF (Bldg.)	\$2,292,000

Source: Keyser Marston Associates' survey of West Los Angeles child care center construction costs, City of Santa Monica.

The furnishings, equipment and indirects category covers a range of costs including indoor furnishings and fixtures, outdoor play structures, start-up costs, design and engineering, fees and hook-ups, and financing.

The costs per child care space (for the 65-space center as calculated in 2003) are as follows:

Development costs excluding land	\$16,800
Development costs including land	\$35,260

<sup>1</sup> Since the initial preparation of this analysis in 2003, land costs have increased in Santa Monica. In 2005 the probable cost per square foot range is \$125-\$400, depending on location. At \$160 per square foot, or double the \$80 per square foot cost used in the initial analysis, the site cost would be \$2.4 million or more than twice the rest of the project. More likely an alternative site solution would be found, using shared or structured parking and/or shared play area and other cost savings, keeping site costs less than \$2.4 million. For reference, however, if the site cost were \$2.4 million, the total project cost would become \$3.5 million, instead of the \$2.3 million indicated in Table 4 above.

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If 2005 land cost at \$160 per square foot is used and a 10% escalation in other costs, then total costs per child care space are as follows:

Development costs excluding land	\$18,500
Development costs including land	\$55,400

*Conclusion: It costs approximately \$18,500, excluding land, per child care space to develop a new child care center in Santa Monica. Total cost including land is \$55,400 per child care center space. Table 5, at the end of this section, presents a more detailed summary of development costs.*

### **C. Other West Los Angeles Area Child Care Center Costs**

Table 6, at the end of this section, summarizes the development cost experience of other West Los Angeles child care centers. City staff identified the child care centers, varying in construction type and timing, to be included in the survey. Some of the surveyed centers are new construction developments, others are rehabilitation projects and one is currently in the planning process.

With the exception of the project in the planning stage, each center in the survey became operational between 1998 and 2002. Excluding land costs, the development costs per child care space range from \$8,330 to \$39,250. Cost differences are due to varying circumstances and year constructed. A summary of each case study follows:

#### **1. New Construction**

*Les Enfants Inc. Preschool* in Santa Monica has an enrollment of 72 children (28 infant, 18 toddler, and 26 preschool). The stand-alone building was constructed on a vacant lot in 1998 at \$600,000, or \$8,330 per child care space, excluding land. The school director did not provide the land purchase price due to confidentiality. The outdoor play area is approximately 5,000 sq. ft., or 70 sq. ft. per child. In addition to the outdoor play area, 5,000 square feet is dedicated to parking. The parking ratio is one space per seven children.

*The Westside Children's Center (WCC)* in Culver City has spaces for 100 children. It was developed in 2002 for \$3,925,300, or \$39,250 per child care space. The WCC is part of a larger facility and the first of two development phases. The indoor area is 11,650 square feet, or 115 square feet per child, excluding meeting space, additional building and storage space. The outdoor play area is approximately 15,000 sq. ft., or 150 sq. ft. per child. The parking ratio equals one space per four children.

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In 1995, WCC purchased the 2.7-acre site for \$1 million during an economic downturn. The land was owned by the City of Los Angeles and zoned industrial. Office and child care uses equally share the site.

## 2. Rehabilitation

*New Path Montessori School* is located in a 1929 single-family home, which was rehabilitated in 2001. The school has spaces for 30 toddlers (2-6 years old). The school includes 1,200 square feet of indoor space, or 40 square feet per child. Outdoor space is 1,400 square feet, 50 square feet per child. The parking ratio equals one space per ten children.

The acquisition and rehabilitation cost was \$557,700, or \$18,600 per child care space. Land costs account for \$327,900 of the total costs. Rehabilitation costs were \$229,800, or \$190 per building square foot. The school director notes that rehabilitation costs exceeded original estimates due to implementation.

*Saint Joseph Infant Toddler Development Center* was purchased and rehabilitated by Venice Community Housing Corporation in 1999 for \$498,700, or \$21,700 per child care space, excluding land. The Center is located in a two-story building and has spaces for 23 children (6 infants (up to 18 months) and 17 toddlers (18 thru 36 months)). The Center includes 1,570 square feet of indoor play area, or 70 square feet per child. The outdoor play area is approximately 900 square feet, or 40 square feet per child. The parking ratio is one space per 23 children.

Saint John's Health Center, Santa Monica Family YMCA and Smart Start centers were targeted to be part of the survey. However, due to the nature of these facilities, the data could not be organized in a way that was parallel to the other centers.

## 3. Planned Construction

*The UCLA Campus Center* is currently in the planning stages. However, preliminary estimates were provided for the survey. The Center will have spaces for 84 children (12 infants, 12 toddlers and 60 preschool). The construction costs are currently estimated to be \$2.1 million or \$25,000 per child.

The Center will have 5,000 square feet of indoor space and 7,500 square feet of outdoor space (60 square feet and 90 square feet per child, respectively). The development plan includes renovation of a 1,600 square foot existing child care facility to be used as a conference room and kitchen. There will be a few drop-off parking spaces but staff parking is to be located off-site elsewhere on campus.

A major private donation will pay construction costs. The university is providing the property.

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See Appendix C for more information on each case study.

#### **D. Other Child Care Center Averages (2003)**

On a per square foot measure, total costs for the five examples show a broad range from \$120 per square foot to over \$460 per square foot. However, if the survey's lowest and highest costs are eliminated, the costs for the remaining three projects are in the range of \$350 per square foot and the average construction cost per child care space, excluding land, is approximately \$16,670.

Considering the differences in time and the expectation that most new child care centers will likely be new construction, the \$16,800 analysis for current costs, excluding land, is supported by the experience in other West Side centers as a good average for new facilities.

The survey did not enable KMA to identify useful cost experience for land for new facilities in Santa Monica. Land costs were only provided for three of the case studies. The WCC land purchase had special circumstances that would not be applicable to a land purchase today. While New Path and Saint Joseph reported land costs, these centers are both rehabilitation projects where purchase costs included existing improvements. Therefore, as discussed in the previous section, a conservative estimate for residential land in Santa Monica in 2003 was \$80 per square foot, or a total site cost of \$1.2 million for a child care center for 65 children. (It is noted that child care centers built on sites costing more than \$80 per square foot would likely resolve parking needs in some other manner, such as sharing parking with some other use, above grade or underground structures, etc.) With other solutions, the \$1.2 million estimate for land for the 65-space center (or nearly \$18,000 per child care space) was deemed a suitable land cost assumption for purposes of this analysis.

#### **E. Child Care Center Cost Experience in Other High Cost Areas (2003)**

As a cross check against the West Los Angeles Area experience, KMA assembled some information on the cost of child care centers in other high cost areas, both suburban in character and more center city urban. The two comparison areas are Silicon Valley in northern California and downtown Seattle, Washington.

##### **1. Silicon Valley**

Silicon Valley was selected as a comparable area due to very high land costs and generalized density of development akin to the western Los Angeles area. Several useful pieces of information were assembled that help confirm the Santa Monica cost range.

- The City of San Jose has a program to assist with the development of child care centers. A consultant hired by the city advised that the city should plan on child care centers

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costing \$16,000 per space, excluding land and parking. This appears to include an allowance for at least some equipment, furnishing and indirect costs.

- The City of Menlo Park has been seeking to redevelop a parcel in its civic center complex with a large child care facility to accommodate both preschool and after school programs. A design and project development team reported back to City Council to get authorization to seek construction bids. The estimated cost for the total 180-space project is \$6,600,000. This figure computes to \$34,178 per space or \$439 per square foot building area. Since the city already owns the land, there is no land cost included, although there is significant site work needed.
- In late 2003, KMA conducted a survey of child care center development cost experience in the San Mateo-Peninsula area for the purposes of a child care linkage program in the City of Santa Mateo. Good data on four centers was assembled and it was concluded that total costs per space averaged at least \$25,000 per space.

## 2. Downtown Seattle

In 2001, KMA conducted a child care linkage analysis for the City of Seattle and assembled information on the cost of child care centers in that downtown. At the time, there was one child care center that had been developed within a high-rise office building, the Washington Mutual Tower which was completed in 1988. The child care center was built for 23 infants and toddlers and no preschoolers due to the difficulty of the outdoor play area component. The development cost at that time was \$525,000 or \$22,800 per space. This cost did not include outdoor play area (some was added later). Nor did it include land cost. Only one dedicated parking space was built.

Other downtown child care centers not in high-rise buildings had similar development costs, particularly after adjustments for time of development and other differences.

For the Seattle program KMA undertook a prototypical child care center cost analysis similar to the Santa Monica analysis presented here. The major cost components and conclusion are shown in Table 7.

**Table 7**  
**Seattle Child Care Center Cost Analysis (2001)**

	<b>Per SF</b>	<b>Per Child Care Space</b>	<b>Total for 60 Child Care Spaces</b>
Land (per square foot building area)	\$30	\$2,250	\$135,000
Building Shell	\$165	\$12,375	\$742,500
Furnishings, Equipment and Indirects	<u>\$148</u>	<u>\$11,100</u>	<u>\$666,000</u>
<b>Total</b>	<b>\$343</b>	<b>\$25,725</b>	<b>\$1,543,500</b>
Source: Keyser Marston Associates.			

Several clarifications and comparisons are appropriate.

- The Seattle prototype included no parking or drop-off spaces.
- Land costs were prorated in a building and intentionally stated at the low end. Land cost per child care space was \$2,250 in Seattle; the Santa Monica costs are much higher.
- Each of the 12 parking or drop-off spaces in Santa Monica costs an average of \$28,266 in land costs. Were these 12 spaces in a parking structure instead, the cost of the structure including a land allocation and all indirect costs, would be roughly the same as the \$28,000 per parking space.
- The Seattle prototype assumed 75 square feet per child care space compared to the 70 square feet per space assumption for Santa Monica.
- The estimate for furnishings, equipment and indirect costs was substantially higher in Seattle. This was a result of more detailed data on these costs in other child care centers in downtown Seattle.

## **F. Conclusion**

After reviewing the rather wide range of cost experience in developing child care centers, particularly as it relates to all the costs beyond construction of the building shell, one can conclude that state-of-the-art cost estimating for child care centers is still in the formative stage. There appear to be few standards and little consistency with regard to what is counted, what is necessary, and how much should be allowed for such things as equipment and start-up costs. It is also evident that many child care facilities are built on land already owned and therefore land cost is frequently left out of the equation.

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The recommendation from this analysis and survey is that \$35,000 per space in Santa Monica is a good planning number for the purposes of a mitigation program. The cost per space excluding land at \$16,800 clearly is at the low end, and there are at least three examples where costs are double that excluding land (West Los Angeles, UCLA, and Menlo Park). On the other hand the assumption of \$18,460 per child care space for land (to meet the standards of the Santa Monica zoning code with respect to parking and drop-off spaces) is substantial and assumes no variance from the code to accommodate a child care center. Even if parking were accommodated in a structure or other more dense solutions to the child care building and outdoor areas were employed and some code variance was permitted, KMA believes that it would be difficult to reduce the "all inclusive" cost of a child care center in Santa Monica below \$35,000 per space.

The update for late 2005 presents revised conclusions as discussed in Section B, as follows:

Development cost excluding land, per child care space	\$18,500
Development cost including land, per child care space	\$55,400

#### **G. A Note on Rehabilitation of Child Care Centers**

The survey of recently developed West Los Angeles area child care centers found a number of them were rehabilitations of existing buildings. These costs per space again ranged widely and were highly inconsistent with respect to what was counted and not counted. Rarely does the cost or value of the existing structure and land get included in the calculation. Since the City of Santa Monica does not own or identify buildings with rehabilitation potential for child care centers, it was not appropriate to use rehabilitation as an option to mitigate new demands.

A child care linkage ordinance, if adopted, will provide for alternatives to paying any fee to mitigate child care demand. The alternatives would include the construction of new child care facilities and the rehabilitation of existing structures, subject to certain standards and acceptability to the City. In other words, if a developer chooses to meet a child care linkage obligation through rehabilitating an existing structure and can do so at less cost, the developer could be welcome to do so.

**TABLE 5  
TYPICAL CHILD CARE CENTER FACILITY COSTS (2003)  
CHILD CARE LINKAGE PROGRAM  
CITY OF SANTA MONICA**

Number of Children:	65		
 Size of Facility			
Indoor Space @	70 sq. ft. per child	4,550 sq. ft.	
Outdoor Space @	80 sq. ft. per child	5,200 sq. ft.	
Total		<u>9,750 sq. ft.</u>	
 Cost of Facility			
Building shell @	\$170/sf	4,550 sq. ft.	\$773,500
Furnishing, equipment @ (includes indirects)	\$70/sf	4,550 sq. ft.	\$318,500
 Land required:			
Building pad		4,550 sq. ft.	
Parking <sup>1</sup>			
Facility Parking @ 9 spaces		3,190 sq. ft.	
Drop-off Parking @ 3 spaces		1,050 sq. ft.	
Outdoor play area		5,200 sq. ft.	
		<u>13,990 sq. ft.</u>	
Total land required @ 93% coverage		15,000 sq. ft.	
Land cost @ \$80 sq. ft. x 15,000 sq.ft.			<u>\$1,200,000</u>
Total development cost			\$2,292,000
Cost per sq. ft. child care facility			\$500
 Cost per child care space			
Including Land			\$35,260
Excluding Land			\$16,800

<sup>1</sup> City provided parking space requirements. Assumes one parking space per 500 sq. ft. gross building area and assumes one parking space requires 350 sq. ft.

**TABLE 6  
WEST LOS ANGELES PRE-SCHOOL CHILD CARE CENTERS SURVEY  
CHILD CARE LINKAGE PROGRAM  
CITY OF SANTA MONICA**

Name/Location	Developer	Year Built/ Rehab	No. of Child Care Spaces (FT equiv.)	Total Size (Sq. Ft.)		Total Cost	Cost/ Space	Cost/ Sq. Ft. Indoor	Cost Excluding Land		Comments
				Indoor	Outdoor				Cost/ Space	Cost/ Sq. Ft. Indoor	
				Per Child	Per Child						
<b>NEW CONSTRUCTION</b>											
<i>Las Enfants Inc. Preschool</i> 2702 Virginia Avenue Santa Monica	Nancy Behrvesh, Director (310) 315-0058 Page Construction	1998	Infant	28							
			Toddler	18							
			Pre-School	26							
			<b>Total</b>	72	Per Child	89	69				
			<b>Total</b>	5,000	5,000	\$ 600,000	\$ 8,330	\$ 120	\$ 8,330	\$ 120	Land purchase price not provided due to confidentiality. Outdoor space excludes 5,000 sq ft dedicated to parking. Parking ratio is one space per seven children.
<i>Wastside Children's Center (WCC)</i> 12120 Wagner Street Culver City CA 90230	WCC Rosa Arevalo/Douglas Chin (310) 397-4200	2002	Infant	0							
			Toddler	48							
			Pre-School	52							
			<b>Total</b>	100	Per Child	117	150	\$ 4,383,310	\$ 43,830	\$ 380	\$ 39,250
			** 18-34 months		<b>Total</b>	11,850	15,000				
<b>REHABILITATION</b>											
<i>New Path Montessori School</i> 1982 20th Street Santa Monica	Chandra Jayasekara (Ira) (310) 450-2477	2001	Infant	0							
			Toddler	30							
			Pre-School	0							
			<b>Total</b>	30	Per Child	40	47	\$ 557,700	\$ 16,580	\$ 460	\$ 7,660
			* 2-8 years		<b>Total</b>	1,200	1,400				
<i>Saint Joseph Infant Toddler Development Center</i> 718 Rose Avenue Venice, CA 90291	Saint Joseph Center Judy Alexander (310) 398-8488 x306 Venice Cmmt Hsg Lori Zimmerman (310) 398-4100	1999	Infant	6							
			Toddler	17							
			Pre-School	23							
			<b>Total</b>	23	Per Child	68	39	\$ 498,700	\$ 21,880	\$ 320	\$ 16,690
			* 0-18 months		<b>Total</b>	1,570	900				
			** 18-36 months								
<b>PLANNED CONSTRUCTION</b>											
<i>UCLA</i> UCLA campus	Gay Macdonald UCLA Child Care Services (310) 208-1861	2003	Infant	12							
			Toddler	12							
			Pre-School	60							
			<b>Total</b>	84	Per Child	60	89	\$ 2,100,000	\$ 25,000	\$ 320	\$ 25,000
			<b>Total</b>	5,000	7,500						
<b>SURVEY AVERAGE</b>				56	Per Child	71	79		\$ 19,386	\$ 242	

Source: Keyser Marston Associates' interviews with child care center staff.

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## **SECTION IV – BUILDING DEVELOPMENT AND LINKAGE COSTS**

This section combines the findings of the demand analysis (Section II) with the findings of the child care center development cost analysis (Section III) to establish linkage costs. This section first addresses the linkages between workplace building construction and job growth. The historic relationship between the construction of workplace buildings and job growth is examined both in general and for different types of workplace buildings to the extent data availability allows. The three types of workplace buildings that are the subject of this analysis are: office (or office/R&D/), retail and entertainment, and hotel and other lodging. This analysis allows us to link buildings to jobs to employees and child care demand impacts on a per square foot level.

In parts D and E of this section, the conclusions with respect to the child care demand impacts and the costs of mitigating the child care impact are joined together. The result is a quantification of child care impacts associated with workplace building construction per square foot and the costs of mitigation per square foot. The conclusions of the analysis represent the maximum charge for mitigation, or maximum impact fee level supported by this analysis. The City may design impact fees or other type linkage requirements at any level below those established by this analysis.

### **A. Construction and Job Growth Linkage**

The first link in the chain of linkages joining the construction of workplace buildings and child care demand is that between building construction and job growth. If the impact fee is levied on a building at the time of construction, the underlying assumption is that the addition of building space will result in more jobs in Santa Monica. (See Section I for more on the underlying concept and ancillary assumptions.)

To confirm the relationship, KMA assembled available information on job growth and workplace building construction in Santa Monica. For the job growth/building analysis, City staff provided Santa Monica job data for 1995-2000, based on State Employment Development Department (EDD) reports. Job data of this detail are not available for Santa Monica prior to 1995. Data was supplemented with information from the economics page located in Section 6 of the City's web site. The web site refers users to the California State University Long Beach Office of Economic Research 3rd Annual Santa Monica Economic Forecast Presentation (November 2001).

The jobs data series provided by the City appears to be the only data available at the city level. The data series is based on payroll forms prepared by companies and submitted to the EDD. This data source has the following limitations:

- The self-employed and business owners operating as a sole owner, rather than a corporation, without payroll deductions are excluded. Contract workers are also excluded.

- The information is based on where the payments are reported from; e.g., if all Burger King employees are paid through Burger King headquarters, then their statistics would show up in the Burger King headquarters location. The reciprocal is also true; if a corporation is headquartered in Santa Monica payroll information would be provided for the entire company, regardless of whether jobs are located in Santa Monica.
- The data is organized by major Standard Industrial Classification (SIC). This classification system does not neatly match to building type for many categories. Office is particularly problematic since office jobs are a large portion of the services, the finance insurance and real estate "industry", and, in a place like Santa Monica, many manufacturing firms have office functions there, not production activities.

**Table 8**  
**Number of Jobs in Santa Monica by Major Industry**

	1995	2000	Change
Agriculture	266	546	280
Mining	-	-	-
Construction	1,688	1,832	145
Manufacturing	2,241	3,083	843
Transportation/Utilities	1,352	1,735	383
Wholesale Trade	2,205	2,127	(78)
Retail Trade	13,994	17,328	3,334
FIRE	5,127	5,561	434
Services	28,276	34,859	6,583
Public Administration	4,956	5,974	1,018
Confidential <sup>(1)</sup>	<u>2,305</u>	<u>1,039</u>	<u>(1,266)</u>
Total	62,410	74,084	11,675

<sup>(1)</sup>To protect employee identity, specific job type is not available for these jobs.  
Source: City of Santa Monica.

To convert jobs by industry to jobs by building type, KMA utilized a cross matrix of percentage relationships to estimate the share of jobs in office type buildings. For retail and hotel jobs discrete industries subsets could be used. The estimate of jobs by building type for the three types of buildings under analysis is shown in Table 9.

**Table 9**  
**Estimated Jobs by Building Type**

<b>Building Type<sup>(1)</sup></b>	<b>1995</b>	<b>2000</b>	<b>Change</b>
Office (Estimated)	17,162	19,928	2,766
Hotel	1,317	2,571	1,254
Retail	<u>13,994</u>	<u>17,328</u>	<u>3,334</u>
<b>Total</b>	<b>32,474</b>	<b>39,827</b>	<b>7,354</b>

<sup>(1)</sup>Building types reflect major non-residential uses represented in the Child Care Nexus analysis. Jobs for a specific building type are comprised of related SIC employment codes. Data is not available on a more detailed level.  
Source: City of Santa Monica, Keyser Marston Associates.

The City also provided KMA with annual construction activity for the same time period. The information is from building permits and therefore should lead to job growth. For this analysis, it was assumed that on average jobs would occupy new buildings approximately a year after permitting.

During the 1995-1999 period, approximately 1.12 million square feet of commercial development activity was reported (see Table 10). The information does not break down building types further than "hotel" and "other-commercial." Further, no hotel development activity was reported for this time period, despite the growth in hotel jobs. The City of Santa Monica issued building permits in the late 1980s for three hotels constructed in the early 1990s. These new hotels are likely responsible for the growth in the number of hotel jobs in the mid to late 1990s, as hotels typically take a few years to achieve stable operations and would continue to expand employment during this period.

**B. Jobs and Construction Activity Correlation**

Because the data do not identify individual building types, the analysis illustrates the general correlation between jobs and building. Table 10 presents the relationships found from comparing the new jobs to the new space over the 1995 to 2000 time period.

**Table 10**  
**Correlation Between Jobs and Commercial Building**

	<b>New Jobs (1995-2000)</b>	<b>Building (SF) (1995-1999)</b>	<b>SF per Employee</b>
Hotel	1,254	0	0
Other Commercial	<u>10,421</u>	<u>1,116,118</u>	<u>107</u>
Total/Average	11,675	1,116,188	96

Source: City of Santa Monica; Keyser Marston Associates.

The data shows that there is indeed a correlation between employment and workplace building activity in Santa Monica for the five-year period. In other words, as new workplace buildings were developed during this period, new jobs were also created.

The relationship between employee and square feet of building area can be expressed as a density factor. As shown above, Santa Monica gained 11,675 jobs and 1.12 million square feet of nonresidential building area was developed between 1995 and 1999. The average density factor during this period would calculate to one employee per 96 square feet.

The time series reflects a period of vigorous economic expansion only. As such, there probably was considerable job growth in existing buildings. Busy restaurants employ more staff than more idle ones. With a longer time series one would expect to see the very high density levels found here (or low number of square feet per employee) come down substantially. Unfortunately, KMA was unable to obtain the same series information for the 1990 to 1995 period.

However, figures on total job growth and construction activity in Santa Monica over the decade are available. The Cal State Long Beach Office of Economic Research reported the job figures, supplied by the City. These figures indicate total non-farm employment in Santa Monica as follows:

1991	51,000 (approx.)
1995	62,140
2000	75,500

These figures show that Santa Monica experienced substantial growth during the early half of the decade despite the recession in the region and the State as a whole over the period. According to this series job growth over the decade was 24,500 jobs.

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Total commercial construction activity in Santa Monica over the period from 1990 through 2000, according to the City, was 1,636,812 square feet, or 148,802 per year on average. (See Table 12, at the end of this section, for annual figures.)

The density of new jobs in new buildings from the whole decade computes to 67 square feet per job ( $1,636,808 / 24,500 = 67$ ). Again this suggests much job growth was occurring in existing structures. Other adjustments that might be made with more complete data include elimination of government jobs and others not housed in the analysis categories, jobs that occurred in additions and remodels to existing structures, etc.

### **C. Employment Density**

The available employment data series does not provide an adequate level of detail particularly as relates to individual building types. In addition, the unusually vigorous growth during the time period resulted in substantial employment growth, some of which was occurring in existing buildings. Therefore, given these limitations, KMA believes it is appropriate to use standard employment density factors for workplace buildings instead.

These relationships are based on surveys, some national, some local, for a wide range of conditions collected over many years. Appropriate factors were selected for Santa Monica conditions and were discussed with staff. If the City uses such factors in other applications (such as parking standards), the factors utilized are: 250 square feet per employee for office buildings, 350 square feet per retail worker and one hotel employee per hotel room, or per 500 square feet of hotel building area. The density factors are all notably less dense than the data on job growth and building construction during the late 1990s in Santa Monica would suggest.

### **D. 1,000 Employees and Building Area**

Employment density factors allow one to move back and forth between numbers of employees and building area for various types of workspace buildings. Returning to the universe of 1,000 employees, the following building sizes result:

#### **1,000 Employees Related to Building Size**

Office	250 sq. ft./employee	250,000 sq. ft.
Retail/Entertainment	350 sq. ft./employee	350,000 sq. ft.
Hotel/Lodging	500 sq. ft./employee	500,000 sq. ft.

## E. Child Care Demand and Mitigation Costs Related to Building Area

At this juncture, it is possible to link workplace building area with number of employees, with child care demand and the costs of mitigating child care demand. Table 12 summarizes the sequence of steps and the results of the analysis, using the updated 2005 figures with and without land.

**Table 12**  
**Workplace Buildings Mitigation Costs Per Square Foot (2005)**

Child Care Center Spaces in Demand per 1,000 Employees (End of Section II)			35.68
		<u>Excluding Land</u>	<u>Including Land</u>
Cost of Child Care Facilities per Space (End of Section III)		\$18,500	\$55,400
Cost of Child Care Center Spaces for 1,000 Employees		\$660,100	\$1,976,700
Cost of Child Care Center Space per Employee		\$660	\$1977
Child Care Center Cost per Sq. Ft. Building Area			
Office	250 sq. ft./Employee	\$2.64	\$7.91
Retail/Entertainment	350 sq. ft./Employee	\$1.89	\$5.65
Hotel/Lodging	500 sq. ft./Employee	\$1.32	\$3.95
Source: Keyser Marston Associates			

Total child care linkage costs are provided with and without land in recognition that some child care centers may be developed on land either donated or already owned by the City. To reflect the mix, an average linkage cost for the two assumptions is recommended for establishing the maximum ceiling. Results are as follows

Office	\$5.27
Retail/Entertainment	\$3.77
Hotel/Lodging	\$2.64

These are the total child care linkage costs for workplace buildings and child care center facilities. These costs, also referred to as total nexus costs, represent the legal ceiling for potential fees supported by this analysis. These are not recommended fee levels. The City may set fees at any level below these nexus costs. Section VI of the report provides additional materials for assisting in selecting fee levels.

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## F. Building Area and Child Care Demand

The relationships between employees, child care demand and building area have other potentially useful applications beyond the setting of fee maximums. KMA recommends that the City offer a build option as an alternative to paying fees. In addition, the City may wish to require the construction of a child care center for a very large project.

For example, if the City determines that a minimal optimal size child care center is 75 children, it is possible to determine how large the project needs to be to warrant 75 child care spaces.

$$75 \text{ spaces} / 35.68 \text{ spaces (per 1,000 employees)} = 2.102 \text{ times}$$

Office: 250,000 sq. ft. x 2.102 = 525,500 sq. ft.

Retail: 350,000 sq. ft. x 2.102 = 735,700 sq. ft.

Hotel: 500,000 sq. ft. x 2.102 = 1,051,000 sq. ft. (2,102 rooms)

In other words, this analysis uses relationships that suggest that an office project of 525,500 square feet would generate demand for a child care center for 75 children. For the same size child care center, a retail and/or entertainment project would need to be 737,700 square feet, or a hotel of a little over 2,000 rooms.

Other ways of expressing the relationship are as follows:

- Office: 1 child care space per 7,007 sq. ft. building area or 0.000143 child care space per square foot building area.
- Retail: 1 child care space per 9,809 sq. ft. building area or 0.000102 child care space per square foot building area
- Hotel: 1 child care space per 14,013 sq. ft. or 0.000071 child care space per square foot building area

Another application relates child care center space to project area space. It is recalled that the average child care center is 70 sq. ft. of building area per child. If the 75-space child care center is for an office building of 525,500 sq. ft., the child care center size requirement is 5,250 sq. ft. (75 x 70 sq. ft. per space) or roughly 1% added to the building area. For the three building types, the ratios are as follows:

Office – 1%

Retail – 0.7%

Hotel – 0.5%

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In summary, child care center demand conclusions can be used to relate child care center space to commercial projects for other purposes, such as negotiating Development Agreements.

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**TABLE 11****COMMERCIAL BUILDING ACTIVITY IN SANTA MONICA  
CHILD CARE LINKAGE PROGRAM  
CITY OF SANTA MONICA**

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**ANNUAL COMMERCIAL BUILDING ACTIVITY (SQUARE FEET)<sup>1</sup>**

	<u>Hotel</u>	<u>All Other Commercial</u>	<u>Total</u>
1990	0	90,000	90,000
1991	0	224,359	224,359
1992	0	10,904	10,904
1993	0	10,652	10,652
1994	0	91,522	91,522
1995	0	92,881	92,881
1996	0	15,192	15,192
1997	0	27,031	27,031
1998	0	400,198	400,198
1999	0	580,816	580,816
2000	39,381	53,872	93,253
2001	0	67,209	67,209
2002	<u>0</u>	<u>54,553</u>	<u>54,553</u>
<b>Total</b>	<b>39,381</b>	<b>1,719,189</b>	<b>1,758,570</b>
<b>1990-1999</b>			
Total	0	1,543,555	1,543,555
Average	0	154,355	154,355
<b>1995-2000</b>			
Total	39,381	1,169,990	1,209,371
Average	6,564	194,998	201,562
<b>1990-2002</b>			
Total	39,381	1,719,189	1,758,570
Average	3,029	132,245	135,275

<sup>1</sup> Data provided by City staff on March 10, 2003 and is based on building permit activity. Includes large projects subject to development agreements.

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## **SECTION V – SUMMARY OF LINKAGE ANALYSIS AND CONCLUSIONS**

Section V summarizes the child care linkage fee analysis described in Sections I–IV. Those sections explain the multi-step analysis undertaken to quantify the demand for child care by employees in Santa Monica and the costs to mitigate child care demand, in terms of the provision of new child care center spaces. The analysis is conducted for a “universe” of 1,000 employees for ease of understanding and avoidance of awkward fractions associated with an analysis on the per employee or per household level. The findings of the demand analysis and linkage costs are summarized below.

### **A. Demand Analysis**

The demand analysis estimates the number of children who require child care for a given universe of 1,000 employees. Demographic information is drawn from the U.S. Census 2000 series for the County of Los Angeles, since workers in Santa Monica come from the larger area.

- From a universe of 1,000 employees, there are 694.11 employee households, reflecting the fact that most households contain more than one worker or employee.
- In the 694.11 employee households, there are 183.18 children age five and under (actually half of all five year olds).
- Of the 183.18 children age five and under, 140.21 need child care due to the situation that all parents in the home are working.
- Of the 104.21 children needing child care, the demand for spaces in child care center facilities is 47.57 spaces (14.85 infant and toddler spaces and 32.72 pre-school spaces), based on national surveys for children of these age groups.
- National surveys suggest that 75% of demand for child care center space for preschool children is for centers located near the parent’s workplace. As a result, the demand for spaces in child care centers located near the workplace is 35.68 spaces (11.14 infant and toddler spaces and 24.54 preschool spaces).

*The conclusion of the demand analysis is that for 1,000 employees, the demand for spaces in child care centers near the workplace is 35.68 spaces.*

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## B. Mitigation Costs Analysis (2005)

The mitigation costs analysis estimates the cost of providing new child care spaces in Santa Monica and then translates these costs into total linkage costs.

- A prototypical child care center and its development cost in Santa Monica was analyzed. In addition, cost experience was drawn from a survey of other West Los Angeles Area child care centers. The finding is that the cost to develop a new child care center in Santa Monica in 2005 is approximately *\$18,500 per space without land, or \$55,400 with land or, averaged together, \$36,950.*
- The total mitigation cost for 1,000 employees is calculated by multiplying the number of child care center spaces in demand (35.68) by the cost of development per child care center space:

$$35.68 \times \$36,950 = \$1,318,380 \text{ for 1,000 employees}$$

The mitigation cost allocated to each of the 1,000 employees is \$1,318.

- Further analysis relates the per-employee cost to building space based on density of employment. Since density varies by type of building and the activity within it, there are different density factors for each of the three building types:

Office	250 sq. ft. per employee
Retail	350 sq. ft. per employee
Hotel	500 sq. ft. per employee

When the cost per employee is divided by the number of square feet per employee, the result is a cost per square foot of building area as follows:

Office	\$5.27 per sq. ft. ( $\$1,318 \div 250$ )
Retail	\$3.77 per sq. ft. ( $\$1,318 \div 350$ )
Hotel	\$2.64 per sq. ft. ( $\$1,318 \div 500$ )

These costs per square foot express the cost to mitigate the demand for space in child care centers through the construction of new child care center spaces in Santa Monica. These are the total linkage costs and represent a ceiling below which fees may be set.

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## **SECTION VI - MATERIALS TO ASSIST IN DESIGNING A FEE PROGRAM FOR SANTA MONICA**

### **A. Overview**

This section provides information to assist policy makers in selecting an appropriate Child Care Impact Fee level and mitigation program for Santa Monica. As indicated at the end of the previous sections, the linkage analysis establishes maximum supportable fee levels.

*Recognizing a variety of City objectives, policy makers may set the fee or other obligations at any level below the maximum.*

The conclusions of the analysis on child care linkage costs for three types of commercial projects discussed in Section V are restated below. These are the maximums below which fee levels may be considered for different buildings:

Office – \$5.27 per square foot  
Retail/Entertainment – \$3.77 per square foot  
Hotel – \$2.64 per square foot

#### **1. Thresholds and Exemptions**

Before evaluating alternative fee levels, it is helpful to recognize that a linkage fee program and governing ordinance may contain features to address specific concerns and policy objectives. The most important features are minimum size thresholds and exemptions.

A minimum size threshold sets a project size over which fees are in effect and exempts or reduces fees on smaller projects. Very large cities with high fee structures (multiple fees at substantial levels) tend to set thresholds at the 25,000, 50,000 or even 100,000 square foot level. Smaller cities typically establish thresholds at 10,000 or 25,000 square feet. Some programs have no thresholds. For consistency, Santa Monica may want to consider a threshold that is the same as for other development standards or fees. The Development Review threshold is currently 7,500 square feet. The Housing and Open Space Fee reduces the fee for the first 15,000 sq. ft.

A number of policy objectives can be accomplished through the minimum thresholds. If there are older commercial areas for which small-scale infill is a City objective, a minimum threshold will avoid or reduce the cost for small projects. If mixed-use projects are being strongly encouraged, again a minimum would benefit many such projects.

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Exemptions of several sorts can also be added to the program. Specific geographic areas are sometimes identified as warranting special treatment by the City or specific building types may be exempted.

Finally, it should be noted that the ordinance will likely contain a provision to address demolition of existing structures, recognizing that the prior structure had child care impacts and the replacement structure should only address net new impacts. Similarly, when very low employment density type structures are renovated for newer higher employment density activities, adjustments are in order. The classic example is the warehouse that is renovated for an office or film production activity.

## **B. Other Santa Monica Impact Fees and Total Development Costs**

Policy makers usually wish to consider the design and level of a new fee in the context of existing fees already in place and in the context of total development costs within the jurisdiction. This section briefly summarizes Santa Monica impact fees and development costs, particularly land, within the city and evaluates the relationships.

### **1. Other Impact Fees**

The City of Santa Monica was one of the first in the State to adopt a jobs housing or affordable housing impact fee and also an open space impact fee. These were adopted in 1984 and have been adjusted periodically since then using a Consumer Price Index. The fees apply to office projects only. The fee level is quoted as a single fee and, as of the date of report preparation (2005), is as follows:

- \$4.37 per square foot for the first 15,000 square feet; and
- \$9.72 per square foot in excess of 15,000 square feet.

In addition, the City has a "fee" schedule to cover a broad range of planning and processing services associated with the development process. These are not impact fees per se, but are noted because they are reportedly high relative to other cities and do add to the costs of development in Santa Monica.

A child care fee would be an impact fee similar to the affordable housing and open space fee and in addition to the levels noted above.

### **2. Land Costs in Santa Monica**

A brief discussion of land costs in Santa Monica as a key component of total development costs is relevant because, in theory, land value adjusts downward to reflect the added cost burden imposed by the City. Most development costs, such as hard construction costs, and most

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- indirect and financing costs are relatively fixed, or not subject to adjustment as a result of local policies. Land value is the variable in the development equation that adjusts to reflect the income capacity of market forces, given the fixed costs of development. Rents and building values generally act independent of costs of development. They are driven by the market attraction of the location and the strength of the regional economy. If costs are increased as a result of a local fee, land values are theoretically decreased by a corresponding amount.

The relationship between the fee cost and the land value is a function of the project density or Floor Area Ratio (FAR). With an FAR of 1:1, the building area square footage is equal to the site area. A building with an FAR of 2:1 is a building with twice the floor area as the parcel size, meaning the fee impact theoretically is doubled in its diminution of land value. Most commercial or mixed-use projects in Santa Monica are developed to an FAR in excess of 1:1. (Usually parking is kept out of the equation — impact fees are not charged on structured parking square footage and parking is not counted in the FAR.)

The word “theoretically” is dispersed throughout the discussion. In the real world, other forces, most particularly market demand, drive land values far more powerfully than do fees. Land values have escalated substantially since the mid-1990s and despite the recession in office markets, land values have not come down in locations such as Santa Monica.

To obtain an overview of values in Santa Monica, KMA considered several sources. KMA obtained data on 15 land purchase transactions, which have occurred since late 1999. These transactions covered all areas or zip codes of the City. In addition, KMA talked with the City about general conditions and trends. From this limited investigation, KMA concludes that land values are predominantly over \$100 per square foot and in some locations over \$200 per square foot. The low end of the range for properties without significant problems is around \$80 per square foot. (2003)

At \$100 per square foot each dollar of impact fee is a 1% impact on land value at a 1:1 FAR and 2% at a 2:1 FAR. Areas with a development potential of higher than 2:1 FAR due to zoning have land values considerably over the \$100 average used in the example. As a result, the impact of each dollar of fee is probably no greater than 2% of land value at any location in Santa Monica.

Finally, as an observation, Santa Monica may be a city with a high fee structure (both impact fees and processing fees), but it is also a city with a very high land value structure. There is no evidence that the fee structure thus far has had a depressing impact on land values. It is likely that the development community views other difficulties in pursuing development projects in Santa Monica, such as limited land, as being more significant and more costly than the fees.

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### 3. Total Development Costs

Total development costs for all types of projects in Santa Monica are higher than in most other portions of the metropolitan area for a combination of reasons.

- The land cost structure reflecting the high desirability of virtually all locations in Santa Monica and the strong market conditions and income capacity resulting there from.
- High construction costs resulting from most projects being built at urban type densities on sites of constrained size. Staging areas for construction are also minimal, adding to costs.
- Parking requirements, which in combination with the density and land costs, means virtually all parking is now located in structures of one sort or another, often subterranean.

As a result of these factors, it is virtually impossible to complete a development project for less than \$300 per square foot "all inclusive." This cost is inclusive of land, construction, site costs, and all indirect costs including financing in 2003. Average development costs "all inclusive" generally fell in the \$300 to \$400 per square foot range.

In the context of total development costs, each dollar of impact fee has a minor impact — under 0.35%.

To restate KMA's conclusion on land values: market pressures have a far greater impact on land values than fees in the Santa Monica real estate market. According to the Housing Element, land costs escalated 31% to 56% during the 1997 to 1999 period alone, and land costs have continued to rise since that time. A child care fee would not be of a magnitude to significantly alter land values in Santa Monica.

#### **C. Child Care Linkage Programs in Other Jurisdictions**

It is always of interest to decision makers to know what other cities and counties have in place in the way of similar programs. KMA assembled information on child care linkage programs in California and elsewhere, following a search using the internet, the California League of Cities, and other sources such as a State Housing and Community Development publication entitled *Pay to Play*.

The chart, Table 13 at the end of this section (updated for 2005), summarizes the major provisions of ordinances in 15 California jurisdictions plus a specific plan area. Some of the main points of interest are:

- All of the jurisdictions with the exception of West Hollywood and Palm Desert are in northern California.
- The highest fee level in California on non-residential construction is in Palm Desert, at \$1.15 per sq. ft. for office space, adopted in 2005. San Francisco, Berkeley and San Mateo all have fees of \$1 per sq. ft. The next highest is Martinez at \$0.85, followed by West Hollywood at \$0.65. All others are lower yet.
- Many programs have a parallel charge on residential construction.
- A few programs also fund operating expenses and subsidies for lower income families.
- Most programs have thresholds and exemptions of some sort.
- Seattle has a recently adopted a child care linkage program which only applies to the downtown area, and only to large hotels and office projects. The charge is \$3.25 per square foot on the bonus area (above a base FAR) or equivalent to \$1.50 to \$2.00 if applied over the total building area.

KMA is familiar with several jurisdictions that are considering adding a child care linkage program and of those that have them now, some will be doing an update within the next few years. None of the programs have been challenged in court, to KMA's knowledge.

#### **D. Child Care Fee Collection Projection**

Policy makers and planners like to have information on the approximate amount of funding a program will generate, given certain assumptions. This can be done by examining the annual level of construction activity and projecting it forward to determine funding for each dollar of fee.

##### **1. Commercial Construction**

Santa Monica is a built-out city without a substantial amount of construction activity, residential or non-residential. City staff assembled data on commercial construction every year since 1990 (Table 11). This information was presented in Section IV. Commercial construction averages for various timeframes since 1990 are as follows:

	<b><u>Non-Residential</u></b>
1995-2000	201,562 sq. ft./yr.
1990-1999	154,562 sq. ft./yr.
1990-2002	135,275 sq. ft./yr.

For purposes of looking forward, generally the longer timeframe provides a more useful average. The 1990s decade was a particularly good decade for projection purposes because during the first half of the decade the economy was in recession and the second half of the decade was a period a vigorous expansion. Since 2000, the office market has been in recession, so for purposes of projection, KMA believes 150,000 sq. ft. per year is a good average.

In Santa Monica very large projects are typically negotiated with the City and become subject to Development Agreements. Of the approximately 1,760,000 sq. ft. developed since 1990, over 700,000 of it was in Development Agreement projects. Without these projects, the average activity would drop to around 77,000 sq. ft. per year. For projection purposes, KMA would argue that much of this activity probably would have happened in other projects and further, looking ahead, Santa Monica will probably have at least one or two large Development Agreement projects per decade on average.

KMA recommends a projection range of 100,000 to 150,000 per square foot per year. From there one can examine the amount generated for every dollar of fee, or say, a \$1, \$3 and \$5 per square foot fee range.

	<u>\$1 Fee</u>	<u>\$3 Fee</u>	<u>\$5 Fee</u>
100,000 sq. ft. per year	\$100,000	\$300,000	\$500,000
150,000 sq. ft. per year	\$150,000	\$450,000	\$750,000

Working from the mid ranges of both fees and construction activity, KMA brackets the proceeds from the program at roughly \$250,000 to \$450,000 per year.

The above projection range implies two major conditions:

- That the fee will be applied to all commercial type construction — office, , retail, entertainment, hotel, etc. This is not consistent with the current housing and open space fee.
- That the fee program will not include exemptions or reductions for smaller projects. Again, the City's other impact fee programs do include reductions.

## 2. Fund Capacity vs. Costs

On an order of magnitude level, it is helpful to look at the probable linkage program fund in light of linked child care costs, or in this case, child care center facility costs. It was established that the average cost per child care center space is \$36,950 on average. (2005)

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If an adopted linkage program generates \$250,000 to \$450,000 per year, then roughly ten new child care center spaces could be developed each year. Or, if the desired size of a child care center is 75 children, the City could fund development of a new center every seven or eight years.

#### **E. Santa Monica Development Agreements – Child Care Provisions**

The City of Santa Monica has negotiated with the developers of large projects over the past 20 years for child care payments or other provisions as part of the condition of approval for the project. Commencing with the Colorado Place agreement in 1981, the City has worked out child care mitigations on seven large scale projects.

The chart at the end of this section (Table 14) summarizes the seven agreements. It appears that four agreements have called for the provision of a child care centers of varying sizes:

- National Medical Enterprises (now MTV) project – 60 child care spaces
- Colorado Place – a 2,000 sq. ft. child care center (about 28 spaces)
- Water Garden – 3,500 sq. ft. initially, 7,000 sq. ft. by later phase (about 100 child care spaces)
- Saint John's Hospital Expansion – a center for 49 children of which 21 must be infants/toddlers

In addition, the Rand Corporation agreement calls for an expenditure of \$500,000 toward a child care center.

Most of the agreements specify that the project will give first preference to employees and/or tenants. A second priority for enrollment is City residents. The Water Garden and Saint John's require that a portion of spaces (10% and 25% respectively) be made available to the children of lower income families.

These development agreements represent individual negotiations independent of a City policy or program to guide consistency of requirement. As such, they provide little guidance for future development agreements other than the precedent for requiring a child care mitigation in concept.

#### **F. Recommendations for a Child Care Linkage Fee Program for Santa Monica**

Drawing from the findings of the linkage analyses and from the materials in this section of the report, the following findings listed below are offered as a guide:

- 
- The maximum child care fee levels supported by the linkage analysis are as follows:

Office - \$5.27 per square foot

Retail/Entertainment - \$3.77 per square foot

Hotel - \$2.64 per square foot

- The fee levied by the City should be under the maximum amount supported by the analysis. KMA always recommends a margin to allow for minor changes in conditions, different findings from new surveys, or other adjustments that might invite challenges to the fee level. With a margin, challenges are discouraged.
- Based on the high land value structure in Santa Monica and high costs of development, fees at virtually any level below the maximums established by the linkage analysis will have only a negligible impact on development costs and land values and will not significantly alter development attraction in Santa Monica.
- Given the low volume of commercial development activity in terms of new square footage added each year, fees should be at least \$2.00 per square foot in order to accumulate enough funds to follow through on the purpose of the fee — to increase the supply of child care center spaces in Santa Monica.
- For consistency, the City may wish to use the 7,500 sq. ft threshold for Development Review or the 15,000 sq. ft threshold for the office Mitigation Fee. Alternatively, the City may wish to reevaluate all thresholds in light of the average size of projects processed through the City and consider a different level to capture more activity.
- KMA recommends that the Child Care Fee be applied to all commercial projects and that the City reevaluate expanding its Office Mitigation Fee to similarly include retail and hotel type projects. Retail and hotel projects are notably intensive in very low paying jobs.
- KMA recommends that the ordinance include a provision for building child care center spaces as an alternative to paying a fee. The build option could include contributing to a child care center being developed by other sponsors, profit and/or non-profit. Rehabilitation of existing buildings for child care centers should also be permitted within such an option. The build option should be in similar proportion to the linkage finding as the fee is to the linkage maximum.

**TABLL**  
**CHILD CARE LINKAGE PROGRAMS IN OTHER JURISDICTIONS**  
**CHILD CARE LINKAGE PROGRAM**  
**CITY OF SANTA MONICA**

Jurisdiction	Year Adopted	Current Fee Levels	Exemptions <sup>1</sup>	Build Option/ Other	Fee Uses	Comments
City of West Hollywood	1989 (updated 2001)	\$0.65 / sq ft non-res	<10,000 sq ft	Provide 1 sq ft indoor space per 470 sq ft new commercial floor area plus 1 sq ft outdoor space per 219 sq ft. (Min total 2,100 sq ft indoor & 4,500 sq ft outdoor space).	Provide new child care spaces via new construction, expansion and/or lease.	Goal to construct 7,665 sq ft of indoor & 16,425 sq ft of outdoor child care space over 20 years. Construction includes extensive rehab (50% of replacement value). Commercial development fee also required for affordable housing, public open space and transportation facilities.
City of Palm Desert	2005	\$1.15 / sq ft office \$0.90 / sq ft comm'l \$0.77 / sq ft hotel \$0.47 / sq ft business parks & light industrial	Does not specifically exempt schools, non-profits, or public property.	Provide facility sufficient to satisfy their generated impact.	New child care spaces via new construction or expansion. Improvements to existing child care spaces.	
City and County of San Francisco	1986	• \$1 / sq ft office and hotel in downtown	< 50,000 sq ft < 6 hotel rooms	Provide on-site facility (min 3,000 sq ft) to be operated by nonprofit at no cost. On-site facility size 1% of project building area.	Increase supply of facilities to low and mod income households. (25% of funds to provide subsidies for first 3 years)	Large office projects must provide on-site referral/placement services.
City of South San Francisco	2001	• \$1,736 / unit SF • \$1,630 / unit medium density • \$1,624 / unit high density • \$0.60 / sf commercial/retail • \$0.50 / sf R&D office • \$0.16 / sf hotel • \$0.47 / sf other non-res.	Affordable housing and senior housing may apply for a waiver. No other exemptions. Additions <1,000 sf exempt.	May provide facility.	Establish new childcare spaces.	The city's goal is to satisfy fifty percent of the city's existing and future childcare needs by the year 2020 (4,784 additional childcare space, of which 1,176 are associated with new development and will be funded by the fee).
City of Berkeley	1992	• \$1 / sq ft office/retail • \$0.50 / sq ft industrial Intensified use (per net new employee; not to exceed \$1/ sq ft for total project size) • \$525 / new office empl • \$615 / new retail empl • \$500 / new industrial empl (not to exceed \$0.50 /sq ft)	<7,500 sq ft Exempts South Berkeley Target Area	May provide on-site project. Fee will be dedicated to the child care operator at the specific site, in return for req. subsidized spots with priority to project's new employees	Provide subsidies to residents with income <60% Area Median Income.	Non-profit and public sector spaces are not exempt.

<sup>1</sup> Unless otherwise noted, ordinance exempts child care or school facility, non-profit or public property, senior or affordable housing and repairs, replacements or additions if a new bedroom is not created.

Abbreviations: SF – Single family; MF – Multi-family; Sq ft – Square feet; Res - Residential

Prepared by: Keyser Marston Associates, Inc. 19305.005\001-016

**TABLE 13  
CHILD CARE LINKAGE PROGRAMS IN OTHER JURISDICTIONS  
CHILD CARE LINKAGE PROGRAM  
CITY OF SANTA MONICA**

City of Martinez	1990	<ul style="list-style-type: none"> <li>\$830 / unit SF</li> <li>\$221 / unit condo</li> <li>\$166 / unit apt</li> <li>\$0.85 / sq ft office</li> <li>\$0.29 / sq ft retail</li> <li>\$0.36 / sq ft manuf</li> <li>\$0.45 / sq ft comm. service</li> </ul>	See footnote	May pay fee equal to land and construction cost. Min. size of 110 sq ft land per space and 35 sq ft bldg area per child (excl. common area).	Targets assistance for infants and after school care.	
City of Davis	1990	<ul style="list-style-type: none"> <li>\$100 / res unit</li> <li>\$0.005 per sq ft industrial / commercial</li> <li>\$0.015 per sq ft for all other commercial uses</li> </ul>	Also agricultural uses	Provide construction costs or land. Receive credit for future dev if exceed req.	Loans and land. Prohibits on-going operating and general maintenance expenses. Age target 0-12 years old	
County of Contra Costa	1988	N/A (res and non-res must provide child care facility)	<30 res units (excl studios and 1 bdrms) <100 employees OR <15,000 sq ft non-res	Provide facility on- or off site	Increase and/or supply facilities	Developer must provide child care survey to assess child care needs caused by project and a mitigation plan
County of Santa Cruz	1991	<ul style="list-style-type: none"> <li>\$328 / unit SF</li> <li>\$0.328 / sq ft SF addition (between 500-1,000 sq ft)</li> <li>\$108 / unit MF</li> <li>\$0.108 / sq ft MF addition</li> <li>\$0.12 - \$0.23 / sq ft non-res use</li> </ul>	Also agriculture uses	Provide facility on- or off site. Dedicate land to County or nonprofit to develop child care facility  Subdivisions with < 19 units may only pay fee	Grants or loans to purchase, construct or rehab facility.	Targets preschool and school age thru 12 <sup>th</sup> grade. Admin costs limited to 7% of fund.
City of Concord	1985	<ul style="list-style-type: none"> <li>0.5% of total development costs for non-res uses</li> </ul>	< \$40,000 bldg. permit value	Provide on-site facility or contribute to non-profit provider facility. Receive credit for future dev if exceed req.	"Child Care Alliance for Resource and Development" allocates funds for direct subsidy, training, loans and after school rec program.	
City of San Ramon	1988	<ul style="list-style-type: none"> <li>\$210 / unit plus 5% of total res fee</li> <li>\$0.10 / sq ft plus 5% total non-res fee</li> <li>Mixed use - apply fee for each use plus 5% total fee</li> </ul>	< 1 bedroom or 2 <sup>nd</sup> unit  <2,500 sq ft non-res space	Provide facility	Provide school age child care on school sites owned by San Ramon USD according to need	

<sup>1</sup> Unless otherwise noted, ordinance exempts child care or school facility, non-profit or public property, senior or affordable housing and repairs, replacements or additions if a new bedroom is not created.

Abbreviations: SF – Single family; MF – Multi-family; Sq ft – Square feet; Res - Residential

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**TABL**  
**CHILD CARE LINKAGE PROGRAMS IN OTHER JURISDICTIONS**  
**CHILD CARE LINKAGE PROGRAM**  
**CITY OF SANTA MONICA**

City of Danville	1989	<ul style="list-style-type: none"> <li>• \$335 / unit SF</li> <li>• \$115 / unit MF</li> <li>• \$0.25 / sq ft non-res uses</li> </ul>	<p>SF remodels 2<sup>nd</sup> units</p> <p>&lt; 2,500 sq ft non-res</p>	Must provide facility if res project exceeds 50 units	In priority: School age facilities in elementary schools. Purchase land to develop pre- or school age facilities	Goal to achieve ratio of 1 child care space per 40 Town residents. Fee applies building conversions and expansions
City of San Mateo	2004	<ul style="list-style-type: none"> <li>• \$1.00/ sq. ft non-res. uses</li> </ul>	<10,000 SF.		Fund new facilities; joint venture with non-profits; provide low or no interest loans.	Fee applies to new construction and tenant improvements.
City of West Sacramento	2003	<ul style="list-style-type: none"> <li>• Res: \$50/ unit (&lt;600Sq Ft)</li> <li>• \$150/unit (601-1000 Sq Ft)</li> <li>• \$250/unit (1001-1400 Sq Ft)</li> <li>• \$400/unit (&gt;1400 Sq Ft)</li> <li>• \$0.40 / sq ft office</li> <li>• \$0.30 / sq ft retail</li> <li>• \$0.12 / sq ft industrial</li> <li>• \$0.12 / sq ft hotel</li> </ul>	Not currently specified.	Provide facility on-site or off-site; may donate land; may provide financial assistance for new facility; combination of the above.		
City of Los Angeles (Central City West Specific Plan)	1991	<p>Commercial/industrial must provide facility with min size req:</p> <ul style="list-style-type: none"> <li>• 40,000–99,999 sq ft reqs 2,000 sq ft facility</li> <li>• 100,000–499,999 sq ft reqs 4,000 sq ft facility</li> <li>• 500,000–999,999 sq ft reqs 8,000 sq ft</li> <li>• 1 mil+ sq ft reqs 12,000 sq ft</li> </ul>	<40,000 sq ft	<ul style="list-style-type: none"> <li>• On-site facility req if bldg &lt;500,000 sq ft</li> <li>• 500,000–999,999 sq ft may provide one on- and one off-site location within ½ mile</li> <li>• 1mil+ sq ft may have 3 locations, with at least one 4,000 sq ft on-site, remainder within ½ mile</li> </ul>	30% of slots reserved for low and very-low income households who live within Specific Plan area	May combine with other facilities
City of Seattle (Downtown only)	2001	\$3.25 per sq ft bonus areas on office and hotel. Equates to \$1.50-\$1.75 on total bldg. area.	N.A. Program only applies to large projects.	May build; each sq ft bldg. area .000127 child care spaces	Build new facilities and existing City subsidy program	Linkage program applies only to portion of bldg. over base entitlement. Analysis based on cost of child care centers and City subsidy program.

<sup>1</sup> Unless otherwise noted, ordinance exempts child care or school facility, non-profit or public property, senior or affordable housing and repairs, replacements or additions if a new bedroom is not created.

Abbreviations: SF – Single family; MF – Multi-family; Sq ft – Square feet; Res - Residential

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TABLE 14  
 MAJOR PROJECTS IN SANTA MONICA  
 DEVELOPER AGREEMENTS WITH CHILD CARE OBLIGATIONS  
 CHILD CARE LINKAGE PROGRAM  
 CITY OF SANTA MONICA

PROJECT BACKGROUND		CHILD CARE OBLIGATIONS					NOTES	
Project Name/Developer	Development Agreement Year	Development Program	Child Care Center Size	Tuition	Required Costs/Contributions	Enrollment Eligibility		
						Preference	Income	
Colorado Place I & II MGM current occupant	1981	900,000 sq ft office	Interior: 2,000 sq ft; Approx. 28 spaces*		Max \$6,000 for improvements			Annual operator lease payment is \$1. Current operator: Hill & Dale
National Medical Enterprises (NME) MTV current occupant	1982 (amended 1987)	312,000 sq ft office & 30 res units	60 spaces; must provide some infant care		Provide indoor furnishings and equipment or pay City (\$2,000 min). Outdoor furnishings \$3,000	1st Employees and tenants; 2nd City residents	"Affordable" child care to any income employee	Annual operator lease payment \$1. Minimum occupancy requirement is 85%. Current operator Evergreen
Arboretum Southmark Pacific Corporation	1987	1 M sq ft supermarket, office & res			\$250,000 (min. \$50,000 annual)?			Funds must primarily meet child care needs of Pico and Mid City neighborhoods.
Water Garden JH Snyder Co.	1988	1 M sq ft office, medical, health club & retail	Interior: 3,500 sq ft; Exterior: 3,500 sq ft; must provide some infant care			Employees. 10% of spaces reserved for designated neighborhood residents.	10% income qualified to pay 60% of market rate tuition based on need	Current Operator: Cornerstone
St. John's Hospital	1997	900,000 sq ft hospital expansion	49 full day spaces (Min 21 infant/toddler spaces)	Tuition may not exceed tuition to full day non-profit programs in Santa Monica with comparable quality/services		1st Employees and tenants; 2nd City residents; 3rd Employees in the City	Tuition for lower income family not to exceed 25% of market rate	Minimum occupancy requirement is 85%. Project Phase II demand-provide expanded program on or off campus. Current Operator: St. John's
Rand Corporation (replacement and expansion project)	2000	500,000 sq ft office	Infants thru preschool	25% of annual disbursement to provide subsidy on sliding scale. Lowest income has first priority.	\$500,000 for future development of a child care center?	1st Employees and tenants; 2nd City residents		Lab school for early childhood development activities

\*Estimate based on other information.

Each agreement requires developer to provide an implementation plan and includes provisions for operator successor process.  
 Each program must comply with State requirements.

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**APPENDICES A, B, C, D**

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**APPENDIX A**  
**GLOSSARY OF CHILD CARE AND DEVELOPMENT TERMS**

**A/E (also A&E)** – Architect/Engineer. Common abbreviation for the architects and engineers (including mechanical, electrical, structural and civil engineering consultants).

**Building Coverage** – See Floor Area Ratio.

**Building Permit** – The local government’s demonstration that it has reviewed development plans for compliance with local codes and given permission for construction to proceed.

**California Education Code** – Sections of the California Education Code pertain to child care and development programs serving children part day or full day. Specifically, Section 8208 address programs that offer a full range of services for children from infancy through age 13, for any part of a day, by a public or private agency, in centers and family child care homes. Section 8263 clarifies child eligibility for state subsidized child care and development services.

**Capital Cost** – Money spent to improve a property and enhance its value over an extended period of time (as opposed to a repair).

**Capitalization Rate** – A discount rate (expressed as a percentage) used to determine the present value of a stream of future income (or expenditures). For instance, to establish a reasonable purchase price for a given investment property, investors, lenders and appraisers may utilize a capitalization rate to discount a stream of future rental income.

A capitalization rate was utilized in the Child Care Linkage Fee Analysis for the purpose of estimating a one-time charge to address the impacts of new development over the life of a building. As such KMA capitalized the City’s annual child care and youth expenditures at a rate of 10%. This rate is within the finance industry’s acceptable range.

**CCR** – California Code of Regulations.

**Child Care Center** – Any child care facility of any capacity, other than a family child care home, in which less than 24 hour per day non-medical care and supervision are provided to children in a group setting in accordance with CCR, Title 22, Section 101152. In Santa Monica, the Santa Monica-Malibu School District (SMMUSD) runs full time and part-time centers for pre-schoolers (Child Care in Santa Monica, September 2000.)

**Child Care Linkage Fee** – A linkage fee to mitigate the impacts on child care demand associated with building development and new workers or residents.

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**Construction Cost** – The cost of constructing the building, including all direct costs of construction, plus contractor's profit and general conditions.

**Child Care Recreation, Enrichment, Sports Together (CREST)** – Eight after-school programs jointly administered by The Santa Monica-Malibu School District and the City of Santa Monica for school age youth.

**Development Agreement** – A legal contract between a public agency and a developer that includes conditions and terms for the development of a project.

**Development Cost** – The sum of all costs for planning, administration, site acquisition, relocation, demolition, construction, tenant improvement allowance and equipment, all financing related costs, on-site streets and utilities, a contingency allowance, insurance premium, any off-site costs required, any initial operating deficit, and all other costs necessary to develop the project.

**Direct Costs** -- Costs directly related to the construction of a project, including site acquisition, demolition, construction, tenant improvements, landscaping, etc.

**Employee Density Factor** – A measure of the average building space occupied by a single employee. Calculated by dividing the total building area by the total number of employees employed in the building.

**Family Child Care Homes (FCCH)** – Child care facilities operating out of individuals' homes. They are categorized as either small (serving up to 8 children) or large (serving between 9 and 14 children). FCCHs can serve a combination of pre-schoolers (including infants) and school age children.

**Floor Area Ratio (FAR)** – A comparison of the total area of a building with the total area of the land upon which it stands. Maximum or minimum FARs may be established by local zoning codes.

**Federal Poverty Level** – A minimum income level below which a household is officially considered to lack adequate means for subsistence and to be living in poverty. The U.S. Department of Health and Human Services annually updates the poverty guidelines by the Consumer Price Index.

**Housing Element** – One of the mandatory elements of a General Plan of a City or County, the Housing Element identifies the needs and present options for the production of housing in a community.

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**Impact Fee** – Charge levied on developers by local government to pay for the cost of providing public facilities necessitated by a given development or to otherwise lessen the negative impact of development upon the public. Also referred to as an exaction or governmental fee.

**Indirect Costs** – Costs not directly related to construction, e.g., leasing and brokerage commissions, marketing costs, design and other professional service costs, property taxes during construction, development management and governmental fees and financing costs (e.g. loan points, interest expense). Also known as “soft costs.”

**Infant** – Children from birth to two years (CCR, Title 22, Section 101152). However, for purposes of their programs, Santa Monica recognizes infants as children from birth to one year.

**Licensed Child Care** – Child care programs in a center or provider’s home which follow state regulations for staff-to-child ratios, education standards, program structure and facilities. Programs are regulated by the Department of Community Care Licensing in the California Department of Social Services (CCR, Title 22, Section 10152) or administered under the State Department of Education under Title 5 of the CCF.

**Mitigation Fee Act, AB 1600** – Legislation that amended California Government Code, Section 66000, requiring that local government demonstrate a linkage between the amount of a fee, the fee’s purpose, and the type of development on which the fee imposed.

**P.S.F.** – Per Square Foot

**Pre-school Programs** – In Santa Monica, pre-school programs serve children from two to five years. Includes subsets of children of different ages with different state regulations associated with them. (Child Care in Santa Monica, September 2000)

**Pre-schooler** – According to the Health and Safety Code, pre-school children are children who are not infants, toddlers, or school age (Section 1597.059).

**Project Cost** – See Development Cost.

**Rehabilitation** – The improvement, alteration, modernization or modification of an existing structure to make it safe, sanitary and decent and/or to bring it up to Building Code Standards.

**Santa Monica Programmatic Costs/Santa Monica Scholarship Programs** – Funds available to help lower and moderate income households residing in Santa Monica to meet their child care needs (Connections for Children Program and The Growing Place).

**School Age Children** – Children of kindergarten age through grade five. (Child Care in Santa Monica, September 2000).

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**Toddler** – A child between the ages of 18 months and 30 months (CCR, Title 22, Section 101152).

**Total Development Costs** – See Development Costs.

**Universe of Employees** – A grouping of individual employees for analysis purposes. In this analysis the “universe” of employees is comprised of 1,000 employees.

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## **APPENDIX B - THE DEMAND FOR CHILD CARE ASSOCIATED WITH RESIDENCES**

This appendix provides an analysis of the linkage between residential development and child care demand, similar to the analysis provided in Section II of the main report on workplace building construction and child care demand. This analysis is in the appendix because KMA recommends that the City not proceed with a child care impact fee on residential development at this time.

### **A. Santa Monica Residents – Demographic Profile and Growth**

A first step before embarking on the residential demand analysis is to review the demographic profile of Santa Monica residents. The data source is the U.S. Census 2000 series for the City of Santa Monica. Santa Monica demographic characteristics are appropriate for describing households and the propensity to have children in them, whereas for workplace buildings one could look to the characteristics of the greater Los Angeles area because only a small share of those who work in Santa Monica also live there. Santa Monica characteristics are notably different from the larger Los Angeles area. Some of the highlights presented in Appendix Table B-1, at the end of this section, are:

- Only 16.8% of Santa Monica households contain children under age 18. (This may be compared to over 41% for Los Angeles County.)
- Fewer than 5% of Santa Monica households contain children of preschool age.
- Santa Monica did not experience growth in population or households over the 1990 to 2000 decade.
- Overall the number of children under age 18 in Santa Monica grew slightly over the decade, by about 5% (from 11,977 to 12,314).
- Santa Monica had fewer children under age 5 in the year 2000 than it did ten years earlier.

These statistics may be restated without the figures as follows:

- Santa Monica is a city with far fewer children on average compared to the larger Los Angeles area.
- There is no significant growth in the number of children and an actual decrease in the number of very young children (age 0-5).

A description of the demand analysis associated with households is provided in the next pages.

**B. 100 Households – Children Needing Child Care**

Like the workplace analysis, which utilizes a universe of 1,000 employees, the residential analysis works from a universe of 100 households in Santa Monica. Again, this approach is used to avoid having to describe children and child care demand in terms of fractional children carried to four or five decimal places.

Using Census findings, KMA developed factors to quantify the number of children by age group as relates to the type of child care service needed, for 100 households or 100 residential units (the difference between households and residential units being only a minor vacancy adjustment). Unlike the analysis of children of employees which is limited to preschool children, an analysis for residents can address children of all age levels for which the City provides care or assists with services for its residents.

The table below summarizes the incidence of children by age level and of children needing child care by virtue of parents being employed (two-parent households with both parents working and single-parent households with the single parent working). The last step adjusts for more than one child within the age group.

**Appendix Table B-2  
Child Care Demand for Households with Children in Santa Monica**

Per 100 Households	Households by Age of Children					
	<u>0-2</u>	<u>3 and 4</u>	<u>5</u>	<u>6-12</u>	<u>13-17</u>	<u>Total</u>
Households with Children (Age 17 and under)						
Factor	2.99%	1.73%	0.91%	6.13%	5.06%	16.83%
Number	2.99	1.73	0.91	6.13	5.06	16.83
Households Needing Child Care (Parent(s) Employed)						
Factor	62.37%	62.37%	62.37%	73.00%	61.75%	
Number	1.87	1.08	0.57	4.47	3.13	11.12
Children in Employed Households Needing Child Care (Adjusts for more than one child in age group)						
Factor	1.09	1.06	1.03	1.06	1.11	
Number	2.03	1.14	0.59	4.73	3.46	11.95

Source: US Census, City of Santa Monica, 2000.

*The conclusion is that for every 100 households, slightly under 12 children will have working parents and need child care or youth services, recognizing that "care" may not be an appropriate term for children over age 12.*

### C. How Child Care Needs are Met

The same national surveys and sources were consulted for this portion of the analysis as in Section II of the main report. Since there are no suitable surveys that allowed KMA to judge how the residents of Santa Monica might meet their child care needs in a different manner from the Country or State as a whole, KMA relied on the Urban Institute and UCLA surveys. Appendix Table B-3 restates from Section II the distribution of arrangements for child care by age of child:

**Appendix Table B-3**  
**Primary Child Care Arrangements of Employed Parents**

	Age of Children		
	<u>0-2</u>	<u>3 and 4</u>	<u>5</u>
Per 100 Households			
Parent/Relative	54%	35%	38%
Child Care Center	22%	45%	40%
Family Child Care Home	17%	14%	11%
Before and After School	N/A	N/A	8%
Other	<u>7%</u>	<u>6%</u>	<u>3%</u>
	100%	100%	100%

Source: Urban Institute, *Primary Child Care Arrangements of Employed Parents: Findings from the 1999 Survey of America's Families*, Occasional Paper Number 59, May 2002.

For the purposes of this analysis and the City programs, the child care solutions of greatest interest are Child Care Centers and Family Child Care Home (FCCH) arrangements. The following findings from national surveys provide confirmation that demand for these two arrangements is probably higher in Santa Monica than for the State or County as a whole.

- Use of parents and relatives as a solution to child care decreases as household income increases. Based on the high income level in Los Angeles County compared to the U.S. as a whole, KMA estimates that far fewer families in Santa Monica use parents and relatives as a solution than the percentages indicated above.
- Use of center-based child care arrangements increases as household income increases.
- Use of "other" arrangements, which includes nannies and babysitters, is most expensive and, as would be expected, increases with household income.

As a result of the generally accepted findings from multiple surveys, it is likely that the use of parental and relatives arrangements are far fewer and "other" arrangements far greater than the average, but that the use of child care centers and FCCH's are probably akin to the national and State average, or higher.

Based on the above, KMA estimates the child care demand associated with 100 households in Santa Monica, as shown in Table B-4.

**Table B-4**  
**Child Care Demand by Type of Care in Santa Monica Per 100 Households**

	Age of Children			<u>Total</u>
	<u>0-2</u>	<u>3 and 4</u>	<u>5</u>	
Children in Employed Households Needing Child Care (Table B-2)	2.03	1.14	0.59	3.76
Child Care Center				
Factor	22.00%	45.00%	40.00%	
Number	0.45	0.51	0.24	1.20
Family Child Care Home				
Factor	17.00%	14.00%	11.00%	
Number	0.35	0.16	0.06	0.57
Other				
Factor	7.00%	6.00%	3.00%	
Number	0.14	0.07	0.02	0.22

Sources: U.S. Census, Urban Institute, Primary Child Care Arrangements of Employed Parents: Findings from the 1999 Survey of America's Families, Occasional Paper Number 59, May 2002.

*The conclusion of the above is that a universe of 100 households in Santa Monica is associated with the demand for 1.2 child care center spaces and 0.6 spaces in Family Child Care Homes.*

**D. Demand for Child Care Spaces Near Home**

In Section II of the main report, KMA made an allocation of a Child Care Center to two generic locations — near place of work and near place of residence. The allocation for the preschool child was 75% near place of work, 25% near place of residence, based on findings from parent attitude surveys and other evidence.

At this point, to complete the analysis for demand for child care center spaces near homes in Santa Monica, KMA applied the 25% to the 1.2 children per 100 households.

- The conclusion is 0.3 child care center spaces per 100 households, or 0.003 per household.

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## E. Child Care Center Demand and Mitigation Costs

The cost to provide the 0.003 child care center space for each household in Santa Monica can be estimated following the cost analysis and methodology presented in the Report.

The conclusion of the survey and analysis (and 2005 update) for the cost of development of child care centers in Santa Monica is \$18,500 per space excluding land and \$55,400 per space including land. Applying the cost per child care center space to the 0.003 spaces per household results in a cost per household as follows:

Mitigation cost per household/residential unit, excluding land	\$56
Mitigation cost per household/residential unit, including land	\$166
Average	\$111

## F. Households and Residential Construction Correlation

The profile of Santa Monica demographics from the 1990 and 2000 U.S. Census, presented as the beginning of this section found that:

- The number of households actually decreased over the period, going from 44,860 to 44,497 households over the decade.
- The number of children under the age of five decreased from 4,048 to 3,448.

Over the same time period, residential building permits issued by the City of Santa Monica indicate that over 2,600 new residential units were added (Appendix Table B-5). With these two data series there is no correlation between new residential construction and growth in households and increased child care demand.

There are a number of possible explanations for these two seemingly contradictory sets of data. Among the possible explanations:

- Household size is decreasing on average.
- The rate of children growing up in Santa Monica and exceeding age 18 is occurring faster than the rate of new households with young children.
- The rate of residential unit demolition and units lost to consolidation of existing units are considerable.

Finally, it is possible that the Census is inaccurate or has undercounted in some manner. However, the U.S. Census is the mostly widely accepted body of data on such topics. If the City

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were to challenge the Census information, substantial data and analysis would be required. Until such time, the Census must be viewed as the authoritative source.

Without the ability to make the case that each new residential unit equates to new demand for child care in Santa Monica, the linkage between new residential construction and child care demand cannot be supported at this time.

Should the U.S. Census in 2010 produce data indicating growth in the number of small children, then the City could add a residential component to a Child Care Impact Fee program.

**APPENDIX TABLE B-1  
 SANTA MONICA DEMOGRAPHIC PROFILE  
 CHILD CARE LINKAGE PROGRAM  
 CITY OF SANTA MONICA**

	1990		2000	
Population	86,905		84,084	
Housing Units	47,753		47,863	
Households	44,860		44,497	
Households w/Children Under Age 18				
Number of Households	7,171		7,488	
% of All Households	16.02%		16.80%	
Children Under 18 in Santa Monica by Age Range				
Under 5	4,048	34%	3,448	28%
5 - 9	3,101	26%	3,538	29%
10 - 14	2,878	24%	3,507	28%
15 -17	1,930	16%	1,821	15%
		100%		100%

Total Number Under 18	11,977		12,314	
Approximate Share of Households with Pre-School Children		4.90%		4.70%
Approximate Share of Households with School Age Children		10.40%		12.60%
Number of Children per Household with Children Under 18		1.70		1.64

Los Angeles County

Households with Children Under 18 as % of All Households

41.30%

**APPENDIX TABLE B-5  
ANNUAL RESIDENTIAL BUILDING ACTIVITY IN SANTA MONICA  
COMMERCIAL BUILDING ACTIVITY IN SANTA MONICA  
CITY OF SANTA MONICA**

**Assumptions:**

YEAR	SINGLE-FAMILY	MULIT-FAMILY	TOTAL UNITS
	UNITS	UNITS	(SF + MF)
1990	71	237	308
1991	120	219	339
1992	31	187	218
1993	12	110	122
1994	10	29	39
1995	6	60	66
1996	23	172	195
1997	28	280	308
1998	46	762	808
1999	36	240	276
2000	55	405	460
2001	43	196	239

**1990-2001**

Total (rounded)	480	2,900	3,380
Annual Average (12 year period)	40	242	282

**1995/2001**

Total (rounded)	240	2,120	2,350
Annual Average (7 year period)	34	303	336

Sources: Construction Industry Research Board, KMA

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**APPENDIX C**  
**OTHER WEST LOS ANGELES CHILD CARE CENTERS**

**Les Enfants, Inc. Pre-School**  
2702 Virginia Avenue, Santa Monica  
(310) 315-0058

**Developer**

- Page Construction

**Building Type**

- New construction
- Stand alone center built in 1998

**Size of Facility**

- Total = 10,000 square feet
- Indoor space = 5,000 square feet
- Outdoor space = 5,000 square feet

**Child Care Slots**

- Infant = 28
- Toddler = 18
- Preschool (age 3 to kindergarten) = 26

**Costs**

- *Land: N/A*
- *Construction (building shell): \$120 per square foot*
- *Tenant Improvements, Fixtures, Outdoor Play Area, etc.: \$16,000*
- *Furnishings and Equipment: \$5,000*
- *Start up Costs: \$1,700 for licensing, fire inspections, training, curriculum, and losses until facility is running at capacity*

**Parking Requirements**

- 5,000 square feet dedicated to parking

**Source**

- Nancy Behravesh, Director, Les Enfants, Inc.

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**Westside Children's Center (WCC)**

12120 Wagner Street, Culver City  
(310) 397-4200

**Developer**

- WCC

**Building type**

- New construction
- Stand alone and expansion of existing facility 2002

**Size of Facility**

- Total = 26,650 square feet
- Indoor space = 11,650 square feet
- Outdoor space = 15,000 square feet

**Child Care Slots**

- Infant = 0
- Toddler (18 – 34 months) = 48
- Preschool (age 35 months to kindergarten) = 52

**Costs**

- *Land*: Land purchase at \$1 million in 1995 when values were depressed. Industrial zoned land owned by the City of Los Angeles.
- *Construction (building shell)*: Total development costs were \$2.2 million or \$190 per square foot.
- *Tenant improvements, fixtures, outdoor play area, etc.*: \$344,000 or \$30 per square foot.
- *Furnishings and equipment*: \$87,000
- *Start up costs*: \$107,000, including curriculum materials & equipment.

**Parking Requirements**

- A new structured parking area will be provided to serve the site. There are 10 drop-off spaces.

**Other**

- Child care facility is part of the new Child Development and Neighborhood Center. The new building enables WCC to more than double its on-site child care services to lower income families, including subsidized infant care program.

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- The project also includes a large community meeting room and a professional kitchen.

**Source**

- Douglas Chin, WCC

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**New Path Montessori School**  
1962 20<sup>th</sup> Street, Santa Monica  
(310) 450-2477

**Building Type**

- Rehabilitated - 2001
- Single-family home in residential area

**Size of Facility**

- Total = 2,400 square feet
- Indoor space = 1,200 square feet
- Outdoor space = 1,400 square feet

**Child Care Slots**

- Infant = 0
- Toddler = see below
- Preschool (age 2 to kindergarten) = 30

**Costs**

- *Land*: \$328,000
- *Construction (building shell)*: \$125 per square foot
- *Tenant Improvements, Fixtures, Outdoor Play Area, etc.*: \$35,000
- *Furnishings and Equipment*: NA
- *Start up costs*: \$200 for licensing

**Parking Requirements**

- Three drop off spaces and staff parking spaces provided. 12' property in alley

**Source**

- Chandra Jayasekara (Ira), New Path

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**Saint Joseph Infant Toddler Development Center**

718 Rose Avenue, Venice

(310) 396-6468

**Developer**

- Venice Community Housing Corporation, Owner

**Building type**

- Rehabilitated – 1999
- Two-story low-rise office building

**Size of Facility**

- Total = 2,470 square feet
- Indoor space = 1,570 square feet
- Outdoor space = 900 square feet

**Child care slots**

- Infant = 6
- Toddler = 17
- Preschool (age 3 to kindergarten) = 0

**Costs**

- *Land*: \$114,900
- *Construction (building shell)*: \$161 per building square foot
- *Tenant Improvements, Fixtures, Outdoor Play Area, etc.*: above
- *Furnishings and Equipment*: \$32,000
- *Start up Costs*: \$10,600 for licensing, training, curriculum, family recruitment

**Parking Requirements**

- Two spaces

**Other**

- Mostly funded with public grants

**Source**

- Judy Alexander, Saint Joseph Center, (310) 396-6468
- Lori Zimmerman, Venice Community Housing Corporation, (310) 399-4100

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## **UCLA Campus Child Care Center**

UCLA Campus

(310) 206-1861

### **Developer**

- UCLA Capital Programs

### **Building Type**

- Planning – Expected 2003
- New stand alone center
- Renovation of existing structure (approx 1,000 square feet) for new administration area (lobby, kitchen and conference room).

### **Size of Facility**

- Total = 12,000 square feet
- Indoor space = 5,000 square feet
- Outdoor space = 7,500 square feet

### **Child Care Slots**

- Infant = 12
- Toddler = 12
- Preschool (age 3 to kindergarten) = 60

### **Costs**

- *Land:* University donation
- *Construction (building shell):* Only provided "Total Cost All In" amount equal to \$2.1 million or \$420 per building square foot
- *Tenant Improvements, Fixtures, Outdoor Play Area, etc.:* Above
- *Furnishings and Equipment:* Above
- *Start up Costs:* Above

### **Parking Requirements**

- Parking provided for staff on-campus but not attached to facility

### **Other**

- Major private donation for construction

### **Source**

- Gay Macdonald, (310) 206-1861

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## **APPENDIX D- CHILD CARE PROGRAMMATIC EXPENDITURES OF THE CITY**

### **A. Introduction**

In this section, KMA summarizes the expenditures made by the City of Santa Monica for various child care programs and youth services and links them to residential units. They are linked to residential units, and not workplace buildings, because the services and programs are available to residents if not exclusively, certainly primarily.

As indicated in the Report introduction, a narrow, but widely accepted, interpretation of the Mitigation Fee Act, AB 1600 as written into California Government Code, Section 66000 (Code) is that linkage fee type programs may only address capital or facility costs. Since the expenditures examined in this section are all programmatic costs, they are not eligible for linkage fee purposes. As such, this material is summarized for added information only.

For purposes of this exploration, KMA utilized expenditure information for one year (Fiscal Year (FY) 2002/03 Budget). Should the City elect to proceed with any use of the information, it is recommended that additional data for more years be assembled. Average annual City expenditures should reflect data from at least three to five years would to provide a more solid foundation for any purported average.

Given the limitations for proceeding with programmatic expenditures, and the fact that a residential impact fee is not recommended at this time, the information and methodology presented in this section are intended as illustrative only.

### **B. City Expenditures on Preschool Child Care**

The City of Santa Monica responds to community needs through direct service provision or contracts with community agencies through the City's Community Development (CD) Program. The CD Program awards funding to Connections for Children (CFC) and The Growing Place for child care scholarships to low and moderate-income Santa Monica families. CFC prioritizes their subsidies for the Santa Monica Child Care and Family Support Program to families of children from infants through preschool and The Growing Place is a child care center that serves families with children from three months through preschool.

Both these programs receive funding for their operations and scholarships. In FY 2002/03, CFC received \$122,025 and The Growing Place \$171,000 for operational costs. This excludes the amount of funding for their award of scholarships. In order to determine the costs of the program per residential unit in Santa Monica, it was necessary to apply the City expenditure on general program operations to all children of appropriate age in the City and ultimately all households and housing units. Another methodology, which would end with the same result, is to identify the

expenditure per household in the program and then establish the rate of participation among those eligible. This analysis is summarized in Appendix Table D-1 below. Appendix Table D-4, at the end of this section, presents the figures from the City Budget divided into the two components.

**Appendix Table D-1  
Programmatic Expenditures for Preschool Children, per Residential Unit**

<b>Total Cost of Programs</b>	
Connection Program excluding Scholarship Program	\$122,025 /Year
The Growing Place excluding Scholarship Program	\$171,000 /Year
<b>Total</b>	<b>\$293,025 /Year</b>
<b>Total Number Eligible Children in Santa Monica</b>	
Ages 0-4 plus 50% of Age 5	3,773
<b>Cost per Eligible Child in Santa Monica</b>	<b>\$77.66 /Year</b>
<b>Rate of Eligible Children per Household</b> (Number of eligible children divided by all households in Santa Monica – 44,497)	8.48%
<b>Cost per Residential Unit</b>	
Cost per Residential Unit (8.48% x \$77.66)*	\$6.59 /Year
Cost Capitalized @ 10%	\$66
*Alternatively, \$293,025 costs divided by 44,497 households = \$6.59	

The conclusion is that the cost of the program per household or residential unit (the difference being a very small vacancy factor) in Santa Monica is \$6.59 per year, or capitalized at 10% to address the long term.

### C. City Expenditures on School Age Child Care

The City of Santa Monica's program for school age children is called the CREST program. The program serves 4<sup>th</sup> and 5<sup>th</sup> grade students, or for this study's purposes children age 9 and 10 years old. Outside of the scholarship component, the City contributed \$851,968 per the FY 2002/03 Budget (see Appendix Table D-4).

A similar methodology for determining the cost per residential unit as was employed with the preschool programs is utilized.

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**Appendix Table D-2****Programmatic Expenditures for School-Age Children, per Residential Unit**

Total Cost Program	
CREST Program excluding Scholarship Portion	\$851,968 /year
Total Number Eligible Children in Santa Monica (4 <sup>th</sup> and 5 <sup>th</sup> graders or 9 and 10 year olds)	1,596
Cost per Eligible Child in Santa Monica	\$534 /year
Rate of Eligible Children per Household (Number of Eligible Children Divided by All Households in Santa Monica – 44,497)	3.60%
Cost per Residential Unit	
Cost per Residential Unit (3.6% x \$534)	\$19.22 /year
Cost Capitalized @ 10%	\$192

The conclusion is that the City spends \$19.22 per residential unit per year on this program. The annual cost capitalized is \$192.

**D. City Scholarship Programs**

As mentioned, the CD Program provides funding to the CFC and The Growing Place for programs that assist low and moderate-income households with cost of child care. In FY 2002/03, the annual amount available per child averages \$5,900 for CFC and The Growing Place and \$1,170 for the older children in the CREST Program.

For FY 2002/03, CFC awarded 79 children scholarships from 60 households. The Santa Monica Child Care and Support Program awarded approximately 70% of the scholarship families up to the 75% of the state median income and the remaining from families that exceeded the state median income. The Growing Place awarded scholarships to families attending Marine Park Child Development Center based on a variety of criteria including family income and need. They do not use a standardized formula or the state median income as criteria. The CREST program has developed its own fee schedule and will scholarship families above 80% of the state median income depending on family size. The scholarship averages were derived from total expenditures and total recipients. (See Appendix Table D-5, at the end of this section.)

The scholarship programs are available to resident families who meet their child care needs by placing their children in child care centers or family child center homes (not to pay for relatives care, nannies or babysitters). To ascertain the share of children needing child care who meet their needs in this manner, KMA relies on the percentages presented in the Report Section II addressing how families meet their child care needs.

To estimate how many qualifying households there would be per 100 residential units, one can look to the City's rate of affordable housing production as a share of total units. For the purposes at hand, one can therefore look to housing production for units affordable to up to 80% of median income households, which is consistent with the maximum income level of families who typically receive child care scholarships.

According to the recently adopted Housing Element, there were 1,167 units built in the City from 1988 through 1997 of which 395 units, or 34%, were affordable to low and very low income households (below 80% of median income) (*Housing Element Section V-2*). At the time of the Housing Element preparation, looking forward from January 1998, there were 467 out of 2,553 units proposed or in the "pipeline" that met the same income definitions, or 18%. Merging the two periods, the City averaged 23% of its annual housing production affordable units to this income range.

If the 23% average is applied to 100 residential units, we find the following:

**Appendix Table D-3  
Number of Children Eligible for Scholarships and Estimated Costs**

Per 100 Residential Units	<u>Age 0-5</u>	<u>Age 6-12</u>	<u>Total</u>
Children Needing Child Care (Appendix C, Table B-2)	3.76	4.73	8.49
Children with Child Care Needs Met by Other Than Parent or Relatives	55%	36%	45%
Number	2.07	1.70	3.77
Children Qualifying for Scholarship Subsidy @ 23%	0.47	0.39	0.86
Cost of Scholarship/Subsidy			
Per Child – Annual (see Appendix Table D-5)	\$5,900	\$1,170	
Cost per 100 Units	\$2,770	\$456	\$3,226/year
Cost per Unit			\$32.26/year
Cost Capitalized @ 10%			\$323

In summary, when the cost of the scholarship program is allocated to each residential unit, the annual cost is \$32 per year, which capitalized at 10% yields a capital cost of \$323.

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## **E. Other Expenditures for Child Care and Youth Services**

City staff assisted with the preparation of materials on City expenditures for other child care related programs and youth services. Conceptually these expenditures are the same as child care programs in that they are available to the children and youth of resident families in Santa Monica. Staff therefore screened the budgets of City departments and extracted the programs for children and youth and the amount budgeted for FY 2002/03. This procedure led to an assembly of City department programs, which include the Human Services Division, Environmental and Public Works, Police, Library, Fire, Resource Management, SMMUSD, City Manger, Community and Culture, Community Programs and the Blue Bus.

Appendix Table D-6 at the end of this section contains the listing of programs and amounts in the proposed budget. The program list does not include the expenditures for the preschool or other programs presented thus far in this analysis. All programs on the list are additional programs; there is no double counting. The finding is that the City's proposed budget contained programs for children and youth totaling \$11,751,914 or nearly \$12 million.

At the time of the 2000 U.S. Census, the City of Santa Monica had 12,815 children under age 18 residing in it. The total expenditure divided by the number of children is nearly \$1,000 for each child per year, or \$917 per year to be more precise.

The total City expenditures divided by the number of households yields \$264 per household, which capitalized at 10% is \$2,640 per residential unit.

## **F. Summary of Costs Per Residential Unit**

As previously described, there are limitations to residential linkage in Santa Monica due to the lack of growth in the number of young children in the City. In addition there is the requirement of a liberal interpretation of the Code to do a linkage program using operational or program type costs. Finally, figures here are drawn from a single budget year. For these reasons, KMA emphasizes that the analysis is illustrative only.

The following summarizes the total child care program and youth services expenditures amounts per residential unit. The result of adding together all the pieces is:

---

	<u>Cost per Unit</u>
City Preschool Programs	\$66
City School Age Program (CREST)	\$192
City Scholarship/Subsidy Program	\$323
Other City Expenditures for Child Care and Youth Services	<u>\$2,640</u>
 Total Per Residential Unit	 \$3,221

In summary, the total child care programmatic costs, including youth services for children up through age 17, is \$3,221 per residential unit in Santa Monica.

Table D-4

**CITY PROGRAMS FOR PRE-SCHOOL AND SCHOOL AGE CHILDREN  
CHILD CARE LINKAGE PROGRAM  
CITY OF SANTA MONICA**

<u>Program &amp; Budget Category</u>	<u>Annual Youth Budget</u> <sup>1</sup>	<u>Annual Subsidies/ Scholarships</u> <sup>2</sup>	<u>Balance/ Program Cost</u>
<b>I. Community and Cultural Services Department</b>			
<b>A. Human Services Division</b>			
Community Development Program Grantees			
Connections for Children	\$753,740	\$590,136	\$163,604
The Growing Place	\$246,000	\$65,986	\$180,014
<b>B. Direct Services Programs</b>			
CREST -			
Child Care Component Only	\$846,570	\$0	\$846,570
Scholarships	\$605,501	\$520,200 <sup>3</sup>	\$0

<sup>1</sup> City of Santa Monica, Proposed FY 2002-03 Youth Budget

<sup>2</sup> City of Santa Monica, Subsidy Information FY 2001-02 provided by City staff. See Table B-5

<sup>3</sup> Assumes difference is attributed to other non-youth scholarship programs itemized in budget.

APPENDIX TABLE D-5  
 CITY SCHOLARSHIP/SUBSIDY PROGRAM SUMMARY  
 CHILD CARE LINKAGE PROGRAM  
 CITY OF SANTA MONICA

Program	Annual Scholarship/Subsidy								Program Guidelines			
	Number of Recipients				Average Amount Per Child				Subsidy Calculation	Other Requirements Affordable	Residency Requirement	Comments
	0-2	Years 2-5	5+	Total	0-2	Years 2-5	5+ Years	Weighted Average				
Connections For Children (CFC)	34	67	6	107	\$3,800	\$6,600	\$4,200	\$5,500	70 subsidies awarded by ranking order in accordance with CA Dept of Ed. Family Fee Schedule. 30 subsidies exceed Dept of Ed standards to meet households earning up to \$45,000 for a household of four (nearly 80% of median income for Los Angeles County).	By sliding income scale, the CA Dept of Ed sets the fee to be paid by a family. Qualified households earn less than 75% of County Median, adjusted for household size. For instance, a household of three earning less than 50% of LA County Median will pay \$40 per month for full-time daily care.	Yes	In addition to providing full day early childhood child care, program has component to provide training to foster children's early development. Provides operating subsidy support to one child care center; support and technical assistance to centers and family child care facilities.
The Growing Place (MPCDC)	3	13	0	16	\$4,800	\$4,000	\$0	\$4,100	Committee of the Board decides the awards based on "Tuition Assistance Application" provided by the parent. A priority system for enrollment is established for City of Santa Monica employees.	N/A	Priority Only	

Program	Subsidy						Program Guidelines			
	Number of Recipients by Grade			Average Amount Per Child			Subsidy Calculation	Other Requirements Affordable	Residency Requirement	Comments
	K-3rd "Primary Crest"	4th & 5th "Upper Crest"	Total	K-3rd	4th & 5th	Weighted Average				
CREST	51	255	306	N/A	N/A	\$1,700	A Human Services Division's sliding scale fee is based on federal and state income guidelines, adjusted for Santa Monica high income area. Once income limits are met, all children in a household qualify. Participants must qualify annually.	Income sliding scale based on household size to receive scholarship ranging between 25% and 100% of fee. Incomes are less than the Los Angeles County median income.	Must be resident to qualify for a scholarship.	Program operates in 7 SM-MUSD elementary schools. By MOU the school district provides the classrooms/playgrounds and the City provides child care & other youth programs. The program is not fully subscribed. Monthly fees for the "before & after school program" range between \$223-\$285.

Santa Monica College "On the Move Program" excluded because service provided primarily to parents associated with the school. For FY 2001/02, the City provided nearly \$45,000 to 7 children, an average subsidy of \$6,430 per child.

Table D-6

**CITY EXPENDITURES FOR CHILD CARE AND OTHER YOUTH SERVICES\***

**CITY OF SANTA MONICA**

**PROPOSED FY 2002-03 YOUTH BUDGET**

*(non school based programs and funding levels are in italic)*

**DRAFT**

**Santa Monica-Malibu Unified School District**

Annual Operating Grant	\$3,000,000
Grad Nite Subsidy	8,100

**City Manager**

<i>KidScape/Family Guide Publication</i>	22,000
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**Community and Cultural Services Department**

**Capital Improvements Program**

<i>Skate Park</i>	572,000
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**Cultural Arts Division**

<i>Non-School funding and programs</i>	55,590
<i>School Linked Funding and Programs</i>	177,500

**Community Programs Division**

Youth Classes and Programs	69,574
Miles Playhouse	167,756
School Playground Community Use Access Program	168,912
Therapeutic Programs	25,888

*Event Facilities*

<i>Fee Waivers for Parking and Rental to School District</i>	29,200
--	--------

**Human Services Division**

Community Development Program Grantees	
<i>Boys and Girls Club of Santa Monica (Skate Park)</i>	25,420
Computer Access Center	11,583
Dispute Resolution Services: (Youth and Family Program)	48,175
El Nido Family Center (Edison/Will Rogers Elementary)	110,085
Family Service of Santa Monica (McKinley, Muir Elementary/SAPID)	137,760
<i>Family Service of Santa Monica: Agency Based Services</i>	57,605
Growing Place: Mentor Program	10,250
Jewish Family Service of Santa Monica (Santa Monica High School)	26,138
<i>Ocean Park Community Center: Sojourn Services</i>	47,300
Santa Monica-Malibu Unified School District: Enlace Familiar	62,360

Santa Monica-Malibu Unified School District: Santa Monica High School Alliance	308,013
Saint John's Child and Family Center (John Adams/Lincoln/Olympic)	175,705
<i>St. Joseph Center: Family Self Sufficiency</i>	161,875
<i>WISE: Senior Services: RSVP/America Reads</i>	30,750
Woodcraft Rangers: Pico Neighborhood Youth and Family Center	318,000
Direct Service Programs	
Aquatics	859,822
Middle School Sports Leagues	126,807
CREST (Childcare, Recreation, Enrichment, Sports Together)	
Recreation (Playground Access)	73,281
Enrichment	131,412
Sports	262,796
<i>Police Activities League</i>	444,625
<i>Virginia Avenue Park: Youth and Families Programs</i>	421,435
<b><u>Environmental Public Works Management</u></b>	
School Related Programs	68,500
Non-School Related Programs	38,500
<b><u>Fire Department: Fire Safety Programs</u></b>	31,500
<b><u>Library Services</u></b>	
School Based	355,000
Youth and Families Services	1,514,730
<b><u>Police Department</u></b>	
School-Based Services	457,053
Youth and Family Services	1,106,414
<b><u>Resource Management Department</u></b>	12,000
<b><u>Big Blue Bus</u></b>	20,500
	<hr/>
<b>TOTAL</b>	<b>\$11,751,914</b>

\*Excludes: Connections Program  
CREST Child Care  
City Employee Child Care Subsidies  
Growing Place: Marine Park Child Development Center  
All Scholarship/Subsidy Programs



# San Francisco Infrastructure Level of Service Analysis

DECEMBER 2021

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## Acronyms

ADT	Average Daily Trips
AECOM	Architecture, Engineering, Consulting, Operations and Maintenance
ALS	Advanced Life Support
BSP	Better Streets Plan
CAD	Canadian Dollars
CCC	Child Care Center
CPAC	Child Care Planning and Advisory Council
DCYF	Department of Children, Youth and Their Families
DPH	Department of Public Health
EMS	Emergency Medical Services
FCC	Family Child Care Program
FY	Fiscal Year
LOS	Level of Service
LRT	Light Rail Transit
MTC	Metropolitan Transportation Commission
MTS	San Diego Metropolitan Transit System
MUNI	San Francisco Municipal Railway
NFPA	National Fire Protection Agency
NPRA	National Park and Recreation Association
NYC	New York City
OCII	Office of Community Investment and Infrastructure
SF	San Francisco
SF-CHAMP	San Francisco Chained Activity Modeling Process
SFDPW	San Francisco Department of Public Works
SFEMSA	San Francisco Emergency Medical Services Agency
SFFD	San Francisco Fire Department
SFMTA	San Francisco Municipal Transportation Agency
SFOECE	San Francisco Office of Early Care and Education
SFPL	San Francisco Public Library
SFPUC	San Francisco Public Utilities Commission
SFRPD	San Francisco Recreation and Park Department
SPU	Service Population Unit(s)
TAZ	Transportation Analysis Zone
TIDA	Treasure Island Development Authority
TIDF	Transit Impact Development Fee
TJPA	Transbay Joint Powers Authority
TSF	Transportation Sustainability Fee
UC	University of California

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# 1 Executive Summary

## 1.1 Capital Improvement Program Prioritization

Infrastructure plays a critical role in creating a thriving economy and vibrant communities. The City of San Francisco Planning Department and the Capital Planning Program commissioned this study to continue the City's efforts to strategically address its infrastructure needs. In the past fifteen years or so, the City has moved forward on several initiatives to strengthen its capital planning process, including establishing the Capital Planning Program and creating the City's first 10-Year Capital Plan in 2006. The Capital Plan is a fiscally constrained, long-range plan that draws on existing planning documents, such as the City's General Plan and Neighborhood Area Plans, to guide policy and funding decisions related to infrastructure investments. The Plan is updated and approved by the Capital Planning Committee, the Board of Supervisors, and the Mayor every other year.

This study supports these capital planning efforts first by quantifying the current level of infrastructure services within the City, and second by developing target levels for those services based on agency directives and recommendations from the consultant. The study also recognizes the City has limited resources to fund and maintain infrastructure and that the City needs to set realistic infrastructure provision goals. The results of this report are intended to help inform the City's capital planning process and future infrastructure decisions. As part of this process, the following six infrastructure categories have been reviewed:

1. Recreational and Open Space Infrastructure
2. Child Care Facilities
3. Complete Streets Infrastructure
4. Transit Infrastructure
5. Library Facilities
6. Fire Department Facilities

For each of these categories, this study evaluates (1) the existing level of service (LOS), (2) an aspirational, long-term LOS standard, and (3) a realistic, short-term (2025<sup>1</sup>) LOS standard. Each of these LOS is described in greater detail below.

## 1.2 Project Objectives

The infrastructure LOS review and analysis study has four objectives:

- Evaluate existing levels of infrastructure provision and distribution throughout the City;
- Recommend aspirational and attainable LOS targets for the City considering fiscal, policy, physical, and social constraints;
- Use existing LOS provisions along with the developed LOS standards as a tool to understand potential opportunities for capital investment; and
- Provide guidelines for evaluating capital projects in terms of citywide standards.

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<sup>1</sup> In most cases the timeframe of analysis is from the year 2019 (the year this Report was drafted) until 2025. The exception is the transit infrastructure category, for which the timeframe of analysis extends until 2040. This selection of a longer timeframe is discussed in more detail in the relevant infrastructure chapter.

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### 1.3 Standards-Based Metrics

Where appropriate, this study uses standards-based metrics to quantify the appropriate LOS for each infrastructure category. Standards-based metrics are metrics that measure infrastructure provision against a measure of population – typically either population (residents) or service population (residents and a share of employees). An example of a standards-based metric would be: 2 miles of street per 1,000 residents.

The benefits of using standards-based metrics include being able to:

- Set clear City targets for infrastructure provision and capital planning;
- Measure infrastructure distribution across the City’s neighborhoods, thereby identifying areas of need;
- Allow infrastructure provisions to be benchmarked against past/future provision;
- Inform future planning and large-scale redevelopment decisions;
- Contribute to a common language and tool for agency policies and various infrastructure types;
- Measure and track the City’s infrastructure provision in relation to other comparable cities;
- Provide a visual tool to help prioritize capital investment; and
- Streamline the development impact fee nexus update process.

Given constraints associated with some infrastructure categories, not all LOS metrics within this study are standards-based. Each infrastructure category section describes its LOS metric and why that is the most appropriate for that infrastructure category.

### 1.4 Development Process

LOS metrics were developed based on existing City policies, department consultation, and an overview of best practices from comparable cities throughout North America. The key finding from the best practices review is that the consistency of infrastructure metrics vary greatly by infrastructure category; while recreational and open space had fairly consistent metrics (or at least a consistent approach to metrics) throughout the case study cities, child care had almost no metrics, and transit infrastructure had very different metrics across case study cities.

To develop LOS targets, the first step was to determine quantitative metrics for each infrastructure type. The current provision was then mapped onto this quantitative metric to understand distribution across neighborhoods. Next, the long-term aspirational goals were identified based on policy research, departmental input, and consistency with San Francisco’s General Plan. The long-term aspirational goals reflect policy goals that may become achievable over the long-term under alternate financing and social landscapes – i.e. given fewer constraints, financial and otherwise. After quantifying these two conditions, the current LOS and the long-term aspirational goal, short-term targets were developed to reflect infrastructure development objectives that are more feasible given fiscal and social constraints. The short-term (2025 in most cases) targets were developed in consultation with responsible departments and reflect a reasonable estimate of what the City intends to achieve based on prevailing fiscal conditions in San Francisco for both capital and operations & maintenance costs. In most cases, the short-term targets reflect a preservation of the current LOS.

In addition to supporting capital planning efforts, the short-term targets help inform future development impact fees: feasible short-term targets help set reasonable fee levels. By contrast, basing development impact

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fees on the ambitious infrastructure provision of the long-term aspirational goals would create an undue burden on new development that the City is unable to match.

Finally, it is important to note that these goals and targets do not pre-ordain funding to specific locations but rather set up a systematic approach to help understand locations of potential infrastructure investment and determine potentially appropriate infrastructure projects to consider. Individual projects will be guided by a number of other factors including but not limited to departmental guidance, community support, and fiscal feasibility.

## 1.5 Findings

The Existing and Proposed Level of Service section summarizes the LOS metrics, the current provision, and the short-term targets for the six infrastructure categories, and it compares these points to the previous LOS study from 2014. The LOS targets developed as part of this work are consistent with current City plans and are intended to be applied as guidelines. The City may choose to aspire to higher goals or lower targets to account for unique neighborhood characteristics and/or available resources for investing in and maintaining new infrastructure.

Because few cities have well-defined LOS targets, it can be difficult to compare San Francisco's performance against comparable cities. However, where it is possible to do so, each section compares San Francisco's infrastructure provision to the case study cities. San Francisco is generally on par or better in terms of infrastructure provision.

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## 2 Introduction

In 2019, Hatch was retained by the San Francisco Planning Department, the Office of Resilience and Capital Planning, and the City Attorney's Office to conduct a review of the City and County of San Francisco's (the City's) infrastructure provision. The fundamental questions analyzed were:

1. What are the existing citywide levels of service (LOS) for the reviewed infrastructure categories?
2. What infrastructure LOS standards does the City aspire to if fiscally unconstrained?
3. What infrastructure LOS standards should the City realistically target?
4. Given LOS standards, for each infrastructure category, what is the anticipated citywide shortfall by 2025, based on population growth?

This report updates the San Francisco Infrastructure level of Service Analysis report completed by AECOM in 2014.

Specifically, this report provides insights into determining LOS targets for six infrastructure categories:

1. Recreational and Open Space Infrastructure
2. Child Care Facilities
3. Complete Streets Infrastructure
4. Transit Infrastructure
5. Library Facilities
6. Fire Department Facilities

To determine LOS metrics and standards, this report relied on existing City plans and reports related to the six infrastructure categories. This report is intended to inform infrastructure provision in the City to address existing and future shortfalls.

The LOS targets developed as part of this work are consistent with current City plans and are intended to be applied as guidelines. The City may choose to aspire to higher goals or lower targets to account for unique neighborhood characteristics and/or available resources for investing in and maintaining new infrastructure.

### 2.1 Project Objectives

The infrastructure LOS review and analysis portion of the project has four clear objectives:

- To evaluate existing levels of infrastructure provision and distribution throughout the City;
- To develop and propose aspirational and attainable LOS targets for the City consistent with the General Plan;
- To use the developed level of service standards as a capital planning tool; and
- To provide guidelines for evaluating capital projects in terms of citywide standards.

While this report does not cover the estimation of new developments' share of infrastructure provision, it does provide the foundation for the *2021 San Francisco Infrastructure Nexus Analysis*.

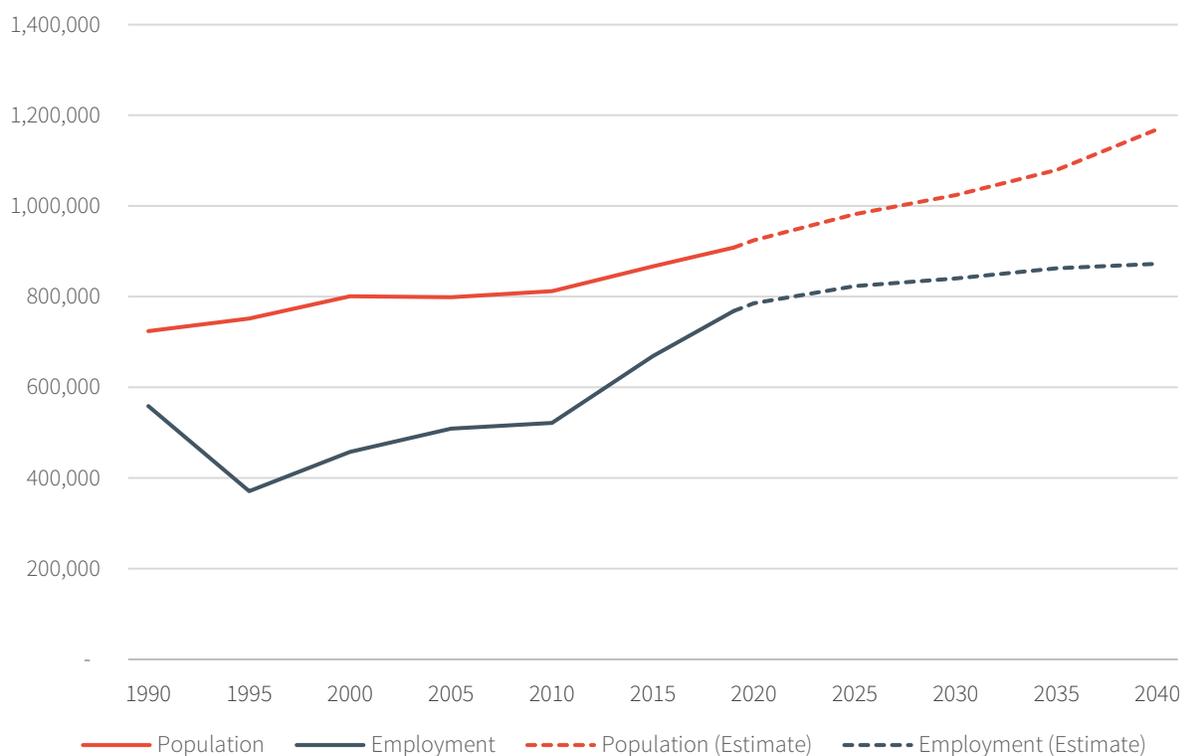
## 2.2 Capital Improvement Program Prioritization

Recognizing the critical role infrastructure plays in creating a thriving economy and vibrant communities, the City commissioned this study to continue its efforts to strategically address its infrastructure needs. The City has moved forward on several initiatives to strengthen its capital planning process, including establishing the Capital Planning Program and creating the City's first 10-Year Capital Plan in 2006. The Capital Plan is a fiscally-constrained, long-range plan that draws on existing planning documents, such as the City's General Plan and Neighborhood Area Plans, to guide policy and funding decisions related to infrastructure investments. The Plan is updated and approved by the Capital Planning Committee, the Board of Supervisors, and the Mayor every other year.

This study quantifies the current level of infrastructure services within the City and develops target levels for those services based on 2019 data and demographic projections. The time period covering the COVID-19 pandemic will be included in the next level of service analysis report.

## 2.3 Demographic Growth and Projected Infrastructure Shortfalls

FIGURE 1: SAN FRANCISCO POPULATION AND EMPLOYMENT, 1990-2040<sup>2</sup>



Both the City's residential and employment populations use City infrastructure on a daily basis. As the City grows, demand on that infrastructure will increase with growth. This report analyzes the current LOS for City infrastructure categories, in part, to establish the additional infrastructure necessary to support further growth

<sup>2</sup> Sources: San Francisco Commerce & Industry Reports (published by SF Planning), 2004, 2012, 2016. San Francisco Population and Employment Projections (from SF Planning).

and maintain the high quality of life San Francisco is known for. Figure 1 shows the projected growth in residential population and employment in the City through 2040<sup>3</sup>.

Part of establishing citywide infrastructure provision is analyzing the distribution of infrastructure throughout the City. For the most part, this is done at the neighborhood level. Figure 2 shows the neighborhoods used for analysis in this report<sup>4</sup>.

FIGURE 2: SAN FRANCISCO NEIGHBORHOODS



Source: San Francisco Planning Department



**LEGEND**

- County Boundary ———
- Highways ———
- Neighborhoods ·····

**City Neighborhoods**

- Neighborhood boundary - - - - -

<sup>3</sup> The bulk of this report was completed in 2019, using 2019 data, costs, and demographic projections. The period of COVID-19 will be part of the next level of service analysis.

<sup>4</sup> The neighborhood boundaries shown in the Figure 2 are from the SF Planning Department’s Division of Neighborhoods.

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## 2.4 Approach & Report Organization

This study begins with a chapter summarizing the infrastructure provision metrics and levels of service, comparing them to the prior (2014) report. The remainder of the report includes one chapter per infrastructure category. The Socio-Economic Analysis section presents an analysis of infrastructure provision in San Francisco's Equity Priority Communities. The appendix contains details of how several datapoints in the report were reached.

Each infrastructure chapter is organized as follows:

- Each chapter opens with a discussion of background information about the infrastructure category and typical measures for infrastructure provision. A review of the provision of the infrastructure category within San Francisco is included, with reference to provision in case study cities.
- Metrics for that infrastructure category within San Francisco are proposed. San Francisco's current level of service is quantified, as per the proposed metric. An aspirational goal and a short-term target are identified, as per the proposed metric.
- New demand for infrastructure based on expected growth (through 2025 or 2040) is forecasted and assessed.

### 3 Existing and Proposed Level of Service

TABLE 1: COMPARISON OF INFRASTRUCTURE PROVISION METRICS, LEVELS OF SERVICE, AND GOALS FROM 2014 TO 2019

2014 LOS Analysis		2019 LOS Analysis	
<b>Recreational and Open Space</b>			
<b>Metrics</b>	<ul style="list-style-type: none"> <li>Acres of City-owned open space per 1,000 service population units</li> <li>Acres of open space per 1,000 adjacent residents</li> </ul>		<ul style="list-style-type: none"> <li>Acres of City-owned open space per 1,000 service population units</li> <li>Percent of service population units within a 10-minute (half-mile) walk of open space</li> </ul>
<b>Level of Service</b>	<ul style="list-style-type: none"> <li>4.0 acres of City-owned open space per 1,000 service population units</li> <li>Average of 2.7 acres of open space per 1,000 adjacent residents; Median of 0.7</li> </ul>		<ul style="list-style-type: none"> <li>3.0 acres of City-owned open space per 1,000 service population units</li> <li>100% of SPU are within a 10-minute (half-mile) walk of open space</li> </ul>
<b>Goals</b>	<ul style="list-style-type: none"> <li>Maintain 4.0 acres of City-owned open space per 1,000 service population units</li> <li>Achieve 0.5 acres of open space per 1,000 adjacent residents at all parks</li> </ul>		<ul style="list-style-type: none"> <li>Maintain 3.0 acres of City-owned open space per 1,000 service population units</li> <li>Maintain 100% of SPU within a 10-minute (half-mile) walk of public open space, and improve quality of open space</li> </ul>
<b>Child Care Facilities</b>			
<b>Metrics</b>	<ul style="list-style-type: none"> <li>Percent of infant/toddler child care demand served by available slots</li> <li>Percent of preschool child care demand served by available slots</li> </ul>		<ul style="list-style-type: none"> <li>Percent of infant/toddler child care demand served by available slots</li> <li>Percent of preschool child care demand served by available slots</li> </ul>
<b>Level of Service</b>	<ul style="list-style-type: none"> <li>37% of infant/toddler child care demand served by available slots</li> <li>99.6% of preschool child care demand served by available slots</li> </ul>		<ul style="list-style-type: none"> <li>19% of infant/toddler child care demand served by available slots</li> <li>88% of preschool child care demand served by available slots</li> </ul>
<b>Goals</b>	<ul style="list-style-type: none"> <li>Maintain 37% LOS capacity for infant/toddler child care demand</li> <li>Achieve 100% LOS capacity for preschool child care demand</li> </ul>		<ul style="list-style-type: none"> <li>Accommodate 100% of new demand for infant/toddler child care space</li> <li>Accommodate 100% of new demand for preschool child care space</li> </ul>
<b>Complete Streets Infrastructure</b>			
<b>Metrics</b>	<ul style="list-style-type: none"> <li>Square feet of improved sidewalk per service population unit</li> </ul>		<ul style="list-style-type: none"> <li>Square feet of Complete Streets Sidewalk per service population unit<sup>5</sup></li> </ul>
<b>Level of Service</b>	<ul style="list-style-type: none"> <li>103 square feet of sidewalk per service population unit</li> </ul>		<ul style="list-style-type: none"> <li>118 square feet of Complete Streets Sidewalk per service population unit<sup>6</sup></li> </ul>
<b>Goals</b>	<ul style="list-style-type: none"> <li>88 square feet of improved sidewalk per service population unit</li> </ul>		<ul style="list-style-type: none"> <li>Maintain 118 square feet of Complete Streets Sidewalk per service population unit</li> </ul>
<b>Transit Infrastructure</b>			

<sup>5</sup> The 2019 Complete Streets Sidewalk metric includes bicycle infrastructure, whereas the 2014 improved sidewalk metric did not.

<sup>6</sup> Sidewalk area increased from the 2014 report due to errors found in the estimation of citywide sidewalk area in the 2014 report.

2014 LOS Analysis		2019 LOS Analysis	
Metrics	<ul style="list-style-type: none"> <li>Transit crowding: boardings exceeding 85% of vehicle capacity</li> <li>Transit travel time</li> </ul>	<ul style="list-style-type: none"> <li>Transit crowding: passenger miles in vehicles with less than three square feet per standing passenger</li> <li>Transit maintenance</li> </ul>	
Level of Service	<ul style="list-style-type: none"> <li>No LOS reported</li> <li>33.7 minutes per average travel time</li> </ul>	<ul style="list-style-type: none"> <li>15% of passenger miles systemwide in crowded conditions</li> <li>1.45 revenue service hours provided per 1,000 daily auto plus transit trips</li> </ul>	
Goals	<ul style="list-style-type: none"> <li>Decrease crowding</li> <li>33.6 minutes per average travel time</li> </ul>	<ul style="list-style-type: none"> <li>Improve existing LOS (decrease percent crowded passenger miles)</li> <li>Maintain existing LOS</li> </ul>	
<b>Library Facilities</b>			
Metrics	<ul style="list-style-type: none"> <li>Not included in 2014 report</li> </ul>	<ul style="list-style-type: none"> <li>Square feet of library per resident</li> </ul>	
Level of Service	<ul style="list-style-type: none"> <li>Not included in 2014 report</li> </ul>	<ul style="list-style-type: none"> <li>0.67 square feet of library per resident</li> </ul>	
Goals	<ul style="list-style-type: none"> <li>Not included in 2014 report</li> </ul>	<ul style="list-style-type: none"> <li>Maintain 0.6 square feet of library per resident</li> </ul>	
<b>Firefighting Facilities</b>			
Metrics	<ul style="list-style-type: none"> <li>Not included in 2014 report</li> </ul>	<ul style="list-style-type: none"> <li>Fire stations per 1,000 service population units</li> </ul>	
Level of Service	<ul style="list-style-type: none"> <li>Not included in 2014 report</li> </ul>	<ul style="list-style-type: none"> <li>0.04 fire stations per 1,000 service population units</li> </ul>	
Goals	<ul style="list-style-type: none"> <li>Not included in 2014 report</li> </ul>	<ul style="list-style-type: none"> <li>Maintain 0.04 fire stations per 1,000 service population units</li> </ul>	

For provision of recreational and open space, this report preserves the two metrics from the 2014 report but changes them slightly. As described in further detail in Section 4, the definition of service population units (SPU) has changed for the purposes of measuring parks and open space: the 2014 report counted 19% of all employees toward the total SPU count, but this report counts 50% of employees toward the parks SPU, due to additional research on San Francisco park usage by employees in the City, which shows that employees in San Francisco use City parks more than was previously assumed. This is one of the main contributing factors to why the current level of service for acres of City-owned parks per 1,000 SPU is so much lower in 2019 than 2014 (3.0 compared to 4.0).

This report also replaces the acres of open space per 1,000 adjacent residents metric from the 2014 report with a new metric, walking distance. The 2014 report discusses park access (via walking distance) in the background section, but does not include it as a metric, because the level of service across San Francisco is so high already (100% of SPU are within a 10-minute walk). However, this report cast a broader net for case study comparisons than the 2014 report, and found that walking distance is a common parks metric among peer cities. After discussions with the San Francisco Recreation and Park Department (SFRPD), it was decided that walking distance is more relevant than the adjacent parks metric. An updated acres of open space per 1,000 adjacent SPU map is included in the appendix.

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For provision of child care facilities, the City is no longer using a level of service methodology to calculate the nexus fee maximum. Instead, the *2021 San Francisco Infrastructure Nexus Analysis* uses a linkage methodology to examine the demand new development makes on child care infrastructure. This stands in contrast to the 2014 report, where child care is measured through a level of service metric. This report includes an assessment of child care level of service using the 2014 study’s metrics, but to the child care fee uses a linkage approach (see *2021 San Francisco Infrastructure Nexus Analysis for more information about linkage analysis*). The goal is no longer set relative to level of service, but rather to meet 100% of new demand created by new development.

The complete streets infrastructure category represents a combination of two infrastructure categories from the 2014 report: streetscape and pedestrian infrastructure, and bicycle infrastructure. However, in the 2014 report, there were no metrics given for bicycle infrastructure, so only the streetscape and pedestrian infrastructure metric is listed in Table 1.<sup>7</sup> This report uses the same metric, square feet of improved sidewalk space per service population unit. Improved sidewalk space, in this case, includes bike lanes as part of the “complete streets” environment. The metric will be referred to as “Complete Streets Sidewalk” from here on out.

In the transit category, the 2014 report used two LOS performance metrics: transit travel time and transit crowding. The 2015 Transportation Sustainability Fee (TSF) update modified these two metrics by keeping the transit crowding metric and substituting a transit maintenance demand metric for the transit travel time metric. These two updated metrics were developed to directly support the 2015 TSF nexus analysis. This 2019 update to the Level of Service Analysis uses the same two metrics used in the 2015 TSF update.

Library and firefighting facilities both represent new infrastructure categories for this report and were not included in the 2014 LOS report. The metrics for both categories are designed to estimate the amount of capital facilities per user for each infrastructure type.

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<sup>7</sup> In the 2014 report, bicycle infrastructure goals were set to achieve planned bicycle improvements at the time, rather than through an established level of service.

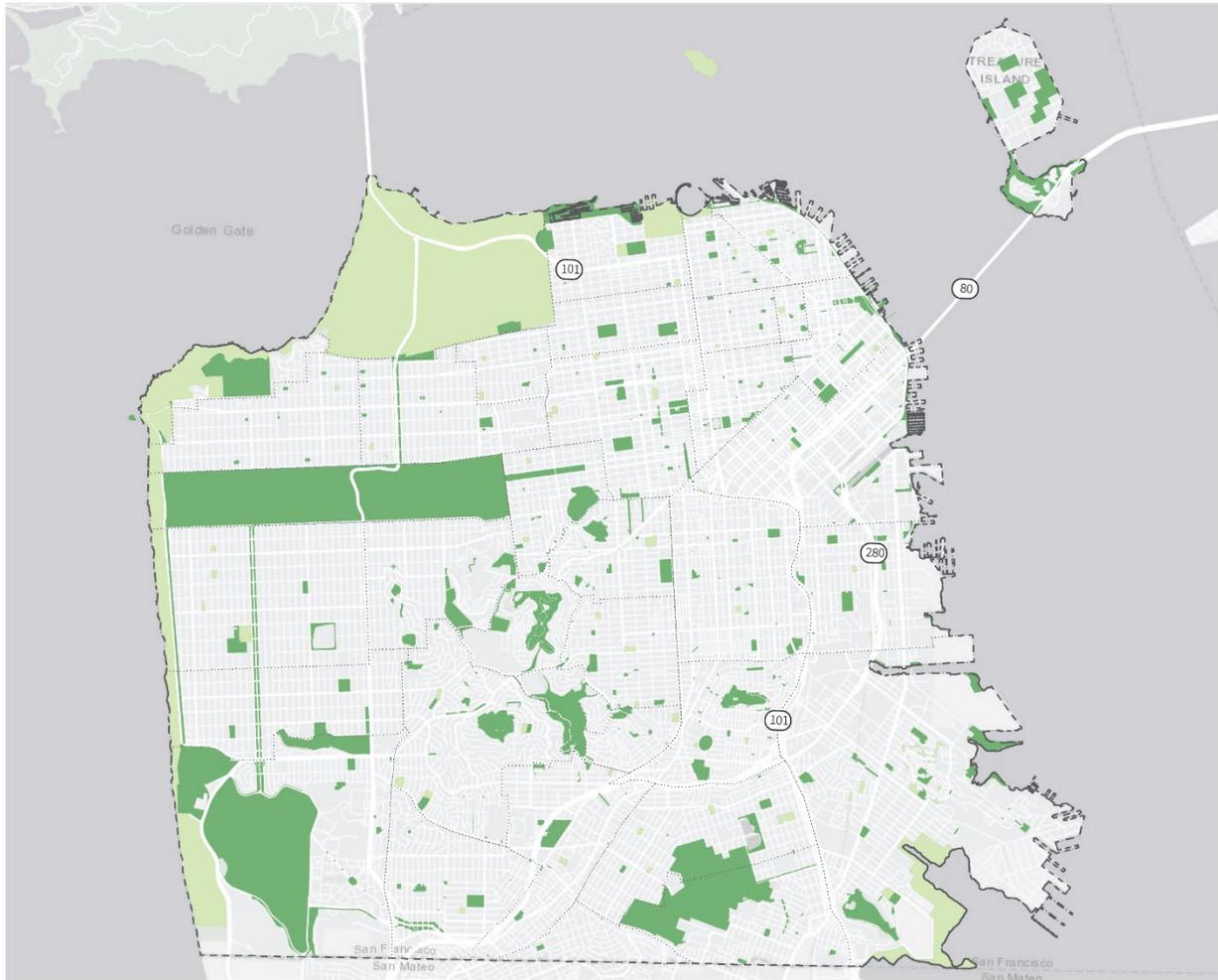
## 4 Recreational and Open Space Infrastructure

Recreational and open space infrastructure has received significant attention in San Francisco, both from City agencies and the public. This section outlines conventions among a set of case-study cities, examining the metrics they use and comparing existing levels of service. This section will then propose metrics and map existing conditions based on those metrics. Table 2 lists the City documents consulted for this section. Note that the terms parks, open space, and recreational space are used synonymously to refer to recreational and open space. For further information, see Figure 3, a map of San Francisco open space by ownership.

TABLE 2: RECREATION AND OPEN SPACE GUIDING AND REFERENCE POLICY DOCUMENTS

Policy Document	Year	Key Contributions
Recreation and Open Space Element	2014	<ul style="list-style-type: none"> <li>Information on existing and proposed open space</li> <li>Analysis of open space distribution</li> </ul>
San Francisco Infrastructure Level of Service Analysis	2014	<ul style="list-style-type: none"> <li>Background information on open space standards</li> <li>San Francisco open space data and analysis</li> </ul>
Transit Center District Plan	2012	<ul style="list-style-type: none"> <li>Downtown-specific open space information</li> <li>Analysis of Privately-Owned Public Open Spaces</li> </ul>
San Francisco Recreation and Park Department Acquisition Policy	2011	<ul style="list-style-type: none"> <li>Historical and planned park acquisitions</li> <li>Department priorities for new open space</li> </ul>

FIGURE 3 : TOTAL RECREATION AND OPEN SPACE BY OWNERSHIP (2018)



Total City Open Space (existing acres)	6,301
City-owned* open space	3,844
Non-city** owned open space	2,457
Total Acres / 1,000 Residents	6.9
Total Acres / 1,000 SPU***	4.9
Total City-Owned Acres / 1,000 Residents	4.2
Total City-Owned Acres / 1,000 SPU	3.0



**LEGEND**

- County Boundary      - - - - -
- Highways              ———
- Neighborhoods      ———

**Open Space by Ownership**

- City-owned open space
- Non-city owned open space

\* City-owned open space includes open space controlled by SFRPD, SFDPW, the Port, SFMTA, SFPL, SFPUC, OCII, TIDA, and TJPA.

\*\* Non-city owned open space includes state and federally-owned open space.

\*\*\* Service Population Unit is calculated as one times the resident population plus 0.5 times the employee population, setting up a 1:0.5 ratio of intensity of use between residents and employees.

Source: San Francisco Recreation and Park Department, City Parks 2018

## 4.1 Background

Traditionally, recreational and open space is measured as a ratio of acres of open space to residents. The National Park and Recreation Association (NPRA) defined a recommendation of 10 acres of park per 1,000 people in 1981,<sup>8</sup> and that recommendation has since become a common standard. More recently, however, city governments have begun adopting more appropriate standards for densely-populated cities.<sup>9</sup> Among the comparison cities for this report, service goals range from 2.8 acres of city-owned park space (San Diego<sup>10</sup>) to 7.5 acres of total open space including non-city-owned (San Jose<sup>11</sup>) per 1,000 residents. San Francisco currently provides 4.2 acres of city-owned recreation space per 1,000 residents, and 6.9 acres of total recreation space per 1,000 residents.<sup>12</sup>

The metric of open space provision, however, is more accurately measured per service population units (SPUs), not residents. Service population units consist of city residents and a proportion of city workers. The proportion is calculated to reflect the frequency with which San Francisco park users visit parks from their place of work (if that place of work is within San Francisco) relative to visiting parks from their place of residence (if that place of residence is within San Francisco). The standard assumption in most infrastructure categories is a worker ratio of 0.5, meaning San Francisco park users visit parks from their place of work with roughly half the frequency as from their place of residence.<sup>13</sup> However, for open space specifically, previous reports have used a lower ratio of workers to residents, 0.19:1. For this analysis, the Hatch team performed a survey of San Francisco park users and pedestrians to determine the relative frequency with which city park users visit parks from their place of work relative to their place of residence.<sup>14</sup> Based on the survey results, the ratio of workers to residents was determined to be closer to the standard 0.5:1 ratio than 0.19:1.<sup>15</sup> This means that the SPU total is defined to be all city residents and 50% of city workers. Using this figure, San Francisco provides 3.0 acres of City-owned open space per 1,000 SPU and 4.9 acres of total open space per 1,000 SPU.<sup>16</sup>

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<sup>8</sup> Fogg, George E. National Recreation and Park Association, Park Planning Guidelines. 1981.

<sup>9</sup> San Francisco Infrastructure Level of Service Analysis. 2014.

<sup>10</sup> San Diego General Plan, Recreation Element. Updated 2015.

<sup>11</sup> Envision San Jose 2040 General Plan. Amended 2011.

<sup>12</sup> 2019 population data from SF Planning. Geospatial park data from SF Recreation and Park.

<sup>13</sup> This is consistent with previous fiscal impact studies prepared for the City, such as the 2011 Parkmerced Fiscal and Economic Impacts Analysis Overview, and the 2018 1690 Folsom Street Economic Impact Study. The 2014 San Francisco Citywide Nexus Study also used the 0.5:1 worker to resident ratio for infrastructure categories other than open space.

<sup>14</sup> 499 surveys were collected from 5 different parks across San Francisco. Each park was surveyed multiple times, and survey collection times included mornings, evenings, and weekends. For further information, see the survey memo in the Appendix, Section 11.5.

<sup>15</sup> More information on the Parks Survey can be found in the Appendix, Section 11.5.

<sup>16</sup> 2019 employment data from SF Planning.

TABLE 3: OPEN SPACE PER CAPITA

		CITY-OWNED OPEN SPACE	TOTAL OPEN SPACE
		3,844 acres	6,301 acres
RESIDENTS	908,336	4.2 acres per 1,000 residents	6.9 acres per 1,000 residents
SERVICE POPULATION UNITS	1,292,516	3.0 acres per 1,000 SPU	4.9 acres per 1,000 SPU

Another important criterion for open space is access. Many cities (Minneapolis<sup>17</sup>, Davis<sup>18</sup>, and Sacramento<sup>19</sup> among the case study cities) aim to provide park space within walking distance of residents’ homes and measure their park access performance based on the percent of residents who live within walking distance of a park or other form of open space. The distance that is considered “walking distance” varies from city to city, but the most common figure is half a mile, or about a 10-minute walk.<sup>20</sup> As reported in the San Francisco General Plan’s Recreation and Open space element, all locations in the City are within a half-mile buffer of recreational and open space.<sup>21</sup>

## 4.2 Case Study Comparisons

In a review of LOS metrics and goals in other cities, the most frequent criteria measured are *access* (percent of residents within a given distance of park space) and *quantity* (park space per capita). Both are reflected in the Recreation and Open Space Element of San Francisco’s General Plan, although no quantifiable goals are listed. Table 4 compares park access and quantity across the case study cities. The access comparison uses the standard 10-minute walk shed. The Hatch team also analyzed the portion of the total land allocated to open space in the case study cities in order to account for the fact that land-constrained cities face different tradeoffs when planning for the provision of open space per capita. Although San Francisco, one of the densest cities on the list, provides less acres per 1,000 residents than less dense cities like Sacramento or Minneapolis, its allocation of open space as a percent of total land area is one of the highest. Cities like Vancouver and San Diego are outliers since they contain regional forests within their city boundaries.

<sup>17</sup> Minneapolis 2040 – The City’s Comprehensive Plan. Draft update submitted for review June 2019.

<sup>18</sup> City of Davis General Plan, Parks and Open Space element. Updated 2007.

<sup>19</sup> City of Sacramento 2035 General Plan, Education, Recreation, and Culture. Adopted 2015.

<sup>20</sup> Moeller, John. American Society of Planning Officials, Standards for Outdoor Recreational Areas. Information Report No. 194. 1965.

<sup>21</sup> San Francisco General Plan, Recreation and Open Space Element. Updated 2014.

TABLE 4: LOS PROVISION COMPARISON – RECREATION AND OPEN SPACE

City	Percent of Total Area <sup>22</sup>	Acres per 1,000 Residents <sup>23</sup>	Percent of Residents within 10-Minute Walk <sup>24</sup>
San Francisco, CA	19.6%	6.9	100%
Minneapolis, MN	14.9%	12.4	97%
San Jose, CA	14.4%	15.8	77%
San Diego, CA	23.2%	34.9	77%
Los Angeles, CA	12.7%	9.5	56%
Vancouver, BC <sup>25</sup>	22.0%	22.4	93%
Portland, OR	17.8%	23.4	86%
Seattle, WA	12.5%	9.8	94%
New York, NY	21.2%	4.7	97%
Boston, MA	17.5%	7.9	99%
Sacramento, CA	8.0%	10.2	78%

<sup>22</sup> Percent of Total Area and Acres per 1,000 Residents comes from The Trust for Public Land, 2017 City park facts (except Vancouver).

<sup>23</sup> Note that, although Section 4 overall uses service population, this table just looks at residents, to provide a consistent comparison point across cities as done by the Trust for Public Land.

<sup>24</sup> ParkScore Index 2018, Trust for Public Land (except Vancouver)

<sup>25</sup> City of Vancouver Greenest City 2020 Action Plan (Percent of Total Area and Acres per 1,000 Residents)

TABLE 5: LOS METRICS AND SERVICE GOALS – RECREATION AND OPEN SPACE

City	Metric <sup>26</sup>	Service Goals
San Francisco, CA	<p><b>Proposed:</b></p> <ul style="list-style-type: none"> <li>Acres of City-owned open space per 1,000 service population units (SPU)</li> <li>Percent of SPU within a 10-minute (half-mile) walk of open space</li> </ul>	<p><b>Proposed:</b></p> <ul style="list-style-type: none"> <li>Maintain 3.0 acres of city-owned open space per 1,000 SPU up until total long-term acquisitions reach 500 acres<sup>27</sup></li> <li>Maintain 100% of SPU within a 10-minute (half-mile) walk of public open space, and improve quality of open space</li> </ul>
Minneapolis, MN	<p>Distance to parks from each dwelling unit</p> <p>Parkland per household</p>	<p>Park access within 6 blocks of each dwelling unit</p> <p>0.01 acres of parkland per household (or 10 acres per 1,000 households)</p>
San Jose, CA	<p>Acres per population (broken down into different types of park - see Service Goals)</p>	<p>1.5 acres of public park per 1,000 residents</p> <p>2 acres of recreational school grounds open to the public per 1,000 residents</p> <p>7.5 acres of total park/open space lands per 1,000 residents through the above and other public land agencies</p> <p>500 sqft of community center space per 1,000 residents</p>
San Diego, CA	<p>"usable acres" of park per capita</p>	<p>2.8 usable acres per 1,000 residents</p>
Vancouver, BC	<p>Percent of population that lives within 5-minute walk of green space</p>	<p>The goal is to have 100% of the population within a 5-minute walk of green space</p>
Davis, CA	<p>Distance of closest park to all dwelling units</p> <p>Acres of park per capita</p>	<p>A neighborhood park with 3/8 mile of all dwelling units</p> <p>5 acres of total park space (1.8 community park, 1.8 neighborhood park, 0.2 mini park, 1.2 other parks) per 1,000 residents</p>
Boston, MA	<p>Quality of parks (ranked from 1 to 5)</p>	<p>No goal</p>
Sacramento, CA	<p>Distance of closest park to all dwelling units</p> <p>Acres of park per capita</p>	<p>There should be a park within a half-mile of all dwelling units</p> <p>5 acres of park space per 1,000 residents</p>

<sup>26</sup> The Metrics and Service Goals for each city (except San Francisco) come from that city's most recent general or comprehensive plan update.

<sup>27</sup> This can be achieved by either acquiring new open space or by improving existing open space.

### 4.3 Level of Service Metrics

Two metrics have been identified to measure recreation and open space infrastructure LOS in San Francisco. They are intended to measure total provision of open space and access to open space. The metrics are:

- Acres of City-owned open space per 1,000 service population units (SPU)
- Percent of SPU within a 10-minute (half-mile) walk of open space

#### 4.3.1 Acres of City-Owned Open Space per 1,000 Service Population Units

TABLE 6: ACRES OF CITY-OWNED OPEN SPACE PER 1,000 SERVICE POPULATION UNITS – LOS PROVISION, GOAL, AND TARGET

LOS Measure	Value	Source
<b>Current Citywide Provision</b>	3.0 acres of City-owned open space per 1,000 SPU	2019 population and employment data from SF Planning. Geospatial park directory from SF Recreation and Park.
<b>Short-Term Target<sup>28</sup></b>	Maintain 3.0 acres of city-owned open space per 1,000 SPU	Meeting with SF Planning and Rec and Park, September 18, 2019.
<b>Long-Term Aspirational Goal</b>	The City will add 500 acres of open space <sup>29</sup>	Emails from SF Planning and Rec and Park, November 21, 2019.

This metric measures the overall provision of park space in San Francisco. The open space acreage metric is confined to City-owned open space in order to reflect the open space upon which the City can effect change. Although the metric speaks about it in terms of acquisition, the expansion of recreational and open space can include improvements that increase the intensity of potential use on already-existing parkland, such as building new sports facilities or playgrounds. For more information about the type of improvements that would meet this expectation, see the *2021 San Francisco Infrastructure Nexus Analysis*.

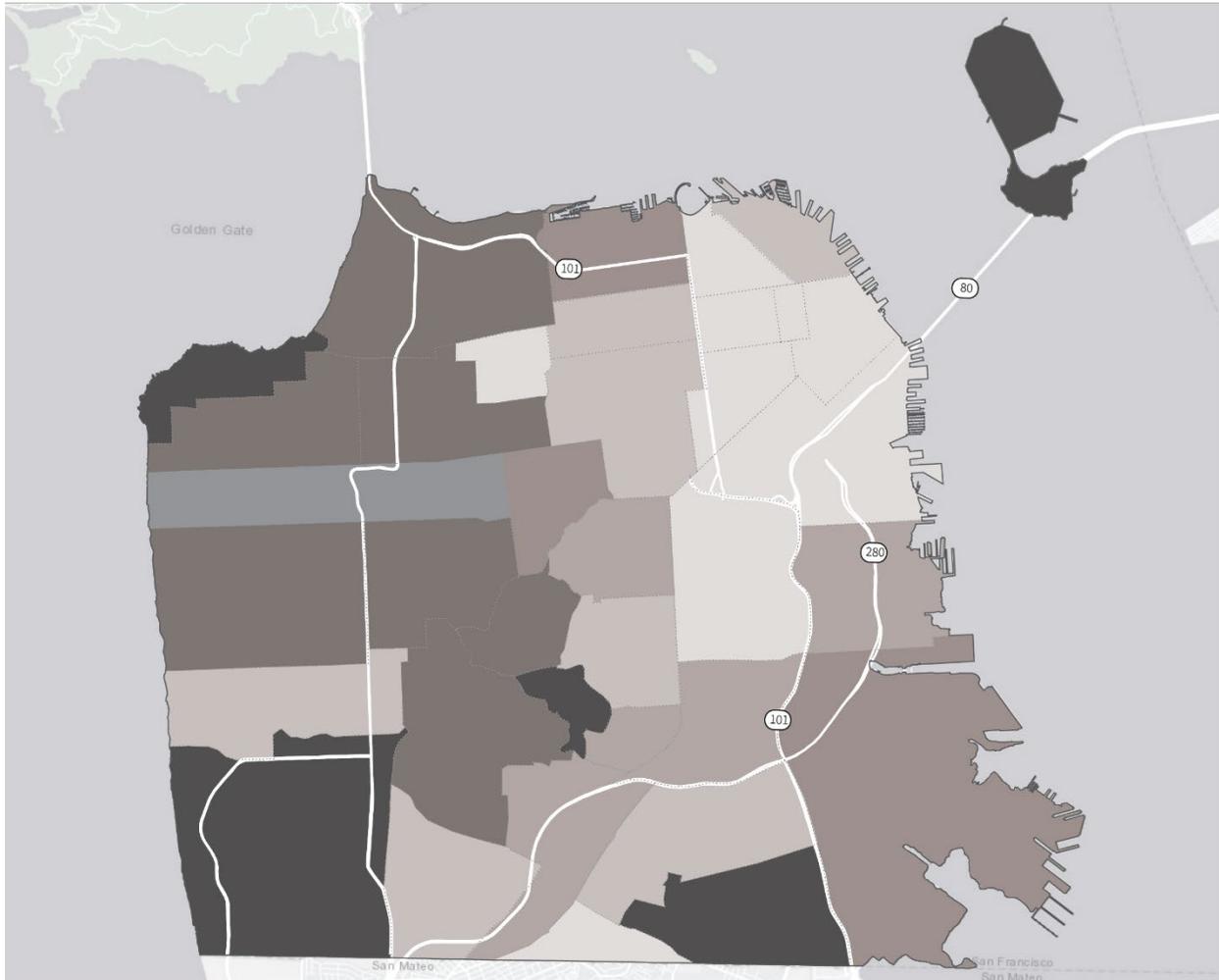
##### 4.3.1.1 Forecasted Demand

By 2025, the City's SPU is projected to grow by 101,000, which would mean adding 301 acres of new open space or park improvement equivalent in that time. By 2040, SPU is projected to grow a further 212,000, to a total of 1,606,000 SPU. If the City maintains the 3.0-acre ratio, there will be sufficient development to finance the 500 acres of total acquisition goal by 2040. However, due to the use of funding for park improvement equivalent and the delay between the collection of funds and use of funds for park space acquisition, the City may not have reached the long term goal by 2040.

<sup>28</sup> To be reached by 2025.

<sup>29</sup> As San Francisco's population and workforce continues to grow, keeping the same ratio of open space to SPU will become increasingly difficult. For this reason, the long-term goal sets a total long-term park acquisition number rather than a per-SPU number.

FIGURE 4 : CITY-OWNED OPEN SPACE PER 1,000 SPU, BY NEIGHBORHOOD (2018)



City-Owned\* Open Space Per 1,000 Service Population Unit\* (SPU) by Neighborhood



**LEGEND**

- County Boundary
- Highways
- Neighborhoods

City-owned open space: 3,844 acres

Citywide Average: 3.0 acres per 1,000 SPU

\*City-owned open space includes open space owned by SFRPD, SFDPW, the Port, SFMTA, SFPL, SFPUC, OCII, TIDA, and TJPA

\*\*The service population unit is calculated based on a 1:0.5 ratio between residents and employees

Note: Golden Gate Park was allocated between the five neighborhoods next to it (Inner and Outer Sunset, Inner and Outer Richmond, and Haight Ashbury).

Source: San Francisco Recreation and Park Department, City Parks 2018

### 4.3.2 Walking Distance to the Nearest Park

TABLE 7: WALKING DISTANCE TO THE NEAREST PARK – LOS PROVISION, GOAL, AND TARGET

LOS Measure	Value	Source
<b>Current Citywide Provision</b>	100% of SPU are within a 10-minute (half-mile) walk of open space	2019 population and employment data from SF Planning. Geospatial park directory from SF Recreation and Park. Walking network data from Open Street Map.
<b>Short-Term Target</b>	Maintain 100% of SPU within a 10-minute (half-mile) walk of public open space, and improve quality of open space	Meeting with SF Planning and Rec and Park, September 18, 2019.
<b>Long-Term Aspirational Goal</b>	100% of SPU will be within a 10-minute (half-mile) walk of public open space, and improve quality of open space	Meeting with SF Planning and Rec and Park, September 18, 2019.

Walking distance to the nearest park measures the level of park access for San Francisco residents and workers. Note that, unlike the prior metric, this metric includes all publicly-owned open space in San Francisco, including that which is controlled by state or federal agencies.

The current average walk to the nearest park is 3 minutes (725 feet). Roughly 91% of SPU are within a 5-minute (quarter-mile) walk of open space. Walk distances are calculated by measuring the distance along roads and walking paths (rather than “as the crow flies”) from each intersection in the City to the edge of the nearest park, and then averaged across all intersections within each Traffic Analysis Zone (TAZ).<sup>30</sup> 100% of SPU are within a 10-minute (half-mile) walk of open space.

#### 4.3.2.1 Forecasted Demand

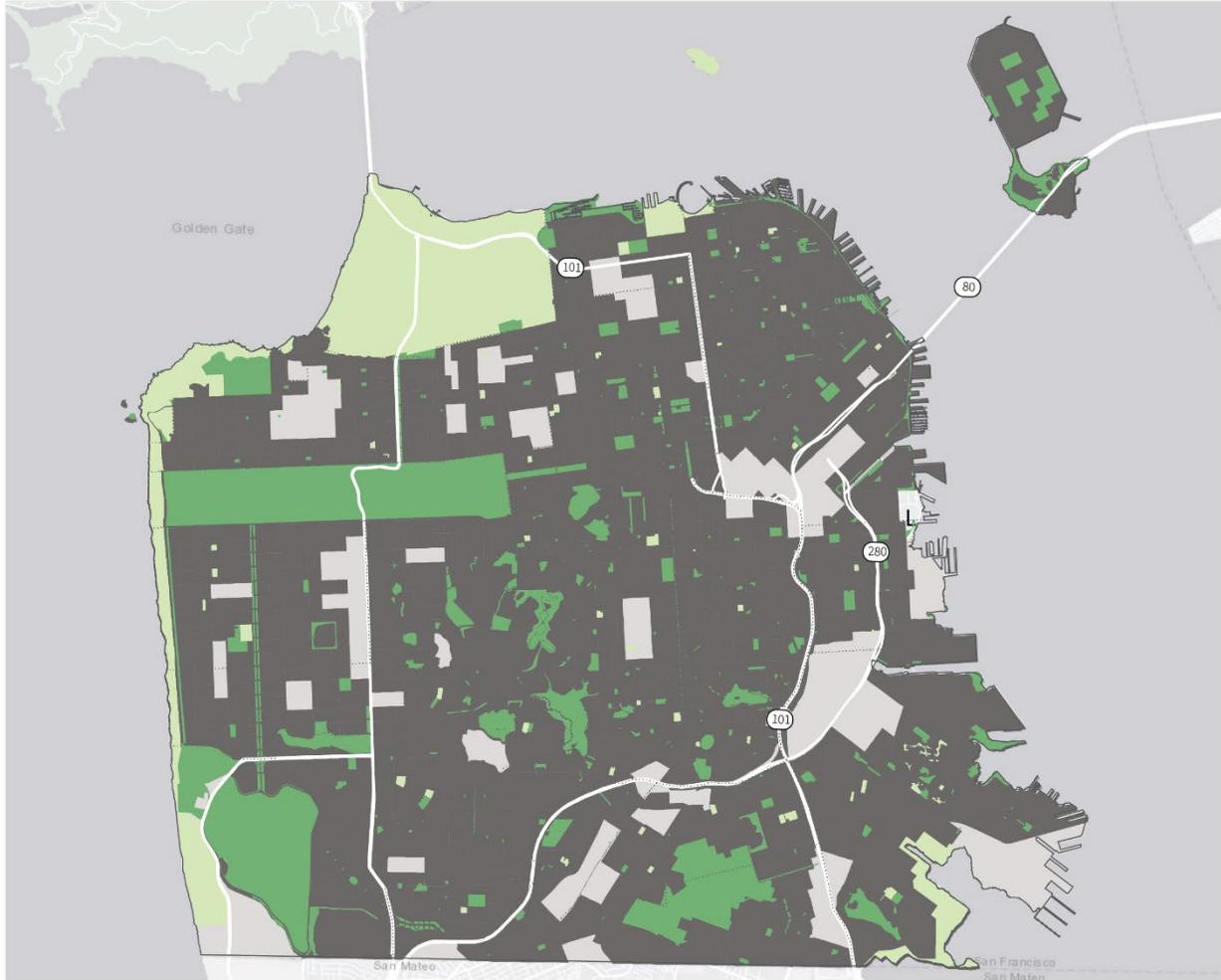
The City of San Francisco is engaged in numerous park improvement projects, from trail restorations to playground improvements to full park renovations. The recently completed Alamo Square Park renovation, for example, included adding a new restroom, over 100 new trees, and a complete overhaul of the irrigation system.<sup>31</sup> Nearly 100 projects are currently underway, bringing improvements of all kinds to San Francisco park space across the City.<sup>32</sup>

<sup>30</sup> Traffic Analysis Zones (TAZs) are a way of dividing land area into discrete measurable units for planning purposes. The US Census Bureau designates these zones based on physical land constraints, population and employment density, and certain municipal boundaries. These are sometimes referred to as TAZs or “analysis zones” throughout the report. Note that the walk analysis measures the distance from each intersection, and averages the distance from every intersection in each TAZ to create the value for that TAZ.

<sup>31</sup> San Francisco Recreation & Park, Alamo Square Park is Now Open. <https://sfrecpark.org/alamo-square-park-is-now-open/>

<sup>32</sup> San Francisco Recreation & Park, Active Capital Projects. <https://sfrecpark.org/park-improvements/currentprojects/>

FIGURE 5: PROXIMITY OF RESIDENTS TO OPEN SPACE



Proximity of Service Population to Recreation and Open Space

- Within 5 minutes walk
- 5 to 10 minutes walk

The walking network for the City of San Francisco was obtained from Open Street Map as a series of nodes and a database of distances and connections between nodes. "Node" refers to any intersection of two or more paths. Any node located inside of or next to (within 50 feet of) a park was set as a Point of Interest (POI), and then the network distance from each node to the nearest POI was calculated based on the database of distances and connections between nodes (as opposed to "as the crow flies"). Finally, each analysis zone was assigned the average walking distance of the nodes within its boundaries.

Source: San Francisco Recreation and Park Department, San Francisco Open Street Map, City Parks 2018, San Francisco population estimates 2019.



**LEGEND**

- County Boundary
- Highways
- Neighborhoods

**Open Space by Ownership**

- City-owned open space
- Non-city owned open space

## 5 Child Care Facilities

While the City of San Francisco is not directly responsible for funding or operating child care facilities, the Office of Early Care and Education (OECE), First 5 San Francisco, and San Francisco Child Care Planning and Advisory Council (CPAC) work to promote the access to quality child care for San Francisco’s children and families. The City’s role includes subsidizing child care costs for low/moderate income families, funding support services and resources for early education programs (such as health screenings, mental health consultation, and quality initiatives), and counseling policy-makers, planners, and funders about child care needs in San Francisco. Finally, the City helps acquire funds for facility construction of new child care facilities.

This section discusses child care in San Francisco and describes two metrics to measure and evaluate the City’s current provision of child care infrastructure. Note that the child care nexus fee, calculated in the *2021 San Francisco Infrastructure Nexus Analysis*, uses a linkage methodology, and the current level of service is not factored into the maximum fee calculation. Furthermore, the nexus calculation, which was completed after this report and had additional data available, includes 5-year-olds in its estimation of child care demand, whereas this report only includes child care demand from children under 5 (i.e., children ages 0-4 years old). For more information, see the *2021 San Francisco Infrastructure Nexus Analysis*. The policy documents reviewed in this section’s creation are enumerated in Table 8.

TABLE 8: CHILD CARE PROVISION GUIDING POLICY DOCUMENTS

Policy Document	Year	Key Contributions
<b>San Francisco Early Care and Education Needs Assessment</b>	2017	<ul style="list-style-type: none"> <li>Information on the provision of child care slots in traditional child care centers and family care centers</li> <li>Information on the percentage of total child care slots available to each age group</li> </ul>
<b>San Francisco Infrastructure Level of Service Analysis</b>	2014	<ul style="list-style-type: none"> <li>Background information on child care standards</li> <li>Methodology for calculating child care need</li> </ul>

### 5.1 Background

The City of San Francisco recognizes the importance of child care, particularly for young children. Child care needs differ depending on age, and typically care is divided into three age-based brackets: infant/toddler, preschool, and school-age. The City defines infants/toddlers as children aged 0 to 2, preschoolers as children aged 3 to 4, and school-age children as being 5 or older.<sup>33</sup>

Child care can be divided into types of care as well: licensed child care centers (CCCs), licensed family child care homes (also known as family child care, or FCCs), and license exempt child care. License exempt care can mean formal programs, like the YMCA or programs run by San Francisco Recreation and Park, or it can refer to more informal care, like stay-at-home parents, nannies, and that provided by families, friends, and neighbors. License exempt care is beyond the purview of this report.

<sup>33</sup> The San Francisco Early Care and Education Needs Assessment defines preschool as ages 3 to 5 and school-age as starting at age 6. However, this report defines preschool as ages 3 to 4, and school-age as starting at age 5. This narrower definition of preschool age is consistent with other municipalities such as Vancouver, San Diego, and San Jose.

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Licensed child care centers, or CCCs, are institutions that provide facilities typically located in a commercial building. CCCs generally offer care for larger numbers of children divided into narrow age groups and have separate staff for each group. Family child care programs, or FCCs, are private homes where the homeowner provides child care, sometimes with a small number of support staff. FCCs have lower capacity, typically mix children of different age groups together, and are more likely to offer care at non-traditional hours than CCCs.<sup>34</sup>

The discussion in this section will focus on both CCCs and FCCs (excluding license exempt care) since both types of facilities require licensing from the State of California, and the City only provides capital funding to licensed facilities. Furthermore, since school-age care is primarily provided at school district sites by San Francisco Unified School District and community partners, the discussion of child care here will focus only on infant/toddler care and preschool care.

Both previous studies and current data indicate that there is a strong demand for licensed child care. CPAC's 2017 report, the *San Francisco Early Care and Education Needs Assessment*, indicates that infant/toddler care is difficult to provide in large part due to the high cost of providing the appropriate staff-to-infant ratio.<sup>35</sup> As a result, there is large demand for this type of care. Preschool care is more adequately supplied than infant/toddler care, in part due to Proposition H, a Charter Amendment passed in 2004 to fund preschool care.<sup>36</sup>

Demand for child care comes from a combination of City residents and non-residents who work within San Francisco. Although most parents seek child care near their place of residence, a small portion seek child care near their place of work instead. The large number of workers in San Francisco who commute in from outside the City create a moderate demand for child care based on place of employment.

Child care demand is calculated by estimating the pool of children requiring licensed child care, based on labor force participation rates and an estimated proportion of parents who use formal licensed care. Detailed child care demand calculations are included in the appendix (Section 11.7: Child Care Demand Calculations). All child care demand values used in this section are based on the calculations described in the appendix, section 11.7.

## 5.2 Case Study Comparisons

Considering child care provision as infrastructure is not a common policy for city governments (compared to streets or parks, for example), and it is less frequently addressed by municipal plans and policies. In a survey of case study cities, none were found to have both metrics and service goals for measuring the provision of child care facilities. A number of cities (or their respective county governments) track the provision of child care slots, but do not use a defined metric to determine level of service. See Table 10 for more details.

Table 9 compares the provision of infant/toddler and preschool care slots relative to need across case study municipalities. The Hatch team used the broadly applicable metric of total infant/toddler/preschool-aged children with all parents in labor force to estimate the level of service. This measure is referred to as child care

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<sup>34</sup> Child Care Aware of America, Types of Child Care. <https://www.child-careaware.org/types-child-care/>

<sup>35</sup> San Francisco Early Care and Education Needs Assessment (2017), page 71.

<sup>36</sup> San Francisco Unified School District. "Public Education Enrichment Fund (PEEF)." Web. 30 Jul. 2019. <http://www.sfusd.edu/en/about-sfusd/voter-initiatives/public-education-enrichment-fund.html>

“need” throughout this report, to distinguish it from the recommended child care demand metric detailed later in this section.

TABLE 9: LOS PROVISION COMPARISON – CHILD CARE

City	Infant/Toddler Care Slots	Preschool Slots	Infant/Toddler and Preschool age children with all parents in labor force	% of total estimated need met
San Francisco, CA <sup>37</sup>	1,414 <sup>38</sup>	14,774 <sup>38</sup>	31,871	51%
Minneapolis, MN <sup>39</sup>	16,746	n/a	23,204	72%
San Jose, CA <sup>40</sup>	7,408	43,778	87,597	58%
San Diego, CA <sup>41</sup>	13,248	74,629	148,010	59%
Los Angeles, CA <sup>42</sup>	27,977	178,853	454,048	46%
Vancouver, BC <sup>43</sup>	57,367	n/a	70,470	81%
Portland, OR <sup>44</sup>	23,153	unknown	34,598	67%
Seattle, WA <sup>45</sup>	15,463	28,263	90,018	49%
New York, NY <sup>46</sup>	228,997	n/a	394,292	58%
Davis, CA <sup>47</sup>	unknown	1,743	1,945	90%
Boston, MA <sup>48</sup>	20,785	unknown	29,743	70%
Sacramento, CA <sup>49</sup>	36,090	unknown	71,057	51%

Note. Some cities do not separate infant/toddler care from preschool care, or even school-age care. Licensed capacity information for cities/counties with missing information in other categories may represent a

<sup>37</sup> San Francisco Early Care and Education Needs Assessment (2017)

<sup>38</sup> To be consistent with the other cities in this table, this figure does not include FCCs.

<sup>39</sup> Think Small, Minnesota Child Care Programs Summary (2019)

<sup>40</sup> Santa Clara County 2018 Child Care Needs Assessment (2018)

<sup>41</sup> San Diego County Child Care and Development Planning Council (LPC) County Needs Assessment (2016)

<sup>42</sup> Los Angeles County 2017 Needs Assessment Technical Report (2017)

<sup>43</sup> A Municipal Survey of Child Care Spaces and Policies in Metro Vancouver (2015); StatCan: Families with Children by Age of Children and Children by Age Groups (2016); StatCan: Employment Patterns of Families with Children (2014)

<sup>44</sup> Child Care and Education in Multnomah County (2014)

<sup>45</sup> Child Care Aware of Washington, Annual Data Report: Trends, Child Care Supply, Cost of Care, & Demand for Referrals (2017)

<sup>46</sup> New York State Child Care Demographics (2017)

<sup>47</sup> Assessing the Need for Preschool for All in Yolo County (2016)

combination of infant/toddler care and preschool care. For this reason, one LOS-number is given for meeting total child care need, rather than separating it out by age.

TABLE 10: LOS METRICS AND SERVICE GOALS – CHILD CARE

City	Metric <sup>50</sup>	Service Goals
San Francisco, CA	<b>Proposed:</b> <ul style="list-style-type: none"> <li>Percent of infant/toddler care demand met by licensed capacity</li> <li>Percent of preschool care demand met by licensed capacity</li> </ul>	<b>Proposed:</b> <ul style="list-style-type: none"> <li>Near term: Licensed capacity to meet 20% of infant/toddler care demand and 100% of preschool care demand</li> <li>Long term: Licensed capacity to meet 50% of infant/toddler care demand and 100% of preschool care demand</li> </ul>
San Jose, CA	Need relative to capacity for infant/toddler care, preschool, and school-age care	None
San Diego, CA	Need relative to capacity for infant/toddler care, preschool, and school-age care	None
Los Angeles, CA	Need relative to capacity for infant/toddler care, preschool, and school-age care	None
Vancouver, BC <sup>51</sup>	None	Spend \$86 million (CAD) on child care infrastructure (new development and maintenance) by the end of 2022
New York, NY	Total capacity for infant/toddler care, preschool, and school-age care	None
Davis, CA	Need relative to capacity for infant/toddler care, preschool, and school-age care	None
Sacramento, CA	Need relative to capacity for infant/toddler care, preschool, and school-age care	None

<sup>48</sup> Child Care Aware of Massachusetts, Mapping the Gap: Supply & Demand for Child Care in MA (2018)

<sup>49</sup> First 5 Sacramento Annual Evaluation Report (2017)

<sup>50</sup> Sources the same as for Table 9 (except Vancouver).

<sup>51</sup> City of Vancouver 2019-2022 Capital Plan (2018)

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### 5.3 Level of Service Metrics

Two metrics were identified to measure child care LOS provision:

- Percent of infant/toddler care demand met by licensed capacity
- Percent of preschool care demand met by licensed capacity

Note that this section calculates child care demand from children under the age of 5. The *2021 San Francisco Infrastructure Nexus Analysis*, which was completed after this report and had additional data available, includes 5-year-olds in its child care demand calculation (i.e., children ages 0-4 years old).

#### 5.3.1 Percent of Infant and Toddler Child Care Demand Served by Available Slots

TABLE 11: PERCENT OF INFANT/TODDLER CARE DEMAND SERVED BY AVAILABLE SLOTS – LOS PROVISION, GOAL, AND TARGET

LOS Measure	Value	Source
<b>Current Citywide Provision</b>	19% of demand for infant/toddler care met by licensed capacity	Child care demand methodology detailed in the appendix. Child care supply data provided by SFOECE.
<b>Short-Term Target</b>	100% of new demand for infant/toddler care created by new development will be met by new licensed capacity	Email from Mathew Snyder (SF Planning) on 4/15/2020, and consistent with the SFOECE 2017 Needs Assessment.
<b>Long-Term Aspirational Goal</b>	100% of new demand for infant/toddler care created by new development will be met by new licensed capacity	Email from Mathew Snyder (SF Planning) on 4/15/2020, and consistent with the SFOECE 2017 Needs Assessment.

This metric measures the provision of infant and toddler care slots relative to demand in San Francisco. Demand is calculated based on the number of resident infants and toddlers in San Francisco, the percentage of young children in San Francisco with both parents working, the number of workers commuting in to San Francisco who might seek child care in the City close to where they work rather than where they live, and the percent of San Francisco residents who work outside the City and may bring their child out of the city with them for child care. For further details, see Table 43 in the appendix.

Citywide, licensed infant/toddler care provision in San Francisco is estimated at 3,515 slots, which meets 19% of the estimated 18,096 slots demanded for licensed infant/toddler care. On a neighborhood level, the results are more varied, as shown in Figure 6. The median neighborhood meets 16% of its locally generated infant/toddler care demand, while the bottom quartile has a level of service of 5% or lower and the top quartile has a level of service of 27% or higher. From 2014 (the previous San Francisco LOS report) to 2019, infant/toddler care level of service dropped from 37% to 19% due to residential and employment growth outpacing growth in licensed infant/toddler care capacity.

### 5.3.1.1 Forecasted Demand

Residential and employment growth in San Francisco from 2019 to 2025 is projected to create demand for an additional 1,359 infant/toddler care slots, bringing total infant/toddler care demand to 19,455. To meet the short-term target, San Francisco would need to add 1,359 slots of infant/toddler care through 2025, bringing total citywide infant/toddler care provision to 4,874 slots in 2025. By 2040, demand for infant/toddler care is expected to grow a further 2,085 slots beyond 2025 demand levels, to a total citywide demand of 21,540 slots. To continue meeting 100% of new demand for infant/toddler care, San Francisco would need to add 2,085 slots of infant/toddler care from 2025 through 2040, bringing total citywide licensed capacity to 6,959 slots in 2040.<sup>52</sup> This would be consistent with the SFOECE 2017 Needs Assessment, which calls for more licensed capacity for infant/toddler care.

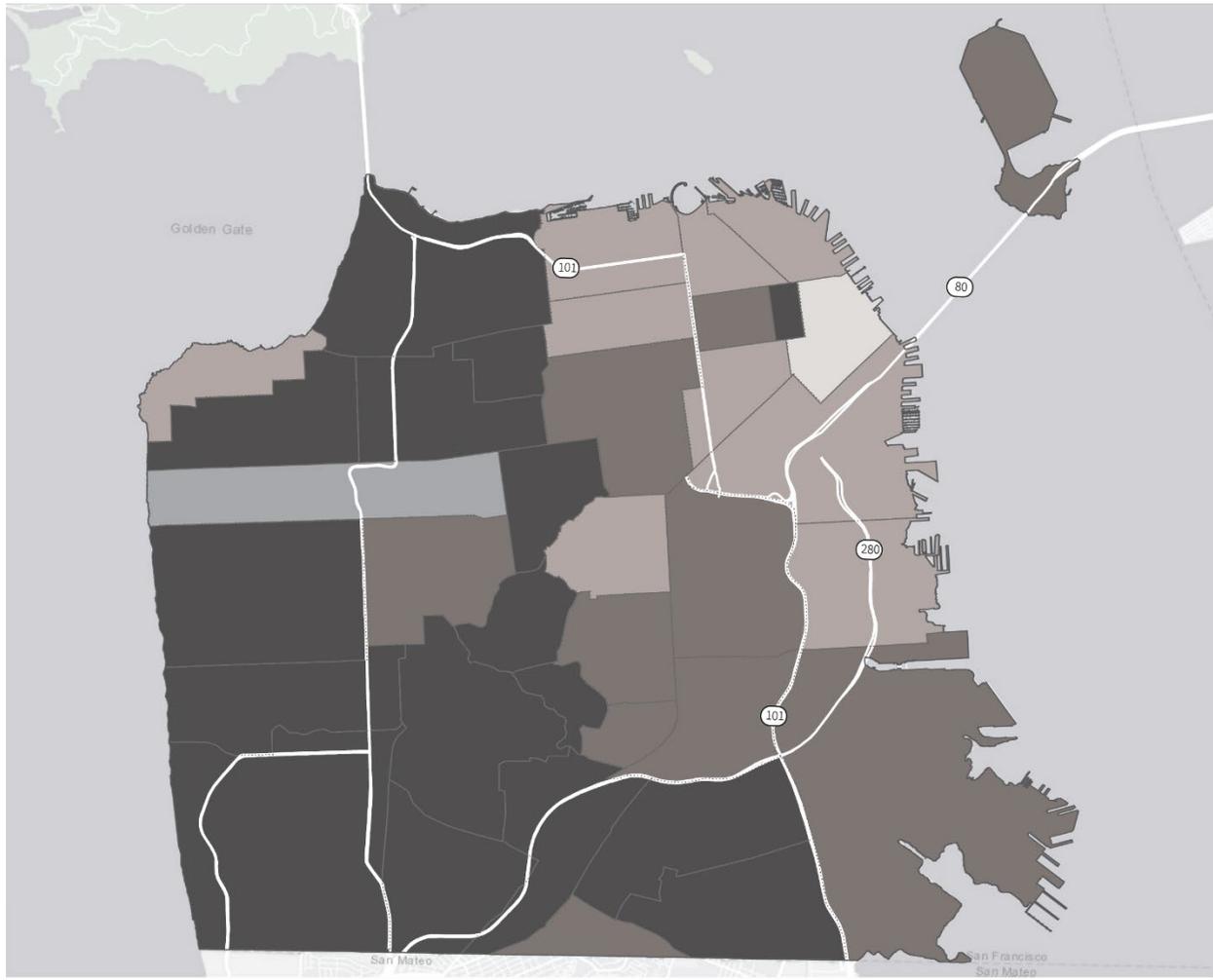
The neighborhoods experiencing the highest levels of service for infant/toddler care tend to be concentrated on the west side of the City, as shown in Figure 6. The high concentration of jobs in the financial district and surrounding neighborhoods means that demand in those neighborhoods is unusually high, which reduces the overall LOS in those neighborhoods. Projected growth in demand for infant/toddler care is concentrated in the eastern neighborhoods, with South of Market experiencing the largest raw growth in demand (440 by 2025, 949 by 2040) and Potrero Hill experiencing the largest percent growth in demand (35% by 2025, 81% by 2040<sup>53</sup>).

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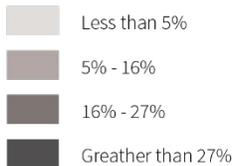
<sup>52</sup> Note that the 4,874 infant/toddler care slots by 2025 and 6,959 slots by 2040 targets are dependent on fee revenue from growth that will be happening through those target years. Due to the time it takes to construct new child care space, actual provision of infant/toddler care slots may not reach the target number in the target years.

<sup>53</sup> Technically, Treasure Island is expected to experience the largest percent growth by 2040 (116%). This, however, is because current demand there is so low; Treasure Island is expecting a growth in infant/toddler care demand of 35 slots by 2040, compared with Potrero Hill's projected demand growth of 295 slots.

FIGURE 6: SHARE OF INFANT AND TODDLER (0-2) CHILD CARE DEMAND SERVED BY AVAILABLE LICENSED SLOTS



Percent of Demand Served by Available Licensed Slots



**LEGEND**

- County Boundary ———
- Highways ———
- Neighborhoods ·····

Citywide average: 19% of infant and toddler slots demand served by available licensed slots.  
 Note: Due to security reasons specific location of childcare facilities are not shown on the maps.

Source: San Francisco Human Services Agency, San Francisco Early Care and Education Needs Assessment (2017), San Francisco Infrastructure Level of Service Analysis (2014)

### 5.3.2 Percent of Preschool Demand Served by Available Slots

TABLE 12: PERCENT OF PRESCHOOL DEMAND SERVED BY AVAILABLE SLOTS – LOS PROVISION, GOAL, AND TARGET

LOS Measure	Value	Source
<b>Current Citywide Provision</b>	88% of demand for preschool care met by licensed capacity	Child care demand methodology detailed in the appendix. Child care supply data provided by SFOECE.
<b>Short-Term Target</b>	100% of new demand for preschool care created by new development will be met by new licensed capacity	Email from Mathew Snyder (SF Planning) on 4/15/2020, and consistent with the SFOECE 2017 Needs Assessment.
<b>Long-Term Aspirational Goal</b>	100% of new demand for preschool care created by new development will be met by new licensed capacity	Email from Mathew Snyder (SF Planning) on 4/15/2020, and consistent with the SFOECE 2017 Needs Assessment.

This metric measures the provision of preschool slots relative to demand in San Francisco. Like the previous metric, demand is calculated based on the number of resident preschool-age children in San Francisco, the percentage of children in San Francisco with both parents working, the number of workers commuting to San Francisco who may seek child care in the City, and the percent of San Francisco residents who work outside the City and may bring their child with them for child care. For further details, see Table 44 in the appendix.

Citywide, licensed preschool provision in San Francisco is estimated at 18,971 slots, which meets 88% of the estimated 21,540 slots demanded for preschool care. On a neighborhood level, the results are more varied, as shown in Figure 7. The median neighborhood meets 77% of its locally generated preschool care demand, while the bottom quartile has a level of service of 38% or lower. The top quartile has a level of service of 114% or higher. The high levels of service found in the top quartile of neighborhoods indicate that the market for child care, and preschool care, spans across neighborhoods. In other words, there is a market willingness to seek care outside of one's own neighborhood, though it is unclear whether those consumers would seek care in their own neighborhood if it were available. From 2014 (the previous San Francisco LOS report) to 2019, preschool care level of service dropped from 99.6% to 88% due to residential and employment growth outpacing growth in licensed preschool capacity.

#### 5.3.2.1 Forecasted Demand

Residential and employment growth in San Francisco from 2019 to 2025 is projected to create demand for an additional 1,638 preschool slots, bringing total preschool care demand to 23,178. To meet the short-term target, San Francisco would need to add 1,638 slots of preschool care through 2025, bringing total citywide preschool provision to 20,609 slots in 2025. By 2040, demand for preschool care is expected to grow a further 2,796 slots beyond 2025 demand levels, to a total citywide demand of 25,974 slots. To continue meeting 100%

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of new demand for preschool care, San Francisco would need to add 2,796 slots of preschool care from 2025 through 2040, bringing total citywide licensed capacity to 23,405 slots in 2040.<sup>54</sup>

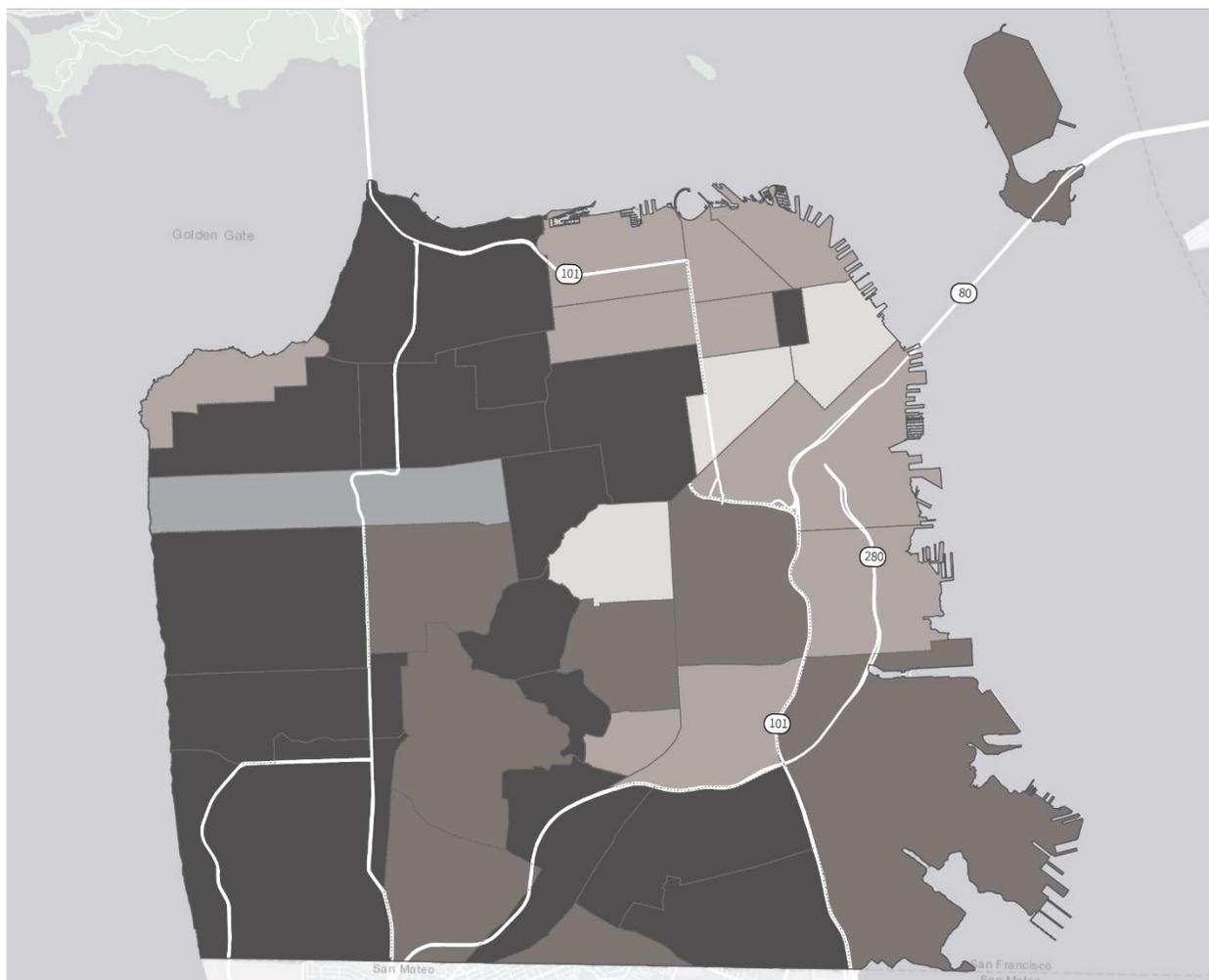
The neighborhoods experiencing the highest levels of service for preschool care tend to be concentrated on the west side of the City, as shown in Figure 7. The high concentration of jobs in the financial district and surrounding neighborhoods means that demand in those neighborhoods is unusually high and pushes the LOS down in those neighborhoods. Projected growth in demand for preschool care, however, is concentrated in the eastern neighborhoods, with South of Market experiencing the largest raw growth in demand (473 by 2025, 1,060 by 2040) and Potrero Hill experiencing the largest percent growth in demand (32% by 2025, 77% by 2040<sup>55</sup>).

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<sup>54</sup> Note that the 20,609 preschool slots by 2025 and 23,405 slots by 2040 targets are dependent on fee revenue from growth that will be happening through those target years. Due to the time it takes to construct new child care space, actual provision of preschool slots may not reach the target number in the target years.

<sup>55</sup> Technically, Treasure Island is expected to experience the largest percent growth by 2040 (108%). This is because child care demand in Treasure Island is relatively low. Treasure Island is expecting a growth in preschool care demand of 41 slots by 2040, compared with Potrero Hill's projected demand growth of 338 slots.

FIGURE 7: SHARE OF PRESCHOOL-AGE (3-4) CHILD CARE DEMAND SERVED BY AVAILABLE LICENSED SLOTS



Percent of Demand Served by Available Licensed Slots

- Less than 38%
- 38% - 77%
- 77% - 114%
- Greater than 114%



**LEGEND**

- County Boundary
- Highways
- Neighborhoods

Citywide average: 88% of preschool age children demand served by available licensed slots.  
 Note: Due to security reasons specific location of childcare facilities are not shown on the maps.

Source: San Francisco Human Services Agency, San Francisco Early Care and Education Needs Assessment (2017), San Francisco Infrastructure Level of Service Analysis (2014)

## 6 Complete Streets Infrastructure

Complete Streets infrastructure covers the streetscape, pedestrian, and bicycle infrastructure in the City of San Francisco. This includes right-of-way components such as sidewalks, street trees, curb ramps, lighting, bulb-outs, and bicycle lanes. In the previous Infrastructure LOS report, bicycle infrastructure was evaluated separately from streetscape and pedestrian infrastructure. As bicycle and pedestrian elements work in tandem to create a safer and more sustainable transportation system, this report represents a new method for combining them all into a single metric. The policy documents referenced in this section are listed in Table 13.

TABLE 13: COMPLETE STREET GUIDING AND REFERENCE POLICY DOCUMENTS

Policy Document	Year	Key Contributions
Better Streets Plan	2011	<ul style="list-style-type: none"> <li>• Overview of recommended streetscape and pedestrian infrastructure elements</li> <li>• Pedestrian, bicycle, safety, and lighting goals</li> </ul>
ConnectSF	2018	<ul style="list-style-type: none"> <li>• Guidance on the future of San Francisco’s transportation infrastructure</li> </ul>
San Francisco Transportation Plan	2013	<ul style="list-style-type: none"> <li>• Planned transportation infrastructure investments and mode share goals</li> </ul>
San Francisco Transportation 2045 Task Force Report	2018	<ul style="list-style-type: none"> <li>• Proposed methods for funding the infrastructure investment called for in other transportation plans</li> </ul>
SFMTA Strategic Plan	2018	<ul style="list-style-type: none"> <li>• Contains several metrics to measure improvements in the mobility, accessibility, and sustainability of San Francisco’s transportation system. Also includes goals to be achieved by 2020.</li> </ul>
Transportation Climate Action Strategy	2017	<ul style="list-style-type: none"> <li>• Contains plans and goals for reducing emissions from San Francisco’s transportation system</li> </ul>
San Francisco Infrastructure Level of Service Analysis	2014	<ul style="list-style-type: none"> <li>• Background information on streetscape standards, including pedestrian and bicycle</li> <li>• Information on the previous LOS estimate for bicycle and pedestrian complete streets infrastructure</li> </ul>

### 6.1 Background

#### 6.1.1 Streetscape and Pedestrian Infrastructure

The concept of “complete streets” is articulated in the 2011 San Francisco Better Streets Plan (BSP), along with Section 2.4.13 of San Francisco’s Public Works Code.<sup>56</sup> The BSP puts forward streetscape specifications through guidelines for pedestrian environment design that balance the needs of all street users. The BSP highlights three categories in its recommendations: safety, creation of social space on the sidewalk, and pedestrian aesthetic. Sidewalk widths, street trees, intersection safety, street lighting, curb ramps, and bulb-

<sup>56</sup> 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, including the construction of transit, bicycle, stormwater, and pedestrian improvements. Pedestrian environment improvements include sidewalk lighting, pedestrian safety measures, traffic calming devices, landscaping, and other pedestrian elements listed as defined in the Better Streets Plan.

outs are the main components that form the complete street concept. Limited data availability for most of these key components is the major obstacle to achieving a complete measure of their provision.

Sidewalks are the foundation of pedestrian infrastructure, providing a path of travel and an opportunity for place-making. Sidewalk width is the key factor affecting pedestrian capacity, pedestrian comfort, and providing space for amenities, landscaping, and other streetscape elements. Curb ramps are a key component of sidewalks, providing pedestrian access between the sidewalk and roadway for people using wheelchairs, strollers, walkers, crutches, handcarts, and bicycles, and for pedestrians who have trouble stepping up and down high curbs. Bulb-outs are another key safety measure, extending the sidewalk into the parking lane to narrow the roadway and provide additional pedestrian space at key locations, enhancing pedestrian safety by increasing pedestrian visibility, shortening crossing distances, slowing turning vehicles, and visually narrowing the roadway.<sup>57</sup>

The BSP provides a clear guideline on sidewalk widths for different types of streets. Major new development or redevelopment areas that create new streets must meet or exceed recommended sidewalk widths per Planning Code Section 138.1. Roughly 62% of City sidewalks meet the BSP recommended widths, which range from 9 feet on alleys to 15 feet on park edge streets.<sup>58</sup> Although the unique nature of each street sometimes makes it impossible to reach the BSP-defined sidewalk width minimum or goal, these metrics provide a reasonable census of the City's current sidewalk infrastructure.

Street trees are the archetypal street landscaping that contribute to the pedestrian environment. Streets with trees planted in lines along side of the road are perceived as narrower, which slows down the traffic speed and increases pedestrian safety.<sup>59</sup> In addition, tree-lined streets enhance the aesthetic environment, making people more comfortable spending time on the street as pedestrians. Trees also mitigate the urban heat island effect by providing shade over paved sidewalks and roads. There are currently about 125,000 street trees existing on roughly 1,200 miles of roads in San Francisco.<sup>60</sup> The Urban Forest Plan, in collaboration with SFDPW, has provided a long-term goal of increasing the number of street trees in San Francisco up to 155,000 by 2034.<sup>61</sup>

As a comparison, the city of Boston, with a land area about the same size as San Francisco, currently has an estimated 150,000 street trees.<sup>62</sup> Most of these were introduced as part of a 2013 plan to plant 100,000 street trees by 2020. Similarly, New York City has an ambitious Million Trees NYC program that aims to add an additional one million trees to the city's urban forest over the next decade.<sup>63</sup>

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<sup>57</sup> SF Better Streets, <https://www.sfbetterstreets.org/>.

<sup>58</sup> Hatch internal analysis based on data from SF Department of Public Works

<sup>59</sup> Wolf, K.L. 2010. Safe Streets - A Literature Review. In: Green Cities: Good Health ([www.greenhealth.washington.edu](http://www.greenhealth.washington.edu)). College of the Environment, University of Washington.

<sup>60</sup> Data from SF Planning Department and SF Department of Public Works

<sup>61</sup> San Francisco Urban Forest Plan (2015) was developed in collaboration with San Francisco Public Works, the Urban Forestry Council, and Friends of the Urban Forest, providing a long-term vision and strategy to improve the health and sustainability of the City's urban forest.

<sup>62</sup> Boston Open Data, retrieved on July 31, 2019 from: [https://bostonopendata-boston.opendata.arcgis.com/datasets/ce863d38db284efe83555caf8a832e2a\\_1?geometry=-72.363%2C42.181%2C-69.75%2C42.536](https://bostonopendata-boston.opendata.arcgis.com/datasets/ce863d38db284efe83555caf8a832e2a_1?geometry=-72.363%2C42.181%2C-69.75%2C42.536)

<sup>63</sup> Million Trees NYC. Million Trees NYC. MTNYC, 2013. <http://www.milliontreesnyc.org/html/home/home.shtml>

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### 6.1.2 Bicycle infrastructure

The City currently manages 430 miles of bicycle network<sup>64</sup> on the City's roughly 1,200 miles of road, with a bicycle mode share of approximately 2%.<sup>65</sup> Traditionally, bicycle networks are classified into four categories:

- **Class I** bikeways, also known as bike paths or shared-use paths, are facilities with exclusive right of way for bicyclists and pedestrians, away from the roadway and with cross flows by motor traffic minimized. In some instances, separate pedestrian facilities are provided. Note that, although Class I bikeways are not on roadways, they are included in the general “bike lanes” concept as used in the remainder of this report.
- **Class II** bikeways are bike lanes established along streets and are defined by pavement striping and signage to delineate a portion of a roadway for bicycle travel. Bike lanes are one-way facilities, typically striped adjacent to motor traffic travelling in the same direction.
- **Class III** bikeways, or bike routes, designate a preferred route for bicyclists on streets shared with motor traffic not served by dedicated bikeways to provide continuity to the bikeway network. Bike routes are generally not appropriate for roadways with higher motor traffic speeds or volumes.
- **Class IV** refers to a separated bikeway and is often referred to as a “cycle track” or “protected bike lane.” The bikeway is for the exclusive use of bicycles, physically separated from motor traffic with a vertical feature.

Almost half of San Francisco's bikeway network is Class III (209 miles), while Class IV makes up the smallest portion (20 miles). Most of the City's planned improvements to the bikeway network involve upgrading the existing network (for example, upgrading Class III bikeway to Class II or Class IV) rather than increasing the size of the network.<sup>66</sup>

A typical measure of bicycle transportation is bicycle mode share. Mode share measures the percentage of all transportation trips that use a given “mode” – in this case, the percentage of all trips made by bicycle. As noted above, San Francisco currently has a bicycle mode share of approximately 2%, meaning that 2% of all trips in San Francisco are taken via bicycle. The City does not currently have a bicycle-specific mode share target, but does have a target to reach an 80% sustainable mode share by 2030.<sup>67</sup> Achieving this target would mean that, by 2030, 80% of all trips in San Francisco would be bicycle, pedestrian, or transit trips. San Francisco's current sustainable mode share is 47%.<sup>68</sup>

While it is useful to evaluate how people are traveling, as a metric, mode share has no direct connection to infrastructure; for example, a percentage point of mode share cannot defensibly be equated to miles of bikeway. Instead, in the 2017 update to the San Francisco Transportation Plan, the Transportation Authority has identified the bike infrastructure necessary to move towards the City's target mode share.<sup>69</sup>

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<sup>64</sup> Note that this measure counts bike lanes on opposite sides of the same street separately.

<sup>65</sup> Fehr & Peers, 2013 - 2017 Travel Decision Survey Data Analysis and Comparison Report

<sup>66</sup> Meeting with SFMTA, 6/19/2019

<sup>67</sup> SFMTA, San Francisco Transportation Sector Climate Action Strategy (2017)

<sup>68</sup> SFMTA Travel Decision Survey 2019

<sup>69</sup> SFCTA, San Francisco Transportation Plan, 2017 update

## 6.2 Case Study Comparisons

Due to the variety of Complete Streets components and the numerous ways to measure them, Table 14 combines existing LOS with metrics and service goals to show how each case study city is performing according to its own metrics. Unlike other infrastructure categories, there is no consensus among case study cities for how to measure Complete Streets. The proposed Complete Streets metric for San Francisco combines all of the numerous Complete Streets infrastructure components into a single metric, and is detailed in Section 6.3.

TABLE 14: LOS METRICS, PROVISION, AND SERVICE GOALS – COMPLETE STREETS

City	Metric	Existing Condition	Service Goals
San Francisco, CA <sup>70</sup>	Traffic Fatalities	23 (2018)	0 by 2024
	Increase Enforcement Hours focused on Speeding	N/A	Increase by 30%
	Increase Sustainable Mode Share	9–10% walking, 2.5% biking, 715,000 average weekday MUNI trips	80% sustainable mode share by 2030
Minneapolis, MN <sup>71</sup>	Miles of bikeways	3,908 miles	6,773 miles by 2,020
	Percent of bicycle mode share increasing among underrepresented communities	N/A	5% faster than citywide increase
	Percent of major transportation hubs with adequate bicycle parking	50% (2015)	100% (2020)
	Percent of intersections with actuated signals and detection	50% (2015)	100% (2020)
	Number of bicycle parking spaces	N/A	Increase by 300 spaces per year
San Jose, CA <sup>72</sup>	Bikeway Network	342 (2016)	Complete 25 miles each year, and complete 500 miles by 2020
	Bike mode share	1% Citywide, 4% Downtown (2016)	5% by 2020

<sup>70</sup> San Francisco Infrastructure Level of Service Analysis (2014); San Francisco Transportation Sustainability Fee Nexus Study (2013); SFMTA Strategic Plan Performance Metrics & Targets (2018); San Francisco Pedestrian Strategy (2013); San Francisco Bicycle Strategy (2013)

<sup>71</sup> Vision Zero Minneapolis (2019); Minneapolis Pedestrian Master Plan (2009); City of Minneapolis Bicycle Master Plan (2011); The 2040 Transportation Policy Plan (2015)

<sup>72</sup> San José Access & Mobility Plan: Transportation Directives (2019); San José Bike Plan 2020 (2009); Vision Zero San Jose 2017-2018 Action Plan (2016)

City	Metric	Existing Condition	Service Goals
	Bike parking	2,570 (2016)	Install 500 new spaces each year, and add 5,000 spaces by 2020
San Diego, CA <sup>73</sup>	Bike mode share of commute trips	0.0346	n/a
	Class 1 bicycle network	72.3 miles	166.4 miles
	Class 2 bicycle network	309.4 miles	450.0 miles
	Class 3 bicycle network	112.9 miles	284.1 miles
Los Angeles, CA <sup>74</sup>	Miles of class 1 bike facility	341 miles (2014)	Increase 10% per year
	Miles of class 2 bike facility	1,046 miles (2014)	Increase 10% per year
	Miles of class 3 bike facility	614 miles (2014)	Increase 10% per year
	Miles of class 4 bike facility	6 miles (2014)	Increase 100% per year
Portland, OR <sup>75</sup>	Bike mode share of commute trips	N/A	25% by 2035
	Miles of regional trails	229 miles	Increase 50% by 2040
	Miles of regional bikeways	623 miles	Increase 50% by 2040
Seattle, WA <sup>76</sup>	Bicycle network completed	167 miles (2016)	608 miles by 2035
New York, NY <sup>77</sup>	Miles of bike lanes	N/A	Add 50 miles each year; Add 200 miles by 2021
	Number of accessible pedestrian signals		Install 75+ signals each year
Davis, CA <sup>78</sup>	Bicycle mode share of all trips	N/A	30% by 2020
Boston, MA <sup>79</sup>	Number of street trees excluding park trees	37,000 street trees (2015)	Plant 100,000 trees and increase the City's green canopy 20% by 2020 and 35% by 2030
	Miles of bicycle network	120 miles (2013)	356 miles by 2043
Santa Monica, CA <sup>80</sup>	Number of on- and off-street public charging stations for electric vehicles	89 (2017)	300 by 2020 1,000 by 2025
	Percent of bike commuters	12% (2015)	25% by 2030

<sup>73</sup> Vision Zero: Traffic Deaths and Severe Injuries (2018); City of San Diego Pedestrian Master Plan (2006); City of San Diego Bicycle Master Plan (2013)

<sup>74</sup> LA Metro Active Transportation Strategic Plan (2016); Los Angeles Mobility Plan 2035 (2016)

<sup>75</sup> Portland Transportation System Plan (2018); Portland Regional Transportation Plan (2014)

<sup>76</sup> Seattle Bicycle Master Plan (2017) - 2017-2021

<sup>77</sup> NYCDOT Strategic Plan (2016); NYCDOT Mobility Report (2018); OneNYC Progress Report (2018)

<sup>78</sup> City of Davis Beyond Platinum Bicycle Action Plan (2014)

<sup>79</sup> Boston Complete Streets Design Guidelines (2013); Boston Bike Network Plan (2013)

<sup>80</sup> Electric Vehicle Action Plan (2017); Santa Monica Bike Action Plan (2011); Santa Monica Pedestrian Action Plan (2016); Santa Monica Urban Forest Master Plan

City	Metric	Existing Condition	Service Goals
	Miles of bike lanes/paths	69 miles (2015)	88.7 miles (2030)
	Miles of bike lane/path per square mile	1.9	n/a
	Miles of Bike Lane/Path per 100,000 Residents	33.1 (2010)	n/a
	Percent of intersections lacking curb ramps	0.045	n/a
Sacramento, CA <sup>81</sup>	Bicycle mode share for commute trips	0.025	7% by 2020
	On-street bikeways	316 miles	464 miles
	Off-street bikeways	88 miles	208 miles

### 6.3 Level of Service Metrics

Although there are a number of infrastructure components that make up Complete Streets, the Hatch team uses one metric to represent the infrastructure category:

- Square Feet of Complete Streets Sidewalk per Service Population Unit (SPU)<sup>82</sup>

#### 6.3.1 Square Feet of Complete Streets Sidewalk per Service Population Unit

TABLE 15: SQUARE FEET OF SIDEWALK PER SPU – LOS PROVISION, GOAL, AND TARGET

LOS Measure	Value	Source
<b>Current Citywide Provision</b>	118 square feet of Complete Streets Sidewalk per SPU	Data from SF Planning and SF Department of Public Works.
<b>Short-Term Target</b>	Maintain 118 square feet of Complete Streets Sidewalk per SPU	Meeting with SF Planning, October 16, 2019.
<b>Long-Term Aspirational Goal</b>	Maintain 118 square feet of complete streets sidewalk per SPU	Meeting with SF Planning, October 16, 2019.

This metric is intended to measure the overall provision of complete streets infrastructure in San Francisco, including sidewalks, gutters, street trees, curb ramps, bulb outs, and bike lanes, and street lights. Because square feet of sidewalk is the most plentiful of the above infrastructure components, it is used as the representative metric; each square foot of sidewalk represents a certain amount of bike lane, street light, etc,

<sup>81</sup> City of Sacramento Bicycle Master Plan (2018)

<sup>82</sup> Note that, while other infrastructure categories measure infrastructure provision per 1,000 SPU, Complete Streets measures per SPU, not per 1,000 SPU.

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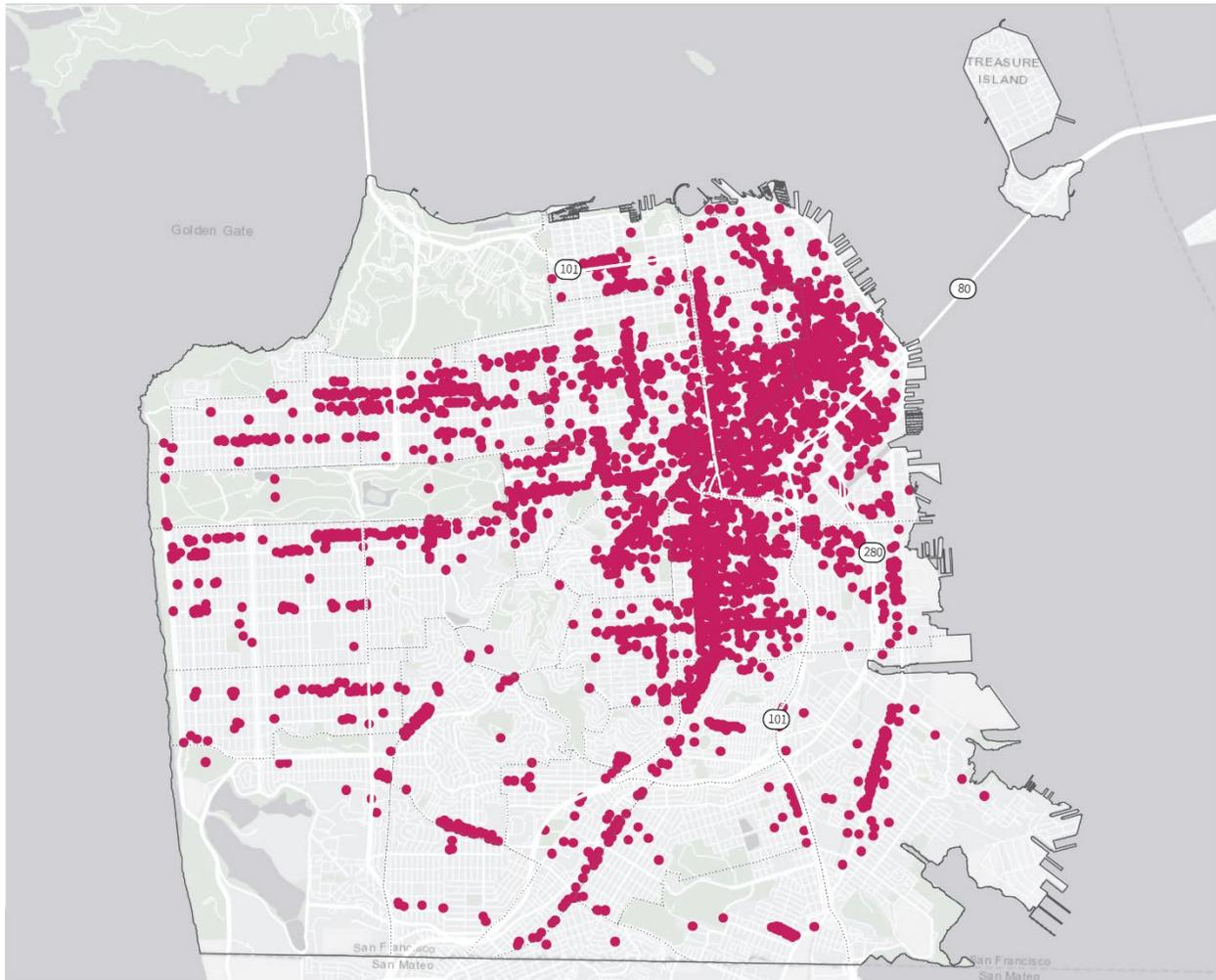
that creates a square foot of Complete Streets Sidewalk. Figure 8 through Figure 17 illustrate the distribution of the infrastructure components considered as part of this metric.

As San Francisco continues to grow, complete streets will be augmented in a variety of ways. Although some sidewalk widening may be necessary, adding other complete streets components such as bulb outs or street lights may be more important. As stated in Section 6.1.2, the SFMTA's current focus is to upgrade the existing bike paths. Although these improvements will not contribute to the number of square feet of sidewalk per SPU, they will contribute to the quality of the complete streets.

#### 6.3.1.1 Forecasted Demand

Current population and employment projections anticipate a growth of 101,000 SPU by 2025, and a further growth of 212,000 SPU by 2040. In order to maintain the current LOS, the City will need to invest in the equivalent of 12 million new square feet of Complete Streets Sidewalk by 2025 and a further 25 million square feet of Complete Streets Sidewalk by 2040. This may include infrastructure upgrades such as expanded bicycle lanes, improved street lights, and more street trees. Most of the anticipated SPU growth is concentrated in South of Market, Bayview, and Lakeshore.

FIGURE 8: LOCATION OF BICYCLE PARKING LOCATIONS



Bicycle Parking Locations  
 Total Number of Parking Locations 13,104

Source: SFMTA Bike Parking



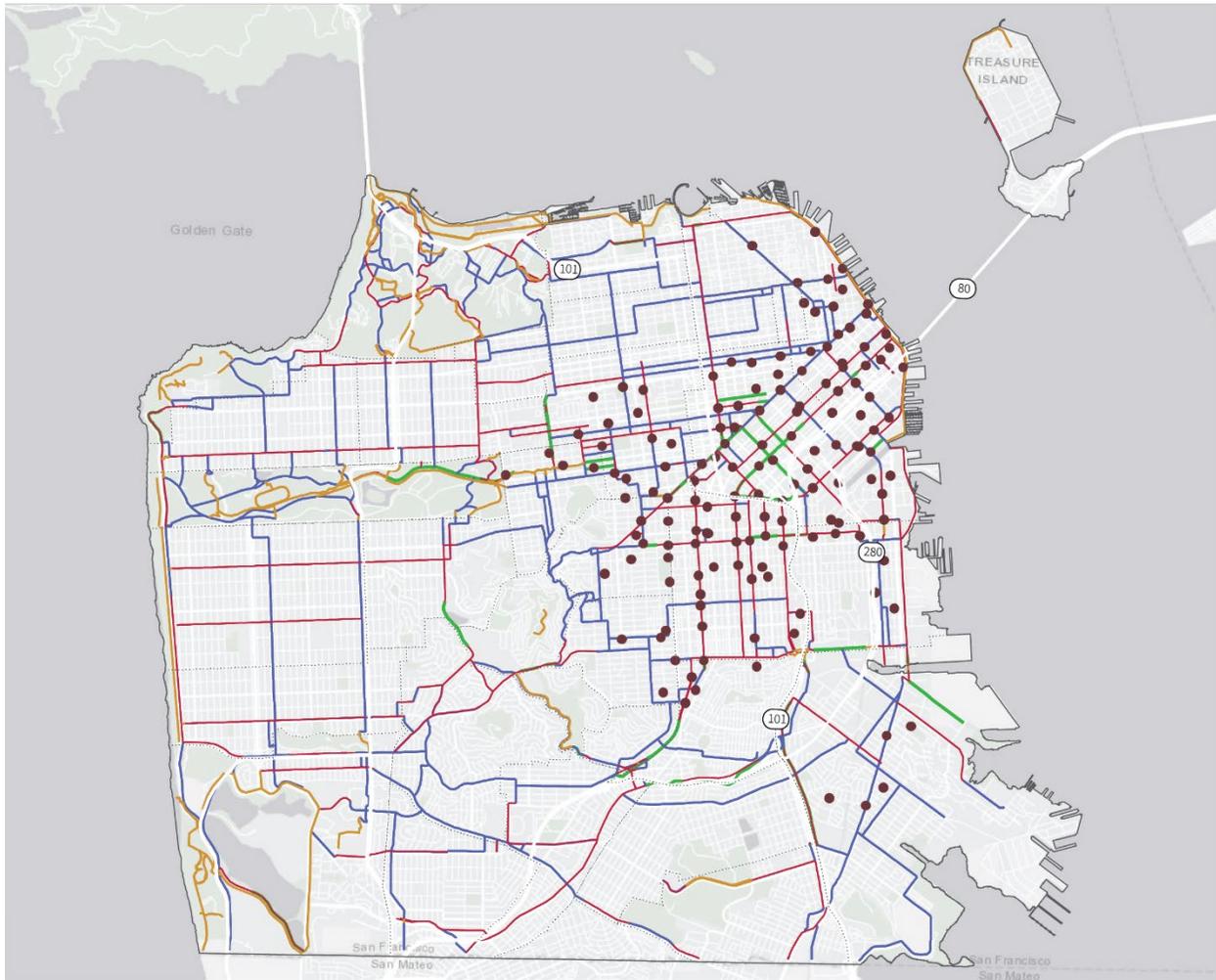
**LEGEND**

- County Boundary ———
- Highways ———
- Neighborhoods ·····

**Biking Facilities**

- Bicycle parking locations

FIGURE 9 - BIKESHARE DOCKING STATIONS AND BIKE LANES BY CLASS



- Class I<sup>1</sup>: 62 miles
- Class II<sup>2</sup>: 139 miles
- Class III<sup>3</sup>: 209 miles
- Class IV<sup>4</sup>: 20 miles

1. Bikeways, also known as bike paths or shared-use paths, are facilities with exclusive right of way for bicyclists and pedestrians, away from the roadway and with cross flows by motor traffic minimized. Some systems provide separate pedestrian facilities
2. Bikeways are bike lanes established along streets and are defined by pavement striping and signage to delineate a portion of a roadway for bicycle travel. Bike lanes are one-way facilities, typically striped adjacent to motor traffic travelling in the same direction.
3. Bikeways, or bike routes, designate a preferred route for bicyclists on streets shared with motor traffic not served by dedicated bikeways to provide continuity to the bikeway network. Bike routes are generally not appropriate for roadways with higher motor traffic speeds or volumes.
4. Separated bikeway, often referred to as a cycle track or protected bike lane, is for the exclusive use of bicycles, physically separated from motor traffic with a vertical feature.

Source: SFMTA Bikeway Network, Bike Share Stations, Bikeway Classification Brochure by Caltrans



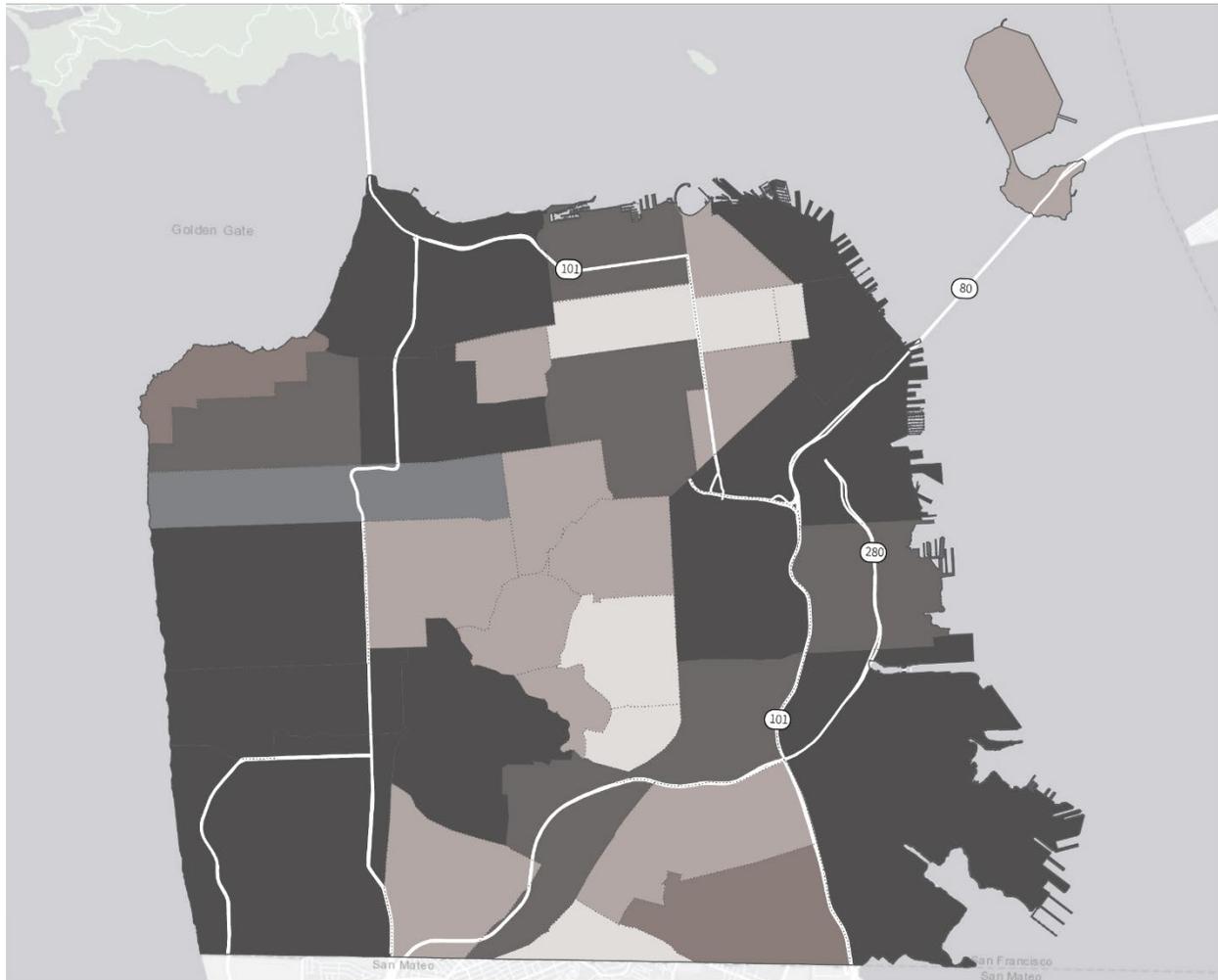
**LEGEND**

- County Boundary
- Highways
- Neighborhoods

**Bike Share Facilities**

- Bike Share Docking Stations

FIGURE 10 - MILES OF PREMIUM CLASS (I, II AND IV) BIKE LANES PER NEIGHBORHOOD



Miles of Premium Bike Lane (Class I<sup>1</sup>, II<sup>2</sup> and IV<sup>3</sup>) Per Neighborhood



**LEGEND**

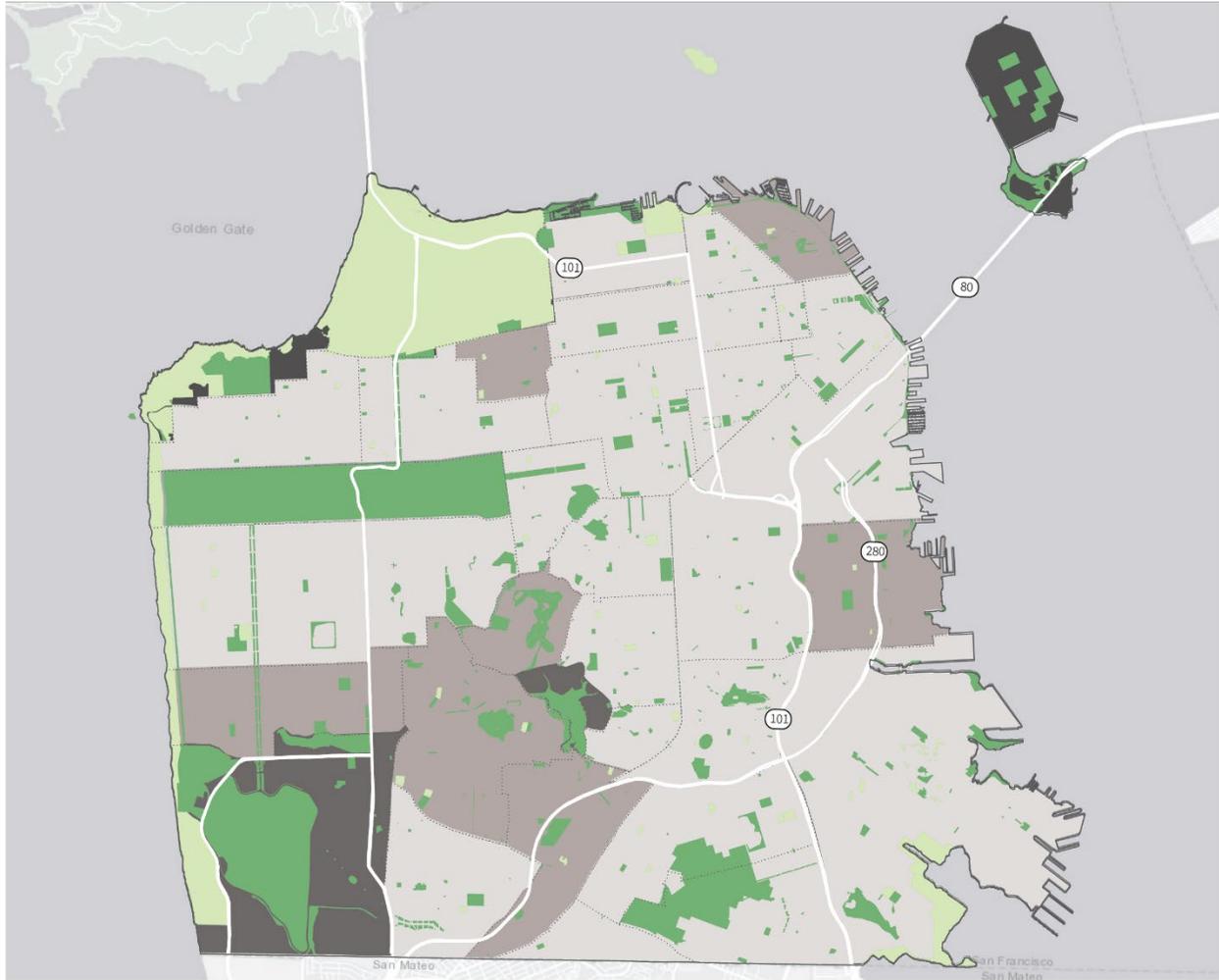


Average miles of bike lane per neighborhood: 7.0 miles

1. Bikeways, also known as bike paths or shared-use paths, are facilities with exclusive right of way for bicyclists and pedestrians, away from the roadway and with cross flows by motor traffic minimized. Some systems provide separate pedestrian facilities. 2. Bikeways are bike lanes established along streets and are defined by pavement striping and signage to delineate a portion of a roadway for bicycle travel. Bike lanes are one-way facilities, typically striped adjacent to motor traffic travelling in the same direction. 3. Bikeways, or bike routes, designate a preferred route for bicyclists on streets shared with motor traffic not served by dedicated bikeways to provide continuity to the bikeway network. Bike routes are generally not appropriate for roadways with higher motor traffic speeds or volumes.

Source: SFMTA Bikeway Network, Bikeway Classification Brochure by Caltrans

FIGURE 11 - MILES OF PREMIUM CLASS (I, II AND IV) BIKE LANES PER CAPITA



Miles of Bike Lane (Class I, II and IV) Per 1,000 Service Population Unit\* (SPU)

- < 0.25 miles per 1,000 SPU
- 0.25 - 0.5 miles per 1,000 SPU
- 0.5 - 0.75 miles per 1,000 SPU
- 0.75 - 1.00 miles per 1,000 SPU
- > 1.00 miles per 1,000 SPU

Citywide average: 0.58 miles per 1,000 SPU

\*In this case, the service population is defined as 100 percent of the residents and 50 percent of the employees.

Source: SFMTA Bikeway Network, SF Planning 2019 population estimates



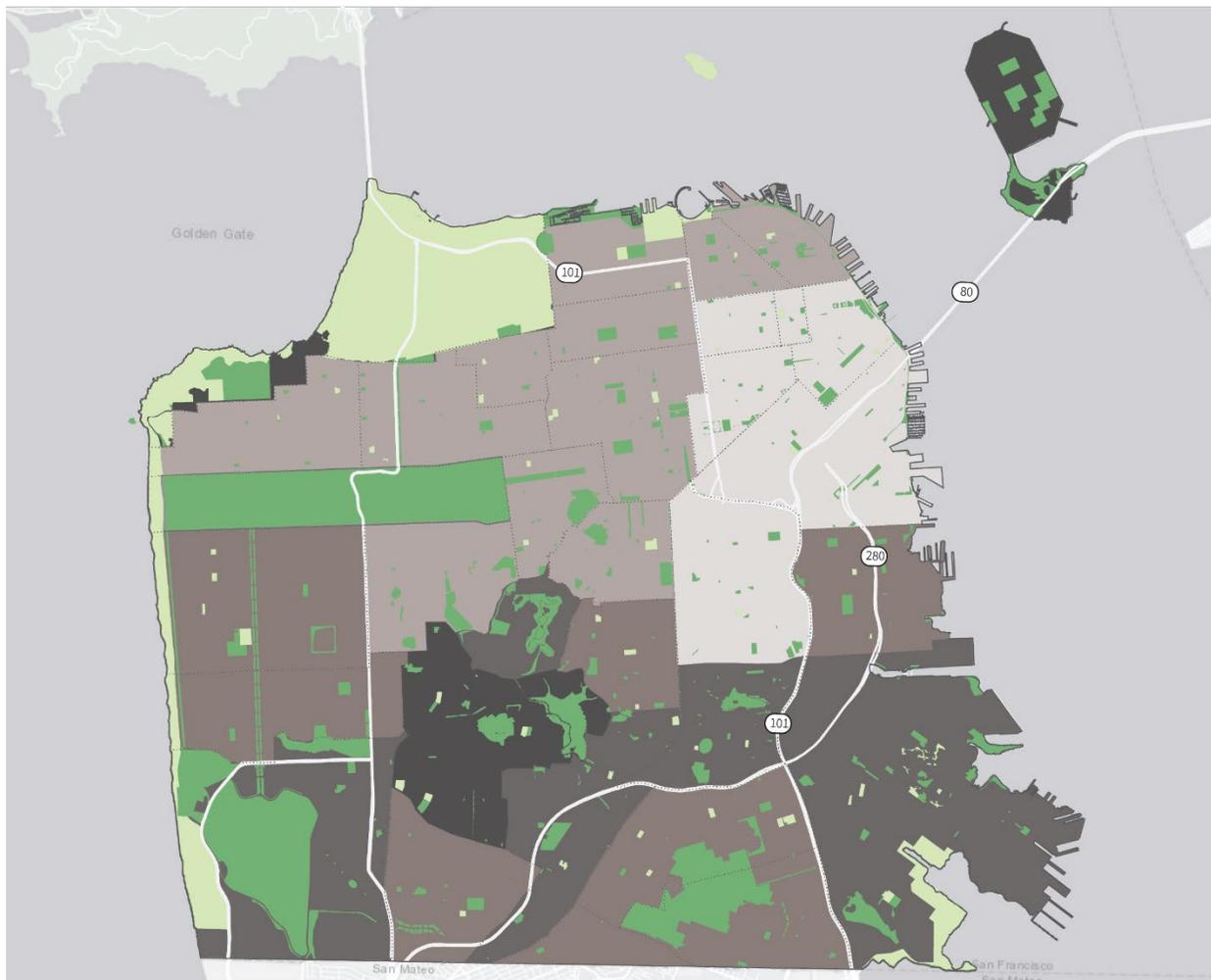
**LEGEND**

- County Boundary
- Highways
- Neighborhoods

**Open Space by Ownership**

- City-owned open space
- Non-city owned open space

FIGURE 12 - LINEAR FEET OF SIDEWALK PER CAPITA



Linear Feet of Sidewalk Per 1,000 Service Population Unit\* (SPU)

- < 3,000 feet per 1,000 SPU
- 3,001 - 6,000 feet per 1,000 SPU
- 6,001 - 9,000 feet per 1,000 SPU
- 9,001 - 12,000 feet per 1,000 SPU
- > 12,000 feet per 1,000 SPU

Citywide Average: 14,192 feet per 1,000 SPU

Total Sidewalk Distance: 6,392,286 feet / 1,210 miles

\*In this case, the service population is defined as 100 percent of the residents and 50 percent of the employees.

Source: SFMTA Sidewalk Widths, SF Planning 2019 population estimates, SFCTA Communities of Concern



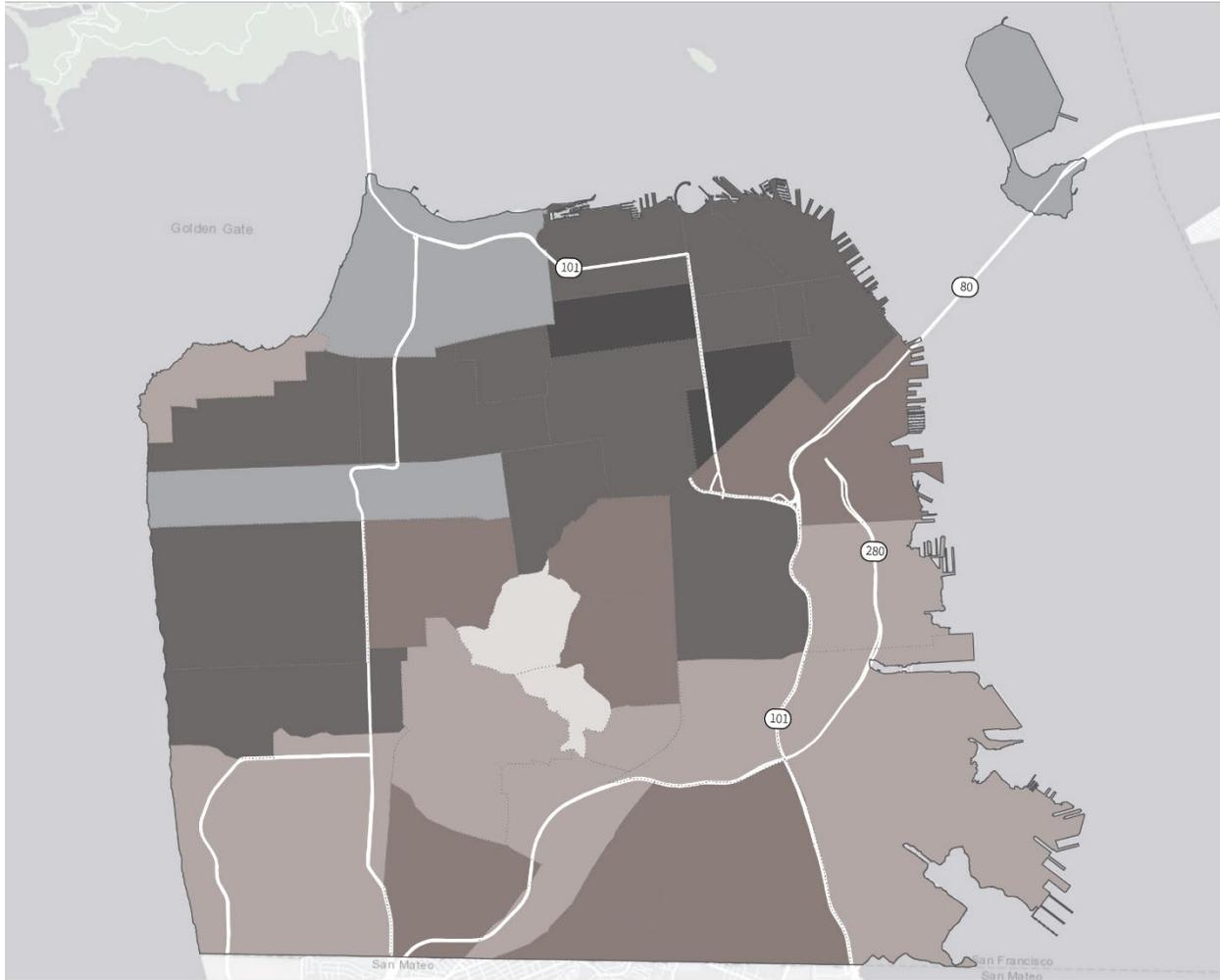
**LEGEND**

- County Boundary
- Highways
- Neighborhoods

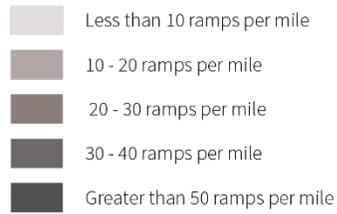
**Open Space by Ownership**

- City-owned open space
- Non-city owned open space

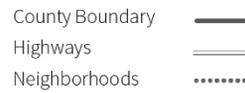
FIGURE 13 - NUMBER OF RAMPS PER MILE OF ROAD



Ramps Per Mile of Road

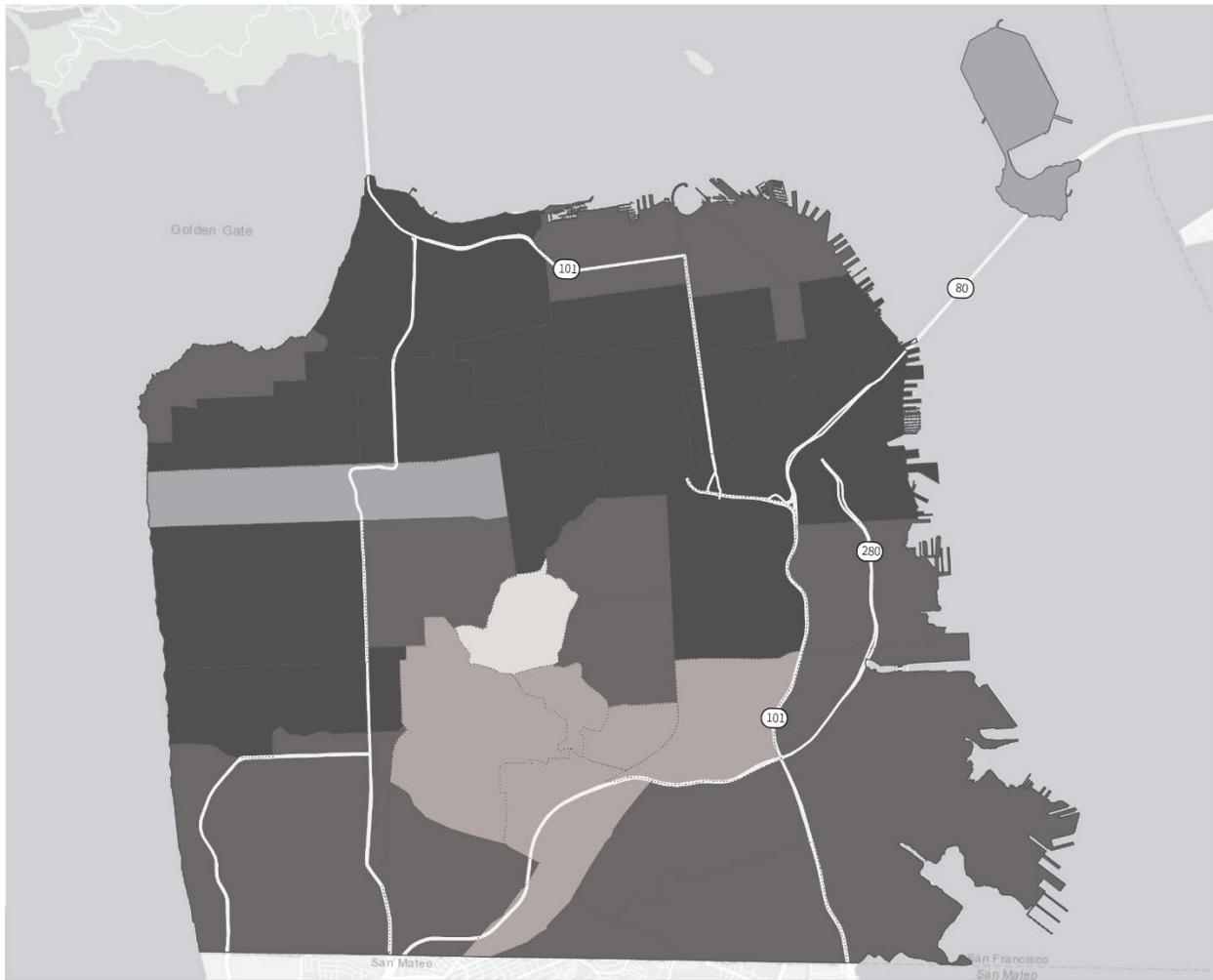


**LEGEND**



Note: There was no data available on number of ramps in Treasure Island

FIGURE 14 - PERCENT OF BUILDABLE CURB RAMPS BUILT PER NEIGHBORHOOD



Percent of Buildable Curb Ramps Built

- Less than 40% of buildable curb ramps built
- 40% - 60% of buildable curb ramps built
- 60% - 80% of buildable curb ramps built
- Greater than 80% of buildable curb ramps built

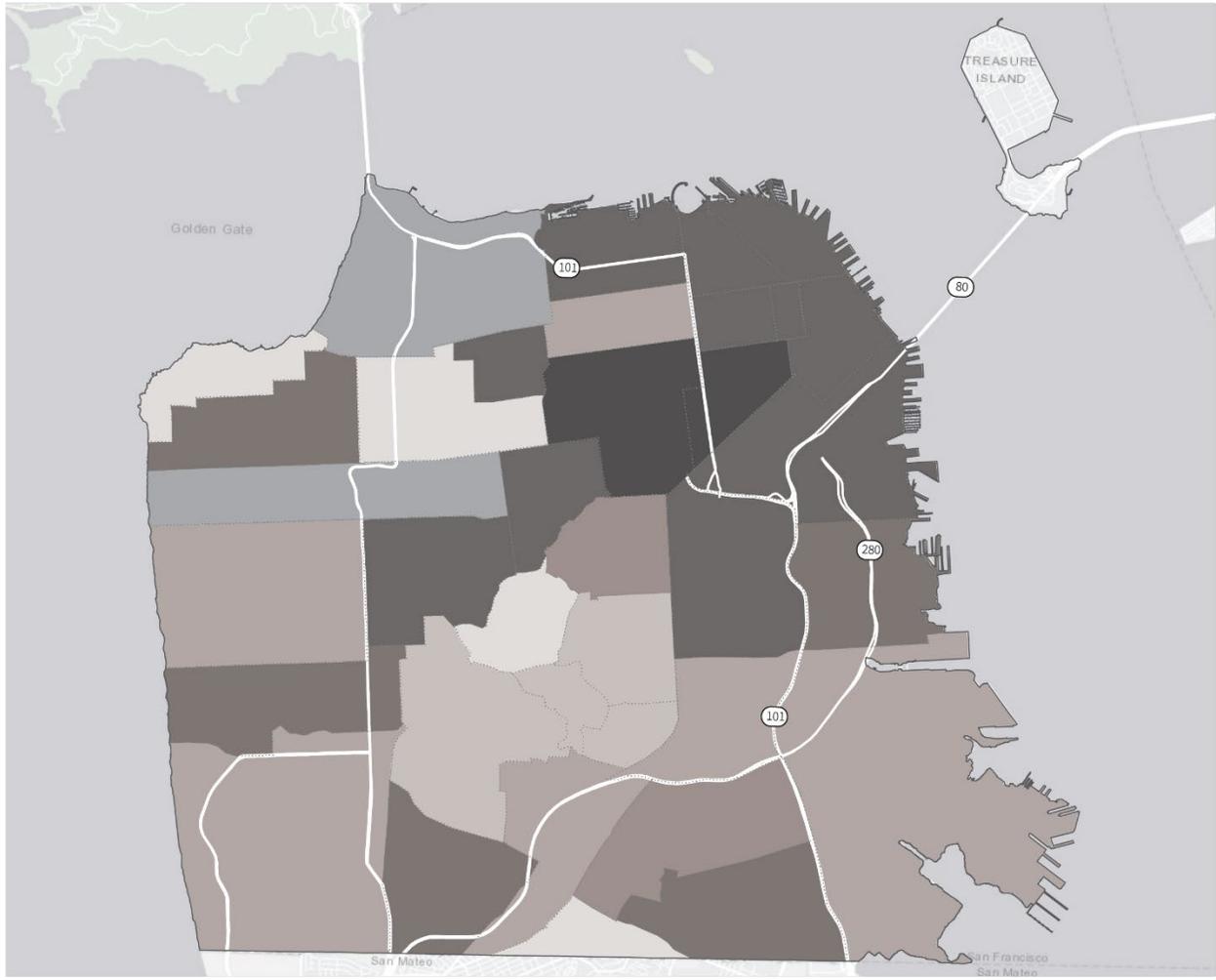


**LEGEND**

- County Boundary
- Highways
- Neighborhoods

Citywide Average: 75% of buildable curb ramps built

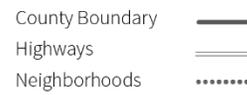
FIGURE 15 - NUMBER OF BULB-OUTS PER MILE OF ROAD



Bulb-outs Per Mile of Road



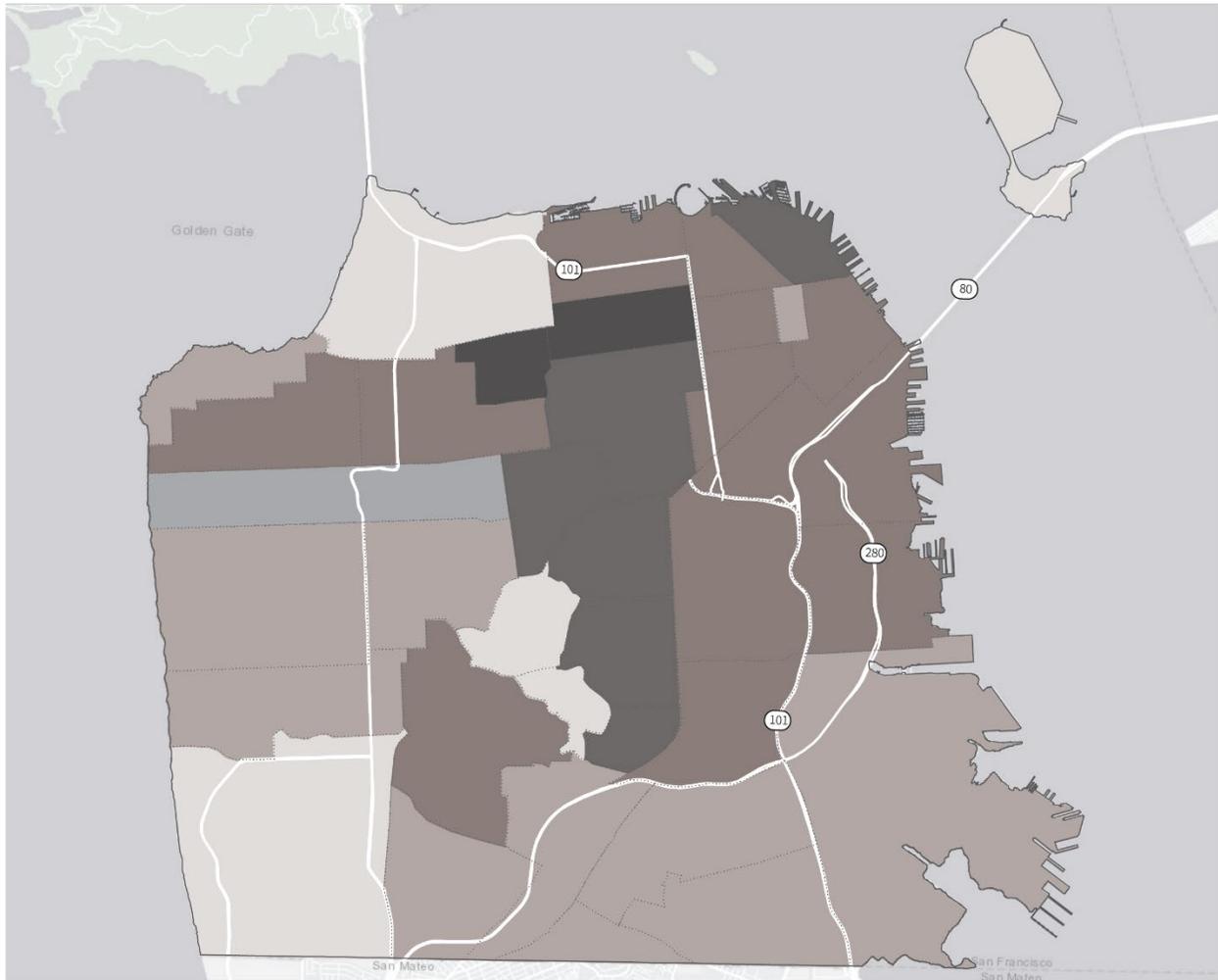
**LEGEND**



Citywide Average: 0.9 bulb-outs per mile

Note: There was no data available on number of ramps in Treasure Island

FIGURE 16 - STREET TREES PER LINEAR MILE OF SIDEWALK



Tress per Linear mile of Sidewalk

- Less than 50 trees per linear mile of sidewalk
- 51 - 100 trees per linear mile of sidewalk
- 101 - 150 trees per linear mile of sidewalk
- 150 - 200 trees per linear mile of sidewalk
- Greater than 200 trees per linear mile of sidewalk



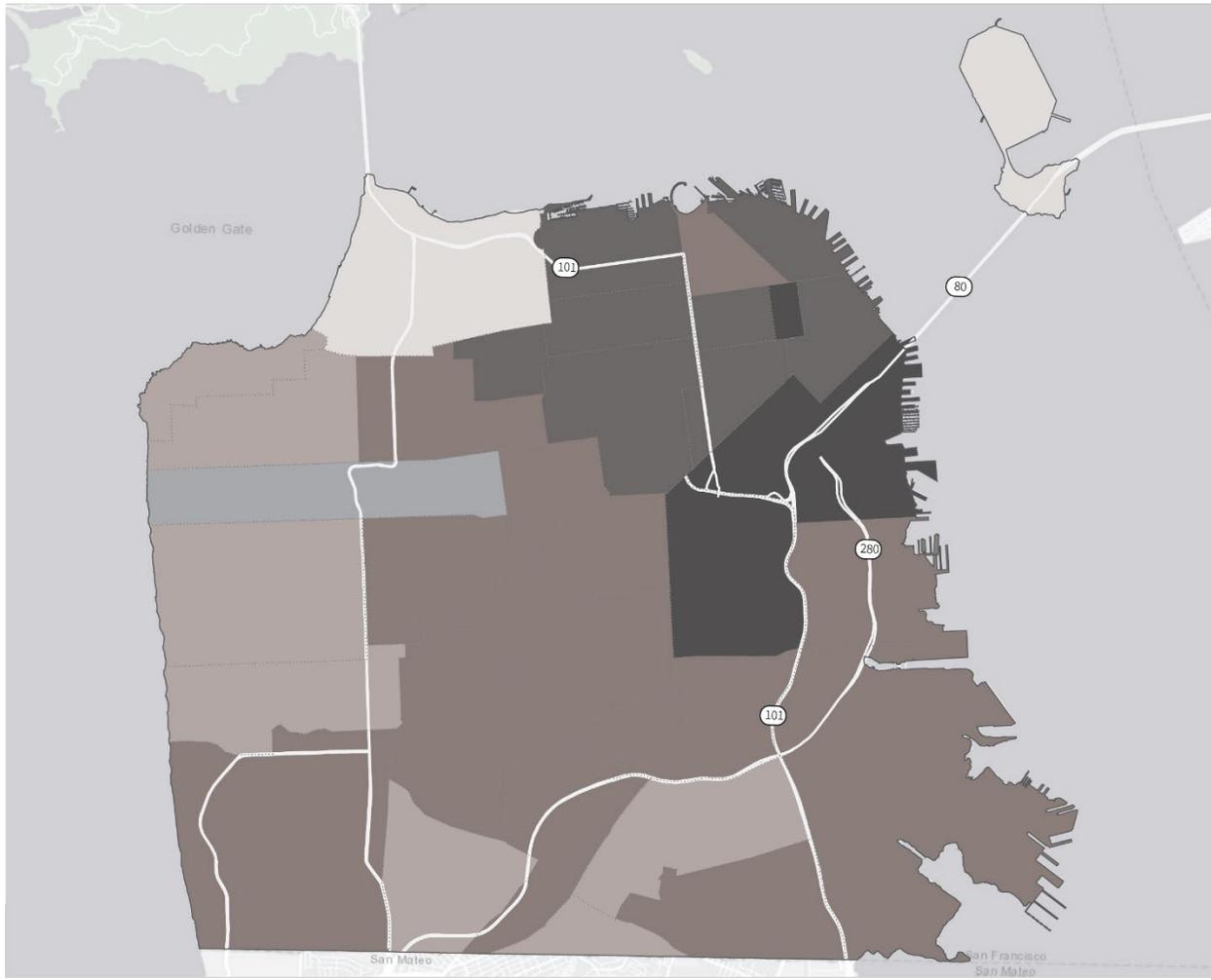
**LEGEND**

- County Boundary
- Highways
- Neighborhoods

Citywide Average: 102 trees per linear mile of sidewalk

Source: SFMTA Sidewalk Widths, San Francisco Tree Census 2017

FIGURE 17 - STREET LIGHT PER LINEAR MILE OF SIDEWALK



Number of Street Light per Linear Mile of Sidewalk

- Less than 5 lights per linear mile of sidewalk
- 5 - 10 lights per linear mile of sidewalk
- 10 - 25 lights per linear mile of sidewalk
- 25 - 50 lights per linear mile of sidewalk
- Greater than 50 lights per linear mile of sidewalk



**LEGEND**

- County Boundary
- Highways
- Neighborhoods

Citywide Average: 19.9 per linear Mile of sidewalk

Source: SFMTA Sidewalk Widths, SFPUC

## 7 Transit Infrastructure

Transit infrastructure, including trolleys, buses, and subways, complements the other transportation modes within the City. San Francisco aims to increase transit ridership by 2% in FY 2019 and 5% in FY 2020.<sup>83</sup> The following section provides a background on San Francisco’s transit infrastructure and service and reviews previously determined metrics and targets for transit network provision.

### 7.1 Background

The SFMTA’s 2012 San Francisco Transportation Sustainability Fee (TSF) Nexus Study is an important guiding document for the evaluation of San Francisco’s transit system within the context of a development impact fee nexus analysis. This evaluation of transit infrastructure defers to that report and its subsequent updates. In 2015, the City revised and adopted an updated Transportation Sustainability Fee (TSF) to achieve the following three objectives:

1. Replace the existing Transit Impact Development Fee (TIDF) with the TSF and expand the fee to include residential in addition to non-residential development citywide.
2. Incorporate a complete streets fee component into the citywide TSF for bicycle and pedestrian facilities to support those travel modes.<sup>84</sup>
3. Establish the maximum justified transportation impact fee for all development citywide, whether subject to an area plan transportation fee or not.

This document updates the LOS metrics and analysis to support an updated 2019 Transportation Sustainability Fee to provide the maximum justifiable fee for use citywide and for justification of adopted neighborhood and specific plan transit fees.

### 7.2 Case Study Comparisons

Due to the variety of transit components and the numerous ways to measure them, Table 16 combines existing LOS with metrics and service goals to show how each case study city is performing according to its own metrics. The proposed transit metrics for San Francisco are designed to be consistent with prior transit studies in the City, and are detailed in Section 7.3.

TABLE 16: LOS METRICS, PROVISION, AND SERVICE GOALS – TRANSIT

City	Metric	Existing Condition	Service Goals
San Francisco, CA <sup>85</sup>	On-time performance	57%	85%
	Percent of Muni bus trips over capacity during AM/PM peak	AM Peak: 14.6% PM Peak: 15.8%	AM Peak: 13% PM Peak: 13%
	Bus on-time performance	86%	N/A

<sup>83</sup> SFMTA Strategic Plan 2018

<sup>84</sup> TSF funds may be used to cover pedestrian and bicycle improvements insofar as they reduce auto congestion and transit overcrowding, but the transit infrastructure LOS does not include complete streets infrastructure.

<sup>85</sup> SFMTA Strategic Plan Performance Metrics & Targets (2018)

City	Metric	Existing Condition	Service Goals
Minneapolis, MN <sup>86</sup>	Average vehicle miles between service calls	7,915 miles	N/A
San Jose, CA <sup>87</sup>	On-time Performance	Bus: 86.4% (2018)	Bus: 92.5% (Short-term)
		LRT: 84.7% (2018)	LRT: 95%( Short-term)
	Percent of Scheduled Service Operated	Bus: 99.66% (2018)	Bus: 99.50% (Short-term)
		LRT: 99.96% (2018)	LRT: 99.90% (Short-term)
San Diego, CA <sup>88</sup>	On-time performance (MTS bus)	82.7% (2017)	85%
	Percent of vehicle trips exceeding the maximum lag factor of 1.5	N/A	<20%
Los Angeles, CA <sup>89</sup>	On-time performance on Transit Enhanced Network:	N/A	95% (2035)
	Bus Frequency on Transit Enhanced Network:	N/A	Off-peak 5 minute bus frequency on 25% of the Transit Enhanced Network, off-peak 10 minute bus frequency on 50% of the Transit Enhanced Network, and off-peak 15 minute bus frequency on 100% of the Transit Enhanced Network by 2035
Vancouver, BC <sup>90</sup>	Service hours	5,125,269	8,125,000 by 2027
	On-time performance for frequent bus	76%	N/A
	On-time performance for non-frequent bus	79%	N/A
Portland, OR <sup>91</sup>		N/A	<15 min (short-term)

<sup>86</sup> Twin Cities Transit System Performance Evaluation (2009); Metro Transit Arterial Transit way Corridor Study (2012)

<sup>87</sup> VTA Performance Report (2018); San José Access & Mobility Plan: Transportation Directives (2019)

<sup>88</sup> SANDAG The Coordinated Plan (2018)

<sup>89</sup> Los Angeles Mobility Plan 2035 (2016); LA Metro Vision 2028 Strategic Plan (2018)

<sup>90</sup> TransLink Financial and Performance Report (2018); TransLink 10-Year Vision 2018 - 2027 INVESTMENT PLAN (2018); TransLink Statutory Annual Report (2017)

<sup>91</sup> Portland Enhanced Transit Corridors Plan (2018); Portland Regional Transportation Plan (2014); TriMet Business Plan for Fiscal Years 2019-2023 (2018); Portland Transportation System Plan (2018)

City	Metric		Existing Condition	Service Goals
	Transit frequency for a majority of the day			<12 min (within 10 years)
				<10 min (within 20 years)
	On-time performance		Bus: 85.6%	Bus: 85% by 2022
			Light rail: 88.4%	Light rail: 90% by 2022
Overloaded weekday peak trips		2%	2% or fewer	
Seattle, WA <sup>92</sup>	Percent of Frequent Transit Network that is maintained and modernized by rehabilitating the pavement		22% (2014)	35%(2025)
	Percent of "Seattle" bus route trips that are on-time in the afternoon peak period		68%	80%
New York, NY <sup>93</sup>	Overall transit capacity (number of passengers) into the Manhattan Central Business District during the AM peak hour		642,290 passengers (2017)	Increase 20% by 2040
	PM peak median citywide bus speed		10.7 mph	Increase bus travel speeds by the year 2020, especially on bus corridors with high ridership and on streets where bus speeds fall below 5 miles per hour.
Davis, CA <sup>94</sup>	Convenience	Peak-hour service frequency for routes with 60+ passengers/hour	15 to 60-minute	15-minute
	Reliability	% within 5 min of scheduled time	94%	90%
		Vehicle miles between road calls	11955	20000
Capacity	Peak loading conditions not to exceed 150% of seats	94% of bus trips; 88% of bus riders	95 % of bus trips; 90% of bus riders	
Boston, MA <sup>95</sup>			93% for bus	95% for bus

<sup>92</sup> Seattle TRANSIT MASTER PLAN (2016); King County Metro Transit 2017; Strategic Plan Progress Report (2018)

<sup>93</sup> MTA Mission Statement, Measurements and Performance Indicator Report (2017)

<sup>94</sup> City of Davis Short-Range Transit Plan Fiscal Years 2015-2021

<sup>95</sup> Massachusetts Bay Transportation Authority (MBTA) Service Delivery Policy (2017)

City	Metric		Existing Condition	Service Goals
	Service Availability Standards	Span of Service - hours meeting the expected span of service	100% for rail	100% for rail
		Frequency of Service - hours meeting the expected frequency of service	93% for bus	95% for bus
			100% for rail	100% for rail
	Reliability Service Standards	Bus - percent of time points meeting scheduled time points	65%	75-80%
		Light Rail - percent of all station departures over the entire service day that pass their on-time tests	89%	90%
	Santa Monica, CA <sup>96</sup>	On-time performance		Varies by route
Total ridership by route				
Passenger load factor				
Sacramento, CA <sup>97</sup>	Service Frequency		5-15 min depending on the mode	10 minutes or better

### 7.3 Level of Service Metrics

In 2012, the SFMTA’s San Francisco Transportation Sustainability Fee Nexus Study established guidelines for the evaluation of San Francisco’s transit system using citywide metrics. The Hatch team used a citywide geographic analysis because of the dispersion of trip origins and destinations citywide and regionally, and the interdependence of transit system components. The 2012 study used two LOS performance metrics that were also reported in the 2014 LOS Analysis: transit travel time and transit crowding. The 2015 TSF update modified these two metrics by keeping the transit crowding metric and substituting a transit maintenance demand metric for the transit travel time metric. The transit travel time metric proved too complex to maintain because of the extensive travel modeling required, and the transit maintenance demand metric supported the use of TSF funds for transit maintenance that increases available transit capacity to serve new development. These two updated metrics were developed to directly support the 2015 TSF nexus analysis. This 2019 update to the

<sup>96</sup> Fiscal Year 2015-16 Big Clue Bus Year End Performance Report (2016)

<sup>97</sup> Sacramento Transit Action Plan Regional Transit Master Plan

Level of Service Analysis uses the same two metrics used in the 2015 TSF update. Both of these metrics are calculated at the citywide level. The two metrics are:

- Transit crowding: Level of service is measured in terms of passenger miles traveled in crowded versus uncrowded conditions systemwide on an average daily basis. Crowded conditions occur when there is less than three square feet per standing passenger.<sup>98</sup>
- Transit maintenance level of service: The existing transit maintenance LOS is the current ratio of the supply of transit services (measured by transit revenue service hours) to the level of transportation demand (measured by number of auto plus transit trips).

Table 17 calculates the transit crowding level of service both for the 2015 base year and for a 2040 projection. The calculation of passenger miles comes from the ConnectSF Needs Assessment, which completed 2015 and 2040 SF-CHAMP travel demand model runs on the current and future transit system links. The Hatch team adjusted the calculation of crowded passenger miles to consider the latest transit vehicle crowding capacities specified by SFMTA. The analysis indicates that in 2040, despite a projected increase in transit infrastructure, crowding will increase relative to the existing LOS standard.

TABLE 17: TRANSIT CROWDING LOS STANDARD<sup>99</sup>

	2015	2040
Uncrowded Passenger Miles	1,375,899	1,926,271
Crowded Passenger Miles	233,455	485,189
Total Passenger Miles	1,609,354	2,411,460
Percent Crowded Passenger Miles	15%	20%

Figure 18 compares the crowded to uncrowded passenger miles in 2015 to 2040. As shown, crowding will increase compared to the existing LOS standard.

<sup>98</sup> Exhibit 5-17, TCRP 165 – Transit Capacity and Quality of Service Manual, 2013, 3<sup>rd</sup> Ed.

<sup>99</sup> ConnectSF Needs Assessment; SF-CHAMP travel demand model, 2019; Urban Economics

FIGURE 18: TRANSIT CROWDING LOS STANDARD IN 2015 AND 2040

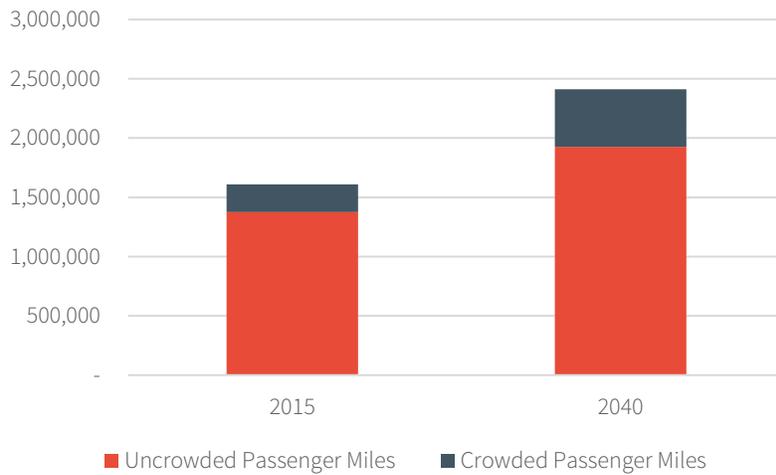


Table 18 calculates the transit maintenance level of service standard in terms of revenue service hours per 1,000 vehicle trips. The analysis utilizes data from the U.S. Department of Transportation and the San Francisco Planning Department calculate revenue service hours per 1,000 vehicle trips. The current LOS standard is 1.45 revenue service hours per 1,000 daily trips.

TABLE 18: TRANSIT MAINTENANCE LOS STANDARD<sup>100</sup>

	Amount	Calculation
Annual Revenue Service Hours	3,885,640	A
Days per Year	365	B
Average Daily Revenue Service Hours	10,646	C = A / B
2019 Average Daily Trips (ADT) <sup>1</sup>	7,335,000	D
Revenue Service Hours per 1,000 ADT	1.45	C / D * 1,000

<sup>100</sup> Auto and transit trip ends only within San Francisco. Excludes bicycle and pedestrian trip ends.

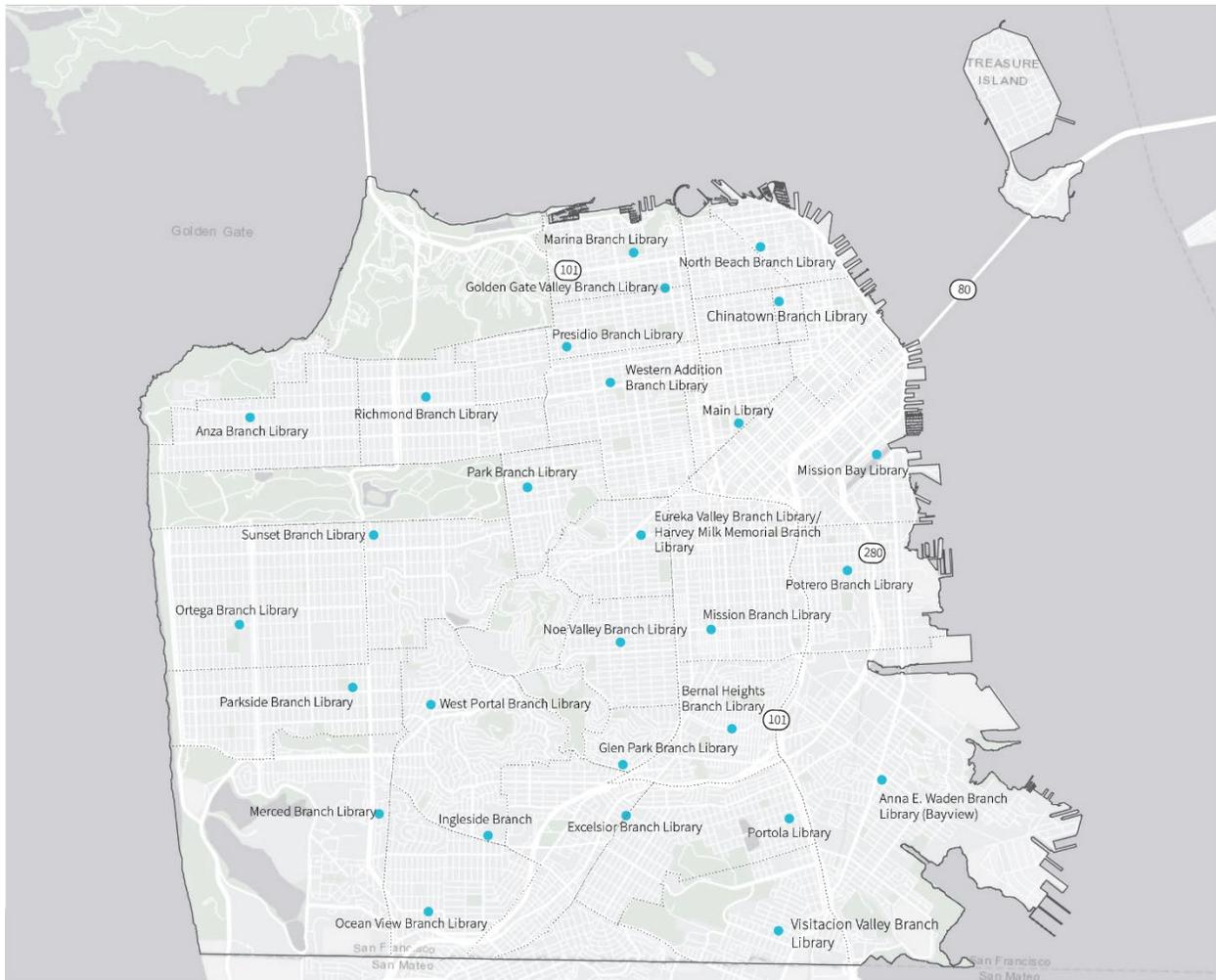
Sources: U.S. Department of Transportation, Federal Transit Administration, National Transit Database, 2017 Data Reports (<https://www.transit.dot.gov/ntd/ntd-data>); San Francisco Planning Department; Urban Economics.

## 8 Library Facilities

Libraries provide many City services, as well as an important space for community gathering. This section outlines the library facilities operated by the City and County of San Francisco, compares the provision of library facilities among case study cities, and proposes a metric for measuring San Francisco’s provision of library facilities. Maps illustrate San Francisco’s current library Level of Service. Figure 19 shows the distribution of library branches, including the main branch, around San Francisco. Table 19 lists the City’s guiding policy document consulted in the formulation of this section.

TABLE 19: LIBRARY PROVISION GUIDING POLICY DOCUMENT

Policy Document	Year	Key Contributions
<b>Emerging Southeast Initiative: Southeast Framework: Community Facilities</b>	2018	<ul style="list-style-type: none"> <li>• Information on current library facilities in San Francisco, and San Francisco Public Library’s internal standards for Level of Service</li> <li>• Plans for library expansion in the City’s southeast neighborhoods</li> </ul>



Total Number of Libraries 28

Source: San Francisco Public Library



**LEGEND**

- County Boundary ———
- Highways ———
- Neighborhoods ·····

**Community Facilities**

- Library

### 8.1 Background

Library facilities provide a wide array of services to San Francisco residents. Traditionally, libraries supply the public with books and other materials that they can borrow for free, reference librarians to help with research and material recommendations, a quiet location for studying, and community meeting space. As libraries expand to meet 21<sup>st</sup> century needs, they have also become a place where people can access other government services such as registering to vote and filing their taxes, as well as accessing computers with wi-fi access. In addition, San Francisco libraries offer information on immigration, citizenship, and adjusting to American culture, after school programs for children and teenagers including help with homework, job-searching and

career resources, programming for older adults, and art exhibitions, among other services.<sup>101</sup> 80% of Americans still consider borrowing books to be a “very important” library service, and 77% feel the same about free access to computers and the internet.<sup>102</sup>

Most of the programs listed above rely heavily on staffing, and therefore operations funding, to take place. However, the public facilities that libraries provide are essential for locating these programs. Furthermore, computers qualify as a capital investment along with buildings, and are necessary tools to apply for many jobs and government programs, both of which are heavily utilized library services.<sup>103</sup> This section will primarily focus on the physical building space associated with libraries to establish the capital facilities level of service, but capital funds may also be used to increase capital capacity at existing libraries by increasing the stock of capital infrastructure such as computers and books.

Unlike other infrastructure categories examined in this report, library facilities are measured per resident, rather than per service population unit. Although any resident of California can obtain a San Francisco Public Library (SFPL) card, non-resident employees in San Francisco are not more likely to use the City’s public libraries than other Bay Area residents living outside of San Francisco.<sup>104</sup> 89% of Americans say closing their local public library would have a negative impact on their community,<sup>105</sup> which suggests that most Americans primarily rely on their local library for library services.

To geospatially measure library facility LOS within San Francisco, this section analyses the LOS within 27 library service areas, one for each branch library in the City. Library service areas are defined as the collection of Traffic Analysis Zones (TAZs)<sup>106</sup> that are closest to each library. The main library service area has been excluded from the neighborhood-level analysis because the main library is considered a citywide resource. It is only counted toward the citywide LOS.

Internally, the San Francisco Public Library (SFPL) uses different service areas to evaluate its library branch needs and levels of service. Physical barriers like freeway overpasses may make certain walks unpleasant and prompt library users to go to a different library, and certain libraries have culturally-specific collections that draw patrons to that library from across the City.<sup>107</sup> This does not affect the citywide LOS but may affect branch-level considerations. From an infrastructure provision perspective, making sure residents have sufficient access to a local library suffices, regardless of which library they choose to go to.

## 8.2 Case Study Comparisons

Traditionally, the recommended amount of library space for a city of San Francisco’s size is 0.3 square feet per capita.<sup>108</sup> San Francisco’s Level of Service exceeds this standard, at 0.67 square feet of library space per

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<sup>101</sup> San Francisco Public Library website, <https://sfpl.org/index.php?pg=0000000401>. Accessed August 8, 2019.

<sup>102</sup> Pew Research Center, Library Services in the Digital Age (2013)

<sup>103</sup> American Library Association, State of America’s Libraries Report 2019

<sup>104</sup> Confirmed in a meeting with SFPL staff on June 26, 2019.

<sup>105</sup> Pew Research Center, Libraries at the Crossroads (2015)

<sup>106</sup> Traffic Analysis Zones (TAZs) are a way of dividing land area into discrete measurable units for planning purposes. The US Census Bureau designates these zones based on physical land constraints, population and employment density, and certain municipal boundaries.

<sup>107</sup> Meeting with SFPL, June 18, 2019.

<sup>108</sup> American Planning Association, Piero Faraci, Information Report No. 241, Planning the Public Library.

resident. As square footage is not a readily available figure for many library systems among the case study cities, Table 20 compares the number of library branches per resident and square mile of city among the case study cities. As seen in Table 21, most case study cities do not have a standard for determining library facility LOS.

TABLE 20: LOS PROVISION COMPARISON – LIBRARIES

City	Libraries (Total)	Libraries per 100,000 Residents <sup>109</sup>	Libraries per Square Mile
San Francisco, CA <sup>110</sup>	28	3.24	0.60
Minneapolis, MN <sup>111</sup>	15	3.65	0.28
San Jose, CA <sup>112</sup>	24	2.35	0.07
San Diego, CA <sup>113</sup>	35	2.52	0.11
Los Angeles, CA <sup>114</sup>	75	1.90	0.16
Vancouver, BC <sup>115</sup>	21	3.33	0.48
Portland, OR <sup>116</sup>	19	3.01	0.14
Seattle, WA <sup>117</sup>	27	3.92	0.32
New York, NY <sup>118</sup>	210	2.45	0.69
Davis, CA <sup>119</sup>	2	2.96	0.20
Boston, MA <sup>120</sup>	26	3.89	0.54
Santa Monica, CA <sup>121</sup>	6	6.49	0.71
Sacramento, CA <sup>122</sup>	30	6.13	0.31

<sup>109</sup> Population and city area data come from the US Census Bureau

<sup>110</sup> San Francisco Public Library: Libraries (2019)

<sup>111</sup> Hennepin County Library: Library Locations (2019)

<sup>112</sup> San Jose Public Library: Locations & Hours (2019)

<sup>113</sup> The City of San Diego: Library Locations (2019)

<sup>114</sup> Los Angeles Public Library: Locations & Hours (2019)

<sup>115</sup> Vancouver Public Library: Hours & Locations (2019)

<sup>116</sup> Multnomah County Library: Locations (2019)

<sup>117</sup> The Seattle Public Library: Hours & Locations (2019)

<sup>118</sup> New York Public Library: Locations (2019); Brooklyn Public Library: Hours & Locations (2019); Queens Public Library: Hours & Locations (2019)

<sup>119</sup> Yolo County Library: Locations (2019)

<sup>120</sup> Boston Public Library: Branches (2019)

<sup>121</sup> Santa Monica Public Library: Locations & Hours (2019)

<sup>122</sup> Sacramento Public Library: Locations (2019)

TABLE 21: LOS METRICS AND SERVICE GOALS – LIBRARIES

City	Metric	Service Goal	Level of Service
San Francisco, CA	<b>Proposed:</b> <ul style="list-style-type: none"> <li>Square feet of library per resident</li> </ul>	<b>Proposed:</b> <ul style="list-style-type: none"> <li>Near term: Maintain 0.6 square feet of library per new resident (0.66 square feet per resident for the total population)</li> </ul>	0.67 square feet per resident <sup>123</sup>
Portland, OR <sup>124</sup>	Square feet per resident	0.6 – 0.8 square feet per resident	0.3 square feet per resident
Davis, CA <sup>125</sup>	Square feet per resident	0.75 – 1.0 square feet per resident	0.47 square feet per resident
Sacramento, CA <sup>126</sup>	n/a	n/a	0.2 square feet per resident

### 8.3 Level of Service Metrics

As shown in Table 21, both of the case study cities that have internal metrics to track the provision of library facilities relative to population do so via square feet per resident. Thus, the library metric is:

- Square feet of library per resident

<sup>123</sup> Although San Francisco's level of service is higher than peer cities, this is driven by its high density of population.

<sup>124</sup> Multnomah County Library Framework for Future Library Spaces (2017)

<sup>125</sup> City of Davis State of the City Report (2017)

<sup>126</sup> Sacramento Public Library Strategic Plan Appendix: Facilities Study (2011)

### 8.3.1 Square Feet of Library per Resident

TABLE 22: SQUARE FEET OF LIBRARY PER CAPITA – LOS PROVISION, GOAL, AND TARGET

LOS Measure	Value	Source
<b>Current Citywide Provision</b>	0.67 square feet of library per resident <sup>127</sup>	Library data provided by SFPL. Population data from SF Planning.
<b>Short-Term Target</b>	Maintain 0.6 square feet of library per new resident (0.66 square feet per resident for the total population)	Meeting with SF Planning and SFPL staff on April 16, 2020.
<b>Long-Term Aspirational Goal</b>	Provide San Francisco residents with improved community space and amenities, meeting changing library needs.	Meeting with SF Planning staff on October 23, 2019.

As discussed above, San Francisco’s current library LOS is above the case study cities which measure their library provision in comparable terms, as well as above the standard recommended level of service. For this reason, the short-term goal is to reach a 10% reduction of the current LOS for new residents. This does not mean new residents will have a lower LOS than current residents (all facilities are open to any resident), but rather that expansion will not fully keep pace with the City’s rate of growth, relative to the current level of service.

In the long term, San Francisco Public Libraries will adapt to meet the changing needs of San Francisco communities. Public libraries are becoming an important community gathering site, providing free meeting space for community gatherings and access to digital resources for people who need it. Due to San Francisco’s high density of existing library branches, SFPL has begun discussing building a new regional library facility (larger than any existing branch library) rather than building more small branch libraries. The most important long-term goal is meeting City residents’ changing library needs.

The geospatial analysis of library facility provision shows lower Levels of Service than the citywide average, on account of the main library’s exclusion.<sup>128</sup> The median local branch has an LOS of 0.26 square feet of library per resident. As shown in Figure 20, most libraries in the City have a local LOS close to this figure. Castro/Upper Market has the lowest Level of Service, at 0.13 square feet per resident.

#### 8.3.1.1 Forecasted Demand

By 2025, San Francisco’s residential population is expected to grow to 982,000, an increase of 74,000 from the current population. In order to maintain the current LOS, the City will need to add 44,000 square feet of library space by 2025, bringing the total library square feet to 650,000 by 2025. This expansion will not necessarily be built as new branch library square feet, but may take the form of a new regional library facility or further investment in existing library space.

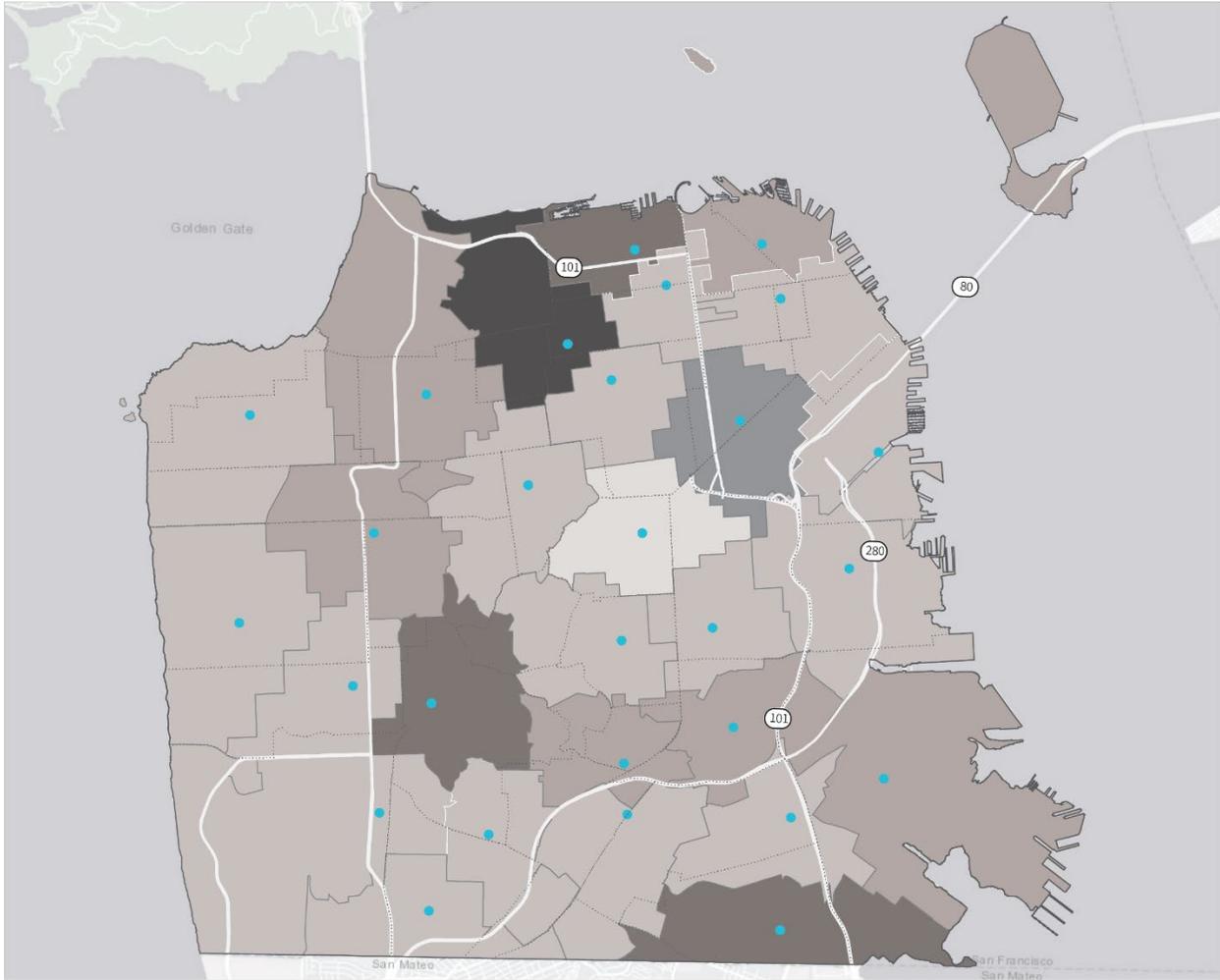
<sup>127</sup> Note that this includes the main library branch, which is excluded from the neighborhood-level analysis shown in Figure 21.

<sup>128</sup> The main library accounts for 62% of citywide library square feet, according to data from SFPL.

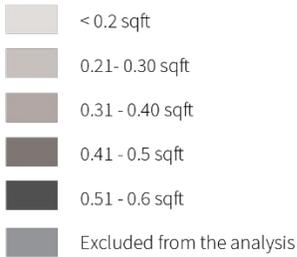
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Geospatially, projected growth is concentrated in the South of Market, Bayview, and Lakeshore neighborhoods. The closest branch library to South of Market is the Mission Bay Library, with a below-median LOS of 0.22 square feet per resident. However, the South of Market neighborhood is also adjacent to the Main Library service area. The Anna E. Waden Branch Library, which serves most of the Bayview, has a relatively high LOS currently, at 0.36 square feet per resident. The Merced Branch Library, which serves most of Lakeshore, currently has an LOS of 0.29 square feet per resident, slightly above the median.

FIGURE 20: SQUARE FEET OF LIBRARY PER RESIDENT



Square Feet of Library Space per Resident



**LEGEND**

- County Boundary
- Highways
- Neighborhoods

**Community Facilities**

- Library
- Closest library area

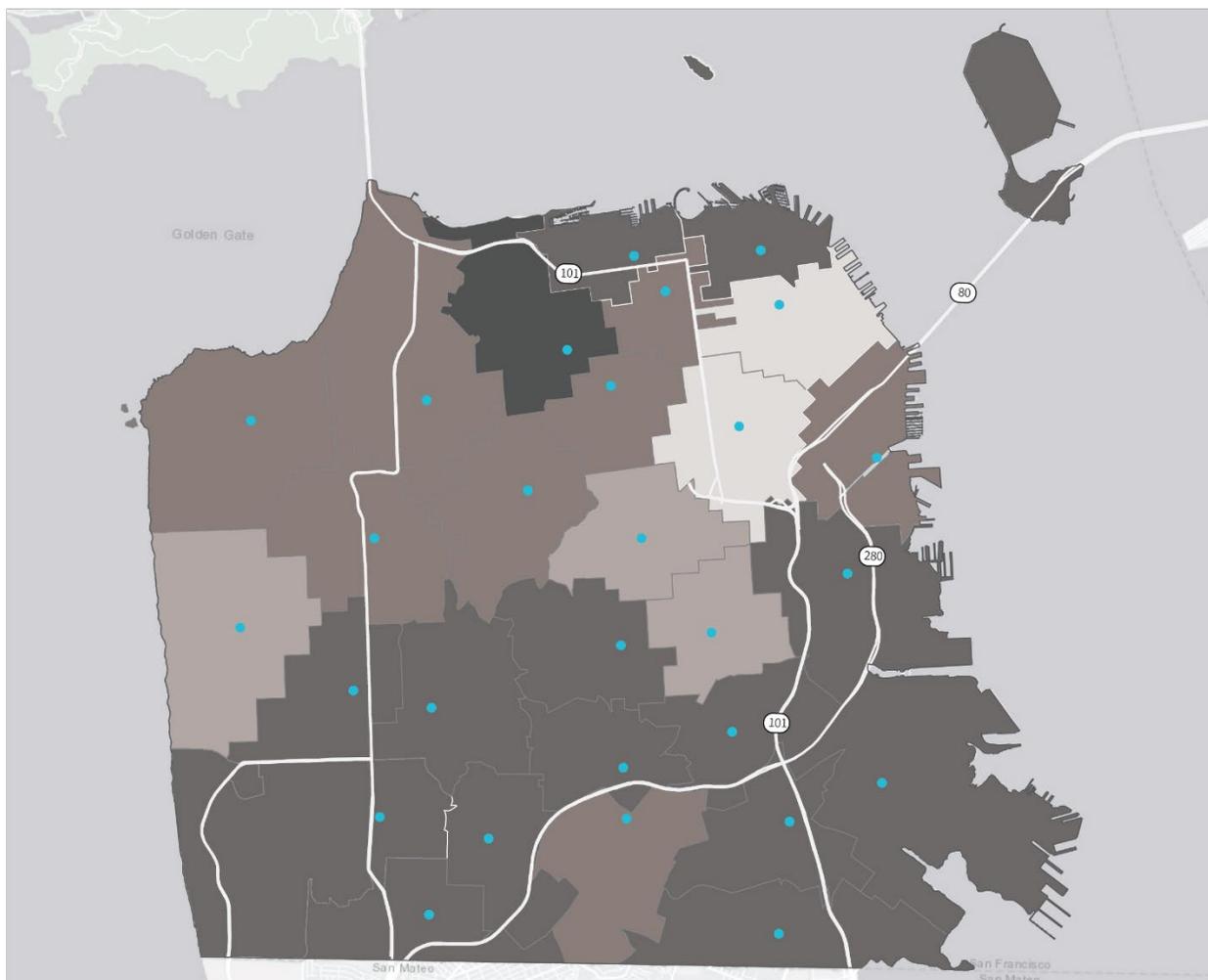
By Closest Library Citywide Average: 0.67 sqft per resident

The San Francisco Planning Department estimates the total residents per Traffic Analysis Zones (TAZ) for 2019. Resident population is assigned to their closest library and divided by the total square footage of that library to arrive at a square feet per resident ratio.

Note: San Francisco Main Public Library was excluded from this analysis as an outlier.

Source: San Francisco Public Library, San Francisco population estimates 2019

FIGURE 21: RESIDENT POPULATION TO THE CLOSEST LIBRARY



Residents per closest San Francisco Public Library

- < 20,000 residents
- 20,000 - 30,000 residents
- 30,001 - 40,000 residents
- 40,001 - 50,000 residents
- > 50,000 residents

Citywide Average: 32,188 residents overall per library  
 The San Francisco Planning Department estimates the total residents per Traffic Analysis Zones (TAZ) for 2019. Resident population is assigned to their closest library to estimate the average number of residents per closest library.

San Francisco Public Library, San Francisco population estimates 2019



**LEGEND**

- County Boundary
- Highways
- Neighborhoods

**Community Facilities**

- Library
- Closest library area

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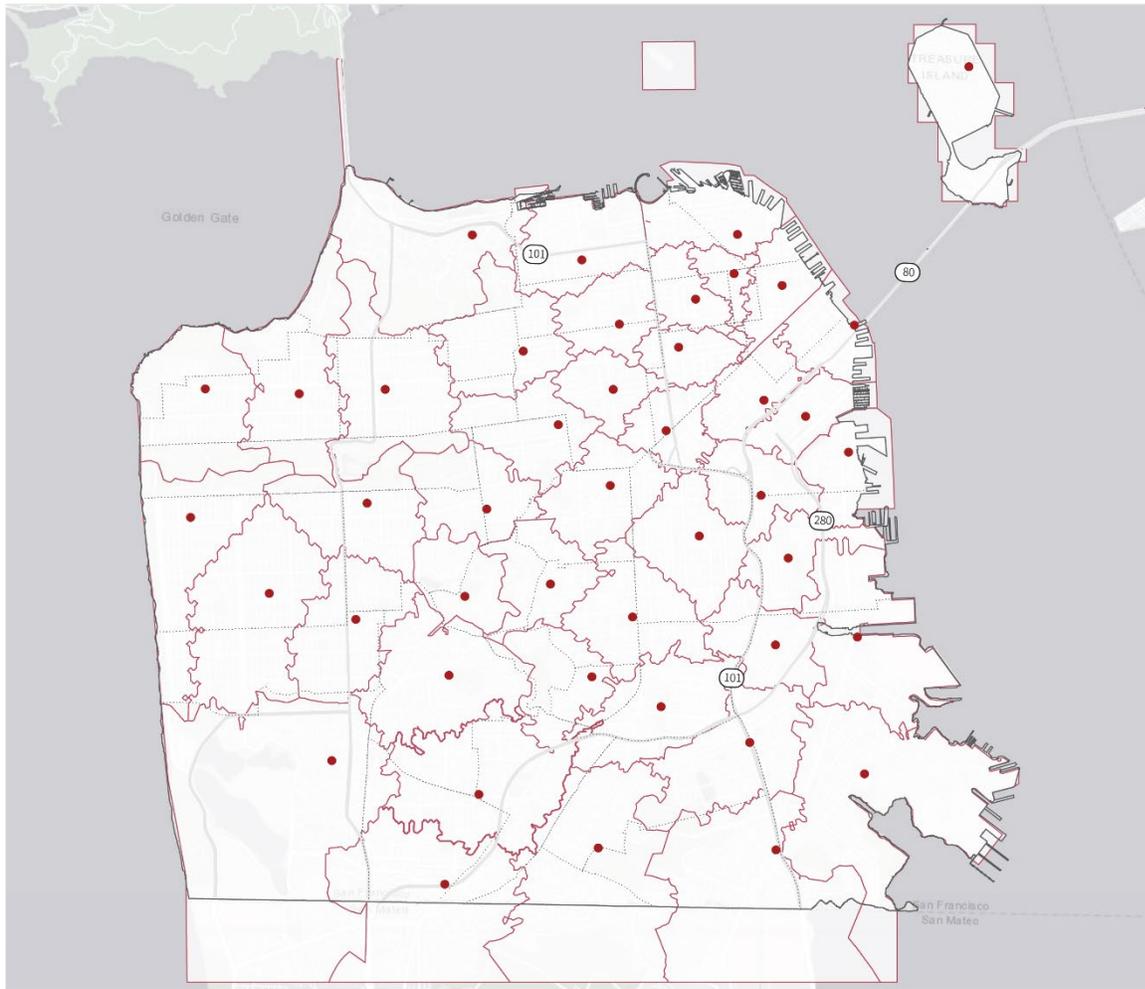
## 9 Fire Department Facilities

Fire department facilities provide the backbone of two critical emergency services provided by the City of San Francisco: fire suppression and emergency medical services (EMS). This section outlines the metrics used by case study cities to measure their fire suppression and EMS Level of Service (LOS), compares the LOS provided among case study cities, and evaluates San Francisco’s provision of fire department services along recommended metrics, projecting the need for additional facilities into the near and long-term future. Table 23 outlines the City documents consulted in the production of this section. Figure 22 shows the locations of fire department facilities in San Francisco.

TABLE 23: FIREFIGHTING PROVISION GUIDING POLICY DOCUMENTS

Policy Document	Year	Key Contributions
<b>Emerging Southeast Initiative: Southeast Framework: Community Facilities</b>	2018	<ul style="list-style-type: none"><li>• Information on current firefighting facilities in San Francisco, and San Francisco Fire Department’s internal standards for Level of Service</li><li>• Plans for SFFD expansion in the City’s southeast neighborhoods</li></ul>
<b>San Francisco Infrastructure Level of Service Analysis Draft</b>	2014	<ul style="list-style-type: none"><li>• Background information on firefighting standards</li><li>• Previous proposed LOS metrics</li></ul>

FIGURE 22: LOCATION OF FIRE DEPARTMENT FACILITIES



Source: San Francisco Fire Department



**LEGEND**

- County Boundary ———
- Highways ———
- Neighborhoods ·····

**Fire Department Facilities Service Area**

- Fire Department Facilities
- Area Served by 5-Minute Response

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## 9.1 Background

The San Francisco Fire Department (SFFD) oversees both fire suppression and emergency medical services (EMS). City residents and employees access these services by dialing 911, where the operator categorizes each call under a response code class, which defines the nature of the emergency and the response mode. Code 1 calls are non-emergency calls, and emergency vehicles proceed with the normal flow of traffic, without lights or sirens. A Code 2 call is a non-emergency, but important, call; emergency vehicles generally proceed according to traffic laws but may use lights or sirens to circumvent slow or stopped traffic. A Code 3 call is a life-threatening emergency; emergency vehicles proceed with lights and sirens and may disregard traffic laws if safe to do so. As they are the most critical calls, this analysis focuses on Code 3 calls.

For Code 3 calls, the SFFD is governed by strict national and local service standards. At the national level, the National Fire Protection Agency (NFPA) issues guidelines on response times, fire and emergency services staffing, and deployment recommendations. At the local level, the San Francisco Emergency Medical Services Agency (SFEMSA), under the Department of Public Health (DPH), issues LOS requirements regarding EMS provision. Both the NFPA and the SFEMSA provide standards for response time and staffing for emergency medical events; however, because staffing is not a capital provision, the staffing standards and metrics are not included in this analysis. The analysis will focus specifically on response time.

SFFD's response time to a Code 3 call is subdivided into several steps, including:

- Time from 911 call to time of dispatch
- Time from dispatch to time of arrival of the first unit on scene
- Time from dispatch to time of arrival of the advanced life support (ALS) unit
- Time from dispatch to time of arrival of the transportation unit

Each of these time intervals has an associated response time standard set either by NFPA, or by the SFEMSA based on NFPA standards. Of the cities surveyed, the NFPA standards were consistently mentioned as the adopted city targets. Every case study city that has adopted response time goals has crafted those firefighting service targets around the NFPA response time standards (see Table 25), adjusting them as necessary to account for city-specific geographical or planning constraints. For example, San Diego's fire department aims to respond to 90% of emergency calls in less than 5 minutes. San Jose, by contrast, aims for less than 8 minutes 80% of its incidents.<sup>129</sup> The proposed metric for San Francisco's fire department services is based on these well-established response time standards.

In recent years, the fastest growing demand within SFFD has been for EMS services. From 2007 to 2018, the number of EMS calls grew 56%, from 76,673 in 2007 to 119,732 in 2018. 2019 is on track to exceed 2018, with 83,756 EMS calls logged as of September 9, 2019.<sup>130</sup> EMS services are distributed throughout San Francisco by having ambulances staffed with paramedics parked at "posting locations", with ambulances distributed more heavily in certain areas based on anticipated need (for example, large events such as major concerts typically result in more EMS calls in the event's vicinity, and would require heavier staffing at nearby posting locations).

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<sup>129</sup> See Table 25

<sup>130</sup> Email from Jesus Mora, SFFD, September 9, 2019

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Figure 24 shows the potential posting locations across the City. In addition, SFFD currently has a devoted ambulance deployment center, located in the Bayview district.<sup>131</sup>

Each of San Francisco's 44 fire department facilities has its own service area within the City. Figure 23 shows the service area of each fire station. This analysis focuses on the fire station level, as well as the citywide picture.

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<sup>131</sup> Meeting with SFFD staff, September 6, 2019

FIGURE 23: DISTRIBUTION OF FIRE DEPARTMENT FACILITIES



Source: San Francisco Fire Department



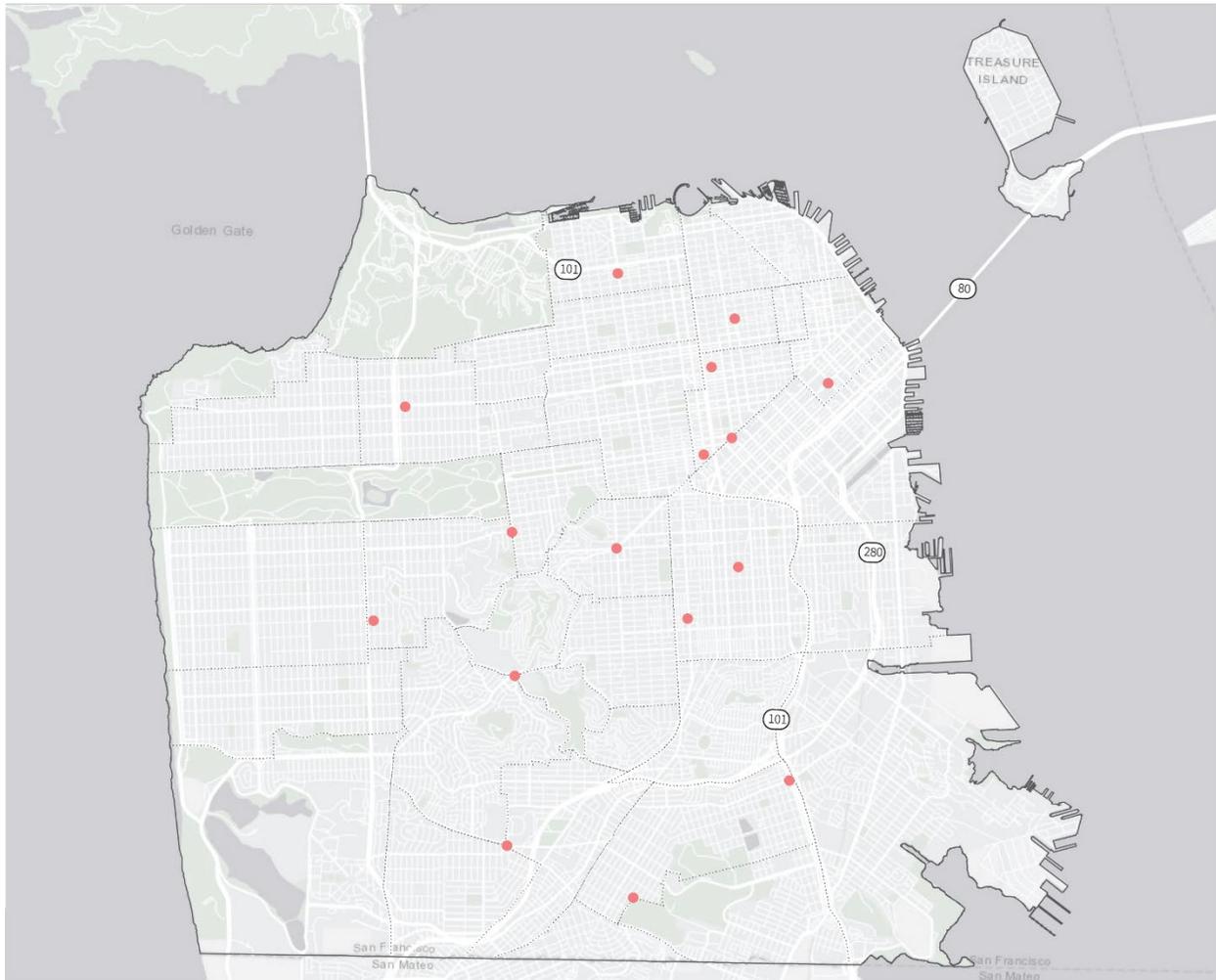
**LEGEND**

- County Boundary ———
- Highways ———
- Neighborhoods ······

**Fire Department Facilities Service Area**

- Fire Department Facilities
- Area Served by 5-Minute Response

FIGURE 24: AMBULANCE POSTING LOCATIONS



Total Number of Ambulance Posting Locations 16

Source: SFFD



**LEGEND**

County Boundary ———

Highways ———

Neighborhoods ······

**Ambulance Locations**

● Ambulance Posting Location

## 9.2 Case Study Comparisons

Table 24 compares the gross provision of firefighting infrastructure across case study cities. Firefighting services can be measured per capita, as with most municipal infrastructure, but also per unit of city area (square mile, in this case), as the level of geographic coverage is important as well. Response time standards vary slightly between cities, and response time Levels of Service are typically reported as percent compliance with those varying standards. They are compared in Table 25, along with the comparison of metrics.

TABLE 24: LOS PROVISION COMPARISON – FIREFIGHTING

City	Fire Department Facilities (total)	Facilities/100,000 Residents <sup>132</sup>	Facilities/Square Mile
San Francisco, CA <sup>133</sup>	44	5.1	0.9
Minneapolis, MN <sup>134</sup>	19	4.6	0.4
San Jose, CA <sup>135</sup>	33	3.2	0.1
San Diego, CA <sup>136</sup>	52	3.7	0.2
Los Angeles, CA <sup>137</sup>	102	2.6	0.2
Vancouver, BC <sup>138</sup>	20	3.2	0.5
Portland, OR <sup>139</sup>	30	4.8	0.2
Seattle, WA <sup>140</sup>	33	4.8	0.4
New York, NY <sup>141</sup>	255	3.0	0.8
Davis, CA <sup>142</sup>	3	4.4	0.3

<sup>132</sup> City population and square mileage data from the US Census Bureau.

<sup>133</sup> Data from SFFD

<sup>134</sup> Minneapolis Fire Department 2016 Annual Report (2016)

<sup>135</sup> City of San Jose Annual Report on City Services 2017-18 (2018)

<sup>136</sup> San Diego Fire-Rescue Department Standards of Response Cover Review (2017)

<sup>137</sup> Los Angeles Fire Department Stations Map (2019)

<sup>138</sup> City of Vancouver: Vancouver Fire Halls (2019); Geographic Information System Emergency Services Response Capabilities Analysis Final Report: Vancouver Fire and Rescue Services (2017)

<sup>139</sup> Portland Fire & Rescue Annual Performance Report (2016)

<sup>140</sup> Seattle Fire Department 2017 Annual Report (2017)

<sup>141</sup> Fire Department, City of New York: Statistics (2017)

<sup>142</sup> City of Davis & UC Davis Shared Fire Management Monthly Performance Report (2014)

City	Fire Department Facilities (total)	Facilities/100,000 Residents <sup>132</sup>	Facilities/Square Mile
Boston, MA <sup>143</sup>	33	4.9	0.7
Santa Monica, CA <sup>144</sup>	4	4.3	0.5
Sacramento, CA <sup>145</sup>	24	4.9	0.2

TABLE 25: LOS METRICS AND SERVICE GOALS – FIREFIGHTING

City <sup>146</sup>	Metric (Response Time Goal)	Level of Service (% Compliance)
San Francisco, CA <sup>147</sup>	Response time of <b>4:30</b> or less to <b>80%</b> of calls	87.6%
Minneapolis, MN	Response time of <b>5</b> minutes or less to <b>90%</b> of calls	83.8%
San Jose, CA	Response time of <b>8</b> minutes or less to <b>80%</b> of calls	71.0%
San Diego, CA	Response time of <b>5</b> minutes or less to <b>90%</b> of calls	77.1%
Los Angeles, CA	None stated	6:30 (average EMS response time)
Vancouver, BC	Response time of <b>4</b> minutes to <b>90%</b> of calls	75.7%
Portland, OR	Response time of <b>5:20</b> or less to <b>90%</b> of calls	60.5%
Seattle, WA	Response time of <b>4</b> minutes or less to <b>90%</b> of calls	77.0%
New York City	None stated	6:44 (average response time for life threatening medical emergencies)

<sup>143</sup> Mayor of Boston's Quarterly Performance Report (2011); Boston CityScore (2019)

<sup>144</sup> Santa Monica Fire Department Dispatch Evaluation Project (2009); City of Santa Monica, Sustainable Santa Monica (2014)

<sup>145</sup> City of Sacramento Fire Department, Fire Department Standards of Response Cover Review (2016); Sacramento Metropolitan Fire District - Metro Fire Revenue-to-Service Review (March 2014)

<sup>146</sup> Sources the same as prior table

<sup>147</sup> Email from Jesus Mora, SFFD, September 12, 2019

City <sup>146</sup>	Metric (Response Time Goal)	Level of Service (% Compliance)
Davis, CA	None stated	90.5% in under 5 minutes on the UC campus 72.1% in under 5 minutes in the City of Davis
Boston, MA	Response time of 4 minutes or less to 90% of calls	71.0%
Santa Monica, CA	Response time of 4 minutes or less to 90% of calls	70.0%
Sacramento, CA	Response time of 4 minutes or less to 90% of calls	55.0%

### 9.3 Level of Service Metrics

As previously discussed, the standard metric for measuring fire suppression and EMS services is response time. However, response time represents a combination of capital facilities and operations provision. In order to measure just the provision of infrastructure, the metric for fire department services is:

- Fire Department Facilities per 1,000 Service Population Units (SPU)

#### 9.3.1 Fire Stations per 1,000 SPU

TABLE 26: FIRE STATIONS PER CAPITA – LOS PROVISION, GOAL, AND TARGET

LOS Measure	Value	Source
<b>Current Citywide Provision</b>	0.034 fire department facilities per 1,000 SPU	Data on Fire Department Facilities and their service areas provided by SFFD. Population and Employment data from SF Planning.
<b>Short-Term Target</b>	Maintain 0.034 fire stations per 1,000 SPU	Meeting with SFFD staff on September 6, 2019.
<b>Long-Term Aspirational Goal</b>	Maintain 0.034 fire stations per 1,000 SPU	Meeting with SFFD staff on September 6, 2019.

This metric measures the provision of fire department facilities in San Francisco, relative to the size of the population those facilities need to serve. As Table 24 shows, San Francisco has a high level of service by this measure relative to case study cities. For this reason, both the short-term target and long-term aspirational goal are to maintain the current Level of Service.

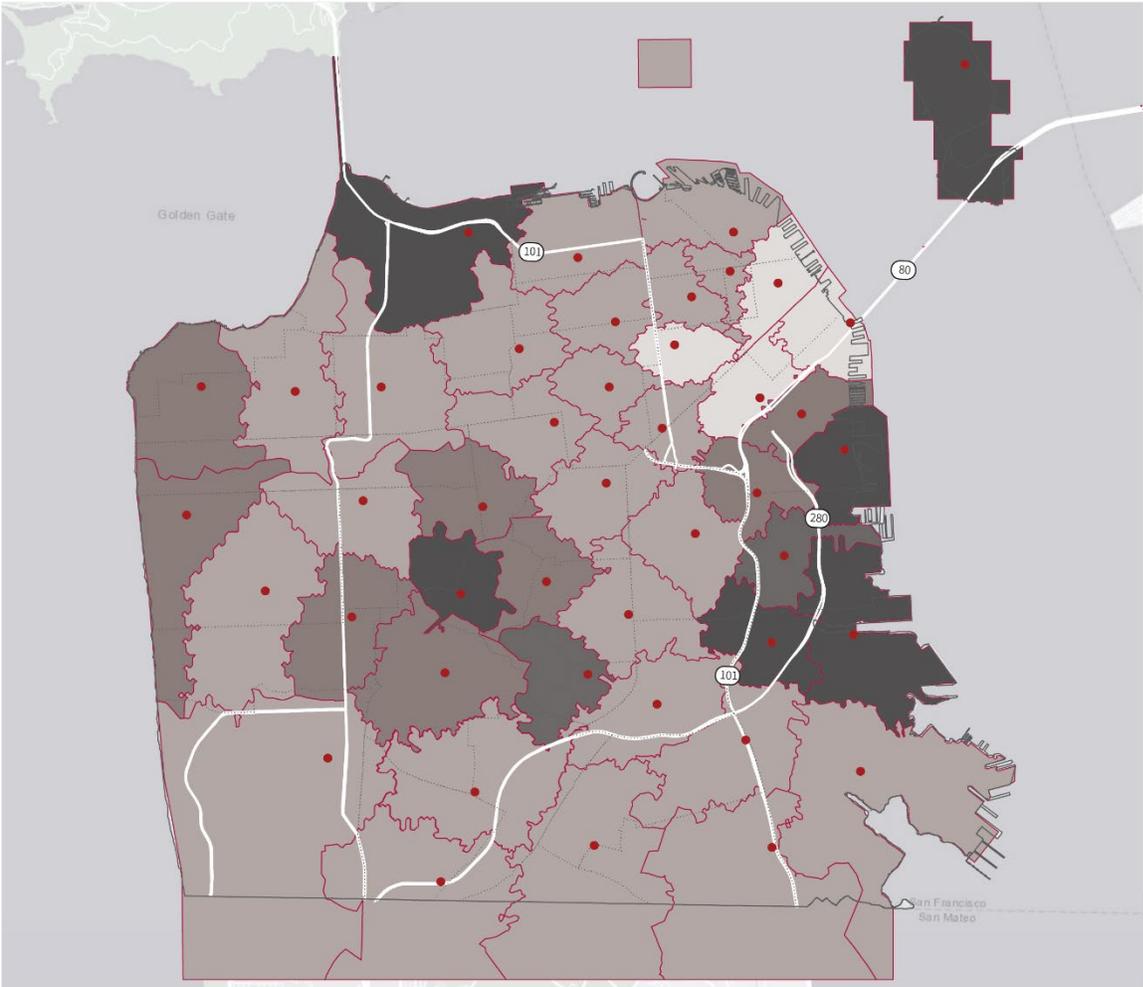
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### 9.3.1.1 Forecasted Demand

San Francisco's current population and employment projections predict that the City will add roughly 100,000 SPU by 2025, and an additional 200,000 SPU by 2040 (313,000 total SPU growth by 2040). In order to maintain the current LOS for fire department facilities per 1,000 SPU, San Francisco would need to add 3 new facilities by 2025, and a further 7 new facilities by 2040, for a total of 10 new fire department facilities by 2040 to maintain current conditions.

San Francisco's Emerging Southeast Initiative: Southeast Framework calls for adding a new fire department facility at the Hunters Point Shipyard in the Bayview neighborhood. Increasing fire department capital facilities could take the form of new stations, increasing capacity at existing stations, or increasing the stock of citywide infrastructure such as new fire engines and ambulances.

FIGURE 25: FIRE DEPARTMENT FACILITIES PER CAPITA



Number of Fire Department Facilities Per 1,000 Service Population Unit\* (SPU)

- < 0.02 fire department facilities per 1,000 SPU
- 0.02 - 0.039 fire department facilities per 1,000 SPU
- 0.04 - 0.06 fire department facilities per 1,000 SPU
- 0.06 - 0.08 fire department facilities per 1,000 SPU
- > 0.08 fire department facilities per 1,000 SPU

Citywide Average: 0.03 fire department facilities per 1,000 SPU  
 \*In this case, the service population is defined as 100 percent of the residents and 50 percent of the employees.

Source: San Francisco Fire Department, San Francisco population estimates 2019



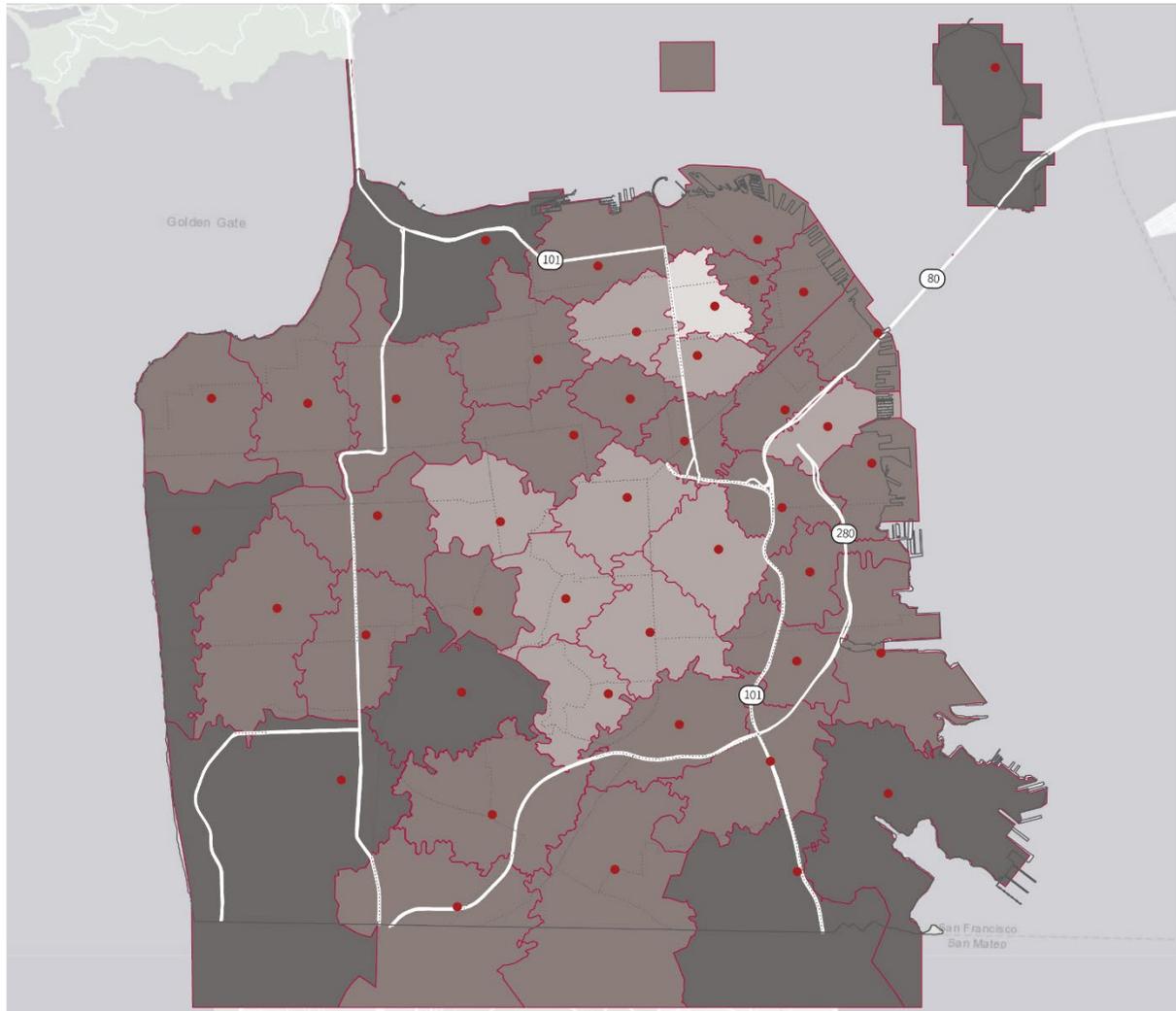
**LEGEND**

- County Boundary
- Highways
- Neighborhoods

**Fire Department Facilities Service Area**

- Fire Department Facilities
- Area Served by 5-Minute Response

FIGURE 26: FIRE DEPARTMENT SERVICE AREAS AVERAGE EMERGENCY RESPONSE TIME



Average Emergency Response Time

- Less than 2 minutes
- 2 - 3 minutes
- 3 - 4 minutes
- Greater than 4 minutes



**LEGEND**

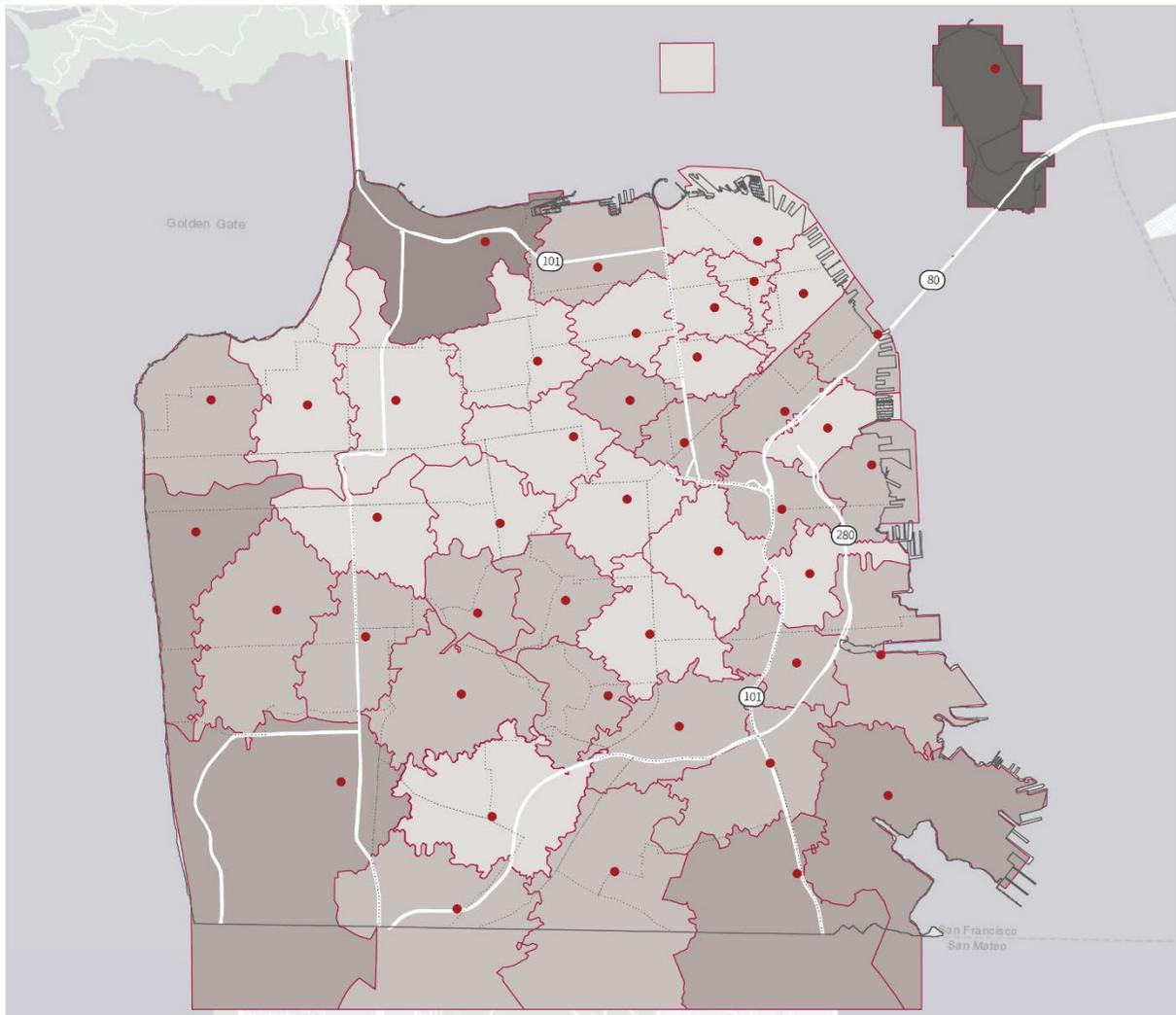
- County Boundary
- Highways
- Neighborhoods

**Fire Department Facilities Service Area**

- Fire Department Facilities
- Area Served by 5-Minute Response

Source: San Francisco Fire Department

FIGURE 27: FIRE DEPARTMENT SERVICE AREAS 90<sup>TH</sup> PERCENTILE EMERGENCY RESPONSE TIME



90th Percentile Emergency Response Time

- Less than 5 minutes
- 5 - 6 minutes
- 6 - 7 minutes
- 7 - 8 minutes
- 8 - 9 minutes
- Greater than 9 minutes

Source: San Francisco Fire Department



**LEGEND**

- County Boundary
- Highways
- Neighborhoods
- Fire Department Facilities Service Area**
- Fire Department Facilities
- Area Served by 5-Minute Response

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## 10 Socio-Economic Analysis

### 10.1 San Francisco Recreation and Park Department Equity Zones

San Francisco Recreation and Park Department (SFRPD) has a set of equity metrics that are used to establish a baseline of existing recreational and open space infrastructure and resources in equity priority communities<sup>148</sup>, compared to services and resources available to the City as a whole, to guide more equitable distribution. Equity priority communities are defined based on census tracts that are scored using population characteristics such as income and pollution burden.<sup>149</sup> For this analysis, equity priority communities were defined using SFRPD-defined equity zones from the Strategic Plan 2016-2020..

Figure 28 examines city-owned open space per 1,000 service population units where equity priority communities reside. Each equity zone is highlighted, showing the LOS of the neighborhood in which it resides. The analysis shows that equity priority communities near John McLaren Park (on the south side of the City) and on Treasure Island generally have access to a fair amount of open space, but equity priority communities near the financial district tend to have access to less open space.

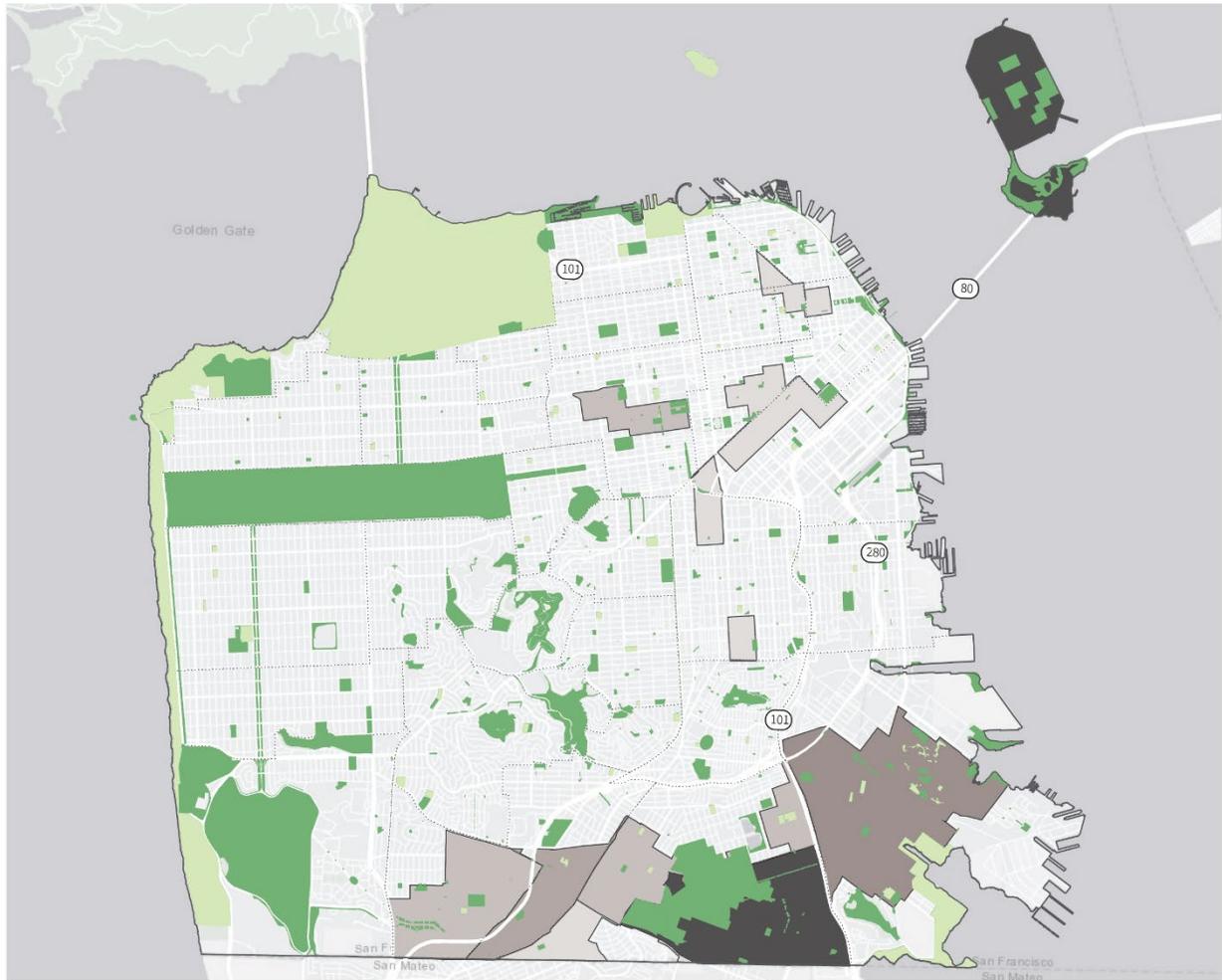
Figure 29 shows walking access to open space for equity priority communities. As discussed earlier in this report, the entire City is within a 10-minute walk of open space, so this map only examines whether communities are within a 5-minute walk. Overall, equity priority communities in the south parts of San Francisco are more likely to be greater than a 5-minute walk away from open space than those residing in other parts of the City.

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<sup>148</sup> Equity priority communities is a preferred term to be used to describe the various populations that require targeted or focused strategies to advance the City's racial and social equity work.

<sup>149</sup> CalEnviroScreen (CES) offers the standard.

FIGURE 28: CITY-OWNED OPEN SPACE PER 1,000 SPU, BY NEIGHBORHOOD (2018) RELATIVE TO VULNERABLE POPULATION



City-Owned\* Open Space Per 1,000 Service Population Unit\* (SPU)



City-owned open space: 3,844 acres  
 Citywide Average: 3.0 acres per 1,000 SPU

\*City-owned open space includes open space controlled by SFRPD, SFDPW, the Port, SFMTA, SFPL, SFPUC, OCII, TIDA, and TJPA.

\*\*The service population unit is calculated based on a 1:0.5 ratio between residents and employees  
 Vulnerable populations were defined using the San Francisco Recreation and Parks Department-defined Equity Zones. These are defined in the Strategic Plan 2016-2020 as low income neighborhoods and disadvantaged communities, compared to services and resources available in the City as a whole.



**LEGEND**

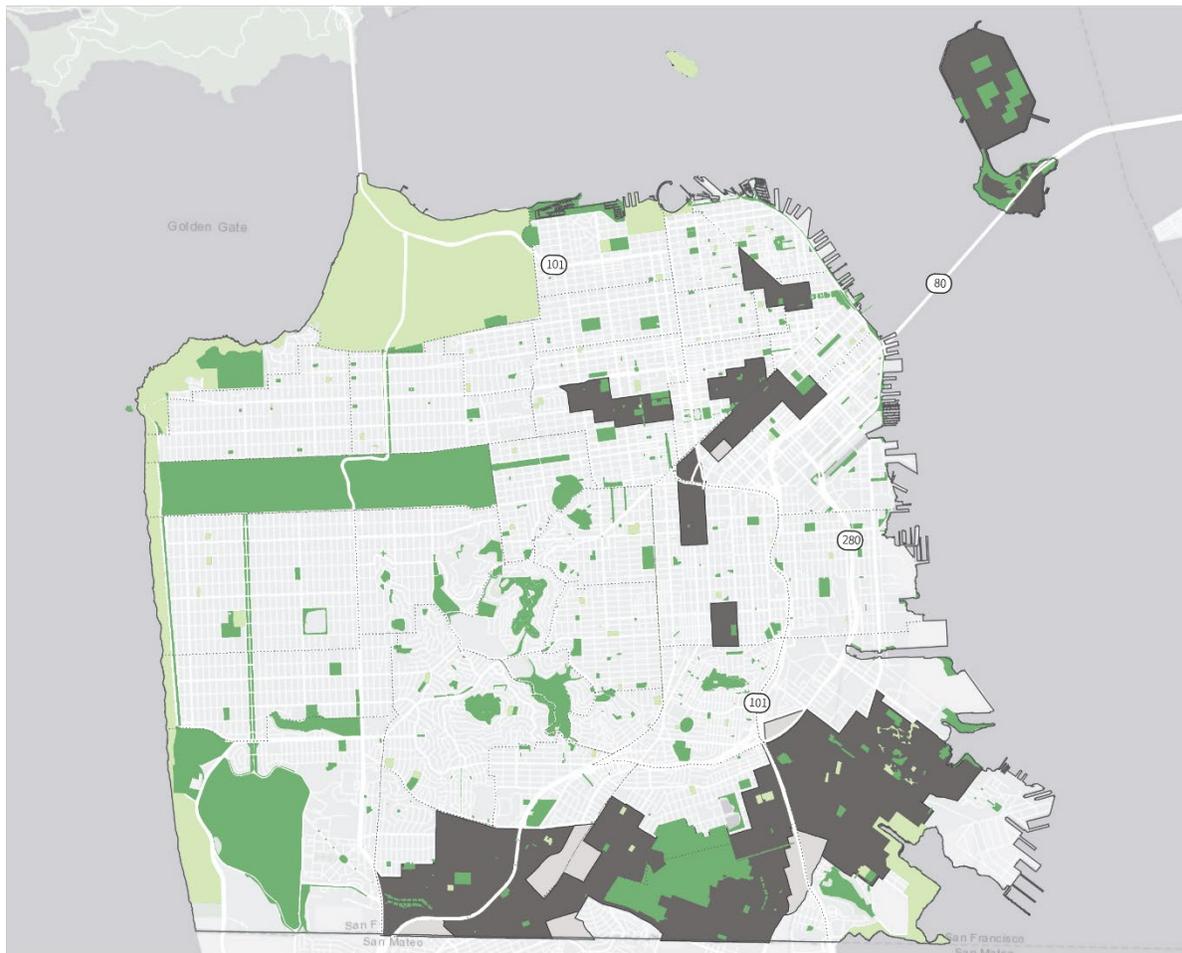
- County Boundary 
- Highways 
- Neighborhoods 

**Open Space by Ownership**

-  City-owned open space
-  Non-city owned open space

Source: San Francisco Recreation and Park Department, City Parks 2018, San Francisco Recreation and Park Department Equity Zones 2018

FIGURE 29: PROXIMITY OF RESIDENTS TO OPEN SPACE RELATIVE TO VULNERABLE POPULATION



Proximity of Service Population to Recreation and Open Space

- Within 5 minutes walk
- 5 to 10 minutes walk



**LEGEND**

- County Boundary
- Highways
- Neighborhoods

**Open Space by Ownership**

- City-owned open space
- Non-city owned open space

The walking network for the City of San Francisco was obtained from Open Street Map as a series of nodes and a database of distances and connections between nodes. "Node" refers to any intersection of two or more paths. Any node located inside of or next to (within 50 feet of) a park was set as a Point of Interest (POI), and then the network distance from each node to the nearest POI was calculated based on the database of distances and connections between nodes (as opposed to "as the crow flies"). Finally, each analysis zone was assigned the average walking distance of the nodes within its boundaries.

Vulnerable populations were defined using the San Francisco Recreation and Parks Department-defined Equity Zones. These are defined in the Strategic Plan 2016-2020 as low income neighborhoods and disadvantaged communities, compared to services and resources available in the City as a whole.

Source: San Francisco Recreation and Park Department, San Francisco Open Street Map, City Parks 2018, San Francisco population estimates 2019, San Francisco Recreation and Park Department Equity Zones 2018

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## 10.2 Equity Priority Communities

The Metropolitan Transportation Commission (MTC) designates Equity Priority Communities (formerly communities of concern<sup>150</sup>) for the entire Bay Area, including San Francisco. The determination considers eight disadvantage factors: minority residents, low-income residents, residents who do not speak English well or at all, households with no car, senior residents (at or over age 75), persons with disabilities, single-parent households, and cost-burdened renters. These areas include a diverse cross-section of populations and communities that could be considered disadvantaged or vulnerable, both in the present and the future. Equity priority communities include all census tracts that have a concentration of both minority and low-income households at 70% and 30% of all households, respectively, or that have a concentration of three or more of the six other factors.<sup>151</sup> Note that equity priority communities boundaries change over time, and the most current boundaries can be found on the San Francisco County Transportation Authority website.<sup>152</sup>

Figure 30 examines the percent of demand for infant and toddler (0-2) child care that can be met by existing slots in neighborhoods where equity priority communities reside. Approximately 16% of infant and toddler care need, on average, can be served through available licensed slots in equity priority communities. The citywide number is 19%. Figure 31 examines the same thing for preschool-aged (3-4) child care. Approximately 77% of preschool care demand, on average, can be served through available licensed slots in Equity Priority Communities. The citywide number is 88%.

Figure 32 shows the miles of premium (class I, class II, and IV) bike lane per capita in neighborhoods where equity priority communities reside. There are less than 0.25 miles of premium bike lane available per 1,000 service population units (SPU) in equity priority communities, lower than the citywide average of 0.58 miles per 1,000 SPU.

Figure 33 illustrates resident population per closest branch library in equity priority communities. There are approximately 40,000 residents per closest branch library in Equity Priority Communities, higher than the citywide average of 32,188 residents. Note that this metric treats the main library as a citywide asset and does not count it as a branch library.

Figure 34 examines the fire department service areas' average emergency response time in equity priority communities. The analysis shows that the average response time is slower in equity priority communities than citywide; average response time for equity priority communities is 4.07 minutes, while the citywide number is 3.44 minutes.

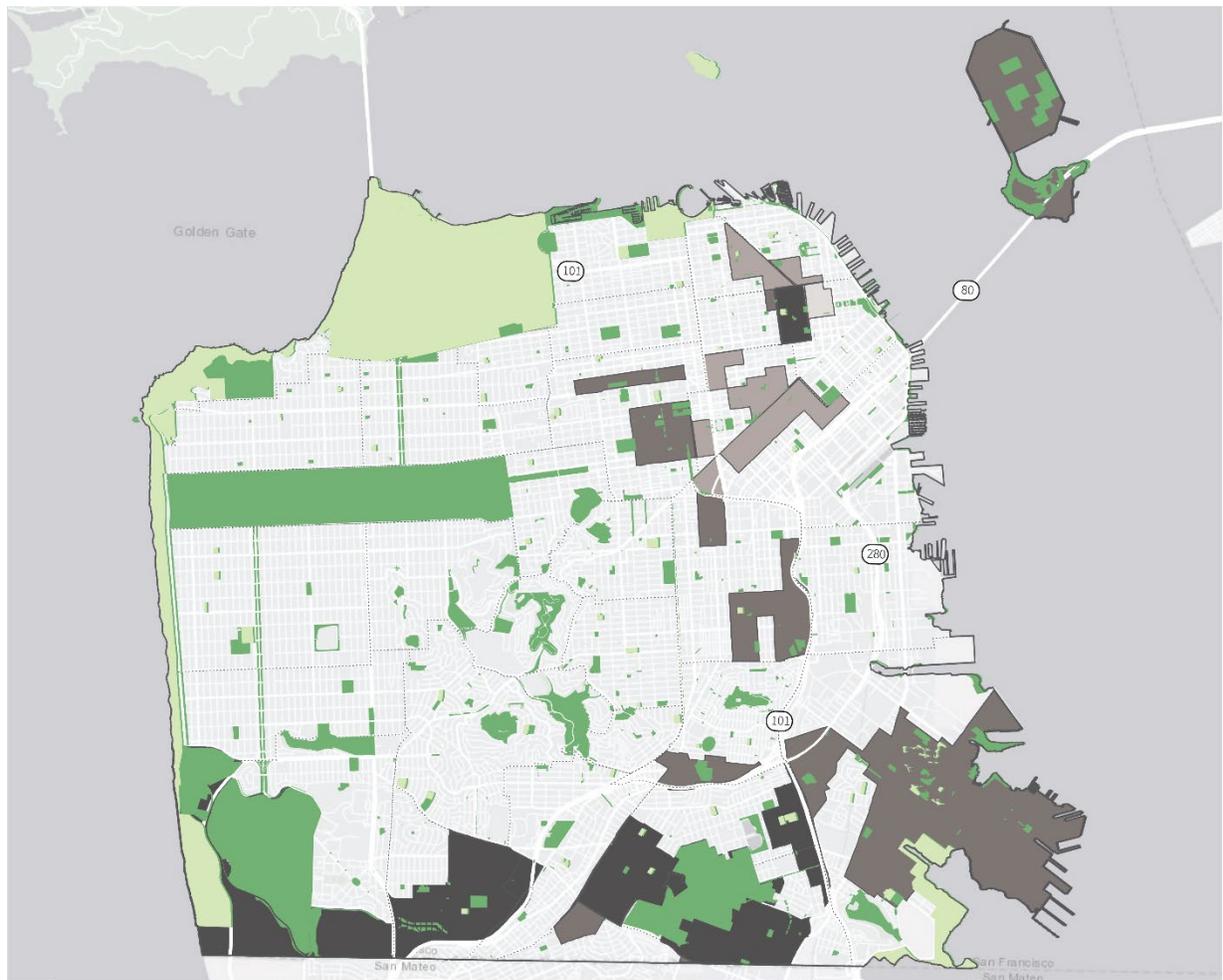
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<sup>150</sup> The term 'communities of concern' has changed since the analysis presented in this Report was completed. The report uses the term 'equity priority communities' where appropriate but as the analysis in this Report was completed prior to the term being changed, some references to 'communities of concern' are still included throughout the Report where necessary, including in some maps, figures, and footnotes.

<sup>151</sup> Bay Area Metro, Spatial Analysis Mapping Projects, MTC Communities of Concern. <https://github.com/BayAreaMetro/Spatial-Analysis-Mapping-Projects/tree/master/Project-Documentation/Communities-of-Concern>.

<sup>152</sup> The website can be found here: <https://www.sfcta.org/policies/equity-priority-communities>.

FIGURE 30: SHARE OF INFANT AND TODDLER (0-2) CHILD CARE DEMAND SERVED BY AVAILABLE LICENSED SLOTS RELATIVE TO EQUITY PRIORITY COMMUNITIES



Percent of Demand Served by Available Licensed Slots

- Less than 5%
- 5% - 16%
- 16% - 27%
- Greater than 27%

Citywide average: 19% of infant and toddler slots demand served by available licensed slots. Communities of Concern are defined in Plan Bay Area 2040 Equity Analysis section. Communities of Concern include "all census tracts that have a concentration of BOTH minority AND low-income households at specified thresholds of significance, or that have a concentration of three or more of six additional factors if they also have a concentration of low-income households".

Source: San Francisco Human Services Agency, San Francisco Early Care and Education Needs Assessment (2017), San Francisco Infrastructure Level of Service Analysis (2014), SFCTA Communities of Concern



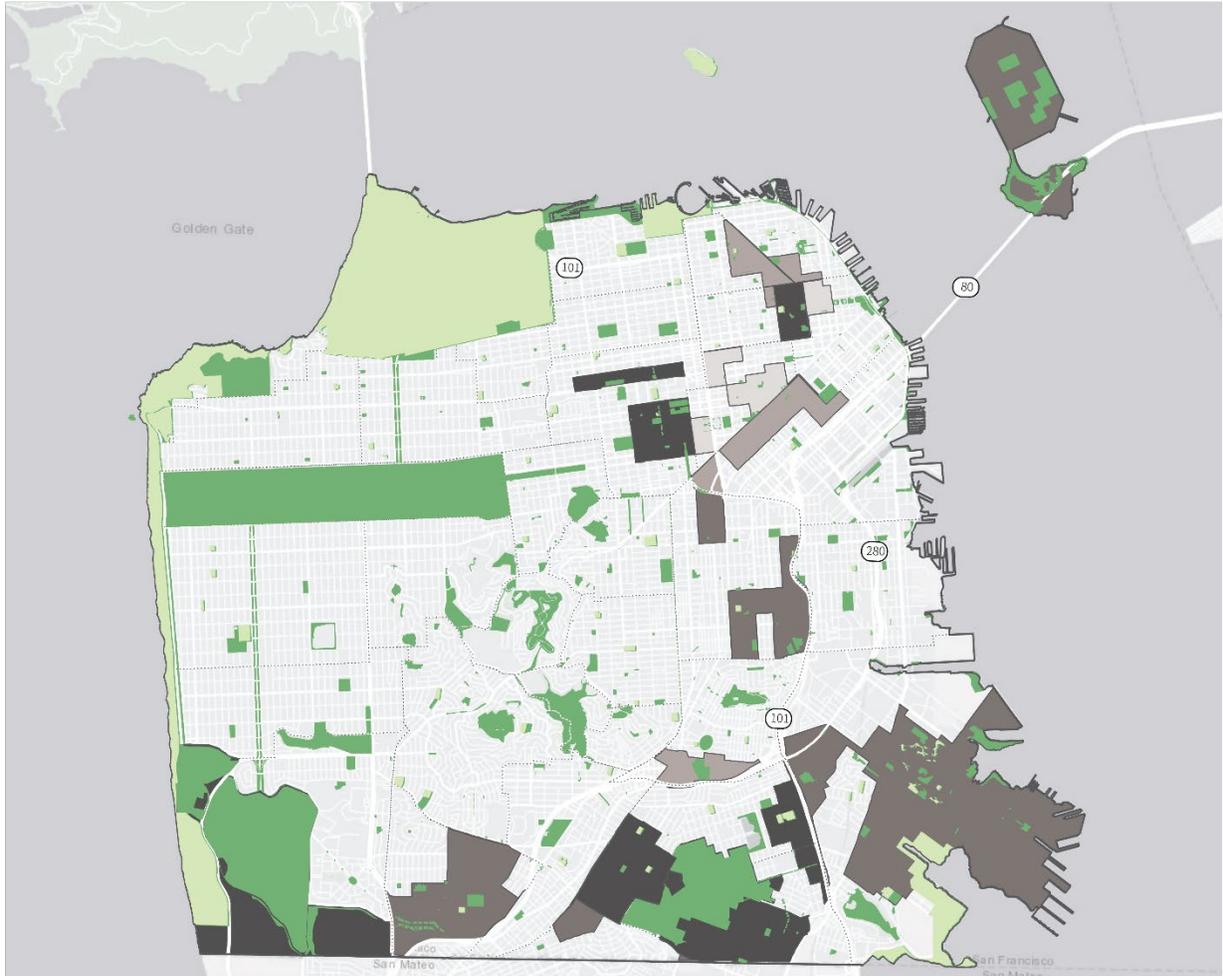
**LEGEND**

- County Boundary
- Highways
- Neighborhoods

**Open Space by Ownership**

- City-owned open space
- Non-city owned open space

FIGURE 31: SHARE OF PRESCHOOL-AGE (3-4) CHILD CARE DEMAND SERVED BY AVAILABLE LICENSED SLOTS RELATIVE TO EQUITY PRIORITY COMMUNITIES



Percent of Demand Served by Available Licensed Slots

- Less than 38%
- 38% - 77%
- 77% - 114%
- Greater than 114%

Citywide average: 88% of preschool age children demand served by available licensed slots. Communities of Concern are defined in Plan Bay Area 2040 Equity Analysis section. Communities of Concern include "all census tracts that have a concentration of BOTH minority AND low-income households at specified thresholds of significance, or that have a concentration of three or more of six additional factors if they also have a concentration of low-income households".

Source: San Francisco Human Services Agency, San Francisco Early Care and Education Needs Assessment (2017), San Francisco Infrastructure Level of Service Analysis (2014), SFCTA Communities of Concern



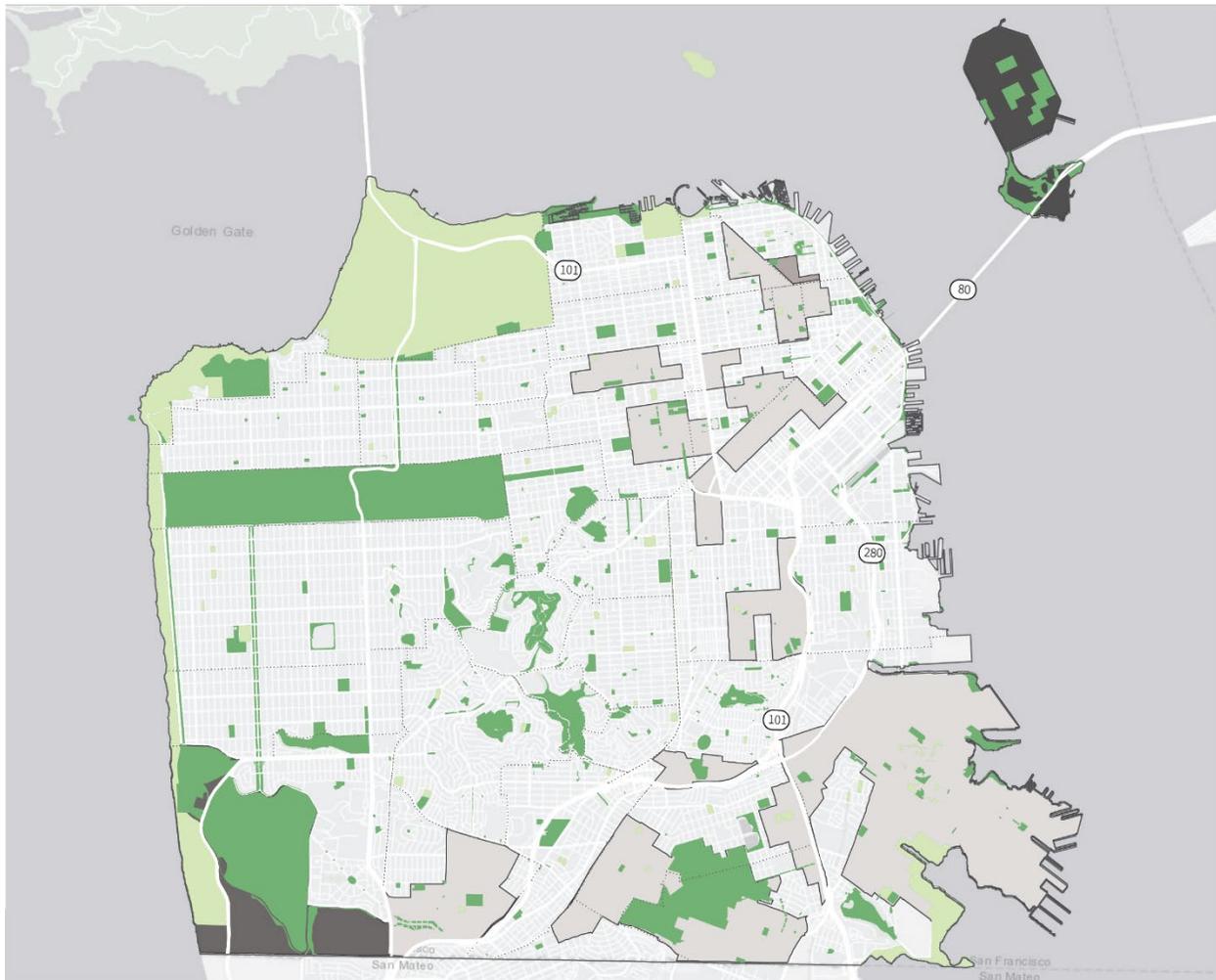
**LEGEND**

- County Boundary
- Highways
- Neighborhoods

**Open Space by Ownership**

- City-owned open space
- Non-city owned open space

FIGURE 32: MILES OF PREMIUM CLASS (I, II AND IV) BIKE LANES PER CAPITA RELATIVE TO EQUITY PRIORITY COMMUNITIES



Miles of Bike Lane (Class I, II and IV) Per 1,000 Service Population Unit\* (SPU)

- < 0.25 miles per 1,000 SPU
- 0.25 - 0.5 miles per 1,000 SPU
- 0.5 - 0.75 miles per 1,000 SPU
- 0.75 - 1.00 miles per 1,000 SPU
- > 1.00 miles per 1,000 SPU

Citywide average: 0.58 miles per 1,000 SPU

Communities of Concern are defined in Plan Bay Area 2040 Equity Analysis section. Communities of Concern include "all census tracts that have a concentration of BOTH minority AND low-income households at specified thresholds of significance, or that have a concentration of three or more of six additional factors if they also have a concentration of low-income households".



**LEGEND**

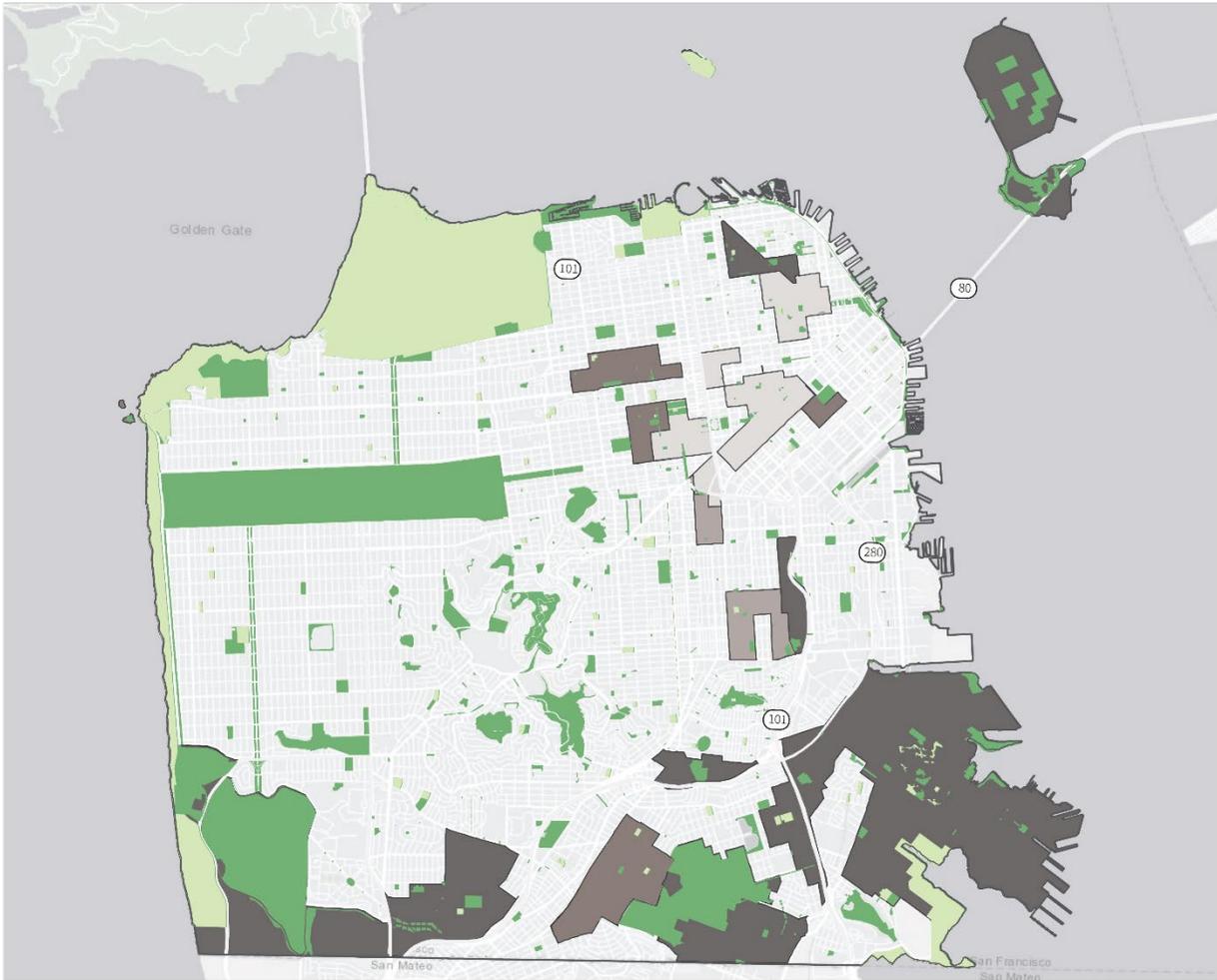
- County Boundary
- Highways
- Neighborhoods

**Open Space by Ownership**

- City-owned open space
- Non-city owned open space

Source: SFMTA Bikeway Network, SF Planning 2019 population estimates, SFCTA Communities of Concern

FIGURE 33: RESIDENT POPULATION TO THE NEAREST LIBRARY RELATIVE TO EQUITY PRIORITY COMMUNITIES



Residents per closest San Francisco Public Library

- < 20,000 residents
- 20,000 - 30,000 residents
- 30,001 - 40,000 residents
- 40,001 - 50,000 residents
- > 50,000 residents

Citywide Average: 32,188 residents overall per library

Communities of Concern are defined in Plan Bay Area 2040 Equity Analysis section. Communities of Concern include "all census tracts that have a concentration of BOTH minority AND low-income households at specified thresholds of significance, or that have a concentration of three or more of six additional factors if they also have a concentration of low-income households".

San Francisco Public Library, San Francisco population estimates 2019, SFCTA Communities of Concern



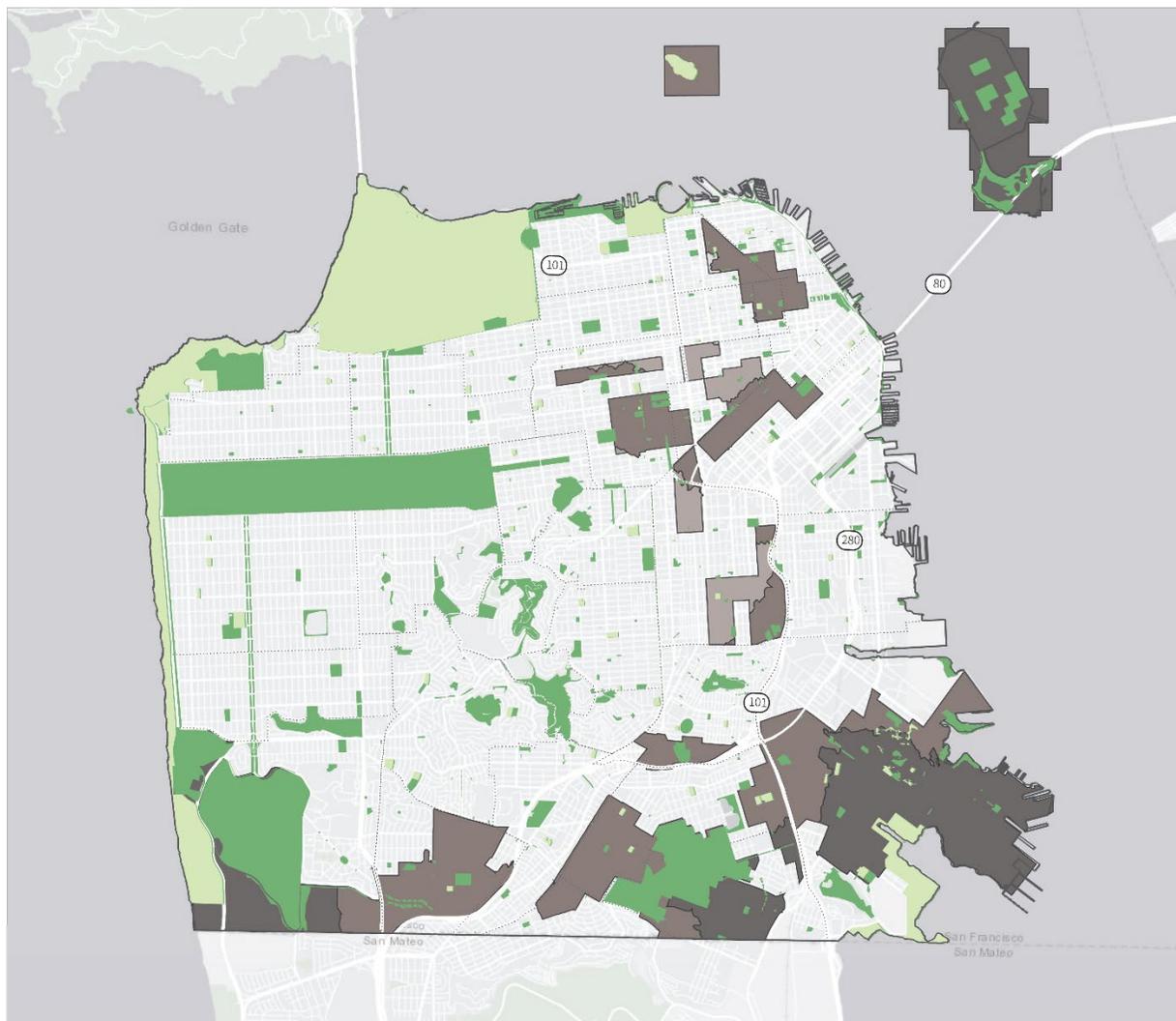
**LEGEND**

- County Boundary
- Highways
- Neighborhoods

**Open Space by Ownership**

- City-owned open space
- Non-city owned open space

FIGURE 34: FIRE STATIONS AVERAGE EMERGENCY RESPONSE TIME RELATIVE TO EQUITY PRIORITY COMMUNITIES



Average Emergency Response Time

- Less than 2 minutes
- 2 - 3 minutes
- 3 - 4 minutes
- Greater than 4 minutes



**LEGEND**

- County Boundary
- Highways
- Neighborhoods

**Open Space by Ownership**

- City-owned open space
- Non-city owned open space

Communities of Concern are defined in Plan Bay Area 2040 Equity Analysis section. Communities of Concern include "all census tracts that have a concentration of BOTH minority AND low-income households at specified thresholds of significance, or that have a concentration of three or more of six additional factors if they also have a concentration of low-income households".

Source: San Francisco Fire Department, SFCTA Communities of Concern

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# 11 Appendices

## 11.1 Service Population Definitions

In order to estimate the usage of City infrastructure categories, infrastructure provision is measured on a per service population basis. Service population includes City residents and a share of employees. Employees are discounted because they spend less time in the City (as an employee) than residents (or as a resident, in the case of individuals who both live and work in San Francisco). Generally, employees are discounted by 50%, because they spend about half the day at work.

Some infrastructure categories do not use this standard assumption. For child care and transit, demand is calculated directly, and no service population is used. And for libraries, only residents are counted (no employees). Table 27 illustrates how service population is defined for each infrastructure category.

TABLE 27: SERVICE POPULATION DEFINITIONS BY INFRASTRUCTURE CATEGORY

Infrastructure Category	Service Population
Recreational and Open Space	100% of residents plus 50% of employees
Child Care Facilities	Not Applicable
Complete Streets	100% of residents plus 50% of employees
Transit Infrastructure	Not Applicable
Library Facilities	100% of residents
Fire Department Facilities	100% of residents plus 50% of employees

## 11.2 Citywide and Neighborhood Policy Documents

### 11.2.1 Task Description

This report provides a review of the City and County of San Francisco’s (City) existing plans and studies pertinent to San Francisco’s infrastructure level of service and development fee program. Hatch reviewed the existing adopted studies, their methodology and assumptions, and identifies preliminary recommendations for modifications to the standards for the update of the infrastructure level of service and nexus studies. Target fees are considerably higher than actual fees charged to the developer.

### 11.2.2 Documents Reviewed

Table 1 below lists the planning documents and studies reviewed for this report and indicates the specific level of service standard described in the document and evaluated herein.

TABLE 28 : REFERENCE DOCUMENTS REVIEWED

Reference Document	Year Published	Infrastructure Type
San Francisco Citywide Nexus Analysis and Infrastructure Level of Service Analysis (Citywide Nexus Analysis)	2014	Bicycle Childcare Parks and open space Pedestrian and Streetscape Infrastructure Transit
Transportation Sustainability Fee (TSF)	2015 (Updated 2017)	Transit
Transit Center District Plan (TCDP)	2009	All categories for the downtown area
Recreation and Open Space Element (ROSE)	2012	Parks and open space
San Francisco Recreation and Park Department Acquisition Policy	2011	Parks and open space
Better Streets Plan	2011	Street, pedestrian, bicycle, and transit
ConnectSF	2018	Street, pedestrian, bicycle, and transit
San Francisco Transportation Plan	2013	Street, pedestrian, bicycle, and transit
San Francisco Transportation 2045 Task Force Report	2018	Street, pedestrian, bicycle, and transit
SFMTA Strategic Plan	2018	Street, pedestrian, bicycle, and transit
Transportation Climate Action Strategy	2017	Street, pedestrian, bicycle, and transit

Source: Hatch, 2019.

### 11.2.2.1 San Francisco Citywide Nexus Analysis

Facility Type	Metrics	2014 Level of Service	2014 Short-Term Target
Recreation and Open Space	Acres of City-Owned Open Space per 1,000 Service Population Units	4.0	4.0
Childcare	% of Childcare Demand Served by Available Licensed Slots	37% (infant & toddler), 99.6% (preschool)	37% (infant & toddler), 99.6% (preschool)
Streetscape and Pedestrian Infrastructure	Square feet of sidewalk/improved sidewalk space per service population unit	103	88 of improved sidewalk <sup>153</sup>
Bicycle Infrastructure	(1) Number of Premium Network Miles, (2) Number of Upgraded Intersections, (3) Number of Bicycle Parking Spaces, and (4) Bicycle Share Program	(1) 51 miles, (2) 3 intersections, (3) 8,800 spaces, and (4) 0 stations & 0 bicycles	(1) 61 miles, (2) 13 intersections, (3) 12,800 spaces, and (4) 50 stations & 500 bicycles
Transit Infrastructure	(1) Transit Crowding (% of boardings relative to capacity), and (2) Transit Travel Time (Average Minutes per Trip)	(1) N/A, and (2) 33.72 minutes	(1) 85%, and (2) 33.6 minutes

The Citywide Nexus Analysis completed in 2014 evaluated five facility types – recreation and open space, childcare, streetscape and pedestrian infrastructure, bicycle infrastructure, and transit infrastructure. The nexus study applied citywide level of service goals established in the level of service analysis and estimated infrastructure demand based on the short-term level of service goal.

#### 11.2.2.1.1 Fee structure by land use and service population density calculators

The nexus study distributed those costs between residential and non-residential applying a single average household size and employment density. In other words, there’s no distinction by unit size or unit type regarding the average number of persons per housing unit and there’s no variation among non-residential structures on the average employment density. This means that PDR and office have the same assumed employment densities.

For most citywide infrastructure categories, the nexus applied service population ratio where one resident represents one service population unit and one employee represents 0.5 service population unit. The

<sup>153</sup> See Section 11.2.2.1.3.3 for a broader definition of the term “improved sidewalk”.

exception is in park and open space where the study referenced a Phoenix park usage study which estimated 0.19 factor for employees, accounting for their lower propensity of park usage.

#### 11.2.2.1.2 Parks and Open Space

Parks and open space calculators were based on the short-term expansion of park capacity, maintain the level of service. This may need to be reconsidered as it will be difficult to acquire a lot of new land for open space, especially in the Downtown. The parks and open space cost calculators did not include land acquisition costs.

#### 11.2.2.1.3 Streetscape and Pedestrian Infrastructure

##### 11.2.2.1.3.1 Description of Facilities

Streetscape and pedestrian infrastructure includes sidewalk 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.

##### 11.2.2.1.3.2 Level of Service Standard

The previous LOS standard was expressed as improved sidewalk space per capita and estimated at 88 square feet (sq. ft.) per capita. The assumptions used to calculate the LOS are presented below in Table 29.

TABLE 29: PEDESTRIAN AND STREETScape INFRASTRUCTURE LOS STANDARD

	Improved Sidewalk (sq. ft.)		Service Population		LOS Standard (sq. ft. per capita)
<b>Metric</b>	115 million	÷	1,301,049	=	88
<b>Description</b>	Existing (2013) improved sidewalk space citywide		Future (2030) citywide service population. Employment numbers are discounted by ½ to account for decreased demand compared to residential demand		Future LOS assuming no increase in sidewalk space above 2013

Source: San Francisco Citywide Nexus Analysis, 2014.

As shown in Table 29, the LOS standard calculation used existing (2013) improved sidewalk space but future (2030) service population. This methodology accounts for the limited opportunities to expand sidewalks, which results in a decrease in the LOS standard as service population grows. Although sidewalk widening could occur in some areas, capital improvement strategies are likely to prioritize improvements of existing sidewalks through the addition of streetscape and pedestrian amenities.

The Transbay Center District Plan (TCDP) calls for removal of roadway lanes in response to increased transit and pedestrian activity in the area. The Plan does not specify if the downtown fee fully accounts for the additional construction costs and associated complexity of converting existing roadway to pedestrian and bicycle right-of-way.

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#### 11.2.2.1.3.3 Design Standard & Cost Assumptions

A design standard was established to calculate the cost of maintaining the LOS standard and to determine the maximum justified impact fee. The design standard was based on the average cost across five “typical” street improvement scenarios developed in response to the Better Streets Plan (BSP). The approach identified the streetscape and pedestrian infrastructure costs by removing the roadway elements of the scenarios, yielding an average cost to construct a square foot of ‘improved sidewalk.’<sup>154</sup> Modifications were made to the scenarios to be conservative and avoid potential double counting between the nexus fee and the urban design requirements of Section 138.1 of the San Francisco Planning Code.

#### 11.2.2.1.4 Recommendations

Based on the evaluation of the existing LOS for pedestrian and streetscape infrastructure and the design standard and cost assumptions, the following recommendations are provided for improving this LOS standard.

- Expand the pedestrian and streetscape LOS standard to include bicycle infrastructure. The existing bicycle LOS is relatively low. Combining the pedestrian/streetscape and bicycle infrastructure types into a single category would provide more flexibility on adopted fee levels and the use of fee revenue.
- Update the design standard to include bicycle infrastructure. Include right-of-way pavement costs and associated improvements for all existing Class I, II, III, and IV bicycle routes in the city.
- Update the design standard and cost assumptions for existing pedestrian and streetscape infrastructure based on capital asset inventory estimates of existing components such as pedestrian signals, street trees, bulb-outs, lighting, and landscaping, while addressing any double-counting based on other requirements of the City’s Planning Code. Rather than using a design standard based on improvement scenarios, this approach would improve defensibility of the fee by basing it on the existing infrastructure standard.
- Define the downtown area where the City plans to convert automobile right-of-way to the use of bicycle, pedestrian, and/or transit infrastructure.
- Work with the City’s legal counsel to resolve any duplication between the fee and related development standards.
- Per the scope of work, Hatch will perform a survey of park usage in San Francisco. This will provide the City with a more direct and current estimate of how employees use parks in the city.
- Create three land use categories based on analysis on subcategories: Residential, Commercial, and PDR.

#### 11.2.2.2 Transportation Sustainability Fee

The Transit Sustainability Fee (TSF) included three components, each with their own LOS standard – transit capital maintenance, transit capital facilities, and complete streets. In addition, the TSF Nexus Study included an overarching LOS analysis to demonstrate the impact of development and the need for additional transit facilities and services. The LOS analysis showed that without the transit services and facilities to be fully or partially funded by the TSF, transit service in San Francisco would become increasingly overcrowded, diminishing the performance of the City’s transportation system and San Francisco Municipal Transportation

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<sup>154</sup> The cost estimates were provided by the San Francisco Department of Public Works.

Agency staff conducted an analysis of overcrowding using SF-CHAMP model output for existing (2012) and 2040 conditions.

The 2040 projection considered a “no build” analysis that only included transit capital projects anticipated to be completed without funding from the TSF (such as the Central Subway), thereby demonstrating the impact of development and need for TSF funding. As shown in Figure 35, the number of passengers on overcrowded routes would increase from 2010 to 2040 by approximately 6,500 passengers during the morning and afternoon peak periods. When transit reaches capacity, commuters that would have taken transit are unable to and thus they chose to drive, exacerbating congestion.

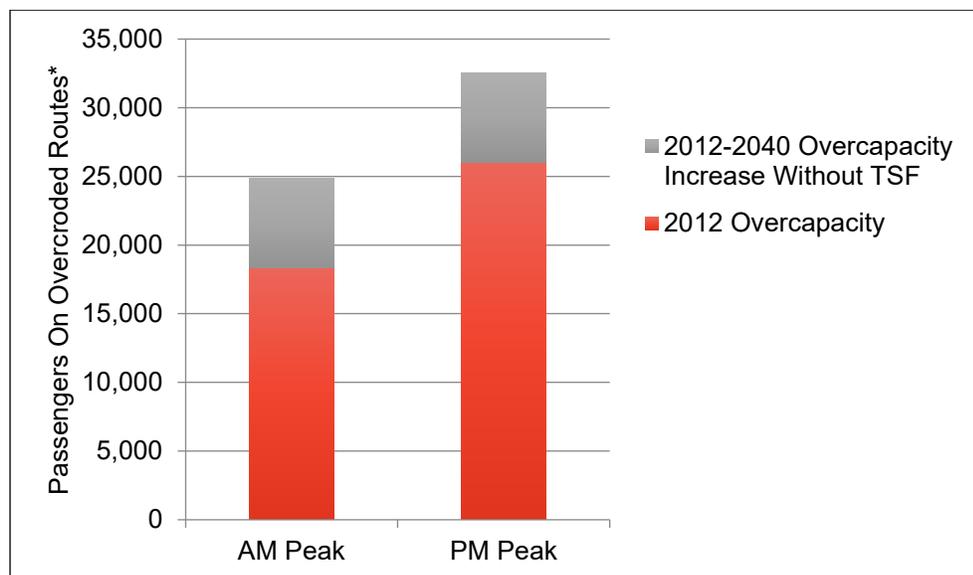


FIGURE 35: FUTURE SCENARIO WITHOUT THE USE OF TSF, SHOWING TRANSIT PASSENGERS ON OVERCAPACITY ROUTES

Note: "Overcapacity" is greater than 85% occupancy with passengers measured at maximum load point on each route.

Source: San Francisco Municipal Transportation Agency, personal communication summarizing analysis of SF-CHAMP model output, MLP Loads & % Contribution.xls, August 29, 2015.

#### 11.2.2.2.1 Transit Capital Maintenance Component

##### 11.2.2.2.1.1 Description of Facilities

The transit capital maintenance component of the TSF may be used for any operating cost that directly supports increased transit service. The 2015 TSF nexus study noted that the SFMTA anticipates using fee revenues solely for direct preventative capital maintenance costs that increase transit service. Fee revenues may not fund capital facilities costs to avoid double counting with the transit capital facilities component of the TSF, nor costs in the two categories excluded the design standard cost assumptions: non-vehicle maintenance costs and general administration.

##### 11.2.2.2.1.2 Level of Service Standard

The existing LOS standard was based on the ratio of the supply of transit services to the level of transportation demand. The assumptions used to calculate the LOS are presented below in Table 30.

TABLE 30: TSF CAPITAL MAINTENANCE COMPONENT LOS STANDARD

Transit Supply <i>(average daily revenue service hours)</i>		Transportation Demand <i>(average daily person trips)</i>		LOS Standard <i>(revenue service hours per 1,000 ADT)</i>
9,474	÷	7,235,000	=	1.31
Existing (2013) transit service		Existing (2013) transportation demand		Existing LOS

#### 11.2.2.2.1.3 Design Standard & Cost Assumptions

A design standard was established to calculate the cost of maintaining the LOS standard and determine the maximum justified impact fee. The design standard was based on (1) the SFMTA annual operating cost (net of non-vehicle maintenance costs, general administration costs, and farebox revenue) per revenue service hour, and (2) the impact fee needed to fund that cost for each new trip from development over a 45-year planning horizon. The cost per revenue service hour excludes non-vehicle maintenance, general administrative, and capital costs because these costs are not directly related to operating costs for expanded transit service. Fare box revenue is deducted because transit system users from new development will pay fares to offset costs.

#### 11.2.2.2.1.4 Recommendations

The methods and approach outlined in previous studies remains adequate, however the following recommendation is noted.

- Update the TSF transit capital maintenance component LOS standard and related design standard and cost assumptions based on the most current data available.

#### 11.2.2.2.2 Transit Capital Facilities Component

##### 11.2.2.2.2.1 Description of Facilities

The transit capital facilities component of the TSF may be used for new or expanded transit capital facilities that support increased transit services, including improved transit vehicle availability.

The TSF Nexus Study identified a range of programs and projects based on various CIP documents, primarily from the SFMTA and San Francisco County Transportation Authority (SFCTA). All programs and projects included in the nexus analysis would provide increased transit service, such as SFMTA transit fleet and facilities expansion, new or upgraded service to increase SFMTA transit speed and reliability, the Transbay Transit Center, and improvements to transit services serving San Francisco by regional transit operators such as BART and Caltrain.

The TSF capital facilities component included bicycle improvements because bicycle infrastructure shift demand away from automobiles and transit thereby relieving auto congestion, improving transit travel times, and reducing transit overcrowding. However, the TSF nexus study stated that funding of bicycle infrastructure would occur solely from the TSF complete streets component (see below) to be consistent with the bicycle, pedestrian, and streetscape infrastructure components of the area plan fees.

#### 11.2.2.2.2.2 Level of Service Standard

Various LOS standards for planning transit capital improvements were used by the SFMTA, SFCTA, BART, and Caltrain to develop the \$6.5 billion CIP used in the nexus analysis. For purposes of the nexus analysis, the LOS standard was reduced to a single cost standard based on the maximum justified level of TSF funding for the Capital Improvement Program (CIP) expressed per trip from new development. The assumptions used to calculate the LOS are presented below in Table 31 and the methodology used to develop the maximum justified amount of TSF funding is described below.

TABLE 31: TSF CAPITAL FACILITIES COMPONENT LOS STANDARD

Maximum Justified TSF Funding		Transportation Demand ( <i>average daily person trips</i> )		LOS Standard ( <i>cost per trip</i> )
\$1,756,100,000	÷	1,713,000	=	\$1,025
See Section 11.2.2.2.1.3 below		Transportation demand from new development subject to TSF (2010-2040)		Planned LOS to accommodate growth

#### 11.2.2.2.2.3 Design Standard & Cost Assumptions

As described above, the maximum justified TSF funding used to calculate the LOS standard was based on the \$6.5 billion CIP of planned capital programs and projects. The maximum allowable TSF cost share for each program or project was based on using one of two methods:

- Method 1: If the project or program included replacement of existing transit facilities and expanded transit capacity, then the TSF cost share was based on person trips from new development subject to the TSF as a share of total trips (existing plus new development, including development projects not subject to the TSF such as the Candlestick Point – Hunters Point Shipyard, Parkmerced, and Treasure Island – Yerba Buena Island development projects).
- Method 2: If the project or program only provided expanded transit capacity then the TSF cost share was based on person trips from new development subject to the TSF as a share of total trips from new development.

The maximum justified TSF funding of approximately \$1.8 billion equaled the sum of the TSF cost share for each program and project included in the \$6.5 billion CIP, adjusted for any programmed funding that could be allocated to the TSF cost share and only included funding over and above funding needed for the non-TSF cost share.

#### 11.2.2.2.2.4 Recommendations

The methods and approach outlined in previous studies remains adequate, however the following recommendation is noted.

- Update the TSF transit capital facilities LOS standard and related design standard and cost assumptions based on the most recent data available.

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### 11.2.2.2.3 Complete Streets Component

#### 11.2.2.2.3.1 Description of Facilities

The complete streets component of the TSF funds the enhancement and expansion of pedestrian and streetscape infrastructure to accommodate growth. The TSF Nexus Study specifically identified two programs from the SFMTA CIP current at the time of the study that would be eligible for funding with the TSF complete streets component: (1) the pedestrian strategy corridor program, and (2) the striping and signage program. As explained above regarding the TSF capital facilities component, the TSF complete streets component also may fund bicycle infrastructure.

#### 11.2.2.2.3.2 Level of Service Standard

The LOS standard was based on the Citywide Nexus Analysis (see Section 11.2.2.1.3.2).

#### 11.2.2.2.3.3 Design Standard / Cost Assumptions

The design standard was based on the Citywide Nexus Analysis (see above), with the cost per square foot of improved sidewalk adjusted for inflation.

#### 11.2.2.2.3.4 Recommendations

- Update the fee and expand it to include bicycle infrastructure based on the recommendations associated with the citywide nexus study update, discussed above in section 11.2.2.1.4.

### 11.2.2.3 Transit Center District Plan Implementation Document (2012)

The Transit Center District Plan (TCDP) included two nexus studies and related development impact fees: (1) a park, recreation, and open space fee and (2) a transportation system improvements fee.

#### 11.2.2.3.1 Park, Recreation, and Open Space Development Impact Fee

##### 11.2.2.3.1.1 Description of Facilities

The park, recreation, and open space impact fee funds the acquisition of land, development of park and recreation facilities, and improvement of existing park facilities in lieu of additional land acquisition. Based on the LOS standards described in the following subsection, the TCDP anticipated acquisition and improvement of 3.57 acres of new park land and improvement of 140.16 acres of existing park land. This capital planning is based on a fee zone for the downtown area that extends beyond the Transit Center District Plan area and is roughly bounded by the Embarcadero to the east, Clay, Kearny, and Bush streets to the north, Van Ness Avenue to the west, and Highway 101 and King Street to the south.

##### 11.2.2.3.1.2 Level of Service Standard

The TCDP nexus study was completed in April 2012 and was based on LOS standards developed in a prior citywide nexus analysis last updated in January 2008, shown in Table 32, below. The land acquisition standard was based on opportunities for expanding the City's park system given the limited amount of open space lands. The park improvement standard was based on existing city-owned parks.

TABLE 32: TCDP PARK, RECREATION, AND OPEN SPACE LOS STANDARD

LOS Component	LOS Standard ( <i>acres per 1,000 residents</i> )	Notes
Park Land Acquisition & Improvement	0.11	Based on acquisition of 5.9 acres citywide
Park Land Improvement	4.32	Existing (2008) LOS standard for city-owned parks

Allocation of this standard by land use category used a service population approach to reflect relative demand from residential and five non-residential land uses.

#### 11.2.2.3.1.3 Design Standard / Cost Assumptions

The design standard was based on the Citywide Nexus Analysis (see above), with the cost per square foot of improved sidewalk adjusted for inflation.

#### 11.2.2.3.1.4 Recommendations

- Update the fee based on updating the citywide park and recreation LOS standard in the prior nexus study and associated design standards and cost assumptions consistent with the citywide nexus study update.
- Consider using a park land acquisition standard equal to the park improvement standard to increase the maximum justified fee and provide more flexibility on adopted fee levels. This approach is justified by the use of funds that may have been used for park land acquisition but instead are used to accommodate new development by intensifying development of existing parks.
- Update the service population approach for allocation of costs to residential and non-residential land uses based on the citywide nexus study update.

#### 11.2.2.3.2 Transportation System Improvements Development Impact Fee

##### 11.2.2.3.2.1 Description of Facilities

The TCDP Nexus Study identified a range of improvements drawn from the TCDP that were related to streetscape and pedestrian facilities. These facilities are needed to accommodate the increased number and concentration of pedestrians, transit users, cyclists, and carpool commuters anticipated in the TCDP area. Improvements include district-wide circulation, streetscape, and pedestrian improvements, mid-block crossings, Natoma Street and Shaw Plaza improvements, signalization changes, casual carpool waiting areas, and underground pedestrian connector to BART/Muni.

##### 11.2.2.3.2.2 Level of Service Standard

The TCDP identified the improvements included in the nexus study to meet the Plan's objectives. These improvements had an estimated cost of \$278 million. For purposes of the nexus analysis, the LOS standard was reduced to a single cost standard based on the maximum justified level of TSF funding for the identified improvements expressed per trip from new development. The assumptions used to calculate the LOS are presented below in Table 33 and the methodology used to develop the maximum justified amount of TSF funding is described below.

TABLE 33: TCDP TRANSPORTATION SYSTEM IMPROVEMENTS LOS STANDARD

Maximum Justified TSF Funding		Transportation Demand (average daily person trips)		LOS Standard (cost per trip)
\$115,130,000	÷	211,159	=	\$545
See Section 11.2.2.3.2.3, below		Transportation demand from new development within the TCDP (2005-2030)		Planned LOS to accommodate growth

#### 11.2.2.3.2.3 Design Standard & Cost Assumptions

The maximum justified TSF funding used to calculate the LOS standard was based on the list of improvements identified in the TCDP (cost of approximately \$278 million). The maximum allowable TSF cost share for each improvement was based on using one of three methods:

- Method 1: Approximately 100% of the cost of improvement designed specifically to address new development within the TCDP area was allocated to the fee program.
- Method 2: Approximately 48% of the cost of improvements designed to address growth within the greater downtown area was allocated to the fee program based on person trips from new development within the TCDP area as a share of total trips from new development within the greater downtown area.
- Method 3: Approximately 11% of the cost of improvements designed to address both existing and new development within the greater downtown area was allocated to the fee program based on person trips from new development within the TCDP area as a share of total trips from existing and new development within the greater downtown area.

The maximum justified TSF funding of \$115.1 million shown above in Table 33 equaled the sum of the cost share for each improvement included in the improvement list (total \$278 million).

#### 11.2.2.4 Recreation and Open Space Element (ROSE)

The ROSE describes the provision of parks and open space in San Francisco and calls for the enhancement of existing parks as well as a modest expansion of the park system through minor acquisitions and through investments in the right-of-way. The ROSE also includes a clear classification of park components and prioritizes investments in high-need areas based on existing population density, projected growth in population, children, seniors, and concentrations of low-income populations. Many of the projected investments are identified for the eastern shoreline and are anticipated to include both resiliency and open space investments, such as the Blue Greenway.

The ROSE also calls for expansion and strengthening of privately owned public open spaces (POPOS) and greater enforcement of public access to POPOS. Currently, POPOS are not factored into the level of service standard for parks and open space.

Alleyway and green connections are identified as potential investments, both in building green connections to parks and establishing living alleyways.

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#### 11.2.2.4.1 Recommendations

- Consider using a park land acquisition standard equal to the park improvement standard to increase the maximum justified fee and provide more flexibility with adopted fee levels. This approach is justified by the use of funds that may have been used for park land acquisition but instead are used to accommodate new development by intensifying development of existing parks.
- Establish a separate downtown park impact fee that uses a higher per unit cost due to increased costs in this area (land and construction costs).

#### 11.2.2.5 Better Streets Plan (2011)

The Better Streets Plan sets right-of-way guidelines for investments in San Francisco streets. It includes stormwater management, pedestrian, bicycle, safety, and lighting goals. The plan was used in the Citywide Nexus Analysis to estimate the average cost per square foot of right-of-way improvement. Hatch can inflate these costs to represent current year estimates or can use new cost estimates provided by the Department of Public Works.

#### 11.2.2.6 ConnectSF

ConnectSF is a broad vision for the City's transportation system for 2050, recognizing future advances in autonomous vehicles, shared mobility, and the establishment of the Transbay Transit Center. It calls for reduce personal automobile use and more equitable provision of transportation infrastructure. As part of next steps, ConnectSF calls for repurposing right-of-ways for more sustainable forms of transports. No costs are developed in this document. It provides general guidance on the future of San Francisco's transportation infrastructure.

#### 11.2.2.7 San Francisco Transportation Plan (2013)

The San Francisco Transportation Plan has a long-term expenditure plan for right-of-way and transit investments to 2040. There is approximately \$75 billion in project transportation revenue to 2040 from 2014, of which \$70 billion is already allocated to specific projects. More than \$66 billion is allocated to road maintenance and repaving needs. Another \$1.2 billion in allocated to the City's pedestrian and bicycle safety programs. Note that some of the goals in this plan have since been updated in later plans.

##### 11.2.2.7.1 Plan Goals

The City has set sustainability and livability goals pertaining to its transportation system, including 50% of trips are taken by walking, bicycling, and transit and 50% reduction in fatal pedestrian injuries. It also calls for a 20% biking mode share. As a result, the plan calls for \$600 million towards fully building out SFMTA's bicycle plan and another \$630 million in pedestrian improvements.

In addition, the plan calls for a 10% decrease in greenhouse gas emissions by transitioning commuters out of personal vehicles into transit and other non-motorized forms of transportation. The plan also calls for 15 miles of protected transit lanes.

##### 11.2.2.7.2 Growth Projections

The Transportation Plan projects population to grow to 1.1 million and have more than 750 thousand jobs by 2040.

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#### 11.2.2.7.3 *Plan versus Vision*

The plan budget is \$75 billion in estimated revenue but the plan also calls for alternative financing “Vision” that would add \$7.5 billion towards additional discretionary spending. The implication to the Hatch team is under what expenditure plan should the team use in allocating future transportation infrastructure costs to new development. This should be a discussion point with the City and the Hatch team.

#### 11.2.2.8 *San Francisco Transportation 2045 Task Force Report (2018)*

The San Francisco Transportation 2045 Task Force Report is primarily focused on assessing numerous potential methods for San Francisco to raise revenue for meeting future (and current) transportation capital needs. According to the report, San Francisco anticipates \$32 billion in transportation capital needs by 2045, of which \$22 billion was unfunded at the time of the report (the report was published prior to the passage of Regional Measure 3). The report assumes that the local share of that \$22 billion gap will be 25% - 30%, or \$5.5 - \$6.6 billion.

##### 11.2.2.8.1 *Revenue Sources*

The Task Force considered 29 potential revenue sources, evaluating them for equitability, the significance of revenue potential, ability to support policy objectives, reliability, the degree to which the funds would be dedicated, the flexibility of the funding source, growth potential, ease of administration, and ease of establishing. Broadly speaking, the sources fit into five categories: vehicle-related sources, property-related sources, sources paid by individuals and businesses, entertainment/leisure-related sources, and sources that would require a more complex approval process than could be achieved within 2018.

##### 11.2.2.8.2 *Recommendations*

Ultimately, the report recommends four local revenue sources that could be approved quickly: a sales tax, a commercial property rent tax, a vehicle license fee, and a platform/gig economy tax. It also recommends two local revenue sources which would require state approval: congestion pricing and a fee for transportation network companies.

Beyond recommendations for new local revenue sources, the report reaffirms Proposition J’s expenditure priorities, recommends continuing to lobby the state and federal governments for transportation funding (in addition to the authorization of the above-mentioned local funding mechanisms), and reaffirms support for the 2040 Task Force Report (published in 2013) recommendation of a general obligation bond in 2024.

#### 11.2.2.9 *SFMTA Strategic Plan*

The San Francisco Municipal Transportation Agency (SFMTA) Strategic Plan lays out a series of performance targets for San Francisco’s transportation system, to be achieved by Fiscal Year (FY) 2019 and FY 2020. The plan also provides some steps the SFMTA can take to help achieve those goals.

##### 11.2.2.9.1 *Safety*

Goal 1 is to create a safer transportation experience for everyone. There are three objectives within this goal: achieve vision zero, improve the safety of the transit system, and improve security for transportation system users. By FY 2019 and FY 2020, there should be no traffic fatalities, a decrease in Muni collisions and crimes per mile driven, and an increase in Muni customer ratings.

#### *11.2.2.9.2 Travel Choices*

Goal 2 is to make transit and other sustainable modes of transportation the most attractive and preferred means of travel. There are three objectives within this goal: improve transit service, enhance and expand use of the city's sustainable modes of transportation, and manage congestion and parking demand to support the Transit First policy. By FY 2019 and FY 2020, Muni should be more on-time (with fewer service gaps and breakdowns), Muni ridership should be up (along with bicycle trips, as part of a 58% citywide sustainable mode share goal), and Muni travel times should be faster.

#### *11.2.2.9.3 Livability*

Goal 3 is to improve the quality of life and environment in San Francisco and the region. There are five objectives within this goal: advance equity, support sustainable transportation and land use principles, guide emerging mobility, improve air quality, and achieve financial stability for the SFMTA. By FY 2019 and FY 2020, Muni should expand its Free Muni program (and close the service gap differential in Equity Priority Communities), new developments should have fewer parking spaces per unit, emerging mobility services should be better monitored, San Francisco's transportation system should be producing fewer carbon emissions, and the SFMTA should be fiscally sound.

#### *11.2.2.9.4 Service*

Goal 4 is to create a workplace that delivers outstanding service. There are five objectives within this goal: strengthen employee morale, improve employee safety, enhance customer service, diversify the workforce, and increase the efficiency of project delivery. By FY 2019 and FY 2020, employee satisfaction should be up (and the unscheduled absence rate should be down), workplace injuries and security incidents should be down, customer complaints should be down (and ratings up), employee ratings should be up, and more projects should be completed on time.

### *11.2.2.10 Transportation Climate Action Strategy*

The San Francisco Transportation Sector Climate Action Strategy lays out San Francisco's plan and goals for reducing the city's impact on climate change, including an assessment of the status quo. By 2017, San Francisco had reduced its greenhouse gas emissions by 28% from 1990 levels, despite a population increase of 19.5% and a GDP increase of 78% in that same time period. The City had also met its goal of 52% sustainable mode share by 2017. By 2030, San Francisco should have 80% of its trips take place in environmentally sustainable modes (transit, biking, and walking), and emissions overall should be 80% below 1990 levels. The following sections outline specific tasks for achieving these goals.

#### *11.2.2.10.1 Transit*

Continue implementing Muni Forward service improvements, along with prioritizing transit service in the public right of way, implementing recommendations from the Core Capacity Transit Study, and supporting these endeavors with Cap and Trade funding.

#### *11.2.2.10.2 Land Use & Transportation*

Implement innovative and robust land use and transportation plans, including Connect SF.

#### *11.2.2.10.3 Pricing & Congestion*

Update pricing, expand SFpark, and complete further pricing studies.

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#### *11.2.2.10.4 Transportation Demand Management*

Support efforts regional fare integration to support transit ridership, reach out to employers (especially outside of the downtown core), and create a TDM program for K-12 schools.

#### *11.2.2.10.5 Complete Streets*

Update San Francisco's Bike Plan, construct the network's high priority components, and construct complete streets projects that increase bicycle and pedestrian safety, integrating green infrastructure as much as possible.

#### *11.2.2.10.6 Zero Emission Vehicles & Infrastructure*

Develop a zero emission vehicle strategy that works with San Francisco's Transit First policy, implement high priority recommendations from that strategy, and develop a plan to transition taxis, paratransit vehicles, and school buses to zero emission vehicles.

#### *11.2.2.10.7 Emerging Mobility*

Develop an emerging mobility strategy, implement a pilot program related to emerging mobility, quantify greenhouse gases associated with emerging mobility, and collect and analyze data from emerging mobility providers.

#### *11.2.2.10.8 Education Capacity & Communication*

Educate the public and city staff about the causes and impacts of climate change and sea level rise, and engage communities and stakeholders on solutions.

#### *11.2.2.10.9 Capital Planning*

Examine the resiliency of current transportation infrastructure to sea level rise, and prepare a set of financial tools to fund the development of a climate resilient transportation system.

#### *11.2.2.10.10 Vulnerability Assessment*

Identify system wide vulnerabilities, the impacts the disadvantaged communities, and identify data and information gaps.

#### *11.2.2.10.11 Adaptation Strategies, Plans & Policies*

Lead collaborative planning efforts on climate adaptation and resilience planning, and monitor and document climate related impacts to the current transportation system.

#### *11.2.2.10.12 Partnerships & Collaboration*

Build and maintain strong working partnerships across city departments and other regional, state, national, and international agencies and individuals to support the development of a resilient transportation system.

### **11.2.3 Overall Recommendations**

#### **11.2.3.1 Downtown Boundary**

The Downtown boundary remains unclear after reviewing the Transbay Center District Plan and recognizing that the Transbay Center District is mostly built out. The area should be large enough to account for the broader growth projected south of market and the further intensification of Market Street. One method would

be to isolate for streetscape and open space fees specifically considering both infrastructure assets will have higher unit costs in the downtown core than elsewhere in the city.

### 11.2.3.2 Commercial versus Industrial

The Citywide nexus analysis used a residential and non-residential fee in ascribing infrastructure need. This meant that office and PDR uses were defined as having the same employment densities, which are typically dramatically different. Hatch recommends the use of three fee components – residential, commercial, and industrial to more-accurately reflect actual employment densities.

### 11.2.3.3 Pedestrian & Bicycle Facilities

While the City has established overall plans and costs for the improvement on bicycle routes that are more focused than improvements to the pedestrian right-of-way, both bicycle and pedestrian investments overlap in the public right-of-way. Combining the pedestrian/streetscape and bicycle infrastructure types into a single category would provide more flexibility on adopted fee levels and the use of fee revenue. This Right of Way Nexus should include both Complete Streets and the Transportation Sustainability Fee.

The fee program needs to delineate its uses of recreation and open space funds from the pedestrian and bicycle funds. Meaning, recreation and open space funds can go towards capital investments providing additional recreation and open space opportunities for San Francisco residents and workers. These facilities are to be managed by the San Francisco Department of Recreation and Park. Whereas right of way investments, which could include plazas and additional open space elements, would be managed and operated by the San Francisco Department of Public Works.

## 11.3 City Agency Stakeholders

TABLE 34: SAN FRANCISCO CITY AGENCIES AND CONTACTS

San Francisco City Agency	Name	Email
Planning	Seung Yen Hong	seungyen.hong@sfgov.org
	Mathew Snyder	mathew.snyder@sfgov.org
	Adam Varat	adam.varat@sfgov.org
	Heather Green	heather.green@sfgov.org
	Kate Faust	Kate.faust@sfgov.org
	Scott Edmondson	scott.edmondson@sfgov.org
Recreation and Park	Stacy Bradley	stacy.bradley@sfgov.org
	Taylor Emerson	taylor.emerson@sfgov.org
	Maggie Laush	maggie.laush@sfgov.org
	Yael Golan	yael.golan@sfgov.org
Office of Early Care and Education	Graham Dobson	Graham.Dobson@sfgov.org
Department of Public Works	Elizabeth Ramos	elizabeth.ramos@sfdpw.org
	Oscar Quintanilla	oscar.quintanilla@sfdpw.org
Municipal Transportation Agency	Monica Munowitch	Monica.Munowitch@sfmta.com
	Matt Lasky	Matt.Lasky@sfmta.com
Public Library	Randle McClure	randle.mcclure@sfpl.org

Fire Department	Olivia Scanlon	olivia.scanlon@sfgov.org
	Jesus Mora	jesus.mora@sfgov.org

## 11.4 Data Sources

Data	Data File Name	Source	Data Year
Analysis Zone Locations	LUA_2019.shp	Planning (Scott Edmondson)	2019
Housing, population, and employment estimates	Updated LUAs.csv	Planning (Scott Edmondson)	2019
Housing, population, and employment projections	zone_indicators_2025.csv zone_indicators_2040.csv	Planning (Scott Edmondson)	2015
Neighborhood names and locations	Neighborhoods.shp	Planning (Seung Yen Hong)	Current
Parks Equity Zone Locations	EquityZones2017v2.shp	San Francisco Recreation and Park Department (Janice Lau Perez)	Current
Equity Priority Communities Locations	CoC.gdb	Planning (Seung Yen Hong)	Current
Park acreage, location, ownership, and characteristics	SanFrancisco_City_parks_clip2018.shp	Rec and Park (Coordinated by Seung Yen Hong)	2018
Location and length of San Francisco walking paths	owm_walk_2way_subset.h5	Open Street Map	2019
Licensed child care information	2019.4.11 Center FCC Provider data (2.0).xlsx	Office of Early Care and Education (Graham Dobson)	2019
Proportion of child care per age group	San Francisco Early Care and Education Needs Assessment 2017	Published document	2017
Location, length, and width of sidewalks	geo_export_6f22a8a1-1212-4203-a9a7-71768d6f22ea.shp	DPW (Coordinated by Seung Yen Hong)	
Location of street trees	Street_Tree_Map.csv	DataSF	Current

Location of curb ramps	map_of_curb_ramps.shp	DPW (Coordinated by Seung Yen Hong)	
Location and class of bike lanes	geo_export_b1c1cc8e-e461-482a-b49e-9b9ec7c11122.shp	DPW (Coordinated by Seung Yen Hong)	
Location of street lights	Streetlight.shp	SF Water (Rodolfo Clavel)	
List of bulb outs	CRonBulbOut.xlsx	Department of Public Works (Elizabeth Ramos)	Current
Location and size of libraries	Libraries.shp	SFPL (Coordinated by Seung Yen Hong)	Current
Location of fire department facilities	Fire_Stations.shp	SFFD (Coordinated by Seung Yen Hong)	Current
	SFFD data V3.csv	SFFD (Coordinated by Seung Yen Hong)	Current
Service areas and response times of fire department facilities	SFFD_Response_Times.xlsx	SFFD (Coordinated by Seung Yen Hong)	Current
	First_Due_Engine_Station_Area.shp	SFFD (Coordinated by Seung Yen Hong)	Current
List of ambulance posting locations	Ambulance_Posting_Locations.xlsx	Fire Department (Jesus Mora)	Current

## 11.5 Parks Survey Results Memo

### 11.5.1 Purpose

The purpose of this survey was to determine the ratio of San Francisco workers' frequency of visiting city parks to San Francisco residents' frequency. This ratio is necessary to determine the service population that San Francisco parks serve: workers are only counted as a fraction of their total and then added to residents, so that each unit of service population visits San Francisco parks with the same frequency. This number can then be used to estimate demand for city parks, potentially based on the number of residents or workers a new development would house.

### 11.5.2 Findings

The survey results determined that workers in San Francisco visit city parks with a ratio of 0.72 (or 72%) compared to city residents. Table 35 shows the calculation that was used to determine this number. First, the workers were broken down into two groups: workers who do not live in San Francisco ("worker only") and workers who also live in San Francisco ("SF live and work, from work"). Then, a ratio for each group of workers was calculated, relative to the frequency with which San Francisco residents visit city parks (from home, in the case of people who both live and work in the city). Finally, these ratios were weighted based on the percent of total workers in San Francisco who live in the city versus those who commute in (Work Force Distribution). This last piece of data comes from Longitudinal Employer-Household Dynamics (2015), which is run by the US Census Bureau.

Note that this report uses a lower ratio of workers to residents (0.5:1) than the findings of this survey would allow (0.72:1) in order to be consistent with other infrastructure categories.

TABLE 35: WORKER TO RESIDENT USAGE RATIO CALCULATION

	Average Park Visits a Month by Origin of Visit	Usage Ratio to Resident	Work Force Distribution <sup>155</sup>	Calculated Share
Worker Only	4.40	0.59	60%	0.35
All residents (from home)	7.49	1.00		
SF Live and Work, from Work	7.08	0.92	40%	0.37
SF Live and Work, from Home	7.74	1.00		
<b>Average Worker Usage Ratio to Resident:</b>				<b>0.72</b>

### 11.5.3 Methodology

The information in this survey was collected by asking park users how frequently they visit city parks coming from home or work. The goal was to collect at least 100 surveys each from San Francisco workers and San Francisco residents, in order to produce statistically significant results for each group. As shown in Table 36, that was surpassed.

TABLE 36: SURVEYS BY RESPONDENT’S RELATIONSHIP TO SAN FRANCISCO

	Number of Surveys
I live and work in San Francisco	281
I live in San Francisco	83
I work in San Francisco	59
I do not live or work in San Francisco	76
<b>TOTAL</b>	<b>499</b>

#### 11.5.3.1 General Survey Results

The survey allowed people to enter in any number they wanted for the number of times they visit San Francisco parks, either per week or per month. Several of the numbers entered were unrealistically high (i.e. in the hundreds or thousands), and those outliers were removed from later results. However, to begin understanding the data, Table 37 shows the averages including those outliers.

TABLE 37: RAW SURVEY RESULTS

	When starting from your home, how often do you visit any park in San Francisco?		When starting from your work, how often do you visit any park in San Francisco?	
	times per week	times per month	times per week	times per month

<sup>155</sup> LEHD 2015

I live and work in San Francisco	4.72	15.38	3.72	11.48
I live in San Francisco	5.08	10.00	n/a	n/a
I work in San Francisco	n/a	n/a	3.51	3.00

After removing the outliers and changing the per week results to their per month equivalents, Table 38 shows the survey averages.

TABLE 38: NORMALIZED SURVEY RESULTS

	When starting from your home, how often do you visit any park in San Francisco?	When starting from your work, how often do you visit any park in San Francisco?
	times per month	times per month
I live and work in San Francisco	7.74	7.08
I live in San Francisco	6.51	n/a
I work in San Francisco	n/a	4.40

Table 39 shows the weighted averages, based on the number of survey respondents who live and work in San Francisco, the number who just live in the city, and the number who just work in the city.

TABLE 39: WEIGHTED AVERAGES

	Usage starting from home	Usage starting from work
Park usage per month	7.5	6.7

### 11.5.3.2 Respondent Demographics

Basic demographic information was collected from most survey respondents in addition to park usage information. This was collected as a statistical safeguard in case there were not enough surveys to reach statistical significance collected under allotted survey days, so that insufficient results could be weighted. However, since enough surveys from both workers and residents were collected, this information was not used in calculating the results.

The tables in this section go through and compare the demographics of survey respondents to the demographics of all San Francisco residents. The demographic section of the survey was optional, so these tables do not represent the full spectrum of people who took the survey. Furthermore, the survey includes respondents who do not live in San Francisco, a group whose demographics are not represented in the comparison data. Information about San Francisco residents comes from the American Community Survey 5-year estimates (2013-2017), usually represented as “ACS 2017.”

TABLE 40: SURVEYS BY AGE GROUP

Age Group	Number of Responses	%	ACS 2017
Under 18	3.00	1%	13%

18-24	26.00	6%	8%
25-34	151.00	36%	23%
35-44	111.00	26%	16%
45-54	49.00	12%	14%
55-64	45.00	11%	12%
65+	36.00	9%	15%

TABLE 41: SURVEYS BY RACIAL AND ETHNIC GROUP

Race/Ethnicity	Number of Responses	%	ACS 2017
White	230	54.0%	40.8%
Black/African American	28	6.6%	5.1%
Asian/Pacific Islander	111	26.1%	34.2%
Hispanic/Latino	48	11.3%	15.3%
Other	9	2.1%	4.6%

TABLE 42: SURVEYS BY HOUSEHOLD MAKEUP

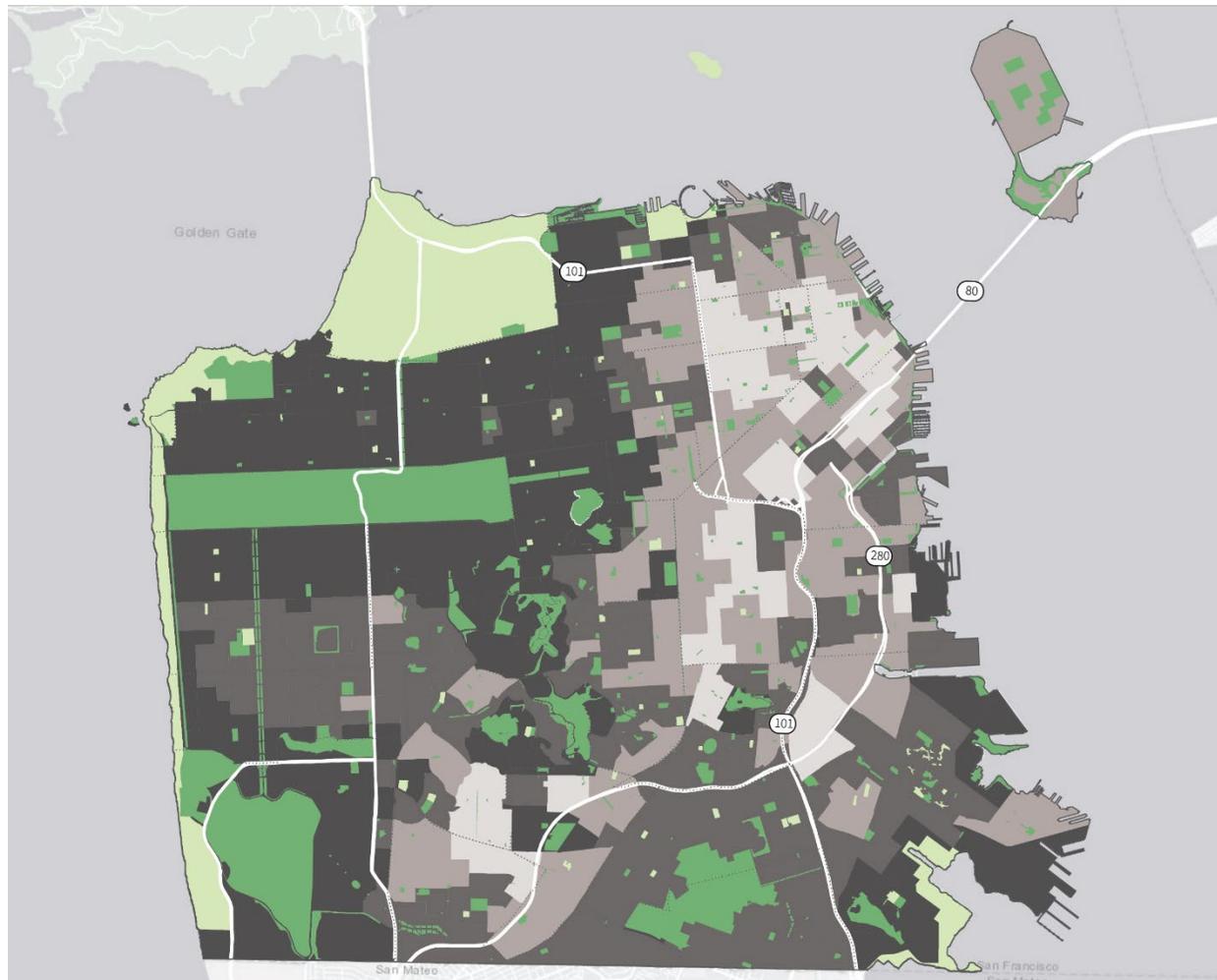
Household Category	Number of Responses	%
Single/roommate household with no children under 18 (i.e. non-family household with no children)	159	39.0%
Family household with no children under 18 (i.e. related household with no children)	132	32.4%
Family household with children under 18 (i.e. related household with children)	104	25.5%
Single/roommate household with children under 18 (i.e. non-family household with children)	13	3.2%

Table 42 does not have an ACS 2017 column because these exact categories are not replicated in the American Community Survey. However, in broader terms:

- 29% of survey respondents live in households with children, whereas only 19% of households living in San Francisco contain children (ACS 2017).
- 58% of survey respondents live in family households, whereas only 47% of households living in San Francisco are families (ACS 2017).

## 11.6 Acres of Open Space per 1,000 Adjacent SPU

FIGURE 36: DISTRIBUTION OF OPEN SPACE PER CAPITA



Citywide Parks Distribution

- Lower quartile (< %25, less than 0.12 acres of open space per 1,000 SPU)
- Median quartile (%25 - %50, 0.12 - 0.48 acres of open space per 1,000 SPU)
- Median quartile (%50 - %75, 0.48 - 4.08 acres of open space per 1,000 SPU)
- Upper quartile (> %75, greater than 4.08 acres of open space per 1,000 SPU)

\*Each Traffic Analysis Zone (TAZ) was assigned to its nearest city-owned park of at least a quarter acre in size. Then, for each park, the total acreage was divided by the total population (in thousands) of the TAZs assigned to it. The quartiles were calculated based on the Service Population Units in each Traffic Analysis Zone (TAZ).



**LEGEND**

- County Boundary
- Highways
- Neighborhoods

**Open Space by Ownership**

- City-owned open space
- Non-city owned open space

## 11.7 Child Care Demand Calculations

TABLE 43: INFANT/TODDLER CARE DEMAND CALCULATION DETAILS

Variable Name	Data Point	Value	Source
<b>Total Resident-Children</b>			
A	% of SF children under 5 that are 0-2	64%	2017 ACS 5-Year Estimates, B09001
B	Resident children under 5	44,955	SF Planning
C	Resident children 0-2	28,717	A * B
D.1	Total SF Residents (ACS)	864,263	2017 ACS 5-Year Estimates, S0101
<b>Resident-Children (0-2) Needing Care Outside of San Francisco</b>			
D.2	Total Employed SF Residents	504,914	2017 ACS 5-Year Estimates, DP03
D	% of SF Residents who are employed	58%	D.2 / D.1
E	SF Residents	908,336	SF Planning
F	Employed SF Residents	530,662	D * E
G	% of Employed Residents working outside SF	24%	2017 ACS 5-Year Estimates, S0801
H	Employed SF Residents working outside SF	125,767	F * G
I	% of Workers who seek child care where they work rather than where they live	5%	2014 San Francisco Nexus Study <sup>156</sup>
J	Resident children needing child care outside SF (assumes one child per working adult)	6,288	H * I
<b>Resident-Children (0-2) Needing Care in San Francisco</b>			
K	Resident children 0-2 needing child care outside SF	4,017	J * A
L	Remaining resident children (0-2) potentially needing child care	24,700	C - K
M	Percent of young children in households with all working parents	71%	2017 ACS 5-Year Estimates, B23008
N	Resident children (0-2) with working parents	17,622	L * M
O	% of children (0-2) with working parents needing licensed care	37%	2014 San Francisco Nexus Study <sup>157</sup>
P	Resident children (0-2) needing licensed care in SF	6,520	N * O
<b>Non-Resident Children (0-2) Needing Care in San Francisco</b>			
Q.1	Total jobs in SF (LEHD)	642,375	LEHD 2015

<sup>156</sup> Based on the 2014 San Francisco Nexus Study, South San Francisco Child Care Facilities Impact Fee Nexus Study and surveys of corporate employees and other child care studies, reviewed by Brion & Associates, including Santa Monica's New Child Care Fee Nexus Study (as cited in Table 6 of Child Care Nexus Study for San Francisco by Brion & Associates); this study assumes one child needing care per employee).

<sup>157</sup> Based on the 2014 San Francisco Nexus Study, 37% of children (0-2) with working parents need licensed care (as cited in Table 7 of Child Care Nexus Study for San Francisco by Brion & Associates, which is based on a detailed review of 12 child care studies, including impact fee studies; demand factors developed in concert with Dept. of Human Services and DCYP). DCYP refers to the San Francisco Department of Children, Youth and Their Families (DCYF).

Q.2	Total Employees that live elsewhere but work in SF	387,117	LEHD 2015
Q	% of jobs filled by non-SF residents	60%	Q.2 / Q.1
R	SF Jobs	768,360	SF Planning
S	Employees that live elsewhere	463,040	Q * R
T	Children of employees from elsewhere needing licensed child care in SF	23,152	S * I
U	% of children needing care who are ages 0-2 in general	50%	Department of Finance (Report P-3); assumes that school age children have care near home or school and all resident-children needing care outside of San Francisco are either infants/ toddlers or preschoolers.
V	Non-resident employees' children (0-2) needing care in SF	11,576	T * U
<b>Total Children (0-2) Needing Care in San Francisco</b>			
W	Total children (0-2) needing care in SF	18,096	V + P
<b>Existing Supply</b>			
X	Current available spaces for children aged 0-2	3,515	SFHSA; Child Care Needs Assessment (2017)
<b>Existing LOS</b>			
Y	% of demand met by existing slots	19%	X / W

TABLE 44: PRESCHOOL CARE DEMAND CALCULATION DETAILS

Variable Name	Data Point	Value	Source
<b>Total Resident-Children</b>			
A	% of SF children under 5 that are 3-4	36%	2017 ACS 5-Year Estimates, B09001
B	Resident children under 5	44,955	SF Planning
C	Resident children 3-4	16,238	A * B
D.1	Total SF Residents (ACS)	864,263	2017 ACS 5-Year Estimates, S0101
<b>Resident-Children (3-4) Needing Care Outside of San Francisco</b>			
D.2	Total Employed SF Residents	504,914	2017 ACS 5-Year Estimates, DP03
D	% of SF Residents who are employed	58%	D.2 / D.1
E	SF Residents	908,336	SF Planning
F	Employed SF Residents	530,662	D * E
G	% of Employed Residents working outside SF	24%	2017 ACS 5-Year Estimates, S0801
H	Employed SF Residents working outside SF	125,767	F * G
I	% of Workers who seek child care where they work rather than where they live	5%	2014 San Francisco Nexus Study <sup>158</sup>
J	Resident children needing child care outside SF (assumes one child per working adult)	6,288	H * I
<b>Resident-Children (3-4) Needing Care in San Francisco</b>			
K	Resident children 3-4 needing child care outside SF	2,271	J * A
L	Remaining resident children (3-4) potentially needing child care	13,966	C - K
M	Percent of young children in households with all working parents	71%	2017 ACS 5-Year Estimates, B23008
N	Resident children (3-4) with working parents	9,964	L * M
O	% of children (3-4) with working parents needing licensed care	100%	2014 San Francisco Nexus Study <sup>159</sup>
P	Resident children (3-4) needing licensed care in SF	9,964	N * O
<b>Non-Resident Children (3-4) Needing Care in San Francisco</b>			

<sup>158</sup> Based on the 2014 San Francisco Nexus Study, South San Francisco Child Care Facilities Impact Fee Nexus Study and surveys of corporate employees and other child care studies, reviewed by Brion & Associates, including Santa Monica's New Child Care Fee Nexus Study (as cited in Table 6 of Child Care Nexus Study for San Francisco by Brion & Associates); this study assumes one child needing care per employee).

<sup>159</sup> Based on the 2014 San Francisco Nexus Study, 100% of children (3-5) with working parents need licensed care (as cited in Table 7 of Child Care Nexus Study for San Francisco by Brion & Associates, which is based on a detailed review of 12 child care studies, including impact fee studies; demand factors developed in concert with Dept. of Human Services and DCYP). DCYP refers to the San Francisco Department of Children, Youth and Their Families (DCYF).

Q.1	Total jobs in SF (LEHD)	642,375	LEHD 2015
Q.2	Total Employees that live elsewhere but work in SF	387,117	LEHD 2015
Q	% of jobs filled by non-SF residents	60%	Q.2 / Q.1
R	SF Jobs	768,360	SF Planning
S	Employees that live elsewhere	463,040	Q * R
T	Children of employees from elsewhere needing licensed child care in SF	23,152	S * I
U	% of children needing care who are ages 3-4 in general	50%	Department of Finance (Report P-3); assumes that school age children have care near home or school and all resident-children needing care outside of San Francisco are either infants/toddlers or preschoolers.
V	Non-resident employees' children (3-4) needing care in SF	11,576	T * U
<b>Total Children (3-4) Needing Care in San Francisco</b>			
W	Total children (3-4) needing care in SF	21,540	V + P
<b>Existing Supply</b>			
X	Current available spaces for children aged 3-4	18,971	SFHSA; Child care Needs Assessment (2017)
<b>Existing LOS</b>			
Y	% of demand met by existing slots	88%	X / W

TABLE 45: 2025 INFANT/TODDLER CARE DEMAND PROJECTION

Variable Name	Data Point	Value	Source
<b>Total Resident-Children</b>			
A	% of SF children under 5 that are 0-2	64%	2017 ACS 5-Year Estimates, B09001
B	Resident children under 5	48,597	Estimated on a per capita basis using population growth projections from SF Planning
C	Resident children 0-2	31,044	A * B
D.1	Total SF Residents (ACS)	864,263	2017 ACS 5-Year Estimates, S0101
<b>Resident-Children (0-2) Needing Care Outside of San Francisco</b>			
D.2	Total Employed SF Residents	504,914	2017 ACS 5-Year Estimates, DP03
D	% of SF Residents who are employed	58%	D.2 / D.1
E	SF Residents	981,920	SF Planning
F	Employed SF Residents	573,651	D * E
G	% of Employed Residents working outside SF	24%	2017 ACS 5-Year Estimates, S0801
H	Employed SF Residents working outside SF	135,955	F * G
I	% of Workers who seek child care where they work rather than where they live	5%	2014 San Francisco Nexus Study <sup>160</sup>
J	Resident children needing child care outside SF (assumes one child per working adult)	6,798	H * I
<b>Resident-Children (0-2) Needing Care in San Francisco</b>			
K	Resident children 0-2 needing child care outside SF	4,342	J * A
L	Remaining resident children (0-2) potentially needing child care	26,701	C - K
M	Percent of young children in households with all working parents	71%	2017 ACS 5-Year Estimates, B23008
N	Resident children (0-2) with working parents	19,050	L * M
O	% of children (0-2) with working parents needing licensed care	37%	2014 San Francisco Nexus Study <sup>161</sup>
P	Resident children (0-2) needing licensed care in SF	7,048	N * O

<sup>160</sup> Based on the 2014 San Francisco Nexus Study, South San Francisco Child Care Facilities Impact Fee Nexus Study and surveys of corporate employees and other child care studies, reviewed by Brion & Associates, including Santa Monica's New Child Care Fee Nexus Study (as cited in Table 6 of Child Care Nexus Study for San Francisco by Brion & Associates); this study assumes one child needing care per employee).

<sup>161</sup> Based on the 2014 San Francisco Nexus Study, 37% of children (0-2) with working parents need licensed care (as cited in Table 7 of Child Care Nexus Study for San Francisco by Brion & Associates, which is based on a detailed review of 12 child care studies, including impact fee studies; demand factors developed in concert with Dept. of Human Services and DCYP). DCYP refers to the San Francisco Department of Children, Youth and Their Families (DCYF).

<b>Non-Resident Children (0-2) Needing Care in San Francisco</b>			
Q.1	Total jobs in SF (LEHD)	642,375	LEHD 2015
Q.2	Total Employees that live elsewhere but work in SF	387,117	LEHD 2015
Q	% of jobs filled by non-SF residents	60%	Q.2 / Q.1
R	SF Jobs	823,505	SF Planning
S	Employees that live elsewhere	496,272	Q * R
T	Children of employees from elsewhere needing licensed child care in SF	24,814	S * I
U	% of children needing care who are ages 0-2 in general	50%	Department of Finance (Report P-3); assumes that school age children have care near home or school and all resident-children needing care outside of San Francisco are either infants/toddlers or preschoolers.
V	Non-resident employees' children (0-2) needing care in SF	12,407	T * U
<b>Total Children (0-2) Needing Care in San Francisco</b>			
W	Total children (0-2) needing care in SF	19,455	V + P

TABLE 46: 2025 PRESCHOOL CARE DEMAND PROJECTIONS

Variable Name	Data Point	Value	Source
<b>Total Resident-Children</b>			
A	% of SF children under 5 that are 3-4	36%	2017 ACS 5-Year Estimates, B09001
B	Resident children under 5	48,597	Estimated on a per capita basis using population growth projections from SF Planning
C	Resident children 3-4	17,553	A * B
D.1	Total SF Residents (ACS)	864,263	2017 ACS 5-Year Estimates, S0101
<b>Resident-Children (3-4) Needing Care Outside of San Francisco</b>			
D.2	Total Employed SF Residents	504,914	2017 ACS 5-Year Estimates, DP03
D	% of SF Residents who are employed	58%	D.2 / D.1
E	SF Residents	981,920	SF Planning
F	Employed SF Residents	573,651	D * E
G	% of Employed Residents working outside SF	24%	2017 ACS 5-Year Estimates, S0801
H	Employed SF Residents working outside SF	135,955	F * G
I	% of Workers who seek child care where they work rather than where they live	5%	2014 San Francisco Nexus Study <sup>162</sup>
J	Resident children needing child care outside SF (assumes one child per working adult)	6,798	H * I
<b>Resident-Children (3-4) Needing Care in San Francisco</b>			
K	Resident children 3-4 needing child care outside SF	2,455	J * A
L	Remaining resident children (3-4) potentially needing child care	15,098	C - K
M	Percent of young children in households with all working parents	71%	2017 ACS 5-Year Estimates, B23008
N	Resident children (3-4) with working parents	10,771	L * M
O	% of children (3-4) with working parents needing licensed care	100%	2014 San Francisco Nexus Study <sup>163</sup>
P	Resident children (3-4) needing licensed care in SF	10,771	N * O
<b>Non-Resident Children (3-4) Needing Care in San Francisco</b>			

<sup>162</sup> Based on the 2014 San Francisco Nexus Study, South San Francisco Child Care Facilities Impact Fee Nexus Study and surveys of corporate employees and other child care studies, reviewed by Brion & Associates, including Santa Monica's New Child Care Fee Nexus Study (as cited in Table 6 of Child Care Nexus Study for San Francisco by Brion & Associates); this study assumes one child needing care per employee).

<sup>163</sup> Based on the 2014 San Francisco Nexus Study, 100% of children (3-5) with working parents need licensed care (as cited in Table 7 of Child Care Nexus Study for San Francisco by Brion & Associates, which is based on a detailed review of 12 child care studies, including impact fee studies; demand factors developed in concert with Dept. of Human Services and DCYP). DCYP refers to the San Francisco Department of Children, Youth and Their Families (DCYF).

Q.1	Total jobs in SF (LEHD)	642,375	LEHD 2015
Q.2	Total Employees that live elsewhere but work in SF	387,117	LEHD 2015
Q	% of jobs filled by non-SF residents	60%	Q.2 / Q.1
R	SF Jobs	823,505	SF Planning
S	Employees that live elsewhere	496,272	Q * R
T	Children of employees from elsewhere needing licensed child care in SF	24,814	S * I
U	% of children needing care who are ages 3-4 in general	50%	Department of Finance (Report P-3); assumes that school age children have care near home or school and all resident-children needing care outside of San Francisco are either infants/toddlers or preschoolers.
V	Non-resident employees' children (3-4) needing care in SF	12,407	T * U
<b>Total Children (3-4) Needing Care in San Francisco</b>			
W	Total children (3-4) needing care in SF	23,178	V + P