West Bay Law
Law Office of J. Scott Weaver

July 14, 2017

Clerk, San Francisco Board of Supervisors
#1 Dr. Carlton B. Goodlett Place, Room 244
San Francisco, CA 94102

Re: Case No. *2015-004454PRV 1726-1730 Mission Street*
Appeal of the June 1, 2017 Planning Commission Decisions
Board of Supervisors File No 170808

Dear Members of the Board of Supervisors:

Please accept this submission on behalf of Our Mission No Eviction with respect to the appeal of the proposed project at 1726-30 Mission Street.

Summary

The project sponsor proposes to construct a 40 unit, six story building located at 1726-30 Mission Street. The sponsor intends to subdivide the property into condominium units and sell them at "market" (with the exception of the 7 affordable units). It also includes parking for 22 cars and approximately 2,200 square feet of first floor "trade shop" space. The sponsor utilized a Community Plan Exemption that tiered off of the Eastern Neighborhoods Plan EIR. The Planning Commission approved the project on June 1, 2017. This appeal raises several CEQA issues related to that project.

This appeal raises concerns regarding cumulative impacts on the Mission Area Plan, and particularly the eight block area that is the "Gateway to the Mission". Environmental issues include impacts on traffic and circulation, air quality, noise, unaddressed land use and open space issues, as well as socioeconomic impacts on this working class, Latino community,

including an extremely vulnerable SRO tenant population who will be put at greater risk of homelessness without adequate, targeted mitigations[1].

Context for the 1726-30 Mission Street Project

The proposed project (40 units) is being built in conjunction with a number of other projects currently in the pipeline for the area. Pipeline projects between the intersection of South Van Ness and Mission, and 16th and Mission and one block either side of Mission (eight blocks total) are: 130 Otis Street (220 units), 1601 Mission Street (354 units), 1801 Mission Street (54 units), 1863 Mission Street (36 units), 1900 Mission Street (9 units), 1924 Mission Street (13 units), 1979 Mission Street (331 units), 198 Valencia (28 units), 235 Valencia (50 units), 80 Julian (9 units), 1463 Stevenson (45 units), and 1500 15th Street, (184 units – density bonus). Additionally, there are two affordable housing projects, one at 1950 Mission Street (157 units), and one at 490 South Van Ness Avenue (81 units). Total number of pipeline units, including the proposed project are within two blocks either side of sausage factory is 1,601 units.

Built after 2008, but equally applicable to any cumulative analysis under CEQA are 1880 Mission Street (202 units), 1501 15th Street (40 units), 380 14th Street (29 units) and 411 Valencia (16) 1587 15th (26 units) 1924 units[2].

This is extraordinary for such a small geographic area. The total number of units contemplated under the most ambitious scenario for the entire Mission in the Eastern Neighborhoods Plan was 2054 units, with a Preferred Project at 1696 units[3]. To provide a sense of scale, the Mission Area Plan is approximately 72 blocks, whereas the number of blocks considered above is eight. (The projects at 130 Otis and 1601 Mission are not within the Mission Area Plan Area but, given their proximity, must be included in the cumulative analysis.)

Further compounding the matter, the Armory at 1800 Mission Street proposes to convert 49,999 square feet of video production space to office use, and 25,385 square feet of video production to entertainment (dubbed "the Madison Square Garden of the West") That translates into three hundred or more office workers and thousands attending evening events.

The proposed Market/Van Ness "Hub", a four block walk from the project site, will consist of between 7.300 and 9,000 residential units!

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[1] We believe that the next wave of gentrification will result in a significant reduction in traditional SRO residents as Hotel owners "upgrade" their units. Currently there are hundreds of SRO units within the area between Duboce and 16th Street, Valencia and South Van Ness Avenue.

[2] Information provided by SF Property Information Map: http://propertymap.sfplanning.org/

[3] As discussed below, the total number of Mission Area Plan projects subject to a cumulative impacts analysis exceeds that anticipated by the Eastern Neighborhoods EIR.

Finally, there are hundreds of SRO units in the immediate area housing the poorest of the poor, a population who have no other housing options than to utilize this housing stock. (See Exhbit E, first page). With the upscaling of the neighborhood, the conversion of these units to "higher end" uses is inevitable, leaving many SRO residents homeless..

Potential cumulative environmental impacts must therefore be evaluated in this context.

CEQA Requires a Cumulative Impact Analysis of Projects.

Under Public Resources Code Section 21083 subdivision (b)(2).) "The possible effects of a project are individually limited but cumulatively considerable. As used in this paragraph 'cumulatively considerable' means that the incremental effects of an individual project are considerable when viewed in connection with the effects of past projects, the effects of other current projects, and the effects of probable future projects." Stated otherwise, a lead agency shall require an EIR be prepared for a project when the record contains substantial evidence that the "project has possible environmental effects that are individually limited but cumulatively considerable." (Guidelines section 15065 subdivision (a) (3).) "Cumulatively considerable means that incremental effects of the of an individual project is considerable when viewed in connection with past projects, the effects of other current projects, and effects of probable future projects." *Citizens to Preserve the Ojai v County of Ventura* (1985) 176 Cal.App.3d 421 stated that "unstated cumulative impacts impedes meaningful public discussion and skews the decision maker's perspective concerning the environmental consequences of a project, the necessity for mitigation measures and the appropriateness of project approval." Here, the impacts are clearly "unstated".

The environmental assessment of this project consisted largely of a CPE for the proposed project which was dependent solely on the 2008 Eastern Neighborhoods Plan EIR (PEIR). The PIER envisioned a scenario of up to 2054 units in an area nine times the size of the subject area. Further, this evaluation did not consider subsequent new information impacting the environment (discussed in greater detail below). Cumulative analysis in this area of heavily concentrated development is required in order to inform on substantial environmental impacts, and to adopt necessary and appropriate mitigation measures. Reliance almost exclusively on the PEIR in this instance does not provide the required information.

Cumulative impacts on traffic and circulation are especially significant for this particular geographic area. For example, anyone driving down Mission Street in the immediate area of the project has observed congestion and slow, backed up traffic. Addition of nearly 2,000 units will only make matters worse and will cause further congestion affecting both the automobile drivers and commuters traveling along the many bus lines that travel through the area. Red lanes, "ride sharing vehicles," and "Amazon deliveries by UPS and other carriers will further complicate the

traffic patterns. Moreover, the intersection of Duboce Avenue and South Van Ness is already a traffic nightmare and a dangerous intersection for pedestrians.

In addition to traffic and circulation, there are issues related to noise (the 101 Freeway crosses Mission Street very close to the proposed project). Open space is virtually non-existent, yet the thousands of people who would move to the area would require it. There is no recreation to be provided - other than the local bars which will undoubtedly increase exponentially as the Mission becomes more and more of a party zone.

Finally, the cumulative gentrification impacts would effectively wipe out small mom and pop businesses and SRO Hotels in the immediate eight block area and will radiate down Mission Street.

The PEIR anticipated up to 2,054 units over a 72-block area and could not have adequately described environmental impacts in an area one ninth the size. The Planning Commission's CEQA approval relied almost entirely on a CPE that tiered off of the PEIR and therefore its approval was in error.

Simply put, neither the CPE nor the PEIR provide adequate information regarding potential cumulative impacts in this highly concentrated area. As a result, mitigation measures that would ease these impacts could not have been identified or implemented.

CPE Reliance on the PEIR was Improper Because the Cumulative Housing Production Anticipated in the PEIR has been Exceeded.

Aside from the fact that it was improper to rely on the PEIR to analyze cumulative impacts for this eight block area, the PEIR, now nine years old, is outdated and can no longer be relied on.

The use of the PEIR in for this project presupposes that it is sufficiently current to provide the information necessary to evaluate environmental concerns in the Mission Area Plan as a whole (not to mention the small eight block area that is the subject of this appeal).

The Mission Plan had as its goals *inter alia* to produce a substantial amount of affordable housing, preserve diversity and vitality of the Mission, preserve and enhance the distinct character of the Mission's distinct commercial areas, and preserve and enhance existing PDR businesses. The PEIR assumed these goals and presumably believed that they would be realized under the ENP. Now, nine years later, it has become painfully apparent that the Plan is falling far short of its goals and that its implementation is out of balance with changing circumstances in

the neighborhood. The Mission Monitoring Report has revealed that of the 1855 units entitled or under review between 2011 and 12/31/15, only 12% were affordable. An additional 504 units were built during this period, however the monitoring report does not state how many were affordable. Likewise the Eastern Neighborhoods Plan Community Advisory Council had noted that many of ENP outcomes have been skewed in the wrong direction.

A report by the Planning Department dated February 2016 revealed that there were 2,415 units completed, entitled, or under environmental review for the Mission, far exceeding the 2,057 studied under the PEIR. This alone begs for a new EIR for the Mission Area.

On September 13, this Board of Supervisors, when considering the project at 2000 to 2070 Bryant Street, expressed serious concerns about the efficacy of the Eastern Neighborhoods Plan. (See http://sanfrancisco.granicus.com/MediaPlayer.php?view_id=10&clip_id=26119 beginning at 3:16).

CPE Reliance on the PEIR is Improper Because Substantial New Information Affecting Environmental Analysis has Become Available.

At least part of the reason for the disconnect between the goals and the outcomes of the Eastern Neighborhood Plan is that there have been numerous changes on the ground having direct, indirect and cumulative impacts on the environment. When substantial new information becomes available, CEQA Guidelines require comprehensive analysis of these issues. (CEQA Guidelines Sec. 15183). The situation on the ground has changed substantially since the PEIR was prepared in 2008 in the following ways:

- **An Unanticipated Rapid Pace of Development.** The PEIR was prepared in the midst of the "great recession" and did not project the steep increases in housing prices that we have witnessed during the past eight years. This has been especially exacerbated by the increase in high paying jobs that have come to the City. This has resulted in a construction explosion. As a result, the cumulative total of units built, approved, and under review in the pipeline (2,451 as of February 23, 2016-we have been unable to obtain an updated report) This exceeds the highest number of units contemplated in the Plan EIR for the Mission (2,056). The PEIR projected this production to take place over a much longer period of time - 2008 to 2025. Development has therefore accelerated at a pace higher than that anticipated in the PEIR. Because of the unexpectedly rapid pace of development, community benefits, including improvements to the Mission's traffic, transportation, open space, and recreation infrastructures have been unable to keep pace (ENCAC Response to Monitoring Report - The report also noted that transportation impacts hurt businesses). The PEIR clearly did not anticipate this pace of development, nor the needs to step up mitigation measures.

- **Changed Transportation Patterns.** In addition to the cumulative concentration of traffic, the project area will experience unforeseen changes in traffic patterns that have not yet been evaluated. These include the "ride share" phenomena, increased frequency of "amazon" deliveries, and the existence of "red lanes" which both confuse traffic and make it harder to exit from on-site parking. Although there was a traffic study done for this project, it did not contain any cumulative analysis and based its Mode Share Projections on 2011-2014 projections.[4] (Discussed further below)

- **Disproportionate Construction of Market Rate Units as compared with Affordable Units.** One cannot reasonably assert that "we are not building enough housing". Exhibit D, second to last page, is the Residential Pipeline Report for 2017Q1. It states that, only two years in, San Francisco has exceeded its 2015 to 2022 housing production goals, and has built or entitled 217% of the RHNA Goals for above moderate income housing (greater than 120% AMI). Moderate and low income production is well below targets – even if one equates housing rehabilitation with housing production – which these figures seem to indicate. These figures do not include an additional 22,680 units from the large projects at Hunters Point, Treasure Island, and ParkMerced. Put another way, more than 70% of the housing built or entitled serve the top third of the population earning greater than 120% AMI, while two thirds of the population compete for 30% of the remaining housing. This has implications with respect to the manner in which the City – especially the affected areas – are transformed. This overbuild of luxury units (as opposed to low/moderate units) has environmental implications relative to traffic, congestion, land use, and health and safety.

- **Gentrification Has Caused Unanticipated Increases in Traffic and Automobile Ownership.** The unanticipated influx of high earners in the Mission has resulted, and will result, in a substantial increase in the rate of automobile ownership and "ride sharing" in the Mission. Between 2000 to 2013, the number of households with automobiles increased from 37% to 64% - or 9,172 automobiles in 2000 to 16,435 in 2013. At the same time AMI increased from $50,676 to $75,269. It is now well recognized that high earners are twice as likely to own an automobile than their low income counterparts – even in transit rich areas such as the Mission.

- [4] The memo also admits that there were potential safety issues for vehicles exiting the garage (page 20) as well as potential conflicts crossing red lanes (although no mitigation was proposed.

- **Tech Shuttle Gentrification and Displacement Impacts.** The PEIR did not anticipate the impact of tech shuttles from a traffic standpoint, nor from that of the demand for housing. The specter of living within a few blocks of a free ride to work has caused many tech employees to move to areas where the shuttles stop – predominantly in the Mission. As such, we have high-earning employees exacerbating the already high demand for housing. The anti-eviction mapping project has documented the connection between shuttle stops and higher incidences of no-fault evictions. http://www.antievictionmappingproject.net/techbusevictions.html

The Traffic Analysis for the Project Neglected Critical Information.

The proposed project would result in potentially significant traffic impacts that were not known or considered at the time the Eastern Neighborhoods PEIR. As noted in a recent SF Chronicle article, when the city was preparing its strategic transportation plan in 2012, planners thought that "ride shares" meant car pooling. The Eastern Neighborhoods PEIR did not anticipate the physical impacts from the use of "ride sharing" as a transit mode or the increased dependence on delivery trucks by residents doing much of their shopping online. The Chronicle Article also noted a reduction in mass transit usage – due largely, we believe, to the influx of "ride shares" and exodus of working class and Latino residents. Furthermore, subsequent analysis contained in the Kittleson & Associates Transportation Memo (May 11, 2017) used outdated data and failed to consider ride-sharing and increased loading demand. Both the Mode Share Analysis and Loading Demand Estimates used in the Memo were based on the US Census Bureau's American Community Survey (2010-2014) and SF Guidelines (2002).

The Plan EIR also neglected to consider the inherent conflicts with bicycles, ride shares, trucks and private vehicles crossing SFMTA red lanes. The Transportation Memo for the proposed project recognizes the issue but proposed mitigations offered in the CPE are inadequate. Specifically the Memo states that, "*Given the high volume of traffic on Mission Street (including Muni buses), drivers in the Project garage could potentially have difficulty safely exiting the Project garage.*" (Kittleson & Associates, p. 20) This would result in unforeseen traffic congestion with direct and cumulative impacts to bicycle safety, delays to transit and emergency vehicle access.

The issue of slowing of MUNI buses is noted in the Memo, "*As discussed earlier, this configuration could result in internal conflicts between inbound and outbound vehicles, which may lead to the queuing of entering vehicles, which could spill back to Mission Street. If this occurs, operations of Muni buses may be affected, as they would need to reduce speeds or change lanes and travel in the adjacent southbound lane to bypass queued vehicles.*" (Kittleson & Associates, p. 20) However the proposed improvement measure using Queue Abatement (TR-1) is not an adequate mitigation as the abatement methods proposed would be inappropriate for a

residential garage of this size, particularly with vehicles exiting the garage and crossing the red transit lane.

Finally, the CPE's reliance on VMT fails to account for the reality of intensive use of "ride shares" in San Francisco. "Ride share" vehicles are in operation for eight to twelve hours a day, while private vehicles, a fraction of that time. The broad-brushed analysis used by the City under outdated VMT modeling concludes that the project's location in a transit priority area would reduce the use of private vehicles. Recent evidence shows that, ironically, the areas with the best transit service are now the most heavily traveled by "ride share" vehicles, while MUNI ridership has dropped for the first time in years. The SF County Transportation Authority has published a report showing that 1/5 of all vehicle miles citywide are by ride-hail vehicles with heavy concentrations in areas including the Mission where they account for all in-city trips at peak commute times. As the agency that developed the original travel demand forecasting model upon which the City's VMT analysis relies, their recent report must be considered in any VMT analysis.

Conclusion

Because the project is situated in an area of highly concentrated development, CEQA requires a cumulative environmental analysis. The Eastern Neighborhoods PEIR is the wrong vehicle to assess these cumulative impacts. At a minimum, further environmental assessment should require study of the impacts on traffic, circulation, transportation, greenhouse gas emissions, noise, safety, including pedestrian and bicycle safety issues, land use, including open space, as well as assessment of how such projects will impact small businesses and residents, especially residents of SRO Hotels. Without such assessment, the City will have fallen short of its CEQA obligation to inform as to significant environmental impacts and adequate mitigations.

Sincerely,

J. Scott Weaver
Attorney for Our Mission No Eviction

EXHIBIT E

EXHIBIT E

EXHIBIT E

Local

SF's traffic planners weren't expecting rise of Uber, Lyft

By Matier & Ross | July 3, 2017 | Updated: July 3, 2017 6:00am

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Photo: Amy Osborne, Special To The Chronicle

A Lyft car goes up Market Street with the F-Market train nearby. Traffic plan ners didn't foresee the rise of ride hailing when they reduced lanes for cars.

In fact, when the city was drawing up its transportation "Major Strategic Plan" back in 2012, planners thought "ride shares" meant car pooling. So as the Municipal Transportation Agency drew up a blueprint for more bus- and bike-only lanes — and less space for cars — it was blind to the wave of Uber and Lyft cars that was about to inundate the streets.

"I don't think anyone anticipated this would happen, including Lyft and Uber," said transportation agency chief **Ed Reiskin**.

Randy Rentschler of the Metropolitan Transportation Commission, which oversees regional transportation planning, said city officials may have fallen victim to their vision of how things should be instead of how they are.

"Public policy often aims for a certain outcome — and as such, it can be harder to predict what you don't want to happen, so you don't see it," Rentschler said.

In fact, Uber and Lyft now carry 283,000 people per workday in San Francisco and make up 9 percent of all vehicle trips in the city, according to a recent survey by the city Transportation Authority.

And for the first time in years, Muni ridership has dropped.

City Hall is increasingly interested in ways to ease the congestion that some officials blame on ride hailing. City Attorney **Dennis**

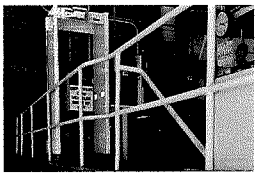
MORE BY MATIER & ROSS

Tipping Point's Daniel Lurie may be looking at run for SF mayor

Bay Area voters may be asked to OK bridge toll hike of up to $3

Foes of Warriors' SF arena aren't giving up

disability access and environmental regulations. Supervisor **Jane Kim** has suggested a 20-cent-per-ride fee to raise money for unspecified anticongestion measures.



Uber has put out feelers that it would be willing to talk with the city. But it wants the conversation to include all aspects of congestion, including the surge in double-parked delivery trucks, the growth of bike lanes and other street reconfigurations designed to slow traffic.

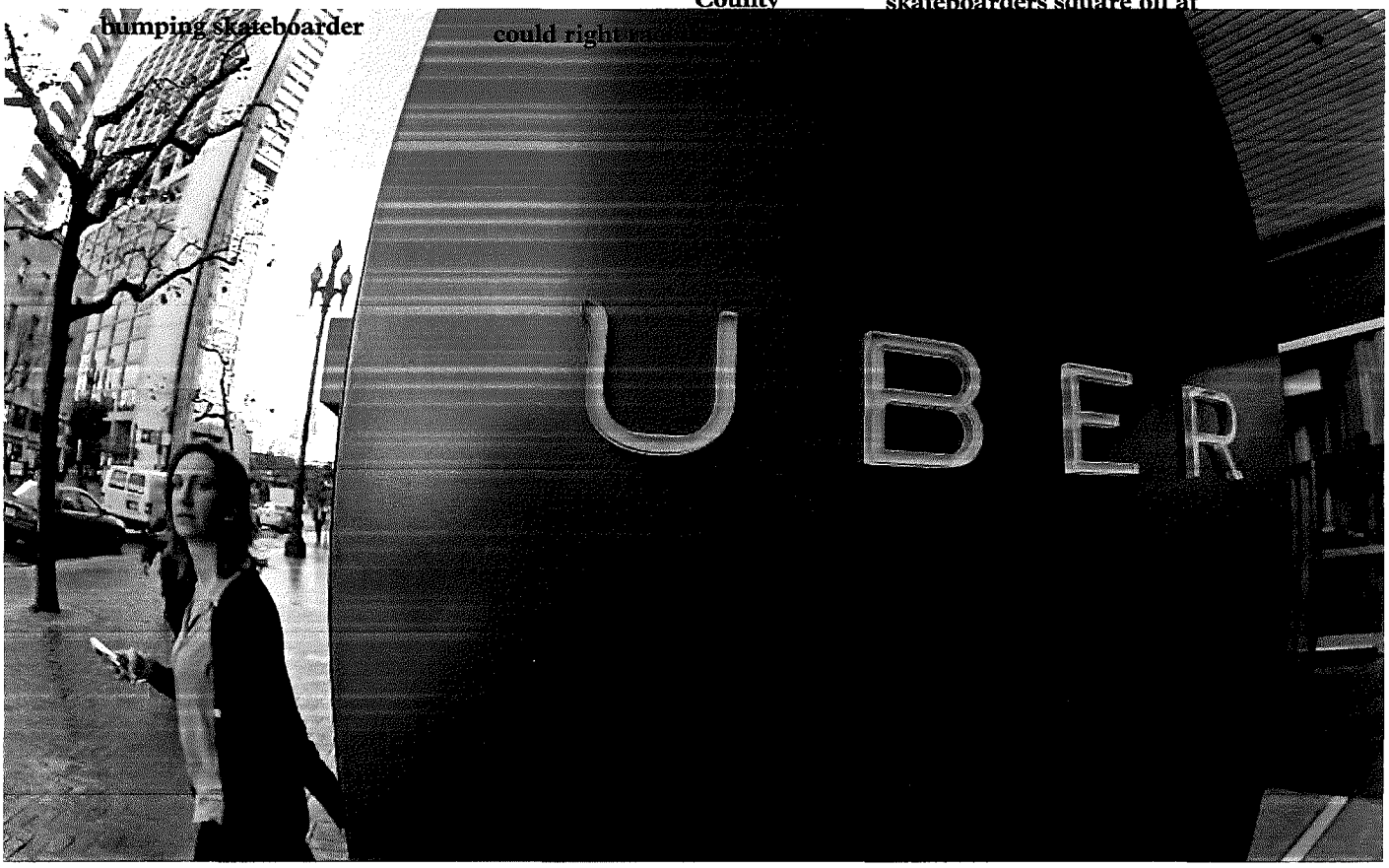
"The feeling (at City Hall) seems to be, 'If you can't beat 'em, tax 'em,' but at this point I'd just like them to give us more information so we can see what is really going on," said Supervisor **Aaron Peskin**.

Wouldn't we all.

9:02 AM
Videos emerge of SF police officer bumping skateboarder

New prosecutor in Contra Costa County could right

7:41 AM
Officer injured as police, skateboarders square off at



A woman walks past the company logo of the Internet car service Uber in San Francisco.

On your marks: Michael Cardoza, a high-powered defense attorney and former prosecutor who has gained attention over the years as a TV legal analyst, is weighing a possible run to succeed disgraced former Contra Costa County District Attorney **Mark Peterson**.

"I am giving it serious thought," Cardoza told us the other day after he was spotted at the Walnut Creek Yacht Club restaurant with a potential supporter.

"I know this (D.A.'s office) needs leadership, and I don't believe it should come from inside," Cardoza said. "They are too in bed with the people there and don't see all the real problems."

Two prosecutors have already announced their candidacies for Peterson's old job — Deputy District Attorney **Paul Graves** and former Deputy District Attorney **Patrick Vanier**, who is now a prosecutor in Santa Clara County.

Peterson resigned June 14 after cutting a plea deal with state prosecutors who had charged him with 13 felonies connected to his use of $66,000 in campaign donations to pay for such personal items as meals, gas, clothes, movie tickets, hotels and phone bills.

The plea deal allowed Peterson to plead no contest to a single count of perjury for making false statements on state campaign disclosure forms.

Doug McMaster, chief assistant district attorney, is handling the office's day-to-day operation while the county Board of Supervisors takes applications for Peterson's replacement. Its goal is to pick a replacement by mid-September.

"That person can choose to run along with other candidates" for a four-year term in the June 2018 primary, said Supervisor **Karen Mitchoff**.

McMaster has made it clear that he is not running and will not seeking the appointment. Graves and Vanier haven't disclosed whether they are applying to the supervisors. They have until July



Whoever gets the job will have some work to do in bringing calm to the district attorney's office. The Peterson scandal came close on the heels of another case that had divided the department for years, in which a deputy district attorney was accused of raping a junior colleague in 2008. The criminal case against the deputy was eventually dropped, and he returned to work two years ago.

San Francisco Chronicle columnists Phillip Matier and Andrew Ross appear Sundays, Mondays and Wednesdays. Matier can be seen on the KPIX TV morning and evening news. He can also be heard on KCBS radio Monday through Friday at 7:50 a.m. and 5:50 p.m. Got a tip? Call (415) 777-8815, or email matierandross@sfchronicle.com. Twitter: @matieranaross

Matier & Ross
Chronicle Columnists

Mission - Projects Completed or Under Environmental Review - 2008 to 2/23/16 (Planning Dept. Data)

Address	Case No.	Date of Document	Status of Document	Net Housing Units	Cultural, Institutional, Educational	Medical	Management, Information, and Professional Services	PDR	Retail and Entertainment
3418 26th Street	2009.0610E	8-Nov-10	Published CPE	13	0	0	0	0	0
80 Julian Avenue	2009.1095E	23-Jun-10	Published CPE	8	0	16,000	0	0	0
411 Valencia	2009.0180E	13-May-10	Published CPE	16	0	0	0	-1,550	1,370
490 South Van Ness Avenue	2010.0043E	24-Jun-14	Published CPE	72	0	0	0	-1,618	1,123
3420 18th Street	2012.1572E	16-Oct-13	Published CPE	16	0	0	0	-4,675	1,000
1875 Mission Street	2010.0787E	14-Oct-10	Published CPE	38	0	0	0	-43,695	2,523
17th Street and Folsom Street Park	2009.1163E	24-Jan-11	Published CPE	0	0	0	0	0	0
1501 15th Street	2008.1395E	27-Jan-11	Published CPE	40	0	0	0	-1,740	9,681
480 Potrero Avenue	2011.0430E	26-Sep-12	Published Other	84	0	0	0	0	0
626 Potrero Avenue/ 2535 18th Street	2011.1279E	16-Jul-12	Published CPE	0	0	15,200	0	-15,000	0
2550-2558 Mission Street	2005.0694E	21-Nov-12	Published Other	114	0	0	0	0	14,750
1450 15th Street	2013.0124E	30-Oct-14	Published CPE	23	0	0	0	-6,088	0
300 South Van Ness Avenue	2011.0953E	29-Nov-12	Published CPE	0	0	0	0	0	20,040
346 Potrero Avenue	2012.0793E	3-Feb-14	Published CPE	72	0	0	0	-1,500	2,760
1785 15th Street	2012.0147E	1-May-13	Published CPE	8	0	0	0	-765	0
1801/1863 Mission Street	2009.1011E	19-Mar-15	Published CPE	54	0	0	740	0	2,125
2600 Harrison St.	2014.0503E	19-Aug-15	Published CPE	20	0	0	0	-7,506	0
1924 Mission St.	2014.0449E	2-Apr-15	Published CPE	12	0	0	0	-1,180	2,315
600 South Van Ness Avenue	2013.0614E	9-Apr-15	Published CPE	27	0	0	0	-1,750	3,060
2000-2070 Bryant St, 2815 18th St, 611 Florida St	2013.0677E	2-Jun-15	Published CPE	274	0	0	-3,540	-64,450	4,105
1298 Valencia Street	2013.1404E	9-Oct-15	Published CPE	35	0	0	0	-2,000	3,770
1198 Valencia Street	2012.0865E	31-Jul-15	Published CPE	52	0	0	0	-440	5,300
1050 Valencia Street	2007.1457E	5-Oct-10	Published Other	16	0	0	0	0	1,830
1419 Bryant Street	2015-005388ENV	6-Jan-16	Published CPE	0	44,600	0	0	-34,350	0
1979 Mission Street	2013.1543E	28-Jan-15	Active Other	331	0	0	0	0	-18,239
2675 Folsom St	2014-000601ENV	TBD	Active CPE	115	0	0	0	-22,111	0
1900 Mission Street	2013.1330E	TBD	Active CPE	11	0	0	0	-2,064	844
645 Valencia St	2013.1339E	TBD	Active CPE	9	0	0	0	0	-4,382
1800 Mission	2014.0154E	TBD	Active CPE	0	0	0	139,607	-138,742	39,000
2750 19th St.	2014.0999E	TBD	Active CPE	60	0	0	0	-10,934	10,112
1515 South Van Ness Ave.	2014.1020E	TBD	Active CPE	160	0	0	0	0	-29,940
3140 16th St	2014.1105ENV	TBD	Active CPE	28	0	0	0	-20,428	7,284
2799 24th St.	2014.1258ENV	TBD	Active CPE	8	0	0	0	0	-269
2435 16th St.	2014.1201ENV	TBD	Active CPE	53	0	0	0	-10,000	4,992
3357-3359 26th St.	2013.0770ENV	TBD	Active CPE	8	0	0	0	0	5,575
1726-1730 Mission St.	2014-002026ENV	TBD	Active CPE	36	0	0	0	-3,500	900
2100 Mission Street	2009.0880E	TBD	Active CPE	29	0	0	0	-7,630	2,640
200 Potrero Ave.	2015-004756ENV	TBD	Active CPE	0	0	0	0	-27,716	30,034
3314 Ceasar Chavez	2014-003160ENV	TBD	Active CPE	52	0	0	-2,500	0	1,740
1798 Bryant St.	2015-006511ENV	TBD	Active CPE	131	0	0	-5,179	0	3,514
2918-2924 Mission St.	2014.0376ENV	TBD	Active CPE	38	0	0	0	0	7,400
793 South Van Ness	2015-001360ENV	TBD	Active CPE	54	0	0	0	-1,966	4,867
1850 Bryant St.	2015-011211ENV	TBD	Active CPE	0	0	0	0	188,994	0
953 Treat Ave	2015-006510ENV	TBD	Active CPE	8	0	0	0	0	0
3620 Cesar Chavez	2015-009459ENV	TBD	Active CPE	28	0	0	-3,200	0	940
344 14th St. & 1463 Stevenson St.	2014.0948ENV	TBD	Active CPE	45	0	0		18,995	5,849
1950 Mission St.	2016-001514ENV	TBD	Active CPE	157	1,236	0	0	0	3,415
1296 Shotwell St.	2015-018056ENV	TBD	Active CPE	96	0	0	850	-11,664	0
				2,451	**45,836**	**31,200**	**126,778**	**-237,073**	**152,028**

Preferred Project (approved 2008) **1696**

Option A	**782**	**104,400**	**37,200**	**422,021**	**422,021**	**114,000**
Option B	**1,118**	**150,300**	**36,900**	**597,242**	**597,242**	**143,400**
Option C	**2,054**	**609,480**	**49,448**	**2,214,011**	**-3,370,350**	**598,323**

The CPE for 2000-2070 Bryant Street notes that 2451 residential units had completed or were under environmental review:
"As of February 23, 2016, projects containing 2,451 dwelling units and 355,842 square feet of non-residential space (excluding PDR loss) have completed or are proposed to complete environmental review within the Mission District subarea."

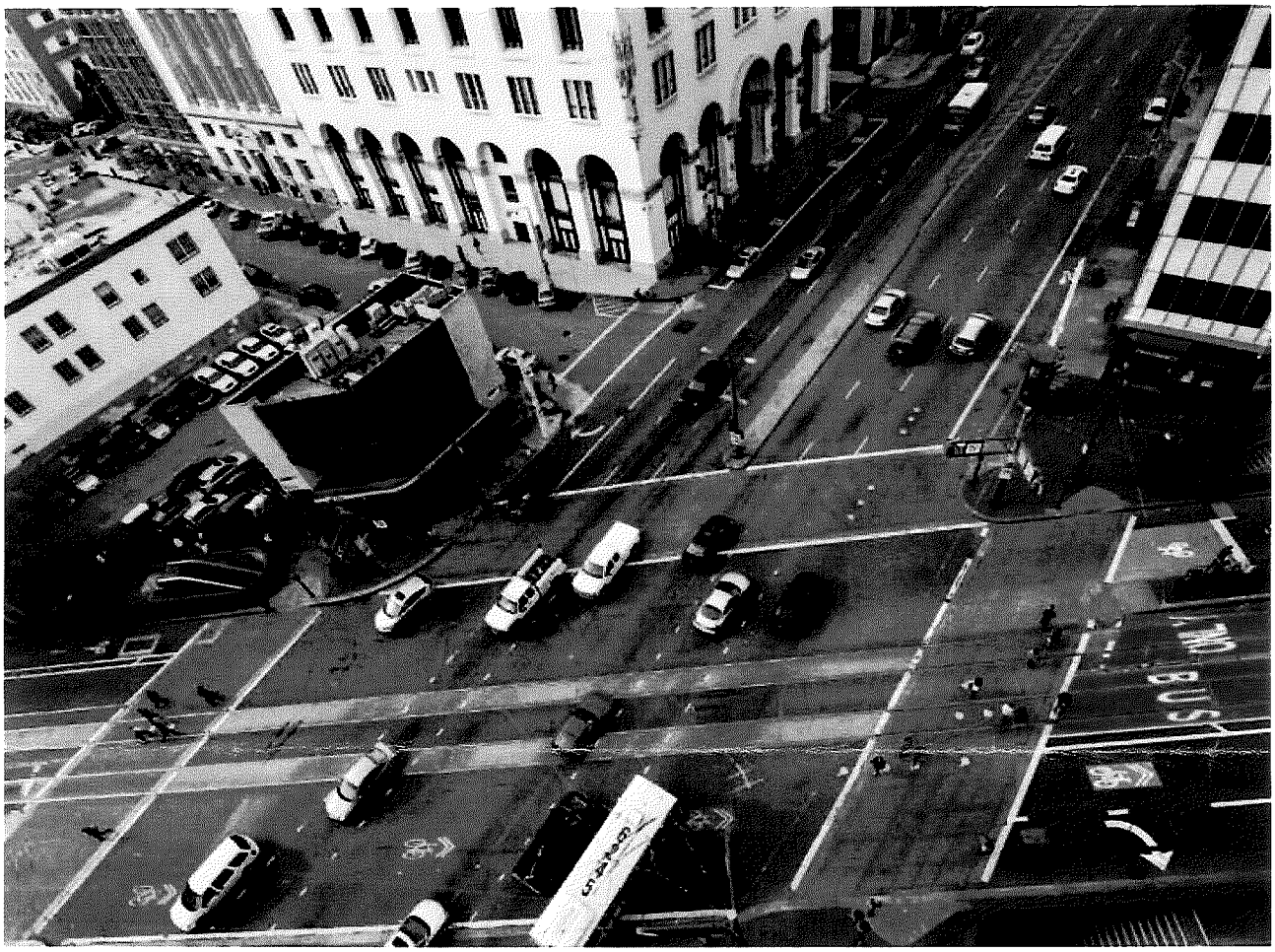
This is in excess of the number of units in the approved Preferred Project, as well as Options A, B and C from the ENP EIR. As a result, the analysis of cumulative impacts contai within the Eastern Neighborhoods Plan EIR, and referenced in the CPE, for this project is no longer relavant. The PEIR is stale and doesn't reflect current conditions. Among the impacts not adequately studied are recreation and open space, transit, traffic, and air quality.

SF Weekly (http://www.sfweekly.com/)

Housing Boom Alert: 9,000 New Apartments Predicted For Market / Van Ness Hub

In response, the SFMTA, Planning and Public Works are trying to figure out how to accommodate 50 percent more people on the streets.

Nuala Sawyer (http://www.sfweekly.com/author/nuala-sawyer/) / Tue Mar 7th, 2017 5:01pm /



(Photo courtesy Jeremy Menzies/SFMTA)

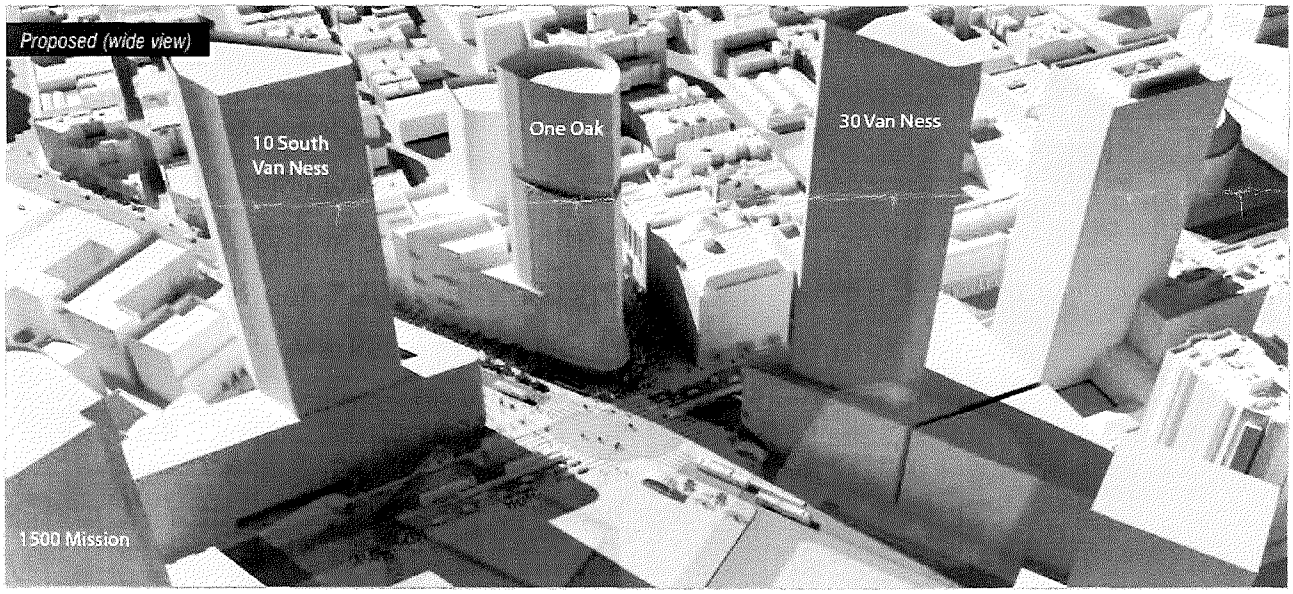
If the 20-minute coffee shop lines, bumper-to-bumper traffic, and one-in, one-out Trader Joe's parking lots have you thinking that the city might be reaching capacity, we've got bad news. A new project overview released by Public Works, the SFMTA and Planning shows that up to 9,000 new units of housing are coming to one itty bitty section of the city: an oddly shaped few blocks on Market Street and in SoMa, between Octavia Boulevard and Ninth Street.

The intersection of Market with Valencia, Haight and Gough streets was coined as the "Hub" in the late 1880s, due to its capacity for four streetcar lines that converged on the area. Over time the borders began to loosen and started to include the

neighborhood surrounding Market Street as well. According to historian and writer Larry Cronader, the area was a hot spot for businesses: Hub Bowling, the Hub pharmacy, and the McRoskey Mattress Company all moved in during the 1930s.

But in years since the area of Market Street and Van Ness Avenue has become a wasteland. Despite its proximity to multiple Muni lines, the All-Star Donuts is often empty, the large car dealership feels misplaced, and the strong winds suck the soul out of the corner. But like it or not, change is on the horizon.

Based on what's slowly working its way through Planning, here is a summary of the population changes we can expect in the Hub: new housing units will come in somewhere between 7,300 and 9,000 apartments. Pedestrian traffic will increase by fifty percent at the Market and Van Ness intersection during peak hours. And more than 8,800 people will use the Van Ness Muni station to commute to and from work.



The simple reason for this population jump: the ever-coveted housing. Here are a few of the big developments coming our way:

- 30 Van Ness Ave. (which houses the Walgreens on the corner of Van Ness and Market streets) is being sold by the Board of Supervisors, and is zoned to accommodate a 550-foot residential tower.
- One Oak (which will replace All-Star Donuts and its adjacent parking lot) will reach 40 stories into the sky and will contain 310 units of market-rate housing.

Name	ADDRESS	CERTIFICATE OF USE TOURIST HOTEL	CERTIFICATE OF USE RESIDENTIAL HOTEL	VACANT TOURIST UNITS	TOTAL HOTEL UNITS	AVERAG RENTS
16th St	3161 16TH ST	0	54		54	
20Mission	3491 20TH ST	0	41	0	40	
Aku	2477 MISSION ST	0	15	0	15	529
Albert	2135 MISSION ST	0	46	0	46	420
Albion	3143 16TH ST	0	20	0	20	439
All Star	2791 16TH ST	0	86	0	86	400
Altamont	3048 16TH ST	7	87			
Andora Inn	2438 MISSION ST	9	5	9	14	600
Apollo	0422 VALENCIA ST	0	80			
Assemblies of God	1462 VALENCIA ST	4	7		0	0
Bay Community Housing	3444 18TH ST	0	14	0	14	610
Casa Quezada	0037 WOODWARD ST	0	59		0	0
Casa Valencia	0504 VALENCIA ST	0	63		0	0
Crown	0528 VALENCIA ST	0	49	0	51	500
Crystal	2766 MISSION ST	0	31	0	31	511
Curtis	0559 VALENCIA ST	0	63	0	63	458
Delbex	2126 MISSION ST	0	40	0	40	300
El Capitan	2361 MISSION ST	23	64	10	87	443
Eula	3061 16TH ST	5	20	2	22	600
Frances	2084 MISSION ST	0	49	0	49	360
Grand Southern	1941 MISSION ST	19	39			
Jalaram	0868 VALENCIA ST	0	24	0	24	600
Jerry	3032 16TH ST	3	18	3	21	500
Julian	0179 JULIAN AV	0	27	0	27	422
Kaileh (former Priyanka)	1041 VALENCIA ST	0	12	0	12	451
Krishna	2032 MISSION ST	4	18	1	20	600
Lexington Apartments	3270 21ST ST	0	11	0	11	600

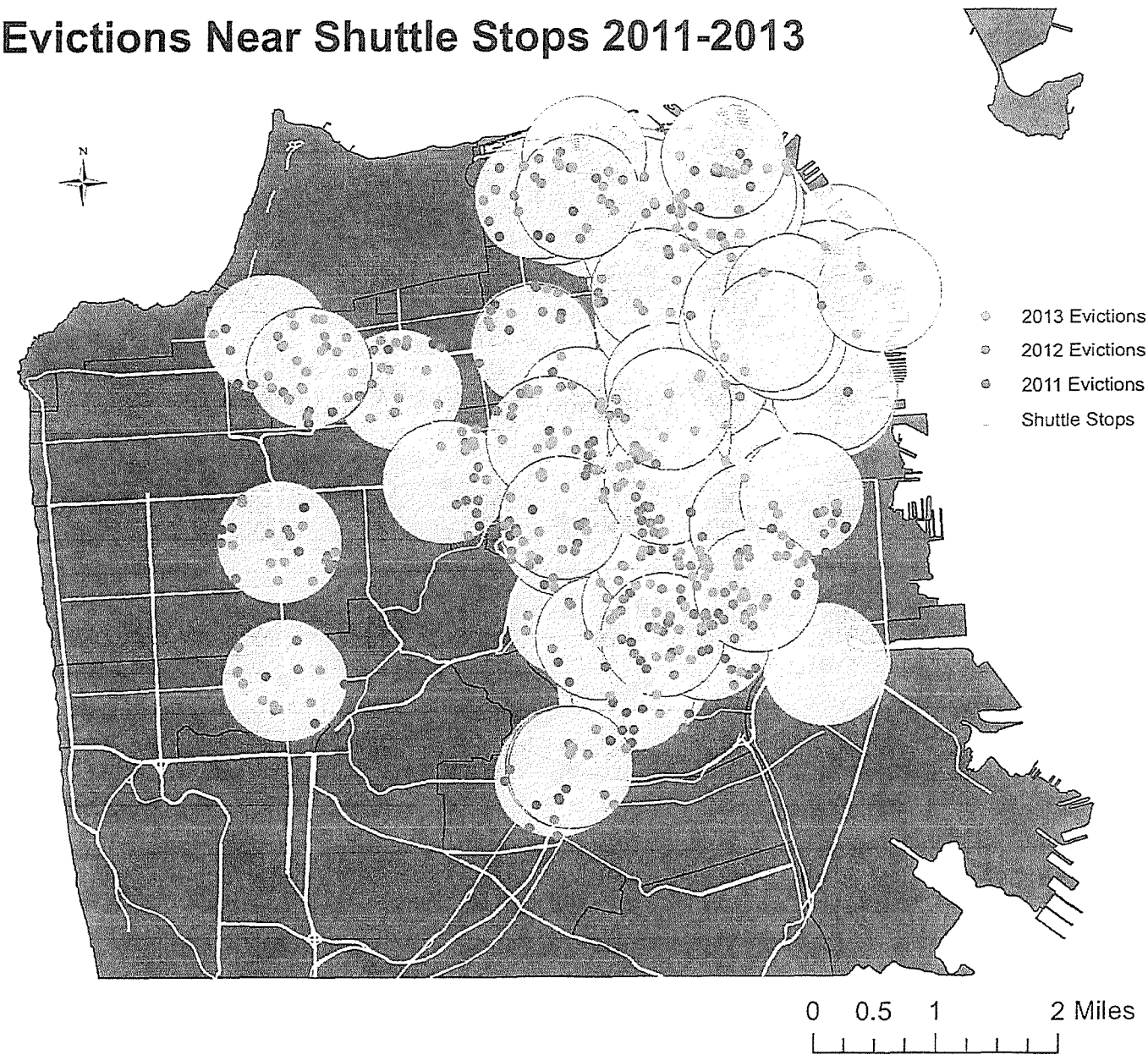
Mirabelle	1906 MISSION ST	0	28	0	30	873
Mission	0520 SOUTH VAN NESS AV	60	188		248	350
Norma	2697 MISSION ST	10	14	3	24	700
Prita	2284 MISSION ST	25	10	11	29	600
Radha	2042 MISSION ST	0	12	0	12	760
Royan	0405 VALENCIA ST	22	47			
St. Alban's	3414 25TH ST	0	20	0	20	353
Star	2176 MISSION ST	10	43	0	54	352
Sunrise	0447 VALENCIA ST	30	42	26	72	800
Sycamore	0030 SYCAMORE ST	0	24	0	27	500
Thomas	2370 MISSION ST	0	12	0	12	300
Tropical	3562 20TH ST	0	22	0	22	409
Tropicana	0661 VALENCIA ST	0	40	0	40	299
Union	2030 MISSION ST	24	13	22	37	600
Westman	2056 MISSION ST	2	20	2	22	553
Yug	2072 MISSION ST	4	16	1	20	550
	0165 GUERRERO ST	0	16		0	0
	1095 MISSION ST	58	14			
	0801 SILVER AV	0	142		0	0
	1476 19TH AV	0	5		0	0
	0215 14TH ST	0	13	0	13	650
	2901 MARIPOSA ST	0	46	0	46	495
	2522 MISSION ST	0	9			

Total Residential Units 942

Total Occupied Residential Units. 722

Information provided by Dolores St. Community Services, from 2015 DBI records.

Evictions Near Shuttle Stops 2011-2013



Overall:

No-Fault Evictions increased 42% between 2011 and 2012.
No-Fault Evictions increased 57% between 2012 and 2013.

69% of No-Fault Evictions each year occurred within four blocks of known shuttle stops.

Anti-Eviction Mapping Project, Mar 2014
*No-Fault Eviction include Ellis, Demolitions & Owner Move-Ins

Sources: San Francisco Rent Board & data.sf.gov.org
Shuttle stops from Stamen Design 2012 study &
SFMTA 2013 report

3B. Mission Street: 2012 Public Life Demographics

POPULATION

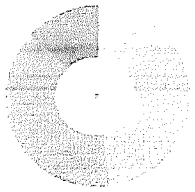
62,105

POPULATION DENSITY

47 per acre

MEDIAN AGE

35.9



NO. OF HOUSEHOLDS

25,680

% OF HOUSEHOLDS WITHOUT A CAR

36%

MEDIAN HOUSEHOLD INCOME

$75,269

UNEMPLOYMENT

7%

EDUCATION

Over half of the adult population graduated from college.

NO. OF HOUSING UNITS

28,085

RESIDENTIAL DENSITY

21 units per acre

RACE / BACKGROUND		MISSION STREET
White		66%
Black		4%
Asian		14%
Native American / Hawaiian or Pacific Islander		1%
Other / Two or More		14%
% Latino		30%
Male / Female Ratio		54/46%
Foreign Born		36%
Linguistic Isolated Households		11%

AGE		
Under 5		5%
5 to 17		6%
18 to 34		35%
35 to 59		39%
60 and over		15%

HOUSEHOLDS		
Family Households		29%
Single-Person Households		44%
Non-Family Households		27%
Average Household Size		2.3
Average Family Household Size		3.3

INCOME		
Median Family Household Income		$73,183
Per Capita Income		$44,772
% Poverty		14%
Unemployment		7%

EDUCATION		
High School or Less		29%
Some College / AA Degree		18%
College Degree		33%
Post Graduate		20%

HOUSING		
Renting Households		61%
Rental Vacancy Rate		3%
Median Rent		$1,279

HOUSING TYPE		
Single Family Housing		23%
2 - 4 Units		38%
5 - 9 Units		16%
10 units or more		27%

Source: 2007–2011 American Community Survey (Census tracts used to approximate Mission Street study area based on a quarter-mile buffer)

(A mile corridor from South Van Ness Avenue to Randall Street)

SAN FRANCISCO PLANNING DEPARTMENT

MISSION

CHANGE IN THE NEIGHBORHOOD

3A. Mission Street : 2000 Public Life Demographics

POPULATION

65,289

POPULATION DENSITY

49 per acre

MEDIAN AGE

33

NO. OF HOUSEHOLDS

24,791

% OF HOUSEHOLDS WITHOUT A CAR

63%

MEDIAN HOUSEHOLD INCOME

$50,676

UNEMPLOYMENT

4%

EDUCATION

A little under half of the adult population graduated from college.

NO. OF HOUSING UNITS

25,632

RESIDENTIAL DENSITY

19 units per acre

RACE / BACKGROUND		MISSION STREET
White		55%
Black		8%
Asian		31%
Native American / Hawaiian or Pacific Islander		1%
Other / Two or More		11%
% Latino		46%
Male / Female Ratio		54/46%
Foreign Born		42%
Linguistic Isolated Households		14%

AGE		
Under 5		5%
5 to 17		11%
18 to 34		43%
35 to 59		33%
60 and over		11%

HOUSEHOLDS		
Family Households		42%
Single-Person Households		35%
Non-Family Households		58%
Average Household Size		2.3
Average Family Household Size		3.3

INCOME		
Median Family Household Income		$49,051
Per Capita Income		$21,880
% Poverty		15.7%
Unemployment		4%

EDUCATION		
High School or Less		41%
Some College / AA Degree		21%
College Degree		26%
Post Graduate		13%

HOUSING		
Renting Households		79%
Rental Vacancy Rate		1.8%
Median Rent		$998

HOUSING TYPE		
Single Family Housing		13%
2 - 4 Units		40%
5 - 9 Units		18%
10 units or more		26%

Source: 2007–2011 American Community Survey (Census tracts used to approximate Mission Street study area based on a quarter-mile buffer)

(1.4 mile corridor from South Van Ness Avenue to Randall Street)

PLANNING DEPARTMENT

MISSION

A Health Risk Assessment

By: Jonathan I. Levy, Jonathan J. Buonocore, & Katherine von Stackelberg

Traffic congestion is a significant issue in virtually every urban area in the United States and around the world. Anyone who spends any time commuting knows that the time and fuel wasted while sitting in traffic can not only be annoying, but can lead to real economic costs. An examination of the peer-reviewed literature shows that there are many previous analyses that estimate the economic costs of congestion based on fuel and time wasted, but that these studies don't include the costs of the potential public health impacts. Sitting in traffic leads to higher tailpipe emissions which everyone is exposed to, and the economic costs of those exposures have not been explored.

Motor vehicle emissions contain pollutants that contribute to outdoor air pollution. One in particular, fine particulate matter (referred to as $PM_{2.5}$) is strongly influenced by motor vehicle emissions. Studies that evaluate the sources of $PM_{2.5}$ in our environment find that vehicles contribute up to one-third of observed $PM_{2.5}$ in urban areas. $PM_{2.5}$ has been associated with premature deaths in many studies, and health impact assessments have shown $PM_{2.5}$-related damages on the order of hundreds of billions of dollars per year. Recently, an expert committee convened by the Health Effects Institute in Boston, Massachusetts, summarized the available evidence on exposure to traffic-generated air pollution and negative health effects. They find strong evidence for a causative role for traffic related air pollution and premature death, particularly from heart attacks and strokes. $PM_{2.5}$ is emitted directly, and it is also produced by secondary formation, as sulfur dioxide (SO_2) and nitrogen oxide (NOx) emissions contribute to the formation of sulfate and nitrate particles. Exposure to $PM_{2.5}$ also causes other health effects such as asthma attacks, and other respiratory illnesses.

In this study, we evaluate the premature deaths resulting from people breathing primary $PM_{2.5}$ and secondarily-formed particles during periods of traffic congestion and compare that to the economic costs from time and fuel wasted. We do this analysis for 83 individual urban areas. We predict how much congestion to expect in each of the 83 urban areas over the period 2000 to 2030. We use several inter-linked models to predict how much of what people are breathing in each urban area is attributable to emissions from traffic congestion. The models predict how many people will die prematurely as a result of being exposed to these traffic conditions over the long term. We assign a dollar value to the predicted deaths using a "value of a statistical life" approach as is done for most regulatory impact analyses. The analysis explores the significance of public health impacts in assessments of predicted traffic congestion to identify information gaps to be addressed to better determine the ongoing public health burden of congestion in the United States, and to set the stage for evaluating potential strategies for relieving traffic congestion. Evaluating such strategies will require models and assumptions that take advantage of conditions and the context unique to each area.

Harvard Center for Risk Analysis • Harvard School of Public Health • Boston

We estimate traffic congestion-related $PM_{2.5}$, NOx and SO_2 emissions in these 83 cities caused approximately 4,000 premature deaths in the year 2000, with a monetized value of approximately $31 billion (in 2007 dollars). This compares to the estimated $60 billion congested-related cost of wasted time and fuel in these communities during the same year. This fuel and time loss is expected to continue to grow annually over the next 20 years. Across cities and years, the public health impacts of traffic congestion range from an order of magnitude less than the lost time/fuel economic impacts, to in excess of these impacts, with variation attributable to the extent of congestion, population density, and other factors.

We forecast the mortality and public health costs of congestion, however, will diminish slightly over time in most of the areas studied—until rising again toward the end of the modeling period, 2030. In 2005, for example, we estimate congestion-related premature mortality of 3,000 lives, with a monetized value of $24 billion (in 2007 dollars). This reduction results from the continual turnover of the motor vehicle fleet to lower emission vehicles and the increased use of cleaner motor fuels.

Our estimates of the total public health cost of traffic congestion in the U.S. are likely conservative, in that they consider only the impacts in 83 urban areas and only the cost of related mortality and not the costs that could be associated with related morbidity, health care, insurance, accidents, and other factors. Our analyses indicate that the public health impacts of congestion are significant enough in magnitude, at least in some urban areas, to be considered in future evaluations of the benefits of policies to mitigate congestion.

Results

In total, across the 83 urban areas modeled, vehicle miles traveled (VMT) is projected to increase more than 30% from 2000 to 2030 (an increase from 2.97 billion daily VMT to 3.94 billion daily VMT), closely paralleling projected population growth in the urban areas of 32% (an increase from 133 million people to 176 million).

For 2005, nationwide estimates of traffic emissions attributable to time spent in congestion include approximately 1.2 million tons of NOx, 34,000 tons of SO_2, and 23,000 tons of $PM_{2.5}$. These emissions are associated with approximately 3,000 premature deaths in 2005 (Figure 1), with an economic valuation of $24 billion (in 2007 dollars). Overall, nearly 48% of the impact over the 83 urban areas is attributable to NOx emissions, with 42% attributable

Nationwide estimates for 2005 of emissions attributable to congested traffic:

- **1.2 million tons of NOx**
- **34,000 tons of SO_2**
- **23,000 tons of $PM_{2.5}$**

These emissions are associated with approximately:

- **3,000 premature deaths**

The total social cost of these impacts:

- **$24 billion**

By 2020, we predict:

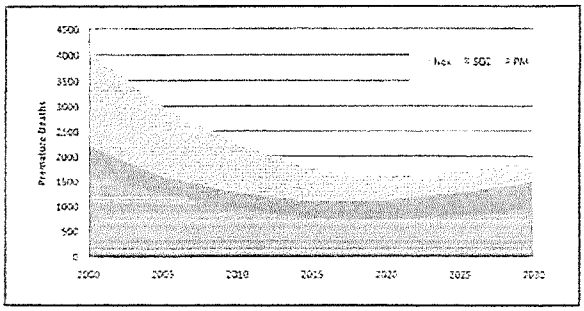
- **1,600 premature deaths**
- **$13 billion in total social costs**

By 2030, we predict:

- **1,900 premature deaths**
- **$17 billion in total social costs**

Figure 1

Projected Nationwide Premature Deaths Attributable to Congested Traffic, 2000 - 2030



This graph represents the nationwide estimates for premature deaths attributable to congested traffic for 2000-2030. The colored sections indicate the portion of these premature deaths attributable to NOx, primary $PM_{2.5}$ and SO_2.

to primary $PM_{2.5}$ and 11% attributable to SO_2. However, the relative proportion of the impact attributable to different pollutants varies significantly across urban areas. For example, the proportion due to NOx ranges from 6% in multiple Northeast cities (Hartford, CT; Boston, MA; New Haven, CT; Springfield, MA) to over 70% in less densely populated areas of Texas (Brownsville, Austin) and Washington State (Spokane).

Similarly, the proportion of impact due to primary $PM_{2.5}$ is highest in densely-populated urban areas of the Northeast (approximately 80%) and below 20% in Brownsville. The proportion attributable to SO_2 emissions is highest in California, with four urban areas in California constituting the only places with more than 20% of the mortality risk from SO_2 emissions. These relative proportions are attributable in part to high ambient sulfate in the eastern United States, which tends to reduce particulate nitrate formation, and to conditions in California favoring the secondary formation of particulate sulfate.

Figure 2

The Monetized Health Impacts Attributable to Congestion for Selected Urban Areas, 2000 - 2030

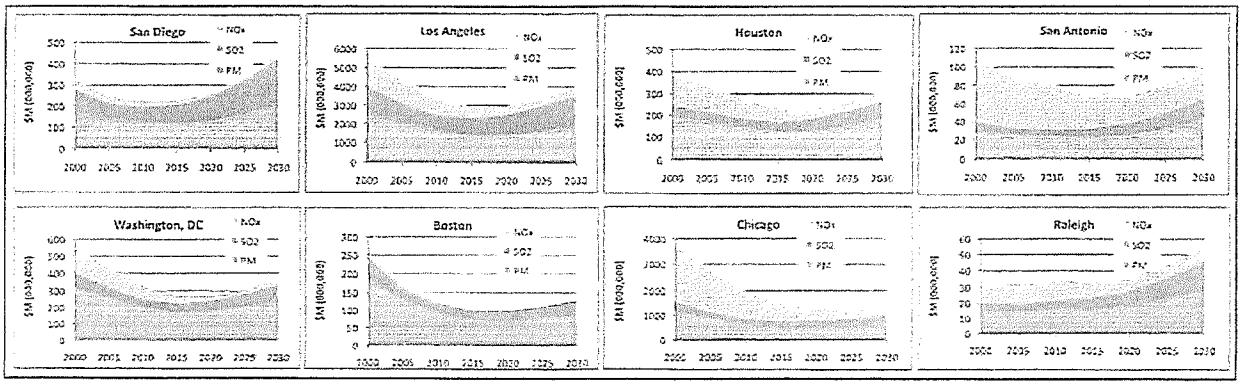
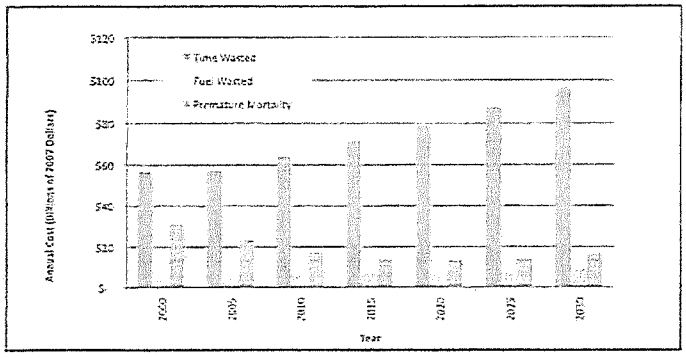


Figure 2 presents the monetized health impacts over time for selected urban areas. These trajectories differ as a function of differential population growth, congestion, population density and atmospheric chemistry. For example, monetized health impacts increase steadily over time in cities such as Raleigh NC and San Diego CA, in which VMT and population growth are significant and primary $PM_{2.5}$ makes a substantial contribution to health risk. In contrast, Chicago and other cities in the Midwest are projected to have small VMT growth and have more substantial contributions to public health damages from NOx emissions, and therefore show a steady decline in health risks over time given the larger decline in NOx emissions per vehicle-mile.

Figure 3

Figure 3 presents the economic costs from time and fuel wasted and monetized estimates of premature mortality attributable to traffic congestion across the 83 urban areas. Overall, time wasted accounts for the bulk of the economic cost associated with traffic congestion, and the cost of delay continues to increase between 2000 and 2030, as this is directly proportional to the extent of congestion. In contrast, reductions in per-vehicle emissions contribute to declines in economic costs associated with premature mortality between 2000 and 2025, with modest increases after that point.

Monetized Premature Mortality as Compared to Projected Time & Fuel Dollars Wasted Attributable to Congested Traffic



As a result, whereas the public health impacts contributed approximately 34% of the total cost of congestion in 2000, this decreases to 14% by 2030. However, the proportion of health impacts attributable to premature mortality varies substantially across urban areas. For example, in 2000, 17 urban areas had health impacts contributing less than 20% of the total cost of congestion, whereas 19 urban areas had contributions in excess of 50%. Those urban areas with relatively small contributions from public health had very high levels of congestion (near or at the 50% threshold) but did not have correspondingly high population density, including Laredo TX, Eugene OR, and Las Vegas NV. In contrast, those urban areas where public health impacts dominated had smaller percentage of time spent in congestion but greater public health benefits per ton of emissions.

Frequently Asked Questions

How was the analysis conducted?

The key components of the analysis include predicting emissions corresponding with traffic congestion for 83 individual urban areas based on travel demand models, which predict how many vehicle-miles people will be traveling in each area. We develop estimates of changes in air pollution (based on $PM_{2.5}$ concentration) associated with these emissions, and apply a concentration-response function that predicts how many people will be impacted by breathing this air pollution. Finally, we assign a dollar value to the predicted number of premature deaths.

Where did we get our data?

We develop estimates of vehicle miles traveled (VMT) based on data and methods from the Center for Urban Transportation Research (CUTR) at the University of Central Florida. We use a model developed by the US EPA called MOBILE6 to estimate city-specific emissions per VMT based on year, temperature profile, and average vehicle speed. We focus on emissions from the baseline year (2000) until 2030. The analysis is conducted for 83 individual urban areas that were previously evaluated by the Texas Transportation Institute (in order to directly compare our results with their estimates of economic costs of congestion) and are in the lower 48 states.

To estimate the changes in air pollution associated with congestion-related emissions from each urban area, we applied a source-receptor (S-R) matrix. S-R matrix is a reduced-form model containing county-to-county transfer factors across the United States, considering both primary $PM_{2.5}$ and secondary formation of sulfate and nitrate particles. To determine the health effects, we use the same studies that the US EPA uses based on a combination of published epidemiological studies and an expert elicitation study addressing the concentration-response function for $PM_{2.5}$-related mortality. To monetize the resulting estimates of

mortality attributable to congestion, we applied a value of a statistical life (VSL) of approximately $7.7M in 2007 dollars (for 2000 GDP), the central estimate used in recent EPA regulatory impact analyses.

What does it mean?

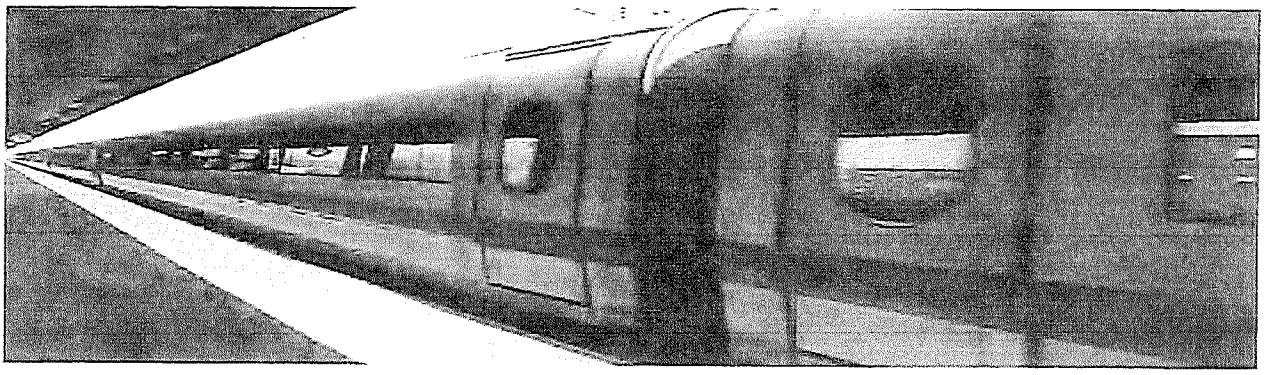
Our modeling illustrates that the public health impacts of traffic during periods of congestion, associated with premature mortality from primary and secondary $PM_{2.5}$ concentrations, are appreciable, with thousands of deaths per year and a monetized value of tens of billions of dollars per year. While the monetized public health damages are smaller than the economic value of time wasted, with the differential anticipated to grow over time, there are some geographic areas where public health damages represent a significant proportion of the total damages, even in future years when per-vehicle emissions are expected to be substantially less. Prior analyses of population exposure per unit emissions from motor vehicles demonstrated that these values were highest in dense urban areas for primary $PM_{2.5}$ and secondary sulfate, especially in California, the mid-Atlantic states, and the industrial Midwest, and were highest in the Southeast and Midwest for secondary nitrate. The urban areas with the greatest proportion of damages from public health were often found in parts of California and the Midwest, where the damages per ton of emissions were greater and the projected future population growth was lower. These findings provide an indication that considering only the direct economic costs of congestion will underestimate societal benefits of mitigating congestion, significantly so in certain urban areas.

What did we leave out?

There are clearly numerous other health endpoints or pollutants that may contribute to the public health burden of congestion, including morbidity endpoints associated with $PM_{2.5}$, mortality and morbidity from ozone, and effects of multiple air toxics. This analysis assumed no change to road infrastructure from 2005 levels, and the models, out of necessity, do not use individualized models of traffic congestion in each urban area (that is, although population and traffic demand are specific to each area, the analysis does not consider road closures, construction, or other area-specific factors that might contribute to increases or decreases in congestion over particular time periods). It is important to note that these are not traffic planning models specific to each area. These are models that predict emissions of pollutants associated with congested conditions on broader scales. Therefore, the results are approximations and represent order-of-magnitude predictions. In addition, the relative proportions across pollutants and urban areas are more robust than the specific numeric estimates.

Where do we go from here?

These results indicate that public health impacts of traffic congestion exist and should be considered when evaluating long-term policy alternatives for addressing congestion such as traffic management through congestion pricing, traffic light synchronization and more efficient response to traffic incidents, and adding new highway and public transit capacity. This analysis represents a first step, and future analyses could incorporate more sophisticated approaches for predicting expected emissions under location-specific conditions as opposed to the generalized case presented here. This exploratory study was designed to evaluate the scope of the issue; more refined estimates are possible that would address urban-area specific alternatives and impacts.



The following tables provide supporting information for our analyses that did not appear in the published paper. Note that the estimates for individual urban areas are more uncertain than the overall estimates for all 83 urban areas combined, and should be interpreted with caution. The model does not capture the nuances and dynamics of each individual urban area. Traffic demand, for example, is based on a national model, not individual models specific to each location.

Table A: Forecasted Increase in Vehicle Miles Traveled (VMT) in 83 U.S. Urban Areas: 2000-2030

Urban Area	Percent VMT Increase					
	2000-2005	2000-2010	2000-2015	2005-2020	2000-2025	2000-2030
Akron, OH	1%	1%	2%	3%	4%	6%
Albany, NY	3%	4%	4%	5%	6%	7%
Albuquerque, NM	2%	8%	14%	19%	23%	28%
Allentown--Bethlehem, PA--NJ	-3%	3%	6%	10%	13%	16%
Atlanta, GA	7%	14%	19%	22%	24%	27%
Austin, TX	6%	12%	17%	21%	25%	29%
Bakersfield, CA	9%	16%	21%	26%	30%	33%
Baltimore, MD	1%	4%	9%	13%	17%	20%
Beaumont, TX	-4%	-3%	-1%	2%	4%	7%
Birmingham, AL	1%	4%	6%	9%	12%	15%
Boston, MA--NH--RI	-5%	-3%	-2%	0%	1%	3%
Boulder, CO	0%	6%	11%	14%	17%	20%
Bridgeport--Stamford, CT--NY	0%	2%	3%	4%	5%	7%
Brownsville, TX	6%	10%	14%	17%	20%	23%
Buffalo, NY	-3%	-3%	-3%	-2%	-1%	0%
Cape Coral, FL	8%	20%	25%	30%	34%	38%
Charleston--North Charleston, SC	3%	11%	18%	25%	28%	32%
Charlotte, NC--SC	4%	13%	17%	21%	25%	28%
Chicago, IL--IN	1%	3%	5%	6%	8%	10%
Cincinnati, OH--KY--IN	-4%	-3%	-1%	0%	2%	3%
Cleveland, OH	-6%	-8%	-9%	-10%	-11%	-12%
Colorado Springs, CO	-2%	6%	12%	17%	22%	27%
Columbia, SC	-2%	7%	15%	23%	31%	36%
Columbus, OH	-1%	2%	6%	10%	13%	17%
Corpus Christi, TX	1%	6%	12%	19%	25%	29%
Dallas--Fort Worth--Arlington, TX	8%	15%	18%	21%	24%	27%
Dayton, OH	-8%	-8%	-8%	-8%	-7%	-6%
Denver--Aurora, CO	0%	7%	10%	13%	16%	19%
Detroit, MI	-3%	-3%	-2%	-2%	-1%	0%
El Paso, TX--NM	3%	7%	11%	15%	19%	22%
Eugene, OR	1%	7%	12%	16%	19%	22%
Fresno, CA	3%	9%	14%	19%	22%	25%
Grand Rapids, MI	-15%	-9%	-3%	2%	8%	14%
Hartford, CT	-2%	-1%	0%	2%	4%	5%
Houston, TX	8%	12%	15%	17%	20%	23%
Indianapolis, IN	4%	8%	12%	15%	19%	22%
Jacksonville, FL	5%	15%	19%	23%	28%	32%
Kansas City, MO--KS	0%	8%	15%	21%	28%	35%

Chart continued on next page...

Urban Area	Percent VMT Increase					
	2000-2005	2000-2010	2000-2015	2005-2020	2000-2025	2000-2030
Laredo, TX	8%	16%	22%	28%	33%	38%
Las Vegas, NV	15%	25%	32%	37%	42%	46%
Little Rock, AR	-8%	-5%	-3%	0%	3%	6%
Los Angeles--Long Beach--Santa Ana, CA	2%	4%	5%	7%	8%	10%
Louisville, KY--IN	0%	2%	4%	6%	8%	10%
Memphis, TN--MS--AR	-3%	-1%	1%	3%	5%	8%
Miami, FL	4%	8%	13%	18%	22%	26%
Milwaukee, WI	-5%	-4%	-3%	-1%	0%	2%
Minneapolis--St. Paul, MN	0%	5%	9%	14%	17%	20%
Nashville-Davidson, TN	-12%	-3%	4%	11%	17%	24%
New Haven, CT	-2%	1%	4%	7%	9%	12%
New Orleans, LA	-3%	-36%	-25%	-15%	-8%	-2%
New York--Newark, NY--NJ--CT	1%	2%	3%	5%	6%	8%
Oklahoma City, OK	3%	9%	13%	16%	19%	23%
Omaha, NE--IA	5%	10%	14%	19%	23%	27%
Orlando, FL	6%	18%	27%	32%	37%	41%
Oxnard, CA	5%	15%	25%	34%	42%	47%
Pensacola, FL--AL	-7%	4%	12%	19%	26%	31%
Philadelphia, PA--NJ--DE--MD	0%	2%	3%	4%	5%	7%
Phoenix--Mesa, AZ	8%	15%	20%	24%	29%	33%
Pittsburgh, PA	-6%	-6%	-4%	-2%	0%	3%
Portland, OR--WA	4%	7%	10%	13%	16%	19%
Providence, RI--MA	-1%	1%	4%	7%	10%	13%
Raleigh, NC	11%	28%	37%	43%	49%	54%
Richmond, VA	-4%	5%	14%	22%	31%	36%
Riverside--San Bernardino, CA	9%	15%	19%	24%	28%	31%
Rochester, NY	0%	0%	0%	0%	1%	3%
Sacramento, CA	6%	10%	14%	18%	22%	25%
St. Louis, MO--IL	1%	1%	1%	2%	2%	3%
Salem, OR	5%	11%	15%	20%	25%	29%
Salt Lake City, UT	6%	17%	27%	35%	40%	45%
San Antonio, TX	5%	15%	22%	28%	35%	42%
San Diego, CA	1%	10%	15%	20%	26%	31%
San Francisco--Oakland, CA	0%	1%	2%	3%	5%	6%
San Jose, CA	1%	2%	3%	4%	5%	6%
Sarasota--Bradenton, FL	8%	17%	25%	33%	39%	45%
Seattle, WA	2%	6%	8%	11%	14%	17%
Spokane, WA--ID	2%	8%	14%	20%	25%	30%
Springfield, MA--CT	-6%	-5%	-5%	-4%	-2%	-1%
Tampa--St. Petersburg, FL	4%	7%	10%	13%	15%	18%
Toledo, OH--MI	-5%	-6%	-5%	-5%	-4%	-2%
Tucson, AZ	5%	12%	19%	23%	26%	29%
Tulsa, OK	-8%	-2%	4%	10%	16%	22%
Virginia Beach, VA	-1%	3%	7%	10%	14%	17%
Washington, DC--VA--MD	3%	5%	7%	9%	11%	13%

Table B provides estimates of premature mortality and associated social costs across selected years to 2030 for each of the 83 urban areas. While estimates in all individual urban areas were not reported in the published paper, they are included below to provide perspective on the relative proportion of expected impacts across the 83 modeled areas. Given the underlying uncertainties and simplifications in the modeling approach, although the values are listed below with multiple significant figures for ease of comparison, the values in this table should be interpreted as order of magnitude estimates of the potential public health impacts.

Table B: Estimated Selective Public Health Impacts of Traffic Congestion With Status Quo Infrastructure & Mobility Options in 83 U.S. Urban Areas: 2000 - 2030

	2000		2005		2010		2015		2020		2025		2030	
	EPD	$M	EPD	$M	EPD	$M	EPD	$M	EPD	$M	EPD	$M	EPD	$M
Akron, OH	8	63	6	47	4	34	3	27	3	26	3	28	4	32
Albany, NY	<2	9	<2	7	<2	5	<2	4	<1	4	<2	4	<2	5
Albuquerque, NM	4	32	3	25	3	21	2	17	2	17	2	19	3	23
Allentown--Bethlehem, PA--NJ	6	44	4	31	3	25	3	21	3	21	3	24	3	29
Atlanta, GA	93	717	80	633	70	549	56	454	52	431	55	476	62	549
Austin, TX	17	129	14	110	12	92	9	73	8	67	8	73	10	85
Bakersfield, CA	2	17	2	15	2	13	<2	11	<2	11	2	13	2	16
Baltimore, MD	65	499	45	354	32	252	24	195	22	183	23	200	26	228
Beaumont, TX	<1	2	<1	2	<1	<2	<1	<2	<1	<2	<1	<2	<1	<2
Birmingham, AL	9	66	6	48	5	36	4	29	3	27	3	29	4	33
Boston, MA--NH--RI	33	257	21	169	16	125	13	102	12	100	13	112	15	130
Boulder, CO	<2	8	<2	6	<2	5	<2	4	<2	4	<2	4	<2	5
Bridgeport--Stamford, CT--NY	11	83	8	62	6	47	5	38	4	37	5	40	5	46
Brownsville, TX	4	28	3	25	3	20	2	15	2	13	2	14	2	16
Buffalo, NY	4	34	3	23	2	16	2	13	<2	12	2	14	2	16
Cape Coral, FL	10	78	9	75	10	76	8	65	8	64	8	73	10	91
Charleston--North Charleston, SC	2	18	2	14	2	13	2	12	2	14	2	17	2	21
Charlotte, NC--SC	16	120	13	102	12	92	10	78	9	78	10	89	12	105
Chicago, IL--IN	487	3,751	350	2,770	251	1,982	182	1,481	157	1,313	158	1,361	171	1,520
Cincinnati, OH--KY--IN	60	460	41	321	28	220	19	154	15	129	15	129	16	139
Cleveland, OH	34	262	21	165	14	111	10	84	9	77	9	79	10	86
Colorado Springs, CO	4	29	3	21	2	18	2	15	2	14	2	15	2	18
Columbia, SC	2	17	2	12	<2	11	<2	10	<2	11	2	14	2	18
Columbus, OH	19	150	14	109	11	83	8	69	8	68	9	76	10	89
Corpus Christi, TX	2	18	2	13	<2	11	<2	9	<2	9	<2	10	<2	12
Dallas--Fort Worth--Arlington, TX	122	941	103	816	85	671	62	507	54	455	56	483	62	547
Dayton, OH	21	161	13	103	9	70	6	48	5	40	5	39	5	42
Denver--Aurora, CO	41	319	31	245	24	192	18	144	15	126	15	132	17	148
Detroit, MI	173	1,333	116	918	76	603	52	421	43	357	41	355	43	381
El Paso, TX--NM	9	69	7	56	6	47	5	40	5	40	5	47	7	58
Eugene, OR	<2	5	<2	4	<1	4	<1	3	<1	3	<1	4	<2	5
Fresno, CA	9	70	7	58	6	49	5	42	5	42	5	47	6	56
Grand Rapids, MI	8	62	5	36	4	28	3	22	2	21	3	23	3	27
Hartford, CT	7	54	5	38	4	29	3	24	3	23	3	26	3	30
Houston, TX	50	383	43	338	35	277	29	232	28	231	30	263	35	311
Indianapolis, IN	34	264	27	210	19	153	14	113	12	100	12	103	13	112
Jacksonville, FL	5	39	4	32	4	29	3	25	3	26	3	30	4	36
Kansas City, MO--KS	18	142	14	108	11	88	8	67	7	62	8	69	9	84
Laredo, TX	<2	4	<1	4	<1	3	<1	3	<1	3	<1	4	<2	5
Las Vegas, NV	4	34	5	36	4	34	4	33	4	37	5	46	7	61
Little Rock, AR	3	22	2	14	<2	10	<2	8	<2	7	<2	7	<2	7
Los Angeles--Long Beach--Santa Ana, CA	722	5,564	547	4,324	426	3,362	360	2,924	355	2,974	394	3,396	454	4,038

EPD = Estimated Premature Deaths
$M = Estimated Cost in Millions of U.S. Dollars (2007 $)

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Table B Continued:
Estimated Selective Public Health Impacts of Traffic Congestion With Status Quo Infrastructure & Mobility Options in 83 U.S. Urban Areas: 2000 - 2030

	2000		2005		2010		2015		2020		2025		2030	
	EPD	$M	EPD	$M	EPD	$M	EPD	$M	EPD	$M	EPD	$M	EPD	$M
Louisville, KY--IN	34	265	24	192	17	138	12	101	11	89	11	91	11	99
Memphis, TN--MS--AR	16	123	11	84	8	62	6	48	5	44	5	47	6	52
Miami, FL	62	474	47	370	40	316	36	293	38	316	44	379	53	473
Milwaukee, WI	40	308	26	205	18	142	13	102	11	88	10	90	11	99
Minneapolis--St. Paul, MN	66	505	48	380	37	295	29	236	27	225	28	245	32	282
Nashville-Davidson, TN	11	84	6	50	5	42	4	34	4	32	4	36	5	43
New Haven, CT	5	35	3	25	2	19	2	17	2	17	2	19	3	22
New Orleans, LA	10	76	6	51	2	17	2	16	2	19	3	23	3	29
New York--Newark, NY--NJ--CT	644	4,962	477	3,768	337	2,658	244	1,981	212	1,772	215	1,859	234	2,079
Oklahoma City, OK	16	120	12	94	9	73	6	52	5	44	5	44	5	48
Omaha, NE--IA	7	53	6	45	4	34	3	26	3	23	3	25	3	28
Orlando, FL	25	196	21	169	21	166	19	157	19	161	22	191	27	236
Oxnard, CA	4	29	3	24	3	22	3	24	3	29	5	39	6	51
Pensacola, FL--AL	3	23	2	15	2	14	2	12	<2	12	2	14	2	17
Philadelphia, PA--NJ--DE--MD	149	1,145	102	806	71	561	51	416	45	374	46	395	50	441
Phoenix--Mesa, AZ	19	148	17	134	15	116	13	102	12	104	14	123	17	152
Pittsburgh, PA	18	137	11	87	8	63	6	51	6	51	7	57	8	69
Portland, OR--WA	20	154	16	129	13	101	10	81	9	75	9	81	11	94
Providence, RI--MA	11	81	7	59	6	44	5	38	5	39	5	45	6	55
Raleigh, NC	4	34	4	32	4	34	4	33	4	36	5	44	6	55
Richmond, VA	6	45	4	30	3	27	3	25	3	29	4	38	5	49
Riverside--San Bernardino, CA	13	98	11	90	10	80	10	79	11	89	13	111	16	144
Rochester, NY	3	24	2	17	<2	13	<2	10	<2	9	<2	10	<2	12
Sacramento, CA	69	533	60	471	48	378	39	316	36	305	40	343	46	412
St. Louis, MO--IL	103	797	74	589	51	399	34	273	27	224	25	218	26	227
Salem, OR	<1	3	<1	2	<1	2	<1	2	<1	2	<1	2	<1	2
Salt Lake City, UT	5	42	5	37	4	34	4	31	4	34	5	39	6	49
San Antonio, TX	14	108	11	89	10	80	8	68	8	68	9	81	12	103
San Diego, CA	43	331	31	249	29	227	28	229	32	265	39	339	50	449
San Francisco--Oakland, CA	235	1,813	170	1,345	124	981	90	733	77	649	78	675	85	751
San Jose, CA	42	323	31	248	24	191	19	156	18	149	19	163	21	188
Sarasota--Bradenton, FL	2	12	<2	11	<2	9	<2	8	<2	8	<2	9	<2	12
Seattle, WA	32	246	26	203	21	162	16	128	14	119	15	128	17	149
Spokane, WA--ID	<2	7	<2	5	<2	5	<1	4	<1	4	<1	4	<2	5
Springfield, MA--CT	<2	5	<1	3	<1	3	<1	2	<1	2	<1	2	<1	2
Tampa--St. Petersburg, FL	80	619	61	482	45	357	33	265	28	233	28	238	29	260
Toledo, OH--MI	12	91	8	60	5	40	3	28	3	24	3	24	3	26
Tucson, AZ	4	31	3	26	3	23	3	21	2	21	3	24	3	29
Tulsa, OK	9	68	5	43	4	35	3	26	3	24	3	25	3	29
Virginia Beach, VA	13	102	9	74	7	59	6	53	7	56	8	67	9	82
Washington, DC--VA--MD	72	556	55	438	42	330	34	273	33	272	36	310	41	366
Total	4,045	31,161	3,001	23,736	2,264	17,861	1,746	14,192	1,602	13,412	1,703	14,690	1,917	17,034

EPD = Estimated Premature Deaths
$M = Estimated Cost in Millions of U.S. Dollars (2007 $)

The Harvard Center for Risk Analysis (HCRA), founded in 1989, is recognized as a world-leader in applying decision theory, environmental and health science, and economics to a broad range of important environmental and public health issues. HCRA is a research institute within the Harvard School of Public Health, which has the objective of using a variety of analytic methods to inform public policy decisions relevant to public health. Our researchers enjoy successful collaborations across disciplines, and a hallmark of our work is synthesizing and integrating basic environmental sciences with social sciences to better inform decision making. We regularly host interdisciplinary seminars. Since 1993, HCRA has been publishing *Risk in Perspective*, a periodic publication available from our website (www.hcra.harvard.edu). Currently, HCRA hosts the Research Translation Core for a Superfund Basic Research program grant focused on gene-environment interactions (www.srphsph.harvard.edu) and is responsible for developing and communicating policy-relevant research based on the results of studies from partners across the University and MIT.

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DEMOGRAPHIA

Population Density, Traffic Density and Nitrogen Oxides (NOx) Emission Air Pollution Density in Major Metropolitan Areas of the United States

This report summarizes the latest Environmental Protection Agency (EPA) data on the density of daily traffic densities and road vehicle nitrogen oxides (NOx) emissions densities by counties within the 51 metropolitan areas with more than 1 million population in the United States as of 2010. The measures used are described under "The Measures," below.

The EPA data indicates a strong association both between:

- Higher population densities and higher traffic densities (Figure 1).
- Higher population densities and higher road vehicle nitrogen oxides (NOx) emission intensities (Figure 2)

In both cases, the relationships are statistically significant at the 99 percent level of confidence.

These relationships are summarized by population density category in Table 1, which includes total daily road vehicle travel density (vehicle miles per square mile), annual nitrogen oxides (NOx) emission intensity and a comparison to the average of all of the metropolitan area counties.

Table 1
Nox Emission & Road Travel Intensities by Population Density
Counties in Major Metropolitan Areas (Over 1,000,000 Population)

Population Density	NOx Emissions per Square Mile	Compared to Average	Road Travel per Square Mile	Compared to Average
20,000 & Over	106.1	13.7	304,064	22.1
10,000 - 20,000	79.8	10.1	173,450	12.6
5,000 - 10,000	55.1	6.3	146,143	10.6
2,500 - 5,000	40.3	5.1	84,695	6.1
1,000 - 2,500	23.1	2.9	45,064	3.3
Under 1,000	4.6	0.6	7,057	0.5
Average of Major Metropolitan Counties	7.9		13,779	

Table 3
Nox Emission & Road Travel Intensities by Population Density
Highly Urbanized Counties in Major Metropolitan Areas (Over 1,000,000 Population)

It is important to recognize that air pollution emissions alone are not a fully reliable predictor of air quality, though all things being equal, higher air pollution emissions will lead to less healthful air. This issue is described further under "Caveats." Below.

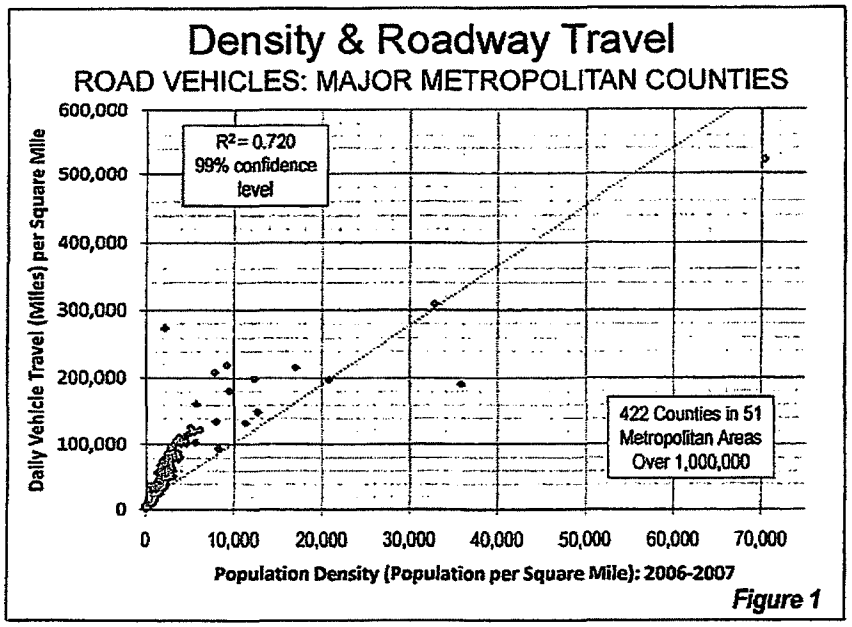

Figure 1

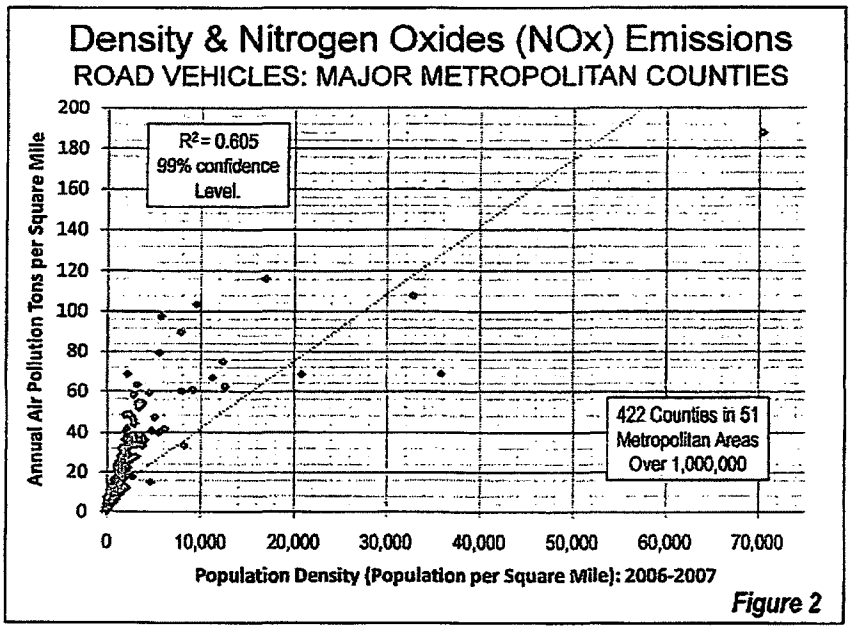

Figure 2

Data by County

Some in the urban planning community have implied that vehicle travel is lowered by higher densities and more intense transit service. It has also been implied that higher population densities are associated with lower air pollution levels.

In fact, New York County (Manhattan), the highest density county in the nation, also has the highest traffic density and the highest total nitrogen oxides (NOx) emission density out of all of the nation's nearly 3,200 counties, metropolitan and non-metropolitan. Moreover, New York County also has the highest concentration of emissions for the other criteria air pollutants, such as carbon monoxides, particulates and volatile organic compounds (2002 data).[1]

The clearest lesson from these data is that *both propositions are patently false.* The county with the highest population density in the nation (New York County) has the both the highest traffic density and nitrogen oxides (NOx) emission density. Generally, increasing population densities leads to increased traffic and air pollution density. The new traffic generated by the new residents substantially offsets any per capita reduction in driving.

Seven of the 10 counties with the highest NOx emissions concentration[2] (annual tons per square mile) in major metropolitan areas (those with more than 1 million population) are also among the top 10 in population density (2008). As noted above, New York County (Manhattan) has by far the most intense NOx emissions and is also by far the most dense. New York City's other three most urban counties (Bronx, Kings and Queens) are more dense than any county in the nation outside Manhattan and all are among the top 10 in NOx emission density (Table 3).

More concentrated traffic leads to greater traffic congestion and more intense air pollution. The data for traffic concentration is similar.[3] Manhattan has by far the greatest miles of road travel per square mile of any county. Again, seven of the 10 counties with the greatest density of traffic are also among the 10 with the highest population densities. As in the case of NOx emissions, the other three highly urbanized New York City counties are also among the top 10 in the density of motor vehicle travel (Table 3).

Table 2
Intensity of Nox Emissions & Motor Vehicle Travel (per Square Mile)

NOx Emissions				Motor Vehicle Travel			
Density			Compared to	Density			Compared to
Rank	Rank	County	Average	Rank	Rank	County	Average
1	1	New York Co, NY	23.8	1	1	New York Co, NY	37.8
2	5	San Francisco Co, CA	14.7	2	3	Bronx Co, NY	22.3
3	3	Bronx Co, NY	13.7	3	50	Fredericksburg city, VA	19.9
4	9	Washington city, DC	13.1	4	10	Alexandria city, VA	15.8
5	15	St. Louis city, MO	12.4	5	5	San Francisco Co, CA	15.6
6	13	Arlington Co, VA	11.3	6	13	Arlington Co, VA	15.1
7	15	Cook Co, IL	10.0	7	7	Suffolk Co, MA	14.4
8	7	Suffolk Co, MA	9.5	8	4	Queens Co, NY	14.3
9	2	Kings Co, NY	8.7	9	2	Kings Co, NY	13.8
10	4	Queens Co, NY	8.7	10	9	Washington city, DC	13.1
Calculated from 2008 EPA Data				Calculated from 2005 EPA Data			
Ranking out of 422 counties				Ranking out of 422 counties			

Urbanization

Most counties have substantial rural land area, which results in lower factors for both traffic density and air pollution emission density. This is evident in Los Angeles County (California) for example, which contains most of the Los Angeles urban area, which has the highest population density of any urban area in the country. Los Angeles has been renowned for decades as having some of the country's worst air pollution. Yet, this report shows Los Angeles County to have a much lower traffic density than many

[1] Calculated from data downloaded from http://www.epa.gov/oar/data/geosel.html.
[2] http://www.epa.gov/ttn/chief/net/2008inventory.html
[3] http://www.epa.gov/ttnnaaqs/pm/docs/2005_vmt_county_level.xls

other counties. This reflects the fact that approximately one half of the land area of Los Angeles County is very low density rural, which substantially reduces the traffic density. Similarly, the air pollution emission factors in Los Angeles County are lower than would be expected because of the large share of the county that is rural.

Data from the 35 counties in which 90 percent or more of the land is developed indicates virtually the same relationships as were indicated in the overall analysis. Table 3 shows the results, which indicates a substantially the same population density/traffic density and population density/air pollution emission density relationship as in all of the metropolitan area counties.

Table 3
NOx Emission & Road Travel Intensities by Population Density
Highly Urbanized Counties in Major Metropolitan Areas (Over 1,000,000 Population)

Population Density	NOx Emissions per Square Mile	Compared to Average	Road Travel per Square Mile	Compared to Average
20,000 & Over	108.1	0.1	304,054	22.1
10,000 - 20,000	79.8	0.1	173,450	12.6
5,000 - 10,000	65.1	0.1	146,149	10.6
2,500 - 5,000	44.8	0.1	91,701	6.7
1,000 - 2,500	26.3	0.0	51,140	3.7
Under 1,000	-		-	
Average of Major Metropolitan Counties	833.3		13,779	

Counties with 90% or more in urban land (35)

Cautions:

The air pollution data contained in this report is for emissions, not for air quality. Air quality is related to emissions and if there were no other intervening variables, it could be expected that emissions alone would predict air quality. However there are a number of intervening variables, from climate, wind, topography and other factors. Again, Los Angeles County makes the point. As the highest density large urban area in the nation is to be expected that Los Angeles would have among the highest density of air pollution emissions. However, the situation in Los Angeles is exacerbated by the fact that the urban area is surrounded by mountains which tend to trap the air pollution that is blown eastward by the prevailing westerly winds.

The EPA data for 2002 can be used to create maps indicating criteria pollutant densities within metropolitan areas. Examples of a map of the New York metropolitan area and the Portland (OR-WA) metropolitan area are shown (Figures 3 and 4), with the latter indicating the data illustration feature using Multnomah County (the central county of the metropolitan area).

The Measures:

Road Travel Volumes: Annual traffic volumes in vehicle miles are reported by EPA.[4] The annual vehicle miles for each county is divided by the number of days (365) and then by the county land area in square miles to generate a vehicle miles per square mile (density) figure. The EPA data is for 2005, which is the latest data available on the EPA website.

[4] http://www.epa.gov/ttn/naaqs/pm/docs/2005_vmt_county_level.xls.

Vehicle Air Pollution Emissions: The EPA reports annual air pollution emissions by county, both gross and by density for various pollutants on its website.[5] This analysis is based on the density of nitrogen oxides (NOx).

This report covers local air pollutants only and does not provide information on greenhouse gas emissions (nor does the EPA "Air Data" website).

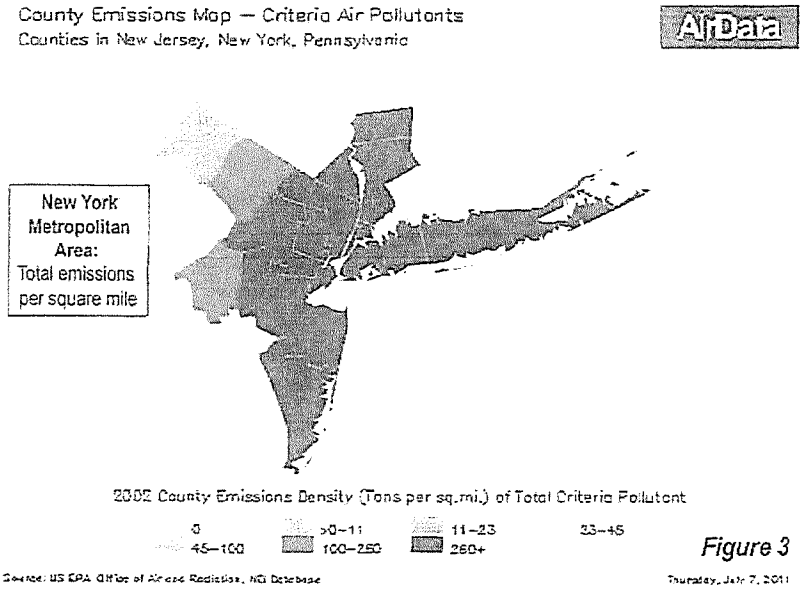

Figure 3

[5] http://www.epa.gov/airdata/geosel.html.

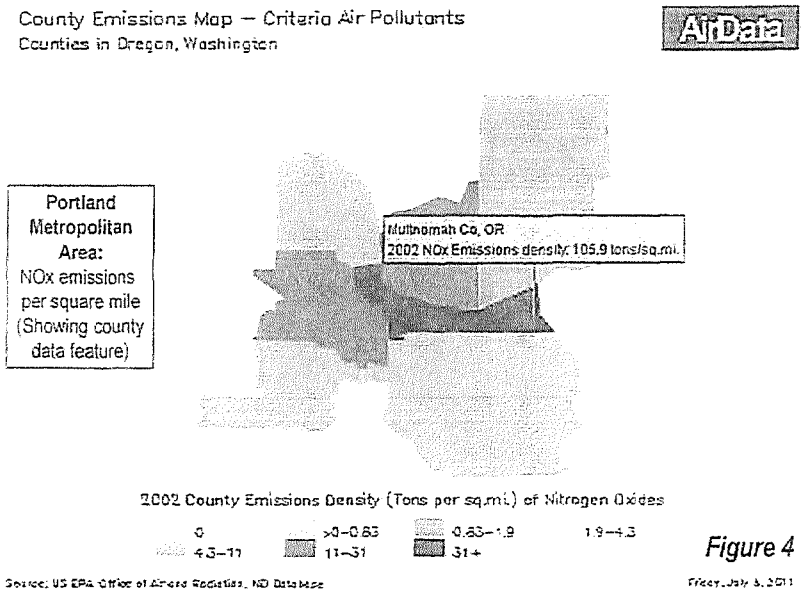

Figure 4

Other Air Pollutants

Similar relationships exist with respect to the other criteria air pollutants. In each case, the relationships between higher population densities and more intense air pollution is statistically significant at the 99 percent level of confidence. The relationships are illustrated in the following figures:

Figure 5: Carbon Monoxide

Figure 6: Volatile Organic Compounds (VOC)

Figure 7: Sulpher Dioxide (SO^2)

Figure 8: Particulate Matter less than 2.5 micrometers in diameter (PM-2.5)

Figure 9: Particulate Matter less than 10 micrometers in diameter (PM-10)

Figure 10: Ammonia (NH^3)

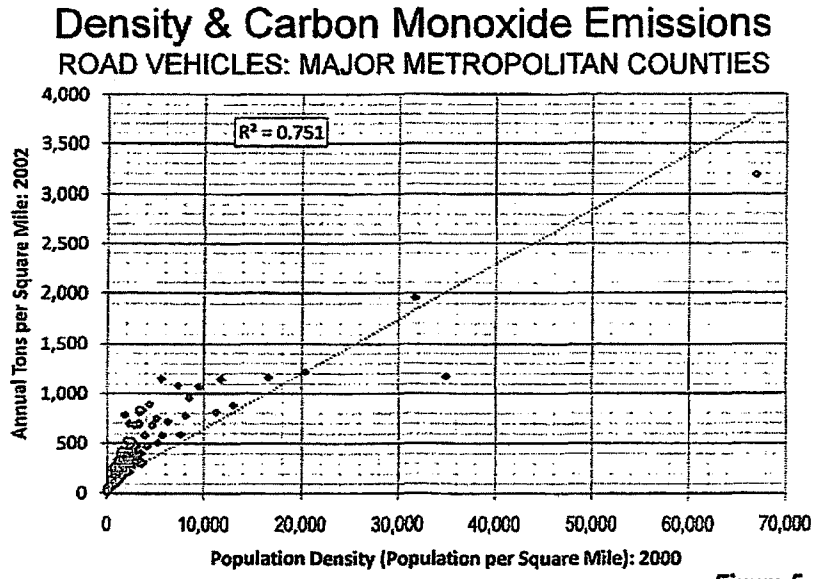

Figure 5

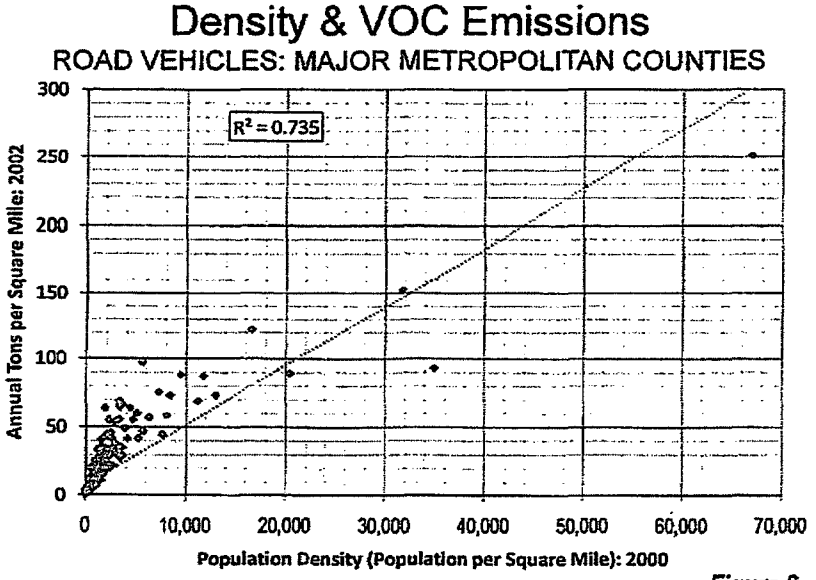

Figure 6

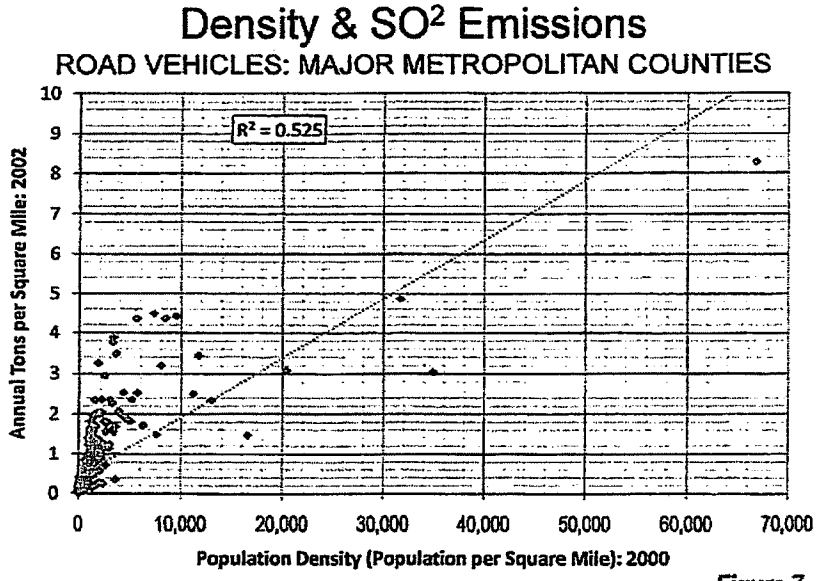

Figure 7

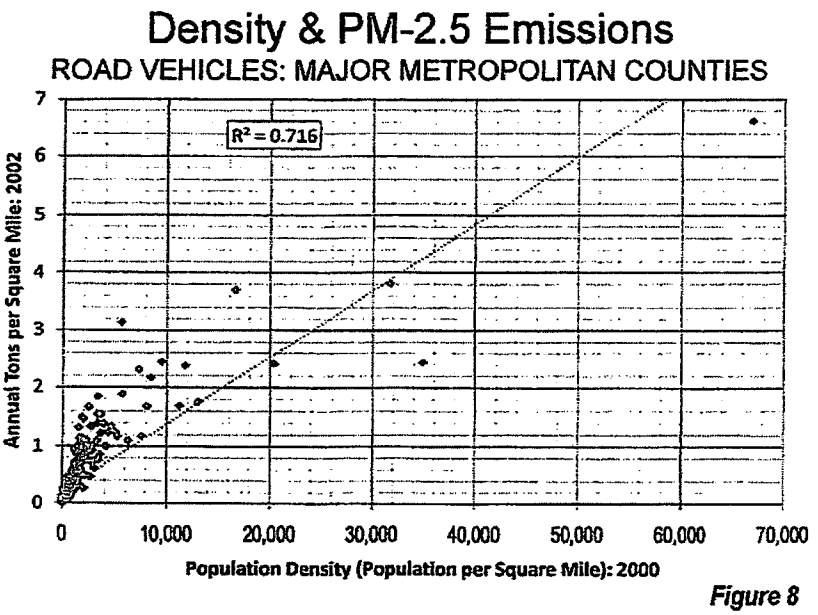

Figure 8

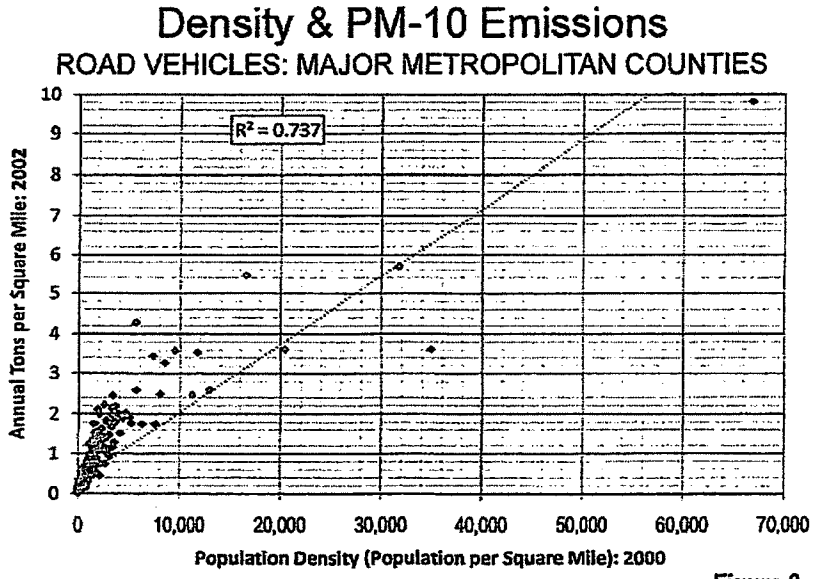

Figure 9

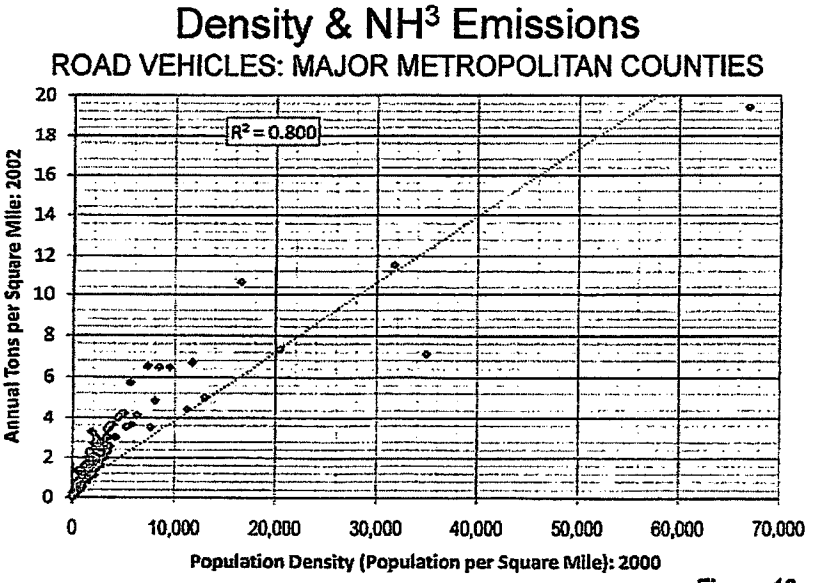

Figure 10

MISSION AREA PLAN
MONITORING REPORT
2014-2015

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San Francisco Planning

1650 Mission Street, Suite 400
San Francisco, CA 94103-3114
www.sfplanning.org

Front Cover: Mission Street at 25th Street looking south

MISSION AREA PLAN MONITORING REPORT

2011–2015

San Francisco Planning Department
September 2016

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NEW MISSION
ALAMO DRAFTHOUSE CINEMA PRESENTS
THE LOBSTER THE NICE GUYS
CAPTAIN AMERICA GREEN ROOM
2550

1. Introduction: Mission Area Plan

San Francisco's Eastern Bayfront neighborhoods have historically been the home of the city's industrial economy and have accommodated diverse communities ranging from families who have lived in the area for generations to more recent immigrants from Latin America and Asia. The combination of a vibrant and innovative industrial economy with the rich cultural infusion of old and new residents is central to San Francisco's character. Among many of the components that contributed to the economic and cultural character of the eastern part of the San Francisco were the wide availability of lands suitable for industrial activities (whether or not they were zoned for such) and the affordability of these neighborhoods' housing stock, relative to other parts of the city. Industrial properties continue to be valuable assets to the city's economy as they provide space for innovative local businesses; large, flexible floorplans for a wide range of tenants; and living wage career opportunities to residents without advanced degrees.

Over the past few decades, and particularly during the series of "booms" in high technology industries since in the 1990s, the Eastern Bayfront neighborhoods have experienced waves of pressure on its industrial lands and affordable housing stock. Due to their proximity to downtown San Francisco and easy access (via US-101, I-280, and Caltrain) to Silicon Valley, industrially-zoned properties in the Eastern Bayshore, particularly in neighborhoods like South of Market (SoMa), Mission, Showplace Square, and Central Waterfront became highly desirable to office users who were able to outbid traditional production, distribution, and repair (PDR) businesses for those spaces. The predominant industrial zoning designations in these neighborhoods until the late 2000s—C-M, M-1, and M-2—allowed for a broad range of uses, which enabled owners to sell or lease properties to non-PDR businesses as well as to develop them into "live-work" lofts serving primarily as a residential use.

Moreover, much of the Eastern Neighborhoods is well-served by public transportation, have vibrant cultural amenities, and feature many attractive older buildings. These neighborhood assets and employment opportunities have served as magnets for high wage earners and housing developers, creating an influx of new, more affluent residents.

Beginning in the late 1990s, the City, residents, community activists, and business owners recognized the need for a comprehensive, community-based planning process to resolve these conflicts and stabilize the neighborhoods into the future. The Eastern Neighborhoods community planning process was launched in 2001 to determine how much of San Francisco's remaining industrial lands should be preserved and how much could appropriately be transitioned to other uses. The planning process also recognized the need to produce housing opportunities for residents of all income levels, which requires not just the development of new units at market rates, but also opportunities for low and moderate income families.

In 2008, four new area plans for the Mission, East SoMa, Showplace Square/Potrero Hill, and Central Waterfront neighborhoods were adopted. Respecting the Western SoMa community's request for more time to complete their planning process, the area plan for that neighborhood was undertaken in parallel and completed in 2013. The resulting area plans contained holistic visions for affordable housing, transportation, parks and open space, urban design, and community facilities.

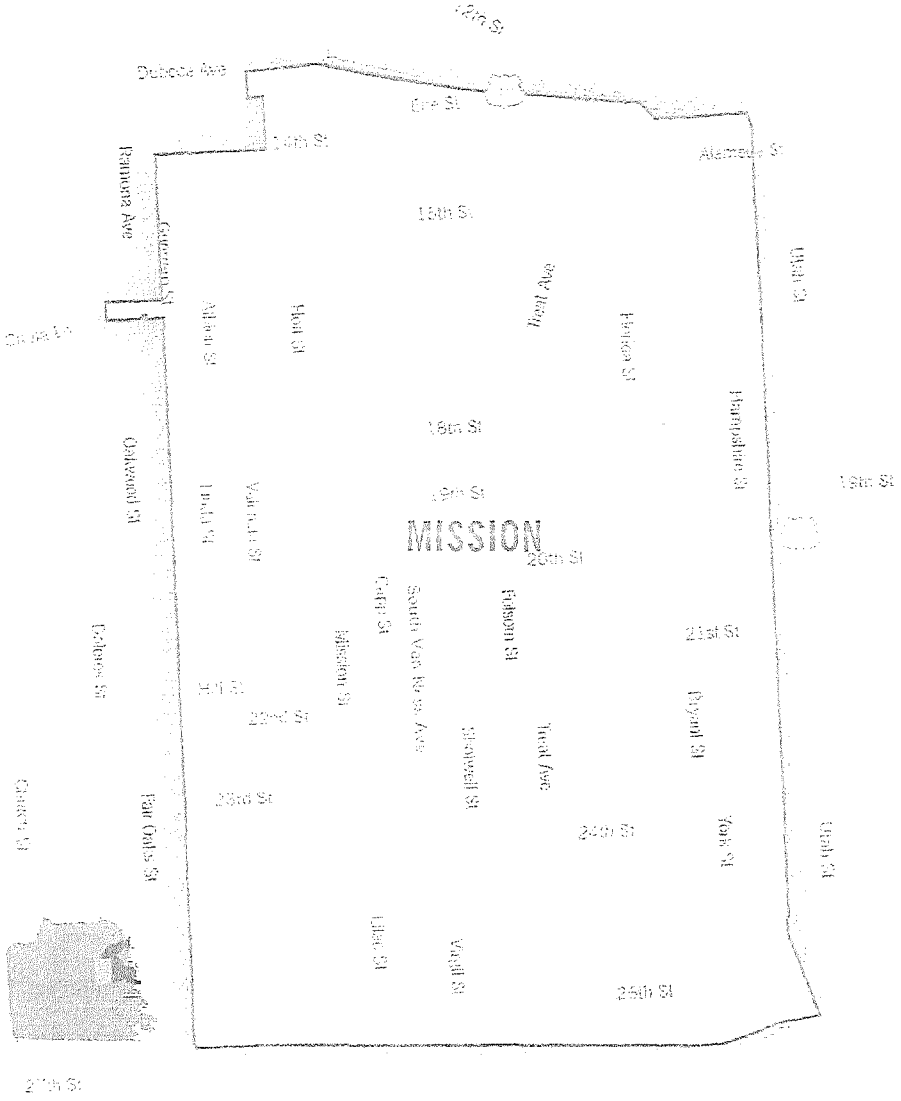
The Eastern Neighborhoods Plans represent the City's and community's pursuit of two key policy goals:

1) Ensuring a stable future for PDR businesses in the city by preserving lands suitable to these activities and minimizing conflicts with other land uses; and

2) Providing a significant amount of new housing affordable to low, moderate and middle income families and individuals, along with "complete neighborhoods" that provide appropriate amenities for the existing and new residents.

The challenges that motivated the Eastern Neighborhoods community planning process

Mission Area Plan Area Boundaries



were evident in the Mission when the plans were adopted and continue to be relevant today. The boundaries of the Mission Area Plan Area, shown in Map 1, run along Duboce/13th to the north, Potrero Avenue to the east, Guerrero Street to the west, and Cesar Chavez Street to the south.[1]

The Mission is highly dense with neighborhood amenities, including a variety of shops and restaurants, an architecturally rich and varied housing stock, vibrant cultural resources, and excellent transit access. Traditionally a reservoir of affordable housing relatively accessible to recent immigrants and artists, housing affordability in the Mission has significantly declined in the past decade as demand has rapidly outpaced new housing supply and due to statewide restrictions on tenant protection laws (such as the Ellis Act), which allows landlords to evict residents from rent controlled apartments. Despite inclusionary housing requirements that mandate that a certain percentage of new units be affordable to low and moderate income households, new housing has been largely unaffordable to existing residents.

Mission residents and business owners highlighted a number of policy goals, in addition to the Eastern Neighborhoods-wide objectives, that should be considered for the Area Plan:

- Preserve diversity and vitality of the Mission
- Increase the amount of affordable housing
- Preserve and enhance the existing Production, Distribution and Repair businesses
- Preserve and enhance the unique character of the Mission's distinct commercial areas
- Promote alternative means of transportation to reduce traffic and auto use
- Improve and develop additional community facilities and open space
- Minimize displacement

1.1 Summary of Ordinance and Monitoring Requirements

The ordinances that enacted the Eastern Neighborhoods Area Plans (including Western SoMa), adopted by the Board of Supervisors, include a requirement that the Planning Department produce five year reports monitoring residential and commercial developments in those neighborhoods, as well as impact fees generated and public and private investments in community benefits and infrastructure.[2] Appendix A includes the language in the Administrative Code mandating the Monitoring Reports. The first set of monitoring reports for Mission, East SoMa, Showplace Square/Potrero Hill, and Central Waterfront were published in 2011, covering the period from January 1, 2006 through December 31, 2010.

The ordinances require the monitoring reports to track all development activity occurring within Plan Area boundaries during the five-year period, as well as the pipeline projecting future development as of the end of the reporting period. Some of this development activity was considered under the Eastern Neighborhoods Environmental Impact Report (EN PEIR), certified in 2008; and Western SoMa EIR, certified in 2012. However, a few of the developments that have been completed during this period and some of the proposed projects in the pipeline did not (or will not) receive their environmental clearance through these two EIRs, for these four reasons:

1) The developments were entitled prior to the adoption of the Plans, under zoning designations that were subsequently changed by the Plans.
2) Under the Eastern Neighborhoods Amnesty Program that expired in 2013, legalization of conversions from PDR to office space that took place prior to Plan adoption was allowed.
3) Some large-scale developments and Plan Areas that are within or overlap Project Area boundaries (such as Central SoMa and Pier 70) will undergo separate environmental review processes.

1 Unless otherwise noted, this report will refer to the Mission Area Plan Area, Mission neighborhood, and "the Mission" interchangeably, as the area shown on Map 1. Other official and community definitions of the boundaries of the Mission neighborhood exist. Where those are used within this report, they will be specifically referenced.

2 Unless otherwise noted, this report will refer to the Eastern Neighborhoods Area Plans, or just Area Plans, as encompassing the Mission, East SoMa, Central Waterfront, Showplace Square/Potrero Hill as well as Western SoMa. References to Plan Areas (or to the names of the individual areas) will describe the areas within the boundaries outlined by the individual plans.

4) Certain smaller projects did not rely on the rezoning under the EIRs and are therefore excluded.

This report analyzes all development activity within the Eastern Neighborhoods, whether or not projects rely on the EN PEIR. For a list of projects relying on the EN PEIR, please refer to Appendix D.

The *Mission Area Plan Monitoring Report 2011-2015* is part of the set of Eastern Neighborhoods monitoring reports covering the period from January 1, 2011 to December 31, 2015. Because Western SoMa was adopted in 2013, no monitoring reports have been produced for that Area Plan. However, due to its geographic proximity and overlapping policy goals with the other Eastern Neighborhoods, Planning Department staff, in consultation with the CAC, has shifted the reporting timeline such that the Western SoMa Area Plan Monitoring Report 2011-2015 will be the first five-year report and set the calendar so that future monitoring reports are conducted alongside the other Eastern Neighborhoods. Subsequent time series monitoring reports for the Mission area and other Eastern Neighborhoods (including Western SoMa) will be released in years ending in 1 and 6.

While the previous Monitoring Report covered only the small amount of development activities in the years immediately preceding and following the adoption of the *Mission Area Plan* in 2008, this report contains information and analysis about a period of intense market development and political activity in the Mission. This report relies primarily on the *Housing Inventory,* the *Commerce and Industry Inventory,* and the *Pipeline Quarterly Report,* all of which are published by the Planning Department. Additional data sources include: the California Employment and Development Department (EDD), the U.S. Census Bureau's American Community Survey, the San Francisco Municipal Transportation Agency (SFMTA), Co-Star Realty information, Dun and Bradstreet business data, CBRE and NAI-BT Commercial real estate reports, and information gathered from the Department of Building Inspection, the offices of the Treasurer and Tax Collector, the Controller, and the Assessor-Recorder.

2. Commercial Activity and Job Creation

One of the defining characteristics of the Mission neighborhood is its remarkable mix of uses and diversity of businesses, including manufacturing, restaurants and bars, a broad range of retail activities, institutional and educational uses, hospitals, and more. The neighborhood commercial corridors along Mission, Valencia, and 24th Streets support a variety of retail activities including shops and services, housing, and small offices, which serve their immediate neighborhood and also residents from throughout the city and region. Indeed, these commercial corridors have become part of San Francisco's tourism circuit, attracting visitors from around the world.[3]

The primarily residential portions of the Mission, which occupy the blocks on the southeast and western edges of the neighborhood, are also peppered with neighborhood serving businesses including corner stores, dry cleaning services, restaurants, cafes, and bars. Lastly, the Mission is home to a thriving collection of PDR businesses. The Northeast Mission Industrial Zone (NEMIZ) clusters many of these industrial activities and spaces, but a variety of smaller PDR businesses (such as auto repair garages, light manufacturing work, and the like) are scattered throughout the neighborhood. This mix of uses is an important source of employment opportunities for neighborhood, city and Bay Area residents; contributing to the overall vitality and culture of the Mission.

2.1 Commercial Space Inventory

Table 2.1.1 illustrates the mix of non-residential space in the Mission as of 2015. The table reflects the balanced mix of uses described above, as office, retail, and PDR activities each occupy roughly a quarter of the commercial space in the neighborhood. Cultural, institutional, and educational and medical uses make up roughly another 20% of non-residential buildings and tourist hotels take up about another 1%. The table

3 For example, a recent New York Times feature highlighting 18 San Francisco attractions to visit on a 36-hour stay in the city included 6 sites within the Mission Area Plan Area and another 3 within 2 blocks of its boundaries. See http://www.nytimes.com/2015/11/01/travel/what-to-do-in-36-hours-in-san-francisco.html?_r=0

FIGURE 2.0.1

Produce Market on Mission Street

Photo by SF Planning, Pedro Peterson

also shows the importance of the Mission in the San Francisco's stock of industrial lands. Though the neighborhood only accounts for 5% of the City's overall commercial space, its share of PDR space is much higher, at 8%. However, as will be discussed in the sections below, in recent decades PDR space has been subject to intense pressures from uses that are able to pay higher land rents, such as office and market-rate residential.

TABLE 2.0.1

Commercial Building Space Square Footage, Mission and San Francisco, 2015

Cultural, Institution, Educational	1,760,105	15%	29,898,514	13%	6%
Medical	698,877	6%	17,468,039	7%	4%
Office	3,079,231	27%	107,978,954	45%	3%
PDR / Light Industrial	2,896,338	25%	36,265,832	15%	8%
Retail	3,022,780	26%	42,299,526	18%	7%
Visitor / Lodging	92,560	1%	4,053,422	2%	2%
Total	**11,549,891**	**100%**	**237,964,287**	**100%**	**5%**

Source: San Francisco Planning Department Land Use Database, March 2016.

shows commercial and other non-residential development activity in the Mission Area Plan area between January 1, 2011 and December 31, 2015 while shows corresponding figures for San Francisco. These tables count newly developed projects (on vacant properties or redevelopment of existing properties) as well as conversions from one use to another. Between 2011 and 2015, 206,000 square feet of PDR land was converted to other uses, especially housing, equivalent to roughly 6% of PDR space in the Mission.

Two properties account for more than 75% of the PDR conversion during this period. In 2012, the Planning Department legitimized a conversion of roughly 95,000 square feet of PDR to office at 1550 Bryant; the actual conversion occurred prior to the enactment of Eastern Neighborhoods without the benefit of a permit. The legitimization program (see section 2.3.1), which was enacted concurrently with Eastern Neighborhoods, enabled the space to be legally permitted as office. Another property at Mission Street and 15th Street, a vacant and non-functioning former printing shop, accounted for another 63,000 square feet of PDR conversion. This project was approved prior to adoption of the Mission Area Plan, but completed construction in 2013. The building was demolished to build a 194-unit residential building, shown in Photo 2.1.1, which includes 40 affordable units (21% of the total). The property is zoned neighborhood commercial transit (NCT) and urban mixed-use (UMU), designations created by the Eastern Neighborhoods Area Plans specifically to transition struggling industrial properties in transit-rich corridors to dense residential uses.

also shows the loss of 25,000 square feet of institutional space in 2015, which took place because the San Francisco SPCA demolished a building on their campus to convert into a dog park in order to better meet their animal

1880 Mission Street

Photo by SF Planning, Pedro Peterson

rescue activities. The table also shows a modest gain of office and retail space during the reporting period. One illustrative project is the development at 1501 15th Street, which redeveloped a vacant lot of a former gas station into a mixed-use building with 40 residential units (7 of them below market rate) and roughly 8,000 square feet of ground floor commercial space.

For comparison purposes, [illegible] shows the commercial development activity throughout San Francisco. Overall, while the Mission saw a decrease of roughly 68,000 square feet, the city gained 2.8 million square feet, mostly serving office and medical uses. The Mission accounted for about 20% of the city's loss of PDR and slightly more than 7% of citywide office development between 2011 and 2015.

[illegible] shows the location of the larger-scale non-residential developments. (See [illegible] for detailed information about completed developments.)

[illegible]

Net Change in Commercial Space Built, Mission 2011–2015

[illegible]	[illegible]	[illegible]	[illegible]	[illegible]	[illegible]	[illegible]	[illegible]
2011	–	–	–	(10,800)	–	–	(10,800)
2012	–	–	108,400	(98,326)	4,320	–	14,394
2013	–	–	–	(70,762)	–	–	(70,762)
2014	–	15,200	–	(26,423)	(3,696)	–	(14,919)
2015	(25,211)	–	–	–	39,495	–	14,284
Total	**(25,211)**	**15,200**	**108,400**	**(206,311)**	**40,119**	**–**	**(67,803)**

Source: San Francisco Planning Department.

Note: Includes all developments in the Plan Area during reporting period, including those that did not receive CEQA clearance under Eastern Neighborhoods EIR.

[illegible]

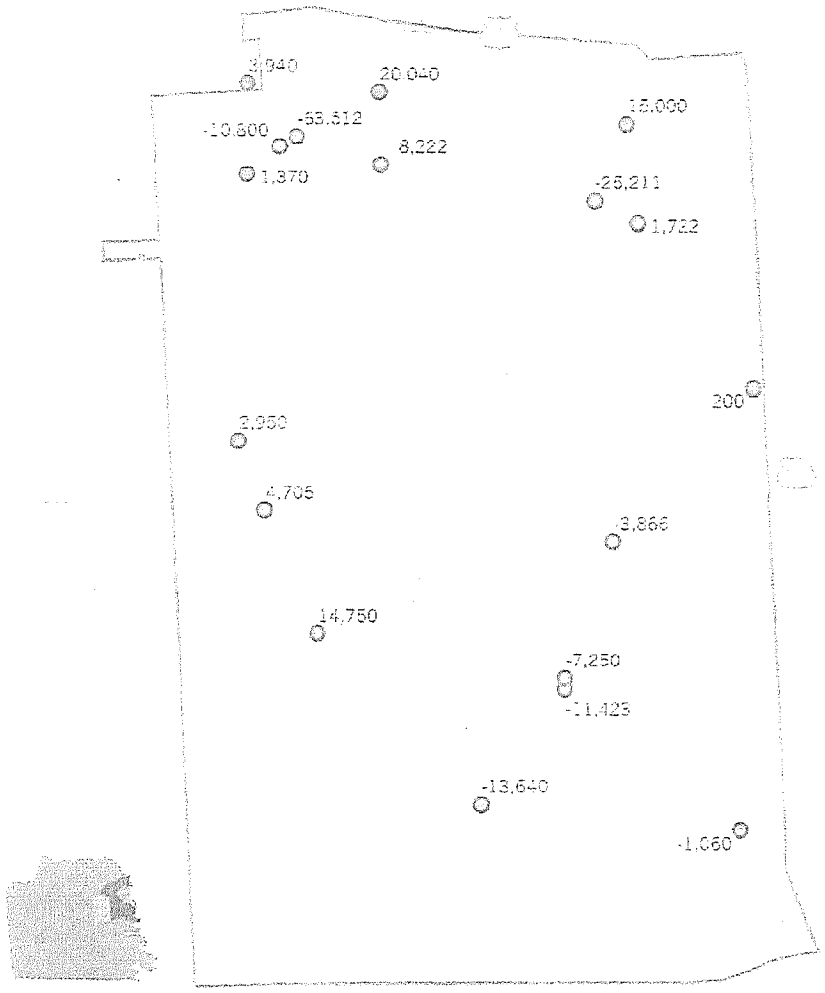
Net Change in Commercial Space, San Francisco 2011–2015

[illegible]	[illegible]	[illegible]	[illegible]	[illegible]	[illegible]	[illegible]	[illegible]
2011	10,477	0	40,019	(18,075)	16,854	0	49,275
2012	(52,937)	0	24,373	(164,116)	32,445	0	(160,235)
2013	66,417	0	335,914	(236,473)	5,941	(69,856)	101,943
2014	446,803	1,815,700	603,997	(422,157)	11,875	63,286	2,519,504
2015	(21,456)	20,000	460,508	(183,775)	65,419	0	340,696
Total	**449,304**	**1,835,700**	**1,464,811**	**(1,024,596)**	**132,534**	**(6,570)**	**2,851,183**

Source: San Francisco Planning Department.

MAP 2

Completed Projects Causing Net Change in Commercial Space, Mission 2011–2015



- Net loss of commercial space
- Net gain of commercial space

2.2 Commercial Development Pipeline

The development pipeline is best understood as two separate subcategories, shown in [illegible] as "Under Review" and "Entitled". Entitled projects are those that have received Planning Department approvals and are under construction or awaiting financing or other hurdles to break ground. Such projects can be expected to be completed with some confidence, although some of them may take years to finally complete their construction and receive certificates of occupancy. Projects that are under review projects are those that have filed application with the Planning and/or Building Departments, but have not been approved. These projects have to clear several hurdles, including environmental (CEQA) review, and may require conditional use permits or variances. Therefore, under review projects should be considered more speculative.

The commercial development pipeline in the Mission shows a continuation of the trends that have taken place during the reporting period of 2011-15 ([illegible]). The Mission will continue to see some of its PDR space converted to other uses, particularly residential, as well as the development of some office, medical, and institutional space. However, the City continues to enforce PDR protection policies in specially designated zones in the Mission, such as PDR-1 and PDR-2.

The projects in the pipeline that have received entitlements show a slight net gain (5,000 square feet) of non-residential uses in the Mission in the near future. If all of these developments are completed, the Planning Department expects a loss of about 360,500 square feet of PDR space and concomitant gain of roughly 175,000 square feet in other commercial space, including institutional, medical, office and retail uses. Entitled projects that propose to convert PDR to other uses are mostly small spaces (up to about 6,000 square feet) that will be redeveloped as residential or mixed-use residential buildings. One representative project is at 346 Potrero Avenue, currently under construction, where 3,000 square feet of PDR has been converted to a mixed use building with approximately 1,600 square feet of ground floor retail and 70 residential units, 11 of which are affordable.

[illegible] 2.2.1

Commercial and Other Non-Residential Development Pipeline, Mission Q4 2015

	[illegible]						
Under Construction	–	–	–	(12,461)	7,396	–	(5,065)
Planning Entitled	3,957	16,000	4,672	(18,607)	4,682	–	10,704
Planning Approved	2,757	–	–	(2,914)	–	–	(157)
Building Permit Filed	–	–	–	(1,939)	844	–	(1,095)
Building Permit Approved/ Issued/ Reinstated	1,200	16,000	4,672	(13,754)	3,838	–	11,956
Under Review	282,932	–	160,591	(329,490)	51,672	–	169,219
Planning Filed	282,932	–	159,388	(303,697)	55,186	–	182,933
Building Permit Filed	–	–	1,203	(25,793)	10,676	–	13,714
Total	286,889	16,000	165,263	(360,558)	67,264	–	174,858

Source: San Francisco Planning Department

Note: Includes all developments in the pipeline as of December 31, 2015, including those that did not (or will not) receive CEQA clearance under Eastern Neighborhoods EIR.

One example of a project that is currently under review, the "Armory Building" at 1800 Mission, has requested to convert roughly 120,000 square feet of PDR space into office use. Another large-scale project currently under review would build 176,000 square feet of non-profit service delivery office space at 1850 Bryant Street. If all projects that are under review come to fruition, the Mission will see roughly 360,000 square feet of PDR transition to other uses.

shows the commercial development pipeline for San Francisco for comparison. The development pipeline in the Mission represents less than 1% of the citywide pipeline.
shows the locations of the larger proposed commercial developments in the plan area. (See for detailed information about pipeline projects.)

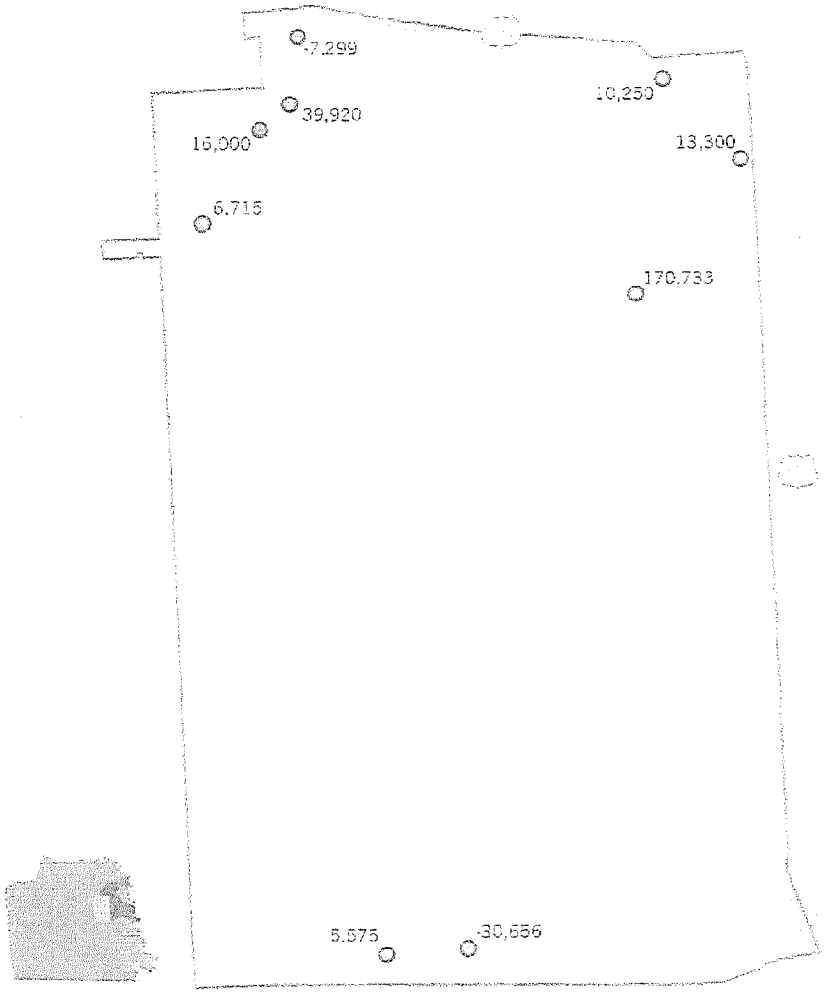
Commercial and Other Non-Residential Development Pipeline, San Francisco Q4 2010

Under Construction	1,098,708	(58,871)	3,894,055	(290,327)	491,366	(189,563)	4,945,368
Planning Entitled	312,600	20,665	5,576,249	332,662	1,268,623	519,906	8,030,705
Planning Approved	1,942	4,665	4,571,993	311,417	1,084,828	458,554	6,433,399
Building Permit Filed	4,343	–	(36,555)	(33,939)	806	–	(65,345)
Building Permit Approved/ Issued/ Reinstated	306,315	16,000	1,040,811	55,184	182,989	61,352	1,662,651
Under Review	1,042,013	1,875	7,459,214	(1,046,009)	1,594,639	418,557	9,470,289
Planning Filed	1,084,228	1,875	5,955,541	(994,050)	1,552,310	200,747	7,800,651
Building Permit Filed	(42,215)	–	1,503,673	(51,959)	42,329	217,810	1,669,638
Total	2,453,321	(36,331)	16,929,518	(1,003,674)	3,354,628	748,900	22,446,362

Source: San Francisco Planning Department

MAP 5

Commercial and Other Non-Residential Development Pipeline, Mission Q4 2015



- Entitled
- Under Construction
- Under Review

Note: Only includes projects that will add or remove 5,000 net square feet.

2.3 Changes in PDR Uses

As discussed above, the Mission (and the Eastern Neighborhoods more broadly), have experienced economic changes that have made many areas highly attractive to residential and office development. These types of uses are generally able to afford higher land costs, and therefore can outbid PDR businesses for parcels that are not specifically zoned for industrial use. Prior to the adoption of the Eastern Neighborhoods Area Plans, the primary industrial zoning designations – M-1, M-2, and C-M – permitted a broad range of uses, which led to the conversion of a significant amount of PDR space to other activities. Of the 2.9 million square feet in PDR space in the Mission in 2015, more than half was scattered throughout zoning districts not specifically geared towards industrial uses, such as neighborhood commercial (NC) zones. Roughly 770,000 (26%) were located in PDR protection districts (PDR-1 and PDR-2) and 20% were in the mixed use UMU district. By comparison, the split between PDR space in PDR protection, mixed use, and other districts in the Eastern Neighborhoods is 38%, 34%, and 29%, respectively. According to Co-Star data, asking lease rates for PDR space in the Eastern Neighborhoods are currently $22 per square foot (NNN) and vacancy rates are 4.4%.[4]

Since the adoption of the Mission Area Plan, PDR space has continued to be converted to other uses in the neighborhood, as [illegible] and [illegible] illustrate. A detailed investigation of the conversion of PDR space in the Mission shows that such conversions have occurred largely outside of the zoning districts created specifically to protect PDR uses (in the case of the Mission, PDR-1 and PDR-2). The only project that recorded a loss of PDR space in a PDR protection zone during this period, 1550 Bryant, involved the legitimization of office conversion undertaken prior to adoption of the plan under an amnesty program that expired in 2013 (discussed in subsection 2.3.1, below). In addition to the project at 1880 Mission, detailed above, other completed projects in the Mission that have converted PDR space have done so in order to build new housing, either with a higher percentage of inclusionary units than required by the City's inclusionary housing ordinance or by paying in-lieu fees, as shown in [illegible]. These projects have all been built in either the transitional UMU district or in districts like NCT and RH-3, which were not intended as PDR protection areas under the Mission Area Plan. The Planning Department has also undertaken some legislative action to strengthen PDR zoning and enable to location, expansion, and operation of PDR businesses. In addition to some "clean

4 Data provided by the City of San Francisco's Real Estate Division.

TABLE 2.2.1

Square Footage of PDR Space by Zoning District Type, Mission and Eastern Neighborhoods, 2015

[illegible]	[illegible]	[illegible]	[illegible]	[illegible]
PDR Protection (1)	767,087	26%	3,465,888	38%
Mixed Use (2)	582,510	20%	3,098,198	34%
Other (3)	1,546,741	53%	2,669,555	29%
TOTAL	**2,896,338**	**100%**	**9,233,641**	**100%**

1. Districts that primarily allow PDR activities and restrict most other uses. In Central Waterfront, Mission, and Showplace Square/Potrero Hill, these districts include PDR-1 and PDR-2. In East SoMa and West SoMa, they are the SLI and SALI districts, respectively.

2. Transitional districts that allow industrial uses mixed with non-PDR activities such as housing, office,and retail, often with additional requirements on affordability and PDR replacement. Includes UMU in Central Waterfront, Mission, and Showplace Square/Potrero Hill;MUG, MUO, and MUR in East SoMa; and WMUG and WMUO in Western SoMa.

3. Various districts designated for non-industrial uses like residential, neighborhood commercial, and the like.

Source: San Francisco Planning Department Land Use Database, March 2016

Table 2.3.2

Projects Converting PDR Space in Mission Area Plan Area, 2011–2015

1550 Bryant Street	PDR-1-G	(93,400)	108,400	0	0	0	N/A
1880 Mission Street	NCT/UMU	(63,512)	0	0	194	40	21%
2652 Harrison Street	UMU	(7,250)	0	0	20	Fee payment	N/A
2660 Harrison Street	UMU	(11,423)	0	11,423	3	Below threshold	N/A
3135 24th Street	NCT	(15,000)	0	1,360	9	Below threshold	N/A
1280 Hampshire Street	RH-3	(1,060)	0	0	3	Below threshold	N/A

Source: San Francisco Planning Department

Note: Only developments with ten or more units are subject to the City's inclusionary housing requirements.

up" language making it easier for PDR businesses to receive permits and share retail spaces, the Department also created a program to allow more office development in certain parcels as a way to subsidize more development of PDR space. Recognizing the financial difficulties of developing new industrial buildings in large "soft site" lots, this program gives developers the ability to construct office space in parcels zoned PDR-1 and PDR-2, located north of 20th Street. The parcels must be at least 20,000 square feet as long as existing buildings are not developed to more than 0.3 floor-to-area (FAR) ratio. At least 33% of the space in the new developments must be dedicated to PDR uses. To date, only one development at 100 Hooper Street in the Showplace Square/ Potrero Hill Plan Area has taken advantage of this program.

PDR Protection Policies and Enforcement

Illegal conversions from Production, Distribution and Repair (PDR) uses have more recently become an issue in the Eastern Neighborhood Plan areas that the City has sought to resolve. In 2015, the Planning Department received about 44 complaints of alleged violation for illegal conversions of PDR space. Most of these cases (42) are in the Eastern Neighborhoods, 20 of which are in the Mission Area Plan Area. Of these cases, six were found to not be in violation of PDR protection rules, 11 are under or pending review, and three have been found to be in violation. The three cases are on Alabama Street between 16th and Mariposa Streets on parcels zoned PDR-1-G. Owners were issued notices of violation and office tenants were compelled to vacate the properties, as shown in [illegible].

Table 2.3.3

Enforcement Cases for Illegal PDR Conversions, Mission, 2015

Closed - Violation	3	6	7
Closed - No Violation	6	9	9
Under Review	1	4	4
Pending Review	10	23	24
TOTAL	20	42	44

Source: San Francisco Planning Department

Most of these complaints describe large warehouses converting into office uses. Many of these office tenants are hybrid uses where PDR also takes place, but may not be the principal use of the space. If an office use is confirmed to be in operation, Planning encourages the company to alter their business practice to fit within the PDR zoning categories or vacate the property. The table in Appendix E shows the enforcement cases that were closed and that were actually found to be in violation of the code. Generally, the complaints filed with the Planning Department are regarding the conversion of PDR uses to office space, not permitted within these zoning districts. However, some complaints that are filed are either not valid, meaning that the tenant is either a PDR complying business or the space was legally converted to office space, prior to the Eastern Neighborhoods rezoning. For these enforcement cases, there is no longer a path to legalization to office use; additionally, many of these office conversions are not recent, and they did not take advantage of the Eastern Neighborhoods Legitimization Program. The program was an amnesty program that established a limited-time opportunity whereby existing uses that have operated without the benefit of required permits may seek those permits. However, this program expired in 2013.

In investigating the alleged violations, the Planning Department discovered that the building permit histories often included interior tenant improvements without Planning Department review. These permits do not authorize a change of use to office. To prevent future unauthorized conversion of PDR space the Planning Department worked proactively with the Department of Building Inspection (DBI). Over the course of 2015, Planning worked with DBI during project intakes to better understand the routing criteria and how to ensure Planning review. Both departments' IT divisions worked together to create a flag in the Permit Tracking System (PTS) to alert project intake coordinators of potential illegal conversions. This is a pilot program that can be expanded at a later date to include other zoning districts if necessary. Planning and DBI continue to work together to monitor this process and plan to meet regularly to discuss additional steps to prevent future conversions.

Planning also works collaboratively with the Mayor's Office of Economic Workforce and Development (OEWD). When Planning receives inquiries or complaints related to either vacant spaces in PDR zones or possible unauthorized spaces, Planning informs the property owner about PDR complying uses and refers them to OEWD. OEWD currently has a list of PDR complying businesses that are looking to lease spaces within San Francisco. Additionally, a training session for real estate brokers was conducted in 2015. The purpose of the voluntary training was to help explain what PDR is and what resources Planning has available for them to utilize prior to leasing a property. The training also outlined the enforcement process, including the process for requesting a Letter of Determination. Future trainings will be held based on interest.

2.4 Employment

The Mission Area Plan Area added employment across all land use types tracked by the Planning Department between 2011 and 2015, following a trend that has taken place in San Francisco and the Bay Area. This growth in employment reflects a rebound in the regional economy following the "Great Recession" of the previous decade, but also the robust growth in high technology sectors and related industries in recent years.[5] Altogether, employment in the Mission grew from roughly 18,000 jobs in 2010 to almost 24,000 with a related increase from 2,700 to 3,000 establishments, according to the California Employment and Development Department (EDD). The next subsections discuss job growth in the Mission by land use category.

2.4.1 Office Jobs

The largest increase in jobs in the Mission between 2010 and 2015 was in office occupations. According to EDD, the neighborhood experienced an almost 70% increase in office jobs in those 5 years. However, the number of office establishments only increased by about 25%, indicating a shift towards office firms with a

5 See annual San Francisco Planning Department Commerce & Industry Inventory, 2008 – 2015.

TABLE 2.A.1

Employment, Mission and San Francisco, Q2 2015

Cultural, Institutional, Educational	119	4%	17,454	45%	2,010	3%	73,182	11%
Medical	1,223	41%	2,409	6%	21,833	37%	60,214	9%
Office	511	17%	6,344	16%	15,628	27%	293,014	44%
PDR / Light Industrial	349	12%	3,723	10%	5,280	9%	88,135	13%
Retail	605	20%	8,802	23%	8,241	14%	130,550	20%
Visitor / Lodging	10	0%	41	0%	311	1%	16,688	2%
Other	187	6%	254	1%	4,961	9%	6,953	1%
Total	**3,004**	**100%**	**39,027**	**100%**	**58,264**	**100%**	**668,736**	**100%**

Source: California Employment Development Department

larger number of employees or occupying formerly vacant space. In 2015 the Mission held about 3% of all of the City's office jobs and 2% of its establishments (see [illegible]).

2.A.3 Retail Jobs

As discussed above, the Mission has also emerged as an important retail destination in San Francisco, with the restaurants, cafes, bars, and shops in the main commercial corridors (particularly Mission, Valencia, 16th,and 24th Streets) attracting visitors from throughout the City, region, and beyond. The number of retail jobs in the Mission increased by 24% between 2010 and 2015 to about 8,800 in more than 600 establishments. The neighborhood represents 7% of the city's retail jobs and establishments.

2.A.4 PDR Jobs

PDR continues to play a critical role in the City's economy, providing quality jobs to employees with a broad range of educational backgrounds, supporting local businesses up- and downstream (for example, many of the city's top restaurants source products from local PDR businesses), and infusing the region with innovative products. Though the trends in loss of PDR space have been widely documented, the City and the Mission both added PDR jobs since 2010. The Mission experienced a 7% increase in PDR employment (to 3,700 jobs) between 2010 and 2015 and 9% increase in number of firms (to 350). Within the three-digit NAICS classifications that make up the Planning Department's definition of PDR, employment increased across several occupational categories, including "other manufacturing", "film and sound recording", and "printing and publishing" occupations and decreased in "construction", "apparel manufacturing" and "transportation and warehousing" occupations, as shown in Appendix F.

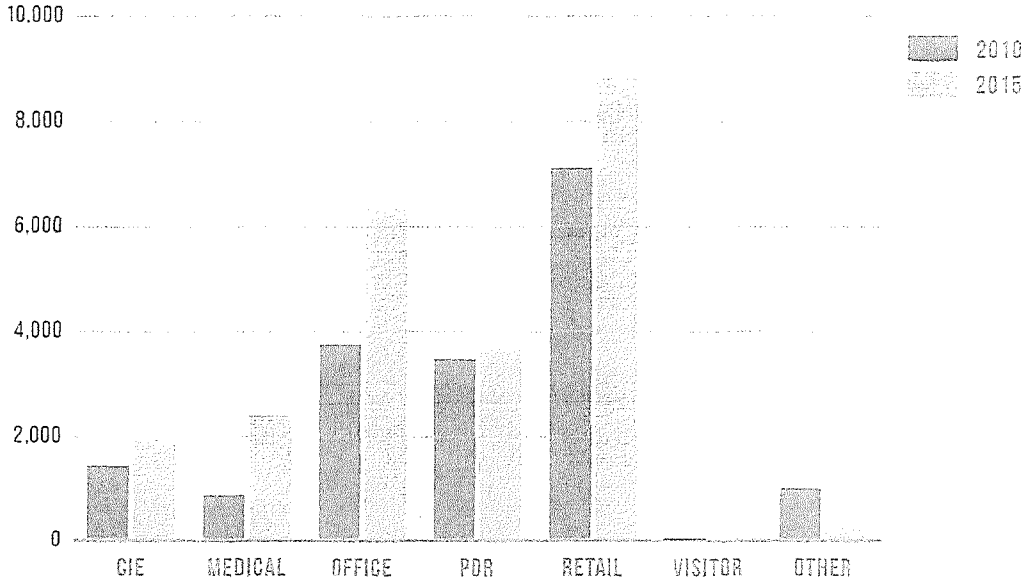
As with other occupations, these increases likely reflect a recovery from the recession as well as the emergence of "maker" businesses and production of customized and high-end consumer products, such as the firm shown in [illegible]. The success of the Plan in curbing large-scale conversion of PDR space has likely played a key role in ensuring that these re-emergent industrial activities are able to locate within San Francisco. The Mission has roughly 4% of the PDR jobs and 7% of the establishments within the City.

2.A.4 Employment and Commercial Space Trends

Over the past five years, the Mission has added a substantial number of jobs, more than 30%

FIGURE 3.4.1

Jobs by Land Use, Mission, Q3 2010 and 2015

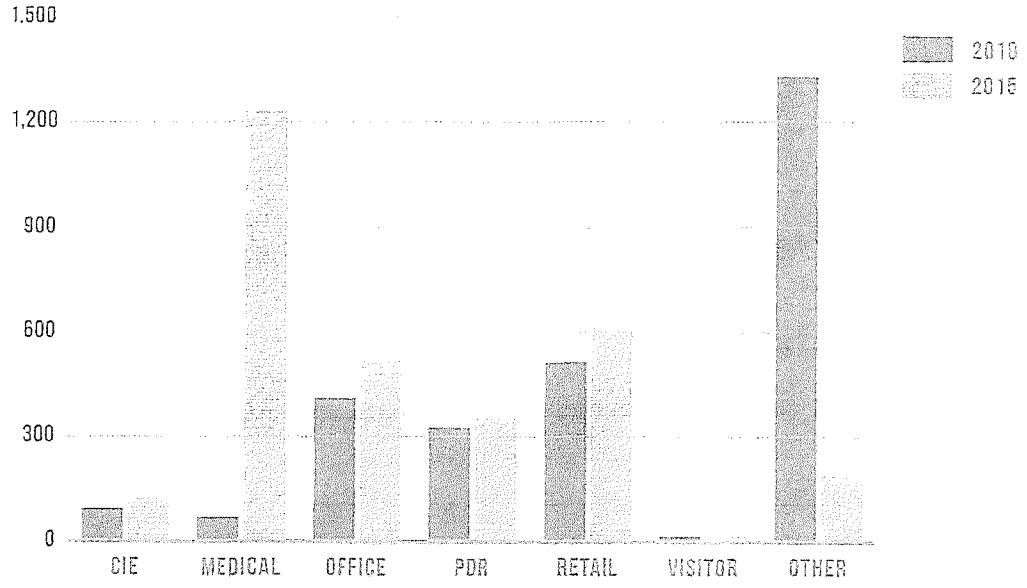


Source: California Employment Development Department

Note: Starting in 2013, the Bureau of Labor Statistics reclassified In-Home Supportive Services (roughly 20,000 jobs city-wide) from the Private Household category (classified as "Other") to other classifications, most of which are captured in this report under "Medical".

FIGURE 3.4.2

Establishment by Land Use, Mission, Q3 2010 and 2015



Source: California Employment Development Department

Note: Starting in 2013, the Bureau of Labor Statistics reclassified In-Home Supportive Services (roughly 20,000 jobs city-wide) from the Private Household category (classified as "Other") to other classifications, most of which are captured in this report under "Medical".

growth, even as its commercial space square footage increased by a small amount (4,000 square feet). In part, many of these new jobs are likely located in commercial space that was vacant at the end of the recession of the previous decade, leading to lower vacancy rates.[6] Another trend that has been underway that may explain the gain in employment without a parallel increase in commercial space is an overall densification of employment (in other words, allowing more jobs to be accommodated within a given amount of space). With the increasing cost of land in locations close to city centers and accessible by transportation infrastructure (as is the case with the Eastern Neighborhoods), real estate researchers have tracked an overall densification of employment across several sectors throughout the country.[7] This kind of densification can be caused by employees who work from home for some or all days of the week (and therefore may share office space with colleagues) or firms that accommodate more employees within a given amount of space.

Sales and Property Taxes

Since the Eastern Neighborhood Area Plans were adopted, the City has also seen sharp increases in collections of sales and property taxes. In the Mission, sales tax collections increased every year from 2011 to 2014, going from $4.5 million to $6.2 million in five years, an increase of almost 40%. By comparison, sales tax collections citywide increased by 26% during this period. Property tax collection also increased substantially in the Eastern Neighborhoods. In the Mission, the city collected roughly $38 million in property taxes in 2008, the year before the plan was adopted. By 2015, property taxes in the Mission increased by 56% to $59 million, as shown on [illegible].

6 Although data to show vacancy rates for the Mission Area Plan Area is not available, commercial real estate brokerage firms like Cushman & Wakefield show that vacancy rates for different types of land uses decreased substantially in San Francisco between 2011 and 2015 across different sectors. See Cushman & Wakefield San Francisco Office Snapshot Q4 2015 and Retail Snapshot Q4 2015.

7 See Gensler, 2013. *US Workplace Survey Key Findings*.

FIGURE 2.4.5

Dandelion Chocolate, 2600 16th Street

Photo by SF Planning, Pedro Peterson

TABLE 2.5.2

Sales Taxes Collected in Mission Area Plan Area, 2011–2015

2011	$4,486,667	–	$75,198,021	–
2012	$4,913,267	9.5%	$80,709,201	7.3%
2013	$5,292,732	7.7%	$84,261,806	4.4%
2014	$5,598,902	5.8%	$89,605,413	6.3%
2015	$6,227,719	11.2%	$94,546,142	5.5%
TOTAL	**$26,519,287**		**$424,320,583**	

Source: San Francisco Controller's Office.

TABLE 2.5.3

Property Taxes Collected in the Eastern Neighborhoods, 2008 and 2015

Mission	**$37,908,346**	**$58,957,413**
Central Waterfront	$5,704,111	$10,338,391
East SoMa	$46,831,664	$63,172,434
Showplace Square/Potrero Hill	$29,446,594	$47,803,586
Western SoMa	$17,146,718	$24,348,243
Total	**$137,037,433**	**$204,620,067**

Source: SF Assessor's Office for 2008 data (assessed values times tax rate of 1.163%) and Tax Collector's Office for 2015.

3. Housing

The provision of adequate housing to residents of all incomes has long been a challenge in San Francisco. Over the past five years, however, San Francisco epitomized the housing affordability crisis afflicting American cities and coastal communities throughout California. As discussed in the previous section, the Bay Area, city, and Mission neighborhood have all seen robust employment growth since the "Great Recession" triggered by the financial crisis in 2007. During this period, the city has added housing units much more slowly than new employees. As a result, a growing and more affluent labor force has driven up the costs of housing, making it increasingly difficult for low and moderate income families to remain in San Francisco.

In the past five years, the Mission has been a focal point of struggles over housing as well as efforts by the City to ensure that its residents can continue to live there. One of the main goals of the *Mission Area Plan* is to increase the production of housing affordable to a wide-range of incomes. The environmental analysis conducted for the EN EIR estimated that between 800 and 2,000 additional units could be developed as a result of the rezoning associated with the *Mission Area Plan*.[8] The Plan also recognizes the value of the existing housing stock and calls for its preservation, particularly given that much of it is under rent control. Dwelling unit mergers are strongly discouraged and housing demolitions are allowed only on condition of adequate unit replacement.

8 Eastern Neighborhoods Rezoning and Area Plans Environmental Impact Report (2005).

3.1 Housing Inventory and New Housing Production

The Planning Department's latest housing inventory, using US Census and permit data, shows that the Mission has roughly 25,000 housing units as of the end of 2015; this represents 6.6% of the citywide total.[9] [illegible] shows a net gain of approximately 564 units in the past five years in the Mission, compared with 861 net units added between 2006 and 2010. Of the new units produced, 76 were conversions from non-residential uses and the rest were completed from new construction.

During the first two years of the reporting period, 2011 and 2012, the construction sector was still recovering from the slow-down of the recession, and only 47 new units were built. Between 2013 and 2015, however, the Mission added 518 new units, or 173 units per year. This yearly average is almost identical to the average between 2006 and 2010, when the Mission added 164 units per year. [illegible] shows the citywide figures for comparison. Nearly 6% of the net increase in the City's housing stock in the last five years was in the Mission area.

[illegible] shows the location of recent housing construction. The vast majority of new units added during the 2011-2015 reporting period are located north of 16th Street and west of Mission Street. All of the new residential development in the sourther portion of the Mission during this period has been in projects adding one or two net units. Additional details about these new development projects can be found in [illegible].

9 2015 San Francisco Housing Inventory.

TABLE [illegible]

New Housing Production, Mission, 2011–2015

2011	–	14	(1)	(15)
2012	47	–	11	58
2013	242	1	16	257
2014	75	1	2	76
2015	140	–	48	188
TOTAL	**504**	**16**	**76**	**564**

Source: San Francisco Planning Department

Note: Includes all developments in the Plan Area during reporting period, including those that did not receive CEQA clearance under Eastern Neighborhoods EIR.

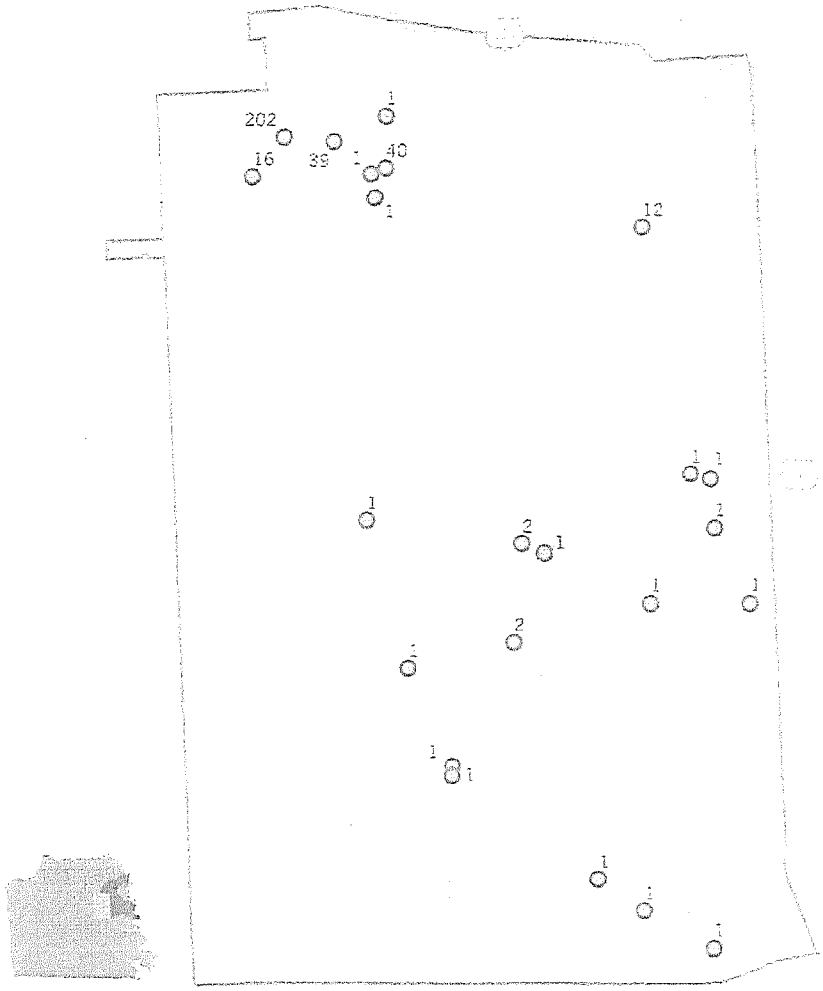
TABLE [illegible]

New Housing Production, San Francisco, 2011–2015

2011	348	84	5	269
2012	796	127	650	1,319
2013	2,330	429	59	1,960
2014	3,455	95	156	3,516
2015	2,472	25	507	2,954
TOTAL	**9,401**	**760**	**1,377**	**10,018**

Source: San Francisco Planning Department

New Housing Production Mission 2011–2015



○ Net Units

Note: Projects that added 5 or more net new units.

3.2 Housing Development Pipeline

As discussed above in the Commercial Activity chapter, the pipeline should be analyzed along two different categories: projects that have submitted planning and building applications (under review) and projects that have received entitlements and are either awaiting or are under construction. The latter (particularly those under construction) are considered much more likely to add residential or commercial capacity to the city's building stock in the short-to-medium term, while under review projects may require clearance from environmental review, variances to planning code restrictions, and discretionary review. In general, the Planning Department estimates that projects that are currently under construction can take up to two years to be ready for occupancy, entitled projects can take between two and seven years, while projects under review can take as many as ten years, if they are indeed approved.

The pipeline for new housing development in the Mission as of the end of 2015 is 1,855 units, of which 1,467 are under review. Roughly 400 units are entitled, of which half are currently under construction, as shown on [illegible]. The pipeline for the Mission accounts for 9% of the total number of projects in the City, though only 3% of the number of units, which suggests that new projects are of a smaller scale than housing developments in the pipeline for San Francisco as a whole.

The current housing pipeline is much more robust than it was at the end of 2010, shown in the previous Monitoring Report. In that year, only seven projects (with a total of nine units) were under construction, 25 projects with 422 units were entitled, and 53 projects with 585 units were under review. As of the end of 2015, twice as many projects were under review for more than three times the number of units, reflecting a much stronger market and willingness by developers to build new housing.

[illegible] shows the location of these proposed housing projects by development status. By-and-large,

TABLE 3.2.1

Housing Development Pipeline, Mission, and San Francisco, Q4 2015

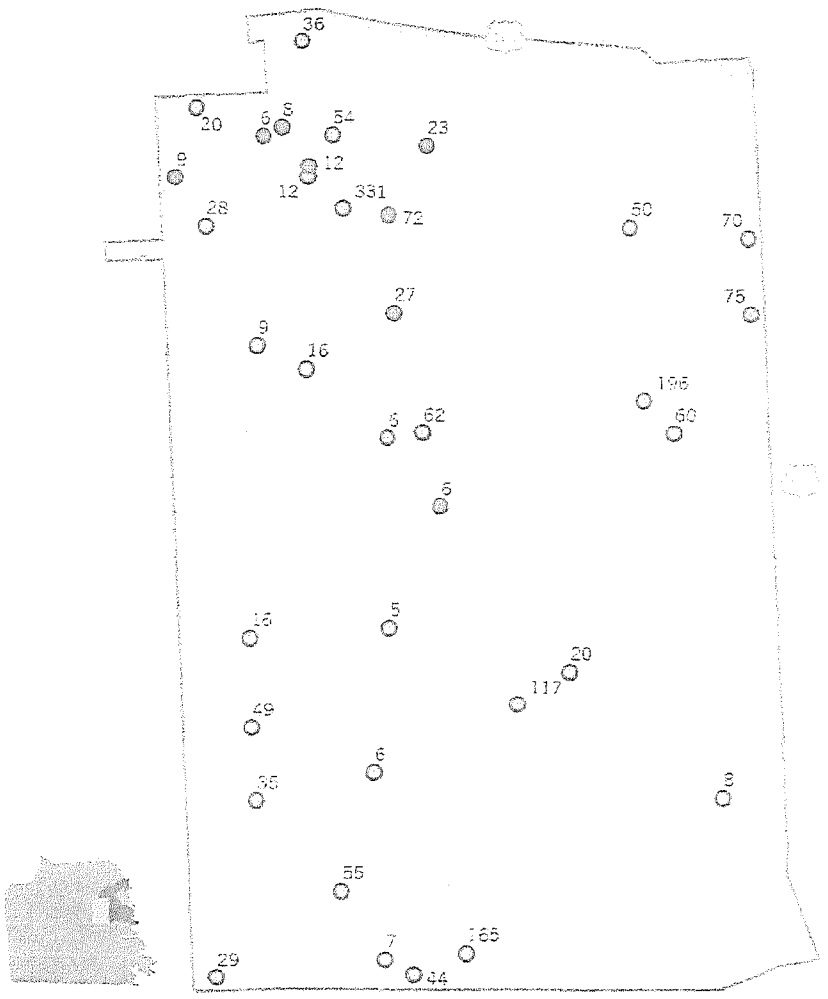
[illegible]	[illegible]	[illegible]	[illegible]	[illegible]	[illegible]	[illegible]
Construction	200	22	17	8,816	979	232
Planning Entitled	188	18	29	31,546	6,141	353
Planning Approved	14	–	5	27,617	12	80
Building Permit Filed	16	–	5	1,529	73	36
Building Permit Approved/ Issued/ Reinstated	158	18	19	2,400	6,056	237
Under Review	1,467	43	65	21,752	1,797	708
Planning Filed	909	37	25	17,575	1,574	206
Building Permit Filed	558	6	40	4,177	223	502
Total	1,855	83	111	62,114	8,917	1,293

Source: San Francisco Planning Department

Note: Includes all residential developments in the pipeline as of December 31, 2015, including those that did not (or will not) receive CEQA clearance under Eastern Neighborhoods EIR.

MAP 5

Housing Development Pipeline by Development Status, Mission, Q4 2015



- Entitled
- Under Construction
- Under Review

Note: Only includes residential developments with 5 or more units.

projects that are entitled and under construction are located north of 20th Street. The sourthern portion of the Mission Area Plan Area has a number of proposed projects that are currently under review, although only one project is under construction, at 1050 Valencia Street. Appendix C provides a detailed list of these housing pipeline projects.

3.3 Affordable Housing in the Mission

San Francisco and the Mission Area Plan Area have a number of policies in place to facilitate the development of affordable housing. This section describes some of these policies and discusses affordable housing development in the Plan Area over the pasts five years.

3.3.1 Affordable Housing Efforts: Citywide, Eastern Neighborhoods, and Mission

The City of San Francisco has a number of programs to provide housing opportunities to families whose incomes prevent them from accessing market-rate housing. The San Francisco Housing Authority (SFHA) maintains dozens of properties throughout the City aimed at extremely low (30% of AMI), very low (50% of AMI) and low (80% of AMI) income households. Households living in SFHA-managed properties pay no more than 30% of their income on rent, and the average household earns roughly $15,000. Four of these properties are located within the Eastern Neighborhoods boundaries: two in the Mission and two in Potrero Hill.

The City has also launched HOPE SF, a partnership between the SFHA, the Mayor's Office of Housing and Community Development (MOHCD), community organizations, real estate developers, and philanthropies to redevelop some of the more dilapidated public housing sites into vibrant mixed-income communities with a central goal of keeping existing residents in their neighborhoods. One of the Hope SF projects, Potrero Terrace/ Annex is located in the Eastern Neighborhoods (Showplace Square/Potrero Hill). MOHCD also maintains a number of funding programs to provide capital financing for affordable housing developments targeting households earning between 30 and 60% of AMI, low-income seniors, and other special needs groups. In most cases, MOHCD funding is leveraged to access outside sources of funding, such as Federal Low Income Housing Tax Credits, allocated by the State.

One of the most powerful tools to promote affordable housing development in San Francisco is the inclusionary housing program specified in Section 415 of the Planning Code. This program requires that developments of 10 or more units of market rate housing must restrict 12% of the units to families earning below 55% of AMI (for rental units) or 90% of AMI (for ownership units). Developers can opt to build the units "off-site" (in a different building), within a 1-mile radius from the original development, as long as units are sold to households earning less than 70% of AMI. In this case, the requirement is increased to 20% of the total number of units in the two projects. Proposition C, approved by San Francisco voters in June 2016, increases the minimum inclusionary housing requirement to 25% on projects larger than 25 units. The Board of Supervisors may change this amount periodically based on feasibility studies by the Controller's Office. The income and rent limits for housing units managed by the Mayor's Office of Housing are included in Appendix G.

The Mayor, Board of Supervisors, Planning Department, and Mayor's Office of Housing have recently passed or introduced legislation to further expand the supply of affordable housing throughout the City. The Board recently adopted an ordinance to encourage accessory dwelling units (ADUs) throughout the City, expanding on previous legislation allowing such units in Supervisor Districts 3 and 8. These ordinances remove obstacles to the development of ADUs, including density limits and parking requirements, in order to incentivize a housing type that has been identified as a valuable option for middle-class households that do not require a lot of space.[10]

Another policy that has the potential to add thousands of units of affordable housing to the city's stock is the Affordable Housing Bonus

10 Wegmann, Jake, and Karen Chapple. "Hidden density in single-family neighborhoods: backyard cottages as an equitable smart growth strategy." *Journal of Urbanism: International Research on Placemaking and Urban Sustainability* 7.3 (2014): 307-329.

Program, which is currently under review by the City. The Board recently approved the portion of the program that allows developers to build up to three stories above existing height limits in 100% affordable projects. Another component of the program that is under consideration would allow developers in certain areas to build up to an additional two stories of market rate housing above what is allowed by their height limit district, in exchange for providing additional affordable housing, with a special focus on middle-income households. With the exception of 100% affordable projects, the local Bonus Program would not apply to parcels in the Eastern Neighborhoods, as most do not currently have density restrictions. The program is intended to expand housing development options outside of the Eastern Neighborhoods, where housing development has been limited in recent decades.

In addition to the Citywide programs described above, the Eastern Neighborhoods Area Plans also placed a high priority on the production and protection of affordable housing, and created policies to expand access to housing opportunities to low and moderate-income families. For example, market-rate housing developments in the Urban Mixed Use (UMU) district are required to restrict between 14.4 and 17.6% of their units to families at or below 55% of AMI for rental and 90% of AMI for ownership, depending on the amount of "upzoning" given to the property by the Plans. If these units are provided off-site, the requirement ranges from 23 to 27%. In the UMU and Mission NCT district, developers also have the option of dedicating land to the City that can be developed as 100% affordable projects.

Developers also have the option of paying a fee in lieu of developing the units themselves, which the City can use to finance the development of 100% affordable projects. Funds collected through these "in-lieu fees" are managed by the Mayor's Office of Housing and Community Development and can be spent anywhere in the City. However, 75% of fees collected in the Mission NCT and East SoMa MUR districts are required to be spent within those districts themselves. The Plans also require bedroom mixes in its mixed use districts to encourage 2- and 3-bedroom units that are suitable to families, including the units sold or leased at below-market rates. Lastly, in order to reduce the costs and incentivize housing production, the Plans removed density controls and parking requirements in many of its zoning districts, particularly those well-served by public transit and pedestrian and bike infrastructure.

3.4 New Affordable Housing Production, 2011–2015

As discussed in this report's introduction, expanding access to affordable housing opportunities was a high priority for the communities in the Eastern Neighborhoods during the planning process, and it has only gained more urgency in recent years. The Mission in particular has been a symbol of the pressures of exploding housing costs on neighborhood stability and character.

As Table 3.4.1 shows, 56 income-restricted affordable units were built during the 2011-15 five-year monitoring period, compared to 446 developed over the previous five years (2006-2010). The main difference between the two periods is that no publicly subsidized developments were built in the Mission in the most recent five-year stretch, while two large, fully affordable projects were built in 2006 and 2009 (Valencia Gardens and 601 Alabama, respectively) with a total of 411 units.

The 56 units built between 2011 and 2015 make up 11% of the 504 newly constructed units built in the Mission (shown on Table 3.1.1), slightly lower than the inclusionary housing minimum of 12%. The percentage is lower than the minimum because seven projects (shown on Table 3.4.3) chose to pay a fee to the City in lieu of building the units on-site. These fees raised $7.3 million for the City's housing development program managed by MOHCD. New affordable units are estimated to cost roughly $550,000 in construction costs (not including land), towards which MOHCD contributes about $250,000, requiring the developer to raise the rest from Federal, State, and other sources. Therefore, it is estimated that the "in-lieu fees" collected in the Mission in this period, if successfully leveraged into additional external funding and used to build projects on

publicly controlled land, could yield an additional 30 units.[11] Moreover, projects with fewer than 10 units are exempt from the inclusionary housing requirement.

Out of the 56 inclusionary units, 40 were rental units targeted to low-income households (55% of AMI) at the 194-unit development at 1880 Mission Street. The rest were ownership units restricted to moderate-income households (90% AMI). An additional 20 secondary or "granny" units, which are not restricted by income, but are generally considered "more affordable by design to moderate-income households were added in the Plan Area. [illegible] lists the affordable housing developments completed between 2011 and 2015.

The inclusionary housing production in the Mission accounts for 7% of the citywide production (853 units, as shown in table 3.4.2 between 2011 and 2015). Because no publicly subsidized developments were completed in this period, the Mission only built 2% of the city's income-restricted units (2,497) during the period.

11 The development costs of affordable housing units are rough estimates based on recent projects that have received assistance from MOHCD.

TABLE 3.4.1

Affordable Housing Production, Mission, 2011–2015

[illegible]	[illegible]	[illegible]	[illegible]	[illegible]
2011	–	–	5	5
2012	–	2	2	4
2013	–	40	3	43
2014	–	8	3	11
2015	–	6	7	13
TOTAL	–	**56**	**20**	**76**

Source: San Francisco Planning Department and Mayor's Office of Housing and Community Development

Note: Secondary units are considered "naturally affordable" and are not income restricted like units produced through the inclusionary housing program or through public subsidies.

TABLE 3.4.2

Affordable Housing Production, San Francisco, 2011–2015

[illegible]	[illegible]	[illegible]	[illegible]	[illegible]
2011	141	4	60	205
2012	377	98	38	513
2013	464	216	30	710
2014	449	249	57	755
2015	213	286	53	552
TOTAL	**1,644**	**853**	**238**	**2,735**

Source: San Francisco Planning Department and Mayor's Office of Housing and Community Development

Note: Secondary units are considered "naturally affordable" and are not income restricted like units produced through the inclusionary housing program or through public subsidies.

TABLE 3.A.3

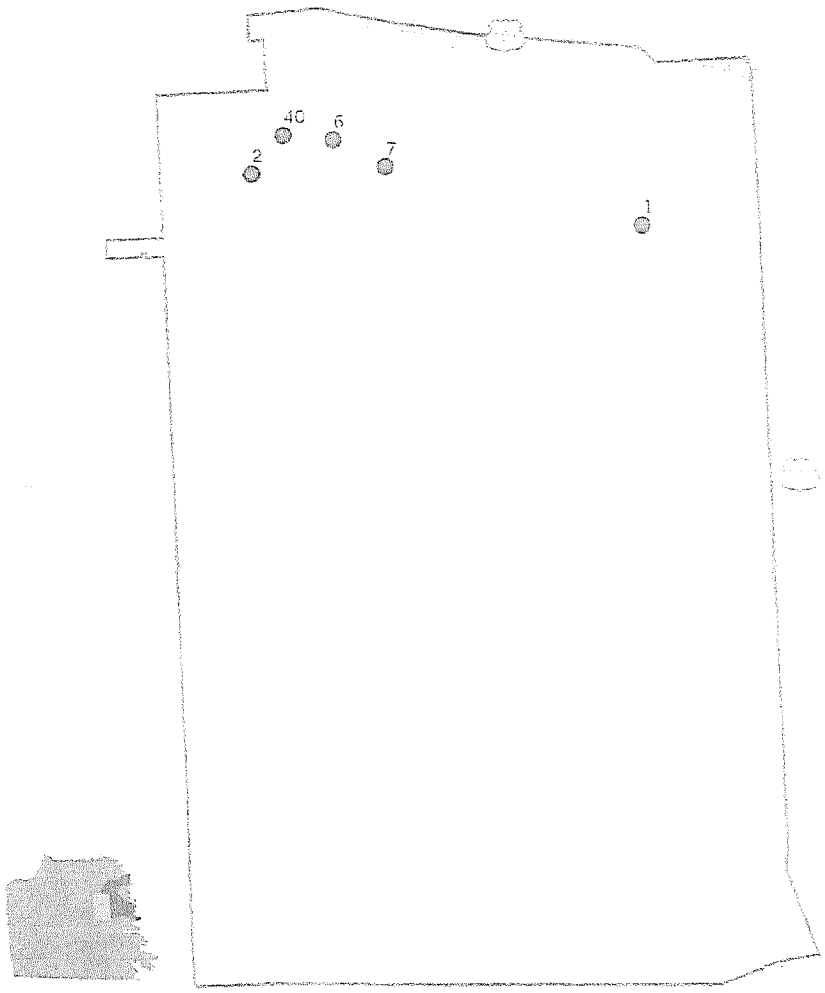
Housing Developments Opting for Affordable Housing "In-lieu" Fee, Mission, 2011–2015

3500 19TH ST	2012	$1,119,972
3418 26TH ST	2012	$685,574
2652 HARRISON ST	2012	$975,904
899 VALENCIA ST	2013	$1,119,260
1050 VALENCIA ST	2013	$756,939
3420 18TH ST	2015	$1,001,589
1450 15TH ST	2015	$1,654,354
GRAND TOTAL		**$7,313,592**

Source: Department of Building Inspection

MAP 9

New Affordable Housing, Mission, 2011–2015



Market-rate Project with Inclusionary Housin

3.5 Housing Stock Preservation

A key component in promoting neighborhood affordability and stability is to preserve the existing stock of housing. New housing development in San Francisco is costly and preserving homes can prevent displacement of families and disruption in tight-knit communities such as the Mission. The *Mission Area Plan* supports the preservation of the area's existing housing stock and prohibits residential demolition unless this project ensures sufficient replacement of housing units. Restrictions on demolitions also help to preserve affordable and rent-controlled housing and historic resources.

A neighborhood's housing stock can also change without physical changes to the building structure. Conversions of rental housing to condominiums can turn housing that is rent controlled and potentially accessible to those of low to moderate income households to housing that can be occupied by a narrower set of residents, namely, those with access to down payment funds and enough earning power to purchase a home. Lastly, rental units can be "lost" to evictions of various types, from owners moving in to units formerly occupied by tenants to the use of the Ellis Act provisions in which landlords can claim to be going out of the rental business in order to force residents to vacate their homes.

One important priority of the Plan's housing stock preservation efforts is to maintain the existing stock of single room occupancy (SRO) hotels, which often serve as a relatively affordable option for low income households. [illegible] includes a list of SRO properties and number of residential units.

The following subsections document the trends in these various types of changes to the housing stock in the Mission Area Plan Area and San Francisco between 2011 and 2015 and comparing the most recent five years with the preceding 5-year period.

3.5.1 Units lost to demolition or alteration

In this most recent reporting period, 30 units were demolished or lost through alteration in the Mission ([illegible]) or less than 3% of units demolished citywide. In the previous reporting period, 15 units were lost to demolition or alteration. [illegible] shows San Francisco figures for comparison. Illegal units removed also result in loss of housing; corrections to official records, on the other hand, are adjustments to the housing count.

TABLE 3.5.1

Units Lost, Mission, 2011–2015

[illegible]	[illegible]				[illegible]	[illegible]
2011	–	7	–	–	7	14	21
2012	–	–	–	–	–	–	–
2013	–	–	–	–	–	1	1
2014	3	–	–	–	3	1	4
2015	4	–	–	–	4	–	4
TOTAL	7	7	–	–	14	16	30

Source: San Francisco Planning Department

TABLE 3.5.2

Units Lost, San Francisco, 2011–2015

Calendar Year	Units Lost Due to Demolitions or Mergers						
2011	39	22	1	3	65	84	149
2012	2	23	1	1	27	127	154
2013	70	38	2	–	110	427	537
2014	24	20	1	–	45	95	140
2015	100	12	1	3	116	25	141
TOTAL	235	115	6	7	363	758	1,121

Source: San Francisco Planning Department

3.5.2 Condo Conversions

Condo conversions increase San Francisco's homeownership rate, estimated to be at about 37% in 2014. However, condo conversions also mean a reduction in the City's rental stock. In 2014, an estimated 76% of households in the Mission were renters. According to the American Community Survey, there was no change in the owner/renter split in the Mission or in San Francisco between 2009 and 2014. Almost 8% of San Francisco's rental units are in the Mission as of 2014, the same figure as in 2009.[12]

Table 3.5.3 shows that in the last five years, 284 units in 105 buildings in the Mission were converted to condominiums, compared to 307 units in 133 buildings between 2006 and 2010. In all, approximately 0.6% of all rental units in the Mission were converted to condominiums between 2011 and 2015. This represents 11% of all condo conversions citywide.

12 San Francisco Neighborhood Profiles, American Community Survey 2010-2014, San Francisco Planning Department 2016. According to the Census, there are roughly 19,000 renter-occupied units in the Mission. The neighborhood boundaries for the Mission in the Neighborhood Profiles do not match perfectly with the Plan Area boundaries, though they are very close. Therefore, these percentages should be read as approximations.

TABLE 3.5.3

Condo Conversion, Mission, 2011–2015

Year	Mission Buildings Converted	Mission Units Converted	San Francisco Buildings Converted	San Francisco Units Converted	Mission Units as % of SF Units	Mission Buildings as % of SF Buildings
2011	23	55	200	472	12%	12%
2012	18	43	201	488	9%	9%
2013	17	42	147	369	12%	11%
2014	29	81	239	727	12%	11%
2015	18	63	149	500	12%	13%
Totals	105	284	936	2,556	11%	11%

Source: DPW Bureau of Street Use and Mapping

3.5.5 Evictions

Evictions by owners that choose to move in to their occupied rental units or use the Ellis Act provisions to withdraw their units from the rental market also cause changes to the housing stock. These evictions effectively remove units from the rental housing stock and are, in most cases, precursors to condo conversions.

Table 3.5.4 shows that owner move-ins led to evictions in 103 units (compared to 73 units between 2006 and 2010). The annual trend from 2011 and 2014 (between 13 and 22) was similar to the annual evictions for the previous 5-year reporting period, but these types of evictions surged to 35 in 2015. Similarly, Ellis Act withdrawals led to 113 evictions during the most recent reporting period (compared to 71 in the previous period). Owner move-in evictions in the Mission accounted for 8% of the citywide total while the Plan Area accounted for 18% of Ellis Act evictions in San Francisco between 2011 and 2015.

During these five years, an estimated 1% of rental units in the Mission experienced owner move-in and Ellis Act evictions. However, this number may not capture buy-outs or evictions carried out illegally without noticing the San Francisco Rent Board. Other types of evictions, also tabulated in Table 3.5.4, include evictions due to breach of rental contracts or non-payment of rent; this could also include evictions to perform capital improvements or substantial rehabilitation.

TABLE 3.5.4

Evictions, Mission, 2011–2015

Year	Mission			San Francisco			[illegible]		
	[illegible]	[illegible]	[illegible]	[illegible]	[illegible]	[illegible]	[illegible]	[illegible]	[illegible]
2011	13	4	64	123	54	1102	11%	7%	6%
2012	19	23	74	172	99	1343	11%	23%	6%
2013	22	51	95	275	229	1368	8%	22%	7%
2014	14	16	120	315	101	1550	4%	16%	8%
2015	35	19	100	425	142	1518	8%	13%	7%
Totals	**103**	**113**	**453**	**1,310**	**625**	**6,881**	**8%**	**18%**	**7%**

Source: San Francisco Rent Board

Note: Evictions classified under "Other" include "at fault" evictions such as breach of contract or failure to pay rent.

3.6 Jobs Housing Linkage Program (JHLP)

Prompted by the *Downtown Plan* in 1985, the City determined that large office development, by increasing employment, attracts new residents and therefore increases demand for housing. In response, the Office of Affordable Housing Production Program (OAHPP) was established in 1985 to require large office developments to contribute to a fund to increase the amount of affordable housing. In 2001, the OAHPP was re-named the Jobs-Housing Linkage Program (JHLP) and revised to require all commercial projects with a net addition of 25,000 gross square feet or more to contribute to the fund. Between fiscal year 2011-12 and 2015-16, commercial developments in the Mission Area Plan Area generated roughly $900,000 to be used for affordable housing development by the city.

TABLE 3.6.1

Jobs Housing Linkage Fees Collected, Mission, FY 2011/12–2015/16

[illegible]	[illegible]
2011–12	$–
2012–13	$893,542
2013–14	$–
2014–15	$6,205
2015–16	$-
Total	$899,747

*Department of Building Inspection as of 6/1/16

4. Accessibility and Transportation

The Mission Area Plan Area is characterized by a multitude of mobility options and its residents access employment and other destinations through a variety of transport modes. A much lower share of commuters in the Mission travel to work by car than the rest of San Francisco (29% to 44%, respectively), a comparison that is true for people who drive alone as well as those who carpool. As [illegible] shows, the most widely used commute mode in the Mission is public transit, which is used by 41% of residents (compared to 33% citywide), and other alternative commute modes also play an important role, including biking at 9% (more than twice the citywide share), walking at 11%, and working at home at 8%. In order to maintain this characteristic and move towards lower dependency on private automobiles, the Mission Area Plan's objectives related to transportation all favor continued investments in public transit and improving pedestrian and bicycle infrastructure rather than facilitating auto ownership, circulation, and parking.

TABLE 4.1.1

Commute Mode Split, Mission and San Francisco

[illegible]	Mission		San Francisco		[illegible]
Car	9,057	29%	199,470	44%	5%
Drove Alone	7,809	25%	165,151	36%	5%
Carpooled	1,248	4%	34,319	8%	4%
Transit	12,942	41%	150,222	33%	9%
Bike	2,852	9%	17,356	4%	16%
Walk	3,532	11%	46,810	10%	8%
Other	844	3%	10,579	2%	8%
Worked at Home	2,410	8%	32,233	7%	7%
Total	**31,637**	**100%**	**456,670**	**100%**	**7%**

Source: 2014 American Community Survey 5-year estimate

4.1 Eastern Neighborhoods TRIPS Program

The Eastern Neighborhoods Transportation Implementation Planning Study (EN TRIPS) Report assessed the overall transportation needs for the Eastern Neighborhoods and proposed a set of discreet projects that could best address these needs in the most efficient and cost beneficial manner. EN Trips identified three major projects for prioritization:

(1) Complete streets treatment for a Howard Street / Folsom Street couplet running between 5nd and 11th Street

(2) Complete streets and transit prioritization improvements for a 7th Street and 8th Street couplet running between Market and Harrison Street in East Soma

(3) Complete streets and transit prioritization improvements for 16th Street (22-Fillmore) running between Church Street and 7th Street.

Other broader improvements were also discussed including street grid and connectivity improvements through the northeast Mission and Showplace Square, bicycle route improvements throughout particularly along 17th Street, and mid-block signalizations and crossings in South of Market.

4.2 Pedestrian and Bicycle Improvements

The *Mission Area Plan* calls for the creation of a network of "Green Connector" streets with wider sidewalks and landscaping improvements that connects open spaces and improves area walkability. The Plan proposes improvements in the vicinity of 16th Street, in the center of the Mission around 20th Street and through the southern part of the Mission including Cesar Chavez Street. Additionally north-south connections are suggested for Potrero Avenue and Folsom Streets. Numerous pedestrian improvements have also been proposed in the *Mission Public Realm Plan*.

The Mission District Streetscape Plan furthered the Mission Area Plan and EN Implementation Document by identifying general district-wide strategies for improving streets and by providing conceptual designs for 28 discreet projects. The Plan looked to create identifiable plazas and gateways, improve alley and small streets, provide traffic calming in the predominately residential neighborhoods, re-envision the Districts throughways, and mixed-use (i.e. light industrial) streets; and further enliven the commercial corridors at key locations. Several of the Mission District Streetscape Plan projects have been implemented including, but not limited to, the Mission District Folsom Street road diet improvements, Bryant Street streetscaping, and the Bartlett Street Streetscape Improvement Project.

In January 2011, San Francisco's *Better Streets Plan*, adopted by the Board of Supervisors in December 2010, went into effect. The plan contains design guidelines for pedestrian and streetscape improvements and describes streetscape requirements for new development. Major themes and ideas include distinctive, unified streetscape design, space for public life, enhanced pedestrian safety, universal design and accessibility, and creative use of parking lanes. The *Better Streets Plan* only describes a vision for ideal streets and seeks to balance the needs of all street users and street types. Detailed implementation strategies will be developed in the future.

In 2014, San Francisco adopted Vision Zero, a commitment to eliminating traffic-related fatalities by 2024. The City has identified capital projects to improve street safety, which will build on existing pedestrian, bicycle, and transit-rider safety programs. The first round will include 245 projects, including several in the Mission, shown on Table 4.2.1. Pedestrian safety improvements such as new crosswalks and "daylighting" (increasing the visibility of pedestrian crossings) will be constructed along Mission Street between 18th and 23rd Streets. Additionally, a variety of multimodal improvements, such as daylighting and vehicle turn restriction, are being implemented at the intersection of Valencia Street and Duboce Avenue. A new traffic signal has also recently been installed at the intersection of 16th and Capp Streets.

Lastly, the southwest Bart plaza was reconstructed in 2014 to emphasize flexible open space over the previous cluttered configuration; elements include removed fencing, new paving, landscaping and street furniture.

TABLE A.2.1.

Vision Zero Projects in Mission Area Plan Area

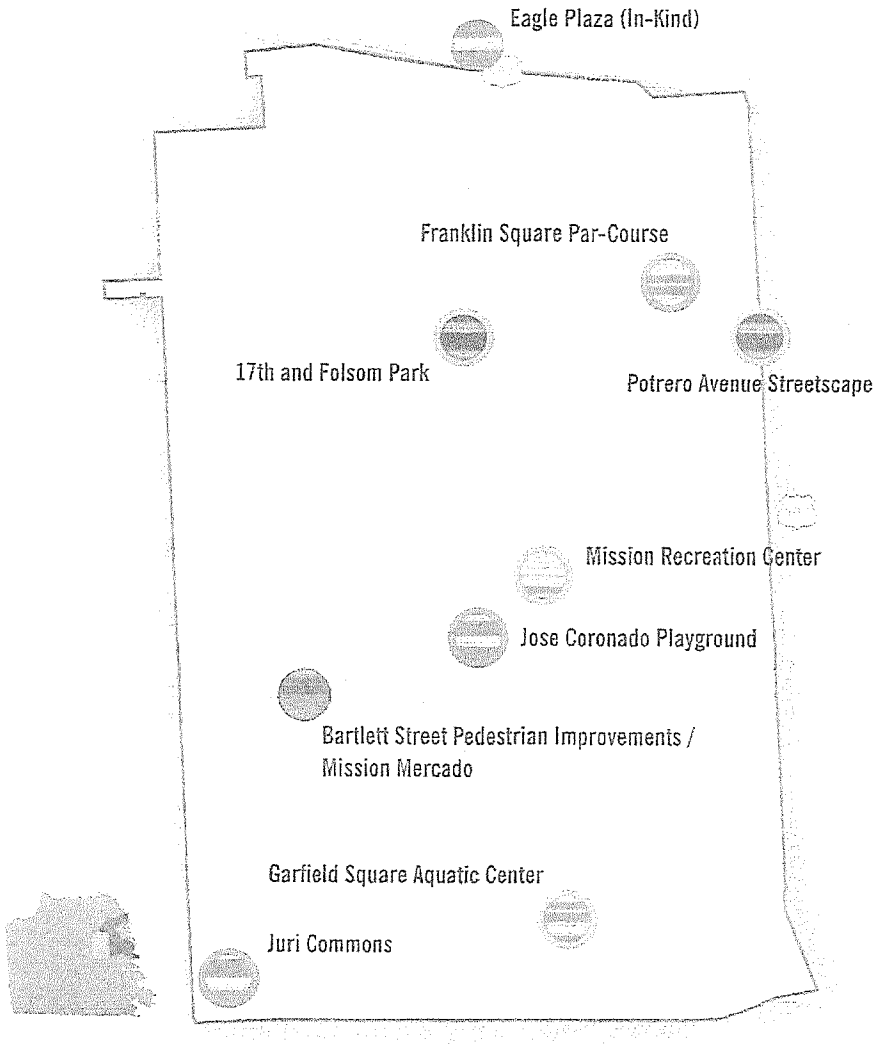
Project Name	Start Date (FY)	Completion Date (FY)	Current Phase	Total Budget ($)
16th Street at Capp Street – New Traffic Signal	Winter 2013/2014	Fall 2016	Complete	$350,000
Cesar Chavez SR2S Project	Spring 2014	Winter 2016/17	Design	$385,000
Valencia St./Duboce Ave Multimodal Improvements	Winter 2014/2015	Summer 2015	Design	$5,000,000
11th St./13th St./ Bryant St. Bicycle and Pedestrian Spot Improvements	Winter 2014/2015	Fall 2015	Design	$150,000
Potrero Ave., from Division to Cesar Chavez Streetscape Project	Winter 2014/2015	Winter 2017/18	Design	$4,100,000
Mission Street, from 18th to 23rd (Pedestrian Safety Intersection Improvements)	Winter 2014/2015	Summer 2015	Design	$86,000
Pedestrian Countdown Signal (3 Signals)	Spring 2015	Winter 2016/17	Design	$417,000

Source: San Francisco Municipal Transportation Agency

5. Community Improvements

The Eastern Neighborhoods Plan included Public Benefits a framework for delivering infrastructure and other public benefits. The public benefits framework was described in the Eastern Neighborhoods "Implementation Document", which was provided to the public, the Planning Commission, and the Board of Supervisors at the time of the original Eastern Neighborhoods approvals. This Implementation Document described infrastructure and other public benefits needed to keep up with development, established key funding mechanisms for the infrastructure, and provided a broader strategy for funding and maintaining newly needed infrastructure. Below is a description of how the public benefit policies were originally derived and expected to be updated. [illegible] shows the location of community improvements underway or completed in the Mission Area Plan Area between 2011 and 2015.

Community Improvements in the Mission, 2011–2015



Project Status

- Complete
- Construction / Near Construction
- Planned

Project Size

- Major
- Community

5.1 Need, Nexus and Feasibility

To determine how much additional infrastructure and services would be required to serve new development, the Planning Department conducted a needs assessment that looked at recreation and open space facilities and maintenance, schools, community facilities including child care, neighborhood serving businesses, and affordable housing.

A significant part of the Eastern Neighborhoods Plans was the establishment of the Eastern Neighborhoods Community Impact Fee and Fund. Nexus Studies were conducted as part of the original Eastern Neighborhoods effort, and then again as part of a Citywide Nexus and Levels-of-Service study described below. Both studies translated need created by development into an infrastructure cost per square foot of new development. This cost per square foot determines the maximum development impact fee that can be legally charged. After establishing the absolute maximum fee that can be charged legally, the City then tests what maximum fee can be charged without making development infeasible. In most instances, fees are ultimately established at lower than the legally justified amount determined by the nexus. Because fees are usually set lower than what could be legally justified, it is understood that impact fees cannot address all needs created by new development.

Need for transportation was studied separately under EN Trips and then later under the Transportation Sustainability Program. Each infrastructure or service need was analyzed by studying the General Plan, departmental databases, and facility plans, and with consultation of City agencies charged with providing the infrastructure or need. As part of a required periodic update, in 2015, the Planning Department published a Citywide Needs Assessment that created levels-of-service metrics for new parks and open space, rehabilitated parks and open space, child care, bicycle facilities, and pedestrian facilities ("San Francisco Infrastructure Level of Service Analysis").

Separate from the Citywide Nexus published in 2015, MTA and the Planning Department also produced a Needs Assessment and Nexus Study to analyze the need for additional transit services, along with complete streets. This effort was to provide justification for instituting a new Transportation Sustainability Fee (TSF) to replace the existing Transit Development Impact Fee (TDIF). In the analysis, the derived need for transit from new development is described providing the same amount transit service (measured by transit service hours) relative to amount of demand (measured by number of auto plus transit trips).

Between the original Needs Assessment, and the Level-of-Service Analysis, and the TSF Study the City has established metrics that establish what is needed to maintain acceptable infrastructure and services in the Eastern Neighborhoods and throughout the City. These metrics of facilities and service needs are included in Appendix I.

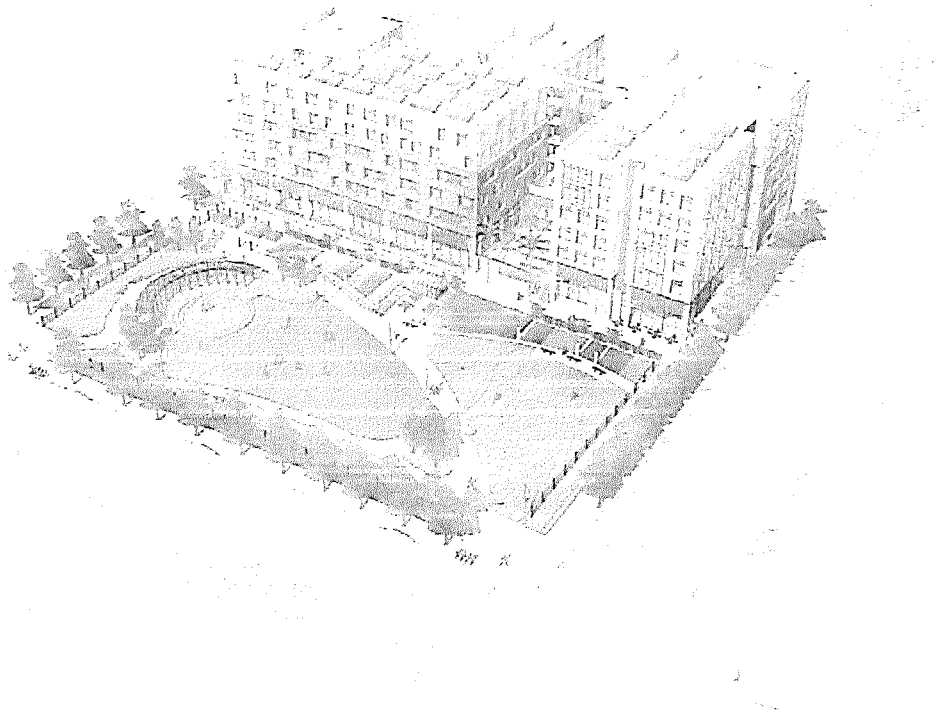
5.2 Recreation, Parks, and Open Space

The *Mission Area Plan* also calls for the provision of new recreation and park facilities and maintenance of existing resources. Some portions of the Mission historically have been predominantly industrial, and not within walking distance of an existing park and many areas lack adequate places to recreate and relax. Moreover, the Mission has a concentration of family households with children (27% of Mission households), which is higher than most neighborhoods in the city. Specifically, the *Plan* identifies a need for 4.3 acres of new open space to serve both existing and new residents, workers and visitors. The Plan proposes to provide this new open space by creating at least one substantial new park in the Mission.

A parcel at 2080 Folsom Street (at 17th Street) owned by the San Francisco Public Utilities Commission was identified as a suitable site for a new park in an underserved area of the Mission. After a series of community meetings in 2010, three design alternatives were merged into one design. The new 0.8 acre park, shown in figure 5.2.1, will include a children's play area, demonstration garden, outdoor amphitheater and seating, among other amenities. The project is under construction and is expected to be completed by winter 2017.

FIGURE 5.2.1

Rendering of Park at 17th and Folsom Streets and Adjacent New Housing Development



Source: San Francisco Recreation & Parks.

Another facility planned for the Plan Area, still in conceptual phase, is the Mission Recreation Center. Located on a through block facing both Harrison Street and Treat Avenue between 20th and 21st Street, the facility includes an interior gymnasium and fitness center, along with an outdoor playground located in an interior courtyard. Recreation and Park staff is planning for a major renovation and reconfiguration of the facility that could include relocating the play equipment so that it is visible from the public right-of-way and adding additional courts to the building.

Lastly, Garfield Pool is scheduled to be rehabilitated through the 2012 Park Bond. Recreation and Park staff plan to further enhance the facility to a higher capacity Aquatics Center, which, besides refurbishing the pool, would also include adding amenities such a multi-purpose room and a slide. Other possible improvements could include a redesign of the pool structure. Design for the pool rehabilitation is expected to be complete by late 2016 with construction bid award and the construction planned to begin in 2017.

5.3 Community Facilities and Services

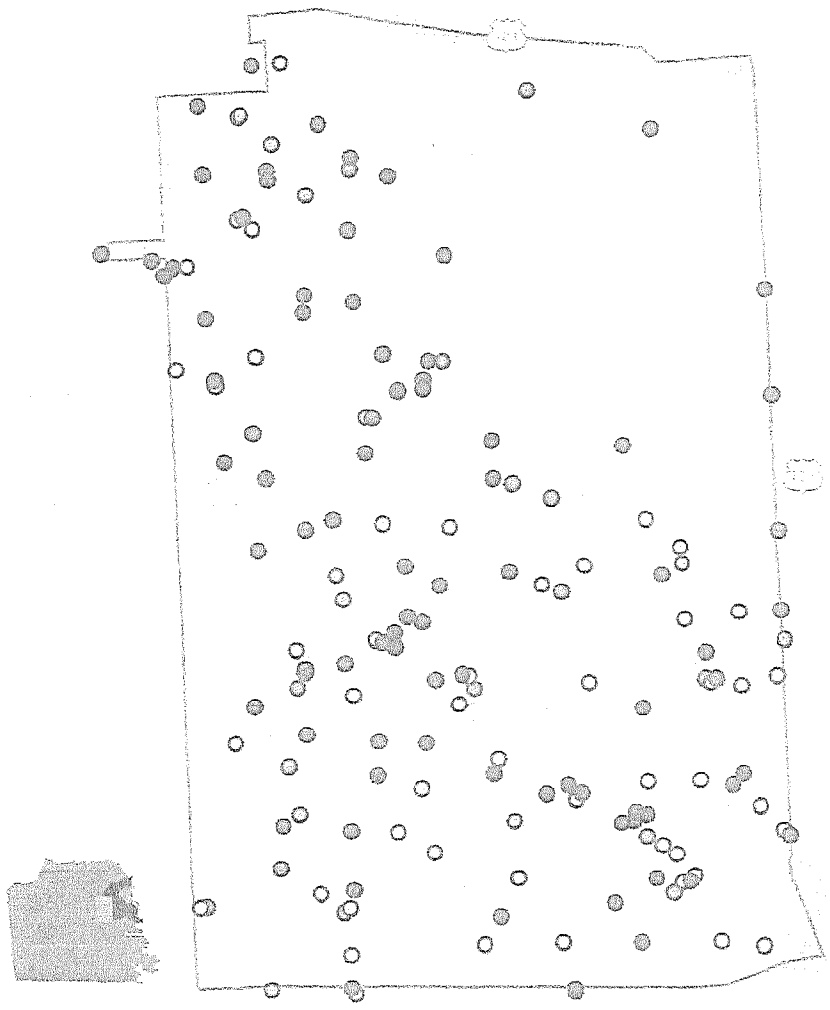
As a significant amount of new housing development is expected in the Mission, new residents will increase the need to add new community facilities and to maintain and expand existing ones. Community facilities can include any type

of service needed to meet the day-to-day needs of residents. These facilities include libraries, parks and open space, schools and child care. Community based organizations also provide many services to area residents including health, human services, and cultural centers. Section 5.3 describes efforts to increase and improve the supply of recreation and park space in the Mission. Section 6, below, discusses the process of implementation of the community benefits program, including the collection and management of the impact fees program.

Map 8 shows existing community facilities in the Mission. Community based organizations currently provide a wide range of services at over 50 sites throughout the Mission, ranging from clinics and legal aid, to job and language skills training centers and immigration assistance. Cultural and arts centers are also prominent in the Mission.

MAP 3

Community Facilities in the Mission



- Hospitals
- Libraries
- Community Based Organizations
- Child CareFacilities
- Schools
- Fire Stations
- Churches

5.4 Historic Preservation

A number of Planning Code amendments have been implemented in support of the Historic Preservation Policies within the Eastern Neighborhoods Plan Areas. These sections of the Planning Code provide for flexibility in permitted uses, thus encouraging the preservation and adaptive reuse of historic resources. The most effective incentive to date is the application of Section 803.9 of the Planning Code within the East and Western SoMa Plan Areas. Approximately 10 historic properties have agreed to on-going maintenance and rehabilitation plans in order to preserve these significant buildings.

5.4.1 Commercial Uses in Certain Mixed-Use Districts

Within Certain Mixed-Use Districts, the Planning Code principally or conditionally permits various commercial uses that otherwise are not be permitted. The approval path for these commercial uses varies depending on the (1) zoning district, (2) historic status, and (3) proposed use. The table in Appendix K shows Planning Code Section 803.9. Depending on the proposed use, approval may be received from either the Zoning Administrator (ZA) or with Conditional Use Authorization from the Planning Commission. Depending on the zoning district, the historic status may either be: Article 10 Landmark (A10), Contributing Resources to Article 10 Landmark Districts (A10D), Article 11 Category I, II, III and IV (A11), Listed in or determined eligible for National Register (NR), or Listed in or determined eligible for California Register (CR).

For use of this Planning Code section, the Historic Preservation Commission must provide a recommendation on whether the proposed use would enhance the feasibility of preserving the historic property. Economic feasibility is not a factor in determining application of the code provision. The incentive acknowledges that older buildings generally require more upkeep due to their age, antiquated building systems, and require intervention to adapt to contemporary uses. The property owner commits to preserving and maintaining the building, restoring deteriorated or missing features, providing educational opportunities for the public regarding the history of the building and the district, and the like. As a result the owner is granted flexibility in the use of the property.

Department staff, along with advice from the Historic Preservation Commission, considers the overall historic preservation public benefit in preserving the subject property. Whether the rehabilitation and maintenance plan will enhance the feasibility of preserving the building is determined on a case-by-case basis. Typically, the Historic Preservation Maintenance Plan (HPMP) from the Project Sponsor will outline a short- and long-term maintenance and repair program. These plans vary in content based on the character-defining features of the property and its overall condition. Maintenance and repair programs may include elements, like a window rehabilitation program, sign program, interpretative exhibit, among others.

5.5 Neighborhood Serving Establishments

Neighborhood serving businesses represent a diversity of activities beyond typical land use categories such as retail. This section defines neighborhood serving as those activities of an everyday nature associated with a high "purchase" frequency (see Appendix L for a list of business categories used). Grocery stores, auto shops and gasoline stations, banks and schools which frequently host other activities, among many other uses, can be considered "neighborhood serving."

By this definition, the Mission is home to almost 600 neighborhood serving businesses and establishments employing over 8,000 people. Although these tend to be smaller businesses frequented by local residents and workers, some also serve a larger market (such as popular restaurants). As shown in Table 4.5.1, the top 10 neighborhood serving establishments in the Mission include eating places (full- and limited-service restaurants, bakeries, etc.), schools, grocery stores, bars, and pharmacies. These businesses are typically along the Mission, Valencia, and 24th Street neighborhood commercial districts, as shown on Map 9.

TABLE 3.5:

Neighborhood Serving Establishments, Mission

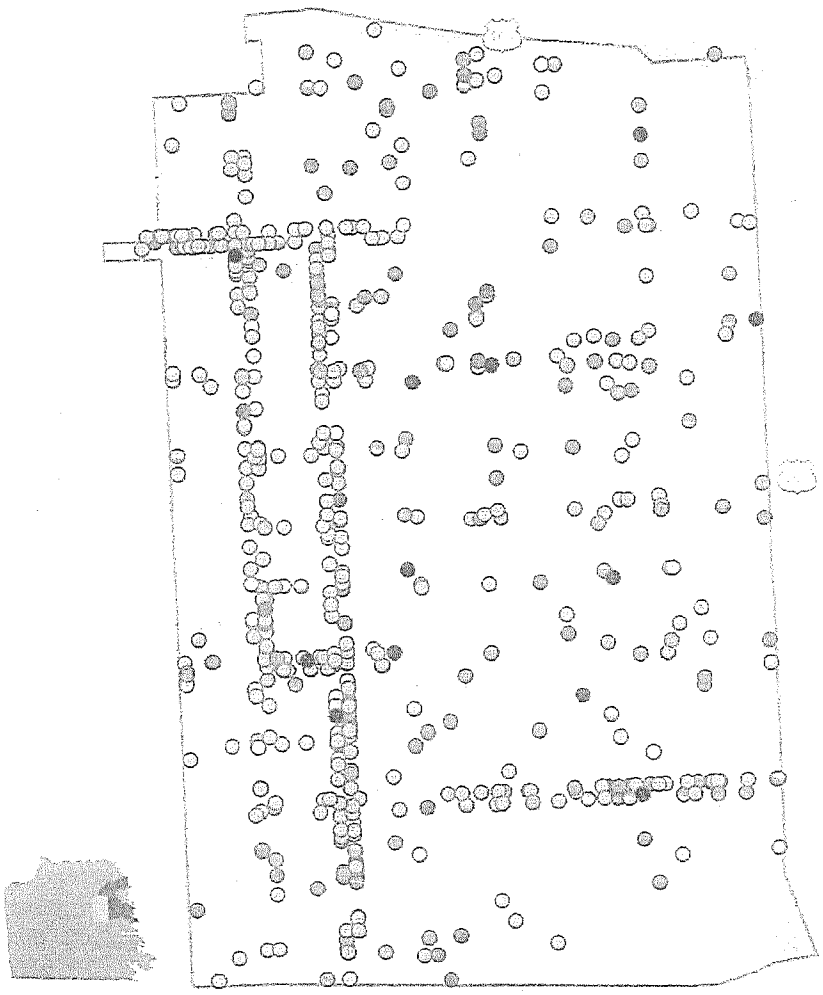
Type	Establishments	Employees
Full-Service Restaurants	155	2,581
Snack and Nonalcoholic Beverage Bars	31	908
Limited-Service Restaurants	62	884
Supermarkets and Other Grocery (except Convenience) Stores	36	521
Elementary and Secondary Schools	20	516
Drinking Places (Alcoholic Beverages)	36	388
Electronics Stores	13	246
Retail Bakeries	12	143
Commercial Banking	7	139
Pharmacies and Drug Stores	10	129
Sporting Goods Stores	7	125
Junior Colleges	2	110
Used Merchandise Stores	6	96
All Other Specialty Food Stores	3	87
Fitness and Recreational Sports Centers	5	85
Discount Department Stores	1	76
Civic and Social Organizations	9	64
Drycleaning and Laundry Services (except Coin-Operated)	7	61
General Automotive Repair	20	57
Pet Care (except Veterinary) Services	10	52
Women's Clothing Stores	9	50
Nail Salons	8	48
Office Supplies and Stationery Stores	2	48
Child Day Care Services	10	47
Shoe Stores	5	41
Savings Institutions	4	40
Book Stores	5	39
Men's Clothing Stores	6	38
All Other General Merchandise Stores	6	38
Religious Organizations	5	34
Family Clothing Stores	3	34
Beauty Salons	9	34
Pet and Pet Supplies Stores	3	32
Barber Shops	1	30
Gasoline Stations with Convenience Stores	3	28
Clothing Accessories Stores	5	26
Meat Markets	6	24
Beer, Wine, and Liquor Stores	6	20
Sewing, Needlework, and Piece Goods Stores	2	19
Fruit and Vegetable Markets	4	12

Cosmetics, Beauty Supplies, and Perfume Stores	3	12
Food (Health) Supplement Stores	1	9
Other Automotive Mechanical and Electrical Repair and Maintenance	3	9
Convenience Stores	4	8
Hobby, Toy, and Game Stores	1	8
Other Clothing Stores	3	8
Coin-Operated Laundries and Drycleaners	3	6
Cafeterias, Grill Buffets, and Buffets	1	5
Video Tape and Disc Rental	1	2
Other Personal and Household Goods Repair and Maintenance	2	2
Automotive Transmission Repair	1	1
Libraries and Archives	1	1
TOTAL	**578**	**8,018**

Source: California Employment Development Department

MAP 9

Neighborhood Serving Businesses in the Mission



- 311 - Food Manufacturing
- 443 - Electronics and Appliance
- 445 - Food and Beverage
- 446 - Health and Personal Care
- 447 - Gas Stations
- 448 - Clothing and Accessories
- 451 - Sporting goods, Hobby, Musical Instrument and Books
- 452 - General Merchandise
- 453 - Miscellaneous
- 519 - Other Information
- 522 - Credit Intermediation
- 532 - Rental and Leasing Services
- 611 - Educational Services
- 624 - Social Assistance
- 713 - Amusement, Gambling and Recreation
- 722 - Food Services and Drinking Places
- 811 - Repair and Maintenance
- 812 - Personal and Laundry Services
- 813 - Religious and Civic Organizations

Note: Based on 3-digit NAICS code occupation

6. Implementation of Proposed Programming

Along with establishing fees, and providing a programmatic framework of projects, the EN approvals included amendments to the City's Administrative Code establishing a process to choose infrastructure projects for implementation on an ongoing basis.

6.1 Eastern Neighborhoods Citizens Advisory Committee

The Eastern Neighborhoods Citizens Advisory Committee (EN CAC) started meeting on a monthly basis in October 2009. The CAC is comprised of 19 members of the public appointed by the Board of Supervisors or the Mayor. The CAC focuses on implementation of the Eastern Neighborhoods Implementation Program and priority projects. Together with the IPIC, discussed below, the CAC determine how revenue from impact fees are spent. The CAC also plays a key role in reviewing and advising on the Five-Year Monitoring Reports.

The EN CAC has held monthly public meetings since October, 2009. For more information on the EN CAC, go to http://encac.sfplanning.org.

6.2 Eastern Neighborhoods Community Facilities and Infrastructure Fee and Fund

The Eastern Neighborhoods Community Facilities and Infrastructure Fee includes three tiers of fees that are based on the amount of additional development enabled by the 2009 Eastern Neighborhoods rezoning. In general, Tier 1 fees are charged in areas where new zoning provided less than 10 feet of additional height. Tier 2 fees are for those areas that included between 10 and 20 feet of additional height, and Tier 3 fees are for areas that included for 20 feet or more of additional height. Fees are adjusted every year based on inflation of construction costs.

Below is a chart of the original fees (2009) and the fees as they exist today.

TABLE 6.2.1

Eastern Neighborhoods Infrastructure Impact Fees per Square Foot, 2009 and 2016

Tier 1	$8.00	$6.00	$10.19	$7.65
Tier 2	$12.00	$10.00	$15.29	$12.74
Tier 3	$16.00	$14.00	$20.39	$17.84

Source: San Francisco Planning Department

The fees established above are proportionally divided into five funding categories as determined by the needs assessment, nexus studies, and feasibilities studies, including housing, transportation/transit, complete streets, recreation and open space, and child care. In the Mission District NCT and MUR (Mixed-Use Residential) Districts, 75% of fees collected from residential development is set aside for affordable housing for the two respective Plan Areas. The first $10,000,000 collected are targeted to affordable housing preservation and rehabilitation. To date, the City has collected more than $48 million in impact fees, as shown on Table 6.2.2.

TABLE 6.2.2

Eastern Neighborhoods Infrastructure Impact Fees Collected to Date

Category	Collected
HOUSING	$4,740,000
TRANSPORTATION / TRANSIT	$16,940,000
COMPLETE STREETS	$6,730,000
RECREATION AND OPEN SPACE	$17,520,000
CHILDCARE	$2,420,000
Total	**$48,350,000**

Source: San Francisco Planning Department

Note: Amount collected includes in-kind improvements.

Over the 2016-2020 period, the City is projected to collect $145 million from the Eastern Neighborhoods impact fee program, as shown on Table 6.2.3.

TABLE 6.2.3

Eastern Neighborhoods Infrastructure Impact Fees Projected, 2016–2020

Category	Collected
HOUSING	$26,411,000
TRANSPORTATION / TRANSIT	$30,302,000
COMPLETE STREETS	$38,542,000
RECREATION AND OPEN SPACE	$43,912,000
CHILDCARE	$5,931,000
Total	**$145,098,000**

As shown in Table 6.2.4, approximately $5.4 million have been collected from 58 projects in the Mission Area Plan Area to date. Overall, roughly $48.4 million has been collected in all of the Eastern Neighborhoods, including Western SoMa.

TABLE 6.2.4

Eastern Neighborhoods Infrastructure Impact Fees Collected, 2011–2015

Area	Collected	Projects
Mission	$5,357,000	58
East SoMa	$14,635,000	35
Western SoMa	$6,940,000	15
Central Waterfront	$10,034,000	19
Showplace/ Potrero	$11,384,000	23
TOTAL	**$48,350,000**	**150**

6.3 IPIC Process

The Infrastructure Plan Implementation Committee was established in Administrative Code Chapter 36, Section 36.3; the IPIC's purpose is to bring together City agencies to collectively implement the community improvement plans for specific areas of the City including the Eastern Neighborhood Plan Areas. The IPIC is instrumental in creating a yearly expenditure plan for impact fee revenue and in creating a bi-annual "mini" Capital Plan for the Eastern Neighborhoods. The annual Expenditure Plan is specific to projects that are funded by impact fees. The bi-annual Eastern Neighborhoods Capital Plan also includes infrastructure projects that are funded by other sources, and projects where funding has not been identified.

6.4 Eastern Neighborhood MOU

In 2009, the Planning Department entered into a Memorandum of Understanding with SF Public Works, SFMTA, Rec and Park, and MOHCD to assure commitment to implementing the EN Plans. A key component of the agreement was the establishment of a list of priority projects:

- Folsom Street
- 16th Street
- Townsend Street
- Pedestrian Crossing at Manalo Draves Park
- 17th and Folsom Street Park
- Showplace Square Open Space

6.5 First Source Hiring

The First Source Hiring Program was first adopted in 1998 and modified in 2006. The intent of First Source is to connect low-income San Francisco residents with entry-level jobs that are generated by the City's investment in contracts or public works; or by business activity that requires approval by the City's Planning Department or permits by the Department of Building Inspection. CityBuild works in partnership with Planning Department and DBI to coordinate execution of First Source Affidavits and MOUs.

CityBuild is a program of the Office of Economic and Workforce Development and is the First Source Hiring Administrator. In accordance to Chapter 83: First Source Hiring Program, developers must submit a First Source Affidavit to the Planning Department prior to planning approval. In order to receive construction permit from DBI, developers must enter into a First Source Hiring MOU with CityBuild. Developers and contractors agree to work in good faith to employ 50% of its entry-level new hiring opportunities through the CityBuild First Source Hiring process.

Projects that qualify under First Source include:

- any activity that requires discretionary action by the City Planning Commission related to a commercial activity over 25,000 square feet including conditional use authorization;
- any building permit applications for a residential project over 10 units;
- City issued public construction contracts in excess of $350,000;
- City contracts for goods and services in excess of $50,000;
- leases of City property;
- grants and loans issued by City departments in excess of $50,000.

Since 2011 CityBuild has managed 442 placements in 72 First Source private projects in the three zip codes encompassing the Eastern Neighborhoods Plan Areas (94107, 94110, 94103), not including projects in Mission Bay, approved under the former Redevelopment Agency. They have also placed 771 residents from the three-zip code area in projects throughout the city.

In 2011, the City also implemented a first of its kind, the Local Hire Policy for Construction on publicly funded construction projects. This policy sets forth a mandatory hiring requirement of local residents per trade for construction work hours. This policy superseded the First Source Hiring Program on public construction contracts. Since 2011, a cumulative 37% of the overall 6.2 million work hours have been worked by local residents and 58% of 840,000 apprentice work hours performed by local residents.

7. Ongoing Planning Efforts

As this report has shown, market pressures and evictions affecting the neighborhood intensified in the Mission District over the six years that followed the adoption of the Eastern Neighborhoods Area Plans and the recovery from the Great Recession. This has necessitated a focused effort to help protect and alleviate the impact on those most affected by the affordability crisis. As a result, the Mission Action Plan 2020 (MAP2020) was launched in early 2015 to take a closer look at the pressures affecting the neighborhood and generate a set of solutions for implementation to help stabilize housing, arts, nonprofits, and businesses.

MAP2020 will also set targets and define solutions for neighborhood sustainability for 2020 and beyond. The solutions may encompass land use and zoning, financing, and identification of opportunity sites and programs; monitoring mechanisms will also be put into place. This first phase of MAP 2020 - solutions development - will be completed by end of Summer 2016. Implementation of certain measures is already underway, with additional implementation (writing legislation, launching new studies, ramping up programs, etc.) scheduled to commence this fiscal year (FY2016) now that a MAP2020 budget has been approved by the Mayor and the Board.

To date, the MAP 2020 collaboration includes a broad range of non-profit and advocacy groups as well as public agencies including the Dolores Street Community (DSCS), the Cultural Action Network (CAN), the Mission Economic Development Agency (MEDA), Calle 24, Pacific Felt Factory, members of the Plaza 16 coalition, the

Planning Department, the Mayor's Office of Housing and Community Development (MOHCD), the Office and Economic and Workforce Development (OEWD), the Health Services Agency (HSA), Department of Building Inspection (DBI), and the Fire Department. The Mayor's Office and District Supervisor Campos have also supported this effort.

These stakeholders are collaborating through working groups co-led by a both City and community leads. A robust community outreach and engagement process has incorporated focus groups and individual presentations to organizations and coalitions such as: tenants' rights organizations, SRO tenants, Mission Girls, PODER, United to Save the Mission, real estate developers, SPUR, San Francisco Housing Action Coalition (SFHAC), San Francisco Bay Area Renters Federation (SFBARF), and others, with the goal of informing and including relevant stakeholders affected by and/or responsible for potential solutions.

Topic-specific working groups have collectively drafted short, medium, and long term strategies, including tenant protections and housing access, housing preservation, housing production, economic development, community planning, SRO acquisition and/or master leasing, and homelessness. The Plan will be presented to the Planning Commission, for endorsement in early Fall 2016.

September 20, 2016

San Francisco Planning Department
1650 Mission Street
San Francisco, CA 94103

Subject: **Eastern Neighborhoods Citizen Advisory Committee (EN CAC) Response to the EN Monitoring Reports (2011-2015)**

Dear President Fong and Members of the Planning Commission:

At your September 22, 2016 Regular Meeting, you will hear a presentation on the Eastern Neighborhoods Five Year Monitoring Report (2011 – 2015). Attached, please find the statement prepared by the Eastern Neighborhoods Citizen Advisory Committee (EN CAC) in response to this report.

As you know, we are a 19 member body created along with the Eastern Neighborhoods Plans in 2009. We are appointed by both the Mayor and the Board of Supervisors and are made up of wide range of residents, business and property owners, developers, and activists. Our charge is to provide input on many aspects of the EN Plans' implementation including but not limited to: (1) how to program funds raised through impact fees, (2) proposed changes in land use policy, and (3) the scope and content of the Monitoring Report.

We have been working closely with staff over the course of the last year to assure the Monitoring Report is accurate and contains all of the material and analysis required by the Planning and Administrative Codes. At our regular monthly meeting in August, we voted to endorse the Monitoring Report that is now before you. We understand that while the Monitoring Report is to provide data, analysis, and observations about development in the EN, it is not intended to provide conclusive statements about its success. Because of this, we have chosen to provide you with the attached statement regarding the where we believe the EN Plan has been successful, where it has not, and what the next steps should be in improving the intended Plans' goals and objectives.

Several of our members will be at your September 22 hearing to provide you with our prospective. We look forward to having a dialog with you on what we believe are the next steps.

Please feel free to reach out to me, Bruce Huie, the CAC Vice-Chair or any of our members with questions or thoughts through Mat Snyder, CAC staff. (mathew.snyder@sfgov.org; 415-575-6891)

Sincerely,

Chris Block
Chair
Eastern Neighborhoods Citizen Advisory Committee

Eastern Neighborhoods Citizen Advisory Committee
Response to the Five-Year EN Monitoring Report (2011-2015)

INTRODUCTION

The Eastern Neighborhoods Citizen Advisory Committee (EN CAC) is comprised of 19 individuals appointed by members of the Board of Supervisors and the Mayor to represent the five neighborhoods included in the Eastern Neighborhoods Plan (EN Plan) - Mission, Showplace Square/Potrero Hill, Central Waterfront, East SoMa and Western SoMa.

The EN CAC has prepared this document in response to the five-year monitoring report, which was prepared under the specifications of the EN Plan adopting ordinance and approved for submittal to the Planning Commission by the EN CAC on September 22, 2016. This response letter was prepared to provide context and an on-the-ground perspective of what has been happening, as well as outline policy objectives and principles to support the community members in each of these neighborhoods who are most impacted by development undertaken in response to the Plan.

BACKGROUND

High Level Policy Objectives and Key Planning Principles of the EN Plan:
The Eastern Neighborhoods Plans represent the City's and community's pursuit of two key policy goals:

1. Ensuring a stable future for PDR businesses in the city by preserving lands suitable to these activities and minimizing conflicts with other land uses; and
2. Providing a significant amount of new housing affordable to low, moderate and middle income families and individuals, along with "complete neighborhoods" that provide appropriate amenities for the existing and new residents.

In addition to policy goals and objectives outlined in individual plans referenced above, all plans are guided by four key principles divided into two broad policy categories:

The Economy and Jobs:

1. Reserve sufficient space for production, distribution and repair (PDR) activities, in order to support the city's economy and provide good jobs for residents.
2. Take steps to provide space for new industries that bring innovation and flexibility to the city's economy.

People and Neighborhoods:

1. Encourage new housing at appropriate locations and make it as affordable as possible to a range of city residents.

2. Plan for transportation, open space, community facilities and other critical elements of complete neighborhoods.

The ordinances that enacted the EN Plan envision an increase of 9,785 and over 13,000 new jobs in the Plan Area over the 20 year period - 2009 to 2029.

The Eastern Neighborhood's approval included various implementation documents including an Interagency Memorandum of Understand (MOU) among various City Departments to provide assurances to the Community that the public benefits promised with the Plan would in fact be provided.

COMMENTARY FROM THE EN CAC

The below sections mirror the four key principles of the EN Plan in organization. Below each principle are the aspects of the Plan that the EN CAC see as "working" followed by "what is not working".

PRINCIPLE 1. Reserve sufficient space for production, distribution and repair (PDR) activities, in order to support the city's economy and provide good jobs for residents.

What Seems to be Working:

PDR has been preserved and serves as a model for other cities

A hallmark of the EN Plan is that the City preserved and protected industrial space and land in the newly created PDR Districts. In fact, many other cities with robust real estate markets often look to San Francisco to understand how the protections were implemented and what the result have been since protections were put in place. While other cities struggle with preserving land for industrial uses, the EN Plan actually anticipated the possible changes and growth we are now facing and provided specific space for industrial uses.

Job Growth in the EN, including manufacturing, is almost double the amount that was anticipated in the EN Plan.

What Seems to Not be Working

Loss of PDR jobs in certain sectors.

There is much anecdotal evidence of traditional PDR businesses being forced out of their long-time locations within UMU zones. In certain neighborhoods, the UMU zoning has lead to gentrification, as long standing PDR uses are being replaced with upscale retail and other commercial services catering to the large segment of market rate housing.

The relocation and displacement of PDR has been especially severe in the arts and in auto repair businesses.
Outside of the PDR zoning, there is no mechanism to preserve the types of uses that typified existing light industrial neighborhoods, such as traditional PDR businesses that offered well-paying entry level positions, and arts uses. This has resulted in a fundamental loss of the long-time creative arts community character of the South of Market, and now also in the Mission District and Dogpatch Neighborhood, with more to come. Traditional PDR businesses cannot afford the rents of new PDR buildings and do not fit well on the ground floor of multi-unit residential buildings. The CAC suggests that the City develop mechanisms within the Planning Code to encourage construction of new PDR space both in the PDR-only zones and the mixed-use districts suitable for these traditional uses, including exploring mandatory BMR PDR spaces.

PRINCIPLE 2: Take steps to provide space for new industries that bring innovation and flexibility to the city's economy.

What Seems to be Working:
The Mixed Use Office zone in East SOMA has produced a number of ground-up office projects which provide space for new industries that can bring innovation and flexibility to the City's economy.

There has been a substantial growth in jobs (approx 32,500 jobs) between 2010-2015 - this far exceeds what was expected over the 20 year term (13,000 jobs). The EN Growth rate appears to be much higher than most other areas of SF.

In other PDR areas, the focus of the EN Plan was to preserve land and industrial space (as opposed to constructing new industrial space) in the various PDR zones within the Plan. Based in part on the robust amount of job growth including job growth within the PDR sector and the need for new industrial space, the City did amend some of the PDR zoning controls on select sites to encourage new PDR space construction in combination with office and/or institutional space. One project has been approved but not yet constructed and features approximately 60,000 square feet of deed-restricted and affordably priced light industrial space and 90,000 square feet of market rate industrial space, for a total of 150,000 square feet of new PDR space.

What Seems to Not be Working
The EN Plan includes a Biotechnology and Medical Use overlay in the northern portion of the Central Waterfront that was put in place to permit expansion of these types of uses resulting from the success of Mission Bay. As of the date of this document, no proposal has been made by the private sector pursuant to the Biotechnology and Medical Use overlay. It's the CAC's view that

the residential uses of the UMU zoning in this specific area supports greater land values then those supported by the Overlay. In addition, the relatively small parcel sizes that characterize the Central Waterfront / Dogpatch area are less accommodating of larger floorplate biotechnology or medical use buildings.

PRINCIPLE 3: Encourage new housing at appropriate locations and make it as affordable as possible to a range of city residents.

What Seems to be Working:

Affordable Housing has been created beyond what would have otherwise:

Throughout San Francisco and certainly in the Eastern Neighborhoods, San Franciscans are experiencing an affordable housing crisis. That being said, the EN Plan's policy mechanisms have created higher levels of inclusionary units than previously required by the City (see Executive Summary, pg. 7). For example, at the time of enactment, UMU zoning required 20% more inclusionary where density controls were lifted, and higher where additional heights were granted. In this regards, UMU has shown to be a powerful zoning tool and is largely responsible for the EN Plan's robust housing development pipeline & implementation. At the same time, community activists and neighborhood organizations have advocated for deeper levels of affordability and higher inclusionary amounts contributing to the creation of additional affordable housing.

Affordable housing funds for Mission and South of Market have been raised:

Some of the initial dollars of impact fees (first $10M) were for preservation and rehabilitation of existing affordable housing that would not have otherwise existed if not for the EN Plan.

A new small-sites acquisition and rehab program was implemented in 2015, and has been successful in preserving several dozen units as permanent affordable housing, protecting existing tenants, and upgrading life-safety in the buildings.

After a few slow years between 2010-2012, the EN Plan is now out-pacing housing production with 1,375 units completed, another 3,208 under construction and 1,082 units entitled with another 7,363 units under permit review (in sum 13,028 units in some phase of development).

What Seems to Not be Working

There is a growing viewpoint centered on the idea that San Francisco has become a playground for the rich. Long-established EN communities and long-term residents of these neighborhoods (people of color, artists, seniors, low-income and working class people,) are experiencing an economic disenfranchisement, as they can no longer afford to rent, to eat out, or to shop in the neighborhood. They see the disappearance of their long-time neighborhood-serving businesses and shrinking sense of community.

Insufficient construction of affordable housing
Although developments have been increasing throughout the Eastern Neighborhoods, we have seen a lack of affordable housing included in what is being built compared to the needs of the current community members. Market-rate development, often regarded as "luxury," is inaccessible to the vast majority of individuals and families living in the city. The demand for these units has been the basis for a notable level of displacement, and for unseen pressures on people in rent controlled units, and others struggling to remain in San Francisco. A robust amount of affordable housing is needed to ensure those with restricted financial means can afford San Francisco. We have yet to see this level of development emulated for the populations who are most affected by the market-rate tremors. It is time for an approach towards affordable housing commensurate with the surge that we have seen for luxury units.

High cost of housing and commercial rents
Due to the high cost of housing in San Francisco, many long-term residents are finding it increasingly difficult, if not outright impossible, to even imagine socioeconomic progress. As rents have entered into a realm of relative absurdity, residents have found it ever more challenging to continue living in the city. The only way to move up (or even stay afloat, in many cases), is to move out of San Francisco. This situation has unleashed a force of displacement, anxiety, and general uneasiness within many segments of the Eastern Neighborhoods.

Pace of Development
The pace of development within the Eastern Neighborhoods has far exceeded the expectations originally conceived by the City. Since the market is intended to ensure situations are harnessed to maximize profit, we have seen development unaffordable to most. With a few thousand units in the pipeline slated for the Eastern Neighborhoods, much yet needs to be done to ensure that the city can handle such rapid change without destroying the essence of San Francisco.

PRINCIPLE 4: Plan for transportation, open space, community facilities and other critical elements of complete neighborhoods.

What Seems to be Working:
The EN Plan leverages private investment for community benefits by creating predictability for development.
With a clear set of zoning principles and codes and an approved EIR, the EN Plan has successfully laid a pathway for private investment as evidenced by the robust development pipeline. While in some neighborhoods the pace of development may be outpacing those benefits – as is the case in the throughout the Eastern Neighborhoods, there are community benefits being built alongside the development – and a growing impact fee fund source, as developments pay their impact fees as required by the EN Plan.

Funds have been raised for infrastructure that would not otherwise be raised. To date $48M has been raised and $100M expected in the next five years (see Tables 6.2.3; 6.2.2)

Priority Projects have been incorporated into the City's Ten Year Capital Plan and the Implementing Agencies' Capital Improvement Plans and work programs.

The Plan has lead to the development of parks and open space recreation. Streetscape improvements to 16th Street, Folsom and Howard, 6th, 7th and 8th Streets are now either fully funded or in process of being funded.

It is expected that more street life will over time support more in-fill retail and other community services.

New urban design policies that were introduced as part of the EN Plan are positive. The creation of controls such as massing breaks, mid-block mews, and active space frontages at street level create a more pedestrian friendly environment and a more pleasant urban experience. In Western Soma, the prohibition of lot aggregation above 100' has proven useful in keeping the smaller scale.

What Seems to Not be Working

A high portion of impact fees (80%) is dedicated to priority projects, such as improvements to 16th Street and, Folsom and Howard Streets. The vast majority of impact fees have been set aside for these large infrastructure projects that might have been better funded by the general fund. This would allow for more funding for improvements in the areas directly impacted by the new development. This also limits the availability of funds for smaller scale projects and for projects that are more EN-centric. There are very limited options in funding for projects that have not been designated as "priority projects".

In-kind agreements have absorbed a significant percentage of the discretionary fees collected as well.

Absence of open space

The Eastern Neighborhoods lag behind other neighborhoods in San Francisco and nationwide in per capita green space (see Rec and Open Space Element Map 07 for areas lacking open space). Although the impact fees are funding the construction of new parks at 17th and Folsom in the Mission, Daggett Park in Potrero Hill and the rehabilitation of South Park in SOMA, there is a significant absence of new green or open space being added to address the influx of new residents. The Showplace Square Open Space Plan calls for four acres of new parks in the neighborhoods where only one is being constructed.

As a finite and valuable resource, we believe the City has an obligation to treat the waterfront uniquely and should strive to provide green and open waterfront space to the residents of the Eastern Neighborhoods and all City residents in perpetuity.

The pace of infrastructure development is not keeping up with development
There is a lag time between development and the implementation of new infrastructure, seemingly with no clear plan for how to fund the increased infrastructure needs. The plan is now 8 years old: the number of housing units that were projected to be built under the Plan is being exceeded, and we have to date not identified additional infrastructure funds to make up the funding gap. This appears to be a clear failure in the EN Plan implementation, especially because we now have little chance to fill that gap with higher development fees.

The data contained in the Monitoring Report indicates that the EN Plan has been successful in the development of new housing. However, the pace of development appears to have far exceeded the pace of new infrastructure. This is true in each of the EN areas. There is a deficiency in transit options and development of new open space within all plan neighborhoods. A single child-care center in the Central Waterfront has been built as a part of the Plan. As of this time, not one new open space park has opened within the Plan area. The deficiency in public transportation is especially apparent. Ride services have become an increasingly popular option. However, their use contributes to the traffic congestion that is common throughout the city of San Francisco.

The impact fees inadequate
Although the amount of impact fees currently projected to be collected will exceed the sums projected in the Plan, the funding seems inadequate to address the increasing requirements for infrastructure improvements to support the EN Plan. The pace of development has put huge pressure on transportation and congestion and increased the need and desire for improved bike and pedestrian access along major routes within each Plan neighborhood. There is a striking absence of open space, especially in the Showplace/Potrero neighborhood. There has been a significant lag time in the collection of the Plan impact fees and with the implementation of the community benefits intended to be funded by the fees.

Large portions of impact fees are dedicated, which limits agility with funding requests from discretionary fees. The CAC has allocated funding for citizen-led initiatives to contribute a sustainable stream of funding to the Community Challenge Grant program run out of the City Administrators' office. Our past experience is that this program has doubled capacity of local "street parks" in the Central Waterfront from 2 to 4 with the addition of Tunnel Top Park and Angel Alley to the current street parks of Minnesota Grove and Progress Park.

Impacts of non-EIR projects
Data in the report does not properly reflect the impacts of non-EIR projects, such as Pier 70, recent UCSF expansion into Dogpatch and the Potrero Annex. These very large projects are not required to provide impact fees; the public must rely on the developers working with the community to add benefits to their projects.

Upcoming non-EIR projects such as the Warriors arena, Seawall 337 / Pier 48, continued housing development in Mission Bay and UCSF student housing further increase the pressures of density on the neighborhoods. The square footage included in these various projects may equal or exceed all of the projects under the EN Plan. Although these projects are not dependent on the EN Plan to provide their infrastructure, their impacts should be considered for a complete EN approach to infrastructure and other improvements.

Deficiency in Complete Neighborhoods
Complete neighborhoods recognize the need for proximity of daily consumer needs to a home residence. Combining resources to add shopping for groceries, recreation for families, schools for children will create a complete neighborhood. This will then have the additional benefit of reducing vehicle trips.

Many new developments have been built with no neighborhood -serving retail or commercial ground floor space. The UMU zoning has allowed developers to take advantage of a robust real estate market and build out the ground floor spaces with additional residential units, not neighborhood services such as grocery and other stores.

Evictions and move-outs
There are many reports of long-term residents of the neighborhoods being evicted or forced or paid to move out of the area. Younger, high wage-earning people are replacing retirees on fixed incomes and middle and low wage earners.

Traffic congestion and its impact on commercial uses
Transportation improvements have not kept pace with the amount of vehicular traffic on the streets, leading to vehicular traffic congestion in many parts of the Eastern Neighborhoods. While the slow movement of traffic has affected all residents, it has become a serious burden for businesses that rely on their ability to move goods and services quickly and efficiently. The additional transit that has been implemented through MUNI Forward is welcome but not sufficient to serve new growth. There does not seem to be sufficient increase in service to meet the increase in population.

Loss of non-profit and institutional space
There are many reports of non-profits and institutions being forced to relocate due to rent pressures.

Urban Design Policies and Guidelines
While the EN Plans did provide urban design provisions to break up building and provide active frontages, additional urban design controls are warranted. New buildings would be more welcome if they provided more commercial activity at the ground level. Other guidelines should be considered to further break down the massing of new structures.

PROPOSED STRATEGIES TO ADDRESS WHAT'S NOT WORKING:

Retaining PDR:

- Study trends of specific PDR sectors, such as repair and construction to see what is happening to them.
- Implement temporary or permanent relocation assistance programs for displaced PDR tenants through the OEWD.
- Consider implementing programs to transition workers from PDR sectors being lost.
- Potentially preserve additional land for PDR - both inside and outside of the EN (i.e. Bayshore).
- Establish new mechanisms and zoning tools to encourage construction and establishment of new and modern PDR space within the PDR districts.
- The EN Plan should consider making a provision for temporary or permanent relocation assistance for PDR uses displaced by implementation of the EN Plan and/or use impact fees to assist in the acquisition/development of a new creative arts facility similar to other city-sponsored neighborhood arts centers like SOMArts.

Retaining Non-Profit Spaces:

- Study impacts of rent increases on non-profit office space.
- Where preservation/incorporation of PDR uses will be required (i.e. Central Waterfront), consider allowing incorporation of non-profit office as an alternative.
- Consider enacting inclusionary office program for non-profit space, PDR, and similar uses.

Housing

- Consider increases in affordability levels.
- More aggressively pursue purchasing opportunity sites to ensure that they can be preserved for affordable housing before they are bought by market-rate developers.

Infrastructure / Complete Neighborhoods

- Work with Controller's Office, Capital Planning Office, and the Mayor's Budget Office to solve the existing known funding gap for EN Infrastructure Projects.
- Deploy impact fees more quickly or find ways to use impact fees to leverage other sources that could be deployed sooner (i.e. bond against revenue stream).
- Consider increasing impact fee levels.
- Increase amount of infrastructure, such as additional parks, given that more development has occurred (and will likely continue to occur) than originally anticipated.
- Study how to bring infrastructure improvements sooner.
- Study new funding strategies (such as an IFD or similar) or other finance mechanisms to supplement impact fees and other finance sources to facilitate the creation of complete neighborhoods, a core objective of the EN Plan.
- Improve the process for in kind agreements.
- Consider allocation of waterfront property to increase the amount of green and open space for use by the general public, as illustrated by the successful implementation in Chicago.
- Review structure of the EN CAC. Consider how the CAC can deploy funds faster. Possibly broaden the role of the CAC to include consideration of creation of complete neighborhoods.
- Consider decreasing the number of members on the EN CAC in order to meet quorum more routinely. Impress on the BOS and the Mayor the importance of timely appointments to the CAC.
- Consider legislation that would enable greater flexibility in spending between infrastructure categories so that funds are not as constrained as they are currently set to be by the Planning Code.
- Explore policies that maximize the utilization of existing and new retail tenant space for neighborhood serving retail, so that they are not kept vacant.

Non EN-EIR Projects

- Encourage the City to take a more holistic expansive approach and analysis that include projects not included in the current EN EIR or the EN Geography.

Mission - Projects Completed or Under Environmental Review - 2008 to 2/23/16 (Planning Dept. Data)

Address	Case No.	Date of Document	Status of Document	Net Housing Units	Cultural, Institutional, Educational	Medical	Management, Information, and Professional Services	PDR	Retail and Entertainment
3418 26th Street	2009.0610E	8-Nov-10	Published CPE	13	0	0	0	0	0
80 Julian Avenue	2009.1095E	23-Jun-10	Published CPE	8	0	16,000	0	0	0
411 Valencia	2009.0180E	13-May-10	Published CPE	16	0	0	0	-1,550	1,370
490 South Van Ness Avenue	2010.0043E	24-Jun-14	Published CPE	72	0	0	0	-1,618	1,123
3420 18th Street	2012.1572E	16-Oct-13	Published CPE	16	0	0	0	-4,675	1,000
1875 Mission Street	2010.0787E	14-Oct-10	Published CPE	38	0	0	0	-43,695	2,523
17th Street and Folsom Street Park	2009.1163E	24-Jan-11	Published CPE	0	0	0	0	0	0
1501 15th Street	2008.1395E	27-Jan-11	Published CPE	40	0	0	0	-1,740	9,681
480 Potrero Avenue	2011.0430E	26-Sep-12	Published Other	84	0	0	0	0	0
626 Potrero Avenue/ 2535 18th Street	2011.1279E	16-Jul-12	Published CPE	0	0	15,200	0	-15,000	0
2550-2558 Mission Street	2005.0694E	21-Nov-12	Published Other	114	0	0	0	0	14,750
1450 15th Street	2013.0124E	30-Oct-14	Published CPE	23	0	0	0	-6,088	0
300 South Van Ness Avenue	2011.0953E	29-Nov-12	Published CPE	0	0	0	0	0	20,040
346 Potrero Avenue	2012.0793E	3-Feb-14	Published CPE	72	0	0	0	-1,500	2,760
1785 15th Street	2012.0147E	1-May-13	Published CPE	8	0	0	0	-765	0
1801/1863 Mission Street	2009.1011E	19-Mar-15	Published CPE	54	0	0	740	0	2,125
2600 Harrison St.	2014.0503E	19-Aug-15	Published CPE	20	0	0	0	-7,506	0
1924 Mission St.	2014.0449E	2-Apr-15	Published CPE	12	0	0	0	-1,180	2,315
600 South Van Ness Avenue	2013.0614E	9-Apr-15	Published CPE	27	0	0	0	-1,750	3,060
2000-2070 Bryant St, 2815-18th St, 601 Florida St	2013.0677E	2-Jun-15	Published CPE	274	0	0	-3,540	-64,450	4,105
1298 Valencia Street	2013.1404E	9-Oct-15	Published CPE	35	0	0	0	-2,000	3,770
1198 Valencia Street	2012.0865E	31-Jul-15	Published CPE	52	0	0	0	-440	5,300
1050 Valencia Street	2007.1457E	5-Oct-10	Published Other	16	0	0	0	0	1,830
1419 Bryant Street	2015-005388ENV	6-Jan-16	Published CPE	0	44,600	0	0	-34,350	0
1979 Mission Street	2013.1543E	28-Jan-15	Active Other	331	0	0	0	0	-18,239
2675 Folsom St.	2014.000601ENV	TBD	Active CPE	115	0	0	0	-22,111	0
1900 Mission Street	2013.1330E	TBD	Active CPE	11	0	0	0	-2,064	844
645 Valencia St	2013.1339E	TBD	Active CPE	9	0	0	0	0	-4,382
1800 Mission	2014.0154E	TBD	Active CPE	0	0	0	139,607	-138,742	39,000
2750 19th St.	2014.0999E	TBD	Active CPE	60	0	0	0	-10,934	10,112
1515 South Van Ness Ave.	2014.1020E	TBD	Active CPE	160	0	0	0	0	-29,940
3140 16th St	2014.1105ENV	TBD	Active CPE	28	0	0	0	-20,428	7,284
2799 24th St.	2014.1258ENV	TBD	Active CPE	8	0	0	0	0	-269
2435 16th St.	2014.1201ENV	TBD	Active CPE	53	0	0	0	-10,000	4,992
3357-3359 26th St.	2013.0770ENV	TBD	Active CPE	8	0	0	0	0	5,575
1726-1730 Mission St.	2014-002026ENV	TBD	Active CPE	36	0	0	0	-3,500	900
2100 Mission Street	2009.0880E	TBD	Active CPE	29	0	0	0	-7,630	2,640
200 Potrero Ave.	2015-004756ENV	TBD	Active CPE	0	0	0	0	-27,716	30,034
3314 Ceasar Chavez	2014-003160ENV	TBD	Active CPE	52	0	0	-2,500	0	1,740
1798 Bryant St.	2015-006511ENV	TBD	Active CPE	131	0	0	-5,179	0	3,514
2918-2924 Mission St.	2014.0376ENV	TBD	Active CPE	38	0	0	0	0	7,400
793 South Van Ness	2015-001360ENV	TBD	Active CPE	54	0	0	0	-1,966	4,867
1850 Bryant St.	2015-011211ENV	TBD	Active CPE	0	0	0	0	188,994	0
953 Treat Ave	2015-006510ENV	TBD	Active CPE	8	0	0	0	0	0
3620 Cesar Chavez	2015-009459ENV	TBD	Active CPE	28	0	0	-3,200	0	940
344 14th St. & 1463 Stevenson St.	2014.0948ENV	TBD	Active CPE	45	0	0		18,995	5,849
1950 Mission St.	2016-001514ENV	TBD	Active CPE	157	1,236	0	0	0	3,415
1296 Shotwell St.	2015-018056ENV	TBD	Active CPE	96	0	0	850	-11,664	0
				2,451	45,836	31,200	126,778	-237,073	152,028

Preferred Project (approved 2008) **1696**

Option A	**782**	**104,400**	**37,200**	**422,021**	**422,021**	**114,000**
Option B	**1,118**	**150,300**	**36,900**	**597,242**	**597,242**	**143,400**
Option C	**2,054**	**609,480**	**49,448**	**2,214,011**	**-3,370,350**	**598,323**

The CPE for 2000-2070 Bryant Street notes that 2451 residential units had completed or were under environmental review:
"As of February 23, 2016, projects containing 2,451 dwelling units and 355,842 square feet of non-residential space (excluding PDR loss) have completed or are proposed to complete environmental review within the Mission District subarea."

This is in excess of the number of units in the approved Preferred Project, as well as Options A, B and C from the ENP EIR. As a result, the analysis of cumulative impacts contai within the Eastern Neighborhoods Plan EIR, and referenced in the CPE, for this project is no longer relavant. The PEIR is stale and doesn't reflect current conditions. Among the impacts not adequately studied are recreation and open space, transit, traffic, and air quality.

KITTELSON & ASSOCIATES, INC.
TRANSPORTATION ENGINEERING / PLANNING
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FINAL MEMORANDUM

Date: May 11, 2017 Project #: 19814.0

To: Jenny Delumo
San Francisco Planning Department
1650 Mission Street, 4th Floor
San Francisco, CA 94103

From: Tim Erney, AICP/PTP/CTP
Ribeka Toda

Project: 1726 Mission Street (Case No. 2014-002026ENV)

Subject: Transportation Circulation Memorandum (Final)

Kittelson & Associates, Inc. (KAI) has prepared this memorandum to summarize the results of the travel demand estimates and site access and circulation evaluation for the proposed development at 1726 Mission Street in San Francisco, California (Case No. 2014-002026ENV herein referred to as the "Project"). This evaluation is based off the revised project description and site plan prepared by Sustainable Living, LLC and provided to KAI in December 2016, and the approved scope of work from the San Francisco Planning Department (see Appendix A). The purpose of this transportation assessment is to estimate the number of daily and peak hour person-trips by mode generated by the Project and identify the potential for transportation-related impacts that could arise from the Project. In particular, KAI assessed the following design and site access/circulation issues:

- Pedestrian access, including to and from nearby transit;
- Bicycle access and parking;
- Transit access;
- Vehicular access and parking;
- Loading access and trash/recycling collection;
- Emergency vehicle access; and,
- Construction impacts.

PROJECT DESCRIPTION

The Project site is located on Lots 004A and 005 of Assessor's Block 3532, on the east side of the block bounded by 13th Street to the north, Mission Street to the east, 14th Street to the south, and Woodward Street to the west. The property is located within the Mission area for the Eastern Neighborhoods (EN) Area Plans, and is in the UMU (Urban Mixed Use) zoning district and the 68-X Height and Bulk District in the *San Francisco General Plan (General Plan)*. The Mission Plan Area allows for a variety of uses, including residential, retail, office, and industrial/Production, Distribution, and Repair (PDR). The study area is shown in the site vicinity map in Figure 1.

The Project site is currently occupied by two buildings consisting of approximately 6,000 square feet of storage and 2,000 square feet of office space. There are two existing curb cuts on Mission Street that directly serve the project site: the north curb cut is 16'-6" feet from the northeast corner of the project site and is 15'-6" feet wide; the south curb cut is 9'-6" feet from the southeast corner of the project site and is 16'-6" feet wide.

As currently proposed, the Project would demolish the existing buildings on the site, fill in the existing curb cuts, and construct a new six-floor mixed-use development consisting of 40 dwelling units (20 one-bedroom and 20 two-bedroom) above approximately 2,250 square feet of PDR space. The ground floor would consist of the lobby to the residential units, the 2,250 square feet of PDR space, and the parking garage. Levels 2-6 would be comprised of the 40 residential dwelling units. The building would be connected vertically via one elevator and two staircases.

Pedestrian access to the proposed residential land uses would be via the lobby entry located along the Mission Street frontage of the Project site. The residential lobby would include a real-time transportation information display. Two exit-only staircases, located on the north and south sides of the lobby, would provide access to Mission Street from the residential units on Levels 2-6. The ground-floor garage would connect to the lobby via the stairwell on the south side of the lobby. The elevator would be accessible from both the garage and the lobby and would be the entrance point for residents to access the dwelling units upstairs. Pedestrian access to the proposed ground floor PDR land uses would be from Mission Street, via the entry door at the southeast corner of the Project site. Eight Class 2 bicycle parking spaces would be installed on the sidewalk along the Project's Mission Street frontage.

Vehicles driving to the site would park in the parking garage provided in the ground level of the proposed building, which would have driveway access on Mission Street. The internal driveway would be 12'-0" feet wide, and the new curb cut would be 10'-0" feet wide. Due to the existing painted and raised median on Mission Street, access to the Project driveway would be right-in/right-out only (a sign would be placed at the garage exit to notify vehicles of the right-turn only exit requirement). There would be a staircase and elevator accessible from the proposed garage. As such, people who park their vehicles in the Project garage would be able to access the residential levels and Mission Street directly from the garage.

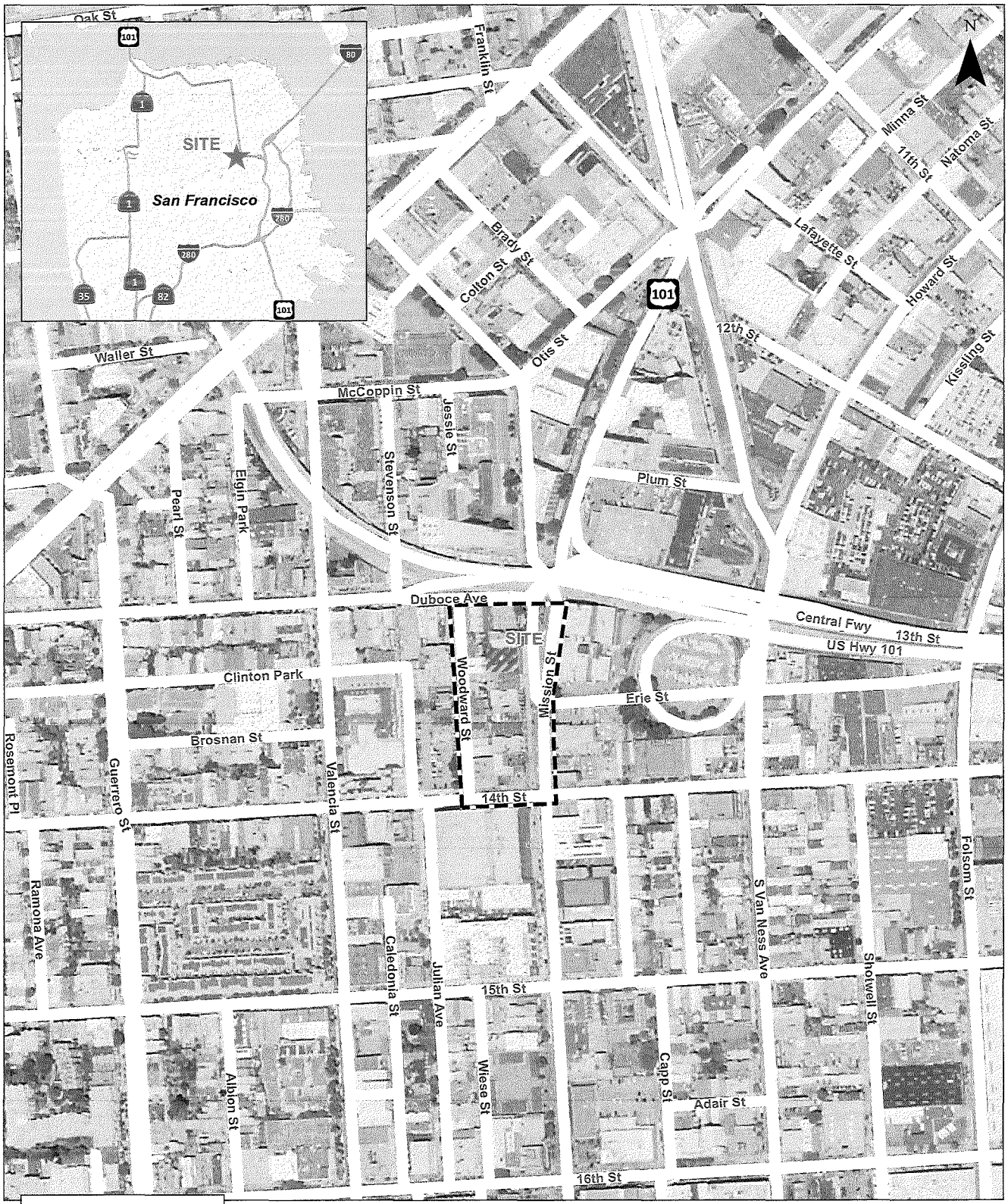
The parking garage on Level 1 would include 21 parking stalls for automobiles in triple stackers (each triple stacker can accommodate a vehicle that is 6'-3" wide, 16'-4" long, and 4'-7"" high)[1], one ground-level handicap parking stall, and 62 (Class 1) bicycle parking stalls in stackers (the group of bicycle stackers directly west of the elevator measures approximately 15'-0" wide, 6'-8" long, and 9'-0" high, with bicycles, and the two groups of bicycle stackers to the west of the first group each measures approximately 15'-0" long, 6'-8" wide, and 9'-0" high, with bicycles). Additional storage would be provided for personal car seats, strollers, and two Class 1 bicycle parking spaces for cargo bikes. A bicycle repair station would be located in the Project garage next to the Class 1 bicycle parking stalls.

The Project garage would have a two-gate entry system: the external gate would be located along the Project frontage, and the internal gate would be located 36 feet into the garage driveway. In terms of operations, the internal gate would be down at all times, and operated by a clicker provided to each resident. The location of this gate would provide queueing space for one or two vehicles (given the size of the vehicles that could fit the parking stackers, the length of two queued vehicles would be about 36 feet). The external gate would be down during the overnight hours, and would also be activated by a clicker. For both gates, the clicker would also activate a warning light within the garage that would alert vehicles within the garage that a vehicle is entering. Vehicles inside must wait to exit the garage until the entering vehicle has cleared the Project garage driveway.

The Project does not propose any off-street freight loading spaces. The Project proposes one 20-foot commercial loading space and two 20-foot metered parking spaces along the Project frontage[2]. Passenger and commercial loading would be accommodated on-street in the proposed loading space or in the available on-street loading or parking spaces near to the Project site. The available nearby on-street loading spaces and the proposed on-street loading and parking spaces along the Project frontage are shown in the existing and proposed site plans (see Appendix B). The Project would provide a reception area adjacent to the residential lobby for receipt of deliveries and temporary storage of packages and other deliveries. The existing site plan is illustrated in Figure 2 and the proposed Project site plan is illustrated in Figure 3. A complete set of Project plans is included in Appendix B.

[1] Per Klaus Multiparking Gmbh, for compact type G63-330 system. See information in Appendix B.

[2] All proposed changes to the curb parking requirements will require approval from the SFMTA Board.



Site Vicinity Map
San Francisco, California

Figure
1

Coordinate System: NAD 1983 StatePlane California III FIPS 0403 Feet

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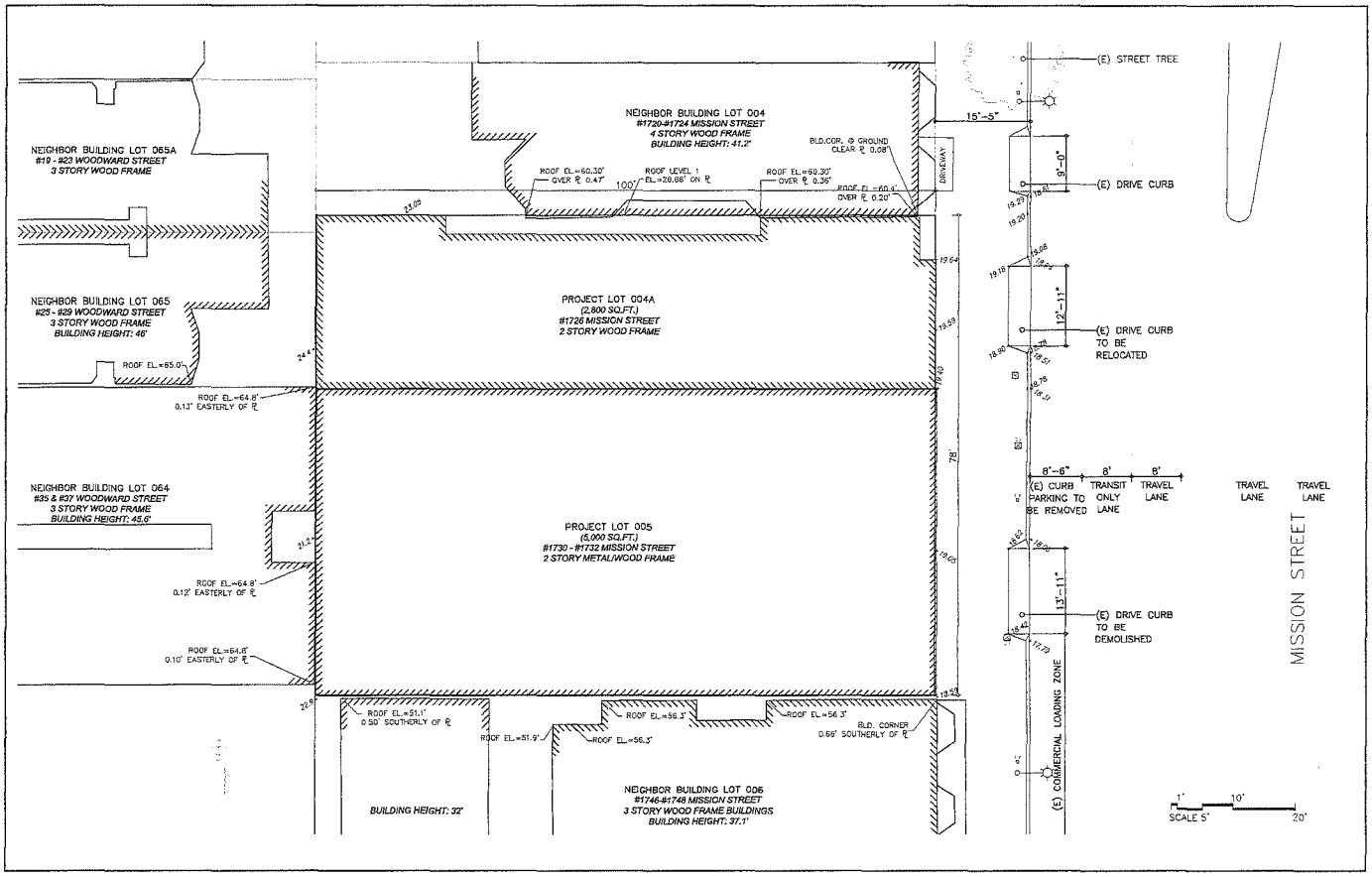

Existing Site Plan
San Francisco, CA

Figure
2

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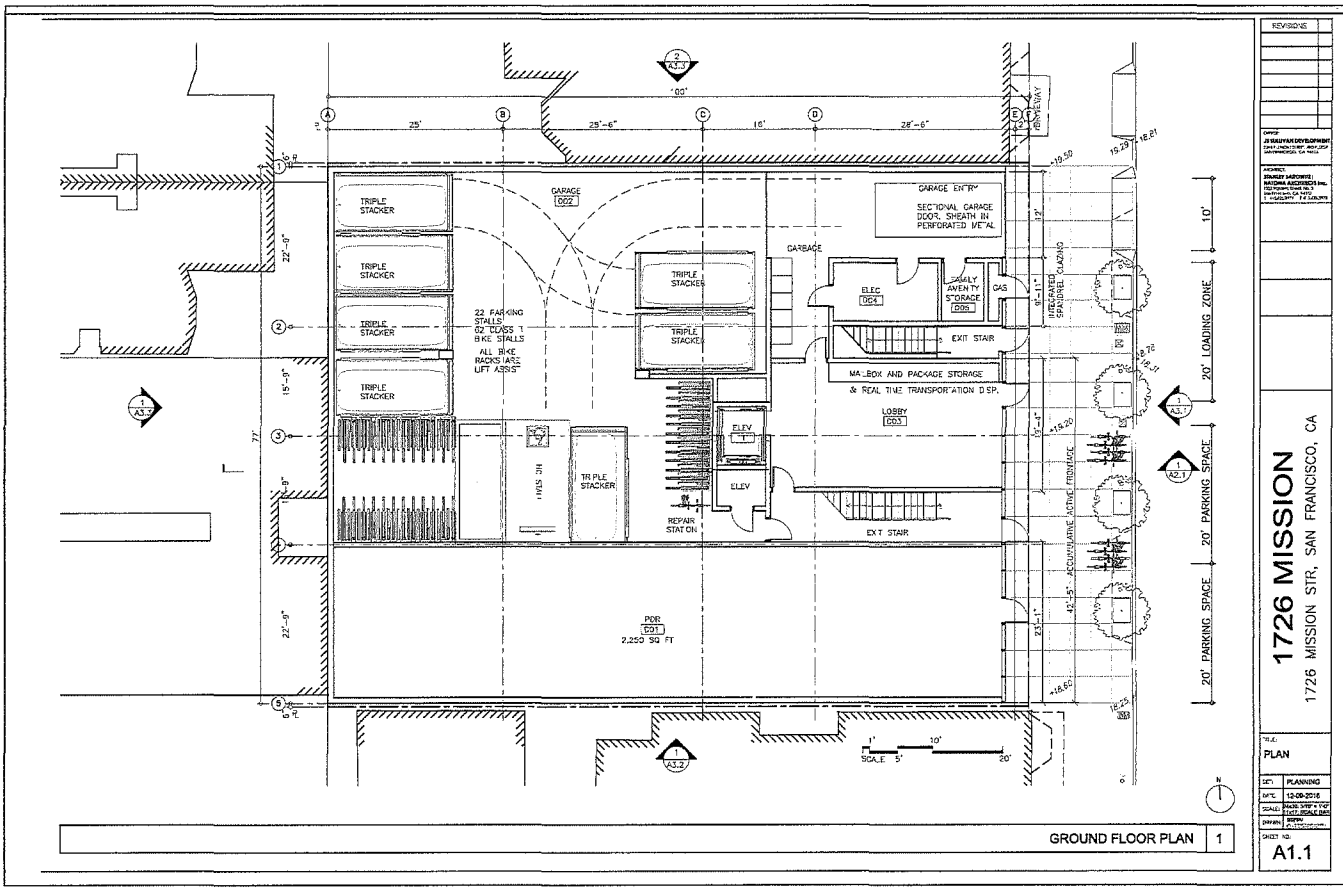

Proposed Site Plan - Parking Garage Layout
San Francisco, CA

Figure **3**

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EXISTING SITE ACCESS AND CIRCULATION

This section provides a description of the existing transportation conditions in the vicinity of the Project site. The study area includes the area generally bounded by 13th Street to the north, Mission Street to the east, 14th Street to the south, and Woodward Street to the west. Included in this section are descriptions of the existing pedestrian, transit, bikeway, and roadway networks and documentation of the existing traffic, transit, pedestrian, bicycle, loading, emergency vehicle access, and parking conditions.

Transit Access

The study area is served by both local and regional public transit service in the immediate vicinity. Local transit service is provided by San Francisco Municipal Railway (Muni) fixed-route bus lines, while regional transit service is provided by Bay Area Rapid Transit (BART) and San Mateo County Transit District (SamTrans), with additional regional transit service (such as AC Transit, Caltrain, and Golden Gate Transit) accessible by transferring to and from Muni.

Muni provides service within San Francisco, including bus, light rail, streetcar, and cable car service. The Project site has frontages on Mission Street and is directly served by Muni bus lines. The closest transit stop to the Project site is Mission Street/14th Street with service from the 14 Mission and the 49 Van Ness/Mission routes. Other nearby transit stops include Mission Street/13th Street and 150 Otis Street with service from the 14 Mission and the 49 Van Ness/Mission routes, and Mission Street/16th Street with service from the 14/14R Mission, the 22 Fillmore, the 33 Ashbury/18th, the 49 Van Ness/Mission, and the 55 16th Street routes.

There are red transit-only lanes in both directions along Mission Street, which are used by the Muni 14/14R Mission and 49 Van Ness/Mission routes throughout the day. These red transit-only lanes are in effect all day, and are designated for transit-vehicles only, with the exception of right-turning vehicles. These red transit-only lanes were implemented as part of the 14 Mission Rapid Project under *Muni Forward* (previously known as the Transit Effectiveness Project, or "TEP"), a transit and pedestrian improvement plan by the San Francisco Municipal Transportation Authority (SFMTA).

Observations of existing transit conditions were conducted during the weekday PM peak hour, on Thursday, April 7th, 2016, from 5:00 to 6:00 PM. During this period, the nearby bus stops (at the northeast corner of Mission Street/14th Street, and the southwest corner of Mission Street/14th Street) were observed to be crowded with passengers waiting for the three Muni routes that serve the stops. These stops are served by 14 Mission and 49 Van Ness/Mission, with 14R Mission passing through.

BART operates regional rail transit service between San Francisco, the East Bay (from Pittsburg/Bay Point, Richmond, Dublin/Pleasanton, and Fremont), and San Mateo County (Millbrae and San Francisco International Airport). The nearest BART station, the 16th Street/Mission Station, is located at the intersection of Mission and 16th Streets, approximately 0.3 miles south of the Project site.

SamTrans (operated by the San Mateo County Transit District) provides bus service between San Mateo County and San Francisco. The closest SamTrans transit stop to the Project site is 0.5 miles northeast of the Project site at 11th Street/Market Street. At this stop, the 397-Palo Alto Transit Center provides late night service, with drop-off only in the inbound direction (northbound) and pick-up only in the outbound direction (southbound).

AC Transit provides bus service between the western portions of Alameda and Contra Costa counties. AC Transit also operates "Transbay" routes to and from San Francisco, San Mateo and Santa Clara counties. In San Francisco, AC Transit mostly serves the Temporary Transbay Terminal, which is located approximately 2.2 miles northeast of the Project site in the South of Market (SoMa) neighborhood. The Temporary Transbay Terminal can be reached with the Muni 14 Mission route.

Caltrain operates commuter rail transit service between San Francisco and the South Bay (to Gilroy), passing through cities along the Peninsula. The nearest Caltrain station is the San Francisco Station—located at the intersection of 4th Street and King Street, approximately 1.6 miles northeast of the Project site. People can access the San Francisco Station from the Project site on foot or by Muni bus (the N Judah or the 47 Van Ness routes). People can also access Caltrain by taking BART from the 16th Street/Mission Station to the Millbrae station, where they can transfer to Caltrain.

Golden Gate Transit provides bus and ferry service between San Francisco, Marin, Sonoma, and Contra Costa counties. The regional bus service operates daily and the nearest bus stop is located approximately 0.7 miles northeast of the Project site at 8th Street/Mission Street. The Golden Gate Ferry operates daily service between Marin County and San Francisco, and the nearest ferry station is located approximately 2.3 miles northeast of the Project site at the San Francisco Ferry Terminal. People can access the Ferry Terminal by taking BART from the 16th Street/Mission Station to the Embarcadero Station or by taking the Muni 14 Mission route.

Pedestrian Access

Observations of pedestrian conditions in the vicinity of the Project site were conducted on Thursday, April 7th, 2016, from 5:00 to 6:00 PM. Within the study area, there are sidewalks on all streets and pedestrian amenities (i.e., marked crosswalks, pedestrian signal heads, and countdown timers) at all signalized intersections. Due to the long crossing distances for the legs at the Mission Street/13th Street intersection, there are pedestrian refuge islands on each leg of the intersection. Sidewalks are generally 11 feet wide on the east side of Mission Street, 15 feet wide on the west side of Mission Street, 11 feet wide on 14th Street, and 6 feet wide on 13th Street. Curb ramps are provided on all street corners in the study area and are Americans with Disabilities Act (ADA) compliant with pedestrian warning systems (except for at the pedestrian refuge island in the north side of the Mission Street/13th Street intersection, where there are no detectable warnings [truncated domes] on the curb ramps).

Nearby sidewalks and crosswalks were observed to operate at acceptable conditions with pedestrians moving at normal walking speeds and minimal crowding on the sidewalk. However, as vehicles enter and exit the driveway into the gas station at the northwest corner of Mission Street/14th Street, vehicles were observed to pull out of the driveways and partially block the sidewalk while waiting for a gap in the traffic flow.

Pedestrian traffic was concentrated around transit stops and on paths to transit. During the weekday evening peak period, most pedestrians were observed to be traveling south along Mission Street and in both directions (east and west) along 14th Street.

Pedestrian Access to Transit

The primary accesses to local and regional transit are at bus stations at the Mission Street/14th Street intersection and at 16th Street/Mission BART station. There are sidewalks along both sides of Mission Street and 14th Street for pedestrians to access these transit stops.

Pedestrian Safety

According to the San Francisco Department of Public Health's map of pedestrian injuries and fatalities, which uses data from the California Highway Patrol (CHP) collected between 2005 and 2010, Mission Street is considered a High-Injury Corridor from 8th Street to 20th Street.[3] High-Injury Corridors represent six percent of San Francisco's street miles and account for 60 percent of severe and fatal injuries reported to the CHP; these corridors are streets where high numbers of pedestrian injuries occur. In addition to the High-Injury Corridors, following intersections within the study area have high level of reported collisions involving pedestrians:[4]

- Otis Street/13th Street, 6 reported injuries;
- Mission Street/Erie Street, 2 reported injuries; and
- Mission Street/14th Street, 7 reported injuries.

Bicycle Access, Parking, and Volumes

Bicycle Access

Several major Citywide Bicycle Routes are located in the nearby vicinity. Within three blocks of the Project site are bike routes running eastbound on 14th Street, and running in both directions on Valencia Street. Observations of bicycle conditions in the vicinity of the Project site were conducted on Thursday, April 7th, 2016, from 5:00 to 6:00 PM. A moderate level of bicycle activity (about 50 to

[3] San Francisco Department of Public Health. San Francisco Pedestrian Injuries – High-Injury Corridors. Online: http://sfgov.maps.arcgis.com/apps/OnePane/basicviewer/index.html?appid=ed7db4c4bf084aeaa8f805c5e68c69ad

[4] San Francisco Transportation Information Map. Injury statistics based on analysis of California Highway Patrol SWITRS data, 2005-2012. Online: http://sftransportationmap.org

100 per hour) was observed in the study area, primarily concentrated in the southbound direction along Mission Street, which has no bike lane but numerous cyclists were observed in the red transit-only lane. Field observations indicated that there are potential for conflicts between vehicles and bicyclists along Mission Street; where bicycle facilities are not provided and there are transit-only lanes, bicyclists were observed to ride within the transit-only lane or the narrow section between the transit-only lane and the on-street parking spaces, and had to divert around buses when they were pulling into and out of stops, of move out of the way for oncoming buses.

Bicycle Parking

There were no bicycle parking spaces observed in the site vicinity.

Vehicular Access

The Project site is located approximately 150 feet south of the southwest corner of the intersection of Mission Street and 13th Street. The following sections present the regional and local access to the Project site.

Regional Access

Regional access to the Project site is provided by Interstate 80 (I-80), Interstate 280 (I-280), and US Highway 101 (US 101).

Interstate 80 (I-80) is a generally eight lane freeway that mostly runs east-west about 0.75 miles east of the Project site and provides regional access to and from the East Bay. Access from I-80 is via its interchange with United States Highway 101 (US 101) approximately 0.75 miles east of the Project site. Other nearby on- and off-ramps that provide service to the Project site include at the 7th and 8th Street ramps.

Interstate 280 (I-280) is a generally six lane freeway that runs north-south about 1.25 miles east of the Project site and provides regional access to and from the South Bay/Peninsula. Nearby access to I-280 is provided at on- and off-ramps at Mariposa Street, about 1.5 miles southeast of the Project site, plus at its interchange with US 101, approximately 2.5 miles south of the Project site. I-280 and U.S. 101 continue as parallel freeways southbound along the Peninsula before intersecting again in San Jose.

United States Highway 101 (US 101) is a generally eight lane freeway that runs north-south approximately 200 feet north of the Project site and provides regional access to and from the North and South Bay. Nearby access to the South Bay is via the Van Ness Avenue/13th Street on-ramp and the Bayshore Boulevard off-ramp. Access to the North Bay is provided via the Potrero Avenue on-ramp and the Van Ness Avenue off-ramp. Within San Francisco, US 101 comprises segments of Van Ness Avenue and continues as Lombard Street, Richardson Avenue, and Doyle Drive to the Golden

Gate Bridge, linking San Francisco to the greater North Bay region. Gough Street and Divisadero Street provide alternative routes to Lombard Street/US 101.

Local Access

Local access to the Project site is provided primarily by Mission Street, 14th Street and Duboce Avenue/13th Street.

Mission Street runs east-west between The Embarcadero and US 101, north-south between US 101 and Cesar Chavez Street, and runs parallel to I-280, merging briefly with CA-82 (El Camino Real), from Cesar Chavez to Chestnut Avenue in South San Francisco. Mission Street is a two-way roadway and it splits between Mission Street (northbound) and Otis Street (southbound) between Duboce Avenue/13th Street to South Van Ness Avenue. In the vicinity of the Project site, Mission Street has two lanes in both directions and a raised median for approximately 150 feet leading up to the northbound approach of the 13th Street intersection, and has sidewalks and on-street metered parking on both sides of the street. Mission Street is considered a High-Injury Corridor from 8th Street to 20th Street (1.64 miles). There are currently no bicycle facilities on 16th Street. In the vicinity of the Project site, the *General Plan* identifies Mission Street as a Transit Conflict Street in the Congestion Management Program (CMP) Network, a Citywide Pedestrian Network Street, a Neighborhood Commercial Street, and a Transit Preferential Street (Transit-Oriented).

14th Street runs east-west between Buena Vista Terrace and Harrison Street. 14th Street is a one-way street with two travel lanes in the eastbound direction between Church Street and Folsom Street, and is a two-way street with one lane in each direction between Buena Vista Terrace and Church Street and between Folsom Street and Harrison Street. In the vicinity of the Project site, 14th Street has two lanes in the eastbound direction and on-street metered parking on both sides of the street. 14th Street is part of Citywide Bicycle Route 30 adjacent to the Project site.

Duboce Avenue/13th Street/Division Street runs east-west between Market Street and De Haro Street (Duboce Avenue to the west of Mission Street, 13th Street between Mission Street and Bryant Street, and Division Street to the east of Bryant Street) and it mainly runs under US 101. In the vicinity of the Project site, 13th Street has two lanes westbound and three lanes eastbound and on-street parking on the south side of the eastbound direction and on the north side of the westbound direction. There are currently no bicycle facilities on 13th Street. The *General Plan* identifies 13th Street as a Major Arterial in the CMP Network and a Metropolitan Transportation System (MTS) Street.

Loading Conditions

Existing loading conditions along Mission Street, adjacent to the Project site, were qualitatively assessed during the weekday PM peak period field observations conducted on Thursday, April 7th, 2016 from 5:00 to 6:00 PM.

There is one loading space adjacent to the Project site and two loading spaces directly south of the Project site along the west side of Mission Street. These loading spaces are marked with a yellow curb for commercial loading (20 feet each, 60 feet total) between 6:00 AM and 6:00 PM Mondays through Saturdays. During field observations on April 7th, 2016, commercial loading activity on these three loading spaces along Mission Street was minimal and these loading spaces were mostly unoccupied. Loading activity was accommodated within existing loading spaces and loading-related vehicles were not observed to double-park on streets adjacent to the Project site. Based on field observations, only one or two of the three loading spaces were observed to be occupied at one time.

No on-street loading spaces are currently provided on 13th Street or 14th Street adjacent to the Project site.

Emergency Vehicle Access

Emergency vehicle access in the study area is primarily provided from Mission Street and Duboce Avenue/13th Street/Division Street. The nearest fire stations are SF Fire Department Station 36 at Franklin Street/Oak Street, approximately 0.4 miles north of the Project site, and Station 6 at Sanchez Street/Henry Street, approximately 0.6 miles southwest of the Project site. All streets that comprise the route from the fire stations to the study area are sufficiently wide enough to provide adequate emergency vehicle access. During peak commute times, general traffic congestion throughout the study area may result in minor delay to emergency vehicle response.

PROJECT TRAVEL DEMAND

Project Trip Generation

The Project travel demand was determined on a weekday daily basis and during the weekday PM peak hour, which is defined as the peak one-hour of the weekday PM peak period (4:00 PM to 6:00 PM) during which the maximum use of the transportation system typically occurs. Project trip generation rates were estimated using weekday daily and PM peak hour rates for "Residential" and "Manufacturing/Industrial" provided in the SF Planning Department's *Transportation Impact Analysis Guidelines for Environmental Review* (*"SF Guidelines"*), published in October 2002.

The Project-generated person-trips were distributed to San Francisco's four quadrants and the rest of the Bay Area and then assigned to travel modes in order to determine the number of auto, transit, walk, and "other" trips generated by the Project, where "other" includes bicycle, motorcycle, taxi, and additional modes.

Mode shares and Average Vehicle Occupancy (AVO) rates for residential work trips were based on United States Census Bureau five-year estimates of commute trip travel behavior from the *2010-2014 American Community Survey (ACS)* for the census tract (Tract 201.00), which contains the Project.

Mode shares and AVO rates for residential non-work PDR work and PDR non-work trips were based on data for Superdistrict 3 (SD-3) contained in Appendix E of the *SF Guidelines.*

Person-trip generation estimates are presented in Table 1, mode share is presented in Table 2, and person-trips by mode are presented in Table 3. Project travel demand calculations are included in Appendix B.

Table 1: Person-Trip Generation Estimates

Land Use	Size	*SF Guidelines* Rate		Daily Person-Trips	Weekday PM Peak Hour Person-Trips		
		Daily	Weekday PM Peak Hour Share of Daily		In	Out	Total
Residential[1]	40 dwelling units (20 1-BR units 20 2-BR units)	7.5 trips per unit (1-BR) 10.0 trips per unit (2-BR)	17.3%	150 trips (1-BR) 200 trips (2-BR)	17 trips (1-RR) 23 trips (2-BR)	9 trips (1-BR) 12 trips (2-BR	26 trips (1-BR) 35 trips (2-BR)
PDR[2]	2,250 sf	7.9 trips per 1,000 sf	12.4%	18	0	2	2
Total				**368**	**40**	**23**	**63**

Source: Kittelson & Associates, Inc. 2016.
Notes:
1 The daily trip generation rate for the residential land use is a weighted average of the daily rates for various dwelling unit types presented in the *SF Guidelines,* based on the number of each unit type in the Project description. Studio/1-bedroom = 7.5 trips per unit, 2+ -bedrooms = 10.0 trips per unit. (20 units x 7.5 trips/unit) + (20 units x 10.0 trips/units) = 350 trips
2 PDR space analyzed as Manufacturing/Industrial

Table 2: Mode Share by Trip Purpose

Land Use – Trip Purpose	Mode Share				AVO	Source
	Auto	Transit	Walk	Other		
Residential – Work	22.7%	47.0%	14.4%	15.9%	1.05	American Community Survey Five-Year (2010-2014) Estimates
Residential – Non-Work	56.1%	18.8%	16.7%	8.5%	2.26	*SF Guidelines*, Appendix E
PDR – Work Trips	71.0%	20.2%	5.8%	2.9%	1.28	
PDR – Non-Work	56.1%	18.8%	16.7%	8.5%	2.26	
Total Overall	44.3%	28.8%	16.7%	10.2%	1.74	

Source: Kittelson & Associates, Inc. 2016. US Census Bureau American Community Survey Five-Year (2010-2014) Estimates. SF Planning Department, *SF Guidelines (Tables E-5 and E-14),* 2002.
Notes: AVO = Average Vehicle Occupancy
All mode splits for Superdistrict 3.

Table 3: Person-Trip Generation Estimates by Mode

Mode	Weekday PM Peak Hour Person-Trips by Mode		
	In	Out	Total
Auto	16	9	25
Transit	13	7	20
Walk	6	4	10
Other	5	3	8
Total Person-Trips	**40**	**23**	**63**
Total Vehicle-Trips	9	6	15

Source: Kittelson & Associates, Inc. 2016.

As shown in Table 1, the Project is estimated to generate 63 person-trips during the weekday PM peak hour (40 inbound, 23 outbound). As shown in Table 3, based on the expected mode split and average vehicle occupancy presented in Table 2, the Project would generate 25 auto person-trips, 10 walk trips, 20 transit trips, and 8 "other" trips during the weekday PM peak hour. These auto person-trips would result in 15 vehicle-trips during the weekday PM peak hour (9 inbound and 6 outbound).

The estimated loading demand for the Project is shown in Table 4. The loading demand calculation for the Project is based on rates from the *SF Guidelines* for residential and PDR (light industry) uses. In total, the Project would generate an average of 2.5 delivery/service vehicle trips per day, which corresponds to a demand of less than one loading space during the average and peak hour of loading activity.

Table 4: Loading Demand Estimates

Land Use	Size (Square Feet)	Delivery/Service (Vehicle-Trips per Day)	Loading Demand (Spaces)	
			Average Hour	Peak Hour
Residential	33,643	1.0	0.05	0.06
PDR	2,250	1.5	0.07	0.08
Total	**35,843**	**2.5**	**0.12**	**0.14**

Source: *SF Guidelines*, 2002. Kittelson & Associates, Inc. 2017.
Notes: Square Feet = SF; Peak hour truck trip generation generally occurs during the off peak hours and does not coincide with the PM peak hour used in other transportation analysis.
Loading demand rates:
R = Turnover (R = 0.03 for residential, R = 0.65 for PDR [light industry])
Daily Trips = (SF / 1,000) * R
Average Hour = (SF / 1,000) * R / 9 / 2.4
Peak Hour = (GSF / 1,000) * (R * 1.25) / 9 / 2.4

Existing Uses

The Project site is currently occupied by two buildings containing storage and office uses. Doorway counts were conducted to determine the current activity patterns of the existing use. This data was collected on a typical weekday (Tuesday, March 29, 2016) from 5:00 PM to 6:00 PM, to represent typical weekday PM peak period (4:00 PM to 6:00 PM) conditions. Counts were conducted at the doorways to the east side of the existing site on Mission Street. The collected doorway count data is summarized in Table 5 and provided in Appendix C.

As shown in Table 5, existing uses at the Project site generate approximately 4 person-trips (3 inbound, 1 outbound) during the weekday PM peak hour.

Table 5: Existing Doorway Counts

Time Period	Mission Street Doorways	
	In	Out
5:00 to 5:15 PM	2	0
5:15 to 5:30 PM	1	0
5:30 to 5:45 PM	0	0
5:45 to 6:00 PM	0	1
Hourly Total (5:00 to 6:00 PM)	**3**	**1**

Source: Kittelson & Associates, Inc., 2016.
Notes: Doorway counts conducted on Tuesday, March 29, 2016.

Doorway counts indicate that the Project would displace minimal trips associated with the existing uses (less than five during the weekday PM peak hour), and no vehicles were observed to be driving into the driveway. In order to present a conservative analysis, the evaluation of the impacts associated with the Project is based off of the assumptions of all new trips, with no trip credits taken for existing uses. As such, the new trips for each mode are those presented in Table 3.

IMPACT ASSESSMENT

The Project site plan (Figure 3 and Appendix A) has been reviewed for implications to access, connectivity, circulation, traffic management, and safety for each mode of travel. The results of this review and impact assessment are summarized in this section.

The following are the significance criteria used by the City and County of San Francisco Planning Department for the determination of impacts associated with a proposed project:[5]

[5] The project is subject to Senate Bill (SB) 743, which provides that "aesthetics and parking impacts of a residential, mixed-use residential, or employment center project on an infill site within a transit priority area shall not be considered significant impacts on the environment". The Planning Department will continue to consider any secondary physical impacts associated with

- The project would have a significant effect on the environment if it would cause substantial additional vehicle miles traveled (VMT);
    - For residential projects, a project would cause substantial additional VMT if it exceeds existing regional household VMT per capita minus 15 percent;
    - For retail projects, a project that would cause substantial additional VMT would result in a net increase in total VMT. The San Francisco Planning Department would use a VMT efficiency metric approach for retail projects consistent with office projects: a project would cause substantial additional VMT if it exceeds the existing regional VMT per retail employee minus 15 percent; and
    - For mixed use projects, each component of the mixed-use project would be evaluated independently per the significance criteria described above.
- The project would have a significant effect on the environment if it would substantially induce additional automobile travel by increasing physical roadway capacity in congested areas;
- The project would have a significant effect on the environment if it would cause a substantial increase in transit demand that could not be accommodated by adjacent transit capacity, resulting in unacceptable levels of transit service; or cause a substantial increase in delays or operating costs such that significant adverse impacts in transit service levels could result. With the Muni and regional transit screenline analyses, the project would have a significant effect on the transit provider if project-related transit trips would cause the capacity utilization standard to be exceeded during the peak hour;
- The project would have a significant effect on the environment if it would result in substantial overcrowding on public sidewalks, create potentially hazardous conditions for pedestrians, or otherwise interfere with pedestrian accessibility to the site and adjoining areas;
- The project would have a significant effect on the environment if it would create potentially hazardous conditions for bicyclists or otherwise substantially interfere with bicycle accessibility to the site and adjoining areas;
- The project would have a significant effect on the environment if it would result in a loading demand during the peak hour of loading activities that could not be accommodated within proposed on-site loading facilities or within convenient on-street loading zones, and create potentially hazardous conditions or significant delays affecting traffic, transit, bicycles, or pedestrians;
- The project would have a significant effect on the environment if it would result in inadequate emergency access; and

constrained supply through the applicable aspects of the transportation analysis (CEQA Update: Senate Bill 743 Summary – Aesthetics, Parking and Traffic [November, 26, 2013]).

- Construction-related impacts generally would not be considered significant due to their temporary and limited duration.

Vehicle Impacts

The following section analyzes vehicle miles traveled (VMT), vehicle access to the site and internal circulation. The potential effect of the Project driveway and garage on transit, pedestrians and bicyclists is discussed in later sections.

VMT Impacts

A project would have a significant effect on the environment if it would cause substantial additional VMT or would substantially induce additional automobile travel by increasing physical roadway capacity in congested areas or by adding new roadways to the network.

Public Resources Code Section 21099(b)(1), effective January 1, 2014, requires that the State Office of Planning and Research (OPR) develop revisions to the CEQA Guidelines establishing criteria for determining the significance of transportation impacts of projects that "promote the reduction of greenhouse gas emissions, the development of multimodal transportation networks, and a diversity of land uses." CEQA Section 21099(b)(2) states that upon certification of the revised guidelines for determining transportation impacts pursuant to Section 21099(b)(1), automobile delay, as described solely by level of service or similar measures of vehicular capacity or traffic congestion shall not be considered a significant impact on the environment under CEQA.

In January 2016, OPR published for public review and comment a *Revised Proposal on Updates to the CEQA Guidelines on Evaluating Transportation Impacts in CEQA*[6] *("proposed transportation impact guidelines")* with a draft recommendation that transportation impacts for projects be measured using a vehicle miles traveled (VMT) metric, rather than the Level of Service (LOS) metric. On March 3, 2016, in anticipation of the future certification of the proposed transportation impact guidelines, the San Francisco Planning Commission adopted a resolution (consistent with OPR's recommendation) to use the VMT metric instead of automobile delay (as measured by LOS) to evaluate the transportation impacts of projects (Resolution 19579). (Note: the VMT metric does not apply to the analysis of project impacts on non-automobile modes of travel such as riding transit, walking, and bicycling.)

The *Proposed Transportation Impact Guidelines* recommend screening criteria to identify types, characteristics, or locations of projects that would not result in significant impacts to VMT[7]. If a project meets screening criteria, then it is presumed that VMT impacts would be less than significant for the project and a detailed VMT analysis is not required.

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[6] This document is available online at: https://www.opr.ca.gov/s_sb743.php.

[7] *Revised Proposal on Updates to the CEQA Guidelines on Evaluation Transportation Impacts in CEQA* by the Office of Planning and Research. www.opr.ca.gov/docs/Revised_VMT_CEQA_Guidelines_Proposal_January_20_2016.pdf

One of the screening criteria is the *Map-Based Screening for Residential, Office, and Retail Projects* criterion. This criterion states that if the Project site is located in a transportation analysis zone (TAZ) where the existing and future (2040) average daily VMT per capita or per employee is 15 percent or more below the corresponding regional VMT ratio, VMT impacts are presumed to be less than significant and a detailed VMT analysis is not required.

Table 6 summarizes the existing and cumulative average VMT per capita for residential and PDR uses in TAZ 236, the zone in which the Project site is located.

Table 6: Daily Vehicle Miles Traveled

Land Use	Existing		
	Regional Average	Threshold (Regional Average Minus 15%)	Project Traffic Analysis Zone (TAZ 236)
Households (Residential)	17.2	14.6	4.3
Employment (Office)	19.1	16.2	7.6

Source: SF Planning Department, sftransportationmap.org, 2016. KAI, 2017.
The office category refers to all other employment other than retail.

As shown in Table 6, existing average daily VMT per capita for residential uses in TAZ 236 is 4.3 miles, which is 75 percent below the existing regional average daily VMT per capita of 17.2 miles. Existing average daily VMT per employee in TAZ 236 is 7.6 miles, which is 40 percent below the existing regional average daily VMT per employee of 19.18 miles.

The Project site is located in an area where average daily VMT per capita or and VMT per employee under existing conditions would be more than 15 percent below the regional average for these land uses. Therefore, the Project would thus meet the Map-Based screening criterion and the Project's land uses would not contribute considerably to any substantial cumulative increase in VMT.

The Project is not a transportation project. However, the Project would include features that would alter the transportation network. These features include on-street commercial loading spaces and a new curb cut. These features fit within the general types of projects identified above that would not substantially induce automobile travel. Therefore, impacts on VMT would be less than significant.

In addition, the Project is subject to the San Francisco TDM Program under San Francisco Planning Code Section 169, and must submit a TDM Plan (see Appendix D).[8] The Project would include the following TDM measures to reduce the number of Project-generated vehicles:

[8] Projects with a Development Application filed before January 1, 2018 shall be subject to 75 percent of the applicable target requirement. Source: TDM Program Application. Online: http://default.sfplanning.org/forms/TDM_Program_Application.pdf

- ACTIVE-2: Bicycle Parking, Option D (4 points). One and a half Class 1 bicycle parking space would be provided for each dwelling unit (60 Class 1 spaces) and four Class 2 bicycle parking spaces would be provided for every 20 dwelling units (8 Class 2 spaces).
- ACTIVE-5A: Bicycle Repair Station (1 point). On-site tools and space for bicycle repair would be provided.
- DELIVERY-1: Delivery Supportive Amenities (1 point). The Project would include an area for receipt of deliveries that offers temporary storage for packages and other deliveries, to be located adjacent to the residential lobby.
- FAM-1: Family TDM Amenities, Option A (1 point). The Project would include on-site secure storage for personal car seats and stroller and two Class 1 bicycle parking spaces for cargo bicycles.
- INFO-2: Real-Time Transportation Displays (1 point). The Project would provide real-time transportation information on displays in prominent locations on the site, including each major pedestrian entry/exit.
- LU-2: On-Site Affordable Housing, Option C (3 points). On-site affordable housing. Seven units (18 percent) would be below market rate (at 55 percent or less of average median income).
- PKG-1: Unbundle Parking, Location D (4 points). Parking spaces leased or sold separately from rental or purchase fees.
- PKG-4: Parking Supply, Option B (2 points). The Project would provide parking in an amount less than or equal to 90 percent and greater than 80 percent of the neighborhood parking rate.

Consistent with requirements outlined the San Francisco Planning Code Section 169, the project sponsor commits to monitoring, reporting, and compliance throughout the life of the project to ensure the TDM Plan is being implemented correctly, on an on-going basis.

Traffic Impacts

Pursuant to the recent revisions to the CEQA Guidelines by OPR, the San Francisco Planning Department (in March 2016) adopted the OPR recommendations to use a VMT-based metric instead of automobile delay to evaluate the traffic-related impacts of projects. Therefore, vehicle delay (i.e., intersection LOS) is no longer used as a significance criterion in San Francisco, and traffic impacts are assessed based on whether a proposed project would cause traffic hazards.

Vehicular Access to the Project Site

The Project garage would be located approximately 150 feet south of the Mission Street/13th Street intersection. Due to the raised and striped median on Mission Street, the Project driveway would have right-in/right-out access. Vehicles heading northbound on Mission Street would be unable to make a left-turn to enter the Project driveway and vehicles leaving the Project garage would be unable to make a left-turn to head northbound on Mission Street. The Project site is located in an area with numerous east/west and north/south streets and vehicles would easily be able to alter their route to access the Project site or reach their desired destination from the Project site.

Given the high volume of traffic on Mission Street (including Muni buses), drivers in the Project garage could potentially have difficulty safely exiting the Project garage. However, because the intersection of Mission Street/13th Street is signalized, there are gaps in the southbound traffic flow (this was also observed during field observations conducted on Thursday, April 7th, 2016 from 5:00 to 6:00 PM), thus providing opportunities for safe vehicular egress from the driveway. As illustrated in the Project's site plan (Figure 3), there are no on-street parking spaces or street trees (existing or proposed) directly north of Project's driveway that would impede sight lines to oncoming vehicles and buses. Overall, the Project would not result in a significant impact to street operations due to vehicular ingress/egress or result in hazardous conditions.

Internal Circulation

The width of the driveway within the garage would be approximately 12 feet. This would provide sufficient space for one-way traffic, thus affecting the ingress and egress to and from the garage. In addition, 21 of the 22 parking spaces in the ground-level garage would be provided in triple-stackers. With triple-stackers, only one vehicle can enter or exit the stacker at one time. As such, if multiple vehicles need to concurrently utilize the stacker, they would need to wait until the movements of the first vehicle are completed. With the configuration of the garage, there would be space for one or two vehicles to wait without blocking access to other stackers.

The Project proposes to provide 22 off-street parking spaces (including one handicapped stall) for the residents of the Project in the ground-level garage (21 in triple stackers, 1 in ground-level stalls). As presented in Table 3, there would be 15 Project-generated weekday PM peak hour vehicle trips (9 inbound and 6 outbound), and some of these vehicles may enter or exit the Project garage at the same time. However, the recessed driveway and the warning light alerting exiting vehicles of entering vehicles would prioritize inbound vehicles over outbound vehicles at the Project driveway and garage, and minimize the potential for conflict between entering and exiting vehicles and for entering vehicles to queue across the sidewalk and into the transit-only lane on Mission Street.

As noted earlier, there would be approximately 36 feet of internal queuing space between the interior gate and the edge of the property, which can accommodate up to two queued vehicles. Given the number of inbound vehicles that are projected to use the driveway during the weekday PM

peak hour (about one every 6 to 7 minutes), the potential for queues that would extend more than one or two vehicles would be minimal.

Given the relatively low number of entering and exiting vehicles generated by the Project during the weekday PM peak hour and the ability to accommodate these vehicles in internal storage, the Project garage would have a less-than-significant impact with respect to queuing into the public right-of-way (across the sidewalk and/or into the transit-only lane) or to the safety of pedestrians on the sidewalk. *Improvement Measure TR-1: Queue Abatement* and *Improvement Measure TR-2: Warning Systems* have been identified to reduce the potential for conflicts at the Project driveway:

Improvement Measure TR-1: Queue Abatement

To minimize the vehicle queues at the Project driveway into the public right-of-way, the Project would be subject to the Planning Department's vehicle queue abatement Conditions of Approval:

> It should be the responsibility of the owner/operator of any off-street parking facility with more than 20 parking spaces (excluding loading and car-share spaces) to ensure that recurring vehicle queues do not occur on the public right-of-way. A vehicle queue is defined as one or more vehicles (destined to the parking facility) blocking any portion of any public street, alley or sidewalk for a consecutive period of three minutes or longer on a daily or weekly basis.
>
> If a recurring queue occurs, the owner/operator of the parking facility should employ abatement methods as needed to abate the queue. Appropriate abatement methods will vary depending on the characteristics and causes of the recurring queue, as well as the characteristics of the parking facility, the street(s) to which the facility connects, and the associated land uses (if applicable).
>
> Suggested abatement methods include but are not limited to the following: redesign of facility to improve vehicle circulation and/or on-site queue capacity; employment of parking attendants; installation of LOT FULL signs with active management by parking attendants; use of valet parking or other space-efficient parking techniques; use of off-site parking facilities or shared parking with nearby uses; use of parking occupancy sensors and signage directing drivers to available spaces; travel demand management strategies such as additional bicycle parking, customer shuttles, delivery services; and/or parking demand management strategies such as parking time limits, paid parking, time-of-day parking surcharge, or validated parking.
>
> If the Planning Director, or his or her designee, suspects that a recurring queue is present, the Department should notify the property owner in writing. Upon request, the owner/operator should hire a qualified transportation consultant to evaluate the conditions at the site for no less than seven days. The consultant should prepare a

monitoring report to be submitted to the Department for review. If the Department determines that a recurring queue does exist, the facility owner/operator should have 90 days from the date of the written determination to abate the queue.

Improvement Measure TR-2: Warning System

Implement the following measures to the satisfaction of Planning and SFMTA staff:

- Install a warning system (e.g., visual and/or audio devices) to alert pedestrians when a vehicle is exiting from the Project garage;
- Maintain a minimum 5'-0" by 5'-0" sight distance triangle at the driveway entrance/exit;
- Install convex mirrors at the Project driveway; and,
- Install "STOP" pavement markings and signage for exiting drivers to look both ways at the garage exit, prior to crossing the sidewalk.

Provision of a warning system and adequate sight distance at driveways would improve visibility between pedestrians and oncoming vehicles and increase awareness of other users, and installation of "STOP" markings would remind drivers to stop and look both ways prior to exiting. Individually and in combination, implementation of these measures would reduce potential for conflicts at the Project driveway.

Transit Impacts

As shown in Table 3, the Project would add 20 new transit trips to the surrounding network during the weekday PM peak hour.

The Project site is served by Muni 14 Mission and 49 Van Ness/Mission bus lines, which both serve the site with a frequency of approximately eight buses per hour for each route in each direction (northbound and southbound). Assuming that half of the 20 new transit trips will be heading northbound (10 new trips) and the other half southbound (10 new trips), there would be a maximum of 10 new passengers waiting at each of the northbound and southbound bus stops at the Mission Street/14th Street intersection. With two lines serving each bus stop and eight buses per hour for each line, the Project would be adding less than one passenger per bus during the weekday PM peak hour, and each passenger would wait at the bus stop no more than eight minutes. While the existing bus stops were observed to be crowded during the evening commute hour, the Project is not anticipated to add a substantial number of passengers to these bus stops during the weekday PM peak hour. Given the relatively low increase in transit riders generated by the Project and the number of transit options available in the site vicinity, it is anticipated that the new Project-generated transit trips could be accommodated by the existing transit capacity for the various transit providers and would not substantially affect transit operations on adjacent streets.

The red transit-only lane on the west side of Mission Street (for southbound buses) is located adjacent to the proposed garage entrance on Mission Street. As more vehicles enter and exit from this new garage entrance with the Project, there would be a potential for increased conflicts between vehicles using the driveway and transit vehicles in the red transit-only lane. *Improvement Measure TR-1* has been identified to monitor and manage any queues and reduce potential for queues to develop.

In particular, the Project driveway would be 12-feet wide and would provide both inbound and outbound access. As discussed earlier, this configuration could result in internal conflicts between inbound and outbound vehicles, which may lead to the queuing of entering vehicles, which could spill back to Mission Street. If this occurs, operations of Muni buses may be affected, as they would need to reduce speeds or change lanes and travel in the adjacent southbound lane to bypass queued vehicles. With the prioritization of inbound vehicles over outbound vehicles in the Project garage with the recessed driveway and the warning light in the garage, inbound vehicles will be cleared out of the public right-of-way and into the garage driveway, minimizing the potential for impact to the transit-only lane.

Overall, the Project's effect on transit operations would be less-than-significant due to the relatively low number of vehicles accessing the Project driveway during the weekday PM peak hour, and the configuration of the garage driveway that will facilitate the clearing of inbound vehicles from the public right-of-way. In addition, as previously noted, implementation of the *Improvement Measure TR-1* would further reduce the potential for vehicle queuing into the bus-only lane.

Pedestrian Impacts

As shown in Table 3, the Project would add 30 new pedestrian trips (including 10 walk-only and 20 walk-to-transit trips) to the surrounding network during the weekday PM peak hour. Pedestrian access points to the residential lobby and PDR space would be located along the Mission Street frontage.

Given the relatively low amount of pedestrian activity generated by the Project and the current levels of pedestrians on the surrounding streets, it is anticipated that the new Project-generated pedestrian trips could be accommodated on the adjacent facilities and would not substantially affect pedestrian operations on nearby sidewalks or crosswalks. Overall, sidewalks and crosswalks in the Project vicinity are adequately wide to accommodate existing pedestrian circulation and would also be sufficient to accommodate the expected increase in pedestrian traffic.

The Project proposes several enhancements that would improve conditions for pedestrians, including:

- Eliminate existing 15'-6" foot curb cut and 16'-6" foot curb cut along the Mission Street frontage (one new curb cut would be added with the Project);

- Install street trees (up to four) along the Mission Street frontage; and,
- Provide ground-floor commercial space at the southeast corner of the Project site.

These enhancements would generally improve the quality of the pedestrian environment. As Mission Street has been identified as a High-Injury Corridor, these enhancements would improve pedestrian conditions in a corridor where high numbers of pedestrian injuries have been reported.

As the Project would provide a new off-street parking facility and associated driveway, vehicles entering and exiting the garage may conflict with pedestrians on Mission Street. However, although the Project would provide 22 parking spaces, the amount of vehicular movements would be relatively low during the weekday PM peak hour (9 inbound and 6 outbound). In addition, field observations taken in the study area indicate moderate pedestrian volumes on the sidewalk in front of the Project site. As such, the Project would not result in a substantial increase in conflicts between vehicles and pedestrians. *Improvement Measure TR-2* has been proposed to improve visibility between pedestrians traveling on the sidewalk and vehicles entering/exiting the garage to further minimize the potential for conflicts between these users.

Overall, the Project's effect on pedestrians would be less-than-significant due to the relatively low number of vehicles accessing the Project driveway during the weekday PM peak hour, and the moderate pedestrian volumes on the sidewalk along the Project frontage. Implementation of the proposed design treatments as identified in *Improvement Measure TR-2* would improve pedestrian conditions along the Project frontage and further reduce the potential for conflicts.

Bicycle Impacts

The Project site is located within biking distance of the Civic Center, SoMa, Mission Bay, and Mission districts. In addition, there are nearby bicycle lanes within two blocks of the Project, with bike routes running eastbound on 14th Street, and running in both directions on Valencia Street. As a result, a portion of the "other" trips would be assumed to be bicycle trips. Assuming all of the "other" trips shown in Table 3 are bicycle trips, the Project would add up to eight bicycle trips to the surrounding network during the weekday PM peak hour.

Commercial and residential developments are required by the *San Francisco Planning Code* to provide safe and secure bicycle parking. Based on these requirements (see Section 155.2), the Project would be required to provide a minimum of 40 Class 1 spaces and three Class 2 spaces. As shown in the site plan, the Project proposes to provide a bicycle storage area in the garage in the ground level that could accommodate 62 Class 1 bicycle stalls in stackers. The Project would also provide eight Class 2 bicycle stalls in front of the proposed residential lobby entrance on Mission Street. The provision of Class 2 bicycle stalls on the sidewalk would be subject to the review and approval of SFMTA.

Bicycle access to the proposed secure bicycle storage area in the ground floor garage would be provided from Mission Street via the various pedestrian entrances into the building – the lobby entry, the secondary lobby entry, the PDR entry, and the garage entry. Bicyclists accessing the on-site

bicycle parking would be expected to pull over to the curb, dismount, and walk through the pedestrian entrances, and pass through one set of internal doors to reach the bicycle storage area located in the garage on the ground floor of the building, adjacent to the elevator. Residents accessing the bicycle storage area from the dwelling units on Levels 2-6 would use the elevator or the two staircases that lead to the lobby to access the garage. While it is anticipated that most bicyclists would access the building via the lobby, some bicyclists may choose to access the garage from Mission Street. In this case, there would be a potential conflict between vehicles and bicycles entering and exiting the garage, especially given the 12-foot width of the driveway which would not provide sufficient separation between vehicles and bicycles. The two-gate entry at the Project driveway and the warning light of incoming vehicles or bicycles would minimize this potential for conflict between vehicles and bicycles.

The red transit-only lane on the west side of Mission Street (in the southbound direction), which carries a high volume of bicyclists, is located adjacent to the proposed garage entrance on Mission Street. As vehicles enter and exit from this new garage entrance with the Project, there would be a potential for increased conflict between vehicles using the driveway and bicyclists in the red transit-only lane. However, given the relatively low vehicular activity at this driveway (15 vehicles during the weekday PM peak hour), the Project would not have a substantial effect to bicyclist circulation.

The Project would meet *San Francisco Planning Code* requirements for bicycle parking, and new bicycle trips generated by the Project could be accommodated on the existing facilities and would not substantially affect bicycle operations on surrounding streets. Therefore, the Project would have a less-than-significant impact on bicycle operations.

Loading Impacts

Loading impacts discussed in this section includes freight loading, passenger loading, and recycling/trash pick-up operations. The assessment of loading impacts evaluates the proposed loading supply versus the supply required by the *San Francisco Planning Code* and the anticipated average and peak hour loading demands.

Loading Supply and Demand

Loading demand consists of the number of delivery and service vehicle-trips generated by the Project, plus the number of loading spaces that would be required to accommodate the demand. The number of daily delivery/service vehicle-trips was estimated based on the size of the proposed land uses and a truck trip generation rate (specific to each land use) based on the anticipated hours of operation, turnover of loading spaces, and an hourly distribution of trips from the *SF Guidelines.*

The Project does not propose any off-street freight loading spaces and, based on the size of the uses, none would be required under the *San Francisco Planning Code* (Section 152.1). The Project proposes

one 20-foot commercial loading space and two 20-foot metered parking spaces along the Project frontage.[9] Passenger and commercial loading would be accommodated on-street in the proposed loading space or in the available on-street loading or parking spaces near to the Project site. Based on the *SF Guidelines* methodology and shown in Table 4, the Project would generate a daily loading demand of 2.5 delivery/service vehicle trips, which would result in a demand for 0.1 loading spaces during an average hour and 0.1 loading spaces during the peak hour of loading activity.

Loading Operations

Since the Project does not propose any off-street loading spaces, all loading activities would need to be handled on-street in the one proposed commercial loading space along the Project frontage or in nearby available loading spaces (there are three existing loading spaces to the south of the Project frontage), as shown in Figure 2 and Figure 3. With the Project, two existing curb cuts on Mission Street would be eliminated (one new curb cut will be added) and replaced with a new curb, which may provide more space for on-street parking. The following presents the passenger loading, freight/service vehicle loading, and trash/recycling pick-up operations with the Project.

Passenger Loading. No dedicated passenger loading (white zone) would be provided by the Project. It is anticipated that Project residents and visitors would utilize available nearby on-street loading spaces for passenger loading, or would arrange for drop-off/pick-up within the Project garage.

Freight/Service Vehicle Loading. The Project does not propose an off-street loading dock. Therefore, daily loading/service vehicle activities (such as FedEx trucks or goods for the PDR spaces) would need to be handled on-street. Given the Project's loading demand would be equal to less than one commercial loading space during the average and peak hours, and the existing availability of on-street loading spaces, it is anticipated that the Project's demand could be met within existing and proposed on-street loading spaces (eight along Mission Street, which were generally available during the weekday PM peak period, as observed on Thursday, April 7th, 2016, from 5:00 to 6:00 PM).

Trash/Recycling Pick-Up Operations. At this time, the operations of the trash and recycling pick-up have not yet been finalized. Based on preliminary information from conversations with Recology, and consistent with Recology's current collection practices, garbage and recycling trucks would conduct curbside pick-up. As currently proposed, trash and recycling storage would be provided in the garbage area, located in the garage on the ground floor of the Project. On collection days, building management would be responsible for bringing the trash and recycling bins curbside prior to pick-up and returning them immediately following collection. As currently proposed, Recology vehicles would have access to the curbside trash collection area from Mission Street. This curbside trash collection area would be adjacent to the red transit-only lane on southbound Mission Street. If nearby on-street parking spaces are not available, Recology vehicles may need to stop in the transit-only lane in order to conduct the pick-up, which would affect any transit vehicles in the lane during this brief period.

[9] All proposed changes to the curb parking requirements will require approval from the SFMTA Board.

Since trash collection occurs two to three times a week and during the early morning (before 6 AM) and the potential blocking of the transit-only lane would only last a few minutes, the impact to the transit lane would be less-than-significant. Garbage storage and pick-up procedures would need to be confirmed with SFMTA and Recology prior to implementation.

Residential Move-In/Move-Out Operations. It is anticipated that residents would utilize available on-street parking or loading spaces for their move-in/move-out activities. Typically, these activities would occur during off-peak times, such as in the evenings and weekends, when there are lower traffic and pedestrian volumes on the roadway network. As such, residential move-in/move-out operations would not substantially affect conditions along Mission Street. All move-in/move-out activity would need to be scheduled and coordinated with building management. If curb parking becomes necessary for loading activities, building management would be required to reserve those spaces through the local station of the SF Police Department.

The Project's loading demand would be less than one commercial loading space during the average and peak hours and could be accommodated within the existing and proposed on-street commercial loading spaces, as described above. Thus, the Project's impacts on loading would be less than significant.

Emergency Vehicle Access Impacts

Emergency vehicle access to the Project site would be provided from Mission Street and Duboce Avenue/13th Street/Division Street. All streets that comprise the routes from the fire stations to the Project site are sufficiently wide enough to provide adequate emergency vehicle access. The Project does not propose modifications to the existing roadway network or major modifications (circulation patterns or design features) to Mission Street or Duboce Avenue that would preclude or otherwise alter access by emergency vehicles. Therefore, the Project would have a less-than-significant impact on emergency vehicle operations.

Construction Impacts

The construction plans have not yet been finalized. Based on preliminary information provided by the project sponsor, construction is expected to take 14 months, with phasing anticipated as follows:

1. Demolition (1 week)
2. Shoring and excavation (1 month)
3. Concrete (1 month)
4. Framing (4 months)
5. MEP (3 months)

6. Windows (1 month)

7. Finishing (4 months)

Prior to construction, as part of the construction application phase, the Project Sponsor and construction contractor(s) would be required to meet with Public Works and SFMTA staff to develop and review truck routing plans for demolition, disposal of excavated materials, materials delivery and storage, as well as staging for construction vehicles. The construction contractor would be required to meet the *City of San Francisco's Regulations for Working in San Francisco Streets* (the Blue Book)[10], including those regarding sidewalk and lane closures, and would meet with SFMTA staff to determine if any special traffic permits would be required. In addition to the regulations in the Blue Book, the contractor would be responsible for complying with all city, state and federal codes, rules and regulations.

Staging would likely occur from the Project site and the adjacent Mission Street sidewalk. In addition, trucks may need to stop on Mission Street to perform construction activity, such as concrete pours. In order to minimize the impact to the red transit-only lane that is adjacent to the Project site on southbound Mission Street, the on-street parking in front of the Project site would likely be restricted to allow access for construction-related trucks. A portion of the sidewalk (which is approximately 13 feet wide) would be used for staging, and protection would be added above the remaining sidewalk to maintain safe pedestrian travel. The Project Sponsor may consider not allowing construction trucks to access the Project site during the weekday PM peak period to reduce the potential for conflict with buses. In general, lane and sidewalk closures are subject to review and approval by the SFMTA's Transportation Advisory Staff Committee (TASC) for permanent travel lane and sidewalk closures, and the Interdepartmental Staff Committee on Traffic and Transportation (ISCOTT) for temporary sidewalk and travel lane closures. Both TASC and ISCOTT are interdepartmental committees that include representatives from the Public Works, SFMTA, Police Department, Fire Department, and the Planning Department. Due to the relatively small size of the development and its mid-block location, the Project would have a less-than-significant impact due to construction activity.

CUMULATIVE CONDITIONS

SFMTA plans to implement transit and streetscape improvements under *Muni Forward*, as well as bicycle infrastructure improvements under the *Bike Plan*. Elements of both of these plans have already been implemented in the Project site vicinity, and the improved conditions as a result of these projects would be able to accommodate the future growth planned in the area, including the additional activity due to the Project. In a one-block area around the Project site, there are no

[10] The *SFMTA Blue Book*, 8th Edition, is available online through the SFMTA website (www.sfmta.com)

planned large development projects[11]. There are currently two active projects in the one-block area around the Project site, 1463 Stevenson Street (Planning Department Case No. 2014.0948) and 235 Valencia Street (Planning Department Case No. 2016-007877).

While these projects would add an additional 95 residents to the Project site vicinity, they are not anticipated to result in substantial impacts in combination with the Project due to the relatively small size of the developments. As a result, cumulative conditions near the Project site are anticipated to be similar to current conditions, with the addition of general background growth in the activity levels due to development outside of the study area.

The following are the potential future impacts of the Project under cumulative conditions:

VMT Impacts

Table 7 summarizes the cumulative average VMT per capita for residential and PDR uses in TAZ 236, the zone in which the Project site is located.

Table 7: Daily Vehicle Miles Traveled

Land Use	Cumulative Year 2040		
	Regional Average	Threshold (Regional Average Minus 15%)	Project Traffic Analysis Zone (TAZ 236)
Households (Residential)	16.1	13.7	3.6
Employment (Office)	17.1	14.5	7.1

Source: SF Planning Department, sftransportationmap.org, 2016. KAI, 2017.
The office category refers to all other employment other than retail.

As shown in Table 7, projected 2040 average daily VMT per capita for residential uses in TAZ 236 is 3.6 miles, which is 77 percent below the projected 2040 regional average daily VMT per capita of 16.1 miles. Projected average daily VMT per employee in TAZ 236 is 7.1 miles, which is 42 percent below the projected 2040 regional average daily VMT per employee of 14.6 miles.

The Project site is located in an area where average daily VMT per capita or and VMT per employee under cumulative 2040 conditions would be more than 15 percent below the regional average for these land uses. Therefore, the Project would thus meet the Map-Based screening criterion and the Project's land uses would not contribute considerably to any substantial cumulative increase in VMT.

[11] San Francisco Permits in My Neighborhood Map. Map of planning applications, active and completed, compiled by the Planning Department. Online http://sf-planning.org/active-permits-my-neighborhood

Traffic Impacts

The Project would generate an estimated 15 new weekday PM peak hour vehicle trips. As discussed above, the project-generated vehicle trips could be accommodated within the existing transportation system without resulting in impacts to the roadway conditions. Under 2040 Cumulative conditions, there is not projected to be a substantial growth in traffic volumes or reduced roadway capacity in the future. As such, the Project would not be anticipated to have any additional significant traffic-related impacts under Cumulative conditions.

Transit Conditions

The Project would generate an estimated 20 new weekday PM peak hour transit trips. As described above, the Project site is in proximity to numerous Muni transit routes, including the 14/14R Mission, 22 Fillmore, 33 Ashbury/18th, 49 Van Ness/Mission, and 55 16th Street routes. The new Project trips would be dispersed across these routes. Furthermore, with the transit service improvements implemented under *Muni Forward*, the transit service frequency, transit service span, and the transit service vehicles have been improved to accommodate growth in future transit ridership along the Mission Street corridor. There are no other planned projects in the Project site vicinity that would reduce transit service or capacity. As such, the Project would not be anticipated to have any additional significant transit-related impacts under Cumulative conditions.

Pedestrian Conditions

The Project would add 30 new weekday PM peak hour pedestrian trips, which could be accommodated by existing sidewalks and crosswalks in the Project vicinity. In addition, with the streetscape improvements implemented under *Muni Forward,* the pedestrian conditions would be improved, which will help accommodate growth in future pedestrian volumes along the Mission Street corridor. There are no other planned projects in the Project site vicinity that would reduce pedestrian capacity or conditions. As such, the Project would not be anticipated to have any additional significant pedestrian-related impacts under Cumulative conditions.

Bicycle Conditions

While the bicycle infrastructure improvements under the *San Francisco Bicycle Plan* (the *"Bike Plan"*) in the Project site vicinity have already been implemented, the *Bike Plan* includes future projects in other areas around San Francisco that will expand the existing bicycle network, enabling more bicyclists to travel further and more safely on the streets of San Francisco, including bicyclists for the Project. The *Bike Plan* shows near-term bicycle improvement projects along Market Street between 11th Street and 17th Street, and along 17th Street generally between Market Street and Potrero Avenue. The *Bike Plan* also shows long-term bicycle improvement projects along Capp Street, between 15th Street and 26th Street, and along Shotwell Street between 14th Street and 26th Street.

The Project would only add a minimal number of bicycles to the network, and would thus not negatively impact the future bicycle network. There are no other planned projects in the Project site vicinity that would reduce bicycle infrastructure or capacity. As such, the Project would not be anticipated to have any additional significant bicycle-related impacts under Cumulative conditions.

Construction Conditions

The construction of the Project may overlap with the construction of other projects in the area, such as 1463 Stevenson Street and 235 Valencia Street. However, given the distance between these projects and their relative sizes, it is unlikely that the combined effect of construction activities would affect access, traffic, and pedestrians on streets used as access routes to and from the Project site (e.g., Mission Street and Duboce Avenue). Overall, localized cumulative construction-related transportation impacts could occur as a result of cumulative projects that generate increased traffic at the same time and on the same roads as the Project. The construction manager for each individual project would work with the City to develop a detailed and coordinated plan that would address construction vehicle routing, traffic control, and pedestrian and bicycle accommodation in the work zone for the duration of any overlap in construction activity.

The cumulative impacts of multiple nearby construction projects would not be considerable, as the construction of the Project and other projects would be temporary. Therefore, the Project, in combination with past, present, and reasonably foreseeable development, would have a less than significant transportation-related construction impact under Cumulative conditions.

Emergency Access Conditions

While there would be a general increase in vehicle traffic associated with planned and reasonably foreseeable development in the vicinity, all streets that comprise emergency access routes to the Project site are sufficiently wide enough to provide adequate emergency vehicles. The Project would not create potentially hazardous conditions for emergency vehicles, or otherwise interfere with emergency vehicle accessibility to the site and adjoining areas. Overall, the Project, in combination with past, present, and reasonably foreseeable development, would have a less than significant impact on emergency vehicle access under Cumulative conditions.

Vehicle Capacity and Loading Conditions

As mentioned above, there are no planned large developments in the area and the two small planned developments that are currently under review are not anticipated to result in substantial increases in vehicular activity in the vicinity of the Project site. In addition, there are no planned transportation projects in the study area that would reduce vehicular capacity or loading capacity on the roadway. As such, the Project would not be anticipated to have any additional significant vehicular-, or loading-related impacts under Cumulative conditions.

Overall, the Project, in combination with past, present, and foreseeable projects, would not result in a cumulatively considerable impact on transportation conditions.

SUMMARY AND RECOMMENDATIONS

To identify the effect of the Project, qualitative assessments of Project-related impacts were conducted for pedestrians, bicyclists, transit, vehicles, parking, and loading. The Project is consistent with off-street vehicular parking, bicycle parking, and off-street loading *San Francisco Planning Code* requirements (see Appendix E), and would meet its requirements for the provision of TDM measures. The Project and the addition of Project-generated activities would not result in any significant impacts. Therefore, no mitigation measures would be required. In addition, considering known transportation network and development projects in the vicinity of the project site, the Project would not result in any significant impacts or cumulative considerable contributions to Cumulative conditions.

There are some design issues with respect to the configuration of the driveway in the Project garage that may result in vehicles queuing and blocking the sidewalk and/or the street, which may result in potential conflicts between vehicles, pedestrians, bicycles, and transit vehicles. To address these concerns, *Improvement Measure TR-1* and *Improvement Measure TR-2* have been identified:

- Improvement Measure TR-1: Queue Abatement (see Page 21)
- Improvement Measure TR-2: Warning System (see Page 22)

With the provision of these recommended measures, the effect of the Project on the surrounding transportation network would be minimized.

Appendix A

Scope of Work and Approval

KITTELSON & ASSOCIATES, INC.
TRANSPORTATION ENGINEERING / PLANNING
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FINAL SCOPE OF WORK
1726 Mission Street (2015-002026ENV) Transportation Circulation Memorandum

Kittelson & Associates, Inc. (KAI) is pleased to submit this Scope of Work for the transportation circulation memorandum for the proposed 1726 Mission Street (Case number 2015-002026ENV) project in San Francisco, California (herein referred to as the "Project"). As currently proposed, the Project would replace two existing buildings on the site consisting of approximately 8,000 square feet of storage and 2,000 square feet of office space, with a six-floor building of mixed-use development consisting of 36 dwelling units (12 1-bedroom and 24 2-bedroom) above approximately 1,000 square feet of commercial/retail space with 27 vehicle parking spaces, 36 class 1 bicycle parking spaces, and four class 2 bicycle parking spaces for the residential land uses. The project site is located within the Eastern Neighborhoods Area Plans, for which the Eastern Neighborhoods Area Plans EIR (herein referred to as the "EN EIR") was adopted in 2008.

This transportation circulation memorandum will be a stand-alone document that includes the analysis, assumptions and other technical elements that can be used to complete the environmental review for this Project.

The following scope of work has been developed based on the San Francisco Planning Department guidelines for the environmental review of projects within the City (primarily the Planning Department's *Transportation Impact Analysis Guidelines for Environmental* Review, published in October 2002, and our experience with similar projects.

TASK 1: PROJECT DESCRIPTION

KAI will describe the Project in a Project Description section. This section will include a summary of the existing uses at the Project site, as well as the surrounding uses in the vicinity of the Project. It will also describe the proposed Project, include its land uses, and provision of on-site vehicular parking, bicycle parking and loading facilitates. A site plan will be provided that clearly indicates the location and associated dimensions of the Project pedestrian, bicycle, and vehicular access points, as well as the location of any off-street parking spaces for vehicles and bicycles, on-street loading spaces, and garbage/trash facilities.

TASK 2: EXISTING CONDITIONS

KAI will describe the existing conditions in the immediate vicinity of the Project site, including descriptions of the nearby pedestrian, bicycle, roadway, and transit networks, documentation of the existing pedestrian, bicycle, traffic, transit, loading, and emergency vehicle access conditions, and connections to the local and regional roadway networks. This will also include a map of the transportation facilities adjacent to the Project site.

Pedestrian Access: KAI will observe and document general pedestrian conditions in the vicinity of the Project site. Pedestrian conditions will be described as they relate to the area, including safety and right-of-way issues, as well as access to transit.

Bicycle Access and Parking: KAI will observe and document general bicyclist conditions in the vicinity of the Project site, including on-street bicycle facilities and any local bicycle parking. Bicyclist conditions will be described as they relate to the area, including safety and right-of-way issues. In addition, existing and potential new bicycle facilities (from the SF Bicycle Plan) will be noted.

Traffic and vehicle access: KAI will qualitatively describe existing traffic and circulation conditions in the immediate vicinity of the Project site. This will include descriptions of regional and local access routes (including nearby freeway on- and off-ramps), and safety and right-of-way issues.

Transit: KAI will observe and document adjacent existing transit facilities, including nearby transit routes and stops (including all commuter rail, light rail, and bus services) with a quarter-mile of the Project site. Qualitative transit information will include a description of Muni's peak periods, and nearest stop locations.

Loading: KAI will observe and document the current on-street loading spaces provided in the immediate vicinity of the Project site.

Emergency Vehicle Access: KAI will qualitatively describe emergency vehicle access to the Project site.

TASK 3: PROJECT TRAVEL DEMAND ESTIMATES

The net-new travel demand for the Project will be estimated, which will account for the displacement of the current uses on the Project site.

***SF Guidelines* Trip Generation/Distribution/Mode Split:** KAI will estimate the number of weekday daily and PM peak hour trips generated by the Project, followed by trip distribution by mode and by origin/destination. The trip generation, mode split and distribution of the Project trips will be based on data from the *SF Guidelines* and the U.S. Census journey-to-work data.

Trip Credits for Existing Uses: The Project would displace an existing use on the site. To account for the elimination of this land use, KAI will collect weekday PM peak hour (4:00 PM to 6:00 PM) doorway counts at the building access points. The observed activity levels would be applied to determine the net travel demand of the Project.

Net New Trips: Incorporating the data, analysis and conclusions from the above tasks, KAI will estimate the net new trips anticipated to be generated by the Project.

Loading Demand: KAI will estimate the daily, average, and peak hour loading demand for the Project. The loading demand will be based on data from the *SF Guidelines*.

TASK 4: TRANSPORTATION ANALYSIS

The Project will be reviewed for implications to access, connectivity, circulation, traffic management, and safety. Based on a review of the proposed site plan and observations conducted at the site, KAI will qualitatively assess site access and circulation (for all modes), and identify impacts, as needed. Cumulative impacts will be discussed qualitatively, relative to the findings in the EN EIR.

Pedestrian Access: KAI will qualitatively assess the effect of the Project on pedestrian conditions in and around the Project site, including the number of new pedestrian trips that could be added to the existing network. The adequacy of pedestrian connections to nearby transit stops will be determined qualitatively, and potential pedestrian safety issues will be identified. This assessment will primarily focus on issues at potential conflict locations (e.g., proposed curb cut for new access to parking garage).

Bicycle Access and Parking: KAI will qualitatively assess the effect of the Project on bicycle conditions in and around the Project site, including the number of new bicycle trips that could be added to the existing network. The adequacy of bicycle connections to proposed bicycle parking facilities and nearby bicycle routes will be determined qualitatively, and potential bicycle safety issues will be identified. In addition, the City of San Francisco *Planning Code* requirements for bicycle parking will be identified and compared to the proposed supply.

Traffic and Vehicular Access: As currently proposed, the Project would include 27 vehicle parking spaces in the form of triple stackers for the proposed residential use and would not provide any parking spaces for the proposed commercial use. This assessment will primarily focus on issues at potential conflict locations (e.g., proposed curb cut and pedestrians traveling along Mission Street), internal site circulation within the parking garage (e.g., queuing for the stacked spaces and width of the driveway), and vehicle access to the site, given proximity to the freeway and its right-in/right-out only access along Mission Street due to the raised median on Mission Street. This assessment will also include a qualitative review of conditions in the future, based on the 2030 Cumulative analysis in the EN EIR.

Transit Operations: As the Project is located on a high-frequency transit corridor, KAI will qualitatively assess the effect of the Project on bus operations, such as the potential for queuing vehicles at the driveway to interfere with transit operations along Mission Street. KAI will also identify potential conflicts with vehicles entering and exiting the project site. In addition, proposed changes under Muni Forward or other transit programs/plans will be assessed in the context of the Project, and will also account for other changes to the transit network documented in the 2030 Cumulative conditions from the EN EIR.

Loading Access, Trash/Recycling Collection, and Move-in/Move-out: As currently proposed, the Project would not include an off-street loading dock; as such, all loading activities would need to occur on-street. KAI will describe and qualitatively assess access to existing nearby on-street loading spaces for commercial and residential passenger loading. Additionally, KAI will describe anticipated trash/recycling collection procedures and residential move-in/move-out activities. If needed, KAI will identify any on-street loading spaces that should be incorporated into the Project description. It should be noted that any loss of on-street parking due to provision of one on-street loading space would likely be offset by the elimination of existing curb-cut which could be converted to one on-street parking space.

Emergency Vehicle Access: KAI will qualitatively assess emergency vehicle access to the Project site. This evaluation will identify potential on-site emergency vehicle access conflicts and overall accessibility to the Project site.

Construction Impacts: KAI will qualitatively evaluate potential short-term construction impacts that would be generated as part of the buildout of the Project, such as any temporary street closures or modifications to Muni bus facilities or operations.

TASK 5: RELATED PLANS (EASTERN NEIGHBORHOODS AND MUNI FORWARD)

KAI will provide a brief description of the Eastern Neighborhoods Area Plan and describe the consistency of the Project with the EN EIR. KAI will also compare the impacts and findings of significance of this study with the findings from the EN EIR for 1726 Mission Street for each mode of travel. If the impacts and findings of significance for the Project are found to be in excess of those identified in the EN EIR, further analysis may be needed per the environmental review required by the Community Plan Exemption process (Section 15183 of California Environmental Quality Act [CEQA]).

KAI will also describe completed and/or planned improvements under the EN EIR, as well as the status of the ongoing Muni Forward and Bicycle Plan projects identified in the vicinity of the Project.

TASK 6: MITIGATION MEASURES AND IMPROVEMENT MEASURES

KAI will identify project-generated impacts to the transportation network under the Existing plus Project and 2030 Cumulative scenarios. Mitigation measures, as developed in the EN EIR, will be applied to improve operations where significant project-related impacts have been identified, and improvement measures, also from the EN EIR, will be applied where non-significant impacts have been identified. All mitigation and improvement measures will be linked back to the EN EIR, as appropriate. Any new Project-specific mitigation and/or improvement measures will be noted.

TASK 7: SUMMARY/CONCLUSIONS

KAI will present the summary and conclusions in a Draft Transportation Circulation Memorandum, incorporating the data, analysis and conclusions from the above tasks. This memorandum will be submitted to the San Francisco Planning Department for review by the appropriate agencies (Planning Department and MTA). KAI will incorporate comments and prepare a Second Draft Transportation Circulation Memorandum. The San Francisco Planning Department will perform a second review of the memorandum and provide additional comments, if needed. KAI will incorporate the second round of comments and prepare a Screeencheck Final Transportation Circulation Memorandum, and then will submit a Final Transportation Circulation Memorandum for the City's approval. This memorandum will be submitted in electronic format (PDF and WORD formats).

ANTICIPATED SCHEDULE

The delivery of the Technical Memorandum will follow the schedule outlined below:

	Month (week ending date)																	
	April					May				June				July					Aug
Task	1	8	15	22	29	6	13	20	27	3	10	17	24	1	8	15	22	29	5
City Approval of Final SOW	⊗																		
Technical Analysis																			
Preparation of Draft Memo						⊗													
City Review and Comments																			
Second Draft Memo													⊗						
City Review																			
Screencheck Final																	⊗		
City Review																			
Final Memo Approval																			⊗

Notes:

KAI task

City task

⊗ Milestone/deliverable

This schedule includes the following assumptions:

- No changes to the Project description are made.
- Six week review period for the Draft Memorandum, three week review period for Second Draft, and two week review period for the Screencheck.
- No substantive re-analysis is needed for the Second Draft or Final Memorandum.

SAN FRANCISCO
PLANNING DEPARTMENT

TRANSPORTATION STUDY
SCOPE OF WORK
ACKNOWLEDGEMENT AND APPROVAL

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Date: April, 2016

Transmittal To: KAI

The proposed scope of work for 1726 Mission Street (2015-002026ENV) Transportation Circulation Memorandum dated April 1, 2016 is hereby

☒ Approved as submitted

☐ Approved as revised and resubmitted

☐ Approved subject to comments below

☐ Not approved, pending modifications specified below and resubmitted

Signed: _____ _____
Transportation Planner Environmental Review Planner

Note: A copy of this approval and the final scope of work are to be appended to the transportation study. The Department advises consultants and project sponsors that review of the draft transportation report may identify issues or concerns of other City agencies not addressed in the scope of work hereby approved, and that the scope of work may need to be modified to accommodate such additional issues.

Appendix B

Project Plans

SHEET INDEX

PROJECT DESCRITION

DEMOLISH EXISTING TWO-STORY BUILDING. CONSTRUCT A 6-STORY, 68 FOOT TALL MIXED-USE BUILDING, CONSISTING OF GROUND FLOOR PDR, AND AT GRADE 22 CAR PARKING GARAGE. THERE WILL BE 40 DWELLING UNITS LOCATED ON 5 STORIES ABOVE THE GROUND FLOOR. TOTAL FAR IS 35,893 SF. THE PROJECT PROPOSES 2,280 SF PDR.

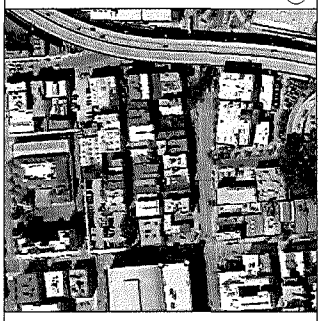
PROJECT DATA

PROJECT SITE	1726 MISSION STREET
CROSS STREETS	14TH STREET
ASSESSOR'S PARCEL #	3232 / 4A AND 5
ZONING	UMU
OCCUPANCY TYPE	S-2, R-2, M (PDR)
CONSTRUCTION TYPE	TYPE IIIA
LOT SIZE	7,800 SQ FT
HEIGHT	66'0" TO ROOFLINE
HOUSING UNITS	40 (50% 2BD)
PARKING STALLS	22 STALLS AT GRADE PARKING
BIKE STALLS	RESIDENTIAL=62 CLASS 1 STALLS, 6 CLASS 2 STALLS (3 REQ)

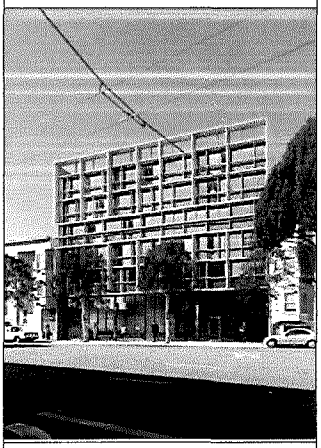
GROSS BUILDING AREA CALCULATION (INCR W/ SPRINKLER) :

OCCUPANCY	PROPOSED
R2	4,281 SF
S2	27,145 SF
M (PDR)	2,280 SF
MISC. (LOBBY)	2,218 SF
TOTAL	35,893 SF

MAP



PERSPECTIVES



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1726 MISSION

1726 MISSION STR, SAN FRANCISCO, CA

TITLE
TITLE SHEET

SET:	PLANNING
DATE:	12-09-2016
SCALE:	NTS
DRAWN:	EDWIN

SHEET NO:
A0.0

PLANNING DATA

ADDRESS: 1726 MISSION STR., SAN FRANCISCO, CA

CROSS STREET: 14th STREET

BLOCK/LOT: 3232 / 4A AND 5

PROJECT DESCRIPTION: Demolish existing two-story building. Construct a 6-story, 68 foot tall mixed-use building, consisting of ground floor commercial space, and at grade 22 car parking garage. There will be 40 dwelling units located on 5 stories above the ground floor. The project proposes 2,250 SF PDR. Total area is 35,893 SF

CODE USED: 2013 California Building Code, 2013 SF Planning Code, 2013 California Mechanical Code, 2013 California Plumbing Code, 2013 California Electrical Code, 2013 California Energy Code, 2013 California Fire Code, 2013 NFPA 72 (fire alarms), 2013 NFPA 13 / 13r (Sprinklers), California Government Code

ZONING: UMU

EXISTING SITE CONDITION: TWO STORY BUILDING WITH FULL LOT COVERAGE. . BUILDING IS NOT A HISTORIC RESOURCE (6/11/2004)
HEIGHT: 28'-7"
AREA: 7,800 SQ FT OF LOT AREA
GROSS BUILDING SQ FT: 11,200 SQ FT

OCCUPANCY:
S-2: PARKING
R-2: RESIDENTIAL
M: PDR: STORAGE / STOCK

ACCESSIBILITY: PROJECT IS A COVERED, MULTISTORY, MIXED USE CONDOMINIUM RESIDENTIAL BUILDING WITH ONE ELEVATOR. AS PER THE CALIFORNIA DISABLED ACCESS REGULATIONS BOOK SEC 11. THIS IS A MULTI-LEVEL, ELEVATOR BUILDING . IT IS IN FULL COMPLIANCE WITH CBC SECTION 11-B, ACCESSIBLE IN ALL COMMON AREAS.

NUMBER OF STORIES: 6 STORIES / 66 FEET; MEASURED FROM MISSION STREET. THERE IS A PARAPET.
THE ENTIRE BUILDING IS TO BE FULLY SPRINKELED. THIS WILL BE UNDER SEPARATE PERMIT. SEE ADDENDUM SCHEDULE.
INSTALL TYPE 1 DRY/WET COMBINATION STANDPIPE.

HEIGHT: 66'0" FEET TO ROOFLINE AS MEASURED FROM MISSION. STREET
THE ELEVATOR, AND STAIR EXTEND AN ADDITIONAL 14 FEET ABOVE THE ESTABLISHED ROOF LINE. THESE FEATURES REPRESENT LESS THAN 20% OF TOTAL ROOF AREA. THERE IS A 3'6" FOOT PARAPET.

LOT SIZE/AREA: AREA: 7,800 SQ FT: LENGTH: 100'-0" WIDTH: 78'-0"
(SEE SURVEY; ASSESSORS PARCEL DATA IS INCORRECT)

FAR: NO FAR REQUIREMENTS FOR HOUSING USE
A 5:1 FAR REQUIREMENTS EXISTS FOR NON RESIDENTIAL USES
2,250 SQ FT < 39,000 SQ FT THEREFORE PROJECT COMPLIES

LOT COVERAGE: THE EXISTING BUILDING COVERS 100% OF THE LOT (LEVELS 1)
THE PROJECT PROPOSES A LOT COVERAGE OF 100% FOR FIRST LEVEL.

(REAR YARD) FOR LEVELS 2 THROUGH 6 A REAR YARD OF 1,950 SQ FT (25%) IS PROPOSED. (SEE ROOF PLAN FOR DIMENSIONS)
THIS REAR YARD IS LARGER THAN THE NORM FOR THE EXISTING BLOCK STRUCTURE WHICH HAS A TYPICAL REAR YARD OF 12%
A TOTAL OF 5,968 SQ FT OF OUTDOOR SPACE IS PROVIDED

OPEN SPACE:

Private Decks		Units #	Area	Total
	Required	4	80	320

	Balconies	Area	Total
Level 2	4	292	1,168
Private Provided			1,168

Common Decks			
	Common Roof Deck	Required	3,830
	Common Roof Deck	Provided	3,925
	Total Outdoor Provided		5,093

PARKING: 22 STALLS IN AT GRADE PARKING STRUCTURE. ONE STALL TO BE HC VAN. 21 OF THE STALLS SHALL BE INDEPENDENTLY ACCESSED VIA STACKERS
AS PER TABLE 152 NO OFF STREET LOADING SPACES ARE REQUIRED: RESIDENTIAL NET SQUARE FOOTAGE < 100,000 SQ FT

BIKE STALLS: RESIDENTIAL = 62 CLASS 1 STALLS
8 CLASS 2 STALLS

STREET TREES: THERE ARE NO EXISTING STREET TREES.
THE PROJECT WILL PROVIDE 4 NEW STREET TREES)SEE SITE PLAN) TO COMPLY WITH THE 1 TREE PER 20 FT OF FRONTAGE. TREES SHALL BE GINKGO PRINCETON SENTRY - 15GAL

BUILDING DATA

GENERAL

DATA	ALLOWED	PROPOSED
CONSTRUCTION TYPE	IIIA	IIIA
OCCUPANCY GROUP	R2, S2, M	R2, S2, M
BUILDING HEIGHT	75'	65'6"
AREA PER FLOOR (R2 LIMITS)	24,000	5,427
NO OF STORIES*	6	6
NO. OF UNITS	N/A	36
FIRE SPRINKLER	REQ	FULLY SPRINKLERED

PER 510.5

PER TBL 503 AND 510.5

GROSS BUILDING AREA CALCULATION FOR TABLE 503 AND 510.5 (INCR W/ SPRINKLER) :

OCCUPANCY	ALLOWED	PROPOSED	ALLOWED	PROPOSED
S2	5 STOR	1 STOR	78,000 SF	4,281 SF
R2	6 STOR	6 STOR	48,000 SF	5,429 SF
M	5 STOR	1 STOR	37,000 SF	2,250 SF

HEIGHT CONTROLS PER CBC 510.5

CONSTRUCTION TYPE and BUILDING TYPE: THE PROPOSED BUILDING IS TO BE TYPE IIIA.
PLEASE REFER TO ASSEMBLY DIAGRAM (A0.6) FOR DESCRIPTION OF ALL RATED ASSEMBLIES.
AS PER TABLE 510.5 THE HORIZONTAL FIRE SEPARATION BETWEEN R2 OCCUPANCY AND S2 OCCUPANCY SHALL BE 3 HRS

FIRE RESISTANCE RATING PER CBC TABLE 601 AND 602

BUILDING ELEMENT	TYPE IB
PRIMARY STRUCTURAL FRAME	1
BEARING WALL EXTERIOR	2
BEARING WALL INTERIOR	1
NONBEARING WALLS & PARTITIONS EXTERIOR	SEE TABLE 602
NONBEARING WALLS & PARTITIONS INTERIOR	0
FLOOR CONSTRUCTION & SECONDARY MEMBERS	1
ROOF CONSTRUCTION & SECONDARY MEMBERS	1

FIRE SEPARATION DISTANCE = X (FT)	OCCUPANCY R2
X<5	1
5<X<10	1
10<X<30	1
X>30	0

ALL PROPERTY LINE WINDOWS SHALL BE AS PER SFBC AB-009

OCCUPANCY SEPARATION: AS PER SECTION 508 AND TABLE 508.4
3 HR ASSEMBLY BETWEEN 1ST STORY S2 GARAGE AND 2ND STORY R-2 RESIDENTIAL AS PER CBC 510.5

2 HR NON COMBUSTIBLE BETWEEN S2 GARAGE AND EXIT LOBBY / PATHS.

1HR NON COMBUSTIBLE BETWEEN M AND R2 AS PER TBL 508.4

1HR NON COMBUSTIBLE BETWEEN ALL RESIDENTIAL UNITS

TYPE IIIA CONSTRUCTION 2 HR. WALLS: BEARING EXTERIOR WALLS AS PER CBC TABLE 601

TYPE IIIA CONSTRUCTION 2 HR. SHAFT WALLS: ALL STAIRS W/ 2 HR ENCLOSURE AS PER CBC SEC. 707.4
1-1/2 HR DOOR AS PER CBC SEC. 715.4

TYPE IIIA CONSTRUCTION 1 HR. WALLS: ALL CORRIDORS LEADING TO EXIT ENCLOSURES

TYPE IIIA CONSTRUCTION. NR WALLS: NON BEARING INTERIOR PARTITIONS. NON RATED DOORS

PROPERTY LINE PARAPET WALLS ALL PROPERTY LINE PARAPET WALLS TO BE 1HR RATE (MINIMUM)

STRUCTURE: ALL PRIMARY STRUCTURAL FRAMES ARE TO BE 1 HR RATED

PLUMBING: PROJECT IS LESS THAN 40,000 SQ FT IN ACCUMULATIVE AREA AND IS THEREFORE EXEMPT FROM DUAL PLUMBING REQUIREMENTS

FLOOR AREA CALCULATIONS:

	S-2	R-2	M	Circ / Lobby	Total Gross	Outdoor (Excl. Gross)
Level 1	4,281	-	2,250	1,367	7,898	
Level 2	-	5,429			5,429	1,168
Level 3	-	5,429			5,429	-
Level 4	-	5,429			5,429	-
Level 5	-	5,429			5,429	-
Level 6	-	5,429			5,429	-
Roof	-	-		850	850	4,800
Total	4,281	27,145	2,250	2,217	35,893	5,968

GROSS FLOOR AREA AS DEFINED BY sSFPC SECTION 102

One Bedroom	20	50 %
Two Bedroom	20	50 %
Total	40	

OCCUPANCY LOAD CALCULATIONS

Occupanc	Area	Factor	Load	Egress width	Egress width provided	Notes
S-2	4,281	200	21.4	4.28	36" for door	1 exit required per tbl 1015.1
R-2	5,429	200	27.1	8.14	96.00	2 exits required . Stair width to be 48" per CBC 1009.1
M	2,250	300	7.5	1.5	36" for door	1 exit required per tbl 1015.1
O (Roof)	4,800	15	320.00	96.00	96.00	2 exits required . Stair width to be 48" per CBC 1009.1

EMERGENCY ESCAPE: AS PER CBC SECTION 1029 AND TABLE 1021 NO EMERGENCY ESCAPE AND RESCUE IS REQUIRED

GARAGE VENTILLATION: IN ACCORDANCE WITH CBC SEC 406.6 MECHANICAL VENTILATION SYSTEM WILL BE PROVIDED

GROUP R LIGHT AND VENTILATION: LIGHT: ALL HABITABLE ROOMS (EXCEPT BATHROOMS AS PER CBC 1203.2) HAVE NATURAL LIGHT GREATER THAN 8% OF THE FLOOR AREA.

VENTILLATION: ALL ROOMS REQUIRED BY CBC 1203.1 SHALL BE PROVIDED WITH MECHANICAL VENTILATION. VERTICAL SHAFTS WILL BE PROVIDED THROUGH BUILDING DRAWING FRESH AIR IN AT ROOF.

ELEVATOR: ELEVATOR TO BE OTIS 3500 LB GEN 2-A MACHINEROOM-LESS ELEVATOR. ELEVATOR IS STRETCHER ACCESSIBLE.

TRASH: TRASH ROOM SHALL COMPLY WITH SFAB-088 COLLECTION AND STORAGE OF TRASH, RECYCLING, AND COMPOSTABLE MATERIALS.

REVISIONS

OWNER:
JS SULLIVAN DEVELOPMENT

ARCHITECT:
STANLEY SAITOWITZ | NATOMA ARCHITECTS Inc.

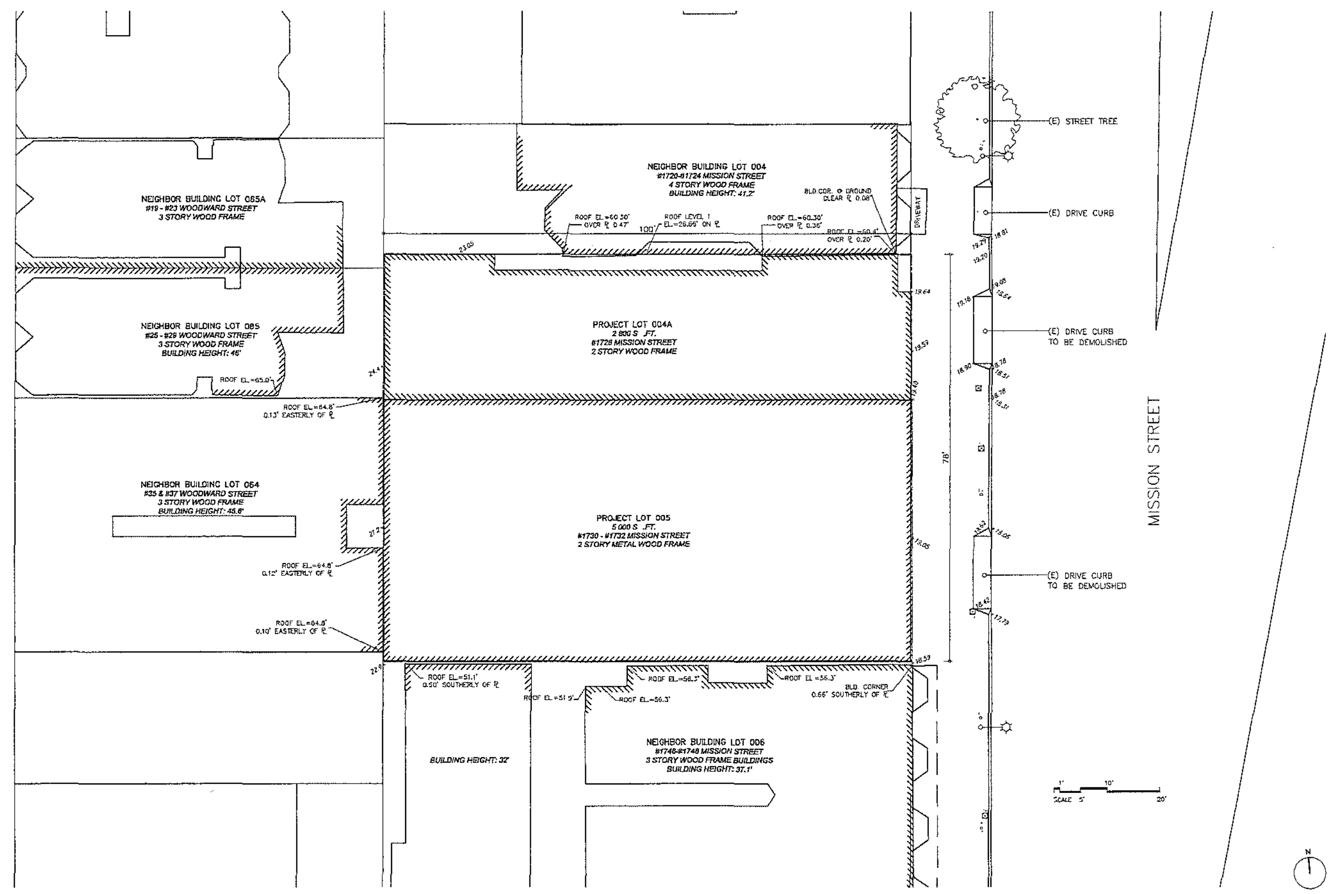
1726 MISSION

1726 MISSION STR, SAN FRANCISCO, CA

TITLE: PROJECT DATA

SET:	PLANNING
DATE:	12-09-2016
SCALE:	NTS
DRAWN:	SONAL

SHEET NO: A0.1



EXISTING SITE PLAN 1

REVISIONS

OWNER:
JS SULLIVAN DEVELOPMENT
SAN FRANCISCO, CA 94115

ARCHITECT:
STANLEY SAITOWITZ | NATOMA ARCHITECTS Inc.
1022 Natoma Street, No. 3

1726 MISSION

1726 MISSION STR, SAN FRANCISCO, CA

TITLE:
EXISTING SITE PLAN

SET:	PLANNING
DATE:	12-09-2016
SCALE:	24x36: 1/8" = 1'-0" 11x17: SCALE BAR
DRAWN:	SSINAI

SHEET NO:
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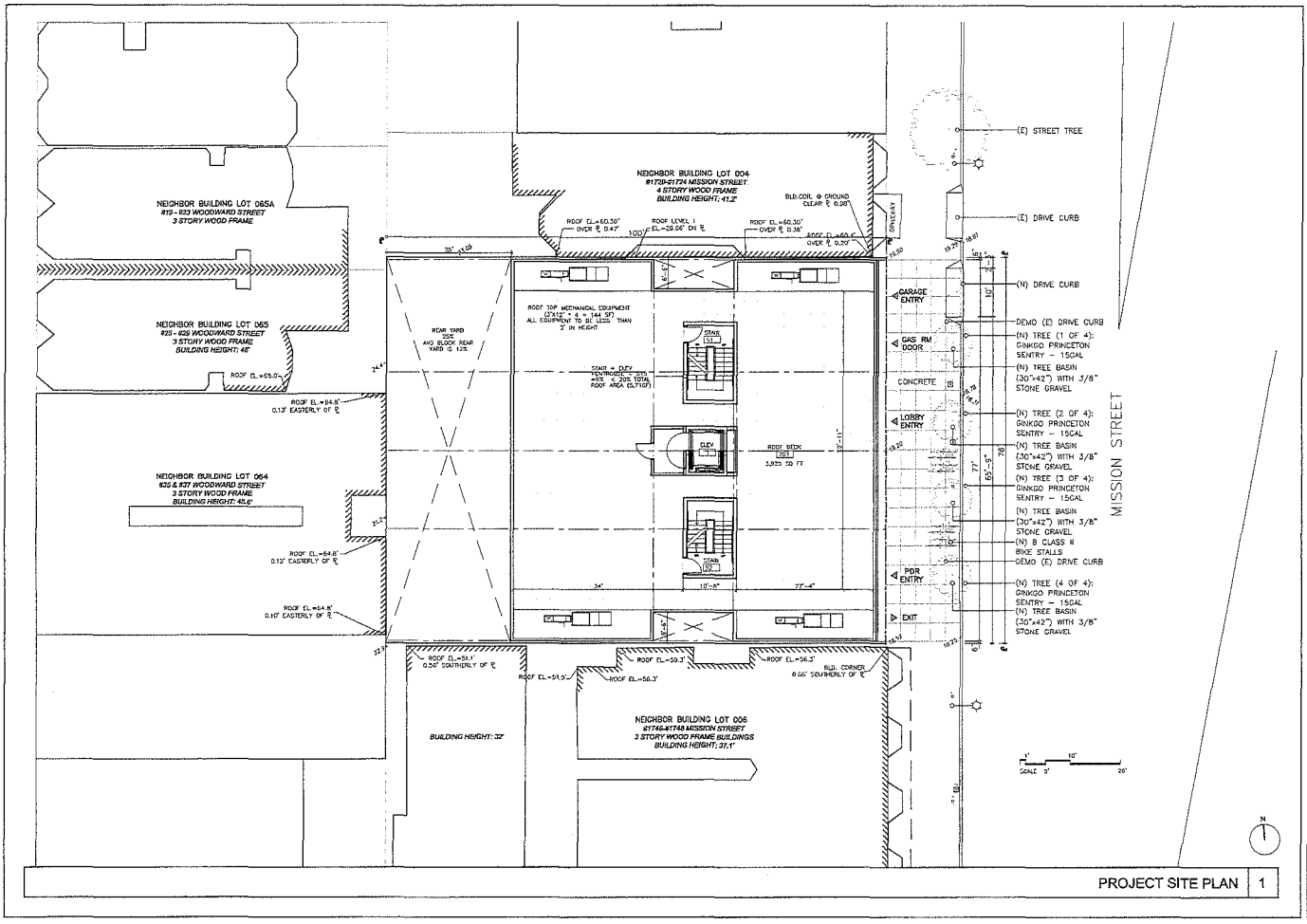


PROJECT SITE PLAN | 1

REVISIONS

1726 MISSION

1726 MISSION STR, SAN FRANCISCO, CA

TITLE: PROJECT SITE PLAN

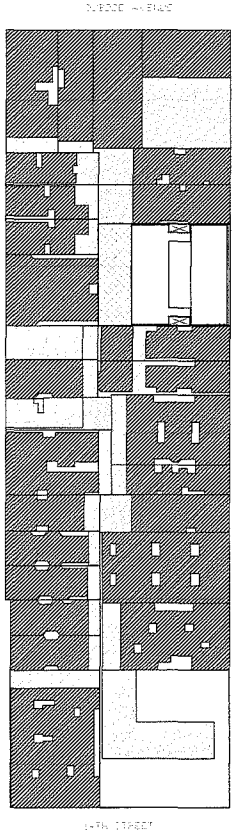
SET: PLANNING

DATE: 12-09-2016

SCALE: 24X36: 1/8" = 1'-0" 11X17: SCALE BAR

DRAWN: SDMH

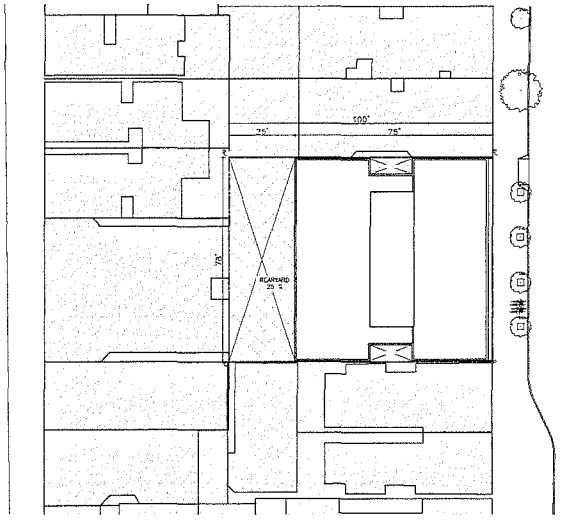
SHEET NO: A0.2B



PROJECT BUILDING FOOTPRINT	
CONTEXT HISTORICAL BUILDING FOOTPRINTS	
CONTEXT NON-HISTORICAL BUILDING FOOTPRINTS	
LOTS WITH LESS THAN 25% REAR YARD IN STUDY AREA	
LOTS WITH MORE THAN 25% REAR YARD IN STUDY AREA	

PERCENTAGE OF LOTS WITH LESS THAN 25% REAR YARD IN STUDY AREA	87.5%
PERCENTAGE OF LOTS WITH 25% REAR YARD IN STUDY AREA	11.9%
AVERAGE REAR YARD AREA OF LOTS IN STUDY AREA	12.2%
PROJECT REAR YARD	25%

ADJACENT BLOCK REAR YARD ANALYSIS 1/32"=1' | 1



PROJECT BUILDING FOOTPRINT (RESIDENTIAL LEVELS)	
CONTEXT BUILDING FOOTPRINTS	
LOTS WITH LESS THAN 25% REAR YARD IN STUDY AREA	
LOTS WITH MORE THAN 25% REAR YARD IN STUDY AREA	
PROJECT REAR YARD	

TOTAL PROJECT REAR YARD	1,850 SQ FT	25%
TOTAL OUTDOOR SPACE	5,868 SQ FT	77%

* INCLUDES OPEN WALKWAYS (PERMITTED AS PER 136.C.3.0.5)

YARD ANALYSIS 1/16"=1' | 2

REVISIONS

OWNER:
JS SULLIVAN DEVELOPMENT
[illegible]

ARCHITECT:
STANLEY SAITOWITZ | NATOMA ARCHITECTS Inc.
[illegible]

1726 MISSION

1726 MISSION STR, SAN FRANCISCO, CA

TITLE: YARD ANALYSIS

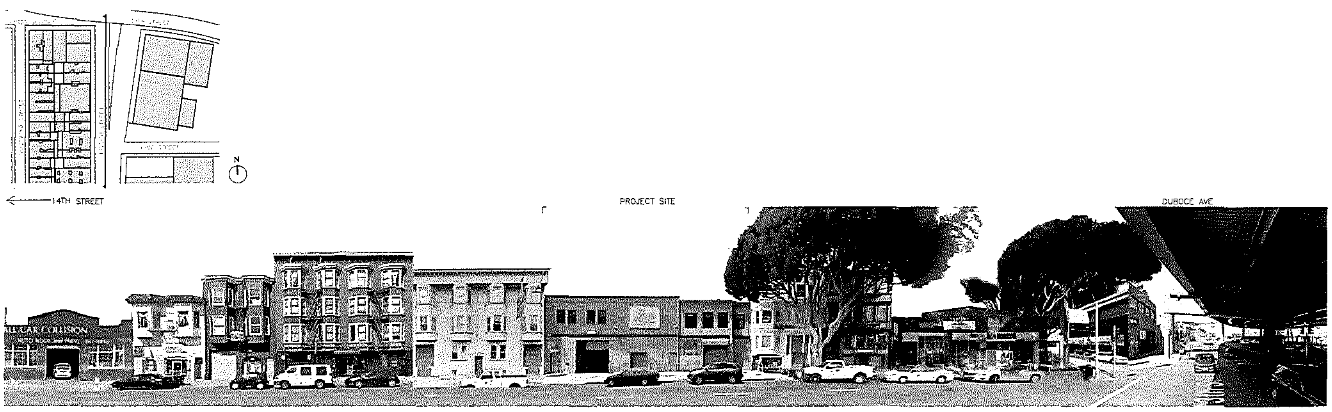
SCT.: PLANNING

DATE: 10-09-2015

SCALE: -

DRAWN: [illegible]

SHEET NO: A0.3



MISSION STREET WEST ELEVATION | 1

MISSION STREET EAST ELEVATION | 2

REVISIONS	

OWNER:
JS SULLIVAN DEVELOPMENT

ARCHITECT:
STANLEY SAITOWITZ|
NATOMA ARCHITECTS Inc.

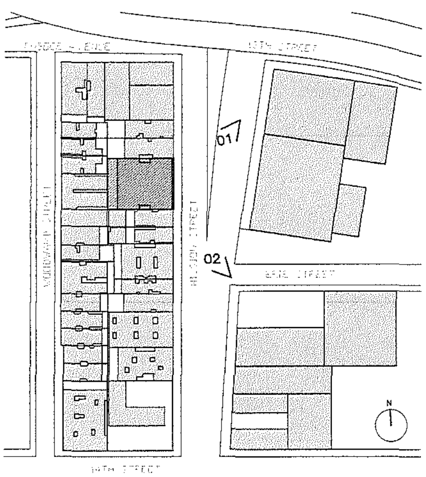
1726 MISSION

1726 MISSION STR, SAN FRANCISCO, CA

TITLE:
CONTEXT

SET:	PLANNING
DATE:	12-09-2016
SCALE:	1/8" = 1'-0"

SHEET NO:
A0.4A



NORTH-EAST VIEW ON MISSON ST | 1

SOUTH-EAST VIEW ON MISSON ST | 2

REVISIONS

OWNER:
JS SULLIVAN DEVELOPMENT

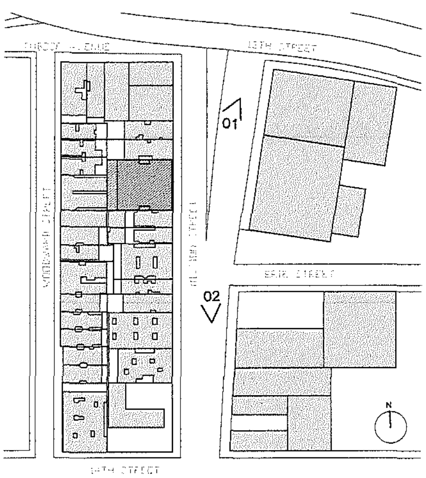
ARCHITECT
STANLEY SAITOWITZ|
NATOMA ARCHITECTS Inc.

1726 MISSION

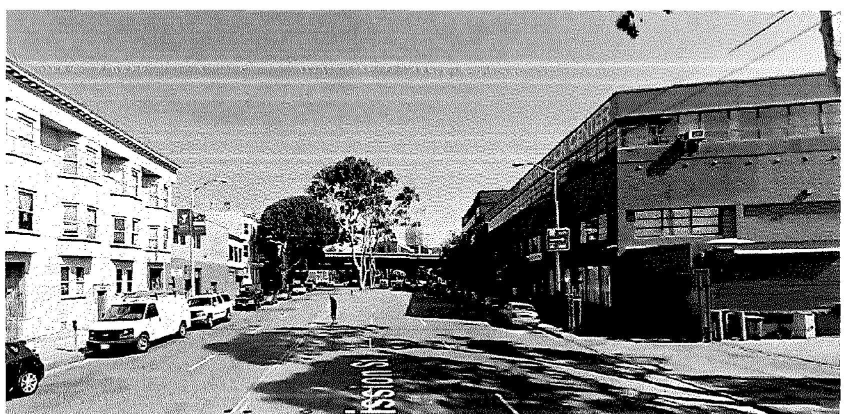
1726 MISSION STR, SAN FRANCISCO, CA

TITLE:
CONTEXT

SET: PLANNING
DATE: 12-09-2016
SCALE: NTS
DRAWN:
SHEET NO.: A0.4B



VIEW TOWARDS SOUTH ON MISSON ST | 1



VIEW TOWARDS NORTH ON MISSON ST | 2

REVISIONS

OWNER:
JS SULLIVAN DEVELOPMENT

ARCHITECT:
STANLEY SAITOWITZ | NATOMA ARCHITECTS Inc.

1726 MISSION

1726 MISSION STR, SAN FRANCISCO, CA

TITLE: CONTEXT

SET:	PLANNING
DATE:	12-09-2016
SCALE:	NTS
DRAWN:	SDNA

SHEET NO: A0.4C

NORTH EAST PERSPECTIVE ON MISSON ST | 1

REVISIONS

OWNER:
JS SULLIVAN DEVELOPMENT
[illegible]

ARCHITECT:
STANLEY SAITOWITZ
NATOMA ARCHITECTS INC.
[illegible]

1726 MISSION

1726 MISSION STR, SAN FRANCISCO, CA

TITLE:
PERSPECTIVE RENDERING

SET:	PLANNING
DATE:	10-09-2018
SCALE:	NTS
DRAWN:	SBW/ [illegible]

SHEET NO:
A0.5A

SOUTH EAST PERSPECTIVE - ENTRY | 1

REVISIONS

OWNER:
JS SULLIVAN DEVELOPMENT
SAN FRANCISCO, CA 94124

ARCHITECT:
STANLEY SAITOWITZ
NADIMA ARCHITECTS Inc.
SAN FRANCISCO, CA 94102

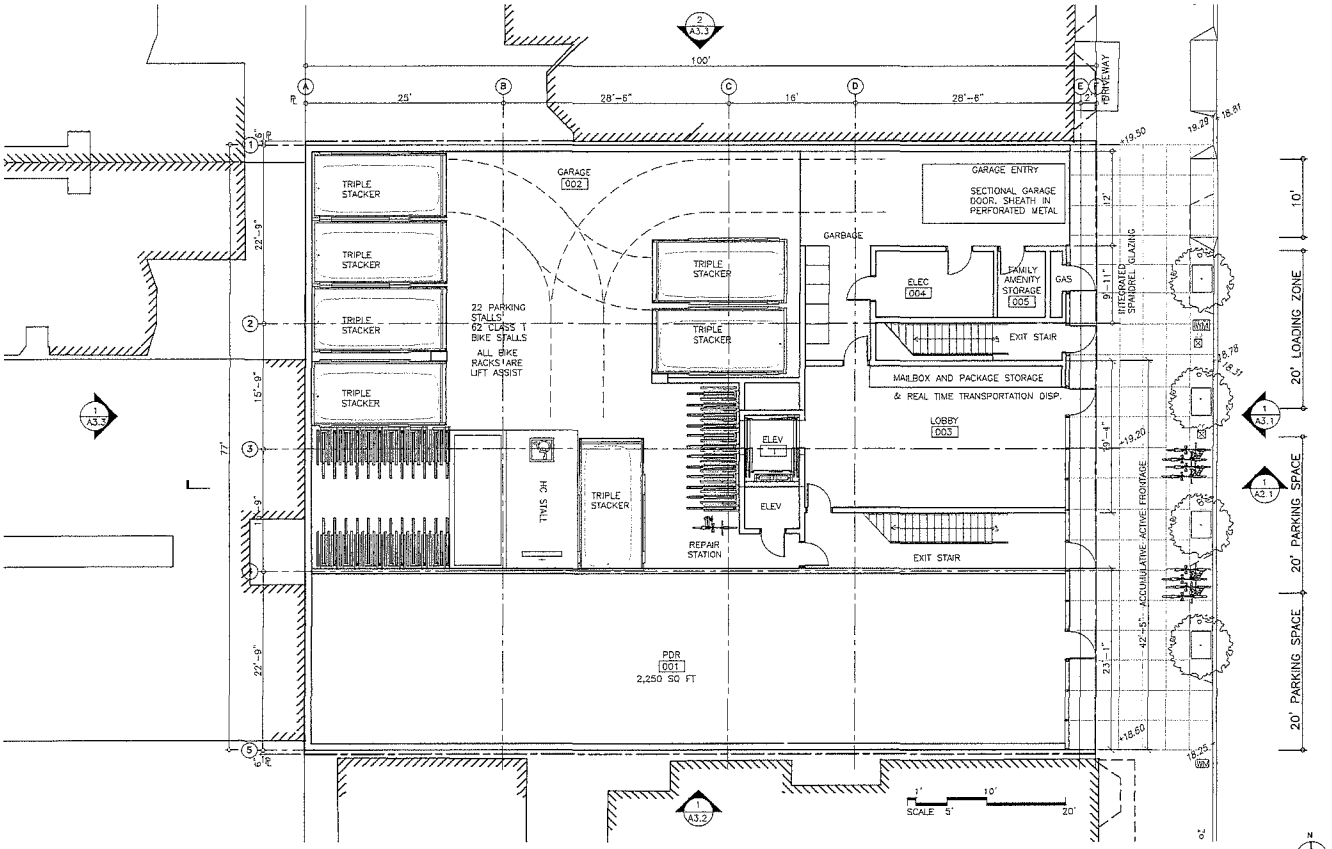
1726 MISSION

1726 MISSION STR, SAN FRANCISCO, CA

TITLE:
PERSPECTIVE RENDERING

SET:	PLANNING
DATE:	10-09-2015
SCALE:	NTS
DRAWN:	EENH

SHEET NO:
A0.5C



GROUND FLOOR PLAN | 1

REVISIONS

OWNER:
JS SULLIVAN DEVELOPMENT
[illegible]

ARCHITECT:
STANLEY SAITOWITZ
NATOMA ARCHITECTS Inc.
[illegible]

1726 MISSION

1726 MISSION STR, SAN FRANCISCO, CA

TITLE:
PLAN

ECT:	PLANNING
DATE:	12-09-2016
SCALE:	24X36: 3/16" = 1'-0" 11X17: SCALE BAR
DRAWN:	[illegible]

SHEET NO:
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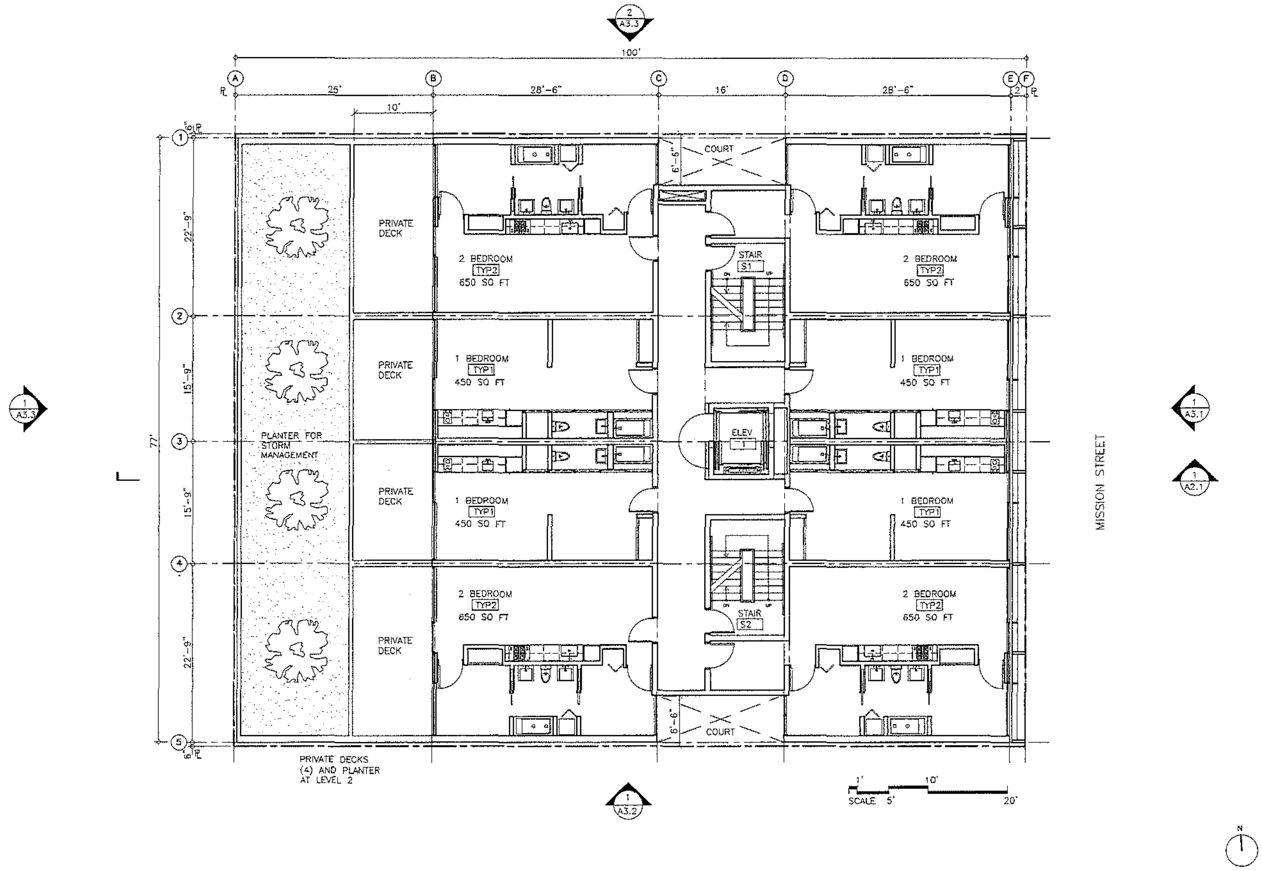


LEVEL 2, 3, 4 FLOOR PLAN | 1

REVISIONS

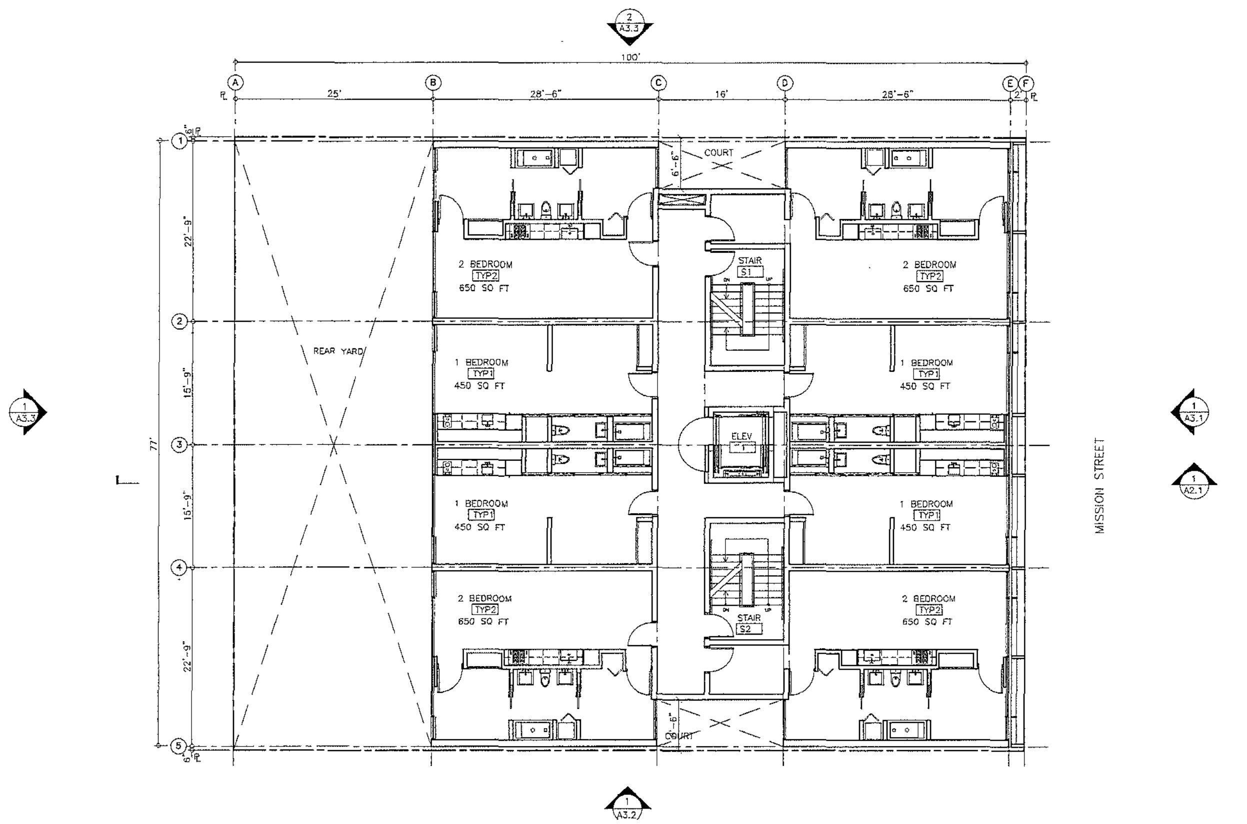
OWNER
JS SULLIVAN DEVELOPMENT

ARCHITECT
STANLEY SAITOWITZ
NATOMA ARCHITECTS Inc.

1726 MISSION
1726 MISSION STR, SAN FRANCISCO, CA

TITLE: PLAN

SET: PLANNING
DATE: 12-09-2016
SHEET No: A1.2



LEVEL 5, 6 FLOOR PLAN | 1

REVISIONS

OWNER
JS SULLIVAN DEVELOPMENT

ARCHITECT
STANLEY SAITOWITZ | NATOMA ARCHITECTS Inc.

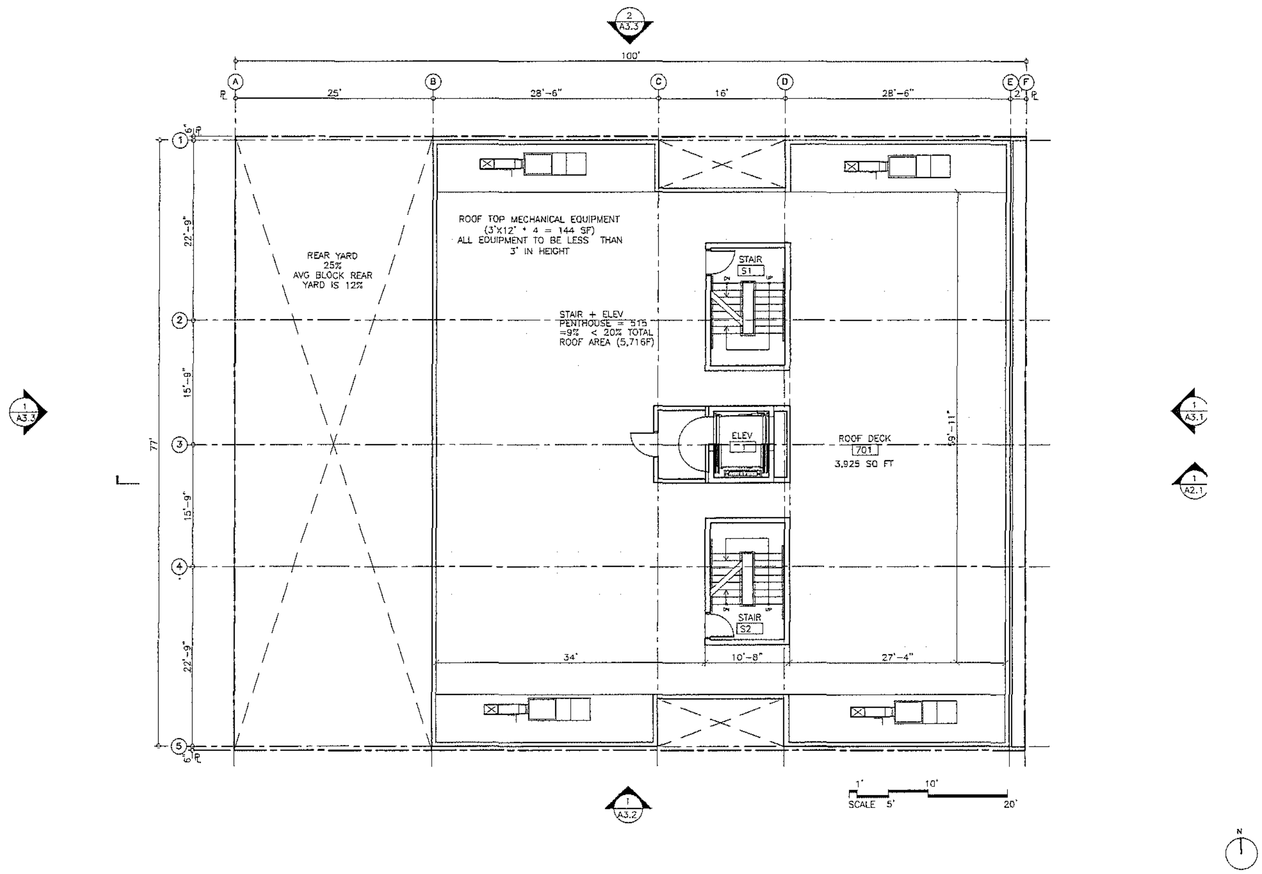
1726 MISSION

1726 MISSION STR, SAN FRANCISCO, CA

TITLE:
PLAN

SET:	PLANNING
DATE:	12-09-2018
SCALE:	24x36: 3/16" = 1'-0" 11x17: SCALE BAR
DRAWN:	SGNAI

SHEET NO:
A1.3



ROOF PLAN 1

REVISIONS

OWNER:
JS SULLIVAN DEVELOPMENT

ARCHITECT:
STANLEY SAITOWITZ |
NATOMA ARCHITECTS Inc.

1726 MISSION
1726 MISSION STR, SAN FRANCISCO, CA

TITLE:
ROOF PLAN

SET:	PLANNING
DATE:	12-09-2016
SCALE:	24x36: 3/16" = 1'-0" 11x17: SCALE BAR
DRAWN:	SGNA

SHEET NO:
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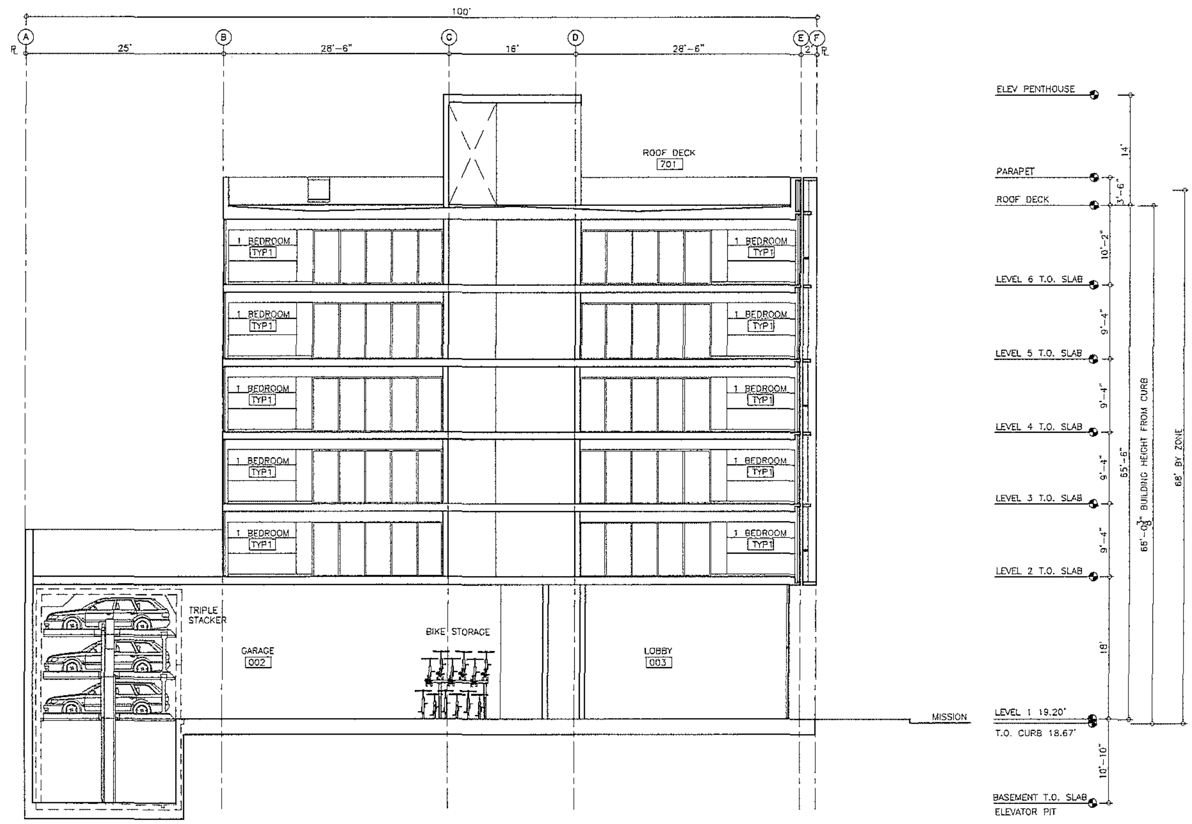


SECTION 1

REVISIONS

OWNER:
JS SULLIVAN DEVELOPMENT

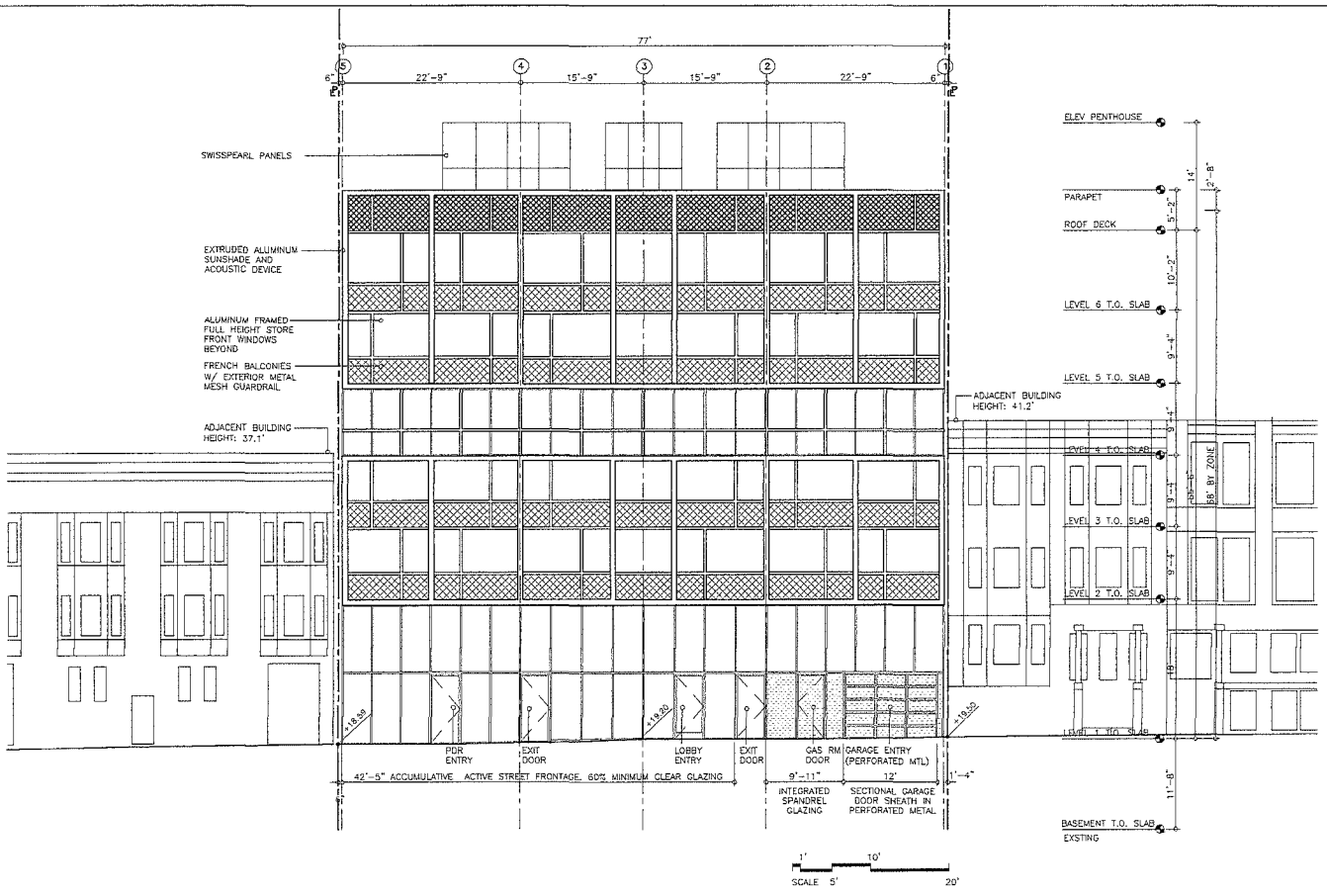
ARCHITECT:
STANLEY SAITOWITZ
NATOMA ARCHITECTS Inc.

1726 MISSION
1726 MISSION STR, SAN FRANCISCO, CA

TITLE:
SECTION

SET:	PLANNING
DATE:	12-09-2015
SCALE:	24X36: 3/16"=1'-0" 11x17: SCALE BAR
DRAWN:	

SHEET NO:
A2.1



EAST ELEVATION | 1

REVISIONS

OWNER
JS SULLIVAN DEVELOPMENT
[redacted]

ARCHITECT
STANLEY SAITOWITZ | NADIMA ARCHITECTS Inc.
[redacted]

1726 MISSION

1726 MISSION STR, SAN FRANCISCO, CA

TITLE:
ELEVATION

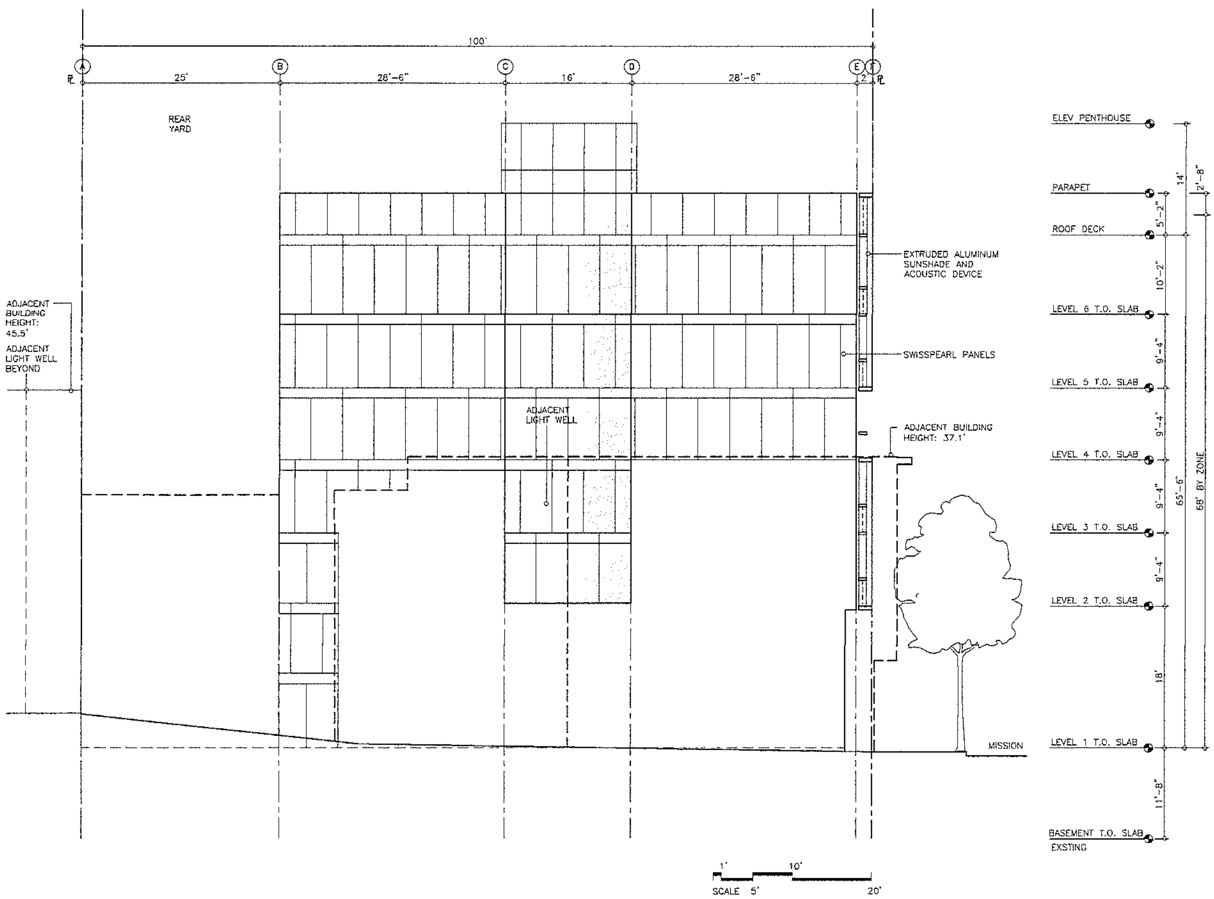
SET: PLANNING

DATE: 12-09-2016

SCALE: [illegible]

DRAWN: [illegible]

SHEET NO:
A3.1



SOUTH ELEVATION | 1

REVISIONS

OWNER:
JS SULLIVAN DEVELOPMENT

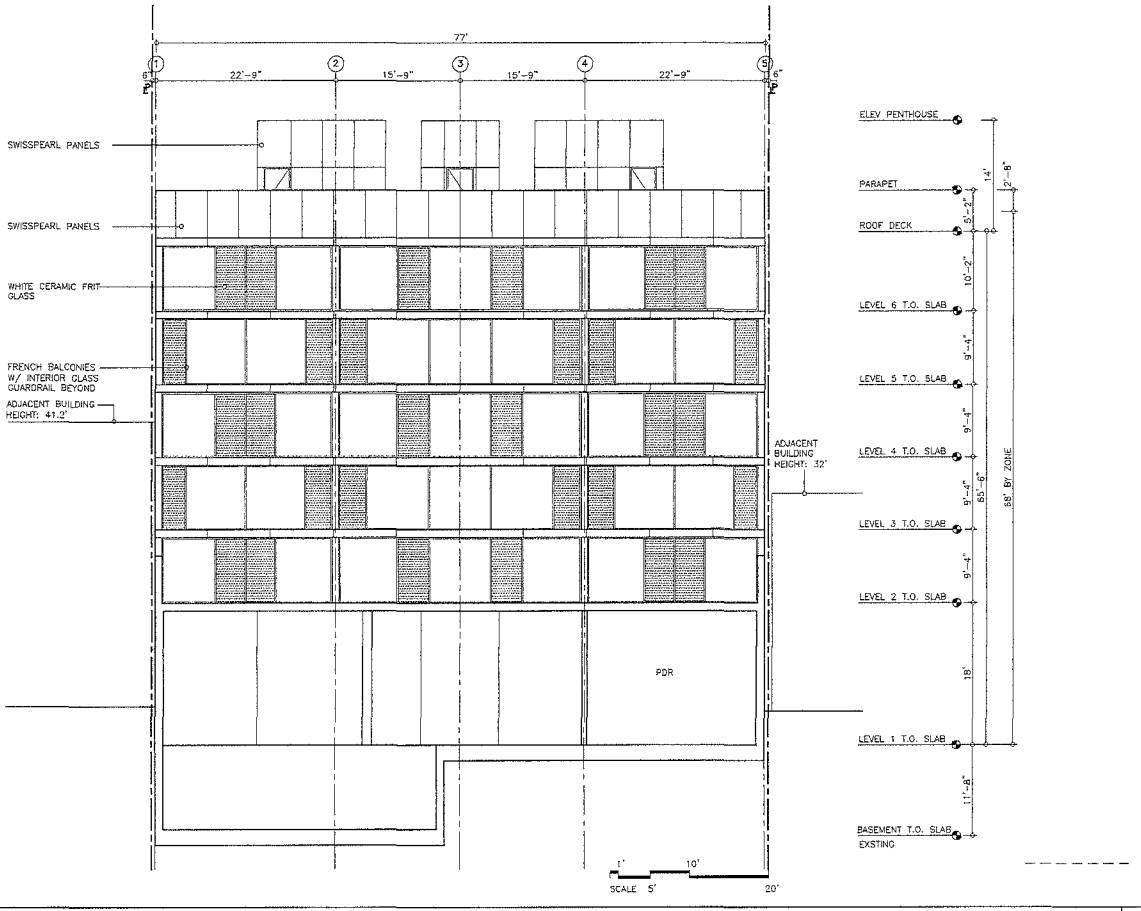
ARCHITECT
STANLEY SAITOWITZ | NATOMA ARCHITECTS Inc.

1726 MISSION
1726 MISSION STR, SAN FRANCISCO, CA

TITLE:
ELEVATION

SET:	PLANNING
DATE:	12-09-2016
SCALE:	24x36: 3/16"=1'-0" 11x17: SCALE BAR
DRAWN:	SS|NAI

SHEET NO:
A3.2



WEST ELEVATION | 1

REVISIONS

OWNER:
JS SULLIVAN DEVELOPMENT
[illegible]
SAN FRANCISCO, CA 94115

ARCHITECT:
STANLEY SAITOWITZ|
NATOMA ARCHITECTS Inc.
[illegible]
San Francisco, CA 94103
T 415.[illegible] F 415.[illegible]

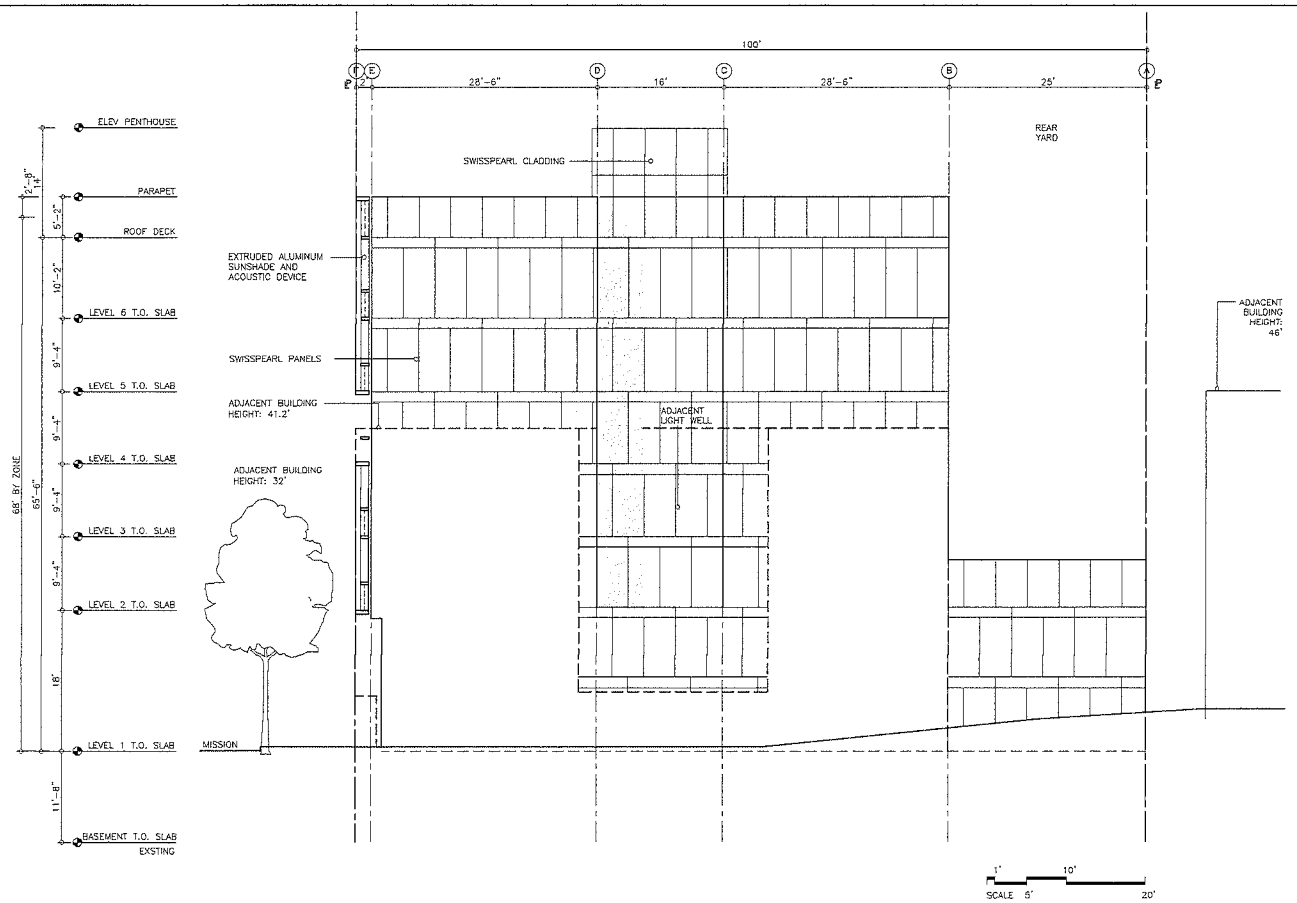
1726 MISSION

1726 MISSION STR, SAN FRANCISCO, CA

TITLE:
ELEVATION

DET.	PLANNING
DATE:	12-09-2016
SCALE:	24X36: 3/16"=1'-0" 11X17: SCALE BAR
DRAWN:	CDW

SHEET NO:
A3.3



NORTH ELEVATION 1

REVISIONS

OWNER:
JS SULLIVAN DEVELOPMENT

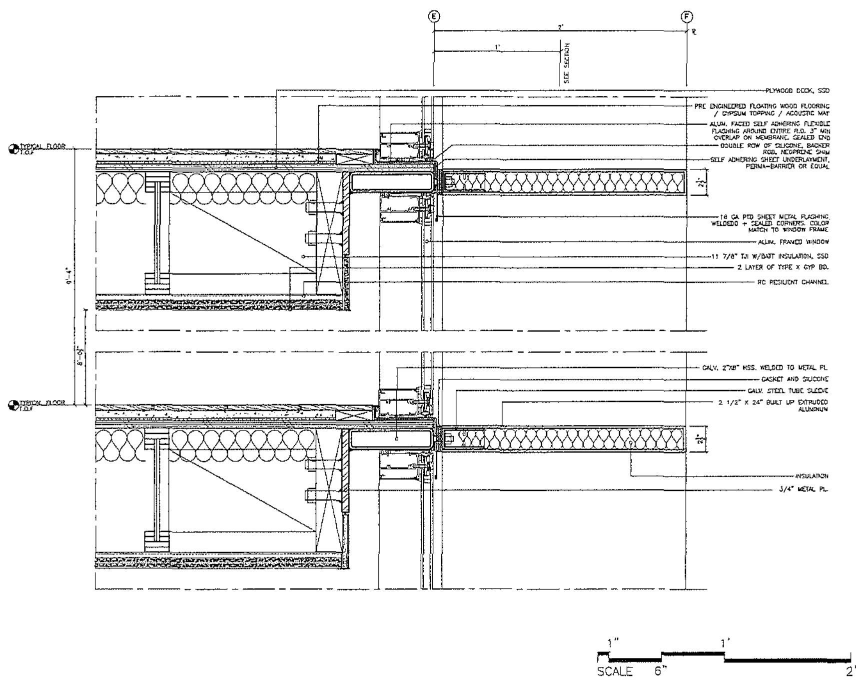
ARCHITECT
STANLEY SAITOWITZ | NATOMA ARCHITECTS Inc.

1726 MISSION
1726 MISSION STR, SAN FRANCISCO, CA

TITLE:
ELEVATIONS

SET:	PLANNING
DATE:	12-09-2016
SCALE:	24x36: 3/16"=1'-0" 11x17: SCALE BAR
DRAWN:	SS|NA

SHEET NO:
A3.4



TYPICAL ACOUSTIC SUNSHADE DETAIL | 1

REVISIONS

OWNER:
JS SULLIVAN DEVELOPMENT

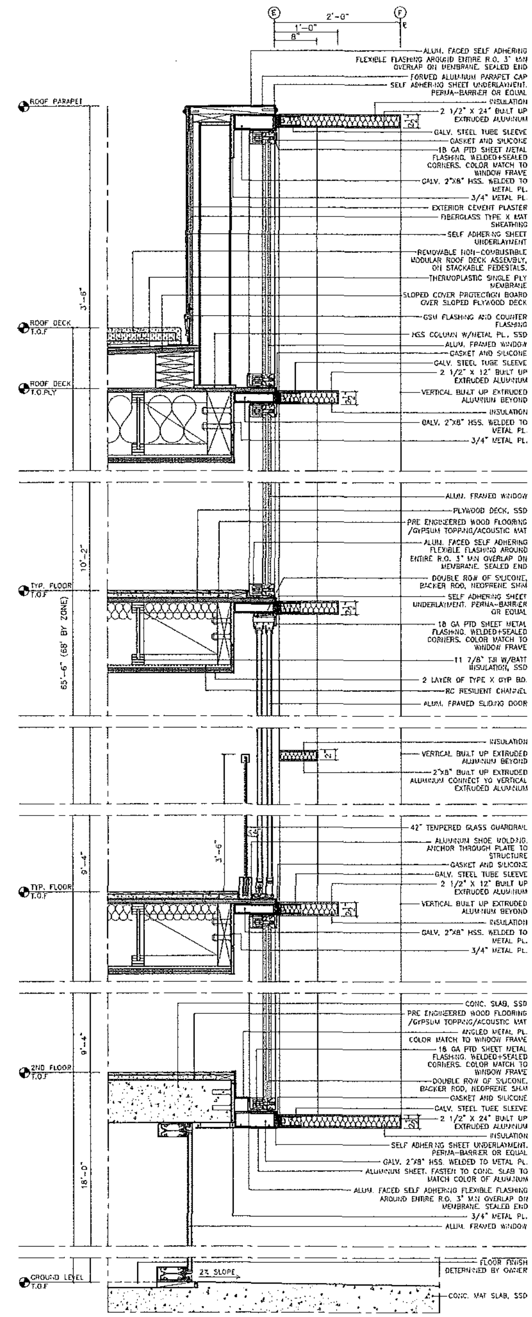
ARCHITECT:
STANLEY SAITOWITZ | NATOMA ARCHITECTS Inc.

1726 MISSION
1726 MISSION STR, SAN FRANCISCO, CA

TITLE:
SUNSHADE DETAIL

SET.	PLANNING
DATE:	12-09-2016
SCALE:	24x36: 3" = 1'-0" 11x17: SCALE BAR
DRAWN:	SS|NA

SHEET NO:
A5.1



WALL SECTION @ GRID E / F | 1

REVISIONS

OWNER: JS SULLIVAN DEVELOPMENT

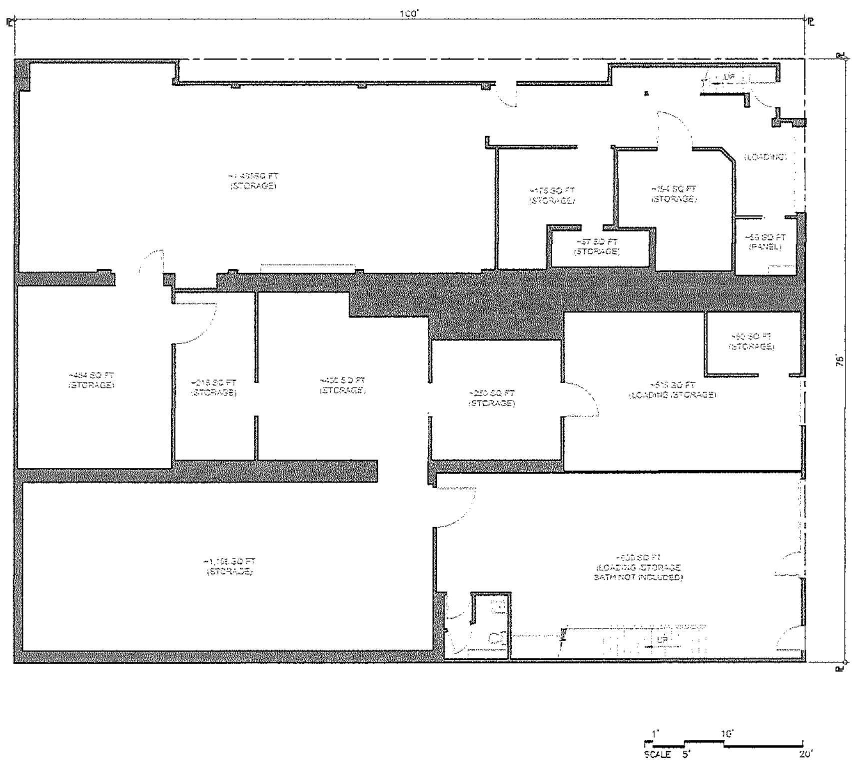
ARCHITECT: STANLEY SAITOWITZ | NATOMA ARCHITECTS Inc.

1726 MISSION

1726 MISSION STR, SAN FRANCISCO, CA

TITLE: WALL SECTION

SET:	PLANNING
DATE:	12-09-2016
SCALE:	24x36: 3" = 1'-0" 11x17: SCALE BAR
DRAWN:	
SHEET NO:	A5.2



EXISTING GROUND FLOOR PLAN | 1

REVISIONS

OWNER:
JS SULLIVAN DEVELOPMENT
SAN FRANCISCO CA

ARCHITECT:
STANLEY SAITOWITZ | NATOMA ARCHITECTS Inc.
San Francisco, CA

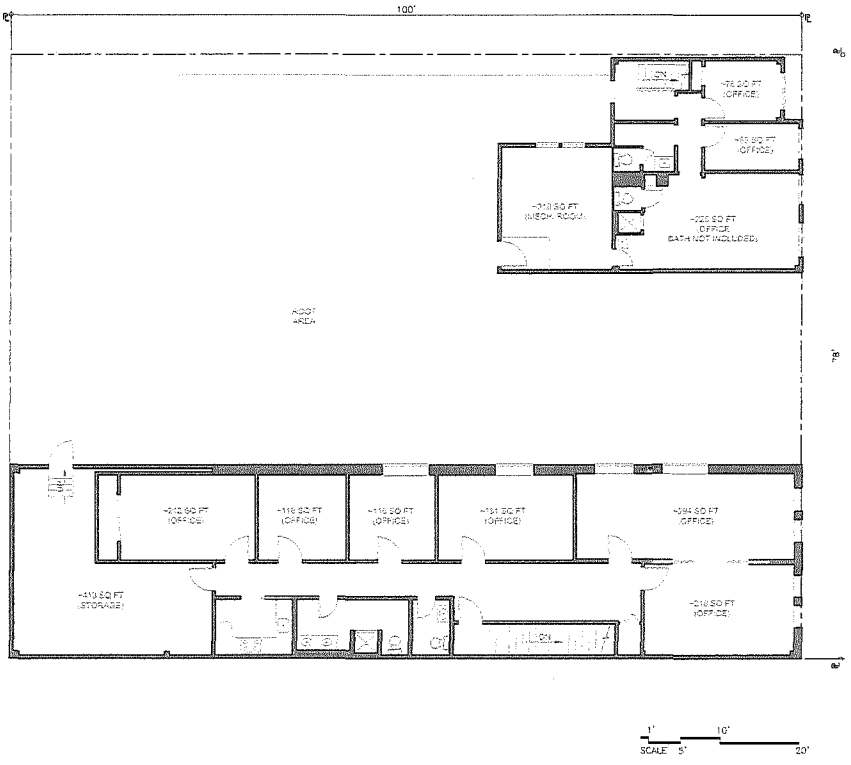
1726 MISSION

1726 MISSION STR, SAN FRANCISCO, CA

TITLE:
EXISTING PLAN

SET:	PLANNING
DATE:	12-09-2016
SCALE:	24x36: 3/16"=1'-0" 11x17: SCALE BAR
DRAWN:	SS|NA

SHEET NO:
D1.1



EXISTING 2ND FLOOR PLAN | 1

REVISIONS

OWNER:
JS SULLIVAN DEVELOPMENT
2548 FILLMORE STREET, 3RD FLOOR
SAN FRANCISCO, CA 94115

ARCHITECT:
STANLEY SAITOWITZ
NATOMA ARCHITECTS Inc.
[illegible]

1726 MISSION

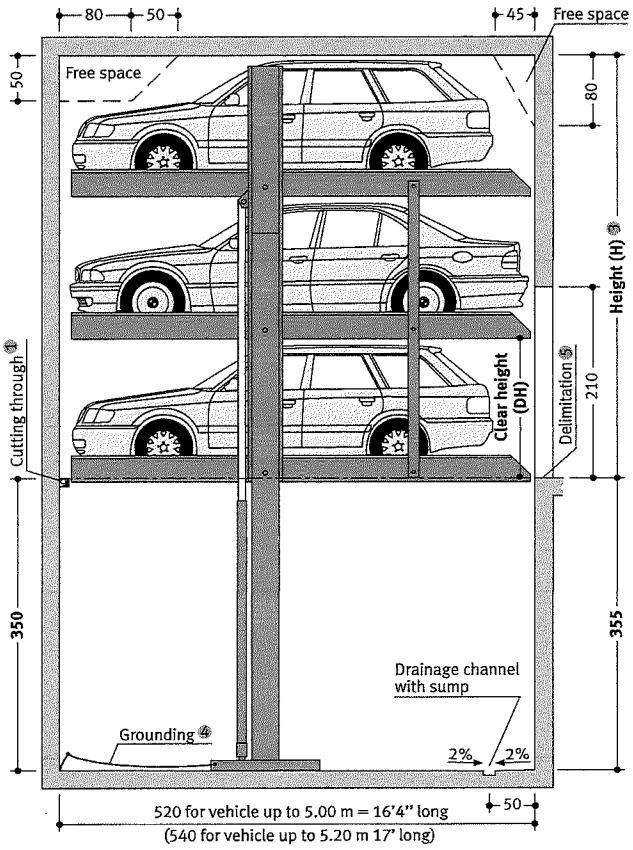
1726 MISSION STR, SAN FRANCISCO, CA

TITLE:
EXISTING PLAN

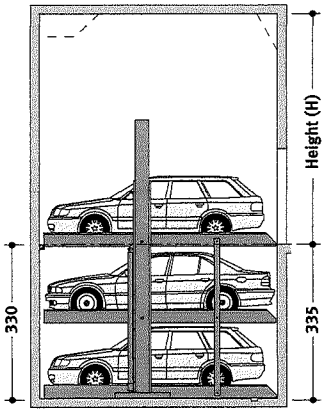
SET:	PLANNING
DATE:	12-09-2016
SCALE:	[illegible]
DRAWN:	[illegible]

SHEET NO:
D1.2

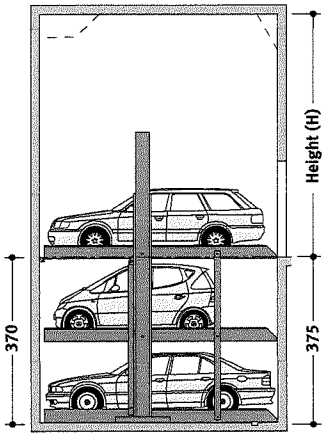
Standard Type G63-350



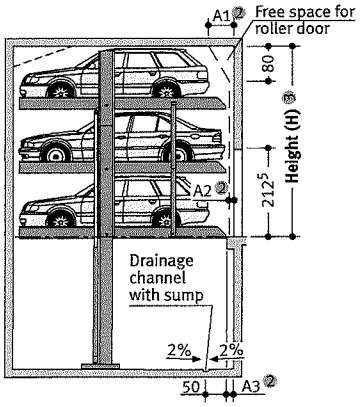
Compact Type G63-330



Exklusive Type G63-370



Garage with door in front of the car parking system



Notes

1. For dividing walls: cutting through 10 x 10 cm (for pipes).
2. Dimensions A1, A2 and A3 must be coordinated with the door supplier.
3. If the total height is greater, the max. vehicle height for the upper parking space increases accordingly.
4. Potential equalization from foundation grounding connection to system (provided by the customer).
5. In compliance with DIN EN 14 010, 10 cm wide yellow-black markings compliant to ISO 3864 must be applied by the customer to the edge of the pit in the entry area to mark the danger zone (see »load plan« page 3).
6. Load increase possible only for EB against surcharge.

Product Data
Stack Parker
G63

CE CONFORMITY

Dimensions:
All space requirements are minimum finished dimensions. Tolerances for space requirements $^{+3}_{0}$. Dimensions in cm.

EB (single platform) = 3 vehicles
DB (double platform) = 6 vehicles

Typ	H	DH**
G63-330	480	155
G63-350*	510	165
G63-370	540	175

* = Standard Type ** = without car

Suitable for:
Standard passenger car and station wagon. Height and length according to contur.

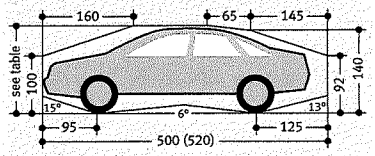
		car height
Type	H	upper/middle/lower
G63-330	480	150
G63-350*	510	160
G63-370	540	170

* = Standard Type

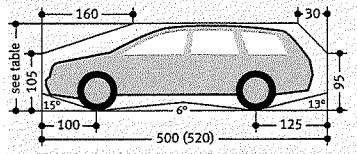
width	1.90 m
weight ⑥	max. 2000 kg ***
wheel load	max. 500 kg ***

*** = Special design: EB max. 2500 kg/wheel load max. 625 kg

Standard passenger car



Standard station wagon



Standard passenger cars are vehicles without any sports options such as spoilers, low-profile tyres etc.

KLAUS multiparking

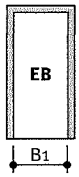
Klaus Multiparking GmbH
Hermann-Krum-Straße 2
D-88319 Aitrach

Phone +49-7565-508-0
Fax +49-7565-508-88
E-Mail info@multiparking.com

Width for basement garage

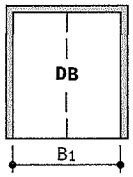
Dividing walls

Single Platform (EB)



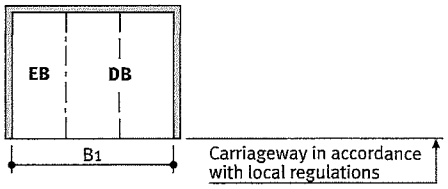
usable platform width	B1
230 *	**270**
240	280
250	290
260	300
270	310

Double Platform (DB)



usable platform width	B1
460 *	**500**
470	510
480	520
490	530
500	540

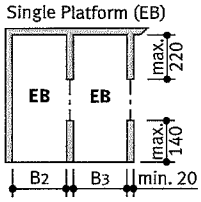
Single and Double Platform (EB + DB) – Example



usable platform width	B1
230 + 460*	**770**
240 + 470	790
250 + 480	810
250 + 500	830
270 + 500	850

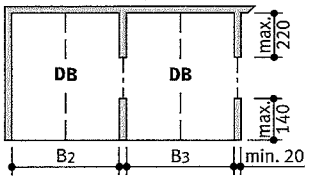
Columns in pit

Single Platform (EB)



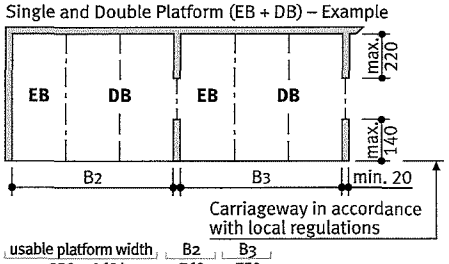
usable platform width	B2	B3
230 *	**260**	**250**
240	270	260
250	280	270
260	290	280
270	300	290

Double Platform (DB)



usable platform width	B2	B3
460 *	**490**	**480**
470	500	490
480	510	500
490	520	510
500	530	520

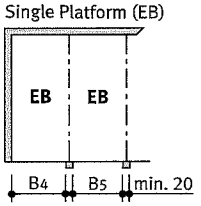
Single and Double Platform (EB + DB) – Example



usable platform width	B2	B3
230 + 460*	**760**	**750**
240 + 470	780	770
250 + 480	800	790
250 + 500	820	810
270 + 500	840	830

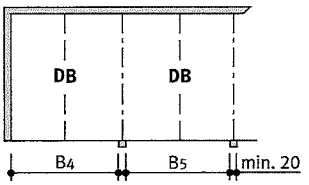
Columns outside pit

Single Platform (EB)



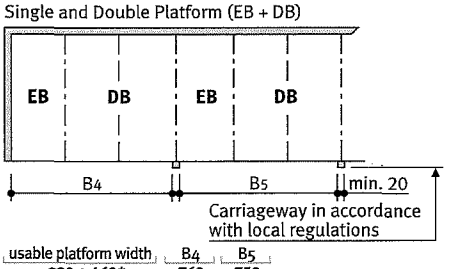
usable platform width	B4	B5
230 *	**260**	**250**
240	270	260
250	280	270
260	290	280
270	300	290

Double Platform (DB)



usable platform width	B4	B5
460 *	**490**	**480**
470	500	490
480	510	500
490	520	510
500	530	520

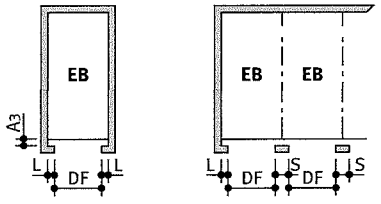
Single and Double Platform (EB + DB)



usable platform width	B4	B5
230 + 460*	**760**	**750**
240 + 470	780	770
250 + 480	800	790
250 + 500	820	810
270 + 500	840	830

Widths for garage with door in front of car parking system

Single platform (EB)

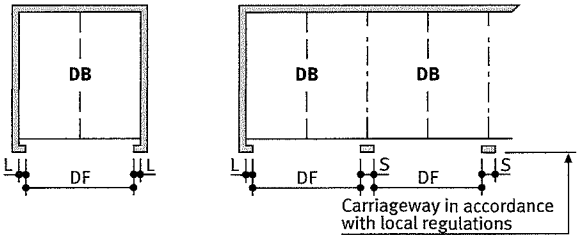


A_3 = seat-engaging surface (dimensions require coordination with door supplier.)

Allround door dimensions require coordination between door supplier and local agency of Klaus Multiparking.

usable platform width	door entrance width DF	L	S
230 *	**237[5]**	**16[5]**	**30**
240	250	15	30
250	250	20	40
260	260	20	40
270	270	20	40

Double platform (DB)



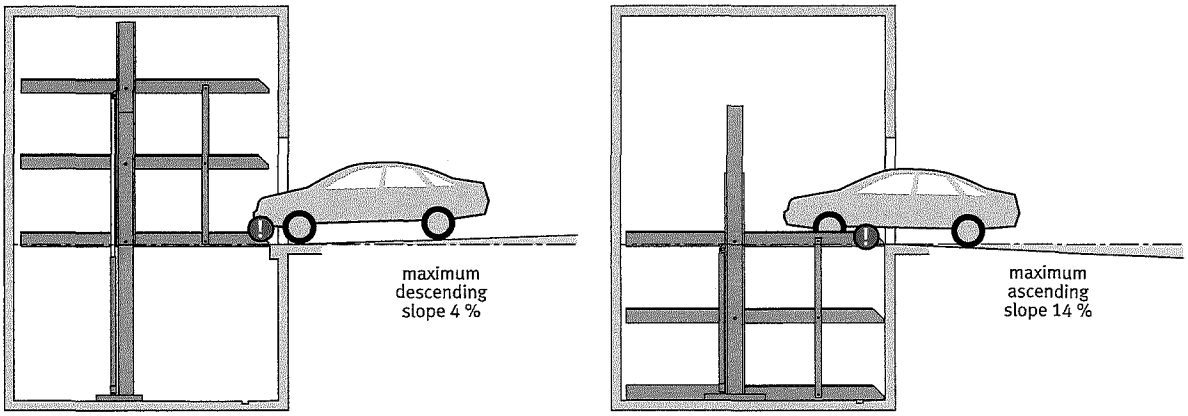
usable platform width	door entrance width DF	L	S
460 *	**475**	**12[5]**	**25**
470	475	17[5]	35
480	500	12[5]	25
490	500	15	30
500	500	20	40

* = standard width (parking space width 2.30 m)

Please note:

End parking spaces are generally more difficult to drive into. Therefore we recommended for end parking spaces our wider platforms. For the greatest possible ease-of-use, we recommend platform widths of 250 to 270 (EB) or 500 (DB).
Parking on standard width platforms with larger vehicles may make getting into and out of the vehicle difficult. This depends on type

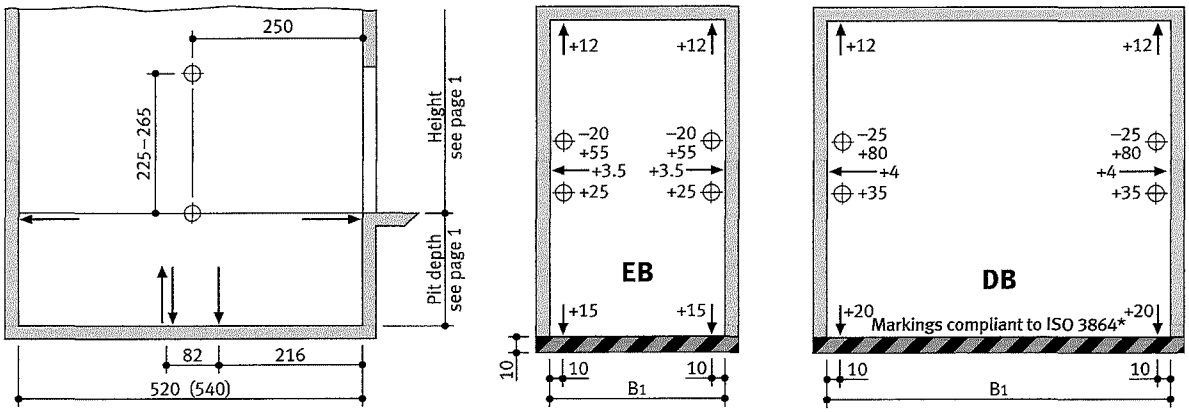
Approach



The illustrated maximum approach angles must not be exceeded. Incorrect approach angles will cause serious maneouvring & positioning problems on the parking system for which the local agency of Klaus accepts no responsibility.

Load plan

Forces in kN

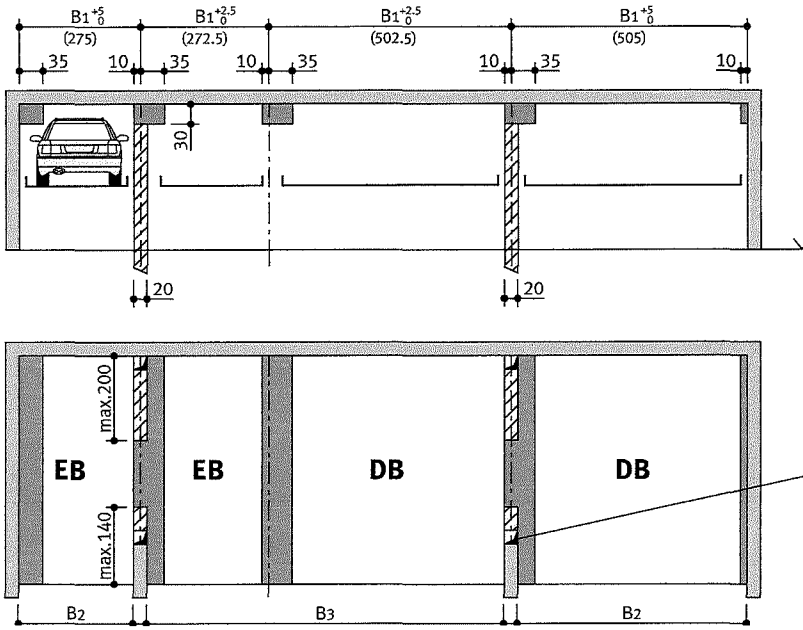


Units are dowelled to the floor. Drilling depth: approx. 15 cm.
Floor and walls below the drive-in level are to be made of concrete (quality minimum C20/25)!

* = Colors used in this illustration are not ISO 3864 compliant

Installation data

Free space for longitudinal and vertical ducts (e.g. ventilation)



B_1, B_2, B_3 = (see table on page 2)

Free space for vertical pipelines, ventilation branch canals

Free space for horizontal ducting

Approach level

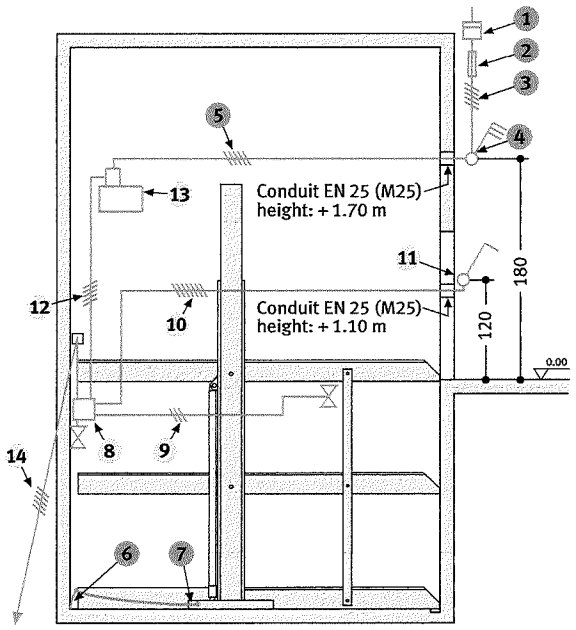
Free space only applicable if vehicle is parked forwards = FRONT FIRST and driver's door on the left side.

( ) = Dimensions in brackets illustrate an example for usable platform width 230/460 cm.

Example for ventilation branch canal and/or vertical pipelines.

Electrical installation

Installation diagram



to the next system

Electrical data (to be performed by the customer)

No.	Qunatity	Description	Position	Frequency
1	1	Electricity meter	in the supply line	
2	1	Main fuse: 3 x fuse 20 A (slow) or circuit breaker 3 x 20 A (trigger characteristic K or C)	in the supply line	1 per unit
3	1	Supply line 5 x 2.5 mm² (3 PH + N + PE) with marked wire and protective conductor	to main switch	1 per unit
4	1	Lockable main switch	defined at the plan evaluation	1 per unit
5	1	Supply line 5 x 2.5 mm² (3 PH + N + PE) with marked wire and protective conductor	from main switch to unit	1 per unit
6	every 10 m	Foundation earth connector	corner pit floor	
7	1	Equipotential bonding in accordance with DIN EN 60204 from foundation earth connector to the system		1 per system

Electrical data (included in delivery of Klaus Multiparking)

No.	Description
8	Terminal box
9	Control line 3 x 0.75 mm² (PH + N + PE)
10	Control line 7 x 1.5 mm² with marked wire and protective conductor
11	Operating device
12	Control line 5 x 1.5 mm² with marked wire and protective conductor
13	Hydraulic unit 5.2 kW, three-phase current, 400 V / 50 Hz
14	Control line 5 x 1.5 mm² with marked wire and protective conductor

Technical data

Range of application

Generally, this parking system is not suited for short-time parkers (temporary parkers). Please do not hesitate to contact your local KLAUS agency for further assistance.

Units

Low-noise power units mounted to rubber-bonded-to metal mountings are installed. Nevertheless we recommend that parking system's garage be built separately from the dwelling.

Available documents

- wall recess plans
- maintenance offer/contract
- declaration of conformity
- test sheet on airborne and slid-borne sound

Corrosion protection

See separate sheet regarding corrosion protection.

Railings

If the permissible drop opening is exceeded, railings are to be mounted on the systems. If there are traffic routes next to or behind the installations, railings compliant to DIN EN ISO 13857 must be installed by the customer. Railings must also be in place during construction.

Environmental conditions

Environmental conditions for the area of multiparking systems: Temperature range –10 to +40° C. Relative humidity 50 % at a maximum outside temperature of +40° C.
If lifting or lowering times are specified, they refer to an environmental temperature of +10° C and with the system set up directly next to the hydraulic unit. At lower temperatures or with longer hydraulic lines, these times increase.

Sound insulation

According to DIN 4109 (Sound insulation in buildings), para. 4, annotation 4, Klaus Multiparkers are part of the building services (garage systems).

Normal sound insulation:

DIN 4109, para. 4, Sound insulation against noises from building services.

Table 4 in para. 4.1 contains the permissible sound level values emitted from building services for personal living and working areas. According to line 2 the maximum sound level in personal living and working areas must not exceed 30 dB (A).
Noises created by users are not subject to the requirements (see table 4 , DIN 4109).

The following measures are to be taken to comply with this value:
- Sound protection package according to offer/order (Klaus Multiparking GmbH)
- Minimum sound insulation of building R'_w = 57 dB (to be provided by customer)

Increased sound insulation (special agreement):

DIN 4109, Amendment 2, Information on planning and execution, proposals for increased sound insulation.

Agreement: Maximum sound level in personal living and working areas 25 dB (A). *Noises created by users are not subject to the requirements (see table 4 , DIN 4109).*

The following measures are to be taken to comply with this value:
- Sound protection package according to offer/order (Klaus Multiparking GmbH)
- Minimum sound insulation of building R'_w = 62 dB (to be provided by customer)

Note: User noises are noises created by individual users in our Multiparking systems. These can be noises from accessing the platforms, slamming of vehicle doors, motor and brake noises.

To be performed by the customer

Safety fences

Any constraints that may be necessary according to DIN EN ISO 13857 in order to provide protection for the park pits for pathways directly in front, next to or behind the unit. This is also valid during construction. Railings for the system are included in the series delivery when necessary.

Numbering of parking spaces

Consecutive numbering of parking spaces.

Building services

Lighting, ventilation, fire extinguishing and fire alarm systems.

Drainage

For the front area of the pit we recommend a drainage channel, which you connect to a floor drain system or sump (50 x 50 x 20 cm). The drainage channel may be inclined to the side, however not the pit floor itself (longitudinal incline is available). For reasons of environmental protection we recommend to paint the pit floor, and to provide oil and petrol separators in the connections to the public sewage network.

Strip footings

If due to structural conditions strip footings must be effected, the customer shall provide an accessible platform reaching to the top of the said strip footings to enable and facilitate themounting work.

Marking

According to DIN EN 14 010, a warning that identifies this danger area must be placed in the entrance area that conforms to ISO 3864. This must be done according to EN 92/58/EWG for systems with a pit (platforms within the pit) 10 cm from the edge of the pit.

Wall cuttings

Any necessary wall cuttings according to page 1.

Electrical supply to the main switch / Foundation earth connector

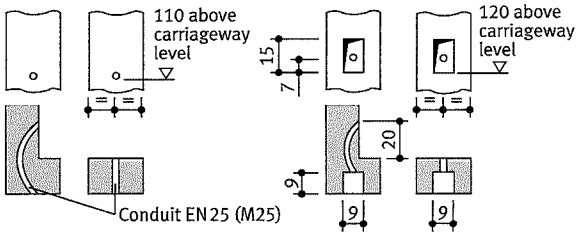
Suitable electrical supply to the main switch and the control wire line must be provided by the customer during installation. The functionality can be monitored on site by our fitters together with the electrician. If this cannot be done during installation for some reason for which the customer is responsible, the customer must commission an electrician at their own expense and risk.

In accordance with DIN EN 60204 (Safety of Machinery. Electrical Equipment), grounding of the steel structure is necessary, provided by the customer (distance between grounding max. 10 m).

Operating device

Cable conduits and recesses for operating device (for double wing doors: please contact the local agency of Klaus Multiparking).

Operating device exposed **Operating device concealed**



If the following are not included in the quotation, they will also have to be provided / paid for by the customer:

- Mounting of contactor and terminal box to the wall valve, complete wiring of all elements in accordance with the circuit diagram
- Costs for final technical approval by an authorized body
- Main switch
- Control line from main switch to hydraulic unit

Description Single platform (EB) and Double platform (DB)

General description

Multiparking system providing independent parking spaces for 3 cars (EB), 2 x 3 cars (DB), one on top of the other each.

Dimensions are in accordance with the underlying dimensions of parking pit, height and width

The parking bays are accessed horinzotally (installation deviation ± 1 %).

Vehicles are positioned on each parking space using wheel stops on the right side (adjust according to operating instructions).

Operation via operating device with hold-to-run-device using master keys.

The operating elements are usually mounted either in front of the column or on the outside of the door frame

Operating instructions are attached to each operator's stand.

For garages with doors at the front of the parking system the special dimensional requirements have to be taken into account.

Multiparking system consisting of:

- 2 steel pillars with base elements (mounted on the floor)
- 2 sliding platforms (mounted to the steel pillars with sliding bearings)
- 2 platforms
- 1 mechanic synchronization control system (to ensure synchronous operation of the hydraulic cylinders while lowering and lifting the platform)
- 2 hydraulic cylinders
- 2 rigid supports (connect the platforms)
- Welded hydraulic lines up to installed globe valve
- Dowels, screws, connecting elements, bolts, etc.
- The platforms and parking spaces are end-to-end accessible for parking!

Platforms consisting of:

- Platform base sections
- Adjustable wheel stops
- Canted access plates
- Side members
- Central side member [only DB]
- Cross members
- Safety railings – along the upper, middle and lower platform (if required)
- Screws, nuts, washers, distance tubes, etc.

Hydraulic system consisting of:

- Hydraulic cylinder
- Solenoid valve
- Safety valve
- Hydraulic conduits
- Screwed joints
- High-pressure hoses
- Installation material

Electric system consisting of:

- Operating device (Emergency Stop, lock, 1 master key per parking space)
- Terminal box at wall valve
- Reed contact

Hydraulic unit consisting of:

- Hydraulic power unit (low-noise, installed onto a console with a rubber-bonded-to-metal mounting)
- Hydraulic oil reservoir
- Oil filling
- Internal geared wheel pump
- Pump holder
- Clutch
- 3-phase-AC-motor (5.2 kW, 230/400 V, 50 Hz)
- Contactor (with thermal overcurrent relay and control fuse)
- Test manometer
- Pressure relief valve
- Hydraulic hoses (which reduce noise transmission onto the hydraulic pipe

We reserve the right to change this specification without further notice

The Klaus company reserves the right in the course of technical progress to use newer or other technologies, systems, processes, procedures or standards in the fulfillment of their obligations other than those originally offered provided the customer derives no disadvantage from

Appendix C

Travel Demand Calculations

1726-1730 Mission Street
Travel Demand Summary

Project Description

Land Use	Size	Description
Residential	40	Total Units
	20	studio/1-BR
	20	2+BR
	33,643	gross sq ft
PDR	2,250	Total Sq Ft

Source: Natoma Architects, 2015.

Travel Demand Summary

Mode	Daily			PM Peak Hour		
	Residential	PDR	Total	Residential	PDR	Total
Auto	158	11	169	24	1	25
Transit	98	3	102	20	0.4	20
Walk	56	2	58	9	0.2	10
Other	38	1	39	7	0.1	7
Total	350	18	368	61	2	63
Vehicle Trips	*83*	*7*	*90*	*14*	*1*	*15*

Mode	Weekday PM Peak Hour								
	Residential			PDR			Overall Total		
	In	Out	Total	In	Out	Total	In	Out	Total
Auto	16	8	24	0	1	1	16	9	25
Transit	13	7	20	0	0.4	0.4	13	7	20
Walk	6	3	9	0	0.2	0.2	6	4	10
Other	5	2	7	0	0.1	0.1	5	3	8
Total	40	21	61	0	2	2	40	23	63
Vehicle Trips	*9*	*5*	*14*	*0*	*1*	*1*	*9*	*6*	*15*

Residential Trip Generation and Parking Demand (SF Guidelines)

Unit Type	Units	Daily Rate	Parking Demand
Studio	0	7.5	1.1
1 Bedroom	20	7.5	1.1
2 Bedroom	20	10.0	1.5
2+ Bedroom	0	10.0	1.5
Total	40	8.75	1.30

Residential In/Out Splits

Direction	Work	Non-Work
Inbound	100%	33%
Outbound	0%	67%

PDR In/Out Splits

Direction	Work	Non-Work
Inbound	0%	50%
Outbound	100%	50%

PM Peak Hour In/Out Splits

Direction	Residential	PDR (Man/Ind)
Inbound	67%	17%
Outbound	34%	84%

Appendix D

Doorway Counts

Quality Counts
TRANSPORTATION DATA COLLECTION SERVICES

7409 SW Tech Center Dr, Ste B150
Tigard, OR 97223
971-223-0003
www.qualitycounts.net

Order Number: 137669
Date: 3/29/16

Mission St & Erie St

In/Out	Door Used	Time	Notes
In	1	17:00	2 Pedestrians make multiple trips unloading stuff
In	1	17:21	
Out	1	17:53	

Appendix E

TDM Checklist

San Francisco Planning

1650 MISSION STREET, #400
SAN FRANCISCO, CA 94103
WWW.SFPLANNING.ORG

APPLICATION PACKET OF INFORMATION FOR Transportation Demand Management Program

WHAT IS THE TRANSPORTATION DEMAND MANAGEMENT (TDM) PROGRAM?

The City and County of San Francisco ("City") is projected to grow substantially through 2040, and this growth will bring more cars. The Transportation Demand Management (TDM) Program is aimed at improving and expanding the City's transportation system, and it creates a policy framework for new private development to minimize its impact on the transportation system. The TDM Program helps ensure that new developments are designed to make it easier for residents, tenants, employees, and visitors to get around by sustainable travel modes, such as transit, walking, and biking. Property owners choose from a variety of TDM measures, which are intended to reduce Vehicle Miles Traveled ("VMT") associated with a particular type of development project.

Planning Code Section 169 identifies the applicability for the TDM Program and establishes the TDM Program Standards. The TDM Program Standards contain the specific requirements necessary for a Development Project's compliance with the TDM Program. These requirements include submittal of one or more TDM Plans. The TDM Plan(s) shall document the Development Project's compliance with the TDM Program, including the Development Project's point target and associated TDM measures selected to achieve that point target.

WHEN IS A TDM PLAN NECESSARY?

In general, any Development Project that meets the applicability criteria of Planning Code Section 169.3 shall be subject to the TDM Program requirements, and must submit a TDM Plan. This includes projects that propose:

- Addition/Construction of ten (10) or more Dwelling Units
- Addition/Construction of ten (10) or more bedrooms of Group Housing
- New construction resulting in 10,000 square feet of **occupied floor area** or more of any use other than Residential, excluding any area used for accessory parking
- Any Change of Use of 25,000 square feet of **occupied floor area** or more of any use other than Residential, excluding any area used for accessory parking, if:
    - The Change of Use involves a change from a Residential use to any use other than Residential, or
    - The Change of Use involves a change from any use other than Residential to another use other than Residential.

Projects that are 100% Affordable Housing, or projects that are for Parking Garages or Parking Lots that are not included within a larger Development Project, are exempt from the TDM Program requirements.

Projects with a Development Application filed, or an Environmental Evaluation Application deemed complete on or before September 4, 2016, shall be subject to 50% of the applicable target requirement. Projects not meeting the above criteria, but which file a Development Application before January 1, 2018, shall be subject to 75% of the applicable target requirement. Projects submitting their first Development Application on or after January 1, 2018 shall be subject to 100% of the target requirement.

HOW DOES THE PROCESS WORK?

If the project is subject to the TDM Program per Planning Code Section 169.3, the Project Sponsor shall fill out and submit the accompanying application form, along with the associated application fee, at the time of submittal for the first Development Application for the project.

For projects that require a pre-application community meeting, the Project Sponsor must discuss potential TDM measures at the meeting and solicit feedback from the local community to be taken into consideration when preparing the proposed TDM Plan application for submission. In addition, if the project requires a Preliminary Project Assessment (PPA), the Project Sponsor is required to submit a draft TDM Plan with the PPA application.

Once the TDM Plan is received, Planning Department staff will review the application for compliance with the TDM Program Standards in conjunction with review of the Development Application for the project. The project will be subject to the TDM Program Standards in effect on the date the TDM Plan application is accepted at the Planning Department.

A project's TDM Plan will be finalized prior to Planning Department approval of the associated building permit. The final TDM Plan will be recorded as a Notice in the Official Records of the Recorder of the City. Neither the Planning Commission or the Zoning Administrator can waive, reduce, or adjust the requirements of the TDM Program through the approval process for the Development Application. However, a Development Project's finalized TDM Plan may be subsequently modified after the issuance of a building or site permit, in accordance with Planning Code Section 169.4 and the TDM Program Standards.

All projects subject to the TDM Program must designate a TDM coordinator: the point of contact for Planning Department staff on the project's compliance with the TDM Program. The project's TDM coordinator will also coordinate a pre-occupancy site visit with Planning Department staff, and will submit Pre-Occupancy and Ongoing Monitoring and Reporting Forms along with the associated monitoring fee. These steps will help the Department ensure that the project will continue to comply with its TDM Plan.

WHO MAY SUBMIT A TDM PLAN?

The TDM Plan will be recorded on the property and will run with the property in perpetuity. Therefore, the property owner or a party designated as the owner's agent may submit the TDM Plan application.

FEES:

Please refer to the Planning Department Fee Schedule available at www.sfplanning.org or at the Planning Information Center (PIC) located at 1660 Mission Street, First Floor, San Francisco. For questions related to the Fee Schedule, please call the PIC at (415) 558-6377.

Submission of a TDM Plan application includes an initial application submittal fee. Should the cost of staff time exceed the initial fee paid, an additional fee for time and materials may be billed upon completion of the hearing process or permit approval. Monitoring for compliance will occur once a year beginning 18 months after occupancy, or will occur once every 3 years for those property owners that are in good standing after a period of 5 consecutive years. Such monitoring will be subject to a seperate application and associated fee.

Development Projects consisting of 24 or fewer Dwelling Units shall be exempt from the periodic compliance review fee and the voluntary TDM Plan update review fee, but shall otherwise be subject to the TDM Program, including the required payment of the initial application fee.

Any land use that requires a TDM Plan, but will be occupied by a non-profit organization that will receive funding from the City to provide services at the subject property shall be exempt from all TDM application fees, provided it files a fee waiver application with the TDM Plan application at the time of submittal, and additional fee waivers with each Ongoing Monitoring and Reporting Form, and as needed if there is a voluntary TDM Plan update submittal. These non-profit fee waivers shall be revoked if a change occurs in the use or tenancy of the project, such that the minimum requirements for a waiver are no longer met.

TDM PLAN UPDATE:

Following occupancy of a project, if a property owner wishes to change their TDM Plan and select different measures they may submit a TDM Plan Update application, so long as it would still allow them to achieve the required point target for their Development Project. The attached application will also be used for the TDM Plan Update application, and will require a Letter of Authorization from the property owner and a written description of any programmatic TDM measures to be offered. Additionally, for a TDM Plan Update application, a set of plans must be submitted showing any physical TDM measures.

San Francisco Planning

1650 MISSION STREET, #400
SAN FRANCISCO, CA 94103
WWW.SFPLANNING.ORG

TRANSPORATION DEMAND MANAGEMENT (TDM) PROGRAM

APPLICATION SUBMITTAL REQUIREMENTS

The attached application for a TDM Plan includes a basic project description, necessary contact information, more detailed project description tables that identify the proposed land use(s), relevant point target(s) for the project, and a TDM Menu worksheet that lists the various measures the project may select in order to meet the required point target. For any programmatic TDM measures you must include a written description of the services to be provided. For physical TDM measures, the plans associated with the Development Application must show the location, number, and/or dimensions of these measures; however, a separate set of drawings is not required with the TDM application. Please answer all questions fully. Please type or print in ink and attach pages if necessary.

For assistance in preparing a TDM Plan, the Department provides a number of resources available online. Please visit http://sf-planning.org/tdm-materials-and-resources for more information.

WHAT TO SUBMIT:

1. One (1) original of this application signed by owner or agent, with all blanks filled in.
2. A digital copy of all documents submitted (may be provided via CD or USB drive), containing the application and any other submittal materials that are available electronically.
3. Additional Information for Programmatic TDM Measures: the application must be accompanied by a written description of the services to be provided for any programmatic TDM measures.
4. A check made payable to the "San Francisco Planning Department" for the required application fee amount. (See Fee Schedule and/or Calculator)

Additionally, if you are not the property owner:

5. Written documentation from the property owner designating the Applicant as an Authorized Agent.

All plans and other exhibits submitted with this application will be retained as part of the permanent public record in this case.

HOW TO SUBMIT:

To file your TDM Plan application, please bring the application and all accompanying materials with you at the time of your intake appointment for the project's Development Application.

To schedule an appointment, please send an email request along with the intake appointment request form to: CPC.Intake@sfgov.org.

Intake request forms are available here: http://sf-planning.org/permit-forms-applications-and-fees.

Projects that only require a Building Permit Application or if the Building Permit Application is the first Development Application filed for the project, the TDM Plan application may be submitted in person at the Planning Information Center at 1660 Mission Street, first floor.

Español: Si desea ayuda sobre cómo llenar esta solicitud en español, por favor llame al 415-575-9010. Tenga en cuenta que el Departamento de Planificación requerirá al menos un día hábil para responder

中文：如果您希望獲得使用中文填寫這份申請表的幫助，請致電415-575-9010。請注意，規劃部門需要至少一個工作日來回應。

Tagalog: Kung gusto mo ng tulong sa pagkumpleto ng application na ito sa Filipino, paki tawagan ang 415-575-9121. Paki tandaan na mangangailangan ang Planning Department ng hindi kukulangin sa isang araw na pantrabaho para makasagot.

PLANNING APPLICATION RECORD NUMBER

San Francisco Planning

TRANSPORTATION DEMAND MANAGEMENT (TDM) PLAN APPLICATION

Property Owner's Information

Name: Sustainable Living, LLC

Address: 1592 Mission Street
San Francisco, CA 94123

Email Address: jdennis@foundationre.com

Telephone:

Applicant Information (if applicable)

Name: Jody Knight Same as above ☐

Company/Organization: Reuben, Junius & Rose, LLP

Address: One Bush Street, Suite 600
San Francisco, CA 94104

Email Address: jknight@reubenlaw.com

Telephone: (4150 567-9000

Please Select Billing Contact: ☒ Owner ☐ Applicant ☐ Other (see below for details)

Name: _____ Email: _____ Phone: _____

Please Select Primary Project/TDM Contact: ☒ Owner ☐ Applicant ☐ Billing ☐ Other (see below for details)

Name: _____ Email: _____ Phone: _____

Property Information

Project Address: 1726-1732 Mission Street Block/Lot(s): 3532 / 4A, 005

Project Description:

Please provide a narrative project description that summarizes the project and its purpose. ☒ See Attachment

LAND USE TABLES

If you are not sure of the eventual size of the project, provide the maximum estimates.

Gross Floor Area and Occupied Floor Area are defined in Planning Code Section 102.

Land Use Category A (Retail)	
Gross Floor Area (GFA)	
Occupied Floor Area (OFA)	
Number of Accessory Parking Spaces	
Target Points	

Land Use Category B (Office)	
Gross Floor Area (GFA)	
Occupied Floor Area (OFA)	
Number of Accessory Parking Spaces	
Target Points	

Land Use Category C (Residential)	
Gross Floor Area (GFA)	35,893
Occupied Floor Area (OFA)	
Number of Accessory Parking Spaces	22
Target Points	

Land Use Category D (Other)	
Gross Floor Area (GFA)	2,250
Occupied Floor Area (OFA)	
Number of Accessory Parking Spaces	0
Target Points	

TDM PLAN WORKSHEET

Category	Measure	Points	Land Use Category A Retail	B Office	C Residential	D Other
ACTIVE-1	Improve Walking Conditions: Option A; or	1	Ⓔ ____	Ⓔ ____	Ⓔ ____	○ ▬
	Improve Walking Conditions: Option B	1	Ⓔ ____	Ⓔ ____	Ⓔ ____	○ ▬
ACTIVE-2	Bicycle Parking: Option A; or	1	Ⓔ ____	Ⓔ ____	Ⓔ ____	Ⓔ ____
	Bicycle Parking: Option B; or	2	Ⓔ ____	Ⓔ ____	Ⓔ ____	Ⓔ ____
	Bicycle Parking: Option C; or	3	Ⓔ ____	Ⓔ ____	Ⓔ ____	Ⓔ ____
	Bicycle Parking: Option D	4	Ⓔ ____	Ⓔ ____	Ⓔ 4	○ ▬
ACTIVE-3	Showers and Lockers	1	Ⓔ ____	Ⓔ ____	⊘	Ⓔ ____
ACTIVE-4	Bike Share Membership: Location A; or	1	Ⓔ ____	Ⓔ ____	Ⓔ ____	○ ▬
	Bike Share Membership: Location B	2	Ⓗ ____	Ⓗ ____	Ⓗ ____	○ ▬
ACTIVE-5A	Bicycle Repair Station	1	Ⓔ ____	Ⓔ ____	Ⓔ 1	○ ▬
ACTIVE-5B	Bicycle Maintenance Services	1	Ⓔ ____	Ⓔ ____	Ⓔ ____	○ ▬
ACTIVE-6	Fleet of Bicycles	1	Ⓔ ____	Ⓔ ____	Ⓔ ____	○ ▬
ACTIVE-7	Bicycle Valet Parking	1	Ⓗ ____	⊘	⊘	○ ▬
CSHARE-1	Car-share Parking and Membership: Option A; or	1	Ⓟ ____	Ⓟ ____	Ⓟ ____	Ⓟ ____
	Car-share Parking and Membership: Option B; or	2	Ⓟ ____	Ⓟ ____	Ⓟ ____	Ⓟ ____
	Car-share Parking and Membership: Option C; or	3	Ⓟ ____	Ⓟ ____	Ⓟ ____	Ⓟ ____
	Car-share Parking and Membership: Option D; or	4	Ⓟ ____	Ⓟ ____	Ⓟ ____	○ ▬
	Car-share Parking and Membership: Option E	5	Ⓟ ____	Ⓟ ____	Ⓟ ____	○ ▬
DELIVERY-1	Delivery Supportive Amenities	1	Ⓔ ____	Ⓔ ____	Ⓔ 1	○ ▬
DELIVERY-2	Provide Delivery Services	1	Ⓗ ____	⊘	⊘	○ ▬
FAMILY-1	Family TDM Amenities: Option A; and/or	1	⊘	⊘	Ⓔ 1	⊘
	Family TDM Amenities: Option B	1	⊘	⊘	Ⓔ ____	⊘
FAMILY-2	On-site Childcare	2	Ⓔ ____	Ⓔ ____	Ⓔ ____	⊘
FAMILY-3	Family TDM Package	2	⊘	⊘	Ⓔ ____	⊘
HOV-1	Contributions or Incentives for Sustainable Transportation: Option A; or	2	Ⓔ ____	Ⓔ ____	Ⓔ ____	○ ▬
	Contributions or Incentives for Sustainable Transportation: Option B; or	4	Ⓔ ____	Ⓔ ____	Ⓔ ____	○ ▬
	Contributions or Incentives for Sustainable Transportation: Option C; or	6	Ⓔ ____	Ⓔ ____	Ⓔ ____	○ ▬
	Contributions or Incentives for Sustainable Transportation: Option D	8	Ⓔ ____	Ⓔ ____	Ⓔ ____	○ ▬
HOV-2	Shuttle Bus Service: Option A; or	7	Ⓗ ____	Ⓗ ____	Ⓗ ____	○ ▬
	Shuttle Bus Service: Option B	14	Ⓗ ____	Ⓗ ____	Ⓗ ____	○ ▬

Ⓔ = applicable to land use category.

Ⓗ = applicable to land use category, see fact sheets for further details regarding project size and/or location.

Ⓟ = applicable to land use catgory only if project includes some parking.

⊘ = not applicable to land use category.

○ = project sponsor can select these measures for

NOTE: Please tally the points on the next page.

NOTE: A project sponsor can only receive up to 14 points between HOV-2 and HOV-3.

Category	Measure	Points	Land Use Category A Retail	B Office	C Residential	D Other
HOV-3	Vanpool Program: Option A; or	1	Ⓜ	Ⓜ	⊘	○
	Vanpool Program: Option B; or	2	Ⓗ	Ⓗ	⊘	○
	Vanpool Program: Option C; or	3	Ⓗ	Ⓗ	⊘	○
	Vanpool Program: Option D; or	4	Ⓗ	Ⓗ	⊘	○
	Vanpool Program: Option E; or	5	Ⓗ	Ⓗ	⊘	○
	Vanpool Program: Option F; or	6	Ⓗ	Ⓗ	⊘	○
	Vanpool Program: Option G	7	Ⓗ	Ⓗ	⊘	○
INFO-1	Multimodal Wayfinding Signage	1	Ⓜ	Ⓜ	Ⓜ	Ⓜ
INFO-2	Real Time Transportation Information Displays	1	Ⓜ	Ⓜ	Ⓜ 1	Ⓜ
INFO-3	Tailored Transportation Marketing Services: Option A; or	1	Ⓜ	Ⓜ	Ⓜ	○
	Tailored Transportation Marketing Services: Option B; or	2	Ⓜ	Ⓜ	Ⓜ	○
	Tailored Transportation Marketing Services: Option C; or	3	Ⓗ	Ⓗ	Ⓗ	○
	Tailored Transportation Marketing Services: Option D	4	Ⓗ	Ⓗ	Ⓗ	○
LU-1	Healthy Food Retail in Underserved Area	2	Ⓗ	⊘	⊘	⊘
LU-2	On-site Affordable Housing: Option A; or	1	⊘	⊘	Ⓜ	⊘
	On-site Affordable Housing: Option B; or	2	⊘	⊘	Ⓜ	⊘
	On-site Affordable Housing: Option C; or	3	⊘	⊘	Ⓗ 3	⊘
	On-site Affordable Housing: Option D	4	⊘	⊘	Ⓗ	⊘
PKG-1	Unbundle Parking: Location A; or	1	ⒽⓅ	ⒽⓅ	ⒽⓅ	○
	Unbundle Parking: Location B; or	2	ⒽⓅ	ⒽⓅ	ⒽⓅ 4	○
	Unbundle Parking: Location C; or	3	ⒽⓅ	ⒽⓅ	ⒽⓅ	○
	Unbundle Parking: Location D; or	4	ⒽⓅ	ⒽⓅ	ⒽⓅ	○
	Unbundle Parking: Location E	5	ⒽⓅ	ⒽⓅ	ⒽⓅ	○
PKG-2	Parking Pricing	2	Ⓟ	Ⓟ	⊘	○
PKG-3	Parking Cash Out: Non-residential Tenants	2	Ⓟ	Ⓟ	⊘	○
PKG-4	Parking Supply: Option A; or	1	Ⓟ	Ⓟ	Ⓟ	Ⓟ
	Parking Supply: Option B; or	2	Ⓟ	Ⓟ	Ⓟ 2	Ⓟ
	Parking Supply: Option C; or	3	Ⓟ	Ⓟ	Ⓟ	Ⓟ
	Parking Supply: Option D; or	4	Ⓟ	Ⓟ	Ⓟ	○
	Parking Supply: Option E; or	5	Ⓟ	Ⓟ	Ⓟ	○
	Parking Supply: Option F; or	6	Ⓟ	Ⓟ	Ⓟ	○
	Parking Supply: Option G; or	7	Ⓟ	Ⓟ	Ⓟ	○
	Parking Supply: Option H; or	8	Ⓟ	Ⓟ	Ⓟ	○
	Parking Supply: Option I; or	9	Ⓟ	Ⓟ	Ⓟ	○
	Parking Supply: Option J; or	10	Ⓟ	Ⓟ	Ⓟ	○
	Parking Supply: Option K	11	Ⓜ	Ⓜ	Ⓜ	○

Ⓜ = applicable to land use category.
Ⓗ = applicable to land use category, see fact sheets for further details regarding project size and/or location.
Ⓟ = applicable to land use catgory only if project includes some parking.
⊘ = not applicable to land use category.
○ = project sponsor can select these measures for

Land Use Category Totals

	A Retail	B Office	C Residential	D Other
Point Subtotal from Page 1:			7	
Point Subtotal from Page 2:			10	
Totals:			17	

APPLICANT'S AFFIDAVIT

Under penalty of perjury the following declarations are made:

a) The undersigned is the owner or authorized agent of the owner of this property.

b) The information presented is true and correct to the best of my knowledge.

c) The TDM Program Standards included multiple options to meet the target, and of those options, the owner has selected the TDM measures included in the TDM Plan application.

d) Other information or applications may be required.

	Jody Knight
Signature	Name (Printed)

Authorized Agent	(415) 567-9000	jknight@reubenlaw.com
Relationship to Project (i.e. Owner, Architect, etc.)	Phone	Email

For Department Use Only

Application received by Planning Department:

By: _____ Date: _____

shift **TRANSPORTATION DEMAND MANAGEMENT** MEASURES FORM

TDM Tool Results

April 14, 2017, 7:18 pm

SFMTA San Francisco Planning SAN FRANCISCO

LOCATION:

Address:

TAZ:

APN:

PROJECT CHARACTERISTICS:

COMMENTS:

Category C Residential

PARKING

PKG 1 Unbundle Parking (pdf/measure/pkg1.pdf) Yes **+4** Neighborhood Parking Rate: 0.62
Location B

PKG 4 Parking Supply (pdf/measure/pkg4.pdf) Yes **+2** Neighborhood Parking Rate: 0.62
Project Parking Rate: 0.55 Option B

ACTIVE TRANSPORTATION

ACTIVE-1 Improve Walking Conditions (pdf/measure/act1.pdf) No ○Option A ○Option B

ACTIVE-2 Bicycle Parking (pdf/measure/act2.pdf) Yes **+4**
○Option A ○Option B ○Option C ◉Option D

ACTIVE-4 Bike Share Membership (pdf/measure/act4.pdf) No ○>1,000feet ○<=1,000feet
(Click here for the bay area bike share station map)
(http://www.bayareabikeshare.com/stations)

ACTIVE-5a Bicycle Repair Station (pdf/measure/act5a.pdf) Yes **+1**

ACTIVE-5b Bicycle Maintenance Services No

Category C - Residential

Current Point:	Target Point:
17	14

ACTIVE-5a Bicycle Repair Station (pdf/measure/act5a.pdf) Yes +1

ACTIVE-5b Bicycle Maintenance Services (pdf/measure/act5b.pdf) No

ACTIVE-6 Fleet of Bicycles (pdf/measure/act6.pdf) No

CAR SHARE

CSHARE-1 Car-Share Parking (pdf/measure/cshare1.pdf) No

○ Option A ○ Option B ○ Option C ○ Option D ○ Option E

DELIVERY

DELIVERY-1 Delivery Supportive Amenities (pdf/measure/deli1.pdf) Yes +1

FAMILY

FAM-1 Family TDM - Amenities (pdf/measure/fam1.pdf) Yes +1 ☑ Option A ☐ Option B

FAM-2 On-site Childcare (pdf/measure/fam2.pdf) No

Category C - Residential

Current Point:	Target Point:
17	14

Category C - Residential

Current Point: 17 | Target Point: 14

FAM-3 Family TDM Package (pdf/measure/fam3.pdf) No

HIGH OCCUPANCY VEHICLES

HOV-1 Contributions or Incentives (pdf/measure/hov1.pdf) No

Option A Option B Option C Option D

HOV-2 Shuttle Bus Service (pdf/measure/hov2.pdf) No Option A Option B

COMMUNICATIONS AND INFORMATION

INFO-1 Multimodal Wayfinding Signage (pdf/measure/info1.pdf) No

INFO-2 Real Time Transportation Displays (pdf/measure/info2.pdf) Yes +1

INFO-3 Tailored Transportation Marketing Services (pdf/measure/info3.pdf) No

Option A Option B Option C Option D

LAND USE

LU-2a On-site Affordable Housing (income >55% ≤80% AMI) No

Appendix F

Planning Code Compliance Table

Appendix D. Planning Code Compliance

Project Description:

40 residential units (20 1-bedroom, and 20 2-bedroom) = 27,145 gsf
1,000 gsf commercial/retail
27 vehicle parking spaces (residential)
40 bicycle parking spaces (40 Class 1 and 2 Class 2 spaces for residential/no Class 1 and 2 Class 2 spaces for retail)

Zoning: Urban Mixed Use (UMU)

Topic	Planning Code Reference	Planning Code Requirement	Proposed Project	Existing Conditions
Vehicle Parking (Off-Street)	§ 151 Residential	One per dwelling unit = 40 spaces	40 spaces provided (compliant)	n/a
	§ 151 Retail	If occupied floor area < 5,000 sf = 0 spaces	None provided (compliant)	
Car-Share Parking (Off-Street)	§ 166 Residential	50 – 200 dwelling units = 1 space	None provided (complaint)	n/a
	§ 166 Retail	0 to 24 parking spaces = 0 Car-Share spaces	None provided (compliant)	
Bicycle Parking (Off-Street)	§ 155.2 Residential (Table 155.2)	One Class 1 per dwelling unit = 40 Class 1 spaces	40 Class 1 spaces provided (compliant)	n/a
		One Class 2 per 20 dwelling units = 2 Class 2 spaces	2 Class 2 spaces provided (compliant)	
	§ 155.2 Retail (Table 155.2)	One Class 1 per 7,500 sf of occupied floor area = 0 Class 1 spaces	None provided (compliant)	
		One Class 2 per 750 sf of occupied floor area = 2 Class 2 spaces	2 Class 2 spaces provided (compliant)	
Freight Loading (Off-Street)	§ 152 Residential (Table 152)	0 to 100,000 gsf = 0 space required	None provided (compliant)	n/a
	§ 152 Retail (Table 152)	0 – 10,000 gsf = 0 spaces required	None provided (compliant)	
Pedestrian Improvements	§ 138.1 Streetscape and Pedestrian Improvements		Does not apply	
TDM Program	(to come)		Applies (see Appendix E)	