Enclosure 2

APPENDIX 1

MTC Guidance

MTC Resolution No. 3000, Revised – Congestion Management Program Policy

Subject: Approval of revisions to MTC's Congestion Management Program Policy to inform the Bay Area's County Transportation Agencies (CTAs) (also known as "Congestion Management Agencies" or "CMAs") on how MTC intends to make a finding of consistency between each prepared 2019 Congestion Management Program (CMP) and Plan Bay Area 2040, the Regional Transportation Plan and Sustainable Communities Strategy (RTP/SCS).

Background: CMPs were established by State law in 1990 with the intention of creating a cooperative context for transportation planning by cities and their respective CTAs. A primary intent of CMPs is to monitor county multi-modal transportation networks and identify improvements to the performance of these multi-modal systems. The CMPs primary performance measure is vehicle delay presented as Level of Service (LOS) A through F.

The CMPs are prepared biennially (odd years). However, CMPs are not required in a county if a majority of local governments representing a majority of the population adopt resolutions electing to be exempt from this requirement (AB 2419 (Bowler) Chapter 293, Statutes of 1996). Jurisdictions throughout the state have chosen to opt out of the CMP process as provided for in the law, including San Diego, Fresno, Santa Cruz, and San Luis Obispo counties. Los Angeles County began the opt out process in 2018. MTC has encouraged local consideration of the opt out process, noting that the CMP legislation is outdated and the CMP's primary measure – LOS – has largely been superseded by other statewide priorities to reduce vehicle miles ("VMT") and reduce greenhouse gas emissions. Instead, MTC has encouraged CTAs to focus limited planning resources on Countywide Transportation Plans (CTP) as a more flexible, comprehensive, and inclusive planning process to identify and reflect local funding priorities, and to focus on coordination with MTC staff on the Regional Transportation Plan and Sustainable Communities Strategy (RTP/SCS).

Revisions to the Guidelines
Staff revised Attachments A and B of MTC Resolution No. 3000, Revised, to reflect updated federal and state regulatory settings and the adoption of Plan Bay Area 2040, to clarify how MTC will make a finding of consistency between each prepared CMP and Plan Bay Area 2040, to update the Travel Demand Modeling Checklist, to reference the latest release of the Highway Capacity Manual, and to reflect minor updates to descriptive language.

MTC's Responsibility
For each prepared CMP, MTC's responsibilities include making a finding of consistency between the CMP and the RTP/SCS (currently "Plan Bay Area 2040"), evaluating the consistency and compatibility of the CMPs in the Bay Area, and including CMP projects into the Regional Transportation Improvement Program (RTIP). For counties that opt out of preparing a CMP, MTC will work directly with the respective CTA to reflect project priorities from an adopted

Capital Improvement Program (CIP) and are consistent with Plan Bay Area 2040 for RTIP funding.

Next Steps
In fall 2019, CTAs will submit their 2019 CMP and their respective project priorities for consideration into the 2020 RTIP. MTC will then begin its consistency review before submitting the final 2020 RTIP priorities to the California Transportation Commission by December 15, 2019. See Table 1 for a summary of the 2019 CMP review process.

Issues: The CMP legislation and ensuing process is outdated and its primary measure – LOS – is out of step with more recent statewide guidance. In response, MTC envisions a future redrafting of the CMP Policy in advance of the 2021 CMPs to re-assess what it means to be consistent with the RTP/SCS. There are two primary ways in which CTA's develop short and long-range transportation project priorities to support regional planning and programming efforts, the CMP and the CTP. Currently, six of the nine Bay Area counties prepare both a CMP and CTP, and the two counties that are not required to prepare CMPs prepare CTPs. Given this redundancy, MTC may want to seek legislative action to revisit the CMP statutes and one modern comprehensive planning process, as the CTP are also established under state statute.

Recommendation: MTC Resolution No. 3000, Revised, delegates to this Committee the responsibility for approving revisions to the CMP Guidance (MTC Resolution No. 3000, Revised). Staff recommends that the Committee approve the revisions to Attachments A and B of MTC Resolution No. 3000, Revised, for the purpose of providing guidance for the development of the 2019 CMPs consistent with Plan Bay Area 2040.

Attachments: Attachment A: Table 1: 2019 CMP Schedule
Attachment B: MTC Resolution No. 3000, Revised

Therese W. McMillan

Table 1. 2019 CMP Review Process and Schedule

Date	Activity	Responsible Party
June 14, 2019	Approval of updates to CMP Policy	MTC's Planning Committee
October 2019	CMAs submit 2019 CMP, RTIP projects summary listings, and identification of projects requiring project-level performance measure analysis to MTC. Deadline to submit Complete Streets Checklist for new projects.	CTAs
October 2019	• Submittal of CMPs for counties that prepare CMPS • Review of consistency of CMPs with Plan Bay Area 2040 (RTP/SCS)	MTC staff
November 2019	Final Project Programming Request (PPR) forms due to MTC. Final RTIP project listing and performance measure analysis due to MTC. Final PSR (or PSR equivalent), Resolution of Local Support, and Certification of Assurances due to MTC (final complete applications due)	CTAs
December 11, 2019	Programming & Allocations scheduled review of RTIP and referral to Commission for approval	MTC's Programming & Allocations Committee
December 15, 2019	2020 RTIP due to the California Transportation Commission (CTC) (PAC approved project list will be submitted)	MTC staff
December 18, 2019	MTC's scheduled Consistency Findings on 2019 CMPs MTC's scheduled approval of the 2020 RTIP	MTC Commission

Date: June 25, 1997
W.I.: 30.5.10
Referred By: WPC
Revised: 06/11/99-W 05/11/01-POC
06/13/03-POC 06/10/05-POC
05/11/07-PC 05/08/09-PC
06/10/11-PC 07/12/13-PC
10/09/15-PC 06/14/19-PC

ABSTRACT

Resolution No. 3000, Revised

This resolution revises MTC's Guidance for Consistency of Congestion Management Programs with the Regional Transportation Plan (RTP).

This resolution supersedes Resolution No. 2537

Attachments A and B of this resolution were revised on June 11, 1999, to reflect federal and state legislative changes established through the passage of the Transportation Equity Act of the 21st Century and SB 45, respectively. In addition, the Modeling Checklist has been updated.

Attachments A and B of this resolution were revised on May 11, 2001, to reflect state legislative changes and to reference updated demographic and forecast data.

Attachments A and B of this resolution were revised on June 13, 2003, to reflect state legislative changes, 2001 RTP goals and policies, and to reference updated demographic and forecast data.

Attachments A and B of this resolution were revised on June 10, 2005, to reflect the updated RTP goals, as per Transportation 2030, and to reference updated demographic and forecast data.

Attachments A and B of this resolution were revised on May 11, 2007, to reflect federal legislative changes established through the passage of the Safe, Accountable, Flexible, Efficient Transportation Equity Act: A Legacy for Users (SAFETEA), and to reference new State Transportation Control Measures and updated demographic and forecast data.

Attachments A and B of this resolution were revised on May 8, 2009, to reflect MTC's new RTP (Transportation 2035 Plan), an updated Travel Demand Modeling Checklist, and revised Resolution 3434 and TOD policy.

Attachments A and B of this resolution were revised on June 10, 2011, to reflect the new regional coordinated land use and transportation planning process as directed through SB 375, an updated Travel Demand Modeling Checklist, the newly released Highway Capacity Manual 2010, the Bay Area 2010 Ozone Strategy, and updates to the table noting achievement of the Transit Oriented Development requirements by Resolution No. 3434 transit extension project.

Attachments A and B of this resolution were revised on July 12, 2013, to reflect the new RTP (Plan Bay Area) and the statutory requirements in MAP-21 for RTP and air quality conformity requirements.

Attachments A and B of this resolution were revised on October 9, 2015, to reflect the final Plan Bay Area document, revisions to the Modeling Consistency Requirements and Transportation Control Measures, and to include minor updates to descriptive language.

Attachments A and B of this resolution were revised on June 14, 2019, to reflect updated federal and state regulatory settings and the Bay Area's new RTP/SCS (Plan Bay Area 2040), clarifications to the manner in which MTC will make a finding of consistency with PBA 2040, revisions to the Travel Demand Modeling Checklist, the newly released Highway Capacity Manual 2016, and to include minor updates to descriptive language.

Date: June 25, 1997
W.I.: 30.5.10
Referred By: WPC

Re: Congestion Management Program Policy.

METROPOLITAN TRANSPORTATION COMMISSION
RESOLUTION NO. 3000

WHEREAS, the Metropolitan Transportation Commission (MTC) is the regional transportation planning agency for the San Francisco Bay Area pursuant to Government Code Sections 66500 et seq; and

WHEREAS, Government Code § 65080 requires each transportation planning agency to prepare a regional transportation plan and a regional transportation improvement program directed at the achievement of a coordinated and balanced regional transportation system; and

WHEREAS, Government Code § 65089 requires a designated local agency in each urbanized county to develop, adopt, and periodically update a congestion management program for the county and its included cities unless a majority of local governments in a county and the county board of supervisors elect to be exempt; and requires that this congestion management program be developed in consultation, among others, with the regional transportation planning agency; and

WHEREAS, Government Code § 65089.2 requires that, for each congestion management program prepared, the regional transportation planning agency must make a finding that each congestion management program is consistent with the regional transportation plan, and upon making that finding shall incorporate the congestion management program into the regional transportation improvement program; and

WHEREAS, Government Code § 65082 requires that adopted congestion management programs be incorporated into the regional transportation improvement program approved by MTC; and

WHEREAS, MTC has adopted a Congestion Management Program Policy (MTC Resolution 2537, Revised) to provide guidance for all the counties and cities within the region in preparing their congestion management programs; and,

WHEREAS, MTC's Congestion Management Program Policy needs to be updated from time to time to provide further guidance, now, therefore, be it

RESOLVED, that MTC adopts the Congestion Management Program Policy, as set forth in Attachments A and B to this resolution, which are incorporated herein by reference; and, be it further

RESOLVED, that the MTC Work Program Committee is delegated the responsibility for approving amendments to Attachments A and B; and, be it further

RESOLVED, that this resolution shall be transmitted to the nine Bay Area Congestion Management Agencies for use in preparing their congestion management programs; and, be it further

RESOLVED, that MTC Resolution No. 2537, Revised is hereby superceded.

METROPOLITAN TRANSPORTATION COMMISSION

_____

Jane Baker, Chairwoman

The above resolution was entered into
by the Metropolitan Transportation
Commission at a regular meeting of the
Commission held in Oakland,
California, on June 25, 1997.

Date: June 25, 1997
W.I.: 30.5.10
Referred By: WPC
Revised: 06/11/99-W 05/11/01-POC
06/13/03-POC 06/10/05-POC
05/11/07-PC 05/08/09-PC
06/10/11-PC 07/12/13-PC
10/09/15-PC 06/14/19-PC

GUIDANCE FOR CONSISTENCY OF

CONGESTION MANAGEMENT PROGRAMS

WITH THE REGIONAL TRANSPORTATION PLAN

Metropolitan Transportation Commission

June 2019

Title Page

GUIDANCE FOR CONSISTENCY OF CONGESTION MANAGEMENT PROGRAMS WITH THE REGIONAL TRANSPORTATION PLAN

TABLE OF CONTENTS

Abbreviations

AB ..... Assembly Bill
ABAG ..... Association of Bay Area Governments
BAAQMD ..... Bay Area Air Quality Management District
BCDC ..... Bay Conservation and Development Commission
CFR ..... Code of Federal Regulations
CIP ..... Capital Improvement Program
CMA ..... Congestion Management Agency
CMP ..... Congestion Management Program
CTC ..... California Transportation Commission
FAST ..... Fixing America's Surface Transportation Act
GHG ..... Greenhouse Gas (CO_2)
HCM ..... Highway Capacity Manual
ITIP ..... Interregional Transportation Improvement Program
LOS ..... Level of Service
MPO ..... Metropolitan Planning Organization
MTC ..... Metropolitan Transportation Commission
MTP ..... Metropolitan Transportation Plan
PCA ..... Priority Conservation Area
PDA ..... Priority Development Area
RMWG ..... Regional Model Working Group
RTIP ..... Regional Transportation Improvement Program
RTP/SCS ..... Regional Transportation Plan/Sustainable Communities Strategy
RTPA ..... Regional Transportation Planning Agency
SB ..... Senate Bill
TCM ..... Transportation Control Measures
TOD ..... Transit Oriented Development
TPA ..... Transit Priority Area
UGB ..... Urban Growth Boundary

I. INTRODUCTION

A. Purpose of This Guidance

The Congestion Management Program (CMP) statutes establish specific requirements for the content and development process for CMPs; the relationship between CMPs and the regional transportation planning process; Congestion Management Agency (CMA) monitoring and other responsibilities; and, the responsibilities of MTC as the Bay Area's Regional Transportation Planning Agency (RTPA) and Metropolitan Planning Organization (MPO). CMPs are not required to be prepared in counties where a majority of local governments representing a majority of the county's population and the Board of Supervisors adopt resolutions requesting to be exempt from this requirement (AB 2419 (Bowler) Chapter 293, Statutes of 1996). The following Guidance is for those counties that prepare a CMP following state statutes. For counties that opt out of preparing a CMP, MTC will work directly with the appropriate county transportation agencies to establish project priorities for funding.

CMP statutes specify responsibilities for MTC as the Bay Area's RTPA/MPO. These responsibilities include: reviewing the consistency between each CMP and the Regional Transportation Plan (RTP) – which encompasses the Bay Area's Sustainable Communities Strategy (SCS) demonstrating how the region could achieve state greenhouse gas (GHG) emission reduction targets; evaluating the consistency and compatibility of the CMPs in the Bay Area; and, including CMP projects into the Regional Transportation Improvement Program (RTIP).

The purpose of this Guidance is to focus on MTC's role in determining consistency between the CMPs and the region's RTP/SCS (herein also referred to as "Plan Bay Area 2040").

B. Legislative Requirement for Congestion Management Programs

CMPs were established as part of a bi-partisan legislative package in 1989 and approved by the voters in 1990. This legislation also increased transportation revenues and changed state transportation planning and programming processes. The specific CMP provisions were originally chartered by the Katz-Kopp-Baker-Campbell Transportation Blueprint for the Twenty-First Century by AB 471 (Katz); (Chapter 106, Statutes 1989). They were revised by AB 1791 (Katz) (Chapter 16, Statutes of 1990), AB 3093 (Katz) (Chapter 2.6, Statutes of 1992), AB 1963 (Katz) (Chapter 1146, Statutes of 1994), AB 2419 (Bowler) (Chapter 293, Statutes of 1996), AB 1706 (Chapter 597, Statutes of 2001), and SB 1636 (Figueroa) (Chapter 505, Section 4, Statutes of 2002), which defines and incorporates "infill opportunity zones." The provisions regarding establishing new "infill opportunity zones" have now expired, but established infill opportunities zones are still subject to the statutes.

CMP statutes establish requirements for local jurisdictions to receive certain gas tax subvention funds. Additionally, CMPs play a role in the development of specific project proposals for the RTIP.

C. The Role of CMPs in the Regional Transportation Planning Process

CMPs can play a role in the countywide and regional transportation planning processes (although these functions can be achieved without an official CMP as well):

- CMPs can be used to identify near-term projects to implement the long-range vision established in a countywide transportation plan.
- Through CMPs, the transportation investment priorities of the multiple jurisdictions in each county can be addressed in a countywide context.
- CMPs can be used to establish a link between local land use decision making and the transportation planning process.
- CMPs can be used as a building block for the federally required Congestion Management Process[1].

II. MTC's ROLE & RESPONSIBILITIES

A. MTC's Responsibilities Regarding CMPs

MTC's direct responsibilities under CMP statutes are concentrated in the following provisions:

> ***"The regional agency shall evaluate the consistency between the program (i.e., the CMP) and the regional transportation plans required pursuant to Section 65080. In the case of a multicounty regional transportation planning agency, that agency shall evaluate the consistency and compatibility of the programs within the region.*** (Section 65089.2 (a))
>
> ***The regional agency, upon finding that the program is consistent, shall incorporate the program into the regional transportation improvement program as provided for in Section 65082. If the regional agency finds the program is inconsistent, it may exclude any project in the congestion management program from inclusion in the regional transportation improvement program.*** (Section 65089.2(b))
>
> ***It is the intent of the Legislature that the regional agency, when its boundaries include areas in more than one county, should resolve inconsistencies and mediate disputes which arise between agencies related to congestion management programs adopted for those areas."*** Section 65089.2.(d)(1))

B. The RTP Regulatory Setting

Federal Requirements

The primary federal requirements regarding RTPs are addressed in the metropolitan transportation planning rules in Title 23 of the Code of Federal Regulations (CFR) Part 450 and 500 and Title 49 CFR Part 613. These federal regulations have been updated to reflect the

[1]See the following link for more information on the federal Congestion Management Process, https://ops.fhwa.dot.gov/plan4ops/focus_areas/cmp.htm

metropolitan transportation planning regulations called out in 2015's federal transportation bill, Fixing America's Surface Transportation Act (FAST). Under FAST, the U.S. Department of Transportation requires that MPOs, such as MTC, prepare long-range Metropolitan Transportation Plans (MTPs) and update them every four years if they are in designated "nonattainment" or "maintenance" areas for federal air quality standards.

State Requirements

California Government Code Section 65080 sets forth the state's requirements for RTPs. Section 65080 requires MPOs located in air quality nonattainment regions update their RTPs at least every four years.

The regional agencies, the Association of Bay Area Governments (ABAG), the Bay Area Air Quality Management District (BAAQMD), and the Bay Conservation and Development Commission (BCDC), assist MTC in addressing the requirements flowing from California's Sustainable Communities and Climate Protection Act (Sustainable Communities Act, SB 375, Chapter 728, Statutes of 2008), which requires each of the state's 18 metropolitan areas, including the Bay Area, to reduce GHG emissions from cars and light-duty trucks. The mechanism for achieving these reductions is the preparation of an SCS.

State RTP Guidelines

The California Transportation Commission (CTC)'s RTP Guidelines, last updated in 2017, tie together federal and state regulations and CTC policy direction to guide the development of RTPs. CTC programming policy prohibits the allocation of funds to projects that are not consistent with an adopted RTP.

Section 65080 of the Government Code, as amended by SB 375, states that the RTP shall contain four distinct elements:

- A Policy Element that reflects the mobility goals, policies and objectives of the region;
- A Sustainable Communities Strategy (SCS), as established through SB 375;
- An Action Element that identifies programs and actions to implement the RTP; and
- A Financial Element that summarizes the cost of implementing the projects in the RTP in a financially constrained environment.

C. Consistency Findings with the RTP/SCS

MTC's findings for the consistency between CMPs and the RTP/SCS focus on four areas:

- Consistency with the RTP/SCS goals, growth pattern, and supporting transportation investment strategy;
- Consistency with the MTC travel demand modeling database and methodologies; and,
- Consistency with federal and state air quality plans.

1) The RTP/SCS ("Plan Bay Area 2040")

Plan Bay Area 2040, adopted in 2017, along with its predecessor – Plan Bay Area – grew out of SB 375 and serves as the Bay Area's MTP and RTP/SCS. Plan Bay Area 2040 integrates the

region's SCS into the RTP. Plan Bay Area 2040 was prepared by MTC in partnership with ABAG, BAAQMD, and BCDC and in collaboration with Caltrans, the nine county-level CMAs or substitute agencies, over two dozen Bay Area transit operators, and numerous transportation stakeholders and the public. Plan Bay Area 2040 achieves and exceeds the Bay Area's regional GHG reduction targets set forth by CARB and was prepared in compliance with the CTC's RTP Guidelines.

Goals and Targets

Plan Bay Area 2040 incorporates a set of seven goals and thirteen performance targets – one of those being CARB's GHG emissions reduction target – as quantifiable measures against which progress may be evaluated in addressing the major challenges facing the region, as shown in Table 1. CMAs should consider these goals and targets when preparing their CMPs.

To determine whether a CMP is consistent with Plan Bay Area 2040, MTC *will* first qualitatively evaluate whether the CMP is supportive or in conflict with the Plan Bay Area 2040's goals and targets shown in Table 1, below. MTC *will not* evaluate whether each CMP achieves Plan Bay Area 2040's adopted targets.

Table1. Plan Bay Area 2040 Performance Targets

Goal	#	Target
Climate Protection	**1**	Reduce per-capita GHG (CO_2) emissions from cars and light duty trucks by 15% *Statutory - Source: California Air Resources Board, as required by SB 375*
Adequate Housing	**2**	House 100% of the region's projected growth by income level without displacing current low-income residents and with no increase in in-commuters over the Plan baseline year
Healthy & Safe Communities	**3**	Reduce adverse health impacts associated with air quality, road safety, and physical inactivity by 10%
Open Space & Agricultural Preservation	**4**	Direct all non-agricultural development within the urban footprint (existing urban development and urban growth boundaries (UGBs))
Equitable Access	**5**	Decrease the share of lower-income residents' household income consumed by transportation and housing by 10%
	6	Increase the share of affordable housing in PDAs, transit priority areas (TPAs), or high-opportunity areas by 15%
	7	Do not increase the share of low- and moderate-income renter households in PDAs, TPAs, or high-opportunity areas that are at risk of displacement
Economic Vitality	**8**	Increase by 20% the share of jobs accessible within 30 minutes by auto or within 45 minutes by transit in congested conditions

	9	Increase by 38% the number of jobs in predominantly middle-wage industries
	10	Reduce per-capita delay on the Regional Freight Network by 20%
Transportation System Effectiveness	**11**	Increase non-auto mode share by 10%
	12	Reduce vehicle operating and maintenance costs due to pavement conditions by 100%
	13	Reduce per-rider transit delay due to aged infrastructure by 100%

Unless noted, the Performance Target increases or reductions are for 2040 compared to a year 2005 baseline.

Growth Pattern

In addition to reducing GHG emissions, SB 375 requires that the SCS promote compact, mixed-use commercial and residential development, and identify how the region could house its current and projected population. To meet the goals of SB 375, and the GHG reduction targets, Plan Bay Area 2040 largely reflects the foundation and regional growth pattern established in the original Plan Bay Area. Plan Bay Area 2040's core strategy is "focused growth" in existing communities along the existing transportation network. This strategy builds upon existing community characteristics and leverages existing infrastructure. Key to implementing the focused growth strategy are Priority Development Areas (PDAs) and Priority Conservation Areas (PCAs) identified, recommended, and approved by local governments.

- **Priority Development Areas (PDAs) -**
  These existing neighborhoods are nominated locally, served by public transit, and include areas that are or will be walkable and bikeable and close to public transit, jobs, schools, shopping, parks, recreation and other amenities.
- **Priority Conservation Areas (PCAs) -**
  These regionally significant open spaces which have a broad consensus for long-term protection but which face nearer-term development pressures.

In addition, MTC has adopted a Transportation and Land Use Platform that calls for supportive land use plans and policies to support transit extensions in Res. 3434. Further, MTC has adopted a Transit Oriented Development (TOD) Policy, as part of Res. 3434, that establishes specific housing thresholds for these extensions, requires station area plans and establishes corridor working groups. These regional policies and specific projects within the county should be recognized in the CMP (attached as Attachment B, Appendix C).

As a second check to determine whether a CMP is consistent with Plan Bay Area 2040, MTC will qualitatively evaluate whether the CMP is supportive versus in conflict with the Plan Bay Area 2040's growth strategy.

Investment Strategy

Plan Bay Area 2040's focused growth strategy is supported by a robust, multi-modal transportation investment strategy that enables the Bay Area to exceed its regional GHG

reduction targets. The Plan develops a blueprint for short- term and long-term transportation investments to support the plan's focused growth strategy. Investment priorities reflect a primary commitment to "Fix It First," a key emphasis area in the original Plan Bay Area as well.

Approximately 90 percent of Plan Bay Area 2040's investments focus on operating, maintaining and modernizing the existing transportation system. Plan Bay Area 2040 also directs almost two-thirds of future funding to investments in public transit, mostly to ensure that transit operators can sustain existing service levels through 2040.

- **Operate + Maintain**: This strategy includes projects that replace transit assets, pave local streets and state highways, and operate the transit system.
- **Modernize**: This strategy includes projects that improve the existing system without significantly increasing the geographical extent of the infrastructure. Electrifying Caltrain and portions of the express lane network are two major investments in this category.
- **Expand**: This strategy includes projects that extend fixed-guideway rail service or add lanes to roadways. Extending Caltrain to downtown San Francisco and BART into Silicon Valley, as well as implementing express lanes on U.S.101 in San Mateo and Santa Clara counties, are major investments in this category.

Regional Transit Expansion Program

The Regional Transit Expansion Program –adopted by the Commission as Resolution 3434– calls for a nearly $18 billion investment in new rail and bus projects that will improve mobility and enhance connectivity for residents throughout the Bay Area. Further, Plan Bay Area 2040 identifies modernization and expansion projects to increase transit capacity in core locations of the Bay Area, including the transbay corridor, peninsula corridor, within San Francisco, and within Santa Clara County. This includes projects such as extending BART to San Jose and Santa Clara, extending Caltrain to downtown San Francisco, extending VTA's light rail on the Capitol Expressway and Vasona lines, and extending SMART to Larkspur and Windsor.

RTP Financial Requirements and Projections

Under the federal transportation authorization (FAST), the actions, programs and projects in the RTP must be fiscally constrained, meaning their costs cannot exceed the forecast of public and private revenues that are reasonably expected to be available. While CMPs are not required by legislation to be fiscally constrained, recognition of financial constraints, including the costs for maintaining, rehabilitating, and operating the existing multi-modal system and the status of specific major projects, will strengthen the consistency and linkage between the regional planning process and the CMP. The CMA may submit project proposals for consideration by MTC in developing future fiscally constrained RTPs.

As a final check to determine whether a CMP is consistent with Plan Bay Area 2040, MTC will verify whether the CMP's CIP is consistent with the Plan Bay Area 2040's adopted investment strategy. The scope, schedule, and cost estimates of regionally-significant projects must be consistent with Plan Bay Area 2040's adopted project list, and non-regionally significant projects must align with a programmatic category in Plan Bay Area 2040's adopted project list.

2) Consistency with the MTC Travel Demand Modeling Databases and Methodologies

MTC's statutory requirements regarding consistent databases are as follows:

> ***The agency, (i.e., the CMA) in consultation with the regional agency, cities, and the county, shall develop a uniform data base on traffic impacts for use in a countywide transportation computer model . . . The computer models shall be consistent with the modeling methodology adopted by the regional planning agency. The data bases used in the models shall be consistent with the data bases used by the regional planning agency. Where the regional agency has jurisdiction over two or more counties, the data bases used by the agency shall be consistent with the data bases used by the regional agency***. (Section 65089 (c))

MTC desires the development and implementation of consistent travel demand models, with shared input databases, to provide a common foundation for transportation policy and investment analysis.

The Bay Area Partnership's Regional Model Working Group (RMWG) serves as a forum for sharing data and expertise and providing peer review for issues involving the models developed by or for the CMAs, MTC, and other parties. The MTC Checklist for Modeling will be used to guide the consistency assessment of CMA models with the MTC model.

The Checklist is included in Attachment B, and addresses:

- Demographic/econometric forecasts;
- Pricing assumptions;
- Network assumptions;
- Travel demand methodologies; and,
- Traffic assignment methodologies.

<u>Level of Service Methodology</u>

CMP statutory requirements regarding level of service are as follows

> ***"Level of service (LOS) shall be measured by Circular 212, by the most recent version of the Highway Capacity Manual, or by a uniform methodology adopted by the agency that is consistent with the Highway Capacity Manual."*** (Section 65089 (b)

The most recently adopted highway capacity manual is Highway Capacity Manual, Sixth Edition: A Guide for Multimodal Mobility Analysis, or HCM 2016, or HCM6, was released in 2016. This edition incorporates the latest research on highway capacity, qualify of service, *Active Traffic and Demand Management*, and travel time reliability.

Over the last several years, the State of California Office of Planning and Research (OPR) has been in the process of developing an alternative to the LOS approach as it relates to the California Environmental Quality Act (CEQA) in response to SB 743 (Steinberg, 2013). OPR's proposed alternative is an assessment of vehicle miles traveled (VMT). In December 2018, the California Natural Resources Agency certified and adopted the CEQA Guidelines update package, including the Guidelines section implementing SB 743 (§ 15064.3).

3) Consistency with pertinent Air Quality Plans

Transportation Control Measures (TCMs) are identified in the federal and state air quality plans to achieve and maintain the respective standards for ozone and carbon monoxide. The statutes require that the Capital Improvement Program (CIP) of the CMP conform to transportation related vehicle emission air quality mitigation measures. CMPs should promote the region's adopted TCMs for federal and state air quality plans. In addition, CMPs are encouraged to consider the benefits of GHG reductions in developing the CIP, although GHG emission reductions are not currently required in federal and state air quality plans.

A reference to the lists of federal and state TCMs is provided in Attachment B. The lists may be updated from time to time to reflect changes in the federal and state air quality plans.

In particular, TCMs that require local implementation should be identified in the CMP, specifically in the CIP.

CMPs are also required to contain provisions pertaining to parking cash-out.

> ***The city or county in which a commercial development will implement a parking cash-out program that is included in a congestion management program pursuant to subdivision (b), or in a deficiency plan pursuant to Section 65089.4, shall grant to that development an appropriate reduction in the parking requirements otherwise in effect for new commercial development. (2) At the request of an existing commercial development that has implemented a parking cashout program, the city of county shall grant an appropriate reduction in the parking requirements otherwise applicable based on the demonstrated reduced need for parking, and the space no longer needed for parking purposes may be used for other appropriate purposes.*** (Section 65089 (d)

As of January 1, 2010, cities, counties and air districts were given the option to enforce the State Parking Cash-Out statutes (Section 43845 of the Health and Safety Code), as per SB 728 (Lowenthal). This provided local jurisdictions with another tool to craft their own approaches to support multi-modal transportation systems, address congestion and greenhouse gases.

D. Consistency and Compatibility of the Programs within the Region

The CMP statutes require that, in the case of a multi-county regional transportation agency, that agency shall evaluate the consistency and compatibility of the CMPs within the region. Further, it is the Legislature's stated intention that the regional agency (i.e., MTC in the San Francisco Bay Area) resolve inconsistencies and mediate disputes between or among CMPs within a region.

To the extent useful and necessary, MTC will identify differences in methodologies and approaches between the CMPs on such issues as performance measures and land use impacts.

The CMP statutes also require that the CMA designate a system of highways and roadways which shall be subject to the CMP requirements. Consistency requires the regional continuity of the CMP designated system for facilities that cross county borders.

To determine whether a CMP is consistent with the system definition of adjoining counties, MTC will review the draft CMPs to determine whether adjacent counties have the same designations of cross border facilities.

E. Incorporation of the CMP Projects into the RTIP

State transportation statutes require that the MTC, in partnership with the state and local agencies, develop the RTIP on a biennial cycle. The RTIP is the regional program for state and federal funding, adopted by MTC and provided to CTC for the development of the State Transportation Improvement Program (STIP). In 1997, SB 45 (Statutes 1997, Chapter 622) significantly revised State transportation funding policies, delegating project selection and delivery responsibilities for a major portion of funding to regions and counties. Subsequent changes to state law (AB 2928 – Statutes 2000, Chapter 91) made the RTIP a five-year proposal of specific projects, developed for specific fund sources and programs. The RTIP is required to be consistent with the most recently adopted RTP (Plan Bay Area 2040).

The CMP statutes establish a direct linkage between CMPs that have been found to be consistent with the RTP, and the RTIP. MTC will review the projects in the CIP of the CMP for consistency with the RTP. MTC's consistency findings for projects in the CMPs will be limited to those projects that are included in the RTP, and do not extend to other projects that may be included in the CMP. Some projects may be found consistent with a program or programmatic category in the RTP. MTC, upon finding that the CMP is consistent with the RTP, shall incorporate the CMP's program of projects into the RTIP, subject to specific programming and funding requirements. If MTC finds the CMP inconsistent, it may exclude any project in the program from inclusion in the RTIP. Since the RTIP must be consistent with the RTP, projects that are not consistent with the RTP will not be included in the RTIP. MTC may include certain projects or programs in the RTIP which are not in a CIP, but which are in the RTP. In addition, SB 45 requires projects included in the Interregional Transportation Improvement Program (ITIP) to be consistent with the RTP.

MTC will establish funding bid targets for specific funds, based upon the fund estimate as adopted by the CTC. Project proposals can only be included in the RTIP within these funding bid targets. MTC will also provide information on other relevant RTIP processes and requirements, including coordination between city, county, and transit districts for project applications, schedule, evaluations and recommendations of project submittals, as appropriate for the RTIP.

As per CTC's Guidelines, MTC will evaluate the projects in the RTIP based on specific performance indicators and measures as established in the RTP and provide this evaluation to the CTC along with the RTIP. CMAs are encouraged to consider the performance measures in Plan Bay Area when developing specific project proposals for the RTIP; more details will be provided in the RTIP Policies and Procedures document, adopted by MTC for the development of the RTIP.

III. CMP PREPARATION & SUBMITTAL TO MTC

A. CMP Preparation

If prepared, the CMP shall be developed by the CMA in consultation with, and with the cooperation of, MTC, transportation providers, local governments, Caltrans, and the BAAQMD, and adopted at a noticed public hearing of the CMA. As established in SB 45, the RTIP is scheduled to be adopted by December 15 of each odd numbered year. If circumstances arise that change this schedule, MTC will work with the CMAs and substitute agencies in determining an appropriate schedule and mechanism to provide input to the RTIP.

B. Regional Coordination

In addition to program development and coordination at the county level, and consistency with the RTP, the compatibility of the CMPs with other Bay Area CMPs would be enhanced through identification of cross county issues in an appropriate forum, such as Partnership and other appropriate policy and technical committees. Discussions would be most beneficial if done prior to final CMA actions on the CMP

C. Submittal to MTC

To provide adequate review time, draft CMPs should be submitted to MTC in accordance to a schedule MTC will develop to allow sufficient time for incorporation into the RTIP for submittal to the California Transportation Commission. Final CMPs must be adopted prior to final MTC consistency findings.

D. MTC Consistency Findings for CMPs

MTC will evaluate consistency of the CMP every two years with the RTP that is in effect when the CMP is submitted; for the 2019 CMP the RTP in effect will be Plan Bay Area 2040. MTC will evaluate the consistency of draft CMPs when received, based upon the areas specified in this guidance, and will provide staff comments of any significant concerns. MTC can only make final consistency findings on CMPs that have been officially adopted.

Attachment B to MTC Resolution No. 3000 consists of:

Appendix A	Federal and State Transportation Control Measures
Appendix B	Checklist for Modeling Consistency for CMPs
Appendix C	MTC's Regional Transit Expansion Program of Projects (MTC Resolution No. 3434, revised 09/24/08)
Appendix D	MTC's Resolution No. 3434 Transit Oriented Development (TOD) Policy, revised 10/24/07

Title Page

Appendix A: Federal and State Transportation Control Measures (TCMs)

Federal TCMs:

For a list and description of current Federal TCMs, see the "Federal Ozone Attainment Plan for the 1-Hour National Ozone Standard" adopted Oct. 24, 2001, and "2004 Revision to the California State Implementation Plan for Carbon Monoxide, Updated Maintenance Plan for Ten Federal Planning Areas," approved January 30, 2006.

The current Federal TCMs have been fully implemented. Refer to the "Final Transportation Air Quality Conformity Analysis for the Plan and the Proposed Final 2015 Transportation Improvement Program" at http://files.mtc.ca.gov/pdf/final_pba_and_2015_tip_air_quality_conformity_analysis.pdf (page 19) for the specific implementation steps in the advancement of these Federal TCMs.

State TCMs:

For a list and description of current State TCMs, see "Bay Area 2010 Ozone Strategy," or subsequent revisions as adopted by the Bay Area Air Quality Management.

CMAQ Evaluation and Assessment Report:

MTC participated in a federal evaluation and assessment of the direct and indirect impacts of a representative sample of Congestion Mitigation and Air Quality (CMAQ) – funded projects on air quality and congestion levels. The study estimated the impact of these projects on emissions of transportation related pollutants, including carbon monoxide (CO), ozone precursors – oxides of nitrogen (NOx), volatile organic compounds (VOCs), particulate matter (PM_{10} and $PM_{2.5}$), and carbon dioxide (CO_2) for information purposes, as well as on traffic congestion and mobility. There is also additional analysis of the selected set of CMAQ-funded projects to estimate of the cost effectiveness at reducing emissions of each pollutant. This report may be of interest to CMAs; it is available on line at:
http://www.fhwa.dot.gov/environment/cmaqpgs/safetealu1808/index.htm

or from the MTC/ABAG Library.

Appendix B: MTC Checklist for Modeling Consistency for CMPs

Overall approach

MTC's goal is to establish regionally consistent model "sets" for application by MTC and the CMAs. In the winter of 2010/2011, MTC implemented *Travel Model One* – an "activity-based" model – to replace the previous trip-based modeling tool – *BAYCAST-90* – that had been in place for the past two decades. *Travel Model One* has seen incremental updates since its implementation. Additionally, MTC has been developing the next generation of its activity-based model, called *Travel Model Two,* although it is not yet ready for application. Because the CMAs use a variety of modeling tools, these guidelines must accommodate a framework in which trip-based and activity-based models can be aligned. The approach therefore consists of a checklist to adjudge consistency across model components.

Checklist

This checklist guides the CMAs through their model development and consistency review process by providing an inventory of specific products to be developed and submitted to MTC, and by describing standard practices and assumptions.

Because of the complexity of the topic, the checklist may need additional detailed information to explain differences in methodologies or data. Significant differences will be resolved between MTC and the CMAs, taking advantage of the Regional Model Working Group (RMWG). Standard formats for model comparisons will be developed by MTC for use in future guidelines.

Incremental updates

The CMA forecasts must be updated every two years to be consistent with MTC's forecasts. Alternative approaches to fully re-running the entire model are available, including incremental approaches through the application of factors to demographic inputs and/or trip tables. Similarly, the horizon year must be the same as the TIP horizon year. However, interpolation and extrapolation approaches are acceptable, with appropriate attention to network changes. These alternatives to re-running the entire model should be discussed with MTC before the CMP is adopted by the CMA.

Defining the MTC model sets

The MTC model sets referred to below are defined as those in use on December 31st of the year preceding the CMP update.

Key Assumptions

Please report the following information.

A. General approach:

Discuss the general approach to travel demand modeling by the CMA and the CMA model's relationship to *BAYCAST-90, Travel Model One* or *Travel Model Two*.

Product: 1) Description of the above.

B. Demographic/economic/land use forecasts:

Both base and forecast year demographic/economic/land use ("land use") inputs must be consistent – though not identical – to *Plan Bay Area 2040's* traffic analysis zone (TAZ) level land use data provided by MTC/ABAG. Specifically, if CMAs wish to reallocate land use within their own county (or counties), they must consult with the affected city (or cities) as well as with MTC/ABAG. Further, the resulting deviation in the subject county (or counties) should within the ranges specified by MTC/ABAG for the following variables: population, households, jobs, and employed residents. Outside the subject county (or counties), the land use variables in the travel analysis zones used by the county must match either MTC/ABAG's estimates exactly when aggregated/disaggregated to census tracts or the county-in-question's estimates per the revision process noted above (e.g. Santa Clara county could use the revised estimates San Mateo developed through consultation with local cities and MTC/ABAG). Forecast year demand estimates should use the *Plan Bay Area 2040* land use data. CMAs may also analyze additional, alternative land use scenarios that will not be subject to consistency review.

Products: 2) A statement establishing that the differences between key ABAG land use variables (i.e., population, households, jobs, and employed residents), and those of the CMA do not differ by more than one percent at the county level for the subject county. A statement establishing that no differences exist at the TAZ-level outside the county between the MTC/ABAG forecast or the MTC/ABAG/CMA revised forecast.

3) A table comparing the MTC/ABAG land use estimates with the CMA land use estimates by county for population, households, jobs, and employed residents for both the base year and the horizon year.

4) If land use estimates within the CMA's county are modified from MTC/ABAG's projections, agendas, discussion summaries, and action items from each meeting held with cities, MTC, and/or ABAG at which the redistribution was discussed, as well as before/after census-tract-level data summaries and maps.

C. Pricing assumptions:

Use MTC's automobile operating costs, transit fares, and bridge tolls or provide an explanation for the reason such values are not used.

Product: 5) Table comparing the assumed automobile operating cost, key transit fares, and bridge tolls to MTC's values for the horizon year.

D. Network assumptions:

Use MTC's regional highway and transit network assumptions for the other Bay Area counties. CMAs should include more detailed network definition relevant to their own county in addition to the regional highway and transit networks. For the CMP horizon year, to be compared with the TIP interim year, regionally significant network changes in the base case scenario shall be limited to the current Transportation Improvement Program (TIP) for projects subject to inclusion in the TIP.

Product: 6) Statement establishing satisfaction of the above.

E. Automobile ownership:

Use *Travel Model One* automobile ownership models or forecasts or submit alternative models to MTC for review and comment.

Product: 7) County-level table comparing estimates of households by automobile ownership level (zero, one, two or more automobiles) to MTC's estimates for the horizon year.

F. Tour/trip generation:

Use *Travel Model One* tour generation models or forecasts or submit alternative models to MTC for review and comment.

Product: 8) Region-level tables comparing estimates of trip and/or tour frequency by purpose to MTC's estimates for the horizon year.

G. Activity/trip location:

Use *Travel Model One* activity location models or forecasts or submit alternative models to MTC for review and comment.

Products: 9) Region-level tables comparing estimates of average trip distance by tour/trip purpose to MTC's estimates for the horizon year.

10) County-to-county comparison of journey-to-work or home-based work flow estimates to MTC's estimates for the horizon year.

H. Travel mode choice:

Use *Travel Model One* models or forecasts or submit alternative models to MTC for review and comment.

Product: 11) Region-level tables comparing travel mode share estimates by tour/trip purpose to MTC's estimates for the horizon year.

I. Traffic assignment:

Use *Travel Model One* models or submit alternative models to MTC for review and comment.

Products: 12) Region-level, time-period-specific comparison of vehicle miles traveled and vehicle hours traveled estimates by facility type to MTC's estimates for the horizon year.

13) Region-level, time-period-specific comparison of estimated average speed on freeways and all other facilities, separately, to MTC's estimates for the horizon year.

Alternatively, CMAs may elect to utilize MTC zone-to-zone vehicle trip tables, adding network and zonal details within the county as appropriate, and then re-run the assignment. In this case, only Products 12 and 13 are applicable.

Appendix C: MTC's Regional Transit Expansion Program of Projects

Note that Resolution No. 3434, Revised, is reproduced below with the TOD Policy attached as Appendix D to Resolution No. 3000; other associated appendices are not attached here – the other appendices are available upon request from the MTC library.

Date: December 19, 2001
W.I.: 12110
Referred by: POC
Revised: 01/30/02-C 07/27/05-C
04/26/06-C 10/24/07-C
09/24/08-C

ABSTRACT

Resolution No. 3434, Revised

This resolution sets forth MTC's Regional Transit Expansion Program of Projects.

This resolution was amended on January 30, 2002 to include the San Francisco Geary Corridor Major Investment Study to Attachment B, as requested by the Planning and Operations Committee on December 14, 2001.

This resolution was amended on July 27, 2005 to include a Transit-Oriented Development (TOD) Policy to condition transit expansion projects funded under Resolution 3434 on supportive land use policies, as detailed in Attachment D-2.

This resolution was amended on April 26, 2006 to reflect changes in project cost, funding, and scope since the 2001 adoption.

This resolution was amended on October 24, 2007 to reflect changes in the Transit-Oriented Development (TOD) Policy in Attachment D-2.

This resolution was amended on September 24, 2008 to reflect changes associated with the 2008 Strategic Plan effort (Attachments B, C and D).

Further discussion of these actions are contained in the MTC Executive Director's Memorandum dated December 14, 2001, July 8, 2005, April 14, 2006, October 12, 2007 and September 10, 2008.

Date: December 19, 2001
W.I.: 12110
Referred by: POC

RE: Regional Transit Expansion Program of Projects

METROPOLITAN TRANSPORTATION COMMISSION
RESOLUTION NO. 3434, Revised

WHEREAS, the Metropolitan Transportation Commission (MTC) is the regional transportation planning agency for the San Francisco Bay Area pursuant to Government Code Section 66500 et seq.; and

WHEREAS, MTC adopted Resolution No. 1876 in 1988 which set forth a new rail transit starts and extension program for the region; and

WHEREAS, significant progress has been made in implementing Resolution No. 1876, with new light rail service in operation in San Francisco and Silicon Valley, new BART service extended to Bay Point and Dublin/Pleasanton in the East Bay, and the BART extension to San Francisco International Airport scheduled to open in 2002; and

WHEREAS, MTC's long range planning process, including the Regional Transportation Plan and its *Transportation Blueprint for the 21st Century,* provides a framework for comprehensively evaluating the next generation of major regional transit expansion projects to meet the challenge of congestion in major corridors throughout the nine-county Bay Area; and

WHEREAS, the Commission adopted Resolution No. 3357 as the basis for assisting in the evaluations of rail and express/rapid bus projects to serve as the companion follow-up program to Resolution No. 1876; and

WHEREAS, local, regional, state and federal discretionary funds will continue to be required to finance an integrated program of new rail transit starts and extensions including those funds which are reasonably expected to be available under current conditions, and new funds which need to be secured in the future through advocacy with state and federal legislatures and the electorate; and

WHEREAS, the Regional Transit Expansion program of projects will enhance the Bay Area's transit network with an additional 140 miles of rail, 600 miles of new express bus routes, and a 58% increase in service levels in several existing corridors, primarily funded with regional and local sources of funds; and

WHEREAS, MTC recognizes that coordinated regional priorities for transit investment will best position the Bay Area to compete for limited discretionary funding sources now and in the future; now, therefore, be it

RESOLVED, that MTC adopts a Regional Transit Expansion Program of Projects, consistent with the Policy and Criteria established in Resolution No. 3357, as outlined in Attachment A, attached hereto and incorporated herein as though set forth at length; and be it further

RESOLVED, that this program of projects, as set forth in Attachment B is accompanied by a comprehensive funding strategy of local, regional, state and federal funding sources as outlined in Attachment C, attached hereto and incorporated herein as though set forth at length; and, be it further

RESOLVED, that the regional discretionary funding commitments included in this financial strategy are subject to the terms and conditions outlined in Attachment D, attached hereto and incorporated herein as though set forth at length; and, be it further

METROPOLITAN TRANSPORTATION COMMISSION

_____

Sharon J. Brown, Chair

The above resolution was entered into
by the Metropolitan Transportation
Commission at a regular meeting of the
Commission held in Oakland,
California, on December 19, 2001.

Appendix D: MTC's Regional Transit Expansion Program of Projects - TOD Policy

Res. No. 3434, TOD Policy (Attachment D-2), revised October 24, 2007, is shown below; other associated Res. 3434 appendices are available upon request from the MTC library.

Date: July 27, 2005
W.I.: 12110
Referred by: POC
Revised: 10/24/07-C

Attachment D-2
Resolution No. 3434
Page 10 of 7

MTC RESOLUTION 3434 TOD POLICY FOR REGIONAL TRANSIT EXPANSION PROJECTS

1. Purpose

The San Francisco Bay Area—widely recognized for its beauty and innovation—is projected to grow by almost two million people and one and a half million jobs by 2030. This presents a daunting challenge to the sustainability and the quality of life in the regionWhere and how we accommodate this future growth, in particular where people live and work, will help determine how effectively the transportation system can handle this growth.

The more people who live, work and study in close proximity to public transit stations and corridors, the more likely they are to use the transit systems, and more transit riders means fewer vehicles competing for valuable road space. The policy also provides support for a growing market demand for more vibrant, walkable and transit convenient lifestyles by stimulating the construction of at least 42,000 new housing units along the region's major new transit corridors and will help to contribute to a forecasted 59% increase in transit ridership by the year 2030.

This TOD policy addresses multiple goals: improving the cost-effectiveness of regional investments in new transit expansions, easing the Bay Area's chronic housing shortage, creating vibrant new communities, and helping preserve regional open space. The policy ensures that transportation agencies, local jurisdictions, members of the public and the private sector work together to create development patterns that are more supportive of transit.

There are three key elements of the regional TOD policy:

(a) Corridor-level thresholds to quantify appropriate minimum levels of development around transit stations along new corridors;

(b) Local station area plans that address future land use changes, station access needs, circulation improvements, pedestrian-friendly design, and other key features in a transit-oriented development; and

(c) Corridor working groups that bring together CMAs, city and county planning staff, transit agencies, and other key stakeholders to define expectations, timelines, roles and responsibilities for key stages of the transit project development process.

2. TOD Policy Application

The TOD policy only applies to physical transit extensions funded in Resolution 3434 (see Table 1). The policy applies to any physical transit extension project with regional discretionary funds, regardless of level of funding. Resolution 3434 investments that only entail level of service improvements or other enhancements without physically extending the system are not subject to the TOD policy requirements. Single station extensions to international airports are not subject to the TOD policy due to the infeasibility of housing development.

TABLE 1:
RESOLUTION 3434 TRANSIT EXTENSION PROJECTS SUBJECT TO CORRIDOR THRESHOLDS

Project	Sponsor	Type	Threshold met with current development?	Meets TOD Policy (with current + new development as planned)?
BART East Contra Costa Rail Extension (eBART)				
(a) Phase 1 Pittsburg to Antioch			No	Yes
(b) Future phases	BART/ CCTA	Commuter Rail	No	No
BART – Downtown Fremont to San Jose/ Santa Clara				
(a) Fremont to Berryessa	(a) BART	BART Extension	No	Not yet determined; planning is underway
(b) Berryessa to San Jose/ Santa Clara	(b) VTA		No	Not yet determined
AC Transit Berkeley/Oakland/San Leandro Bus Rapid Transit: Phase 1	AC Transit	Bus Rapid Transit	Yes	Yes
Caltrain Downtown Extension/Rebuilt Transbay Terminal	TJPA	Commuter Rail	Yes	Yes
MUNI Third Street LRT Project Phase 2 – New Central Subway	MUNI	Light Rail	Yes	Yes
Sonoma-Marin Rail				
(a) Phase 1 downtown San Rafael to downtown Santa Rosa				Not yet determined; planning is underway
(b) Futures phases tbd	SMART	Commuter Rail	No	Not yet being planned
Dumbarton Rail	SMTA, ACCMA, VTA, ACTIA, Capitol Corridor	Commuter Rail	No	Not yet determined; planning is underway
Expanded Ferry Service to Berkeley, Alameda/Oakland/Harbor Bay, Hercules, Richmond, and South San Francisco; and other improvements*	WTA	Ferry	No	Line specific

** Ferry terminals where development is feasible shall meet a housing threshold of 2500 units. MTC staff will make the determination of development feasibility on a case by case basis.*

3. Definitions and Conditions of Funding

For purposes of this policy "regional discretionary funding" consists of the following sources identified in the Resolution 3434 funding plan:

FTA Section 5309- New Starts
FTA Section 5309- Bus and Bus Facilities Discretionary
FTA Section 5309- Rail Modernization
Regional Measure 1- Rail (bridge tolls)
Regional Measure 2 (bridge tolls)
Interregional Transportation Improvement Program
Interregional Transportation Improvement Program-Intercity rail
Federal Ferryboat Discretionary
AB 1171 (bridge tolls)
CARB-Carl Moyer/AB434 (Bay Area Air Quality Management District) [1]

These regional funds may be programmed and allocated for environmental and design related work, in preparation for addressing the requirements of the TOD policy. Regional funds may be programmed and allocated for right-of-way acquisition in advance of meeting all requirements in the policy, if land preservation for TOD or project delivery purposes is essential. No regional funds will be programmed and allocated for construction until the requirements of this policy have been satisfied. See Table 2 for a more detailed overview of the planning process.

4. Corridor-Level Thresholds

Each transit extension project funded in Resolution 3434 must plan for a minimum number of housing units along the corridor. These corridor-level thresholds vary by mode of transit, with more capital-intensive modes requiring higher numbers of housing units (see Table 3). The corridor thresholds have been developed based on potential for increased transit ridership, exemplary existing station sites in the Bay Area, local general plan data, predicted market demand for TOD-oriented housing in each county, and an independent analysis of feasible development potential in each transit corridor.

[1] The Carl Moyer funds and AB 434 funds are controlled directly by the California Air Resources Board and Bay Area Air Management District. Res. 3434 identifies these funds for the Caltrain electrification project, which is not subject to the TOD policy.

TABLE 2:
REGIONAL TOD POLICY IMPLEMENTATION PROCESS FOR TRANSIT EXTENSION PROJECTS

Transit Agency Action	City Action	MTC/CMA/ABAG Action
All parties in corridors that do not currently meet thresholds (see Table 1) establish Corridor Working Group to address corridor threshold. Conduct initial corridor performance evaluation, initiate station area planning. ⇩		
Environmental Review/ Preliminary Engineering/ Right-of-Way	Conduct Station Area Plans	Coordination of corridor working group, funding of station area plans
Step 1 Threshold Check: the combination of new Station Area Plans and existing development patterns exceeds corridor		
Final Design	Adopt Station Area Plans. Revise general plan policies and zoning, environmental reviews	Regional and county agencies assist local jurisdictions in implementing station area plans
Step 2 Threshold Check: (a) local policies adopted for station areas; (b) implementation mechanisms in place per adopted Station Area Plan by the time Final Design is completed. ⇩		
Construction	Implementation (financing, MOUs) Solicit development	TLC planning and capital funding, HIP funding

TABLE 3: CORRIDOR THRESHOLDS
HOUSING UNITS – AVERAGE PER STATION AREA

Project Type	BART	Light Rail	Bus Rapid Transit	Commuter Rail	Ferry
Housing Threshold	3,850	3,300	2,750	2,200	2,500

Each corridor is evaluated for the Housing Threshold. For example, a four station commuter rail extension (including the existing end-of-the—line station) would be required to meet a corridor-level threshold of 8,800 housing units.

Threshold figures above are an average per station area for all modes except ferries based on both existing land uses and planned development within a half mile of all stations. New below market rate housing is provided a 50% bonus towards meeting housing unit threshold.

** Ferry terminals where development is feasible shall meet a housing threshold of 2500 units.*

MTC staff will make the determination of development feasibility on a case by case basis.

Meeting the corridor level thresholds requires that within a half mile of all stations, a combination of existing land uses and planned land uses meets or exceeds the overall corridor threshold for housing (listed in Table 3);

Physical transit extension projects that do not currently meet the corridor thresholds with development that is already built will receive the highest priority for the award of MTC's Station Area Planning Grants.

To be counted toward the threshold, planned land uses must be adopted through general plans, and the appropriate implementation processes must be put in place, such as zoning codes. General plan language alone without supportive implementation policies, such as zoning, is not sufficient for the purposes of this policy. Ideally, planned land uses will be formally adopted through a specific plan (or equivalent), zoning codes and general plan amendments along with an accompanying programmatic Environmental Impact Report (EIR) as part of the overall station area planning process. Minimum densities will be used in the calculations to assess achievement of the thresholds.

An existing end station is included as part of the transit corridor for the purposes of calculating the corridor thresholds; optional stations will not be included in calculating the corridor thresholds.

New below-market housing units will receive a 50 percent bonus toward meeting the corridor threshold (i.e. one planned below-market housing unit counts for 1.5 housing units for the purposes of meeting the corridor threshold. Below market for the purposes of the Resolution 3434 TOD policy is affordable to 60% of area median income for rental units and 100% of area median income for owner-occupied units);

The local jurisdictions in each corridor will determine job and housing placement, type, density, and design.

The Corridor Working Groups are encouraged to plan for a level of housing that will significantly exceed the housing unit thresholds stated here during the planning process. This will ensure that the Housing Unit Threshold is exceeded corridor-wide and that the ridership potential from TOD is maximized.

5. Station Area Plans

Each proposed physical transit extension project seeking funding through Resolution 3434 must demonstrate that the thresholds for the corridor are met through existing development and adopted station area plans that commit local jurisdictions to a level of housing that meets the threshold. This requirement may be met by existing station area plans accompanied by appropriate zoning and implementation mechanisms. If new station area plans are needed to meet the corridor threshold, MTC will assist in funding the plans. The Station Area Plans shall be conducted by local governments in coordination with transit agencies, Association of Bay Area Governments (ABAG), MTC and the Congestion Management Agencies (CMAs).

Station Area Plans are opportunities to define vibrant mixed use, accessible transit villages and quality transit-oriented development – places where people will want to live, work,

shop and spend time. These plans should incorporate mixed-use developments, including new housing, neighborhood serving retail, employment, schools, day care centers, parks and other amenities to serve the local community.

At a minimum, Station Area Plans will define both the land use plan for the area as well as the policies—zoning, design standards, parking policies, etc.—for implementation. The plans shall at a minimum include the following elements:

- Current and proposed land use by type of use and density within the ½ mile radius, with a clear identification of the number of existing and planned housing units and jobs;
- Station access and circulation plans for motorized, non-motorized and transit access. The station area plan should clearly identify any barriers for pedestrian, bicycle and wheelchair access to the station from surrounding neighborhoods (e.g., freeways, railroad tracks, arterials with inadequate pedestrian crossings), and should propose strategies that will remove these barriers and maximize the number of residents and employees that can access the station by these means. The station area and transit village public spaces shall be made accessible to persons with disabilities.
- Estimates of transit riders walking from the half mile station area to the transit station to use transit;
- Transit village design policies and standards, including mixed use developments and pedestrian-scaled block size, to promote the livability and walkability of the station area;
- TOD-oriented parking demand and parking requirements for station area land uses, including consideration of pricing and provisions for shared parking;
- Implementation plan for the station area plan, including local policies required for development per the plan, market demand for the proposed development, potential phasing of development and demand analysis for proposed development.
- The Station Area Plans shall be conducted according to the guidelines established in MTC's Station Area Planning Manual.

6. Corridor Working Groups

The goal of the Corridor Working Groups is to create a more coordinated approach to planning for transit-oriented development along Resolution 3434 transit corridors. Each of the transit extensions subject to the corridor threshold process, as identified in Table 1, will need a Corridor Working Group, unless the current level of development already meets the corridor threshold. Many of the corridors already have a transit project working group that may be adjusted to take on this role. The Corridor Working Group shall be coordinated by the relevant CMAs, and will include the sponsoring transit agency, the local jurisdictions in the corridor, and representatives from ABAG, MTC, and other parties as appropriate.

The Corridor Working Group will assess whether the planned level of development satisfies the corridor threshold as defined for the mode, and assist in addressing any deficit in meeting the threshold by working to identify opportunities and strategies at the local level. This will include the key task of distributing the required housing units to each of the affected station sites within the defined corridor. The Corridor Working Group will continue with corridor evaluation, station area planning, and any necessary refinements to

station locations until the corridor threshold is met and supporting Station Area Plans are adopted by the local jurisdictions.

MTC will confirm that each corridor meets the housing threshold prior to the release of regional discretionary funds for construction of the transit project.

7. Review of the TOD Policy

MTC staff will conduct a review of the TOD policy and its application to each of the affected Resolution 3434 corridors, and present findings to the Commission, within 12 months of the adoption of the TOD policy.

APPENDIX 2

California Government Code Concerning CMPs

GOVERNMENT CODE
SECTION 65088-65089.10

65088. The Legislature finds and declares all of the following:

(a) Although California's economy is critically dependent upon transportation, its current transportation system relies primarily upon a street and highway system designed to accommodate far fewer vehicles than are currently using the system.

(b) California's transportation system is characterized by fragmented planning, both among jurisdictions involved and among the means of available transport.

(c) The lack of an integrated system and the increase in the number of vehicles are causing traffic congestion that each day results in 400,000 hours lost in traffic, 200 tons of pollutants released into the air we breathe, and three million one hundred thousand dollars ($3,100,000) added costs to the motoring public.

(d) To keep California moving, all methods and means of transport between major destinations must be coordinated to connect our vital economic and population centers.

(e) In order to develop the California economy to its full potential, it is intended that federal, state, and local agencies join with transit districts, business, private and environmental interests to develop and implement comprehensive strategies needed to develop appropriate responses to transportation needs.

(f) In addition to solving California's traffic congestion crisis, rebuilding California's cities and suburbs, particularly with affordable housing and more walkable neighborhoods, is an important part of accommodating future increases in the state's population because homeownership is only now available to most Californians who are on the fringes of metropolitan areas and far from employment centers.

(g) The Legislature intends to do everything within its power to remove regulatory barriers around the development of infill housing, transit-oriented development, and mixed use commercial development in order to reduce regional traffic congestion and provide more housing choices for all Californians.

(h) The removal of regulatory barriers to promote infill housing, transit-oriented development, or mixed use commercial development does not preclude a city or county from holding a public hearing nor finding that an individual infill project would be adversely impacted by the surrounding environment or transportation patterns.

65088.1. As used in this chapter the following terms have the following meanings:

(a) Unless the context requires otherwise, “agency” means the agency responsible for the preparation and adoption of the congestion management program.

(b) “Bus rapid transit corridor” means a bus service that includes at least four of the following attributes:

(1) Coordination with land use planning.

(2) Exclusive right-of-way.

(3) Improved passenger boarding facilities.

(4) Limited stops.

(5) Passenger boarding at the same height as the bus.

(6) Prepaid fares.

(7) Real-time passenger information.
(8) Traffic priority at intersections.
(9) Signal priority.
(10) Unique vehicles.
(c) "Commission" means the California Transportation Commission.
(d) "Department" means the Department of Transportation.
(e) "Infill opportunity zone" means a specific area designated by a city or county, pursuant to subdivision (c) of Section 65088.4 that is within one-half mile of major transit stop or high-quality transit corridor included in a regional transportation plan. A major transit stop is as defined in Section 21064.3 of the Public Resources Code, except that, for purposes of this section, it also includes major transit stops that are included in the applicable regional transportation plan. For purposes of this section, a high-quality transit corridor means a corridor with fixed route bus service with service intervals no longer than 15 minutes during peak commute hours.
(f) "Interregional travel" means any trips that originate outside the boundary of the agency. A "trip" means a one-direction vehicle movement. The origin of any trip is the starting point of that trip. A roundtrip consists of two individual trips.
(g) "Level of service standard" is a threshold that defines a deficiency on the congestion management program highway and roadway system which requires the preparation of a deficiency plan. It is the intent of the Legislature that the agency shall use all elements of the program to implement strategies and actions that avoid the creation of deficiencies and to improve multimodal mobility.
(h) "Local jurisdiction" means a city, a county, or a city and county.
(i) "Multimodal" means the utilization of all available modes of travel that enhance the movement of people and goods, including, but not limited to, highway, transit, nonmotorized, and demand management strategies including, but not limited to, telecommuting. The availability and practicality of specific multimodal systems, projects, and strategies may vary by county and region in accordance with the size and complexity of different urbanized areas.
(j) (1) "Parking cash-out program" means an employer-funded program under which an employer offers to provide a cash allowance to an employee equivalent to the parking subsidy that the employer would otherwise pay to provide the employee with a parking space. "Parking subsidy" means the difference between the out-of-pocket amount paid by an employer on a regular basis in order to secure the availability of an employee parking space not owned by the employer and the price, if any, charged to an employee for use of that space.
(2) A parking cash-out program may include a requirement that employee participants certify that they will comply with guidelines established by the employer designed to avoid neighborhood parking problems, with a provision that employees not complying with the guidelines will no longer be eligible for the parking cash-out program.
(k) "Performance measure" is an analytical planning tool that is used to quantitatively evaluate transportation improvements and to assist in determining effective implementation actions, considering all modes and strategies. Use of a performance measure as part of the program does not trigger the requirement for the preparation of deficiency plans.
(l) "Urbanized area" has the same meaning as is defined in the 1990 federal census for urbanized areas of more than 50,000 population.
(m) Unless the context requires otherwise, "regional agency" means the agency responsible for preparation of the regional transportation improvement program.

65088.3. This chapter does not apply in a county in which a majority of local governments, collectively comprised of the city councils and the county board of supervisors, which in total also represent a majority of the population in the county, each adopt resolutions electing to be exempt from the congestion management program.

65088.4. (a) It is the intent of the Legislature to balance the need for level of service standards for traffic with the need to build infill housing and mixed use commercial developments within walking distance of mass transit facilities, downtowns, and town centers and to provide greater flexibility to local governments to balance these sometimes competing needs.
(b) Notwithstanding any other provision of law, level of service standards described in Section 65089 shall not apply to the streets and highways within an infill opportunity zone.
(c) The city or county may designate an infill opportunity zone by adopting a resolution after determining that the infill opportunity zone is consistent with the general plan and any applicable specific plan, and is a transit priority area within a sustainable communities strategy or alternative planning strategy adopted by the applicable metropolitan planning organization.

65088.5. Congestion management programs, if prepared by county transportation commissions and transportation authorities created pursuant to Division 12 (commencing with Section 130000) of the Public Utilities Code, shall be used by the regional transportation planning agency to meet federal requirements for a congestion management system, and shall be incorporated into the congestion management system.

65089. (a) A congestion management program shall be developed, adopted, and updated biennially, consistent with the schedule for adopting and updating the regional transportation improvement program, for every county that includes an urbanized area, and shall include every city and the county. The program shall be adopted at a noticed public hearing of the agency. The program shall be developed in consultation with, and with the cooperation of, the transportation planning agency, regional transportation providers, local governments, the department, and the air pollution control district or the air quality management district, either by the county transportation commission, or by another public agency, as designated by resolutions adopted by the county board of supervisors and the city councils of a majority of the cities representing a majority of the population in the incorporated area of the county.

(b) The program shall contain all of the following elements:

(1) (A) Traffic level of service standards established for a system of highways and roadways designated by the agency. The highway and roadway system shall include at a minimum all state highways and principal arterials. No highway or roadway designated as a part of the system shall be removed from the system. All new state highways and principal arterials shall be designated as part of the system, except when it is within an infill opportunity zone. Level of service (LOS) shall be measured by Circular 212, by the most recent version of the Highway Capacity Manual, or by a uniform methodology adopted by the agency that is consistent with the Highway Capacity Manual.

The determination as to whether an alternative method is consistent with the Highway Capacity Manual shall be made by the regional agency, except that the department instead shall make this determination if either (i) the regional agency is also the agency, as those terms are defined in Section 65088.1, or (ii) the department is responsible for preparing the regional transportation improvement plan for the county.

(B) In no case shall the LOS standards established be below the level of service E or the current level, whichever is farthest from level of service A except when the area is in an infill opportunity zone. When the level of service on a segment or at an intersection fails to attain the established level of service standard outside an infill opportunity zone, a deficiency plan shall be adopted pursuant to Section 65089.4.

(2) A performance element that includes performance measures to evaluate current and future multimodal system performance for the movement of people and goods. At a minimum, these performance measures shall incorporate highway and roadway system performance, and measures established for the frequency and routing of public transit, and for the coordination of transit service provided by separate operators. These performance measures shall support mobility, air quality, land use, and economic objectives, and shall be used in the development of the capital improvement program required pursuant to paragraph (5), deficiency plans required pursuant to Section 65089.4, and the land use analysis program required pursuant to paragraph (4).

(3) A travel demand element that promotes alternative transportation methods, including, but not limited to, carpools, vanpools, transit, bicycles, and park-and-ride lots; improvements in the balance between jobs and housing; and other strategies, including, but not limited to, flexible work hours, telecommuting, and parking management programs. The agency shall consider parking cash-out programs during the development and update of the travel demand element.

(4) A program to analyze the impacts of land use decisions made by local jurisdictions on regional transportation systems, including an estimate of the costs associated with mitigating those impacts. This program shall measure, to the extent possible, the impact to the transportation system using the performance measures described in paragraph (2). In no case shall the program include an estimate of the costs of mitigating the impacts of interregional travel. The program shall provide credit for local public and private contributions to improvements to regional transportation systems. However, in the case of toll road facilities, credit shall only be allowed for local public and private contributions which are unreimbursed from toll revenues or other state or federal sources. The agency shall calculate the amount of the credit to be provided. The program defined under this section may require implementation through the requirements and analysis of the California Environmental Quality Act, in order to avoid duplication.

(5) A seven-year capital improvement program, developed using the performance measures described in paragraph (2) to determine effective projects that maintain or improve the performance of the multimodal system for the movement of people and goods, to mitigate regional transportation impacts identified pursuant to paragraph (4). The program shall conform to transportation-related vehicle emission air quality mitigation measures, and include any project that will

increase the capacity of the multimodal system. It is the intent of the Legislature that, when roadway projects are identified in the program, consideration be given for maintaining bicycle access and safety at a level comparable to that which existed prior to the improvement or alteration. The capital improvement program may also include safety, maintenance, and rehabilitation projects that do not enhance the capacity of the system but are necessary to preserve the investment in existing facilities.

(c) The agency, in consultation with the regional agency, cities, and the county, shall develop a uniform data base on traffic impacts for use in a countywide transportation computer model and shall approve transportation computer models of specific areas within the county that will be used by local jurisdictions to determine the quantitative impacts of development on the circulation system that are based on the countywide model and standardized modeling assumptions and conventions. The computer models shall be consistent with the modeling methodology adopted by the regional planning agency. The data bases used in the models shall be consistent with the data bases used by the regional planning agency. Where the regional agency has jurisdiction over two or more counties, the data bases used by the agency shall be consistent with the data bases used by the regional agency.

(d) (1) The city or county in which a commercial development will implement a parking cash-out program that is included in a congestion management program pursuant to subdivision (b), or in a deficiency plan pursuant to Section 65089.4, shall grant to that development an appropriate reduction in the parking requirements otherwise in effect for new commercial development.

(2) At the request of an existing commercial development that has implemented a parking cash-out program, the city or county shall grant an appropriate reduction in the parking requirements otherwise applicable based on the demonstrated reduced need for parking, and the space no longer needed for parking purposes may be used for other appropriate purposes.

(e) Pursuant to the federal Intermodal Surface Transportation Efficiency Act of 1991 and regulations adopted pursuant to the act, the department shall submit a request to the Federal Highway Administration Division Administrator to accept the congestion management program in lieu of development of a new congestion management system otherwise required by the act.

65089.1. (a) For purposes of this section, "plan" means a trip reduction plan or a related or similar proposal submitted by an employer to a local public agency for adoption or approval that is designed to facilitate employee ridesharing, the use of public transit, and other means of travel that do not employ a single-occupant vehicle.

(b) An agency may require an employer to provide rideshare data bases; an emergency ride program; a preferential parking program; a transportation information program; a parking cash-out program, as defined in subdivision (f) of Section 65088.1; a public transit subsidy in an amount to be determined by the employer; bicycle parking areas; and other noncash value programs which encourage or facilitate the use of alternatives to driving alone. An employer may offer, but no agency shall require an employer to offer, cash, prizes, or items with cash value to employees to encourage participation in a trip reduction program as a condition of approving

a plan.

(c) Employers shall provide employees reasonable notice of the content of a proposed plan and shall provide the employees an opportunity to comment prior to submittal of the plan to the agency for adoption.

(d) Each agency shall modify existing programs to conform to this section not later than June 30, 1995. Any plan adopted by an agency prior to January 1, 1994, shall remain in effect until adoption by the agency of a modified plan pursuant to this section.

(e) Employers may include disincentives in their plans that do not create a widespread and substantial disproportionate impact on ethnic or racial minorities, women, or low-income or disabled employees.

(f) This section shall not be interpreted to relieve any employer of the responsibility to prepare a plan that conforms with trip reduction goals specified in Division 26 (commencing with Section 39000) of the Health and Safety Code, or the Clean Air Act (42 U.S.C. Sec. 7401 et seq.).

(g) This section only applies to agencies and employers within the South Coast Air Quality Management District.

65089.2. (a) Congestion management programs shall be submitted to the regional agency. The regional agency shall evaluate the consistency between the program and the regional transportation plans required pursuant to Section 65080. In the case of a multicounty regional transportation planning agency, that agency shall evaluate the consistency and compatibility of the programs within the region.

(b) The regional agency, upon finding that the program is consistent, shall incorporate the program into the regional transportation improvement program as provided for in Section 65082. If the regional agency finds the program is inconsistent, it may exclude any project in the congestion management program from inclusion in the regional transportation improvement program.

(c) (1) The regional agency shall not program any surface transportation program funds and congestion mitigation and air quality funds pursuant to Section 182.6 and 182.7 of the Streets and Highways Code in a county unless a congestion management program has been adopted by December 31, 1992, as required pursuant to Section 65089. No surface transportation program funds or congestion mitigation and air quality funds shall be programmed for a project in a local jurisdiction that has been found to be in nonconformance with a congestion management program pursuant to Section 65089.5 unless the agency finds that the project is of regional significance.

(2) Notwithstanding any other provision of law, upon the designation of an urbanized area, pursuant to the 1990 federal census or a subsequent federal census, within a county which previously did not include an urbanized area, a congestion management program as required pursuant to Section 65089 shall be adopted within a period of 18 months after designation by the Governor.

(d) (1) It is the intent of the Legislature that the regional agency, when its boundaries include areas in more than one county, should resolve inconsistencies and mediate disputes which arise between agencies related to congestion management programs adopted for those areas.

(2) It is the further intent of the Legislature that disputes which may arise between regional agencies, or agencies which are not within the boundaries of a multicounty regional transportation

planning agency, should be mediated and resolved by the Secretary of Business, Housing and Transportation Agency, or an employee of that agency designated by the secretary, in consultation with the air pollution control district or air quality management district within whose boundaries the regional agency or agencies are located.

(e) At the request of the agency, a local jurisdiction that owns, or is responsible for operation of, a trip-generating facility in another county shall participate in the congestion management program of the county where the facility is located. If a dispute arises involving a local jurisdiction, the agency may request the regional agency to mediate the dispute through procedures pursuant to subdivision (d) of Section 65089.2. Failure to resolve the dispute does not invalidate the congestion management program.

65089.3. The agency shall monitor the implementation of all elements of the congestion management program. The department is responsible for data collection and analysis on state highways, unless the agency designates that responsibility to another entity. The agency may also assign data collection and analysis responsibilities to other owners and operators of facilities or services if the responsibilities are specified in its adopted program. The agency shall consult with the department and other affected owners and operators in developing data collection and analysis procedures and schedules prior to program adoption. At least biennially, the agency shall determine if the county and cities are conforming to the congestion management program, including, but not limited to, all of the following:

(a) Consistency with levels of service standards, except as provided in Section 65089.4.

(b) Adoption and implementation of a program to analyze the impacts of land use decisions, including the estimate of the costs associated with mitigating these impacts.

(c) Adoption and implementation of a deficiency plan pursuant to Section 65089.4 when highway and roadway level of service standards are not maintained on portions of the designated system.

65089.4. (a) A local jurisdiction shall prepare a deficiency plan when highway or roadway level of service standards are not maintained on segments or intersections of the designated system. The deficiency plan shall be adopted by the city or county at a noticed public hearing.

(b) The agency shall calculate the impacts subject to exclusion pursuant to subdivision (f) of this section, after consultation with the regional agency, the department, and the local air quality management district or air pollution control district. If the calculated traffic level of service following exclusion of these impacts is consistent with the level of service standard, the agency shall make a finding at a publicly noticed meeting that no deficiency plan is required and so notify the affected local jurisdiction.

(c) The agency shall be responsible for preparing and adopting procedures for local deficiency plan development and implementation responsibilities, consistent with the requirements of this section. The deficiency plan shall include all of the following:

(1) An analysis of the cause of the deficiency. This analysis shall include the following:

(A) Identification of the cause of the deficiency.

(B) Identification of the impacts of those local jurisdictions

within the jurisdiction of the agency that contribute to the deficiency. These impacts shall be identified only if the calculated traffic level of service following exclusion of impacts pursuant to subdivision (f) indicates that the level of service standard has not been maintained, and shall be limited to impacts not subject to exclusion.

(2) A list of improvements necessary for the deficient segment or intersection to maintain the minimum level of service otherwise required and the estimated costs of the improvements.

(3) A list of improvements, programs, or actions, and estimates of costs, that will (A) measurably improve multimodal performance, using measures defined in paragraphs (1) and (2) of subdivision (b) of Section 65089, and (B) contribute to significant improvements in air quality, such as improved public transit service and facilities, improved nonmotorized transportation facilities, high occupancy vehicle facilities, parking cash-out programs, and transportation control measures. The air quality management district or the air pollution control district shall establish and periodically revise a list of approved improvements, programs, and actions that meet the scope of this paragraph. If an improvement, program, or action on the approved list has not been fully implemented, it shall be deemed to contribute to significant improvements in air quality. If an improvement, program, or action is not on the approved list, it shall not be implemented unless approved by the local air quality management district or air pollution control district.

(4) An action plan, consistent with the provisions of Chapter 5 (commencing with Section 66000), that shall be implemented, consisting of improvements identified in paragraph (2), or improvements, programs, or actions identified in paragraph (3), that are found by the agency to be in the interest of the public health, safety, and welfare. The action plan shall include a specific implementation schedule. The action plan shall include implementation strategies for those jurisdictions that have contributed to the cause of the deficiency in accordance with the agency's deficiency plan procedures. The action plan need not mitigate the impacts of any exclusions identified in subdivision (f). Action plan strategies shall identify the most effective implementation strategies for improving current and future system performance.

(d) A local jurisdiction shall forward its adopted deficiency plan to the agency within 12 months of the identification of a deficiency. The agency shall hold a noticed public hearing within 60 days of receiving the deficiency plan. Following that hearing, the agency shall either accept or reject the deficiency plan in its entirety, but the agency may not modify the deficiency plan. If the agency rejects the plan, it shall notify the local jurisdiction of the reasons for that rejection, and the local jurisdiction shall submit a revised plan within 90 days addressing the agency's concerns. Failure of a local jurisdiction to comply with the schedule and requirements of this section shall be considered to be nonconformance for the purposes of Section 65089.5.

(e) The agency shall incorporate into its deficiency plan procedures, a methodology for determining if deficiency impacts are caused by more than one local jurisdiction within the boundaries of the agency.

(1) If, according to the agency's methodology, it is determined that more than one local jurisdiction is responsible for causing a deficient segment or intersection, all responsible local

jurisdictions shall participate in the development of a deficiency plan to be adopted by all participating local jurisdictions.

(2) The local jurisdiction in which the deficiency occurs shall have lead responsibility for developing the deficiency plan and for coordinating with other impacting local jurisdictions. If a local jurisdiction responsible for participating in a multi-jurisdictional deficiency plan does not adopt the deficiency plan in accordance with the schedule and requirements of paragraph (a) of this section, that jurisdiction shall be considered in nonconformance with the program for purposes of Section 65089.5.

(3) The agency shall establish a conflict resolution process for addressing conflicts or disputes between local jurisdictions in meeting the multi-jurisdictional deficiency plan responsibilities of this section.

(f) The analysis of the cause of the deficiency prepared pursuant to paragraph (1) of subdivision (c) shall exclude the following:

(1) Interregional travel.

(2) Construction, rehabilitation, or maintenance of facilities that impact the system.

(3) Freeway ramp metering.

(4) Traffic signal coordination by the state or multi-jurisdictional agencies.

(5) Traffic generated by the provision of low-income and very low income housing.

(6) (A) Traffic generated by high-density residential development located within one-fourth mile of a fixed rail passenger station, and

(B) Traffic generated by any mixed use development located within one-fourth mile of a fixed rail passenger station, if more than half of the land area, or floor area, of the mixed use development is used for high density residential housing, as determined by the agency.

(g) For the purposes of this section, the following terms have the following meanings:

(1) "High density" means residential density development which contains a minimum of 24 dwelling units per acre and a minimum density per acre which is equal to or greater than 120 percent of the maximum residential density allowed under the local general plan and zoning ordinance. A project providing a minimum of 75 dwelling units per acre shall automatically be considered high density.

(2) "Mixed use development" means development which integrates compatible commercial or retail uses, or both, with residential uses, and which, due to the proximity of job locations, shopping opportunities, and residences, will discourage new trip generation.

65089.5. (a) If, pursuant to the monitoring provided for in Section 65089.3, the agency determines, following a noticed public hearing, that a city or county is not conforming with the requirements of the congestion management program, the agency shall notify the city or county in writing of the specific areas of nonconformance. If, within 90 days of the receipt of the written notice of nonconformance, the city or county has not come into conformance with the congestion management program, the governing body of the agency shall make a finding of nonconformance and shall submit the finding to the commission and to the Controller.

(b) (1) Upon receiving notice from the agency of nonconformance, the Controller shall withhold apportionments of funds required to be apportioned to that nonconforming city or county by Section 2105 of the Streets and Highways Code.

(2) If, within the 12-month period following the receipt of a notice of nonconformance, the Controller is notified by the agency that the city or county is in conformance, the Controller shall allocate the apportionments withheld pursuant to this section to the city or county.

(3) If the Controller is not notified by the agency that the city or county is in conformance pursuant to paragraph (2), the Controller shall allocate the apportionments withheld pursuant to this section to the agency.

(c) The agency shall use funds apportioned under this section for projects of regional significance which are included in the capital improvement program required by paragraph (5) of subdivision (b) of Section 65089, or in a deficiency plan which has been adopted by the agency. The agency shall not use these funds for administration or planning purposes.

65089.6. Failure to complete or implement a congestion management program shall not give rise to a cause of action against a city or county for failing to conform with its general plan, unless the city or county incorporates the congestion management program into the circulation element of its general plan.

65089.7. A proposed development specified in a development agreement entered into prior to July 10, 1989, shall not be subject to any action taken to comply with this chapter, except actions required to be taken with respect to the trip reduction and travel demand element of a congestion management program pursuant to paragraph (3) of subdivision (b) of Section 65089.

65089.9. The study steering committee established pursuant to Section 6 of Chapter 444 of the Statutes of 1992 may designate at least two congestion management agencies to participate in a demonstration study comparing multimodal performance standards to highway level of service standards. The department shall make available, from existing resources, fifty thousand dollars ($50,000) from the Transportation Planning and Development Account in the State Transportation Fund to fund each of the demonstration projects. The designated agencies shall submit a report to the Legislature not later than June 30, 1997, regarding the findings of each demonstration project.

65089.10. Any congestion management agency that is located in the Bay Area Air Quality Management District and receives funds pursuant to Section 44241 of the Health and Safety Code for the purpose of implementing paragraph (3) of subdivision (b) of Section 65089 shall ensure that those funds are expended as part of an overall program for improving air quality and for the purposes of this chapter.

APPENDIX 3

Congestion Management Program Roadway Network Segmentation and Changes

CMP NETWORK - ARTERIALS

Rationale for Segmentation

Street Name	Land Use	Speed Limit	Major Cross Street	Change In Volume	Free-way Ramp
1st Street					
Market-Harrison					
3rd Street					
Jamestown-Evans *		x	x		
Evans-China Basin		x			
China Basin-Market		x		x	
4th Street					
Market-Harrison					x
Harrison-3rd St					x
5th Street					
Market-Brannan					
6th Street					
Market-Brannan					
7th Street					
Brannan-Market					
8th Street					
Market-Bryant					
9th Street					
Brannan-Market					
10th Street					
Market-Brannan					
19th Avenue/Park Presidio Blvd					
U.S.101-Lake		x			
Lake-Lincoln		x	x		
Lincoln-Sloat			x		
Sloat-J.Serra			x		
Alemany Blvd					
C & C limit-Lyell *		x			
Lyell-Bayshore		x			
Army Street					
Guerrero-Kansas *	x	x			x
Kansas-Bryant *					x
Bryant-3rd St.					x
Bay Street					
Van Ness-Embarcadero					
Bayshore Blvd					
Army-Industrial *			x		x
Industrial- C & C limit			x		x
Beale/Davis					
Clay-Mission					
Brannan Street					
Division-9th St					
6th St-5th St					
Broadway					
Gough-Larkin	x				

Street Name	Land Use	Speed Limit	Major Cross Street	Change In Volume	Free-way Ramp
Larkin-Powell (Tunnel)	x	x			
Powell-Montgomery		x			
Montgomery-Embarcadero			x		
Brotherhood Way					
J.Serra-Alemany					
Bryant Street					
Division-4th St					x
4th St-Embarcadero					x
Bush Street					
Masonic-Gough	x				
Gough-Market *	x		x		
Castro/Divisadero Street					
Pine-Geary			x		
Geary-14th St	x		x		
14th St-Market	x		x		
Clay Street					
Kearny-Davis					
Columbus Avenue					
North Point-Greenwich				x	
Greenwich-Montgomery			x		
Drumm Street					
Washington-Market					
Duboce Avenue					
Market-Mission *	x				
Mission-Potrero	x				
The Embarcadero					
Townsend-North Point					
Evans Avenue					
Army-3rd St *					
Fell Street					
Gough-Laguna					x
Laguna-Stanyan					x
Franklin Street					
Market-Pine			x		
Pine-Lombard	x				
Fremont Street					
Harrison-Market *					
Fulton Street					
Masonic-Arguello		x	x		
Arguello-Park Presidio *		x	x		
Geary Blvd					
Market-Gough	x	x			
Gough-Arguello		x			
Arguello-25th Ave			x		
25th Ave-Great Hwy	x		x		

Street Name	Land Use	Speed Limit	Major Cross Street	Change In Volume	Free-way Ramp
Geneva Avenue					
Phelan-Cayuga	x				
Cayuga-Paris	x				
Paris-Santos	x				
Golden Gate Avenue					
Masonic-Franklin	x	x	x		
Franklin-Market	x	x	x		
Gough Street					
Pine-Geary			x		
Geary-Golden Gate *	x				
Golden Gate-Market	x				
San Jose Avenue/Guerrero					
Army-29th St	x	x			
29th St-Monterey Blvd					x
Harrison Street					
Embarcadero-1st St *					x
1st St-4th St					x
4th St-8th St					x
8th St-13th St					x
Hayes Street					
Market-Gough					
Howard Street					
Embarcadero-S.Van Ness					
Junipero Serra Blvd					
Sloat-19th Ave *		x	x		
19th Ave-Brotherhood Way			x		
Brotherhood-C & C limit			x		
Kearny Street					
Market-Columbus					
King Street					
6th St-Embarcadero					
Lincoln Blvd/Kezar Drive					
19th Ave-5th Ave	x				
5th Ave-Stanyan	x				
Lombard Street					
Francisco-Van Ness *					
Main Street					
Mission-Market					
Market/Portola					
Sloat-Santa Clara	x				
Santa Clara-Clipper *	Grade Change				
Clipper-Castro	x				
Castro-Guerrero	x				
Guerrero-Van Ness			x	x	
Van Ness-Drumm	x				

Street Name	Land Use	Speed Limit	Major Cross Street	Change In Volume	Free-way Ramp
Masonic Avenue					
Pine-Geary			x		
Geary-Page			x		
Mission/Otis					
Embarcadero-3rd St	x				
3rd St-9th St	x				
9th St-14th St	x				
14th St-Army *	x				
Army-Ocean *			x		
Ocean-Sickles	x				
Montgomery Street					
Broadway-Bush					
North Point Street					
Van Ness-Columbus			x		
Columbus-Embarcadero			x		
O'Farrell Street					
Gough-Mason *	x				
Mason-Market	x				
Oak Street					
Stanyan-Divisadero *	x		x		
Divisadero-Laguna	x		x		x
Laguna-Franklin					x
Ocean Avenue					
19th Ave-Miramar *	x				
Miramar-I-280	x				
Pine Street					
Market-Kearny	x				
Kearny-Leavenworth	x				
Leavenworth-Franklin	x				
Franklin-Presidio	x				
Potrero Avenue					
Division-21st St	x			x	
21st St-Army	x			x	
Skyline Drive					
Sloat-City & County limit					
Sloat Boulevard					
Skyline-J.Serra					
Stanyan Street					
Fulton-Turk					
Sutter Street					
Market-Mason *	x				
Mason-Gough	x				
Gough-Divisadero	x		x		
Turk Street					
Market-Hyde	x				
Hyde-Gough	x				

Street Name	Land Use	Speed Limit	Major Cross Street	Change In Volume	Free-way Ramp
Hyde-Gough	x				
Gough-Divisadero	x				
Divisadero-Stanyan			x		
Van Ness Avenue					
Lombard-Washington	Sig.	Syst.	Change		
Washington-GoldenGate Av *	x				
Golden Gate Ave-13th St *					x
13th St-Army					x
Washington Street					
Kearny-Drumm					
West Portal Avenue					
Sloat-Ulloa					

* indicates change in segment boundary.

CMP NETWORK - FREEWAYS

Rationale for Segmentation

Freeway	Split	Off-ramp	On-ramp
I-280			
C & C limit- U.S. 101	x		
101/280 -6th/Brannan	x		
U.S.101			
C & C limit- I-280	x		
I-280- I-80	x		
I-80- Fell/Laguna	x		
I-80			
U.S. 101- Fremont		x	
Fremont- Treasure Island		x	

Table II
Rationale for Changes to Arterial Segmentation
Since 1991

Third Street	Eliminated Fairfax Street as a break point. Evans Avenue is the new break point because of the change in speed limit and because Evans is a major cross street.
Alemany Boulevard	Lyell Street is a necessary break point because of a speed limit change.
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Bayshore Boulevard	Industrial is a necessary break point because of nearby off and on-ramps.
Bush Street	Gough is the best divider to break Bush into two segments because land use changes occur at Gough and because it is a major cross street.
Duboce Avenue	Folsom Street was eliminated as a break point and replaced with Mission Street, because of the presence of on and off ramps to 101.
Evans Avenue and Fremont Street	The 1991 intermediate segment limits could not be justified and were eliminated (no apparent change in traffic flow conditions)
Fulton Street	Arguello was identified as an intermediate segment limit because it is a major cross street and because of a speed limit change.
Harrison Street	Eliminated 2nd Street and substituted First Street is the first break point because of the I-80 on-ramp.
Junipero Serra Boulevard	The first segment boundary is 19th Avenue instead of Holloway, as justified by the change in speed limit and also because 19th Avenue is a major cross street.
Lombard Street	Eliminated intermediate segment boundaries because land uses and traffic conditions are uniform along this street.
Market Street	Established a new segment boundary at Clipper because of a change in grade on each side of Clipper. Eliminated unjustified breaks at Danvers, Sanchez and Gough.
Mission Street	Eliminated intermediate boundaries between 14th and Army and between Army and Ocean to better reflect land use.
O'Farrell Street	Eliminated intermediate segment boundaries at Van Ness, Leavenworth and Taylor, which created segments too short for accurate measurement. Mason is the new break point because of land use changes.
Van Ness Avenue	Added Golden Gate Avenue as an intermediate segment boundary because of land use changes (start of the Civic Center area).

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January 10, 2007 REC'D JAN 12 2007

Ms. Tilly Chang
Deputy Director for Planning
San Francisco Transportation Authority
100 Van Ness Avenue, 26th floor
San Francisco, CA 94102

RE: San Francisco CMP Segment Modification

Dear Tilly:

Thank you for the letter dated January 4, 2007 regarding CMP monitoring on Brannan Street. After reviewing your letter and the CMP monitoring map for the area, MTC supports the proposed changes to make monitoring on Brannan in this area consistent with SFCTA's standard CMP segment definitions while continuing to monitor Brannan Street consistent with overall CMP guidance.

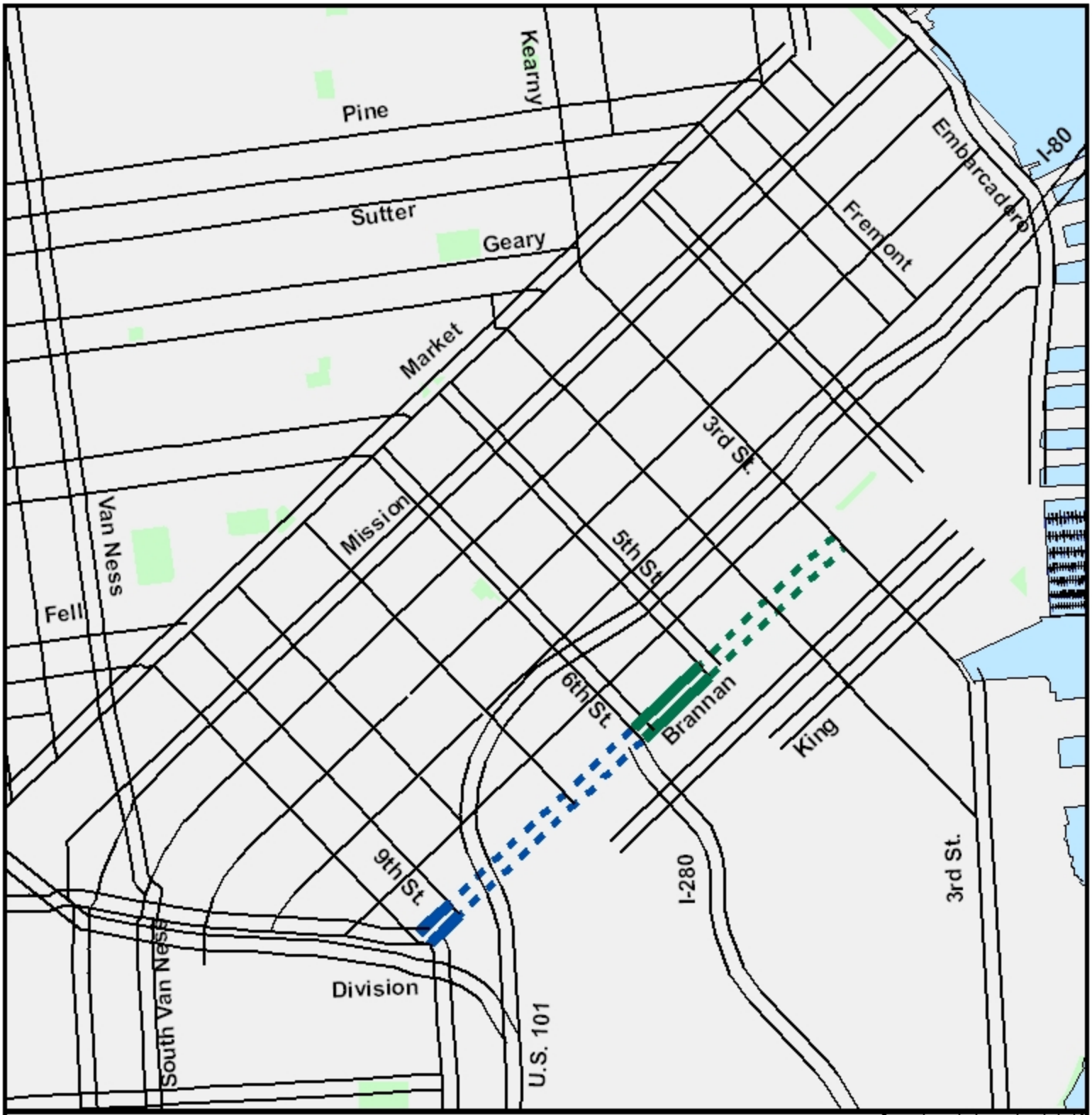
MTC expects monitoring on Brannan will take place on Brannan from Division to 6th Street and from 6th Street to 3rd Street effective spring 2007. Please let me know if there are any questions.

Yours truly,

Doug Johnson

J:\Section\Planning\djohnson\SFCTA\CMP_modifications_Jan_2007.doc

cc: Sean Co, MTC
Valerie Knepper, MTC
Doug Kimsey, MTC



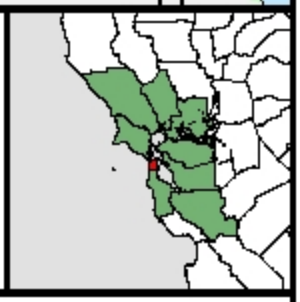
Existing Brannan Street segment from Division to 9th

New Brannan Street segment from Division to 6th

Existing Brannan Street segment from 6th to 5th

New Brannan Street segment from 6th to 3rd

Two-way street segments are represented by two parallel lines.



Proposed new CMP monitoring segments

San Francisco County Congestion Management Program

Miles

0 0.125 0.25 0.5

This map is intended for planning purposes only.

Map Produced: 11/27/2006 KNS

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APPENDIX 4

San Francisco Board of Supervisors Resolution Adopting Infill Opportunity Zones

[Resolution establishing Infill Opportunity Zones for Congestion Management Planning in the City and County of San Francisco under California Government Code Section 65088.]

Resolution establishing Infill Opportunity Zones for Congestion Management Planning in the City and County of San Francisco under California Government Code Section 65088.

WHEREAS, State Senate Bill 1636 ("SB 1636") allows local jurisdictions to designate eligible areas as Infill Opportunity Zones ("IOZs") so that Congestion Management Program ("CMP") requirements better support local land use and transportation policies, pursuant to California Government Code Section 65088.4; and

WHEREAS, The San Francisco County Transportation Authority ("Authority") and the City and County of San Francisco ("City") seek to reform the City's approach to analyzing transportation impacts pursuant to the California Environmental Quality Act ("CEQA"), to better support local land use and transportation polices, by measuring Automobile Trips Generated ("ATG") rather than Level of Service ("LOS"); and

WHEREAS, The adoption of an IOZ in the City would provide strong support for the Authority and the City's effort to replace LOS with ATG for CEQA transportation impact purposes; and

WHEREAS, The adoption of an IOZ in the City would allow the Authority, as Congestion Management Agency ("CMA"), to better support the City's Transit First Policy, land use planning efforts, compact land use pattern, and multimodal transportation system through CMP practices; and

WHEREAS, SB 1636 requires that any IOZ designation be made no later than December 31, 2009; and

WHEREAS, The IOZ designation is consistent with the San Francisco General Plan ("General Plan") because: (1) it will further the goals of the City's Transit First Policy as articulated in General Plan; (2) it will directly support policy objectives of the General Plan, including, but not limited to, Objectives 1, 2, 3, 10, 11, 12, 14, 15, 18, and 19 of the Transportation Element; and (3) it will compliment City efforts to promote infill housing and mixed-use commercial developments in proximity to multimodal transportation infrastructure; and

WHEREAS, The Board of Supervisors finds the City to be eligible for IOZ designation in the area identified by the Authority in the IOZ Map ("IOZ Map") on file with the Clerk of the Board of Supervisors in File No. 091335 , which is hereby declared to be a part of this motion as if set forth fully herein; and

WHEREAS, The Board of Supervisors' eligibility findings are supported by analysis conducted by Authority staff, which is on file with the Clerk of the Board of Supervisors in File No. 091335 , and which is hereby declared to be a part of this motion as if set forth fully herein; now, therefore, be it

RESOLVED, That the Board of Supervisors finds that the IOZ designation is, on balance, consistent with the General Plan; and be it

FURTHER RESOLVED, That the eligible portion of the City identified by the Authority in the IOZ Map is hereby designated an IOZ within the meaning of California Government Code Section 65088.

City and County of San Francisco
Tails
Resolution

City Hall
1 Dr. Carlton B. Goodlett Place
San Francisco, CA 94102-4689

File Number: 091335 **Date Passed:** December 08, 2009

Resolution establishing Infill Opportunity Zones for Congestion Management Planning in the City and County of San Francisco under California Government Code Section 65088.

December 08, 2009 Board of Supervisors - ADOPTED

Ayes: 11 - Alioto-Pier, Avalos, Campos, Chiu, Chu, Daly, Dufty, Elsbernd, Mar, Maxwell and Mirkarimi

File No. 091335

I hereby certify that the foregoing Resolution was ADOPTED on 12/8/2009 by the Board of Supervisors of the City and County of San Francisco.

Angela Calvillo
Clerk of the Board

18 December 2009
Date Approved

Mayor Gavin Newsom

CMP NETWORK - ARTERIALS

Rationale for Segmentation

Street Name	Land Use	Speed Limit	Major Cross Street	Change In Volume	Free-way Ramp
1st Street					
Market-Harrison					
3rd Street					
Jamestown-Evans *		x	x		
Evans-China Basin		x			
China Basin-Market		x		x	
4th Street					
Market-Harrison					x
Harrison-3rd St					x
5th Street					
Market-Brannan					
6th Street					
Market-Brannan					
7th Street					
Brannan-Market					
8th Street					
Market-Bryant					
9th Street					
Brannan-Market					
10th Street					
Market-Brannan					
19th Avenue/Park Presidio Blvd					
U.S.101-Lake		x			
Lake-Lincoln		x	x		
Lincoln-Sloat			x		
Sloat-J.Serra			x		
Alemany Blvd					
C & C limit-Lyell *		x			
Lyell-Bayshore		x			
Army Street					
Guerrero-Kansas *	x	x			x
Kansas-Bryant *					x
Bryant-3rd St.					x
Bay Street					
Van Ness-Embarcadero					
Bayshore Blvd					
Army-Industrial *			x		x
Industrial- C & C limit			x		x
Beale/Davis					
Clay-Mission					
Brannan Street					
Division-9th St					
6th St-5th St					
Broadway					
Gough-Larkin	x				

Street Name	Land Use	Speed Limit	Major Cross Street	Change In Volume	Free-way Ramp
Larkin-Powell (Tunnel)	x	x			
Powell-Montgomery		x			
Montgomery-Embarcadero			x		
Brotherhood Way					
J.Serra-Alemany					
Bryant Street					
Division-4th St					x
4th St-Embarcadero					x
Bush Street					
Masonic-Gough	x				
Gough-Market *	x		x		
Castro/Divisadero Street					
Pine-Geary			x		
Geary-14th St	x		x		
14th St-Market	x		x		
Clay Street					
Kearny-Davis					
Columbus Avenue					
North Point-Greenwich				x	
Greenwich-Montgomery			x		
Drumm Street					
Washington-Market					
Duboce Avenue					
Market-Mission *	x				
Mission-Potrero	x				
The Embarcadero					
Townsend-North Point					
Evans Avenue					
Army-3rd St *					
Fell Street					
Gough-Laguna					x
Laguna-Stanyan					x
Franklin Street					
Market-Pine			x		
Pine-Lombard	x				
Fremont Street					
Harrison-Market *					
Fulton Street					
Masonic-Arguello		x	x		
Arguello-Park Presidio *		x	x		
Geary Blvd					
Market-Gough	x	x			
Gough-Arguello		x			
Arguello-25th Ave			x		
25th Ave-Great Hwy	x		x		

Street Name	Land Use	Speed Limit	Major Cross Street	Change In Volume	Free-way Ramp
Geneva Avenue					
Phelan-Cayuga	x				
Cayuga-Paris	x				
Paris-Santos	x				
Golden Gate Avenue					
Masonic-Franklin	x	x	x		
Franklin-Market	x	x	x		
Gough Street					
Pine-Geary			x		
Geary-Golden Gate *	x				
Golden Gate-Market	x				
San Jose Avenue/Guerrero					
Army-29th St	x	x			
29th St-Monterey Blvd					x
Harrison Street					
Embarcadero-1st St *					x
1st St-4th St					x
4th St-8th St					x
8th St-13th St					x
Hayes Street					
Market-Gough					
Howard Street					
Embarcadero-S.Van Ness					
Junipero Serra Blvd					
Sloat-19th Ave *		x	x		
19th Ave-Brotherhood Way			x		
Brotherhood-C & C limit			x		
Kearny Street					
Market-Columbus					
King Street					
6th St-Embarcadero					
Lincoln Blvd/Kezar Drive					
19th Ave-5th Ave	x				
5th Ave-Stanyan	x				
Lombard Street					
Francisco-Van Ness *					
Main Street					
Mission-Market					
Market/Portola					
Sloat-Santa Clara	x				
Santa Clara-Clipper *	Grade Change				
Clipper-Castro	x				
Castro-Guerrero	x				
Guerrero-Van Ness			x	x	
Van Ness-Drumm	x				

Street Name	Land Use	Speed Limit	Major Cross Street	Change In Volume	Free-way Ramp
Masonic Avenue					
Pine-Geary			x		
Geary-Page			x		
Mission/Otis					
Embarcadero-3rd St	x				
3rd St-9th St	x				
9th St-14th St	x				
14th St-Army *	x				
Army-Ocean *			x		
Ocean-Sickles	x				
Montgomery Street					
Broadway-Bush					
North Point Street					
Van Ness-Columbus			x		
Columbus-Embarcadero			x		
O'Farrell Street					
Gough-Mason *	x				
Mason-Market	x				
Oak Street					
Stanyan-Divisadero *	x		x		
Divisadero-Laguna	x		x		x
Laguna-Franklin					x
Ocean Avenue					
19th Ave-Miramar *	x				
Miramar-I-280	x				
Pine Street					
Market-Kearny	x				
Kearny-Leavenworth	x				
Leavenworth-Franklin	x				
Franklin-Presidio	x				
Potrero Avenue					
Division-21st St	x			x	
21st St-Army	x			x	
Skyline Drive					
Sloat-City & County limit					
Sloat Boulevard					
Skyline-J.Serra					
Stanyan Street					
Fulton-Turk					
Sutter Street					
Market-Mason *	x				
Mason-Gough	x				
Gough-Divisadero	x		x		
Turk Street					
Market-Hyde	x				
Hyde-Gough	x				

Street Name	Land Use	Speed Limit	Major Cross Street	Change In Volume	Free-way Ramp
Hyde-Gough	x				
Gough-Divisadero	x				
Divisadero-Stanyan			x		
Van Ness Avenue					
Lombard-Washington	Sig.	Syst.	Change		
Washington-GoldenGate Av *	x				
Golden Gate Ave-13th St *					x
13th St-Army					x
Washington Street					
Kearny-Drumm					
West Portal Avenue					
Sloat-Ulloa					

* indicates change in segment boundary.

CMP NETWORK - FREEWAYS

Rationale for Segmentation

Freeway	Split	Off-ramp	On-ramp
I-280			
C & C limit- U.S. 101	x		
101/280 -6th/Brannan	x		
U.S.101			
C & C limit- I-280	x		
I-280- I-80	x		
I-80- Fell/Laguna	x		
I-80			
U.S. 101- Fremont		x	
Fremont- Treasure Island		x	

Table II
Rationale for Changes to Arterial Segmentation
Since 1991

Third Street	Eliminated Fairfax Street as a break point. Evans Avenue is the new break point because of the change in speed limit and because Evans is a major cross street.
Alemany Boulevard	Lyell Street is a necessary break point because of a speed limit change.
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January 10, 2007 REC'D JAN 12 2007

Ms. Tilly Chang
Deputy Director for Planning
San Francisco Transportation Authority
100 Van Ness Avenue, 26th floor
San Francisco, CA 94102

RE: San Francisco CMP Segment Modification

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Yours truly,

Doug Johnson

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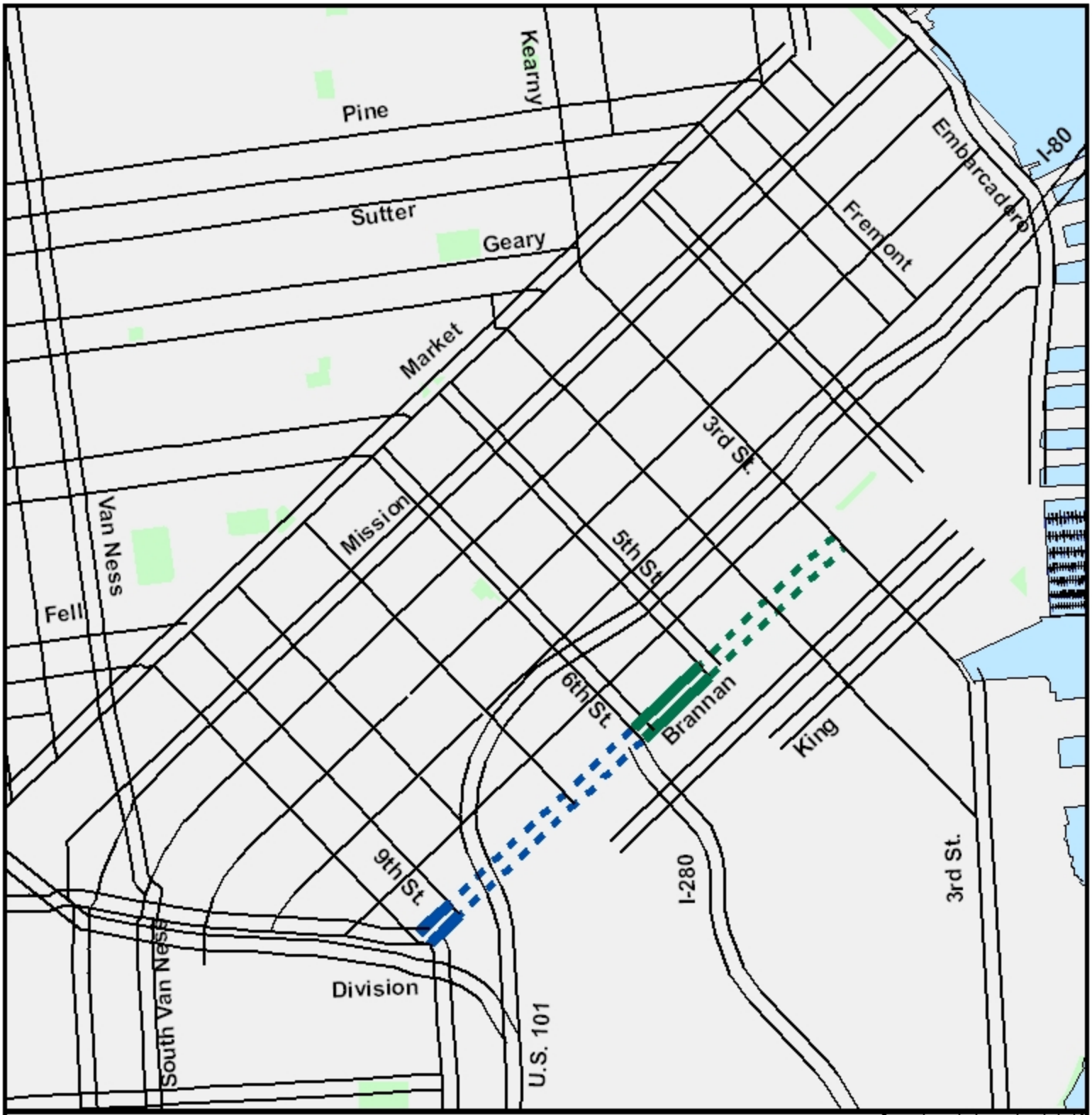
Valerie Knepper, MTC
Doug Kimsey, MTC



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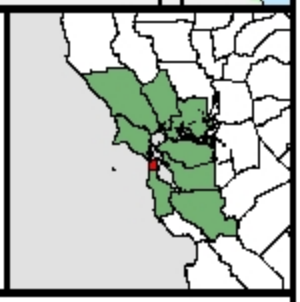
New Brannan Street segment from Division to 6th

Existing Brannan Street segment from 6th to 5th

New Brannan Street segment from 6th to 3rd

Two-way street segments are represented by two parallel lines.



Proposed new CMP monitoring segments

San Francisco County Congestion Management Program

Miles

0 0.125 0.25 0.5

This map is intended for planning purposes only.

Map Produced: 11/27/2006 KNS

N

[Resolution establishing Infill Opportunity Zones for Congestion Management Planning in the City and County of San Francisco under California Government Code Section 65088.]

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WHEREAS, The San Francisco County Transportation Authority ("Authority") and the City and County of San Francisco ("City") seek to reform the City's approach to analyzing transportation impacts pursuant to the California Environmental Quality Act ("CEQA"), to better support local land use and transportation polices, by measuring Automobile Trips Generated ("ATG") rather than Level of Service ("LOS"); and

WHEREAS, The adoption of an IOZ in the City would provide strong support for the Authority and the City's effort to replace LOS with ATG for CEQA transportation impact purposes; and

WHEREAS, The adoption of an IOZ in the City would allow the Authority, as Congestion Management Agency ("CMA"), to better support the City's Transit First Policy, land use planning efforts, compact land use pattern, and multimodal transportation system through CMP practices; and

WHEREAS, SB 1636 requires that any IOZ designation be made no later than December 31, 2009; and

WHEREAS, The IOZ designation is consistent with the San Francisco General Plan ("General Plan") because: (1) it will further the goals of the City's Transit First Policy as articulated in General Plan; (2) it will directly support policy objectives of the General Plan, including, but not limited to, Objectives 1, 2, 3, 10, 11, 12, 14, 15, 18, and 19 of the Transportation Element; and (3) it will compliment City efforts to promote infill housing and mixed-use commercial developments in proximity to multimodal transportation infrastructure; and

WHEREAS, The Board of Supervisors finds the City to be eligible for IOZ designation in the area identified by the Authority in the IOZ Map ("IOZ Map") on file with the Clerk of the Board of Supervisors in File No. 091335 , which is hereby declared to be a part of this motion as if set forth fully herein; and

WHEREAS, The Board of Supervisors' eligibility findings are supported by analysis conducted by Authority staff, which is on file with the Clerk of the Board of Supervisors in File No. 091335 , and which is hereby declared to be a part of this motion as if set forth fully herein; now, therefore, be it

RESOLVED, That the Board of Supervisors finds that the IOZ designation is, on balance, consistent with the General Plan; and be it

FURTHER RESOLVED, That the eligible portion of the City identified by the Authority in the IOZ Map is hereby designated an IOZ within the meaning of California Government Code Section 65088.

City and County of San Francisco
Tails
Resolution

City Hall
1 Dr. Carlton B. Goodlett Place
San Francisco, CA 94102-4689

File Number: 091335 **Date Passed:** December 08, 2009

Resolution establishing Infill Opportunity Zones for Congestion Management Planning in the City and County of San Francisco under California Government Code Section 65088.

December 08, 2009 Board of Supervisors - ADOPTED

Ayes: 11 - Alioto-Pier, Avalos, Campos, Chiu, Chu, Daly, Dufty, Elsbernd, Mar, Maxwell and Mirkarimi

File No. 091335

I hereby certify that the foregoing Resolution was ADOPTED on 12/8/2009 by the Board of Supervisors of the City and County of San Francisco.

Angela Calvillo
Clerk of the Board

18 December 2009
Date Approved

Mayor Gavin Newsom

San Francisco County Transportation Authority

100 Van Ness Avenue 26TH Floor
San Francisco, California 94102
VOICE 415.522.4800 FAX 415.522.4829
info@sfcta.org www.sfcta.org

Infill Opportunity Zones

San Francisco Eligible Areas Analysis

November 2009

State Senate Bill 1636 (Figueroa) allows local jurisdictions to designate Infill Opportunity Zones (IOZs). Within a designated IOZ, the Congestion Management Agency (CMA) must use an alternative to automobile level of service (LOS) standards for CMP purposes.

SB 1636 requires that any IOZ designation(s) be made no later than December 31, 2009. We are advised by the City Attorney's office that this action would be taken by the Board of Supervisors.

ELIGIBLE GEOGRAPHIC AREA

Per SB 1636, a location must meet all of the following criteria to be IOZ-eligible:

1. The area must be zoned for compact residential or mixed use development;
2. The area must be located within a specified distance of certain types of transit service;
3. The area must be located in a county with a population of 400,000 or more; and
4. IOZs can only be designated in areas where infill development is consistent with the local jurisdiction's general plan and any applicable specific plan.

San Francisco meets the county-level population requirement. The General Plan (Housing Element) recognizes the role of infill development in addressing the city's housing needs, thus satisfying the fourth requirement.

Based on the first two requirements, however, the entire city is not eligible to be designated as an IOZ.

Transit Requirement: SB 1636 requires that IOZs be well served by transit; specifically, IOZ areas must be within:

- 300 feet of a bus rapid transit (BRT) corridor;
- 1/3 mile of a rail transit station;[1]
- 1/3 mile of a ferry terminal served by bus or rail transit; or
- 1/3 mile of an intersection of at least two major bus routes.

The legislation does not define "major bus routes." The recommended IOZ area uses the legislation's definition of qualifying "transit service" to determine "major" bus routes: service must operate with headways less than 15 minutes for at least 5 hours on weekdays. The recommended San Francisco IOZ area includes zones within 1/3 mile radius of these intersections, combined with radial areas applied to BART stations, Caltrain stations, Muni rail stops, and ferry terminals. Finally, the recommended San

[1] SB 1636 also allows a "future" rail transit station to satisfy this requirement, but such a station must have advanced into the construction phase with programmed operational funding for frequent service.

Francisco IOZ includes a 300-foot buffer along each side of BRT corridors (considered as the Transit Effectiveness Project (TEP) *Rapid Network* bus corridors).[2]

Zoning Requirement: SB 1636 requires that IOZs be zoned to allow new "compact" residential or mixed use (including residential) development. San Francisco's existing high land use densities permit an interpretation that qualifies any area zoned to allow residential use either As-of-Right or as Conditional Use as IOZ-eligible in terms of the zoning requirement.

Most zoning classifications in San Francisco allow residential development as-of-right. Dwelling units are permitted in all residential and residential-commercial districts, and in any districts described by a combined classification (such as RM-2/NC-1, mixed residential and neighborhood commercial). With few exceptions, housing is also permitted throughout South of Market's mixed-use districts and all of those in Chinatown. Downtown and commercial zoned districts also allow for residential development. In the neighborhood commercial districts, housing is allowed but particularly encouraged above ground floor for new construction projects

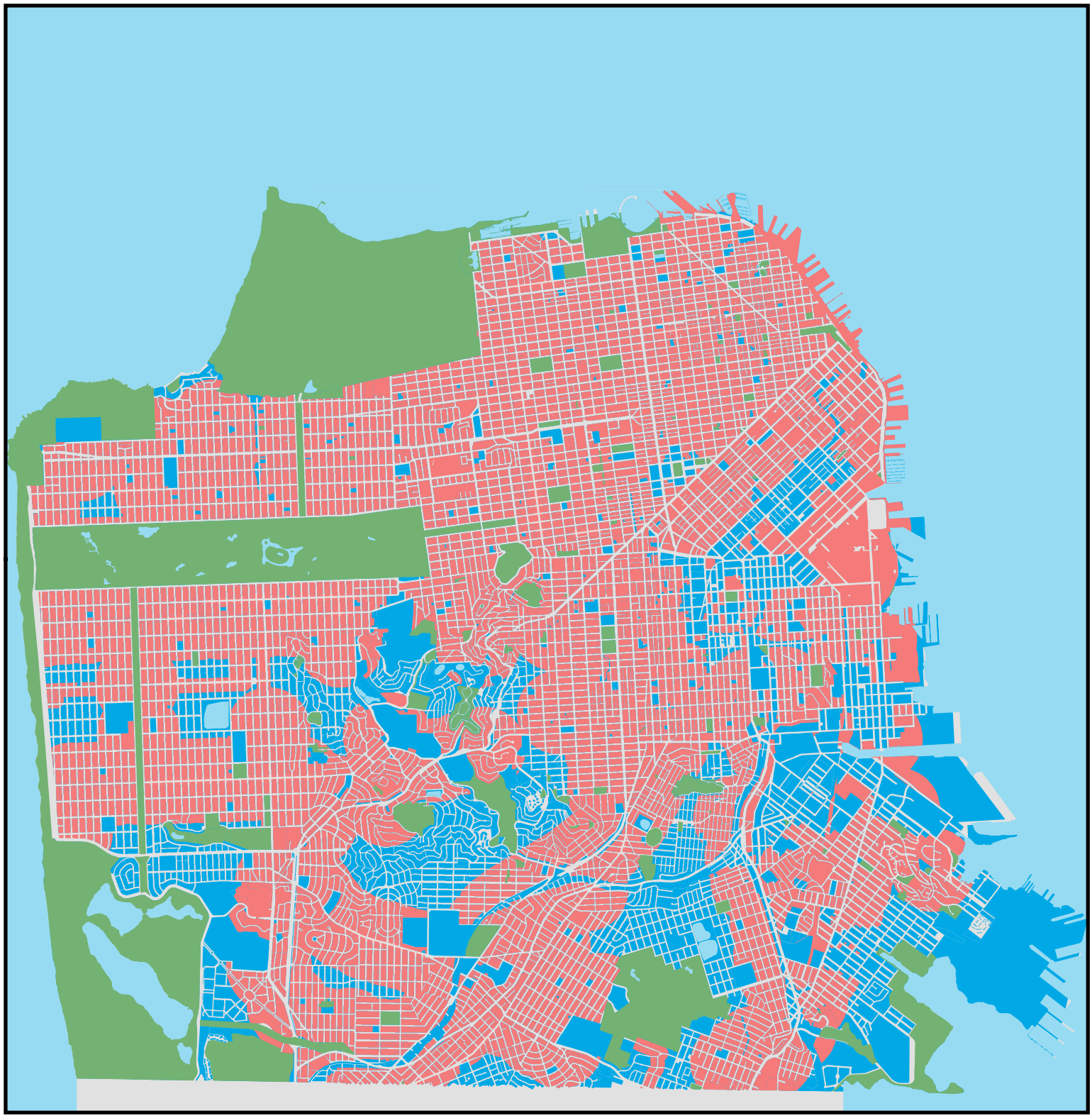
Residential development in industrial districts and the South of Market's Service and Secondary Office (SSO) district requires a Conditional Use Permit. Residential and mixed uses are also conditionally permitted in areas classified as M-1 and M-2, describing light and heavy industrial land uses, respectively.

Using Geographic Information Systems (GIS) data reflecting currently-adopted zoning controls and transit network attributes, we determined which portions of San Francisco meet both the zoning and transit requirements. The resulting map, attached, identifies the recommended (i.e., all eligible) IOZ areas in San Francisco. (Treasure Island is omitted because it does not meet the transit requirement.)

SB 1636 also requires that a development project be completed within a designated IOZ within four years of such designation; otherwise, the IOZ terminates.

Attachment – Recommended San Francisco Infill Opportunity Zone

[2] BRT is defined as bus service that includes at least four of ten attributes specified in the statute.



Parks

Eligible Infill Opportunity Zone

Ineligible Areas

0 0.4 0.8 1.2 Miles

This map is intended for planning purposes only.

APPENDIX 5

TRAFFIC MONITORING (SPEED AND TRAVEL TIME RELIABILITY) METHODOLOGY & RESULTS

KEY TOPICS

- LOS Standard and Exempt Facilities
- CMP Network Changes
- Methodology
- Travel Speed Results
- LOS F Segments
- Travel Time Reliability Results
- Future Monitoring Considerations

The San Francisco County Transportation Authority (Transportation Authority) has updated its Congestion Management Program (CMP) every two years since 1991. The Transportation Authority monitors roadway performance with Level of Service (LOS) along its CMP network, which includes all state highways, principal arterials and several other roads as defined in previous LOS monitoring efforts. The Transportation Authority ensures that LOS measurement methods used by its contractors, Caltrans, or other agencies involved in monitoring the CMP network are consistent with State law.

1. LOS Standards and Exempt Facilities

LOS E was the adopted standard in the initial (1991) CMP Monitoring. Since 1991, CMP Monitoring has been conducted biannually to ensure that the non-exempt facilities within the CMP network are operated at LOS E or better.

Image Source: SFCTA

The Transportation Authority is mandated to prepare a deficiency plan or monitoring follow-up, depending on the applicable exemption, to improve the performance of non-exempt facilities operated at LOS F. The criteria to qualify for the exemption are:

- Facilities that were already operating at LOS F at the time of baseline monitoring, conducted to develop the first CMP in 1991, are legislatively exempt from the LOS standards.
- CMP segments that are within a designated Infill Opportunity Zone (IOZ) are also exempt from LOS conformance requirements.

For LOS monitoring purposes, the CMP segments are categorized by exempt or non-exempt status:

- **Exempt** – segments which qualify for the exemption as detailed above.
- **Non-exempt** – all other segments. If a non-exempt segment fails for three consecutive CMP cycles, it is classified as deficient.

Since 2005, speed monitoring has included the exempt facilities in addition to the rest of the CMP network. Figures A5-1 and A5-2 show segments that are exempt from LOS standards because they were found to be LOS F in the inaugural CMP cycle, while Figure A5-3 shows the portions of the CMP network that are within San Francisco's Infill Opportunity Zone and are therefore exempt from LOS standards as well.

Figure A5-1 Segments Exempt in AM Due to Being at LOS F in the Inaugural Cycle

Figure A5-2 Segments Exempt in PM Due to Being at LOS F in the Inaugural Cycle

Figure A5-3 Segments Exempt Due to Being within Infill Opportunity Zones

2. CMP Network Changes

The CMP network is described in detail in Chapter 3 of the main report. There are no changes to the CMP network from 2021 to 2023.

3. Methodology

Since the 2013 CMP update, automobile LOS monitoring was conducted using commercial speed data from INRIX where available, and floating car runs were made to collect data for all other CMP segments for which INRIX data coverage was insufficient. In the 2013-2017 cycles, INRIX provided travel time data at one-minute intervals on a unique set of roadway segments called Traffic Message Channels (TMCs). Since the 2019 cycle, INRIX provided data at a spatially finer-granular level (XD segments) and the TMC-based travel time data were discontinued, and the TA switched to using XD-based travel time data. Same as the processing method used in the previous cycles, the XD-based speeds were aggregated to CMP segments spatially and the peak periods temporally. LOS was assigned based on the average speed observed in the AM and PM peak periods using both 1985 and 2000 Highway Capacity Manual (HCM) methodologies. Section 3.4 provides a detailed description of data processing steps.

The 1985 Highway Capacity Manual (HCM) methodology has been adopted since the baseline monitoring cycle. It is necessary to maintain 1985 HCM for historical comparisons, identifying exempt segments, and monitoring potential network deficiencies. Since 2009, all the arterial segments were also evaluated using the HCM 2000 classification. Therefore, both the HCM 1985 and 2000 results are presented below.

For freeways, only HCM 1985 LOS was calculated, as the HCM 2000 methodology requires traffic density information for all unique freeway segments and ramps. Collection of comprehensive freeway traffic densities is beyond the scope of the CMP monitoring effort.

In addition to LOS, the buffer time index (BTI) which reflects auto travel time reliability was introduced in the 2021 cycle. The idea behind the metric is that travel times vary significantly during different times of the day and from day to day, and travelers remember these unexpected long delays experienced during their commutes and would therefore budget extra (i.e. buffer) time for the trip in order to reach destination on time. The buffer time here is calculated as the difference between the 95th percentile travel time and the average travel time. Buffer time index is the buffer time divided by the average travel time. It indicates the amount of extra time required to be on-time 95 percent of the time, or in other words, late in only one day per month (20 working days).

3.1 | MONITORING PERIOD

This section summarizes the monitoring days and the conditions that may affect the regular traffic pattern during the monitoring period. INRIX data for every Tuesday, Wednesday, and Thursdays in the months of April and May 2023 were utilized to calculated the average speed of each CMP segment, leaving 26 days within the monitoring period. The morning (a.m.) and afternoon (p.m.) peak periods were defined as 7:00 a.m.—9:00 a.m. and 4:30 p.m.—6:30 p.m respectively.

These monitoring periods were also used for transit speed monitoring (see Appendix 8).

PUBLIC HOLIDAYS AND SCHOOL BREAKS

There were no public holidays within the monitoring period (Tuesdays, Wednesdays, and Thursdays in April and May 2023). The San Francisco Unified School District (SFUSD) was in session during the monitoring period.

SPECIAL/CONSTRUCTION/WEATHER EVENTS

No INRIX data during the monitoring period were removed from analysis due to special, construction, or weather events.

3.2 | COMMERCIAL SPEED DATA

Since the adoption of the 2009 CMP update, there has been a proliferation of archived commercial speed data. This data is collected through real-time GPS monitoring of a variety of sources such as delivery vehicles, navigational devices, and highway performance monitoring systems, and obtained from third-party vendors like INRIX.

As part of the 2011 CMP update, the Transportation Authority explored the reliability of this new data source by comparing results computed from this source to those computed from floating car runs. The analysis found that, although the INRIX data speeds were somewhat higher, on average, than the floating car speeds, the difference was within the typical range of variation for floating car results and that commercial speed data and floating vehicle data were equally acceptable for meeting CMP legislative requirements. For more details about the pros and cons of using commercial speed data, refer to the 2013 CMP report.

In 2013, MTC contracted with INRIX to obtain region wide commercial speed data and has made the data available to the Congestion Management Agency (CMA) and other local governments free of charge for planning and monitoring purposes. The data available from INRIX was in the form of traffic message channel (TMC) links.

In 2019, MTC renewed the contract with INRIX with a major change that the speed data would be on the XD segments, whose length are typically much shorter than those of TMC segments. Due to this segmentation change, the aggregated CMP speeds from XD links and TMC links were found to be inconsistent even with the same underlying data sources. To make “apples-to-apples” comparison, both 2017 and 2019 speeds based on XD speeds were calculated and reported, and the congestion trends from 2017 to 2019 were derived from them.

Since 2019, the CMP reports have used the XD-based speed data to derive and report auto LOS and reliability metrics.

3.3 | SUPPLEMENTAL TRAVEL TIME RUNS

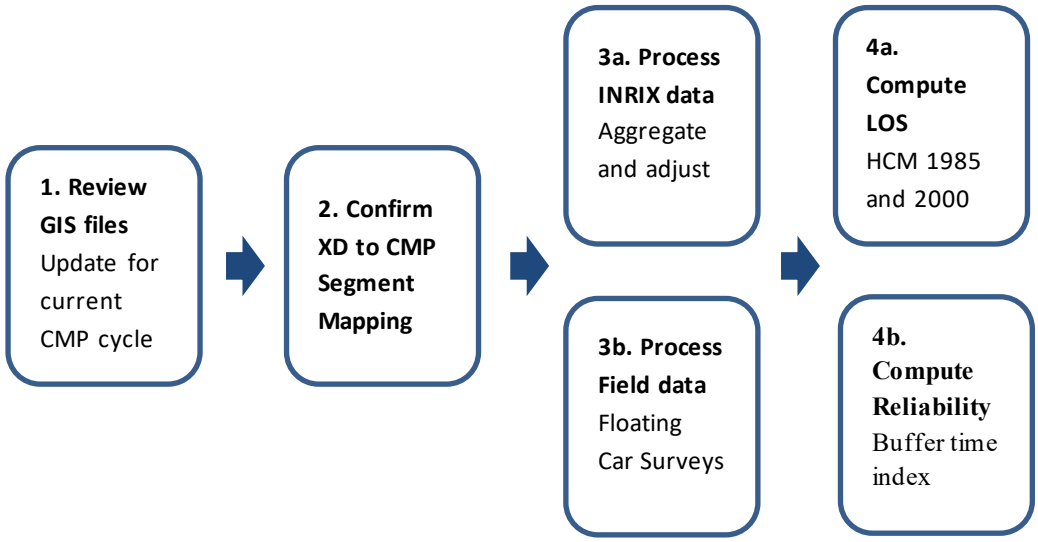
Floating car surveys were conducted on CMP segments with insufficient INRIX speed coverage. The surveys were conducted using conventional methodologies. Drivers were instructed to follow road rules including the speed limit, traffic signals and not blocking intersections. GPS coordinates were recorded as the floating car travels along the CMP segment. The temporal aggregation of multiple floating car runs on the corresponding CMP segment was performed in the same manner as for the INRIX data, explained in Section 3.4 below.

3.4 | PROCESSING

The data were processed to obtain automobile speed, LOS, and reliability for each CMP segment during the morning and afternoon peak periods. The data processing consists of four steps as shown in Figure A5-5. The following provides more details on the data processing procedure:

- The GIS shapefile was reviewed to prepare the base map of the CMP network for conflating the XD links against CMP segments;
- In this step, INRIX XD links were mapped to CMP segments to establish a relationship between XD links and CMP segment. In the cases where the ends of the CMP did not align with the ends of the XDs, travel time was interpolated linearly by using the overlapping portion;
- During data cleaning, INRIX data points based on historical data or that can be affected by the conditions mentioned earlier in Section 3.1 were dropped and will not be used in the LOS and reliability analysis. With the floating car data, the first and last timestamps from the GPS readings when entering and exiting the CMP segment were identified and the CMP travel time was calculated;
- In addition, in cases where multiple XD links spanned a single CMP segment, the travel times were summed and then aggregated spatially to obtain the required average peak period speeds by CMP segment. To ensure the aggregated speed was representative of the traffic condition on the whole CMP segment, a minimum spatial coverage requirement was applied. Based on the remaining aggregated one-minute speeds, the average and 5th percentile speeds for each CMP segment during the AM and PM monitoring periods were calculated.
- Finally, LOS and BTI were calculated. LOS was assigned based upon the peak period speed. For the methodology of LOS assignment, please refer to the section below. BTI was derived as $BTI = 100 * \frac{95th\ percentile\ travel\ time - average\ travel\ time}{avereage\ travel\ time} = 100 * (\frac{average\ speed}{5th\ percentile\ speed} - 1)$.

Figure A5-5 Data Processing Steps



3.5 | LOS ASSIGNMENT

This section discusses the methodology for assigning a LOS (A to F) to each CMP segment for both morning and afternoon peak periods. The LOS assignments for arterials and freeways are consistent with previous reporting periods and legislative requirements from the California Government Code. First, each CMP segment was classified as either an arterial or a freeway. The methodology slightly differs depending on this classification, as follows.

ARTERIALS

LOS for arterial segments was assigned twice using both 1985 and 2000 Highway Capacity Manual (HCM) methodologies. Both methods required identifying the class of the street (HCM 1985 Class I, II or III; HCM 2000 Class I, II, III or IV). Class was determined according to the free flow speed of the road. For example, the free flow speed may be the average speed at 6am when traffic volumes are light and travel speeds are not influenced by interactions with other vehicles.

For the HCM 1985 and 2000, the classification of streets was taken from previous LOS monitoring reports. Then, by knowing the average travel speed in the morning and afternoon peak periods and the class of the street, the LOS could be assigned according to the HCM 1985 and HCM 2000 methodologies. Refer to Tables A5-2 and A5-3 for the LOS look up tables.

FREEWAYS

Freeways followed a similar methodology as arterials; however, it was not necessary to assign a class of freeway. The HCM-1985 method was used to calculate LOS for all freeway CMP segments. By knowing the average speed of the freeway in the morning and afternoon peaks, Table A5-4 was used to assign a LOS in each time period.

Table A5-2 Arterial LOS Assignment, HCM 1985

ARTERIAL CLASS	I	II	III
Range of Free Flow Speed (mph)	45 to 35	35 to 30	35 to 25
Typical Free Flow Speed (mph)	40	33	27
LEVEL OF SERVICE		**AVERAGE TRAVEL SPEED (MPH)**	
A	≥ 35	≥ 30	≥ 25
B	≥ 28	≥ 24	≥ 19
C	≥ 22	≥ 18	≥ 13
D	≥ 17	≥ 14	≥ 9
E	≥ 13	≥ 10	≥ 7
F	< 13	< 10	< 7

Source: Table 11-1, Highway Capacity Manual, 1985

Table A5-3 Urban Street LOS Assignment, HCM 2000

URBAN STREET CLASS	I)	II	III	IV
Range of Free Flow Speed (mph)	55 to 45	45 to 35	35 to 30	35 to 25
Typical Free Flow Speed (mph)	50	40	35	30
LEVEL OF SERVICE			**AVERAGE TRAVEL SPEED (MPH)**	
A	> 42	> 35	> 30	> 25
B	> 34-42	> 28-35	> 24-30	> 19-25
C	> 27-34	> 22-28	> 18-24	> 13-19
D	> 21-27	> 17-22	> 14-18	> 9-13
E	> 16-21	> 13-17	> 10-14	> 7-9
F	≤ 16	≤ 13	≤ 10	≤ 7

Source: Exhibit 15-2, Highway Capacity Manual 2000 (U.S. Customary Units)

Table A5-4 Freeway Segments, HCM 1985

LEVEL OF SERVICE	DENSITY (PC/MI/LN)	SPEED (MPH)	V/C RATIO	SATURATION FLOW (PCPHPL)

A	≤ 12	≥ 60	0.35	700
B	≤ 20	≥ 55	0.58	1,000
C	≤ 30	≥ 49	0.75	1,500
D	≤ 42	≥ 41	0.90	1,800
E	≤ 67	≥ 30	1.00	2,000
F	> 67	< 30	-	-

Source: Adapted from Table 4-1, Special Report 209, HCM 1985

4. Travel Speed Results

Speeds for the a.m. and p.m. peak for each CMP road segment from all CMP cycles can be found in attachments 5.1 and 5.2. Attachment 5.3 presents the 2023 LOS monitoring results for all CMP segments. For arterials, the results are presented for both the 1985 and 2000 HCM methodologies. Table A5-5 presents summary statistics on the peak period speeds.

Table A5-5 2023 CMP Average Travel Speed Results Summary Statistics

	NUMBER OF SEGMENTS	AVERAGE SPEED (MPH)	STANDARD DEVIATION	MINIMUM SPEED	MAXIMUM SPEED
AM	245	17.6	9.8	6.5	63.5
PM	245	15.7	9.2	6.3	63.9

5. LOS F Segments

Tables A5-6 and A5-7 present the segments operated at LOS F (1985 HCM method) during the 2021 Monitoring. As noted above, the Transportation Authority uses the 1985 HCM for calculating LOS when making historical comparisons to the baseline cycle.

Table A5-6 2023 Roadway Monitoring Results – LOS F Segments (1985 HCM), AM Peak

NAME	FROM	TO	DIRECTION	AVE SPEED/LOS (1991)	IOZ (YES/NO)	STATUS / COMMENTS
Junipero Serra	Brotherhood	19th	N	-	Y	Exempt: Segment is within an IOZ and therefore does not constitute a deficiency.
Octavia	Market	Fell	N	-	Y	Exempt: Segment is within an IOZ and therefore does not constitute a deficiency.

NAME	FROM	TO	DIRECTION	AVE SPEED/LOS (1991)	IOZ (YES/NO)	STATUS / COMMENTS
US-101	County Line	Cortland	N	F	-	Exempt: Segment monitored at LOS F during the baseline monitoring and therefore does not constitute a deficiency.
US-101	Cortland	I-80	N	F	-	Exempt: Segment monitored at LOS F during the baseline monitoring and therefore does not constitute a deficiency.
US-101	I-80	Market	N	F	-	Exempt: Segment monitored at LOS F during the baseline monitoring and therefore does not constitute a deficiency.
I-80	Treasure Island	Fremont Exit	W	F	-	Exempt: Segment monitored at LOS F during the baseline monitoring and therefore does not constitute a deficiency.
I-80	Fremont Exit	US-101	W	-		Segment is partially in an IOZ. 1st Cycle LOS F: Segment requires follow-up monitoring per CMP procedures.
US-101	Market	I-80	S	F	-	Exempt: Segment monitored at LOS F during the baseline monitoring and therefore does not constitute a deficiency.

Table A5-7 2021 Roadway Monitoring Results – LOS F Segments (1985 HCM), PM Peak

NAME	FROM	TO	DIRECTION	LOS (1991)	IOZ (YES/NO)	STATUS / COMMENTS
1st St	Market	Harrison	S	F	-	Exempt: Segment monitored at LOS F during the baseline monitoring and therefore does not constitute a deficiency.
Junipero Serra	County Line	Brotherhood	N	-	Y	Exempt: Segment is within an IOZ and therefore does not constitute a deficiency.
Junipero Serra	Brotherhood	19th	N	-	Y	Exempt: Segment is within an IOZ and therefore does not constitute a deficiency.
Oak	Fillmore	Laguna	E	-	Y	Exempt: Segment is within an IOZ and therefore does not constitute a deficiency.
US-101	Cortland	I-80	N	F	-	Exempt: Segment monitored at LOS F during the baseline monitoring and therefore does not constitute a deficiency.
US-101	I-80	Market	N	F	-	Exempt: Segment monitored at LOS F during the baseline monitoring and therefore does not constitute a deficiency.

NAME	FROM	TO	DIRECTION	LOS (1991)	IOZ (YES/NO)	STATUS / COMMENTS
I-80	Treasure Island	Fremont Exit	W	F	-	Exempt: Segment monitored at LOS F during the baseline monitoring and therefore does not constitute a deficiency.
I-80	Fremont Exit	Market	W	F	-	Exempt: Segment monitored at LOS F during the baseline monitoring and therefore does not constitute a deficiency.
US-101	Market	I-80	S	F	-	Exempt: Segment monitored at LOS F during the baseline monitoring and therefore does not constitute a deficiency.
I-80	US-101	Fremont Exit	E	F	-	Exempt: Segment monitored at LOS F during the baseline monitoring and therefore does not constitute a deficiency.
I-80	Fremont Exit	Treasure Island	E	F	-	Exempt: Segment monitored at LOS F during the baseline monitoring and therefore does not constitute a deficiency.

6. Travel Time Reliability Results

Auto travel time reliability represented by Buffer Time Index (BTI) was a new metric added in this cycle. Unlike LOS, which indicates the congestion condition based on average speed, BTI provides additional information on variability of travel times experienced by travelers over a certain period of time. It is useful in that travelers can budget extra amount of time in accordance with BTI to ensure on-time arrival for 95 percent of time.

Table A5-8 presents summary statistics on the peak period BTI for the current cycle. During the 2023 monitoring cycle, the overall average travel time reliability was slightly worse in the AM peak period than the PM peak period. On average, travelers needed to allocate an additional 28% and 26% of their average travel time in the AM and PM to ensure 95% on-time arrival (an increase from 22% and 19% respectively for 2021). Attachment 5.4 presents the reliability monitoring results for all segments in the CMP network.

Table A5-8 2023 CMP Travel Time Reliability (Buffer Time Index) Results Summary Statistics

	NUMBER OF SEGMENTS	AVERAGE (%)	STANDARD DEVIATION (%)	MINIMUM (%)	MAXIMUM (%)
AM	245	28	17	6	174
PM	245	26	18	6	225

APPENDIX 6

DEFICIENCY PLANS

KEY TOPICS

- Legislative Requirements
- Legislative Intent and Application to San Francisco
- Deficiency Planning Process
- Special Issues

A.6.1. Legislative Requirements

The Transportation Authority, as Congestion Management Agency (CMA), is required by state law to ascertain the City's conformance with the CMP, including Deficiency Plans prepared by City departments. If the LOS of roadways on the CMP is not maintained to the established standard and they are not exempt from LOS standards, state CMP legislation requires that the local jurisdiction develop a Deficiency Plan to improve operating conditions on the segment.[1]

Deficiency Plans must contain the following components:

- An analysis of the causes of the deficiency;
- A list of improvements that would have to be made to remedy the deficiency, including cost estimates;
- A list of proposed improvements; and
- An implementation plan including a schedule.[2]

The Deficiency Plan must "measurably improve multimodal performance" on the designated CMP roadway network, and "contribute to significant improvements in air quality." Proposed improvements must be drawn from an inventory of acceptable actions compiled by the air quality management district. The statutes also require that the city or county forward the Deficiency Plan to the CMA, which must hold a public hearing within 60 days of receipt of the Deficiency Plan, and either accept or reject it, but not modify it. Rejection of a Deficiency Plan by the CMA will result in a finding of non-conformance with the CMP.

Unfortunately, the statutes make no provisions for funding City departments' deficiency plans, and similarly, CMAs do not receive state funding for their activities. In the absence of dedicated funding, the deficiency planning process has been designed to use existing data and coordinate with the City's budgetary process.

[1] California Government Code section 65089.4(a) states *"A local jurisdiction shall prepare a Deficiency Plan when highway or roadway level of service standards are not maintained on segments or intersections of the designated system. The Deficiency Plan shall be adopted by the city or county at a noticed public hearing."*

[2] 65089.4(c)

A.6.2. Legislative Intent and Application to San Francisco

This section provides background information on Deficiency Plans and their applicability to San Francisco.

A.6.2.1 | About Deficiency Plans

In 1990, the California voters approved Proposition 111, increasing the gasoline tax by nine cents per gallon of gasoline sold in the state. The year prior to Proposition 111's approval, the State Legislature approved AB 471 (Katz), the original CMP legislation.[3] AB 471 required all local jurisdictions to maintain the adopted LOS standard on all CMP roadways or risk losing their Proposition 111 gas tax revenues. The Legislature then revised the original legislation to allow jurisdictions to continue to receive their share of Proposition 111 gas tax moneys when the level of service (LOS) on a CMP road segment or intersection falls below LOS "E" provided local jurisdictions prepared Deficiency Plans for those segments. Deficiency Planning requirements do not apply for CMP segments that are exempt from the LOS standard.

The intent of Deficiency Plans, therefore, is to allow development to continue as long as any resulting traffic congestion is "offset." Deficiency Plans are reactive solutions applied after the impacts to LOS are actually measured.

The Deficiency Plan legislation offers local jurisdictions two alternatives:

1) Eliminate the problem (correct the deficiency where it manifests itself). This is known as *direct remediation*; or
2) Implement other actions that improve the overall performance of the CMP network, even if the actions do not directly improve the original deficiency. These are known as *offsetting actions*.

A Deficiency Plan may include both remediation and offsetting actions. Direct mitigation involves removing the deficiency such that the LOS is improved above LOS F. Direct mitigations of LOS impacts may have prohibitive costs, regulatory obstacles, or overwhelming environmental consequences. Offsetting actions provide alternative compensations that may leave the facility no less deficient from an LOS perspective, but provide improvements in other part of the system. Offsetting actions, as opposed to direct remediation, include capital improvements, transportation programs, services, or other activities that improve the average countywide level of service.

One major legislative change to the deficiency plan process is SB 1636 (Figueroa), which was enacted in September 2002 and then amended by SB 743 (Steinberg) in 2013. This bill allows local jurisdictions to designate areas meeting certain land use and transportation requirements as Infill Opportunity Zones (IOZs). Network segments within these zones would be exempt from automobile LOS standards.

[3] The 1989 CMP legislation was part of the AB 471 legislation known as the Katz-Kopp-Baker-Campbell Transportation Blueprint for the 21st Century. Voter approval of Proposition 111 on June 5, 1990 effectively enacted the CMP legislation into law.

In December 2009, the Board of Supervisors adopted a resolution designating all eligible areas of San Francisco as an IOZ. CMP network segments within a designated IOZ are exempt from deficiency planning requirements.

A.6.2.2 | Deficiency Plans and Environmental Review

Deficiency Plans are distinct from City processes for review of development projects pursuant to the California Environmental Act (CEQA) and do not replace local Transportation Impact Analyses (TIAs). The San Francisco Planning Department requires project sponsors to prepare TIAs for projects that may have significant negative impacts on transportation conditions. The City's TIA guidelines include some analyses that may be relevant for preparing CMP deficiency plans. However, while environmental analysis conducted pursuant to CEQA may provide information useful in the preparation of Deficiency Plans, these Plans serve a separate and distinct purpose. The Deficiency Plan process should avoid duplicating past CEQA analyses; these guidelines should not create additional review processes for individual development or public construction projects.

One fundamental difference between a TIA and the CMP is that a TIA forecasts the severity of a project's expected impacts on facilities, while a Deficiency Plan implements actions to mitigate – or offset – problems already detected (i.e., deficiencies actually measured on a facility). A TIA or EIR is prepared prior to project implementation, in an attempt to predict a project's future negative impacts.

A TIA or EIR considers the cumulative impacts on a transportation facility of a proposed project in combination with other foreseeable similar projects. The Deficiency Plan, because its focus is on a facility rather than an individual project, considers multiple causes of the existing deficiency.

A.6.3. Deficiency Planning Process

This overview accompanies the flow charts in Figures 1, 2, and 3. These three figures represent the Deficiency Plan process from detection through Transportation Authority Board approval of the Plan.

A.6.3.1 | Deficiency Detection and City Notification

See Figure 1. The Transportation Authority monitors the CMP roadway network and reports a potential deficiency when the level of service (LOS) on any non-exempted segment of the CMP roadway network measures LOS F. LOS F is defined by travel speeds below a threshold set by the 1985 HCM for any of three specified arterial types.

The Transportation Authority determines whether a reported deficiency may have been caused by external, exempt, or temporary causes. State legislation requiring Deficiency Plans has specifically exempted the trips generated by specific activities [Government Code § 65089.4. (f)]. Exempt activities are:

- Inter-regional travel (i.e., pass through trips which have neither origin or destination in San Francisco);
- Construction, rehabilitation, or maintenance of facilities that impact the CMP roadway network;
- Impact of freeway ramp metering;
- Traffic signal coordination by the state or multi-jurisdictional agencies;

- Traffic generated by low- and very low-income housing;
- Traffic generated by high-density residential or mixed-use development located within a quarter mile of a fixed passenger rail station[4]; and
- Roadway segments located within infill opportunity zones.

A detected deficiency may be corrected when a roadway improvement already programmed in the CIP increases the capacity of the deficient roadway. If the lead department determines that the effects of any CIP improvement scheduled to begin within the seven year time horizon of the CIP will remove the deficiency, the Transportation Authority – after review – can make a Finding of No Deficiency. The lead department, however, must demonstrate this CIP improvements will be completed and functioning within ten years of the current CIP.

If any trips are exempt and if the deficiency still exists after removing the exempt trips from the deficient roadway segment, a Deficiency Plan must be prepared. The Transportation Authority will consult with MTC to determine whether external or pass through trips may have caused the deficiency. It will also review all relevant CEQA traffic analysis and/or TIAs of recently completed projects. It will then use the San Francisco Travel Demand Forecasting Model, GIS analysis, sketch planning techniques, and other means to isolate and examine the cause(s) in more detail. If modeling suggests that a deficiency is not caused by any of the above, then the Transportation Authority Board must adopt a finding of "Deficiency" and notify the City (Mayor's Office) of the nature and cause of the deficiency.

The Mayor's Office assigns a City department to act as the lead department for the preparation of a Deficiency Plan. The timelines in Figure 1 assume that LOS is monitored in September and October, and that all follow up verification monitoring is completed by the following April. This schedule allows City Departments to incorporate funding requests for Deficiency Plan activities into the City's budget process in April and May.

A.6.3.2 | Deficiency Analysis and Remediation Plan Preparation

Once the cause(s) of the deficiency have been determined, State law [Government Code § 65089.4 (c) (2)] requires that the lead department identify:

"A list of improvements necessary for the deficient segment or intersection to maintain the minimum level of service otherwise required and the estimated costs of the improvements."

The lead department will use sketch-planning methods consistent with both MTC and Transportation Authority practices and data to estimate the effects of capacity improvements on the level of service and whether the improvements provide capacity at an order-of-magnitude commensurate with the deficiency.

State law requires that a Deficiency Plan first seek direct action to correct a roadway LOS deficiency by preparing a Remediation Plan. The lead department prepares a Remediation Plan that includes: a) a description of the causes of the deficiency; b) a list of all improvements necessary to fully remediate the problem on the deficient roadway itself; and c) an estimate of the cost and available funding for those improvements. The lead department includes a statement as to the feasibility of the Remediation Plan

[4] "High density residential development" means a minimum of 24 dwelling units per acre and equal to 120 percent of the maximum density allowed under the local general plan and zoning ordinance, or a minimum density of 75 dwelling units per acre. "Mixed use development" must have more than one half the land area or floor area used for high-density housing.

(Section 4.2.1). A Remediation Plan usually involves adding sufficient capacity to the roadway to allow traffic to flow at LOS "E" or better. The Remediation Plan should include any relevant projects included in the CIP or CEQA mitigation measures included in specific EIRs as mitigation requirements. A proposed Remediation Plan may include improvements already specified and funded in an EIR, the CIP, or developer exactions or dedications found to be relevant, including scheduled implementation, project characteristics, and funding sources. This gives the City credit for any required EIR mitigation measures to remediate the deficiency.

The lead department should also prepare cost estimates for improvements to mitigate the deficiency as well as of the funding sources.

If the lead department finds that the package of remediation measures is feasible, it must prepare an Implementation Plan.

The lead department submits the Remediation Plan and an Implementation Plan to the Transportation Authority for evaluation and approval. The Transportation Authority will evaluate Deficiency Plans based on effectiveness, financial feasibility, environmental compatibility, and consistency with the City's transportation planning priorities and policies. If the lead department finds it cannot remediate the deficiency and the Transportation Authority concurs, the lead department prepares a Deficiency Plan (presented in Figure 3).

The resulting Remediation Plan must include estimates of the following:

- Extra roadway capacity needed to remove the deficiency;
- Total costs of the capacity increases; and
- Improvements already funded through the CIP or developer exactions or dedications.

The Transportation Authority evaluates the feasibility of the Remediation Plan and accepts or rejects the lead department's findings. Within 30 days of receiving the Remediation Plan from the lead department, the Transportation Authority evaluates the adequacy of the Plan conclusions according to the following three criteria:

1) **Effectiveness:** Are the proposed improvements adding sufficient capacity to the roadway in question to increase the LOS to level "E" or better?
2) **Financially Reasonable:** Are the cost estimates for the proposed improvement reasonably accurate?
3) **Implementability:** In environmental, regulatory, and community terms? Is the Plan consistent with the General Plan?

The Lead Department prepares an Implementation Plan, identifying responsible departments, funding sources, and regulatory authority. If the Transportation Authority accepts the Implementation Plan, the Transportation Authority modifies the CIP to conform to reflect the remediation measures. All departments called upon to implement portions of the Remediation Plan must enter into an interagency agreement stating each department's responsibility and funding sources. If the Transportation Authority finds that the Remediation Plan is feasible, the lead department will prepare an Implementation Plan If the Transportation Authority finds that the Remediation Plan is not feasible, the lead department will prepare a Deficiency Plan Action List.

A.6.3.3 | Deficiency Plan Evaluation and Approval

If the Transportation Authority determines that the Remediation Plan is infeasible, the lead department prepares a list of offsetting actions that will improve the system-wide multimodal level of service but may have only limited effect on the deficient facility itself.

The lead department prepares a Deficiency Plan Action List. The lead department may select actions that have some direct mitigating effect on the deficiency; and/or actions that will improve system-wide LOS (as measured by the multi-modal performance measures). The Bay Area Air Quality Management District (BAAQMD) has prepared a list of approved Deficiency Plan actions. The CMP legislation requires that all Deficiency Plan actions come from that list.

The lead department may choose to prepare (or Transportation Authority may request) one or more alternative action plans to explore alternative approaches.

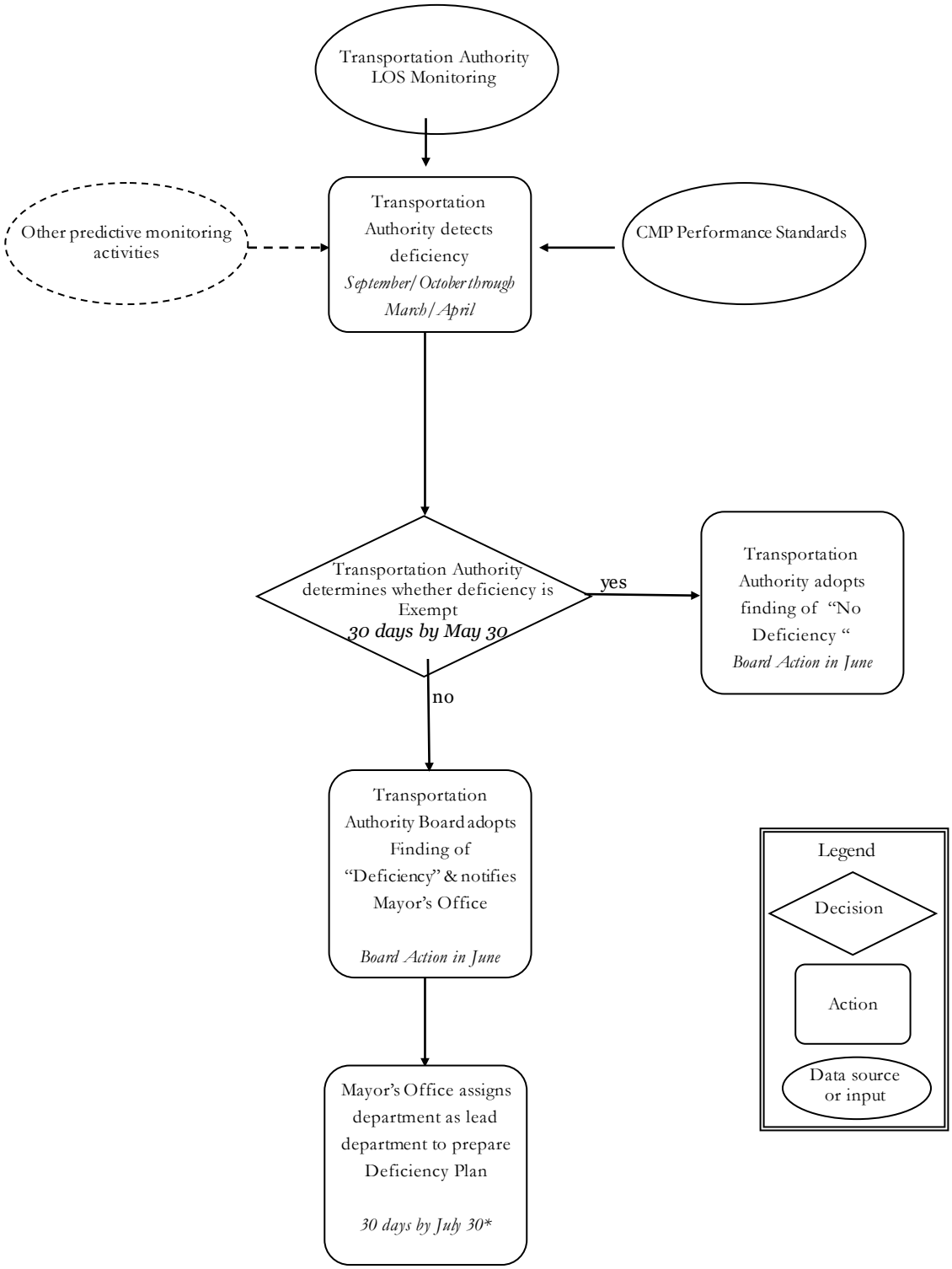
For deficiencies caused by large projects, some of the analysis required in these steps may have been completed through the projects' EIRs. While the analysis and any other relevant documentation may be used verbatim for the Deficiency Plan or Implementation Plan, the Final Deficiency Plan documentation must conform to the requirements outlined in the six steps above and described in more detail below.

The lead department has 60 days to prepare a Preferred Action Plan List. Each action on the list must show its estimated capital (or start-up) and operating (or on-going) costs. The lead department submits this list to the Transportation Authority for its consideration.

The Transportation Authority will review this proposed list and approve or reject it. The Transportation Authority will evaluate the preferred Deficiency Plan Action List, including each action's estimated cost within 30 days of submittal by the lead department. The Transportation Authority evaluates the effectiveness of the Action Plan and confirms General Plan consistency with the Planning Department. If the Transportation Authority accepts the lead department's proposed list of Deficiency Plan actions, the lead department prepares an Implementation Plan and submits this plan for the Transportation Authority's approval.

The Transportation Authority evaluates Implementation Plans using similar adequacy criteria as for Remediation Plans (Figure 2). If the Transportation Authority accepts the Implementation Plan, the Transportation Authority Board will hold a noticed public meeting and adopt a Finding of Conformance. If the Transportation Authority and the lead department are unable to agree on an Implementation Plan, the lead department may either try again, or submit its Final Deficiency Plan (including its Implementation Plan) to the Transportation Authority Board for Board action. If the Transportation Authority Board issues a Finding of Non-Conformance, the Transportation Authority must notify the State Controller to withhold funds. The funds are held in escrow for 12 months and then turned over to the Transportation Authority (as the City's Congestion Management Agency). Deficiency Plans must be completed within one year of the CMA's official notice of a deficiency.

Figure 1: Deficiency Detection and City Notification



Go to Figure 2

Figure 2: Deficiency Analysis and Mitigation Plan Preparation

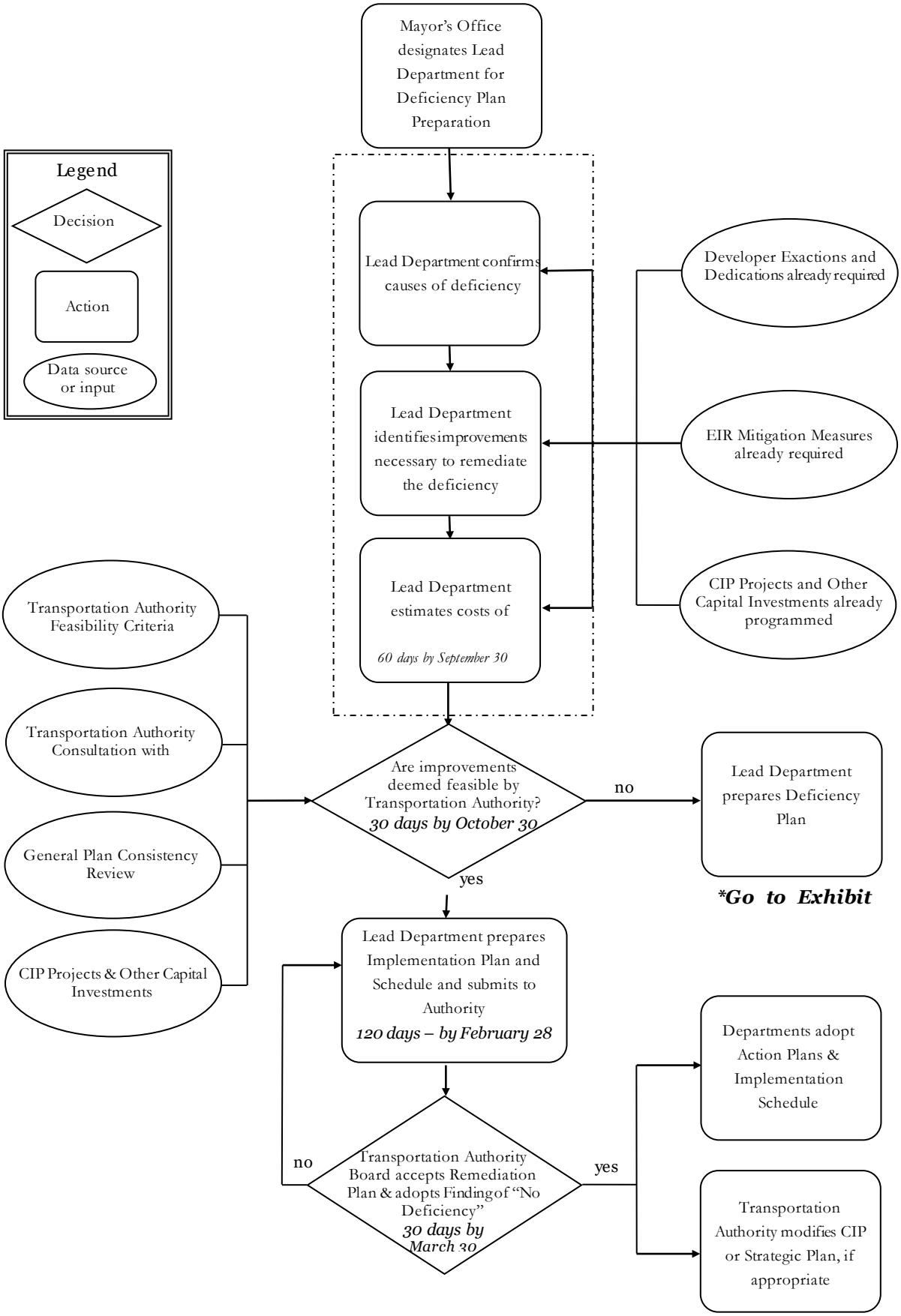
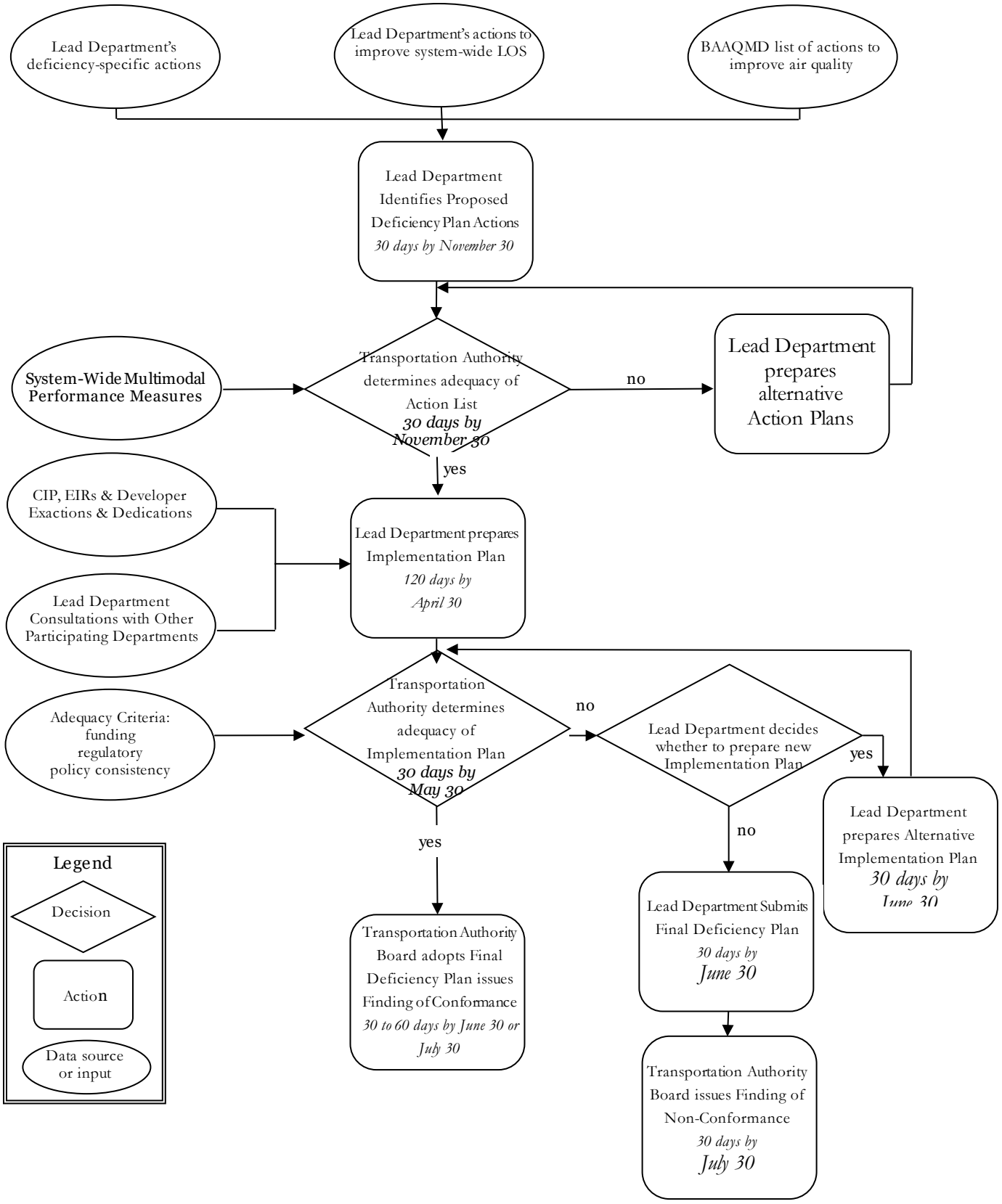


Figure 3: Deficiency Plan Evaluation and Approval



A.6.3.4 | Adequacy Criteria

The CMP legislation, as amended, includes three transit performance measures (in addition to the LOS performance measure) for the evaluation of current and future system performance and the effectiveness of Deficiency Action Plans [Government Code § 65089. (b)(2)]: transit frequency, routing, and service coordination among separate operators.

As required by CMP legislation, the Transportation Authority has developed multimodal performance measures beyond the traditional roadway Level of Service (LOS) measures. Our emphasis has been on user-based measures that help explain mode choice in the City. The Transportation Authority Board adopted the first set of multimodal performance measures in August 1998 (see Chapter 4). These include bicycle and pedestrian safety, transit speed and reliability and other measures. After these measures have been further refined and fully tested, they will then be used to evaluate the proposed list of Deficiency Plan Actions. Additional measures may be developed in the future.

A.6.3.5 | Implementation Plan

The Transportation Authority requires the lead department to prepare an Implementation Plan within 90 days of the Transportation Authority's finding as part of the Deficiency Plan Document. The Implementation Plan identifies the responsible implementing department(s) for each action, and the sources of funding.

I. IMPLEMENTATION PLAN DEVELOPMENT

The lead department is responsible for developing the Implementation Plan. For each action in the Deficiency Plan, the lead department must specify the following:

1. The final cost of the actions and the sources of capital (up-front) and operating (on-going) funds. Note any correspondence with EIR mitigation measures or CIP projects.
2. A monitoring program that conforms to CEQA monitoring requirements.
3. An implementation schedule. All actions must be implemented within the seven-year time horizon for the current CIP. If a Deficiency Plan action is programmed for funding in the sixth or seventh year of the CIP, it will need to be fully implemented within three years of its initiation in order to be considered a feasible action within the Deficiency Plan's ten-year horizon.
4. Identification of city departments responsible for the action's funding, implementation, and on-going operations.
5. Clear identification of all departments responsible for implementation, therefore, is essential for the Transportation Authority's approval of the Final Deficiency Plan. One way for partner agencies to demonstrate this would be through an interdepartmental agreement among all responsible implementing departments stating each department's agreement to fulfill their responsibilities for implementing Deficiency Plan actions.

II. IDENTIFICATION OF FUNDING

The Implementation Plan must include a detailed funding plan.

III. IMPLEMENTATION PLAN AND DEFICIENCY PLAN APPROVAL

Within 30 days of submittal by the lead department, the Transportation Authority will either accept or reject the Implementation Plan. The Transportation Authority will make its determination based on the required elements of the Implementation Plan discussed in 4.4.1. Implementation Plans without a funding plan will be rejected. Once the Transportation Authority has approved the Implementation Plan, the lead department will have additional 30 days to finalize and submit the Final Deficiency Plan for Transportation Authority Board approval. Upon submittal of the final Deficiency Plan by the lead department, the Transportation Authority Board will hold a noticed public meeting and either approve or reject it within 30 days. If the Transportation Authority rejects the Implementation Plan, the lead department may either propose an alternative Implementation Plan within 30 days, or choose to submit the Final Deficiency Plan with the Implementation Plan as is. In the latter case, the Transportation Authority will notify the Mayor's Office of its intent to reject the Final Deficiency Plan due to Implementation Plan inadequacy.

If the Transportation Authority Board rejects the Final Deficiency Plan and issues a finding of non-conformance, pursuant to the State law (Government Code 65089.5), the Transportation Authority must submit its findings to MTC and the State Controller for the withholding of State funds.

IV. DEFICIENCY PLAN DOCUMENT STRUCTURE

A Deficiency Plan Report must include the following sections:

1.0 Introduction Identification of the Deficiency's Causes, including:

1.1 Description of the Deficiency (i.e., road segment;

1.2 Description of the adjacent facilities;

1.3 Analysis of the causes of the deficiency;

1.4 Description of the existing traffic conditions within the boundaries;

1.5 Projection of future transportation conditions for at least the next 10 years; and

1.6 A map of the area, the deficiency, and adjacent facilities and transit routes.

2.0 Remediation Plan, consisting of:

2.1 An estimate of the extra roadway capacity needed to remove the deficiency;

2.2 An estimate of the total costs (operating and capital) of the capacity improvements; and

2.3 A description of improvements that are already programmed through individual project conditions of approval, the CIP, or developer exactions or dedications.

3.0 List of Actions, broken out into:

3.1 Deficiency-Specific Action; and

3.2 Global Actions To Improve System-wide LOS.

4.0 Implementation Plan, specifying the following:

4.1 The final cost of the actions and the sources of capital (up-front) and operating (on-going) funds;

4.2 A monitoring program to verify the action's implementation;

4.3 A schedule for implementation; and

4.4 Identification of city departments responsible for the action's funding, implementation, and on-going support/operation.

5.0 Identification of Other Departments' Responsibilities for Implementation

6.0 Identification of Funding

A.6.4. Special Issues

The following sections discuss special circumstances where the Deficiency Plan process, as described in Section 4.0, may have to be modified. Treatment of these issues is not intended to be exhaustive.

A.6.4.1 | Multi-County Deficiency Plans

Deficiencies may occur because of the activities of other counties or they may occur on a regional facility (e.g., the Bay Bridge). Under such circumstances, the Transportation Authority will take the lead in coordinating the preparation of a Deficiency Plan, following MTC's process and mutual agreements with other agencies. More specifically, the Transportation Authority will coordinate with other congestion management agencies (CMAs) and regional agencies (e.g., MTC, BAAQMD, ABAG, etc.). The Transportation Authority may request the Mayor's Office to designate other city departments to prepare the Remediation Plan, Deficiency Plan Action List, or the Implementation Plan. Furthermore, other departments may be designated as the responsible agencies for the implementation of the Deficiency Plan.

A.6.4.2 | Deficiency Plans Addressing Multiple Deficiencies

The Mayor's Office may request that the lead department prepare a Deficiency Plan that covers more than one deficient roadway segment.

Multiple deficiencies may be likely if an area or transportation corridor is impacted by large land use projects (e.g., Mission Bay), significant transportation infrastructure projects (e.g., demolition of the Central Freeway), or pronounced socioeconomic trends (e.g., increased commuting from the East Bay). When multiple deficiencies are within close geographical proximity, distributed along a single corridor (or parallel facility), or are functionally related, the Transportation Authority may encourage a single area-wide, or corridor Deficiency Plan.

The process would be similar to that described in Section 4.0. Nevertheless, the lead department must:

1. Review relevant EIRs for their assessment of impact and proposed mitigation measures;
2. Perform modeling of traffic within the area or corridor to determine the effectiveness of the Remediation Plan improvements;
3. Consider funding and/or regulatory feasibility of the proposed Implementation Plan; and

4. Coordinate with the CIP and other transportation programming and/or planning documents designed to address transportation planning for a subarea of the city, a specific corridor, or multiple facilities or modes.

A.6.4.3 | Future Deficiencies

The legislation does not require that local jurisdictions address future anticipated deficiencies. Deficiency Plans are only based on actual CMP network conditions.

Future changes to the transportation infrastructure or services may cause deficiencies. There are many potential causes of deficiencies, particularly changes to the transportation infrastructure in the City as well as land use changes.

The Planning Department is responsible for land use planning and development management. This role, stipulated in the City Charter, gives the Planning Department direct or oversight responsibility for every land use project from its initial design stages through environmental impact analysis, to final completion. Large-scale projects may have major impacts. Examples of such projects include, but are not limited to:

- Mission Bay;
- Rincon Point South Beach Redevelopment Area;
- Candlestick Point and Hunters Point Shipyard Development Plan; and
- Revised South of Market Specific Plan.

In addition, the Planning Department oversees preparation of Transportation Impact Analyses (TIAs) and its Office of Environmental Review (OER) coordinates CEQA review and EIR preparation for development projects. All of these documents are intended to anticipate the impacts of a proposed project on the transportation system; thus, they have direct relevance to the Deficiency Plan if a project's impacts cause a deficiency.

Appendix 7: Transit Frequency and Coverage Service Levels

There have been rapid changes in transit frequency and coverage service levels in transit operators across the Bay Area.

Muni

Muni updated its service network in 2022: https://www.sfmta.com/projects/2022-muni-service-network .

BART

BART updated its service plan in September 2023: https://www.bart.gov/news/articles/2023/news20230427 .

Caltrain

The current Caltrain schedule as of Fall 2023 can be found at https://www.caltrain.com/news/caltrain-operate-new-schedule-starting-fall . Caltrain is undergoing electrification (slated for completion in Fall 2024) and is proposing service improvements once electrification is complete: https://www.caltrain.com/news/caltrain-unveils-electrified-service-vision-2024 .

AC Transit

AC Transit Transbay routes provide service between San Francisco and the East Bay via the Bay Bridge. AC Transit is undergoing a comprehensive review ("AC Transit Realign") of its network to respond to shifts in riders' travel patterns, with its 5 phases slated to be complete in Fall 2024: https://www.actransit.org/realign .

Golden Gate Transit

San Francisco is served by both Golden Gate Transit buses and ferries. Transit service standards can be found in their Short Range Transit Plan (https://www.goldengate.org/bus/history-research/publications/), the last version of which was adopted in December 2022 for Fiscal YEars 2022/23-2027/28.

SamTrans

SamTrans is currently updating its Short Range Transit Plan for FY2023-28 beginning in March 2022. The plan is slated for Board approval in December 2023.
(https://www.samtrans.com/projects/samtrans_short_range_transit_plan)

APPENDIX 8

TRANSIT MONITORING METHOLOGY & RESULTS

KEY TOPICS

- Methodology
- Transit Speed Results
- Discussion

1. Methodology

The transit speed monitoring was conducted using Automatic Vehicle Location (AVL) /Automatic Passenger Count (APC) data from the San Francisco Municipal Transportation Agency (SFMTA), which tracks transit speeds, boardings, and alightings on SFMTA buses. SFMTA rail vehicles are not included. SFMTA has APC counters on a significant portion of the bus fleet at any given time and rotates the counters between vehicles periodically to collect data on every bus run.

The APC data are valuable for detailed service planning purposes. For broader system performance monitoring and planning purposes, such as the CMP, the APC data can be aggregated to a weekday peak period and have a relatively large sample set. APC data have been used to report transit speeds since CMP 2011 cycle. In 2011, transit speeds were reported on CMP segments for the afternoon peak alone; since the 2013 CMP update, the monitoring effort included both morning and afternoon peak results.

In 2019, the format of the APC data were changed as the SFMTA implemented a new radio-based APC system. The most impactful change from the CMP monitoring perspective was that no records would be generated when a bus passes-by scheduled bus stops, as opposed to generating interpolated time-tramps for the skipped stops as the older system did. To deal with this issue, the processing method was updated to base calculations on individual trips instead of transit stop pairs. This was done by first mapping transit stop pairs to CMP segments as

previously did and then aggregating the speeds from the matched transit stop pairs to individual transit trips. Those trip level speeds were lastly processed to compute transit performance measures, including average speed, standard deviation, and coefficient of variation, for CMP segments during AM and PM periods. This approach better reflects overall transit speeds on a CMP segment, and is less susceptible to the impact of localized factors such as traffic signal between stop pairs.

During the analysis, the generated intermediate dataset provided stop-to-stop travel time and speed, inclusive of bus dwell time[1]. Specifically, dwell time was assigned to the "upstream" stop: the segment-level data represent upstream stop-arrival point to downstream stop-arrival point. In this way, the processed data correspond with the travel time and through-speed experience by a transit rider as the rider passes multiple stops while on-board. (This is comparable to the manner in which automobile speed is reported by including fully-stopped intersection delay in the calculation of through-travel speed.). The stop-to-stop travel time results with inclusion of upstream dwell time are then aggregated to get travel time of transit trips that are overlapping with the CMP segments.

Following the above methodology, APC data collected on Muni's bus (diesel and trolley coach) fleet in (the entire months of) April and May 2023 were analyzed. Muni light rail vehicles are not currently equipped with APCs, and were thus not included in the analysis. The raw APC transit data utilized corresponded to the same morning and afternoon peak periods as the Automobile LOS monitoring. The monitoring days were examined through a similar data cleaning process that considered the same special events, construction and weather events that informed the cleaning of the auto monitoring data.

2. Results

Attachment 8.1 and 8.2 present the Average Transit Speeds for the morning and afternoon peak periods in the current CMP cycle. The morning and afternoon transit speeds from the previous CMP cycles are included for comparison.

Summary statistics for 2023 (Table A8-1) indicate the average speed decreased markedly since 2021 (during the midst of the COVID pandemic) from 11.2 / 11.1 mph to 8.9 / 8.0 mph (for the AM / PM peaks respectively), to speeds that are slightly higher than pre-COVID (8.7 / 7.7 mph, measured in 2019). However, the changes in the transit speeds compared to 2019 are not statistically significant at p=0.05 under the one-tail two sample t-test.

Table A8-1 Transit Results Summary Statistics

[1] Note that door dwell time was excluded for few bus stop pairs to filter out the layover time corresponding to end of the line operations.

	NUMBER OF SEGMENTS	AVERAGE SPEED	STANDARD DEVIATION	MINIMUM SPEED	MAXIMUM SPEED
AM Peak Period	98	8.9	2.3	3.9	14.8
PM Peak Period	97	8.0	2.2	3.8	13.6

3. Discussion

This section examine the transit speed variability/reliability, and compares the results between 2019 and 2021 and between 2021 and 2023.

3.1 | TRANSIT SPEED VARIABILITY/RELIABILITY

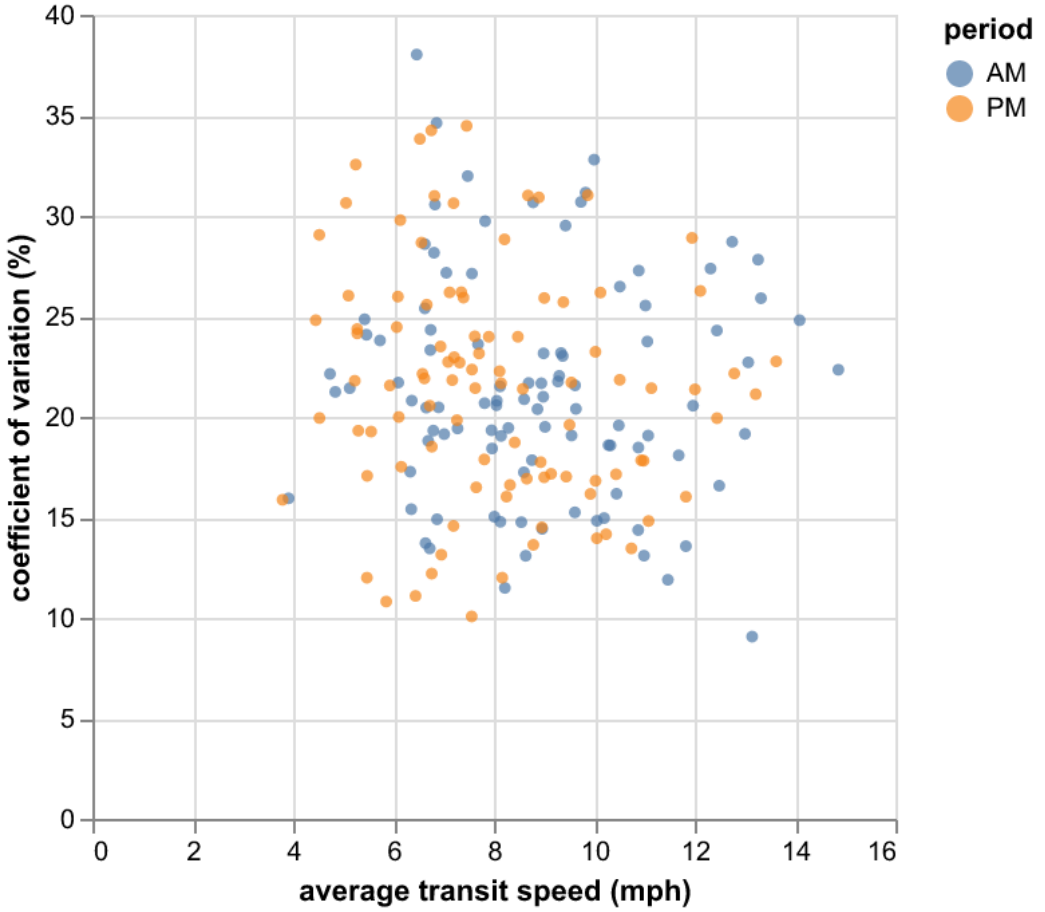
In order to fairly compare the variability of speeds for segments that are fast on average and those that are slow on average, a reliability measure is needed that would not favor one or the other. If the standard deviation alone was used, segments that have higher absolute standard deviations (i.e. most commonly segments with higher average speeds) would be ranked higher than segments that are slower on average. To prevent this, the Coefficient of Variation (CV), the ratio between the standard deviation and the average, is used to measure reliability. The CV is expressed as a percentage of the mean speed, thus both segments with high and low average speeds can be compared on the same scale.

Since it is theoretically possible for segments to be reliably fast, reliably slow, unreliably fast, or unreliably slow, the ideal comparison of these results would show the results in two dimensions at the same time, as is shown in Figure A8-1 below. Most CMP segments have a transit speed between 4 and 14 mph, with a coefficient of variation between 10% and 35%. The figure shows no clear functional relationship between transit reliability (the coefficient of variation) and its speed.

In 2023, 8% of monitored segments had a CV above 30% in the AM peak period, whereas for the PM peak period it was 10%. This is lower than in 2021, when the same metric was at 13% (AM peak) and 16% (PM peak), but still higher than the 6% (AM peak) and 5% (PM peak) in 2019.

The most unreliable segment in the AM period was Folsom from 4th to 1st (CV = 38.0%), followed by Broadway from Powell to Montgomery (CV = 34.6%). The two most unreliable segments in the PM peak period were Mission/Otis from 9th to 14th (CV = 34.5%) and Clay from Kearny to Davis (CV = 34.3%). None of the unreliable (CV > 30%) segments in 2023 had a low sample size (<50).

Figure A8-1 Transit Reliability vs Speed



3.2 | COMPARISON OF RESULTS BETWEEN 2019 AND 2023 AND BETWEEN 2021 AND 2023

In general, transit speeds on each CMP segment in 2023 are close to that in 2019 (with the full range of difference being a change of -2/+4 mph from 2019 to 2023). The 2023 transit speeds on each CMP segment are in general slower than that in 2021 (most of the segment speeds are slower by up to 2mph, with the full range of difference being a change of -4.5/+1.5 mph from 2021 to 2023).

Figures A8-2a and A8-2b below illustrate the changes in both auto and transit speeds at individual segment level in both AM and PM peak periods between 2019 and 2023 and between 2021 and 2023. Tables A8-2a and A8-2b show the number of segment within each quadrant for the two figures. The changes can be broken into four scenarios, represented by four quadrants on the graph, as divided by the two half-axes (marked in grey). The quadrant numbering I-IV goes counter-clockwise starting from the upper right quadrant. Data in quadrant I (upper right)

represent an increase in both auto and transit speeds, and data in quadrant III represent a decrease in both auto and transit speeds.

Between 2019 and 2023, more than half of all segments have an increased transit speed (quadrants I and IV, upper and lower right). Less than a quarter of the segments have a decrease in both automobile and transit speed (quadrant III, lower left). This indicates a general increase in speed for both automobiles and transit compared to pre-COVID conditions, with the increase more pronounced for transit than automobiles.

Between 2021 and 2023, the vast majority of segments have a have a decrease in both automobile and transit speed (quadrant III, lower left), as people began to return to pre-pandemic activity levels.

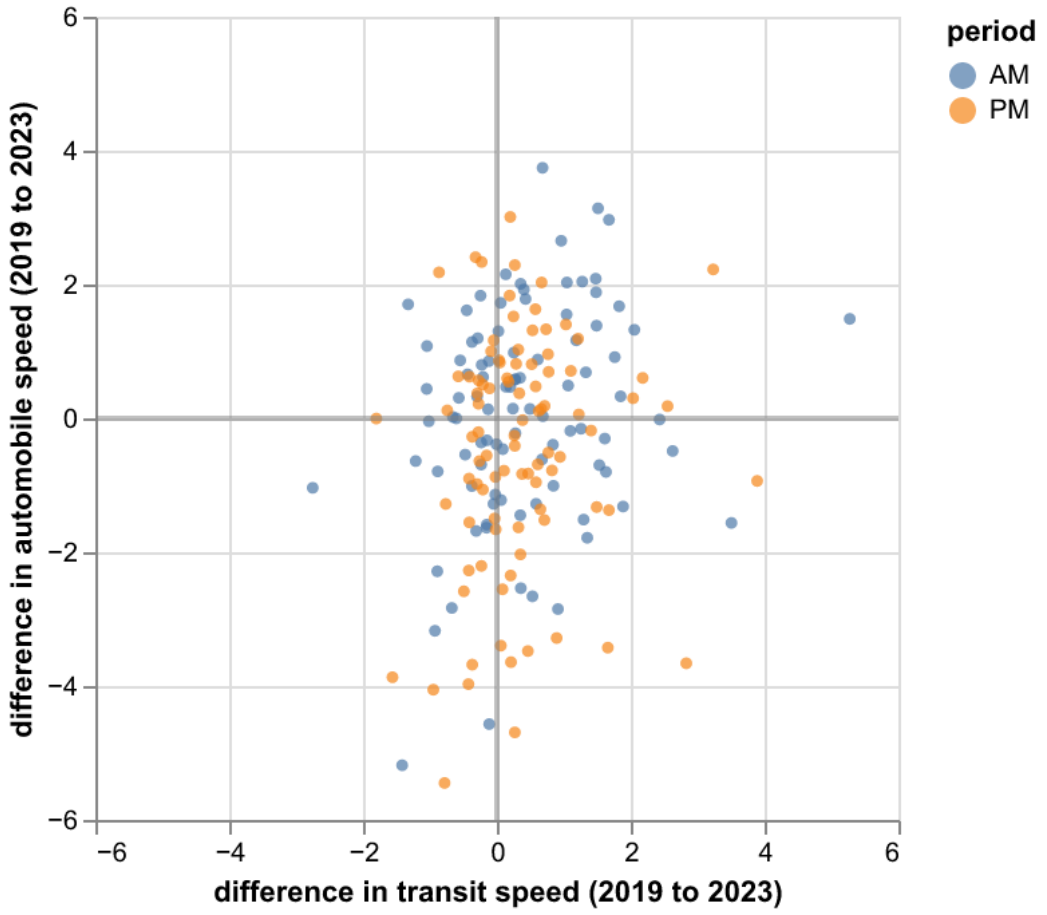


Figure A8-2a Change in Auto & Transit Speeds between 2019 and 2023

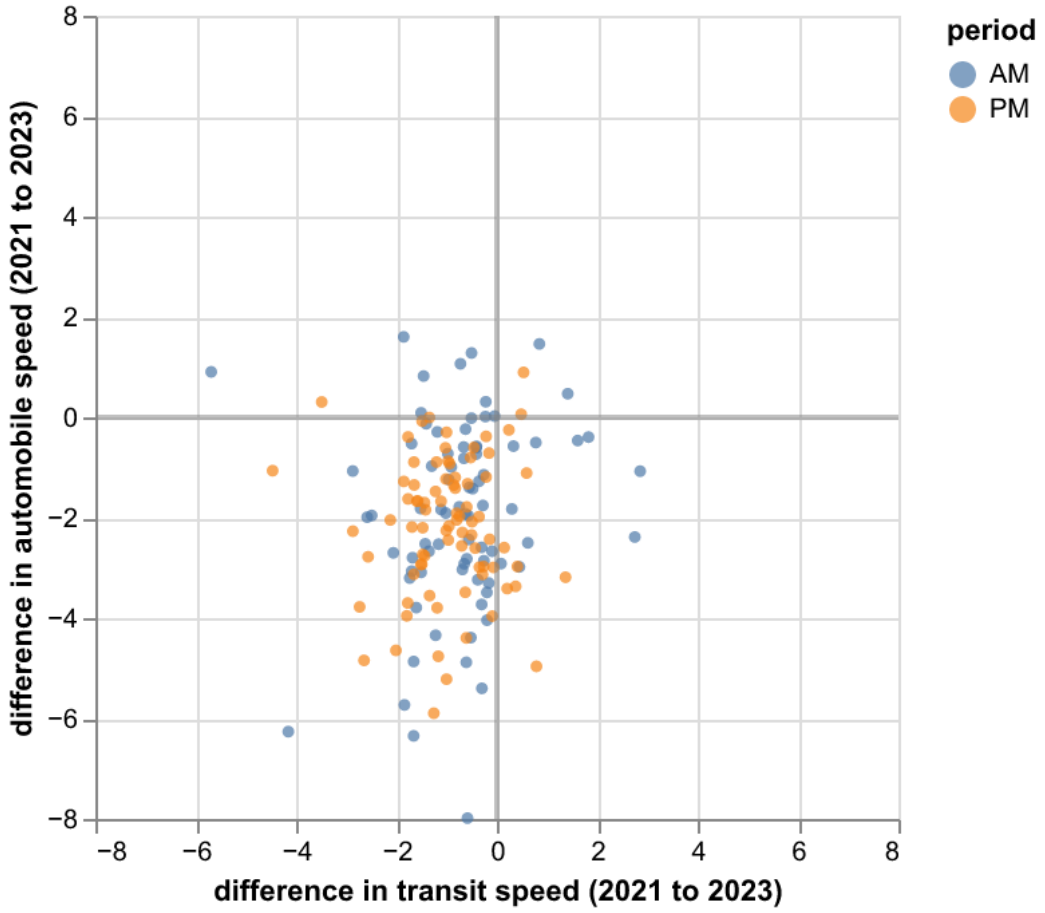


Figure A8-2b Change in Auto & Transit Speeds between 2021 and 2023

Table A8-2a Number of Segments within Each Quadrant (between 2019 and 2023)

Period	I	II	III	IV
AM	34	17	20	22
PM	30	13	21	28
both peak periods	64	30	41	50

Table A8-2b Number of Segments within Each Quadrant (between 2021 and 2023)

Period	I	II	III	IV
AM	2	9	58	10

PM	2	1	70	8
both peak periods	4	10	128	18

APPENDIX 9

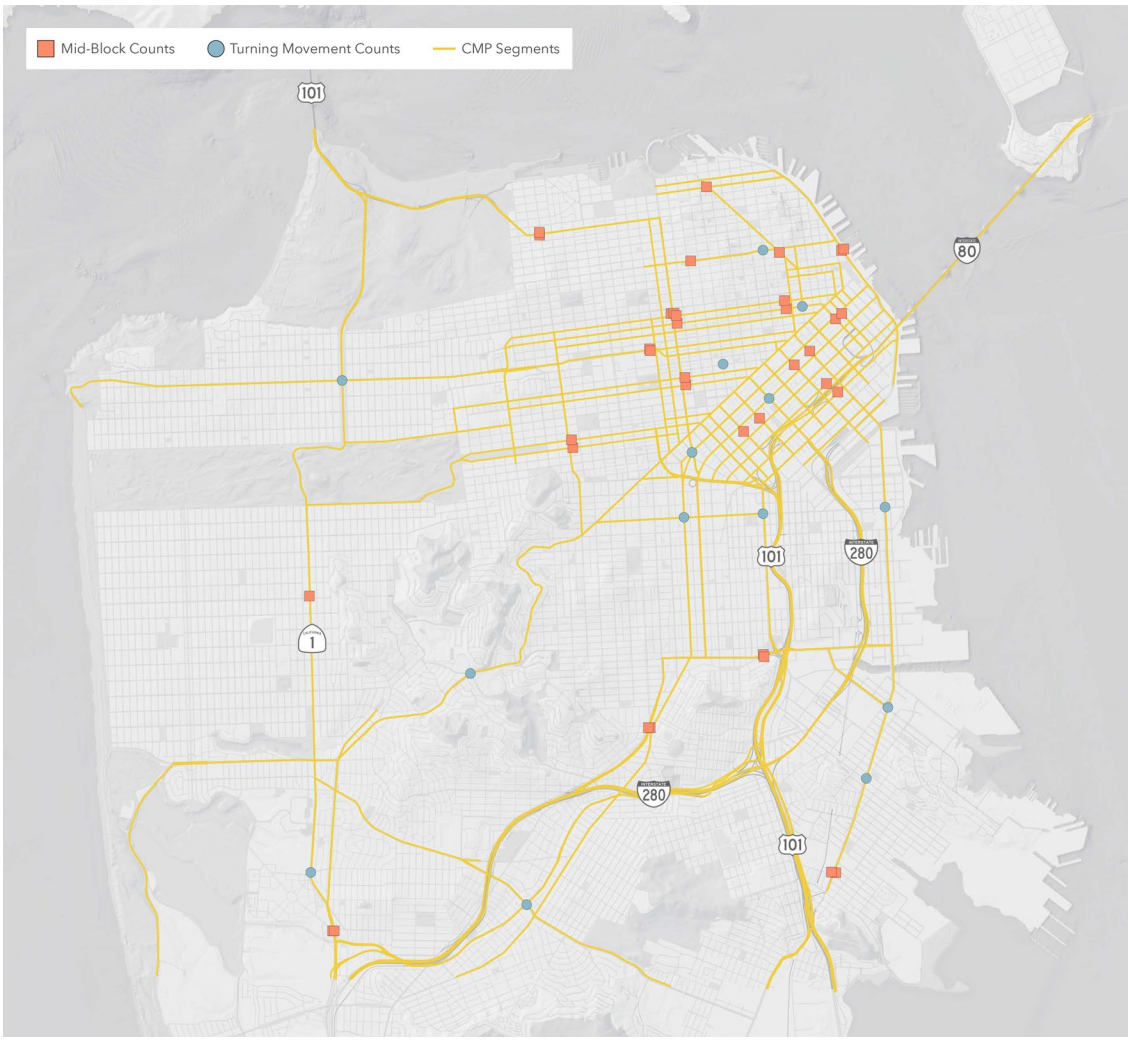
MULTIMODAL COUNTS DATA

KEY TOPICS

- Turning Movement Counts
- Mid-block Counts

In 2023, the Transportation Authority continued to conduct its biennial mid-block and intersection multimodal volume counts. These counts are in addition to the legislatively required CMP performance measures and are therefore not subject to deficiency analyses. Two types of field volume counts were conducted at key locations across San Francisco: turning movement counts and mid-block counts (Figure A9-1). The data collected with these counts are used by agencies for planning and operations activities. Refer to section **X.X** for the analysis of these volume counts. Note that construction and other activities at individual sites can affect count numbers.

Figure A9-1 Location of Turning Movement and Mid-Block Counts



A.9.1. Turning Movement Counts

Turning Movement Counts for three modes (vehicles, pedestrians, and bicycle) were conducted at 14 intersections during the a.m. and p.m. peak periods on a single day within the monitoring period (Table A9-1).

Table A9-1 Average Weekday Multimodal Volumes at Intersection Count Locations 2023

	A.M. PEAK (7:00-9:00 A.M.)			P.M. PEAK (4:30-6:30 P.M.)		
LOCATION	VEHICLE TRAFFIC	BICYCLES	PEDESTRIANS	VEHICLE TRAFFIC	BICYCLES	PEDESTRIANS
3rd St and 16th St	1934	52	531	2493	79	576
3rd St and Evans Ave	3053	7	202	2926	10	165
3rd St and Palou Ave	2219	24	507	2562	18	807
6th St and Howard St	2475	72	458	4012	336	856
19th Ave and Holloway Ave	7838	21	770	8991	21	1165
Geneva Ave and Alemany Blvd	4630	8	132	5140	18	187
Leavenworth St and Eddy St	1247	37	963	1208	37	1424
Mission St and 16th St	1882	39	2612	2888	87	4462
Montgomery St and Bush St	2693	39	3596	2155	95	4155
Park Presidio Blvd and Geary Blvd	10748	1	542	11891	10	636
Portola Dr and O'Shaughnessy/Woodside	6702	33	423	7595	52	214
Potrero Ave and 16th St	3582	67	478	4628	81	744
South Van Ness Ave and 13th St	7674	11	175	7626	16	277
Stockton St and Broadway	3458	36	1717	4099	54	3287
Total	60135	447	13106	68214	914	18955

A.9.2. Mid-block Counts

Mid-block counts were recorded at 29 locations (of which 16 are one-ways and 13 are two-ways) for at least three consecutive weekdays (Tuesday to Thursday) within the monitoring period. For the CMP 2023, three locations (19th Ave between Moraga and Noriega, Mission St between 24th and 25th, and Van Ness Ave between California and Pine) were extended beyond the 3-day monitoring period to record the following Friday, Saturday and Sunday for a total of six days. Results of weekday[1] average mid-block traffic counts from 2015 to 2023 are shown in Table A9-2.[2]

[1] I.e. the data were averaged over Tuesday to Thursday/Friday only.

[2] The CMP 2023 corrects and publishes previously unreported mid-block average weekday traffic counts from the CMP 2017 to 2021.

Table A9-2 Average Weekday Traffic Volumes at Mid-block Count Locations 2015-2023

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Notes:
NB = northbound, SB = southbound, EB = eastbound, WB = westbound
No data collection at Van Ness Ave Between California And Pine in 2017 due to construction.

			2015
location	direction	AM peak	PM peak
19th Ave Between Moraga And Noriega	NB	2895.75	4225
19th Ave Between Moraga And Noriega	SB	4251.75	4840.75
1St St Between Mission And Minna	SB	2001	1236.333
3rd St Between Fitzgerald And Gilman	NB	1754	1270.333
3rd St Between Fitzgerald And Gilman	SB	1217	1501.333
3rd St Between Minna And Howard	NB	3660.667	3274
4th St Between Minna And Howard	SB	1241.667	2273.667
7th St Between Howard And Folsom	NB	2718.667	2980
8th St Between Tehama And Celementina	SB	2454.333	1920.333
Columbus Ave Between Broadway And Pacific	NB	1410.667	1676.667
Columbus Ave Between Broadway And Pacific	SB	2018.333	1326.667
Fremont St Between Mission And Natoma	NB	2493.333	2109
Junipero Serra Blvd Between Font And Brotherhood Ramps	NB	5930.667	6234.333
Junipero Serra Blvd Between Font And Brotherhood Ramps	SB	6408	6720.333
Mission St Between 24th And 25th	NB	1029.25	986.5
Mission St Between 24th And 25th	SB	508	1090.25
San Jose Ave Between Randall And Saint Mary'S	NB	3398.667	2867.333
San Jose Ave Between Randall And Saint Mary'S	SB	2354.333	3247.667
The Embarcadero Between Broadway And Washington	NB	2575.667	2202
The Embarcadero Between Broadway And Washington	SB	2140	1664
Van Ness Ave Between California And Pine	NB	2975	2807.75
Van Ness Ave Between California And Pine	SB	2061.25	3087
Bay St Between Leavenworth And Columbus	EB	2562.333	1324.667
Bay St Between Leavenworth And Columbus	WB	947.3333	2357
Broadway Tunnel Between Larkin And Powell	EB	2113.667	1867
Broadway Tunnel Between Larkin And Powell	WB	1295	2412.333
Bryant St Between 4th And 3rd	EB	3227	1680.333
Bush St Between Grant And Kearny	EB	3693.333	3244
Bush St Between Van Ness And Polk	EB	2984.667	2021
Cesar Chavez St Between York And Hampshire	EB	3287	3782.333
Cesar Chavez St Between York And Hampshire	WB	3592	3282.333
Fell St Between Divisadero And Scott	WB	2815	4080.333
Geary Blvd Between Laguna And Gough	EB	3298	2099
Geary Blvd Between Laguna And Gough	WB	1498.667	2595.333
Golden Gate Ave Between Van Ness And Polk	EB	1997.333	1726.333
Harrison St Between 4th And 3rd	WB	2489	3177.667
Lombard St Between Broderick And Divisadero	EB	3919.667	2938.667
Lombard St Between Broderick And Divisadero	WB	2214	3819.667
Oak St Between Divisadero And Scott	EB	3616.333	3095.333
Pine St Between Grant And Kearny	WB	1542	2164
Pine St Between Van Ness And Polk	WB	1276	2866.667
Turk St Between Van Ness And Polk	WB	1230.667	1825

	2017			2019			2021	
daily	AM peak	PM peak	daily	AM peak	PM peak	daily	AM peak	PM peak
32591.25	4002.75	4623.25	35578.25	3351.2	4067.6	30917.6	2773.25	4003.5
36196.75	4117.75	4752.25	36214	4148.6	4649.2	35162.2	3140	4372.75
15061	2791.667	1493	21313	2407.667	2322.333	21242.67	1858	1900
11169.33	1833.667	1473.667	12500.67	1363.333	1157	10483	1114.667	955.6667
9892	1052	1682	10751	1360	854.6667	8097	1063	1217.333
29231	3369.667	3187.667	28696	3428.667	3116	28570	3028.333	2443.333
14858.67	1487	2255.667	16028.33	1625.333	2230.333	18396.67	1192.333	2195
22434.33	2543.333	2513	20520.33	2565	2471.333	20221	1806.333	1277.333
19720.67	2270.333	2445.667	18773.67	1760	1607	12768.33	846.6667	1570.667
11797.67	750.3333	1555	9290.333	774.6667	1666.333	9457	627	893.3333
13102	1442	704	8132.333	1429.333	844	8591.667	952.6667	1021.667
19928	2520.333	2116.333	20011.33	2596.667	2393	19458	2666	2146
50643.67	5147	5382.667	44693	4663.667	4964	38361	4947.333	5565
49438.33	5664.333	5870.333	46211.67	6335	6448	48518.33	4640.333	6037.667
7607.75	359.5	409.25	3527.25	719	981	7161.2	282	460.75
7066.75	399	757.75	5220.75	501	848.8	6215.8	469.5	1099
20457	3201.667	2915.333	20002.33	2988	2445.667	18536	2571	2234.333
17792.67	2683.333	3566.333	20001	2217	3525.667	19520.33	1485.333	3065
19132	2739.667	2697.333	21111.67	2518.667	2514.333	19287	1450.333	1326.333
16424	2111.333	2123.333	16690.67	1596.667	1482.333	12928.33	1040.333	1702.667
25609	-	-	-	1770.4	1960.6	14953.4	768	1816.25
22205.25	-	-	-	2469.4	2043	16468.2	1628	1490.5
11571.67	2381.333	1321.667	11872	2500.333	1350.333	12424.33	942	998.3333
10806	1121.333	2690.667	13054.33	2237.667	1641	11776	663	1195.667
16423.33	2235.667	2000	15725.33	2380.333	2239.667	18225	1802	1418
14345.33	1167	2181	13182.67	1167.333	2099	12733.33	973	1219.667
20518	3328	1923.667	22227.33	3410.333	1765.333	22195.33	1786	1367.333
29037	2343	1770	15757.33	2471.667	1607.333	16196	1352.333	1351.667
21215	3048.333	2185.333	19063.67	2849	2318	18563.33	1828	2072.333
28494.33	3538	3275.667	25209	3194.333	3106.667	24363	2444.667	2955.333
25407.33	3190.667	3659	26136.33	2871	3557.667	25532.67	2873.333	3112.333
28481	3212	4555.667	32042.33	3211	4711	31660.67	2944	3786
18188.67	2371.333	1863	15866.67	2606.667	1773.667	15030.67	1412.667	1274.667
16443	1226.333	2485.333	13993	1486.667	2585.333	15105.33	1141	1675
13568.67	1972.333	1637.333	13172	1493	1504	10888.33	685.3333	846
24093.33	2753.667	3275.667	26424.33	1625	2181	15291	1293.667	1790.667
25346.33	3890	2253	21848.67	3767	2453.667	21362	3262.333	2082
25452	1926	3073.667	19532	1882	3184	21952.33	1499	3428
27873.33	3919.667	3453.333	30982	4339.667	3678.667	32806	3370.667	3180.333
15108.67	1552.333	2333.333	16514	1604.333	2888.667	17430	1869.333	1884
18327	1816.333	3111	21030	1636	3143	18898	1843.667	2306.667
11917	1173.667	1787.667	11348.33	949.3333	1350.667	8793.667	668	700.3333

		2023	
daily	AM peak	PM peak	daily
25830.5	3785	4247.5	29689
29136	2496.75	3226.75	24018.5
17479.67	844.3333	2213	19440.33
8145.667	1186.667	1037.667	9067.667
8601	494.3333	1178.667	8284.333
21430.67	2954	3151.333	26397
14229.33	751.3333	2076.333	15055.67
11052.67	2066.667	1716.333	14380.33
9574.333	1451.333	1712.333	11651
5921.667	748.6667	1029.333	7124.333
8398	988.6667	1085.667	8911.667
18384	1403.667	2431	21823
38614.33	5005	5398.333	41785
39574	5737.667	6327.667	45505.33
3167	421.25	831	5617.5
6802.75	511.75	1243	7771.5
15367.67	2942.333	2787.667	17483.33
15429.67	2001.333	3151.667	17034
11122.67	926.6667	1462	12346.67
10974.67	914.6667	2017.667	14795.33
9567.5	875	1920.25	10536.5
11334.5	1736.25	1594.5	12368.75
6839.667	2069.667	1113.667	8970.333
6927	744.3333	1733.667	8585
11606	2416.667	2077	16006.33
7851	822	1862	9900.333
14708.33	1876	1463.333	15574
11503	2030.333	1615.667	13903
14015	693.6667	1927.333	16288.33
20300	2979.333	3105	21084.33
22345	3104	3644.667	25069.33
26827	1024.667	2957	26131.33
10258.33	1931.667	1424.333	12249.67
10536.67	1293.667	2227.333	12759
5840.667	827.3333	1050	5965.333
12948	1445.667	1861	14131
17101.33	3846	2930	22578
19351.33	1797	3193	20062
26317	1698.667	2914	25153.33
14314.67	1655.333	2349.333	16380
15872	1815.333	2829.667	18555.33
5395.333	798.3333	1151.667	6877.333

APPENDIX 10

TRAVEL DEMAND MANAGEMENT

KEY TOPICS

- TDM General Plan Objectives
- TDM Requirements
- TDM Policies
- TDM Programs
- TDM Studies and Plans

A.10.1. TDM General Plan Objectives

The Transportation Element of the General Plan lays out the City's policy of transit-oriented solutions for accommodating growth in travel demand and discouraging single-occupant automobile travel:

- Objective 3: Maintain and enhance San Francisco's position as a regional destination without inducing a greater volume of through automobile traffic.
- Objective 4: Maintain and enhance San Francisco's position as the hub of a regional, city-centered transit system.
- Objective 7: Develop a parking strategy that encourages short-term parking at the periphery of downtown and long-term intercept parking at the periphery of the urbanized bay area to meet the needs of long-distance commuters traveling by automobile to San Francisco or nearby destinations.
- Objective 10: Develop and employ methods of measuring the performance of the city's transportation system that respond to its multi-modal nature.
- Objective 11: Establish public transit as the primary mode of transportation in San Francisco and as a means through which to guide future development and improve regional mobility and air quality.
- Objective 16: Develop and implement programs that will efficiently manage the supply of parking at employment centers throughout the city so as to discourage single-occupant ridership and encourage ridesharing, transit and other alternatives to the single-occupant automobile.
- Objective 17: Develop and implement parking management programs in the downtown that will provide alternatives encouraging the efficient use of the area's limited parking supply and abundant transit services.
- Objective 20: Give first priority to improving transit service throughout the city, providing a convenient and efficient system as a preferable alternative to automobile use.

- Objective 21: Develop transit as the primary mode of travel to and from downtown and all major activity centers within the region.
- Objective 23: Improve the city's pedestrian circulation system to provide for efficient, pleasant, and safe movement.
- Objective 27: Ensure that bicycles can be used safely and conveniently as a primary means of transportation, as well as for recreational purposes.
- Objective 28: Establish parking rates and off-street parking fare structures to reflect the full costs, monetary and environmental, of parking in the city.
- Objective 32: Limit parking in downtown to help ensure that the number of auto trips to and from downtown will not be detrimental to the growth or amenity of downtown.
- Objective 34: Relate the amount of parking in residential areas and neighborhood commercial districts to the capacity of the city's street system and land use patterns.

A.10.2. TDM Requirements

A.10.2.1 | Regional TDM Requirements – Transportation Control Measures

San Francisco is subject to regional air district requirements to implement TDM measures (also referred to as Transportation Control Measures) to address air quality issues. In 1991 as required by the California Clean Air Act (CCAA), the Association of Bay Area Governments (ABAG), the Bay Area Air Quality Management District (BAAQMD), and the Metropolitan Transportation Commission (MTC) jointly prepared the first Bay Area Clean Air Plan, which included measures to reduce the total number of trips and miles traveled, ("Transportation Control Measures," or TCMs). The most recent Plan, the 2017 Bay Area Clean Air Plan, was adopted by BAAQMD in April 2017. The Plan addresses greenhouse gases, as well as ozone, particulate matter, and air toxics. It also included new and revised TCMs. The 2017 Clean Air Plan focuses on laying groundwork for a long-term effort to reduce Bay Area GHG emissions 40 percent below 1990 levels by 2030 and 80 percent below 1990 levels by 2050. It also updates the 2010 Clean Air Plan, to fulfill state ozone planning requirements and includes all feasible measures to reduce emissions of ozone precursors—reactive organic gases (ROG) and nitrogen oxides (NOx)—and reduce transport of ozone and its precursors to neighboring air basins. In addition, the Plan builds upon and enhances the Air District's efforts to reduce emissions of fine particulate matter and toxic air contaminants.

Local agencies are expected to incorporate TCMs into planning and implementation for transportation and land use programs. The region, through the MTC, is held responsible for overall progress toward the stated goals. The CMP process provides an opportunity to integrate local planning and programming into the regional air quality planning process. Appendix 11 lists the currently adopted regional TCMs, and discusses how San Francisco's congestion management strategies contribute to, or reinforce, these measures.

A.10.2.2 | TDM Requirements on New Development

A.10.2.2.1 | Area Plans and Development Agreements

Numerous TDM requirements are included within area plans and negotiated agreements for major developments. Significant examples include the following:

- **The Transit Center District Plan** emphasizes Transportation Demand Management as a means of reducing the reliance on automobiles and encouraging mode shifts to transit, carpooling, bicycling, and walking. The plan goals state that 95 percent of trips should be made by transit, walking, or bicycling. It includes supplementary objectives to reach this goal, such as parking supply and management tools; transit incentives, and expansion of Section 163 requirements (see below).

- **The Park Merced Transportation Plan** includes shuttles to Daly City BART and a Shopper's Shuttle to local destinations. In addition, a transportation coordinator will coordinate and manage additional TDM programs.

- **The Candlestick Point & Hunters Point Shipyard Phase II Transportation Plan** proposes new bus service and infrastructure, and requires a Transportation Coordinator to manage unbundled parking, bicycle support facilities, provide transit passes (paid by homeowner's dues), and implement dynamic pricing for visitor parking. The TDM Program will target both residents and employers in the area, with employers expected to provide bicycle parking and amenities, carpooling and vanpooling services, Guaranteed Ride Home program, information on transportation alternatives, commuter checks, telecommuting options, and parking cash-out programs.

- **The Treasure Island Transportation Implementation Plan** includes a congestion pricing program, parking policies, mandatory pre-paid transit vouchers, ramp metering, and special events and emergency access transportation planning. The program will disincentivize residents' use of personal automobiles and increase the appeal of transit, walking, and bicycling. In addition, the parking policies will utilize parking maximums instead of minimums, and unbundle parking prices. Transit passes would also be mandatory for residential units and hotel guests. Additional TDM programs proposed in this plan include Bay Area Bikeshare stations, carshare availability, and employer TDM programs. In 2014, the San Francisco Transportation Authority was designated as the Mobility Management Agency for Treasure Island, and will be responsible for implementation of TDM on Treasure Island.

- **The Southern Bayfront Strategy** is a collection of neighborhoods and communities along San Francisco's eastern waterfront bounded by Mission Creek to the north and Executive Park to the south. Another 20,000 new households and 38,000 new jobs are planned within four major developments that are moving forward in the next several years through negotiated development agreements (DAs) with the city: Mission Rock, Pier 70, Potrero Power Station, and India Basin. The large DA projects present opportunities to go beyond the framework of the city's TDM Ordinance. Each of the DAs within the Southern Bayfront Strategy includes a "trip cap," a program to monitor and restrict the number of SOV trips allowed to be generated by the projects.

A.10.2.2.2 | Institutional Master Plans

TDM measures are also present in Institutional Master Plans (IMP), which city planning code requires for all medical and post-secondary educational institutions in the City and County of San Francisco;

currently 41 institutions are subject to the requirement. IMPs describe any planned campus expansions and present mitigations for reducing the impact of the expansion on the surrounding neighborhood; this could include TDM measures such as shuttles, changes to parking policy, etc. For example, the IMP prepared by the California Pacific Medical Center in 2008 describes the campus TDM program, which includes elements such as free transit passes, vanpool subsidies, and other measures.

A.10.2.2.3 | Section 163 Requirements and TMASF

Planning Code Section 163 requires that all new development of over 100,000 square feet of new office space (or 25,000 square feet in some districts), or 100 residential units in specific zoning designations undertake measures to mitigate impacts on the transportation system, for the lifetime of the project. Section 163 was first added to the Planning Code in 1985 (Ordinance 414-85) as a means to mitigate the transportation impacts, and thus allow a greater density of development than would otherwise be possible. It was subsequently expanded to all new development of over 100,000 square feet in downtown areas zoned C-3, and has more recently been expanded again to include other non-residential, office space outside of the C-3-O, and residential development

Planning Code 163 requires that project sponsors provide onsite transportation brokerage and management service to building occupants that include coordination, encouragement, and promotion of TDM activities, including:

- Transit and ridesharing
- Reduced parking demand and efficient use of parking
- Provision of car-sharing pods and use of car-sharing services (per Section 166)
- Flex-time or staggered work hours program
- Other activities determined by the Planning Department to be appropriate to meeting the purpose of this requirement

Buildings can elect to meet Section 163 requirements on their own or by contracting with a City-approved provider (or vendor) of transportation brokerage services or administering TDM services on their own. Currently, TMASF Connects, a non-profit organization, is the only City-approved vendor of transportation brokerage services. TMASF was first incorporated as a non-profit in 1989 and began to provide transportation management services in 1990. TMASF provides information support and promotions to its currently 68 member building tenants to reduce drive alone rates. Its member buildings report a single-occupancy vehicle (SOV) mode share of less than 10 percent in the last several years. TMASF's activities include providing a web site with transportation resources for employers and travelers, publishing a newsletter, issuing traveler alerts, and organizing periodic campaigns to promote sustainable commute alternatives.

A.10.2.2.4 | Mission Bay Transportation Management Association

As a condition of the Mission Bay Development Plan, the Mission Bay Transportation Management Association (TMA) was formed and began operating in May 2010. The TMA operates shuttle service to and from BART and Caltrain, facilitates TDM marketing, provides bicycle parking assistance, and provides information via a website. Membership includes all property owners and developers, including the recent addition of the Golden State Warriors with the completion of Chase Arena in Fall 2019.

According to the 2017 Mission Bay Annual Report, annual shuttle ridership has experienced declines since peaking at over 375,000 in 2014 to under 325,000 in 2017. Mission Bay TMA shuttles serve multiple areas of the City, not just Mission Bay, and the service area has changed over time as the district has been built out and partnerships with other areas have been established and ended.

A.10.2.2.5 | Planning Code Requirements

The San Francisco Planning Code contains numerous additional requirements to help ensure new developments include features to support sustainable transportation. For example:

- Unbundled parking is required for residential buildings with ten or more dwelling units
- Carshare parking is required for residential and nonresidential development
- Secure bicycle parking is required across most types of development
- Showers and lockers are required for most commercial uses and for large retail uses.

A.10.3. TDM Policies

A.10.3.1 | Commuter Benefits Ordinance

In August 2008, the City enacted a landmark Commuter Benefits Ordinance (CBO), which became effective on January 19, 2009. The ordinance requires businesses with locations in San Francisco and more than 20 employees to offer commuter benefits such as transit, vanpool, and bicycle programs to their eligible employees. In 2012, the Bay Area Air Quality Management District (BAAQMD) and the Bay Area Metropolitan Transportation Commission implemented a similar program on a pilot basis, but focused on employers with fifty or more full-time employees in the region (the local ordinance applies to employers in San Francisco with at least twenty employees nationwide).

The San Francisco Department of the Environment (SFE) is working with the region to coordinate both the local and regional ordinances for seamless implementation and program management. SFE works with employers with fewer than 50 employees and coordinates with the region when outreaching to employers with 50 or more employees. To date, 2520 employers subject to the SF Commuter Benefits Ordinance have submitted a compliance form, with a cumulative 25,000 employees participating in their employer's commuter benefit program.

A.10.3.2 | SFMTA Commuter Shuttle Policy

Numerous employers, educational institutions, medical facilities, office buildings, and transportation management associations offer shuttle service to their employees, students, and clients. Some buildings are required to provide shuttle service as part of their conditions of approval, and an employer may comply with San Francisco's Commuter Benefits Ordinance by offering a free commute shuttle to employees. The majority of the commuter shuttles are closed systems that provide service to a specific population and are not open to the general public. Most shuttles are provided for free to employees (or students, tenants, etc.).

In 2014, SFMTA launched the Commuter Shuttles Pilot Program to create clear and enforceable locations and guidelines for private shuttle loading and unloading and reduce conflicts with Muni and other vehicles. In October, 2015, SFMTA released a Commuter Shuttle Policy that permits ongoing use of the shared stops subject to additional requirements. In February 2017, SFMTA approved the continuation of the Commuter Shuttle Program, based in part on a mid-year evaluation and commuter shuttles hub study. The hub study, conducted jointly by SFMTA and the Transportation Authority, found that a "hub" model, which would concentrate commuter shuttle stops at a small number of designated locations in the city, would dramatically reduce shuttle ridership, increase driving by current shuttle riders, and increase the risk for crashes in the city. The mid-year evaluation found that the existing program had led to a lower potential for conflicts with Muni, fewer shuttles on small, residential streets, a cleaner vehicle fleet, a reduced potential for service disruptions, including those arising from labor disputes, and increased enforcement for violations of parking laws. The updated program allows the SFMTA to establish shuttle vehicle accessibility guidelines and to issue higher penalties for repeated violations of the shuttle permit terms and conditions.

A.10.3.3 | SFMTA Carsharing Policy

Carsharing programs are encouraged in San Francisco as a means to reduce car ownership and decrease VMT[1]. The precise number of carsharing members in San Francisco is unknown but is likely increasing, as new car sharing vendors like GIG Car Share expand the market.

To further encourage carsharing, SFMTA developed a carsharing policy in 2013. The policy outlines the On-Street Car Sharing Pilot Program whereby private carsharing companies can apply to use on-street parking spaces for carshare vehicles. As of December 2019, 237 on-street parking spaces were reserved for carshare vehicles. A 2017 evaluation of the pilot program found that car share cars enrolled in the program were in use 6 hours a day, relative to 1 hour a day for a private vehicle, and were used on-average by 19 unique users per month.

A.10.3.4 | Parking Management

The General Plan, Planning Code, and Zoning Code guide parking management in San Francisco. San Francisco's existing parking policies are intended to support the city's development, and have been especially successful in the downtown area by limiting the provision of parking provided with new office development. Parking policies are also designed to support the City's Transit First policy through a combination of regulatory controls, revenue transfers, regulations, and incentives. In November 2007, San Francisco voters approved Proposition A, which shifted responsibility for parking regulations, fees, and fines from the Board of Supervisors to SFMTA. In 2007, the Transportation Authority and the Metropolitan Transportation Commission (MTC) applied for and subsequently received a U.S. Department of Transportation (USDOT) Urban Partnership Program (UPP) grant, which includes $19.4 million for a demonstration of variable parking pricing as part of the Federal initiative to fight congestion. SFMTA's SFpark program was a demonstration project funded through the Department of Transportation's Urban Partnership Program wherethe SFMTA used several strategies to make it easier to find a space and improve the parking experience, including:

- Demand-responsive pricing

[1] Cervero, R., Golub, A., & Nee, B. (2007). City CarShare: Longer-term travel demand and car ownership impacts. Transportation Research Record: Journal of the Transportation Research Board, 1992, 70-80.

- Making it easier to pay at meters and avoid citations
- Longer time limits
- Improved user interface and product design
- Improved information for drivers, including static directional signs to garages and real-time information about where parking is available on- and off-street
- Highly transparent, rules-based, and data-driven approach to making changes to parking prices

SFpark piloted and cultivated several emerging technologies, including smart meters, parking sensors, and a sophisticated data management tool. The demonstration ran from 2010-2014, after which SFMTA evaluated the program. The evaluation found several benefits including better parking availability, improved ease of payment, and reduced circling for parking and associated reductions in greenhouse gas emissions and vehicle miles traveled, among other benefits. After the end of the pilot demonstration, the SFMTA Board established an ongoing demand-responsive parking policy, with meter rate adjustments made approximately once a quarter. Using meter payment data to estimate parking occupancy, the SFMTA raises the rate by $0.25 on blocks where average occupancy is above 80%, lowers the rate $0.25 on blocks where average occupancy is below 60%, and does not change the rate on blocks that hit the target occupancy between 60% and 80%.

A.10.4. TDM Programs

A.10.4.1 | Emergency Ride Home Program

The San Francisco Department of Environment (SFE)'s Emergency Ride Home (ERH) program promotes sustainable commuting by ensuring a free or low-cost ride home in cases of emergency. The program pays for a ride home for employees of registered businesses in the event of illness, severe crisis, unscheduled overtime, or disruption of carpool or vanpool schedules. The program is designed to remove some of the risks and reliability concerns associated with the choice of carpooling or relying on transit service for the commute trip. SFE promotes the ERH program to City employees and all San Francisco employers and commuters.

A.10.4.2 | Carpools

SFMTA encourages the use of carpools and vanpools during the morning and evening commutes. The City provides a casual carpool pick-up location on Beale Street between Howard and Folsom, adjacent to the Temporary Transbay Terminal site. At this location, there is signage indicating several East Bay destination locations.

SFMTA also administers a program through which major employers (those with Transportation Brokerage Services described above) may provide parking for employee carpool vehicles (three or more riders) in City-owned garages at a reduced rate. The City also provides a limited amount of designated on-street parking in the downtown area for registered/permitted vanpool vehicles.

A.10.4.3 | Bikesharing

Bay Wheels, formerly known as Ford GoBike and Bay Area Bike Share, opened on August 29, 2013 with 700 bikes at 70 stations in San Francisco and along the peninsula as a pilot program of the Bay Area Air Quality Management District and the Metropolitan Transportation Commission (MTC). Originally operated by Alta Bikeshare, MTC transferred operations to Motivate in May of 2015, and in 2017 Motivate expanded the program to 5 Bay Area Cities with 540 stations and 7,000 bicycles, including a substantial expansion within San Francisco. Currently, there are over 300 stations in San Francisco. The bike share system is integrated with the clipper card program, allowing both individual trips and memberships to be accessed via the clipper card. In 2018, Lyft purchased Motivate and assumed operations of Ford GoBike, changing the name to Bay Wheels in 2019.

During 2018 and 2019, San Francisco also conducted a pilot permit for JUMP (owned by Uber) to provide dockless electric assist bikes (e-bikes) on City streets. In 2019, SFMTA expanded this to other operators. Currently, dockless e-bikes make up half of the Bay Wheels fleet. In 2023, the MTC and Lyft reached an agreement on a $16 million expansion of the Bay Wheels system. The expansion includes over 1,000 next-generation docked-only e-bikes and 19 new stations in San Francisco. Several stations will support in-dock charging to reduce operational vehicle miles travelled due to less battery swapping. The expansion also includes membership price reductions and a discounted student membership pilot.

A.10.4.4 | E-Bike Delivery Pilot

The City of San Francisco's Department of the Environment is conducting a pilot program that involves providing 35 free electric bikes to delivery drivers. The pilot is designed to reduce carbon emissions and determine the viability of e-bikes for delivery services. Data will be collected from the e-bikes and compared to a control group of delivery drivers using cars, helping the program operators to evaluate the validity of the delivery e-bikes. The one-year pilot program will provide food delivery workers with e-bikes to use for making deliveries. The program will monitor the impact e-bikes have on delivery efficiency and worker revenue while assessing bike safety.

A.10.5. TDM Studies and Plans

A.10.5.1 | Travel Demand Management Ordinance

The SFMTA, City Planning Department, and SFCTA partnered to craft the Travel Demand Management (TDM) Ordinance as part of the Transportation Sustainability Program (TSP). The TDM Ordinance introduced TDM requirements on new construction or changes of land use in San Francisco, and provides a toolkit to aid developers in designing an appropriate TDM program. The toolkit will be used to ensure a consistent approach to including TDM in new development and ensuring that the most effective measures are prioritized. The inter-agency team is committed to analyzing the effectiveness of TDM measures, through research, to improve the toolkit by prioritizing the most effective measures. The San Francisco Board of Supervisors approved the ordinance on February 7, 2017.

The SF Moves Pilot was conducted through collecting data on Mission residents' travel habits using daily text-message polls asking participants to report the number of sustainable trips and car trips they took each day during the Challenge. The more sustainable trips a participant reported and

the more text polls they responded to, the greater their chances of winning a prize.

The target geographic area of the Challenge was San Francisco's Mission neighborhood - specifically the 4-block radius around the 20th and Shotwell Slow Streets, the latter of which was made permanent in August 2021. SFE chose this area for the pilot due to its ample access to low-carbon transportation options, and high concentration of BIPOC residents.

The target audience of the Challenge was Mission residents with a particular focus on Spanish-speaking and low-income residents. The Challenge was run in both English and Spanish, and garnered significant participation in both languages with 75% English language participation and 25% Spanish language participation.

A.10.5.2 | San Francisco Transportation Plan

The San Francisco Transportation Plan 2050 identifies TDM as a systematic approach to shift how, when, and where people travel through programs and policies and an effective tool to address the rise in congestion associated with population and job growth. The SFTP recommends that San Francisco establish a vision and measurable goals for the future TDM strategy to guide development, implementation, and monitoring; identify priority geographic areas, trip types, travel markets, traveler types, and success metrics to guide program selection and implementation details; and provide guidance for how to incorporate ongoing evaluation to track impacts on modeshift and cost effectiveness and guide future TDM investments. This recommendation is reflected in the upcoming TDM Market Analysis and an upstate to the 2017 TDM Plan.

A.10.5.3 | SF Business Relocation TDM Project

This is an effort led by SFMTA to develop and operate a program focused on addressing the transportation needs of employees at businesses that are opening in or relocating to new locations in San Francisco. The program was originally scoped to provide transportation planning services and materials to businesses to help their employees travel to work in their new location without driving alone, thus setting a more sustainable commute habit from the get-go, rather than trying to change habits after they have already been set.

The intention of targeting businesses with a TDM intervention as they relocate was to capitalize on a window of opportunity when large numbers of commuters are selecting a new route to work and have not yet formed mode habits that are difficult to influence. The emergence of COVID and resulting health orders changed the business and commute environment such that identifying and targeting businesses as they moved into San Francisco or moved office locations within San Francisco has become infeasible.

However, public health orders requiring office-based businesses to have their employees work-from-home to the greatest extent possible has created a new form of "relocation" - first from the office to remote work locations, followed by a substantial shift of employees returning to their offices when restrictions are eased. After months of working remotely, each returning employee will be selecting a new route and mode(s) to their office, shaped by new motivations and constraints, opening a similar opportunity to influence mode choice as exists when a business relocates their office.

For these reasons SFMTA amended the project scope to shift the target population from businesses as they relocate between offices, to all office-based businesses as changing public health orders allow an increasing number of employees to return to office settings. Given the changes in return to office trends and the city's recovery, this project was paused and will be rescoped to reflect learnings from Phase 2.

San Francisco Trip Reduction Efforts:
Relationship to Regional Transportation Control Measures (TCMs)
in the 2017 Clean Air Plan

Regional TCM	Local Implementation
A-1. Local and Area-wide Bus Service Improvements.	The San Francisco Municipal Transportation Agency (SFMTA) is currently implementing MuniForward, a major program to upgrade Muni service throughout the city. It includes service and route changes, capital upgrades, and other enhancements to nearly every major bus and rail transit route in the city. Upgrades are designed to make Muni faster and more reliable, and to improve safety. The city also has several major transit improvement projects underway. The Van Ness Bus Rapid Transit Project is currently under construction. The Geary Bus Rapid Transit Project has a Locally Preferred Alternative (LPA) that secured state and federal environmental clearance by 2018. SFMTA is also in the process of replacing its fleet with a goal towards zero emissions.

San Francisco Trip Reduction Efforts:
Relationship to Regional Transportation Control Measures

TCM	Local Implementation
A-2.Improve Local & Regional Rail Service	The Muni Forward project mentioned above includes numerous upgrades to Muni rail service. Five of the seven Muni rail line have capital projects underway (either in the study or implementation phase) to improve service quality and reliability. The Transportation Authority continues to advocate and program funds for local and regional rail improvement projects, such as Phase 2 of the Third Street Light Rail Project (Central Subway), Caltrain electrification and signal improvements, BART station improvements, and the downtown extension of Caltrain and High Speed Rail to the rebuilt Transbay Terminal. Construction on Central Subway began in 2011 and the Transbay Terminal opened in 2019. The Transportation Authority completed the feasibility study for a major upgrade to the M-Ocean view line that would underground portions of the line and extend it to Park Merced. The Transportation Authority and SFMTA recently completed a Subway Vision that creates a framework for subway expansion throughout the city and identifies likely corridors. The corridors from the Subway Vision are currently being evaluated as part of the ConnectSF Transit Corridor Study. The Transportation Authority partnered with the Metropolitan Transportation Commission and numerous other agencies to complete a Core Capacity Transit Study that recommended a suite of projects to address transit crowding and unreliability in corridors into downtown San Francisco. The Transportation Authority will be partnering with BART and Capitol Corridor to further evaluate new proposed BART and conventional rail alignments across the Bay.
B-1. Freeway & Arterial Operations Strategies	Implementation of this TCM is being coordinated by Caltrans and the Metropolitan Transportation Commission (MTC). SFMTA's SFgo program is developing an integrated traffic management system managed from a centralized transportation control center. In addition, the Program is working with Caltrans to coordinate freeway improvements with the City's traffic management systems. As part of this project, SFMTA is working to replace aging signal controllers and install signals with transit priority capabilities on key transit routes.

San Francisco Trip Reduction Efforts:
Relationship to Regional Transportation Control Measures

TCM	Local Implementation
B-2. Transit Efficiency & Use	Major transit operators in San Francisco, including Muni, BART, AC Transit, Golden Gate Transit, Caltrain, and SamTrans, all accept the Clipper card for fare payment. In addition, BART is upgrading signage at its downtown stations to ease wayfinding. Muni is upgrading signage, lighting, and other architectural aspects of its downtown stations. San Francisco has also worked to have discounted or free transit passes be part of TDM and mitigation programs required of new developers such as Candlestick Point/Hunters Point Shipyard, Treasure Island, California Pacific Medical Center, and Park Merced. San Francisco State University has implemented a discount transit pass for trips on BART and Muni.
B-3. Bay Area Express Lane Network	Implementation of this TCM is being led by MTC. An HOV pricing structure exists on the approaches to San Francisco via the San Francisco Oakland Bay Bridge and the Golden Gate Bridge during peak commute hours, with separate HOV lanes on the Bay Bridge. Express buses will continue to operate in San Francisco and will be prioritized through the new Transbay Terminal. The Transportation Authority completed the Freeway Corridor Management Study and is initiating a Caltrans Project Initiation Document (PID) and environmental clearance process for potential express lanes alternatives that may include high occupancy vehicle or high occupancy toll lanes on portions of U.S. 101 and I-280. These lanes would connect to high occupancy toll lanes being implemented on U.S. 101 in San Mateo County.
B-4. Goods movement Improvements & Emission Reduction Strategies	Implementation of this TCM is being led by MTC and BAAQMD. San Francisco will work with BAAQMD to implement grant programs that fund diesel emission reduction programs. As part of ConnectSF, the Transportation Authority is evaluating changes in the delivery of goods in San Francisco and opportunities to increase the efficiency and sustainability of freight movement in the City.

San Francisco Trip Reduction Efforts:
Relationship to Regional Transportation Control Measures

TCM	Local Implementation
C-1. Voluntary Employer-Based Trip Reduction Program.	The San Francisco Department of the Environment (SFE) currently conducts many of the City's employer based Transportation Demand Management (TDM) activities, funded in part through Prop K. These activities currently include the commuter benefits program; Emergency Ride Home (ERH) program; bicycle fleet (e.g. CityCycle) program; and regional ridesharing program. The San Francisco Planning Department also conducts compliance monitoring of office buildings required to have a TDM program. In 2017, city agencies developed a joint San Francisco TDM Plan: 2017-2020. This workplan, based on the 2014 strategy, identifies the employer-oriented policies, projects, and programs the city can implement to accomplish its TDM goals..
C-2. Safe Routes to School & Safe Routes to Transit Programs	The San Francisco Metropolitan Transportation Agency manages San Francisco's Safe Routes to Schools program, which conducts education, encouragement, and related programs at elementary, middle and high schools in San Francisco. These programs are designed to encourage schoolchildren to walk and bicycle to school rather than driving in the family car.

San Francisco Trip Reduction Efforts:
Relationship to Regional Transportation Control Measures

TCM	Local Implementation
C-3. Ridesharing Services & Incentives	SFE is the MTC-delegated agency that oversees the Regional Rideshare Program in the City, including introducing employers to TDM programs, promoting rideshare, and encouraging and assisting employers to implement rideshare. SFMTA promotes the use of carpools and vanpools during the morning and evening commutes. The City provides a casual carpool pick-up location for evening commutes on Spear Street between Howard and Folsom Streets. SFMTA also administers a program through which major employers may provide parking for employee carpool vehicles (3 or more riders) in City-owned garages at a reduced rate. The City also provides a limited amount of designated on-street parking in the downtown area for registered vanpool vehicles. Finally, buildings subject to Section 163 Planning Code Requirements are required to encourage alternatives to driving alone, including through ridesharing and carpooling.
C-4. Conduct Public Outreach & Education	Implementation of this TCM (e.g., Spare the Air Days) is occurring through the Air District, MTC, and transit operators throughout the region, as well as through local agency activities, including the ongoing SF Moves pilot project to provide outreach and education to neighborhoods in San Francisco, and the completed TDM Partnership Project which involved employer outreach and education. Additionally, buildings subject to the Section 163 Planning Code requirement must engage in outreach and education activities, such as those provided by the downtown TMA.
C-5. Smart Driving	Implementation of this TCM is being led by MTC. San Francisco does have a traffic calming program, funded through Prop K and implemented by SFMTA, which includes speed reduction on arterials streets. However, speeding on freeways in San Francisco is generally not a major concern due to relatively dense traffic conditions within the city limits.

San Francisco Trip Reduction Efforts:
Relationship to Regional Transportation Control Measures

TCM	Local Implementation
D-1. Bicycle Access and Facilities Improvements.	Since the Bicycle Plan injunction was lifted in 2010, the City and County have moved rapidly to implementation. The SFMTA has installed more than 50 miles of bicycle lanes since 2008, using Prop K as well as regional funding for many projects. Progress on the Plan has also included separated and buffered bike lanes, bike boxes at intersections, colored pavement treatments to increase the visibility and safety of bicycling on City streets, sharrows, and bike racks and bicycle corrals. Several major bicycling improvement projects have been recently completed or will be under construction soon, including implementation of new protected bicycle lanes on Masonic Street, 2nd Street, 7th/ 8th Street, Division/13th Street, 17th Street, Folsom/Howard Street, San Jose Avenue, upper Market Street, and others.
D-2. Pedestrian Access and Facilities Improvements.	The General Plan and Planning Code have supported pedestrian friendly, transit-oriented development for decades, which is referred to as the City's Transit First Policy. The Transportation Authority funds pedestrian-related projects through Prop K and programs other fund sources to support pedestrian improvements. Many of these projects fall under SFMTA's programs related to traffic calming, pedestrian and bicycle safety, and school area safety, and are also implemented through new development compliance with the Better Streets Plan which sets standards for street improvements associated with new development. Multi-agency efforts to coordinate major construction opportunities with pedestrian projects have also improved through the Follow-the-Paving process. In 2014, following a directive from the Transportation Authority Board, city agencies launched the Vision Zero program aimed to eliminate traffic injuries and fatalities by 2024. Because pedestrians typically make up more than half of fatalities in the city, work has involved focusing on improving conditions for pedestrians, especially on corridors identified as high injury pedestrian corridors.

San Francisco Trip Reduction Efforts:
Relationship to Regional Transportation Control Measures

TCM	Local Implementation
D-3. Local Land Use Strategies.	The Transportation Authority promotes legislative activities that encourage smart growth and more sustainable transportation and development-related investment decisions by the City and developers. ABAG and MTC have been working for years to encourage the region's municipalities to plan for compact, transit-oriented development to meet the region's sustainability goals. The most recent regional transportation plan (Plan Bay Area), called for focused growth around Priority Development Areas (PDAs), which largely center around existing or planned transit hubs. The Transportation Authority continues to work closely with City agencies to plan multimodal transportation improvements to support focused growth in San Francisco's 12 PDAs.
E-1. Value Pricing Strategies	The Transportation Authority has been designated as the Treasure Island Mobility Management Agency (TIMMA). TIMMA is working to implement congestion pricing on Treasure Island, as required in the development agreement prepared for the island. Additionally, the Transportation Authority continues to study the potential for congestion pricing or alternative approaches to manage congestion in downtown San Francisco. In 2018, the Transportation Authority began a fresh look at the idea of congestion pricing with updated data and analysis and a full community engagement process.

San Francisco Trip Reduction Efforts:
Relationship to Regional Transportation Control Measures

TCM	Local Implementation
E-2. Parking Policies to Reduce VMT	In September 2009, the Transportation Authority adopted the San Francisco On-Street Parking Management and Pricing Study. SFMTA piloted the study's key recommendations through the SF*park* program and adopted demand responsive parking pricing for all City-owned garages and street parking in late 2017. The City has also addressed private off-street parking by eliminating minimum parking requirements downtown and in specific neighborhoods and commercial corridors, in some cases replacing them with maximum parking requirements. Unbundled parking, bicycle parking, and carshare parking requirements have also been implemented. In 2016, the Transportation Authority completed a Parking Supply and Utilization Study that considered further parking policy reform to manage auto trip demand. Rather than pursue any of the strategies analyzed, the study recommended that agencies advance existing parking-related initiatives, including the Residential Parking Permit Evaluation and Reform Project and implementation of the city's proposed TDM Ordinance.
E-3. Transportation Pricing Reform.	The Transportation Authority continues to work with MTC and the Bay Area Partnership to identify new revenue sources. The Authority developed major transportation pricing studies, including the Mobility, Access, and Pricing Study and the Parking Supply and Utilization Study, to examine the potential for pricing to be used in combination with new technology and transportation enhancements to improve system performance and reduce emissions.

APPENDIX 12

LAND USE IMPACTS ANALYSIS PROGRAM

KEY TOPICS

- City Land Use Development Process
- CMA-Regional Land Use Coordination
- Neighborhood Transportation Plans and Projects
- Transportation Impact Analysis Studies

A.12.1. City Land Use Development Process

The General Plan and the City Charter are the primary policies that guide the City's review of land development impacts on the transportation network. San Francisco is a Charter City, and it has a consolidated city and county government. An eleven-member Board of Supervisors serves as the legislative body for the City's unified city and county government. The City Planning Commission (CPC) has responsibility for land use decision-making throughout the City. The Mayor appoints the seven members of the CPC. Among the responsibilities of the CPC are the following:

- Exclusive authority to act on General Plan policies and area land use plans (per City Charter);
- Holding public hearings on all appeals to Negative Declaration determinations and certification of local Environmental Impact Reports; and
- Discretionary actions on Conditional Use permits, (which can be appealed to the Board of Supervisors) and decisions by the Zoning Administrator, Discretionary Reviews, and others that can be appealed to the Board of Appeals

In addition, both the CPC and the Board of Supervisors must approve all rezoning.

The Planning Department's land use responsibilities include transportation matters. The Planning Department has primary responsibility for assessment of the transportation impacts of development proposals, and to determine consistency with land use and transportation policies in the General Plan. The existing local regulations include measures to mitigate project-specific transportation impacts within the policy and priority framework of the General Plan, the long-range transportation plan, and the Capital Improvement Program (CIP) of the CMP.

The City already has in place an extensive process for evaluating the transportation impacts of land development proposals. This process, which ensures the City's compliance with State and Federal environmental review requirements, is the responsibility of the Planning Department. With the passage of California Senate Bill 743 (see section A.12.4), the City aligned its CEQA review and development approval process with RTP goals such as a Vehicle Miles Traveled (VMT) reduction target. Nevertheless, as CMA, the Transportation Authority has a role in ensuring that the impacts of land use decisions on the transportation system are analyzed with a uniform methodology, consistent with the long-term strategic goals of the General Plan and the San Francisco Transportation Plan.

A.12.1.1 | Consistency with Long Term Strategic Goals of General Plan and San Francisco Transportation Plan

San Francisco has been able to maintain one of the highest levels of transit use among U.S. cities because of its relatively high-density development and because topography and geography limit vehicular access routes to and from the City.

There have been significant numbers of non-resident commuters into the city for over a century. To improve the balance of housing and jobs, during the 1980s San Francisco actively promoted new residential development. Extensive revisions to the City's General Plan and rezonings were undertaken. Each of these land use plans—the Downtown Plan, Rincon Hill, North of Market, Chinatown, Neighborhood Commercial, Van Ness Avenue, South of Market, and Mission Bay—incorporated measures to retain and enhance opportunities for residential development.

In recent years, several more area plans have been developed or adopted including: the Market/Octavia Plan, Eastern Neighborhoods Plan, Balboa and Glen Park BART Station Area Plans, the Treasure Island Plan, the Transbay Center District Plan, and the Central SoMa Plan. In addition, housing development has been promoted by the policies of the San Francisco Redevelopment Agency and its successor agency, the Office of Community Investment and Infrastructure, in various areas, including the Rincon Point/South Beach, Yerba Buena Gardens, Transbay, the Bayview Hunters Point Redevelopment Plan Areas, Candlestick Point-Hunters Point Shipyard Phase 2, Parkmerced, and Visitacion Valley.

San Francisco's continued role as a regional employment center and its policy of housing development have had an impact on the demand for transportation in the city. A primary mission of the Transportation Authority is to strategize investment in the city's transportation infrastructure and promote the development of demand management tools to address growing travel demand. Infrastructure investment is intended both to address future growth in transportation demand and to improve the city's current transportation system. Demand management is needed to promote a balanced and cost-effective transportation system.

In past decades San Francisco's primary transportation challenge was to absorb new jobs downtown without proportionately increasing the number of workers commuting by car. That challenge was addressed with the construction of BART and MUNI services focused on downtown commuting, combined with limits on parking provision.

Today San Francisco's transportation challenges are more varied. They are numerous and located across the city, throughout the various neighborhoods as well in core areas, which can expect not only employment growth but also extensive residential growth. Challenges include competitive transit service for non-commute and reverse commute trips; neighborhood parking management; safety for pedestrians and bicyclists; improved transit reliability and speed through the development of a transit priority network; and reducing emissions of pollution and greenhouse gases. Recent innovations in transportation are rapidly changing how people navigate our city streets. These emerging mobility services and technologies include ride-hailing services (such as Uber & Lyft), microtransit (Via), app-based ridesharing, bike/e-bike/car-sharing, courier network services, autonomous vehicle technologies, and more. Additionally, post-pandemic continued remote work for some types of occupations presents further challenges.

Regional efforts to coordinate land use and transportation include Priority Development Areas (PDAs) and development of a regional High Occupancy/Toll (HOT) lane system. In addition, state laws promulgated in 2006 and 2007 require greater integration of land use and transportation planning

processes in recognition of the climate change challenge. Climate change issues and initiatives are discussed further in Section 6.3.5, below.

Underlying these needs is the challenge of finding new mechanisms to pay for needed transit and other improvements as development decisions are made. A discussion of the city's initiative to update transportation impact and mitigation fees is provided in Section A.12.4.

NOTE: California Government Code Section 65089(b)(4) requires the land use program to assess the impacts of land development on regional transportation systems. In the 1991 San Francisco CMP this was interpreted to mean impacts on the CMP roadway network. However, the federal Intermodal Surface Transportation Efficiency Act (ISTEA), passed in 1991, explicitly requires the development of a metropolitan transportation system (MTS), including both transit and highways. As discussed in Chapter 3, MTC contracted with the Transportation Authority, acting as CMA, to help develop the MTS and to use the CMP process to link land development decisions to impacts on the MTS. For purposes of the land use analysis program, the San Francisco CMP will use the San Francisco component of the MTS, but conformance with roadway level of service (LOS) standards will continue to be assessed using the CMP roadway network, which is a subset of the multimodal MTS.

A.12.2. CMA-Regional Land Use Coordination

A.12.2.1 | CMP Land Use Impacts Analysis

One key aspect of the CMP approach to land use impacts analysis is that, pursuant to state law, the Transportation Authority will also be responsible for reviewing transportation analysis of specific development projects under CEQA and determining the consistency of these "sub-area" analyses with the citywide model. Examples of this role include our work to support the Bayview/Hunters Point Redevelopment Area Environmental Impact Report (EIR), the Transbay Center District Plan EIR, and the Market/Octavia Better Neighborhoods Plan EIR, and the Central SoMa Plan and EIR.

A.12.2.2 | MTC/CMA Transportation/Land Use Work Plans

Pursuant to MTC's agreements with county CMAs over coordination of transportation and land use, the Transportation Authority focuses on the following activities to help integrate transportation and land use decisions:

First, the Transportation Authority prioritizes transportation planning funds and capital investments that meet performance criteria or demonstrate a strong vision for coordinated land use and transportation development.

The Transportation Authority provides technical guidance and assistance with the planning process to partner agencies, communities, and project sponsors, including neighborhood planning, thereby facilitating access to discretionary state and regional grants and providing for coordinated county-level input into the regional transportation planning process.

The Transportation Authority promotes legislative activities that encourage smart growth, more sustainable transportation and development-related investment decisions by the City and developers, and more efficient travel decisions by all transportation system users. Examples include the Transportation

Authority's support of the State Resources Agency's revisions to the CEQA Guidelines Transportation Checklist and our work with local partner agencies to reform the City's CEQA transportation impact analysis process.

The Transportation Authority coordinates county-level input into the regional Sustainable Communities Strategy (SCS), the RTP, and related regional land use planning efforts.

Finally, the Transportation Authority conducts project and program delivery oversight to ensure efficient use of funds and effective project delivery.

A.12.2.3 | Plan Bay Area and Priority Development Areas

ABAG and MTC have been working for years to encourage the region's municipalities to plan for compact, transit-oriented development to meet the region's sustainability goals. This work was previously conducted through the FOCUS program that invited municipalities to nominate locations to be considered as Priority Development Areas (PDAs) or Priority Conservation Areas (PCAs) based on regionally established criteria. In 2013, the region adopted Plan Bay Area, the first SCS for the San Francisco Bay Area prepared pursuant to Senate Bill 375 (Steinberg). PDAs and PCAs are key "building blocks" of the region's land use strategy presented in Plan Bay Area. ABAG and MTC approved an update to 2017's Plan Bay Area 2040 (Plan Bay Area 2050) in October 2021.

Prior to 2019, San Francisco had identified twelve PDAs, generally in the eastern part of San Francisco, and generally locations that have been comprehensively planned as part of an Area Plan process. San Francisco's PDAs were first identified and approved by the San Francisco Board of Supervisors in 2007 and have been updated since then to reflect slight changes to boundaries. In August 2015, ABAG approved three additional regional PCAs that cross San Francisco: California Coast Trail (along the Pacific coast), San Francisco Bay Water Trail (including access points in San Francisco's Marina District), and San Francisco Bay Trail (along the Embarcadero, through the Marina and over the Golden Gate Bridge). Five Priority Conservation Areas (PCAs) have been adopted by San Francisco since 2015: Palou Phelps Natural Area, Bayview Hill Natural Area, Green Connections-McLaren Park Pivot, Crosstown Trail-Connecting Twin Peaks Bio-Region/Glen Canyon, and the San Francisco Bay Area Water Trail.

In May 2019, the MTC Commission and Executive Board adopted an update to the Regional Growth Framework, including updated criteria for PDAs and PCAs, and a new Priority Production Area (PPA) pilot program, which promotes middle-wage jobs and support the region's industrial economy. San Francisco worked with MTC to expand the coverage of existing PDAs and identify four new PDAs, eight new PCAs, and one PPA designation as part of the ongoing update to Plan Bay Area. These additional PDAs ensure their eligibility for regional OBAG and other funding, and that more of the region's areas well-served by transit and with high access to opportunity are included in the PDA framework and considered for investment as they grow. In total, fifteen Priority Development Areas (PDAs) have been adopted by the City (a map of the PDAs can be found in Chapter 6).

As a part of Plan Bay Area, the region committed to identify funding incentives for PDAs and PCAs, most significantly through the One Bay Area Grant (OBAG) Program which provides a four or five year framework for the federal Surface Transportation Program and the Congestion Mitigation and Air Quality Improvement Program funds programmed by MTC. OBAG Cycle 1 covered Fiscal Years 2012/13 through 2016/17; OBAG Cycle 2 covered Fiscal Years 2017/18 through 2021/22, and OBAG Cycle 3

covers Fiscal Years 2022/23 through 2025/26. OBAG Cycle 2 built upon OBAG Cycle 1 with an added focus on affordable housing and anti-displacement policies in light of the region's current housing crisis. OBAG Cycle 3 built further upon OBAG Cycle 2, requiring compliance with state housing laws related to accessory dwelling units, density bonuses, and the Housing Accountability Act. Approximately 50% of OBAG Cycle 3 funds are passed to county Congestion Management Agencies (CMAs), including the Transportation Authority for San Francisco, to nominate projects that help advance the transportation and land use vision expressed in Plan Bay Area 2050. For the OBAG Cycle 3 county grant program:

- Funds were distributed to the region's nine CMAs using a funding formula that was based 50 percent on population, 20 percent on future housing growth assigned through the Regional Housing Needs Allocation, and 30 percent on housing production between 2007 and 2019. The formula placed additional emphasis on affordable housing, defined as including very low-, low-, and moderate-income households.
- Scoring methodologies were required to provide a reward for jurisdictions with the most effective affordable housing and anti-displacement policies.
- San Francisco and the other larger CMAs were required to program 70 percent of funds to support PDAs (smaller CMAs were required to program 50 percent of funds to support PDAs).
- To be eligible to receive funds, all jurisdictions were required to have a certified Housing Element, have adopted a Complete Streets policy, and have complied with state housing laws related to surplus lands, accessory dwelling units, density bonuses, and the Housing Accountability Act. .
- Jurisdictions were required to adopt Local Road Safety Plans (e.g. Vision Zero in San Francisco), and priority was given to funding projects that align with and support these plans.
- Fund levels were increased for Healthy, Safe, and Sustainable Streets projects and implementation of projects in Equity Priority Communities that have been prioritized through Community-Based Transportation Plans or Participatory Budgeting processes.

Refer to the Transportation Authority's OBAG page (see the Bibliography) for the list of funded projects.

A.12.2.4 | Multi-Agency Land Use and Transportation Studies

In addition to projects identified to receive PDA Planning Funds, San Francisco is leading or plans to lead several studies in which transportation is closely tied to land use development. All planned development areas are located within PDAs and involve a multi-agency approach in which the Transportation Authority has a supporting role.

A.12.2.4.1 | New Transbay Rail Crossing - Link21

Following from the long-range recommendations of the Core Capacity Transit study (CCTS), BART is conducting a multi-jurisdictional planning process to identify one or more new potential transbay rail crossings. This study is being conducted jointly with Capitol Corridor and will evaluate both BART and standard gauge rail crossings of the San Francisco Bay. The Transportation Authority, along with other city agencies, will be coordinating closely with BART, Capitol Corridor, and other agencies, stakeholders, and the public on this study as it unfolds. This study will identify a preferred alternative for a transbay rail crossing.

A.12.2.4.2 | ConnectSF

The San Francisco Department of Planning, SFMTA, and the Transportation Authority are jointly leading the development of a long-range plan for San Francisco known as ConnectSF. This process includes the development of an updated San Francisco Transportation Plan (SFTP 2050) by the Transportation Authority and an updated General Plan Transportation Element by the Planning Department. The process began by developing a comprehensive vision for the future of transportation that considers how a combination of transportation and land use policy and investments can provide an effective, sustainable, and equitable future for San Francisco. The effort produced a 50-year roadmap to arrive at that future, including policies, planning, project development, and funding strategies. The key outputs for the program include a vision document 2018, the Transit Strategy, the Streets and Freeways Strategy, the SFTP 2050, and an update to the Transportation Element of the San Francisco General Plan.

The ConnectSF team engaged a diverse set of stakeholders to understand priorities and shape study recommendations.

A.12.3. List of Neighborhood Transportation Plans and Projects

A list of plans developed with the support of the Community Based Transportation Planning program and the Neighborhood Transportation Improvement Program is provided below.

The Community Based Transportation Planning program supported development of the following plans:

- Visitacion Valley and Portola Community Based Transportation Plan (2023)
- Lake Merced Pedestrian Safety Project Community Based Transportation Plan (2021)
- Portsmouth Square Community Based Transportation Plan (2021)
- Bayview Community Based Transportation Plan (2020)
- Western Addition Community Based Neighborhood Transportation Plan (also funded with NTIP funds) (2017)
- Chinatown Neighborhood Transportation Plan and Pilot Study (2015)
- Potrero Hill Neighborhood Transportation Plan (2015)
- Western SOMA Neighborhood Transportation Plan (2012)
- Bayview Hunters Point Neighborhood Transportation Plan (2010)
- Columbus Avenue Neighborhood Transportation Plan (2010)
- 19th Avenue Park Presidio Neighborhood Transportation Plan (2008)
- Mission-Geneva Neighborhood Transportation Plan (2007)
- Mission South of Chavez Neighborhood Transportation Plan (2007)
- Tenderloin-Little Saigon Neighborhood Transportation Plan (2007)

The Neighborhood Transportation Program has recently supported the following planning projects (* indicates projects that are underway):

- District 1: Multimodal Transportation Plan (anticipated 2024)*
- District 1: Golden Gate Park Stakeholder Working Group and Action Framework (2021)

- District 1: Fulton Street Safety Project (2020)
- District 3: Walter U Lum Place Public Space Study*
- District 4: District 4 Mobility Improvements Study (2021)
- District 5: Octavia Boulevard Circulation and Accessibility Study Update (2023)
- District 6: Treasure Island Supplemental Transportation Study (2023)
- District 7: Ocean Avenue Action Plan (2023)
- District 7: Inner Sunset Multimodal Safety and Access Study*
- District 9: Alemany Realignment Study (2017)
- District 10: District 10 15 Third Street Bus Study (2020)
- District 11: Alemany Safety Project (2020)

A.12.4. Transportation Impact Analysis Studies

A.12.4.1 | Uniform Land Use Analysis Methodology

The Transportation Authority uses tools and analysis techniques that use regionally-consistent land use assumptions. For example, in updating the SFTP the Transportation Authority used land use forecasts developed by the Planning Department (subject to regional requirements for consistency with ABAG), generated new estimates of future travel demand, and tested alternative projects and investment strategies to address those future transportation needs.

A.12.4.2 | Transportation Sustainability Fee

In the City and County of San Francisco the only citywide transportation impact fee until recently was the Transit Impact Development Fee (TIDF). First enacted in 1981, the Downtown TIDF ordinance was enacted as a means to have new development pay its fair share for expanded transit capacity to serve that development. TIDF assesses a one-time fee per square foot on new or converted office space in the downtown area. The fee was imposed on most nonresidential development in San Francisco and not on residential development. The 2004 TIDF ordinance established a fee schedule, which is subject to annual adjustment without further action by the Board of Supervisors to reflect changes in the relevant Consumer Price Index, as determined by the City Controller. The impact fee levied on developers must be related to providing new or expanded transit service to support peak period travel generated by new development (including any costs associated with operations or capital). The need for transit services as a result of new development must be established. Furthermore, the proposed expenditures of the fee and the dollar amount of the fee must also have a "nexus" to the development project impacts. The fee schedule was updated in February 2013, based on a nexus study completed in 2011, and is shown in Table A12-2.

Table A12-2: 2013 TIDF Ordinance Fee Schedule

LAND USE CATEGORY	TIDF PER SQ. FT. OF DEVELOPMENT
Visitor Services	$12.64
Medical and Health Services	$13.30
Cultural/Institution/Education	$13.30

Museums	$11.05
Retail/Entertainment	$13.30
Management, Information and Professional	$12.64
Production/Distribution/Repair	$6.80

Based on another nexus study completed in 2015, the Transportation Sustainability Fee (TSF) was adopted and went into effect in December 2015. The TSF replaces TIDF and would raise new revenue to expand the transportation system as San Francisco grows. New commercial developments, market-rate residential developments with more than 20 units, and certain large institutions will be required to pay the TSF. Affordable housing developments, subsidized middle-income housing, market-rate housing with less than 20 units or less and most nonprofit developments are exempt from the fee. Table A12-3 shows the latest fee schedule (San Francisco Planning Code: Section 411A).

Table A12-3: TSF Ordinance Fee Schedule

LAND USE CATEGORY	TIDF PER SQ. FT. OF DEVELOPMENT
Residential, 21-99 units	$7.74
Residential, all units above 99 units	$8.74
Non-Residential, except Hospitals and Health Services, 800-99,999 gsf	$18.04
Non-Residential, except Hospitals and Health Services, all gsf above 99,999 gsf	$19.04
Hospitals	$18.74
Health Services, all gsf above 12,000 gsf	$11.00
Production, Distribution and Repair	$7.61

Currently, the TIDF generates about $24 million a year on average. The TSF is projected to add about $14 million a year, raising nearly $1.2 billion for transportation improvements over 30 years, or roughly $430 million in net new revenue. The revenues from the fee may subsidize capital and operating expenses for existing and new transit service. New development generates more transit trips, which add to the already heavily utilized transportation system, especially in the downtown area during peak periods. This, in turn, creates a greater burden on the City transit system. Because transit operates at or near capacity during peak periods, ridership growth must be addressed through increased Muni service frequencies. However, constrained infrastructure (e.g., Market Street tunnel) and reduced operating funding (e.g., from the state) limit the ability of Muni to increase peak-period service.

The TSF is part of a larger effort, the Transit Sustainability Program (TSP), that seeks to improve and expand upon San Francisco's transportation system to help accommodate new growth. It belongs to the "Invest" component of TSP that aims to invest in the transportation network by having developers pay their fair share to help offset the growth created by their project.

A.12.4.3 | CEQA Transportation Impact Analysis Reform

The California Environmental Quality Act (CEQA) requires California's public agencies to determine the potential for proposed projects to have significant impacts on the environment, including transportation impacts. CEQA also encourages agencies to develop thresholds of significance—the quantitative point at which an environmental effect may be considered significant—to facilitate these determinations. Beginning on September 15, 2020, new projects were required to include a VMT-based transportation impact significance determination, the culmination of a multi-year effort led by the California Office of

Planning and Research (OPR) to implement Senate Bill 743 (SB743). CEQA gives local jurisdictions discretion to adopt impact measures and significance thresholds, and while many agencies in California measure a project's effects on transportation using the Highway Capacity Manual's intersection Level of Service (LOS) measure, which measures delay to automobiles, LOS may no longer be used as a sole measure of transportation impact. These changes better align environmental review with environmental policies, like reducing greenhouse gas emissions.

Prior to statewide implementation of SB743, the Transportation Authority had a long history of supporting CEQA reform. In October 2008, the Transportation Authority adopted the Final Report on the Automobile Trip Generation Impact Measure as an alternative to automobile LOS. The Report recommends that the City measure the transportation impacts of projects under CEQA based on the net new automobile trips generated (ATG) by a project. In 2009 the Transportation Authority worked with the State Office of Policy and Research to revise the CEQA Guidelines section on transportation impact analysis, which removed the exclusive reference to automobile LOS and replaced it with an option for local jurisdictions to select an alternative measure of transportation impact. The revisions also deleted references to parking as a transportation impact area.

On September 27, 2013, the governor signed into law SB743, which revised the criteria for determining the significance of transportation impacts within transit priority areas. In the fall of 2014, the State of California Office of Planning and Research released draft guidelines for implementation of SB 743, indicating that vehicle miles traveled would be the primary metric for evaluating transportation impacts. In March 2016, San Francisco became the first county to adopt the proposed SB 743, preceding statewide adoption by more than 2 years. The San Francisco Planning Commission adopted a resolution, based on state-proposed guidelines that remove automobile delay as a significant impact on the environment and replaced it with a vehicle miles traveled threshold for all CEQA environmental determinations, including active projects, going forward. In 2018, California adopted CEQA guidelines for implementing SB743, and on September 15, 2020, all new projects were required to include a VMT-based transportation impact significance determination.

APPENDIX 15

CAPITAL IMPROVEMENT PROGRAM

KEY TOPICS

- Relationship to Regional Transportation Plan and Countywide Transportation Plan
- List of Funding Sources
- Capital Improvement Program Amendments

A.15.1. Relationship to Regional Transportation Plan and Countywide Transportation Plan

The CMP statute requires that each CMP be consistent with the long-range Regional Transportation Plan (RTP), developed by the regional transportation planning agency (the Metropolitan Transportation Commission, or MTC, for the Bay Area), and each county's component of the RTP must be supported by a long-range countywide transportation plan (San Francisco Transportation Plan, or SFTP), developed by the CMA. The Capital Improvement Program (CIP) is intended to serve as a short or medium-range implementation vehicle for investment priorities as prioritized in the long-range plans.

Through the RTP, the MTC establishes the Bay Area's vision for transportation with supporting policies and investment strategies, including a list of specific projects and programs. Inclusion of projects and programs in the RTP is a prerequisite for receiving state and federal transportation grants for certain state or federal approvals and a requirement for capacity expanding projects that may have air quality impacts. 2013's Plan Bay Area was the region's first RTP/Sustainable Communities Strategy (SCS) that explicitly integrated transportation projects and policies with land-use strategies to meet the SB 375 requirements to accommodate future population growth and reduce greenhouse gas emissions. MTC and the Association of Bay Area of Governments adopted an update to Plan Bay Area, named Plan Bay Area 2050 in fall 2021. An update, Plan Bay Area 2050+, is scheduled to be adopted in late 2025 that will incorporate lessons learned from the pandemic.

The Transportation Authority develops the SFTP (countywide transportation plan) for San Francisco, consistent with MTC guidelines, to guide transportation investment and to serve as a basis for RTP/SCS assumptions. The Transportation Authority updated the SFTP in December 2013, which identified four goals (economic competitiveness, safe and livable neighborhoods, environmental health, and well maintained infrastructure) and proposed scenarios that invest strategically in a diverse set of projects to make progress toward each of the goals. A focused update approved in October 2017 reaffirmed these goals, updated project costs, and reassessed projects previously identified for funding. A major update of the SFTP, named SFTP 2050, was adopted by the Transportation Authority in December 2022. The Transportation Authority ensures the CIP projects, as well as their selection processes, are consistent with the SFTP. The SFTP is discussed in further detail in Chapter 6 (Land Use Impacts Analysis).

A.15.2. List of Funding Sources

As a result of the Transportation Authority's role as the Prop L and Prop AA administrator and the CMA, the capital priorities programming process not only involves state and federal funds that are required by state law to be programmed through the CMP but also incorporates the Prop L and Prop AA programming strategy. Listed below are major CIP funding sources administered by the Transportation Authority. Importantly, as described in the section 7.2 of the main report, the Transportation Authority ensures that all CIP projects, as well as the programming and project selection processes, are consistent with the RTP, SFTP, and other requirements attached to the funding.

Evaluation of potential impacts of CIP projects on multimodal system performance is embedded throughout the project selection and monitoring processes. The results of the CMP multimodal system performance analysis and any deficiency findings will also be incorporated into the future CIP development as appropriate. Please refer to Chapter 4 for a detailed discussion of multimodal system performance.

A.15.2.1 | Surface Transportation Program / Congestion Mitigation Air Quality Program

Conformance with the CMP is required for a local jurisdiction to receive federal Surface Transportation Program (STP) funds or Congestion Mitigation and Air Quality Improvement Program (CMAQ) funds. STP funds are among the most flexible and are used to support a wide range of transportation improvement projects across all modes. CMAQ funds are intended for projects that reduce transportation related emissions. Both funds are distributed mainly by the regional transportation planning agency, i.e. the MTC for the Bay Area. The MTC has divided the Bay Area's share of STP and CMAQ funds into multiple programs under the umbrella of the One Bay Area Grant (OBAG) program. Each of the OBAG programs typically has its own associated policies and guidelines in pursuant of RTP goals. The MTC approved a third cycle of OBAG programming (OBAG 3) for Fiscal Years 22/23 through 25/26. One of the centerpieces of OBAG 3 is the county share program, which is intended to better integrate the region's transportation program with land use and housing policies and to promote transportation investments that support Priority Development Areas (PDAs). PDAs refer to locally-identified, regionally designated infill development opportunity areas within existing communities. A map of PDAs is included in Chapter 6 of the main report. The Transportation Authority recommended and MTC approved $50,577,000 in county share OBAG 3 funds for projects. The Transportation Authority has also provided monitoring and support for sponsor agencies as San Francisco's OBAG projects advance through the design and construction phases under the federal aid guidelines. The bibliography includes a link to the OBAG funded projects list for Cycles 1 through Cycles 3.

A.15.2.2 | State Transportation Improvement Program

Inclusion in the CIP is a prerequisite for inclusion in the State Transportation Improvement Program (STIP), a five-year program of projects adopted by the California Transportation Commission (CTC) every two years. Priorities for approximately 75% of the STIP programming capacity are set by regional transportation planning agencies, and the remaining 25% is established by the state. The Regional Transportation Improvement Program (RTIP) is the MTC's submittal to the state, which is merged with other regions' RTIPs and additional CTC priorities to become the STIP. In the Bay Area, the practice has been for the CMAs to establish priorities for their county share, subject to the MTC's

concurrence and the CTC approval of the region's RTIP. In the draft 2024 RTIP, which is pending CTC approval, the Transportation Authority Board continues to fulfill its long-standing commitments to RTIP priorities. As part of the 2024 RTIP, San Francisco fulfilled the county's outstanding commitment to The Portal, also known as Caltrain Downtown Extension ($17.8 million) and reduced the commitment to the Central Subway ($17.08 million). RTIP funds cannot be programmed directly to the Central Subway or Downtown Extension projects because all the contracts have been awarded, so we are honoring the commitment by programming RTIP funds to the other eligible projects.

The STIP used to be a significant, although highly variable source of state funds for highways, local streets and roads, transit rehabilitation and expansion projects, and pedestrian and bicycle projects. With reduced revenues from fuel taxes and lack of an adequately funded multi-year federal transportation bill, the STIP experienced a drastic reduction in available funding. However, the passage of Senate Bill 1 in 2017 has helped to stabilize the program. The 2024 RTIP, which lists the priorities approved by the Transportation Authority Board, is expected to be approved through the CTC's STIP adoption in March 2024.

A.15.2.3 | Prop L Transportation Sales Tax

Since 1990, San Francisco has had a half-cent local sales tax for transportation improvements. San Francisco voters approved the first such sales tax and expenditure plan in November 1989 as Proposition B and the second in November 2003 as Proposition K. In November 2022, voters approved Proposition L and adopted a new 30-year Expenditure Plan, superseding the prior one. At the time of the Expenditure Plan adoption, Prop L was expected to generate $2.6 billion (in 2020 $'s) over 30 years and to leverage close to $23.7 billion in federal, state, and other local funds for transportation projects in San Francisco.

The Expenditure Plan established five overall categories of investment and attached mandatory percentage shares of total Prop L revenues: Transit Maintenance and Enhancements (41.2%), Major Transit Projects (22.6%), Streets and Freeways (18.9%), Paratransit (11.4%), and Transportation System Development and Management (5.9%). The Expenditure Plan details eligible sponsors and project types for 28 programs, ranging from the Caltrain Downtown Rail Extension, to street resurfacing, to pedestrian and bicycle improvements to transit vehicle replacements to transportation demand management. The bibliography provides a link to a summary of the Expenditure Plan, which lists the eligible projects and programs along with their shares of Prop L funds and expected leveraging goals.

As required by the Expenditure Plan, the Transportation Authority Board adopts a Prop L Strategic Plan to guide the day-to-day implementation of the Prop L program, and for each of the programmatic categories, a 5-Year Prioritization Program (5YPP). The Prop L Strategic Plan is the financial tool that guides the timing and allocation of Prop L revenues over the 30-year Expenditure Plan period, and it considers many factors, such as the presence of matching funds and the likelihood of projects to move forward in the year proposed. The 5YPP includes prioritization criteria, a five-year list of projects (with scope, schedule, cost, and funding information), and performance measures. The Strategic Plan and 5YPPs are updated quinquennially and may, between quinquennial updates, be amended as needed. The Transportation Authority is currently in the process of developing the Prop L Strategic Plan (final approval anticipated in early 2024) and the inaugural 5YPPs.

A.15.2.4 | Prop AA Vehicle Registration Fee

Prop AA is a $10 countywide annual vehicle registration fee that was passed by San Francisco voters in 2010. Total revenues are estimated over the 30-year period at approximately $150 million, or approximately $5 million annually, to fund smaller, high-impact projects throughout the city on a pay-as-you-go basis. The Prop AA Expenditure Plan established three categories of investment and prescribed percentage shares over 30 years: Street Repair & Reconstruction (50%), Pedestrian Safety (25%), and Transit Reliability & Mobility Improvements (25%). The Expenditure Plan requires that the Transportation Authority adopt a Strategic Plan to guide the timing of expenditures and set policies for day-to-day management of the program and to update it every five years. In 2012, the Transportation Authority Board approved the first Prop AA Strategic Plan with $25.1 million to projects over the five year period of Fiscal Year 2012/13 through Fiscal Year 2016/17. In 2017, the Board approved the first update to the Strategic Plan, with $22.8 million programmed to projects over the five year period of Fiscal Year 2017/18 to Fiscal Year 2021/22. The Strategic Plan was updated again in 2022 with $23.5 million programmed to 15 projects over Fiscal Years 2022/23 through 2026/27. The bibliography provides a link to the 2022 Prop AA Strategic Plan Programming and Allocations.

A.15.2.5 | Transportation Fund for Clean Air

The Transportation Fund for Clean Air Program (TFCA) was established to fund cost effective transportation projects that achieve a reduction in motor vehicle emissions. Funds are generated from a $4 surcharge on the vehicle registration fee. Forty percent of the funds are set aside for Program Managers for each of the nine counties in the Bay Area Air Quality Management District (BAAQMD). The Transportation Authority is the designated TFCA Program Manager for San Francisco. In that capacity, it programs approximately $800,000 every year to clean air vehicles, shuttle operations, bicycle and pedestrian improvements, and other eligible transportation projects that help clean up the air by reducing motor vehicle emissions. The Transportation Authority also provides assistance to project sponsors in applying for Regional TFCA funds, programmed directly by the BAAQMD. The remaining sixty percent of the revenues, referred to as the Regional Fund, is distributed to applicants from the nine Bay Area counties through a variety of grant programs. The bibliography provides a link to the 2023-24 TFCA funded projects summary.

A.15.2.6 | Lifeline Transportation Program

The MTC established the Lifeline Transportation Program (LTP) to improve transportation choices for low-income persons as part of the 2005 RTP. For the Cycle 5 LTP, the MTC assigned approximately $2.69 million in State Transit Assistance (STA) funds to the Transportation Authority. Since the adoption of the Cycle 5 LTP program of projects in May 2018, the Transportation Authority has provided monitoring and support for sponsor agencies and created the San Francisco Lifeline Transportation Program (SF LTP).

In February 2018, the MTC established a transit-focused STA County Block Grant program, with funds from the regional paratransit program, the northern counties/small transit operators program, and the regional LTP, to be administered by CMAs. The STA County Block Grant program allows each county to determine how to invest in paratransit, transit operating and capital needs, including providing lifeline transit services. Funds were distributed among the nine Bay Area counties based on the amount that each county would have received in Fiscal Year 2018/19 under the former regional programs. For the first two years of the new block grant program, Fiscal Years 2018/19 and 2019/20, San Francisco received approximately $8.3 million.

In December 2018, the Transportation Authority Board approved the San Francisco STA County Block Grant Framework to distribute 40% of the funds to the SFMTA's paratransit program consistent with what SFMTA would have received under the prior regional paratransit program. The Board approved the remaining 60% for the new SF LTP modelled on the former regional LTP. In April 2019, the Transportation Authority Board approved the SF LTP Cycle 1 program of projects to address gaps or barriers identified through equity assessments and collaborative and inclusive community-based planning processes.

In light of the significant decline in transit fare and other operating revenues due to the COVID-19 pandemic, in April 2020, the Board approved San Francisco's share of Fiscal Year 2020/21 County Block Grant funds to support the San Francisco Municipal Transportation Agency's paratransit operations. In addition, SFTP funds continue to support the Bay Area Rapid Transit District's Elevator Attendant Program at the downtown stations. The bibliography provides a link to the LTP funded projects summary. This funding distribution between paratransit operations and BART's Elevator Attendant Program has continued in Fiscal Year 2021/22 through Fiscal Year 2023/24.

A.15.2.7 | Senate Bill 1 Local Partnership Program Formulaic Shares

The Local Partnership Program (LPP), created by the Road Repair and Accountability Act of 2017 or Senate Bill 1, is a program created to reward local or regional transportation agencies that have sought and received voter approval of taxes or fees solely dedicated to transportation. Of the $200 million appropriated annually, the California Transportation Commission (CTC) allocates 50% of the program through a Formulaic Program based on both the share of revenues and population of counties with voter-approved sales taxes, tolls, or fees. As administrator of San Francisco's Prop L transportation sales tax, Prop AA annual vehicle registration fee, and TNC Tax, the Transportation Authority is responsible for programming San Francisco's share of the LPP Formulaic Program. The bibliography provides a link to the 2018 through 2022 LPP Formulaic Program of Projects, adopted by the CTC in August 2023. For the current funding cycle covering Fiscal Years 2023/24 - 2024/25, San Francisco will receive $8.758 million based on Prop K, Prop AA, and the TNC tax revenues as well as a one-time $5 million bump from LPP incentive funds to reward San Francisco for passing Prop L in November 2022. In November 2023, the Board approved $2.6 million in LPP formulaic funds for the Yerba Buena Island (YBI) Hillcrest Road Improvement Project to accommodate the YBI Multi-use Path.

A.15.2.8 | Traffic Congestion Mitigation Tax

On November 5, 2019, San Francisco voters approved Prop D, enabling the City to impose a 1.5% business tax on shared rides and 3.25% business tax on private rides for fares charged by commercial ride-share and driverless-vehicle companies until November 5, 2045. The Traffic Congestion Mitigation Tax, referred to as the TNC Tax, was expected to generate about $30 million annually, before the COVID-19 pandemic. Half of the revenue goes to the SFMTA for transit improvements. The Transportation Authority administers the other half of the funds for street safety improvements. Revenue collection began on January 1, 2020.

On October 27, 2020, the Transportation Authority Board adopted the TNC Tax Program Guidelines and programmed $7.5 million to the SFMTA's Vision Zero Quick-Build Program. In March 2023, the Transportation Authority Board adopted the first update to the Program Guidelines and programmed $21.6 million to the SFMTA for the Vision Zero Quick-Build Program and the new, rolling Application-Based Residential Traffic Calming Program. The bibliography provides a link to the TNC Tax funded projects summary.

A.15.3. Capital Improvement Program Amendments

The project sponsor is expected to deliver a project or program as approved by the Board. If a project sponsor anticipates that the scope, schedule, budget or funding plan will change, Transportation Authority staff will assess the need for a CIP amendment. There are two types of CIP amendments – administrative and policy level. Administrative amendments are approved by the Transportation Authority's Executive Director or her designee. Policy-level amendments must be approved by the Transportation Authority Board. The type of approval required by an amendment request depends upon the significance of the proposed changes to the project's scope, schedule and budget.

A.15.3.1 | Administrative-Level CIP Amendments

Administrative-level amendments address minor changes that do not substantively change the nature of the original project and its impact on system performance, and do not increase the amount of funding allocated or programmed by the Transportation Authority to the project. Administrative amendments will only require notification to and approval by the Transportation Authority's Executive Director or her designee. The Executive Director may rule that a requested CIP amendment is administrative if the proposed changes, involving one or more projects and one or more funding sources, requires programming actions that can be authorized at the staff level at the Transportation Authority, at the MTC and/or the CTC, or at the regional office level for federal agencies, such as administrative TIP amendments.

A.15.3.2 | Policy-Level CIP Amendments

Policy-level amendments apply to changes that are deemed by the Transportation Authority to be significant enough that they have the potential to affect the performance of the multimodal transportation system and represent a significant departure from the scope, schedule, or budget approved by the Transportation Authority. This may include changes that will affect the year of delivery (completion), the amount or availability of operating funds, the year of programming, the fund source designation, or any other aspect of the project requiring action by the MTC and/or the CTC for funds initially prioritized or programmed by the Transportation Authority. Policy-level amendments require approval by the Transportation Authority Board prior to processing of the change by the project sponsor or other funding agency.

A.15.3.3 | Applicability of CIP Amendments

Applicable funding sources include but are not limited to those programmed directly by the Transportation Authority, such as county share STP/CMAQ, SB 1 Local Partnership Program Formulaic Shares, RIP, LTP, TFCA, Prop L, Prop AA, and TNC Tax. Certain funding sources are programmed through state or regional processes and typically become available to project sponsors through a separate application procedure. Further, many sources have timely use of funds requirements

where failure to meet deadlines can result in loss of funds to the project or to San Francisco or prohibition from applying for future cycles until deadlines are met. The MTC has requested that CMAs assist with oversight of certain funding sources (e.g. Highway Safety Improvement Program) even if not directly prioritized by CMAs. The intent is to improve project delivery and specifically to avoid loss of funds to the region. The Transportation Authority encourages sponsors to proactively notify the Transportation Authority of any project delivery issues or other issues that may threaten a project's ability to meet timely use of fund deadlines, whether sources covered by CIP amendments or not. The Transportation Authority can serve as a resource and facilitator to help resolve delivery issues and avoid loss of funds to San Francisco projects.

Attachment 5.1 - CMP Segments Average Speed Monitoring (AM Peak) (1991 - 2023)

cmp id	Name	From	To	Travel Direction	Length (mi)	1991	1992/3	1995	1997	1999	2001	2004	2006	2007	2009	2011	2013	2015	2017 (TMC)	2017 (XD)	2019	2021	2023
1	1st St	Market	Harrison	S	0.481558		15.1				12.5	11.2	20.8	16.3	14.2	13.8	18.5	11.8	12.8	13.4	11.6	17.0	14.6
2	2nd St	Brannan	Market	N	0.721664								10.1	10.8	12.2	13.9	11.1	9.7	9.6	10.4	8.8	14.3	11.4
3	2nd St	Market	Brannan	S	0.721664								14.3	18.6	16.3	20.8	9.6	11.9	10.6	10.5	10.9	14.1	13.2
4	3rd St	Jamestowr	Evans	N	1.6237		25.4				23.5		17.9	20.5	24.6	23.9	18.1	17.1	15.3	15.3	12.8	15.6	14.6
5	3rd St	Evans	Terry Fran	N	2.359989	10.3	24				23.6		24.7	23.1	28.4	27.6	20.9	17.5	16.2	16.9	13.6	18.1	17.0
6	3rd St	Terry Fran	Market	N	1.048898	12.1	12.1	15.3		10.8	9.2	6.2	8.1	9.7	20.0	15.1	13.6	12.1	10.6	10.7	10.9	14.4	10.1
7	3rd St	Terry Fran	Evans	S	2.360565	10.3	24.1				23.8		20.2	28.9	28.6	27.3	21.7	18.7	17.5	17.8	14.0	18.8	18.4
8	3rd St	Evans	Jamestowr	S	1.6237		22.3				20.9		23.7	21.9	23.2	25.4	19.2	18.4	15.9	15.8	11.3	15.3	14.8
9	4th St/Stoc	O'Farrell	Harrison	S	0.564056		11.6	8.1	14.6				11.3	9.4	13.4	17.0	13.6	13.9	11	10.8	10.4	13.1	10.6
10	4th St/Stoc	Harrison	Channel	S	0.596755									16.0	13.8	16.8	12.8	11.4	7.6	8.7	9.7	13.5	11.7
11	5th St	Brannan	Market	N	0.722306	7.9	10.5	10.7	12.1	10.5	11.8	8.6	10.9	11.8	14.7	16.3	9.5	10.0	8.7	10.7	10.1	13.1	11.0
12	5th St	Market	Brannan	S	0.722304	7.9	11.6				9.9	10.6	11.8	11.4	19.3	16.1	11.7	10.8	11.4	11.2	10.6	14.1	12.8
13	6th St	Brannan	Market	N	0.722783		13.8				4.7	5.5	12.6	10.3	11.2	15.7	13.6	10.6	10.4	10.6	10.5	14.7	10.0
14	6th St	Market	Brannan	S	0.72278		22.4				10	8.3	13.6	14.2	15.1	16.5	17.5	14.6	12.3	12.4	11.2	21.3	13.9
15	7th St	Brannan	Market	N	0.722735	8.9	13.9			14.2		6.8	13.4	19.1	18.9	19.3	15.4	10.8	8.6	8.9	10.1	13.2	10.0
16	8th St	Market	Bryant	S	0.602908		17.1			17.7		15.9	16.6	18.7	15.0	17.9	15.9	13.5	12	12.2	12.6	12.8	11.6
17	9th St	Brannan	Market	N	0.722619	9.9	12.5	13.3			10.3	9.6	14.2	13.0	11.4	13.8	14.4	10.2	9.1	9.2	10.0	10.2	9.2
18	10th St	Market	Brannan	S	0.726749	12.1	20.5				16.3	9.7	17	26.1	21.9	21.4	23.8	18.1	16.5	17.3	16.4	20.9	15.7
19	16th St	Market	Mission	E	0.735954								19	18.5	12.1	13.7	16.3	13.1	9.3	9.8	7.8	15.1	12.0
20	16th St	Mission	Potrero	E	0.666427								15.9	13.6	14.1	13.6	14.7	13.3	10.2	10.9	10.7	15.0	13.1
21	16th St	Potrero	Mission	W	0.666427								13.4	11.5	13.5	12.1	14.1	13.0	11.8	12.0	12.0	14.4	13.4
22	16th St	Mission	Market	W	0.73603								12.9	13.7	13.4	12.7	16.0	13.3	10.5	11.6	10.9	13.0	14.3
23	19th Ave/F	Junipero S	Sloat	N	1.248889		19.2			23.1			22.1	16.4	18.2	16.9	15.7	17.6	17.8	19.3	17.2	22.6	18.8
24	19th Ave/F	Sloat	Lincoln	N	2.129077	11.1	19.2			15			17.9	18.6	13.8	15.4	17.0	13.1	13.4	13.7	15.7	20.9	15.5
25	19th Ave/F	Lincoln	Lake	N	1.846013		21.9			19.7			19.9	20.4	19.9	22.1	24.5	21.7	19.9	20.0	19.2	27.0	24.4
26	19th Ave/F	Lake	US-101	N	1.18461		38.8				28.6		34.7	44.0	45.3	43.6	49.6	37.4	45.2	44.4	43.7	42.3	44.3
27	19th Ave/F	US-101	Lake	S	1.259089		38.3				47.2		42.2	40.3	40.7	24.4	42.9	39.7	32.1	35.2	26.9	47.0	40.1
28	19th Ave/F	Lake	Lincoln	S	1.846014		20.9			22			25.1	26.1	26.3	28.1	26.4	22.8	22	22.1	21.2	27.7	22.0
29	19th Ave/F	Lincoln	Sloat	S	2.129074	11.1	17.2			18.4			21.8	22.2	19.2	19.3	17.8	17.4	18.1	18.9	18.8	21.2	14.8
30	19th Ave/F	Sloat	Junipero S	S	1.248889		20.2			21.2			20.2	17.2	21.6	23.6	23.8	23.2	24.9	30.1	27.1	28.1	25.7
31	Alemany	Junipero S	Lyell	E	2.949454		25.6				20		20.9	21.5	28.3	23.2	23.0	20.0	16.5	16.7	18.5	24.4	22.1
32	Alemany	Lyell	Bay Shore	E	1.591704		28.5				19		23.7	28.5	26.1	28.5	29.7	22.3	21.3	20.1	21.3	29.8	25.6
33	Alemany	Bay Shore	Lyell	W	1.566291		35.4				28.4		37.5	25.4	30.7	28.1	29.8	31.2	28.2	29.4	27.2	28.2	29.5
34	Alemany	Lyell	Junipero S	W	3.026555		25.6				15.1		19.1	21.4	25.3	21.4	25.9	22.4	15.3	15.0	17.3	21.1	20.0
35	Bay	Van Ness	Embarcade	E	1.074704	12.7	22.4				16.8		19.7	21.0	18.9	14.1	21.3	14.8	13.8	14.5	15.4	22.8	17.7
36	Bay	Embarcade	Van Ness	W	1.074706	12.7	19.7				22.8		18.3	19.6	19.3	20.1	20.6	17.1	16	16.5	15.4	19.1	16.8
37	Bayshore	County Lin	Industrial	N	2.265298		20.9				25.3		18.4	26.2	17.4	19.1	13.9	10.8	12.3	11.5	12.0	21.9	15.7
38	Bayshore	Industrial	Cesar Chav	N	0.82965		20.2				14.8		11.2	19.0	17.5	12.6	15.8	16.2	15.1	13.4	11.1	17.9	15.9
39	Bayshore	Jerrold	Industrial	S	0.802764		21				17.5		17.6	29.9	25.4	19.4	22.1	24.4	19.3	23.2	19.0	23.1	20.0
40	Bayshore	Industrial	County Lin	S	2.260688		27.4				23.3		25.7	30.1	27.8	24.1	24.5	22.5	19.3	19.2	17.7	24.1	20.6
41	Beale/Davi	Clay	Mission	S	0.324643		11.3	10	16.6	16.6			15.6	14.1	12.8	12.3	8.8	9.2	9.3	11.4	9.7	14.2	11.6
42	Brannan	Division	6th	E	0.543687									15.7	13.8	11.7	20.3	16.2	18.9	13.5	11.8	15.8	13.8
43	Brannan	6th	3rd	E	0.510995									21.8	15.8	14.7	19.3	13.2	10.8	11.3	10.1	15.8	14.3
44	Brannan	3rd	6th	W	0.516217									15.9	17.0	12.8	20.4	14.4	12.4	13.2	13.6	16.6	15.3
45	Brannan	6th	Division	W	0.544047									16.3	16.9	14.1	22.9	15.9	12.2	11.6	10.3	13.8	13.3
46	Broadway	Gough	Larkin	E	0.364312		19.2			9	10.6	12.3	11.4	14.7	15.1	16.3	8.8	11.6	10	11.5	10.9	17.1	13.0
47	Broadway	Larkin	Powell	E	0.547817		22.5			15.1	16.6	16.3	36.8	18.2	32.8	23.2	14.0	8.4	21.5	12.8	12.0	33.7	17.2
48	Broadway	Powell	Montgome	E	0.354654		16.8			8	10.9	11.8	13.9	15.4	20.1	15.8	11.4	11.2	8.2	12.4	11.5	18.2	13.3
49	Broadway	Montgome	Embarcade	E	0.348306		11.2	9.4	15.1	12.2	11.6	8.8	10.8	11.3	13.9	15.3	11.3	9.9	8.1	11.7	10.2	17.9	14.2
50	Broadway	Embarcade	Montgome	W	0.348438		17.7			14.8	11.2	12.1	17	17.5	19.9	17.1	12.7	17.1	10.8	13.3	10.5	14.7	14.0
51	Broadway	Montgome	Powell	W	0.354654		15.2			10	8.9	13.5	14.5	11.5	13.3	11.7	11.1	11.2	9.2	11.7	11.6	15.3	14.2
52	Broadway	Powell	Larkin	W	0.547817		35.6			16	20	16.3	34.1	34.6	32.9	31.6	27.8	33.1	31.3	25.3	21.1	30.9	30.7
53	Broadway	Larkin	Gough	W	0.363564		10.6	11.2	12.9	15.2	17.1	14.4	14.4	17.9	19.5	15.0	11.6	8.8	15.1	16.2	15.7	14.8	13.0
54	Brotherhoo	Junipero S	Alemany	E	0.429306									21.3	25.8	29.2	28.7	23.0	24.4	23.3	22.3	24.9	23.5
55	Brotherhoo	Alemany	Junipero S	W	0.470988									31.8	29.7	28.8	28.7	23.3	24	24.5	24.0	29.0	25.4
56	Bryant	Division	4th	E	0.993047	7.7	12.2	13.2		12.9	13.2		12.2	11.2	13.1	19.4	15.9	14.9	11.7	12.3	11.1	16.4	14.7
57	Bryant	4th	Embarcade	E	0.772988		21.8			14.4			18.3		21.2	18.9	21.5	16.6	12	12.5	11.7	16.4	13.9
58	Bush	Masonic	Gough	E	1.243158		17.3				22.4		18.2	17.2	18.0	23.3	20.4	16.6	15.7	15.4	17.0	18.7	15.7
59	Bush	Gough	Market	E	1.454974	3.2	10.9	9.6	11.4	11.6	12.6	8.7	10.7	11.7	10.9	13.8	16.4	12.1	10.4	11.4	10.4	16.0	12.1
60	Castro/Div	Market	14th	N	0.322083		17.5			11.9	10.1	10.7	16	9.0	14.8	15.6	14.0	12.5	10.4	10.7	10.8	14.0	11.4
61	Castro/Div	14th	Geary	N	1.134082	4.5	14			10.6	11.2	8.8	11.2	11.3	15.0	14.9	14.4	11.7	10	9.9	9.4	12.3	11.7
62	Castro/Div	Geary	Pine	N	0.265206		10.8	7.7	7.5	7.4	7.3	8.4	7.1	6.1	11.1	8.1	13.0	10.3	7.9	9.4	8.8	12.6	9.7
63	Castro/Div	Pine	Geary	S	0.265206		14.2			13.2	7.3	7.8	11.7	15.6	14.5	13.0	13.6	11.1	12.1	12.3	9.7	12.9	10.3
64	Castro/Div	Geary	14th	S	1.133676		14.8			14	11.5	9.8	12.3	15.8	16.6	12.8	14.9	11.7	12.3	12.4	12.0	13.5	13.3
65	Castro/Div	14th	Market	S	0.322083		11.9	10.4	13.3	14.2			10.3	16.4	9.9	16.0	15.0	12.5	11.6	12.0	11.4	15.0	12.1
66	Cesar Chav	Guerrero	Bryant	E	0.755058		19				14.3		16.6	17.2	18.8	17.0	17.4	12.7	12.6	13.6	13.3	18.3	12.0
67	Cesar Chav	Bryant	Kansas	E	0.375196		19.9				28.9		28.3	31.3	20.5	26.9	26.2	20.8	24.9	20.1	20.8	25.0	23.8
68	Cesar Chav	Kansas	3rd	E	0.795213		17.6				19.5		25	16.4	18.6	19.9	20.4	18.0	14.3	14.3	14.8	19.7	17.1
69	Cesar Chav	3rd	Kansas	W	0.797392		19.4				18.8		22.1	20.1	18.6	23.0	21.4	17.6	15	14.4	13.2	18.2	16.8
70	Cesar Chav	Kansas	Bryant	W	0.377772		17.7				31.9		30.1	26.2	23.5	25.3	22.8	20.4	19.8	17.5	17.1	19.3	19.9
71	Cesar Chav	Bryant	Guerrero	W	0.754606		19.6				16.2		19.3	16.0	13.8	14.8	15.2	13.1	9.4	10.3	9.6	13.2	13.9
72	Clay	Kearny	Davis	E	0.378529	11.7	3.7			12.5	10.6	9.2	10.8	14.3	19.1	19.0	12.4	9.9	10.7	10.7	10.1	12.0	10.6
73	Columbus	Montgome	Greenwich	N	0.670646		14			14.9			13.3	14.3	14.9	12.6	13.3	12.4	11.6	12.0	10.7	13.9	13.5
74	Columbus	Greenwich	North Poin	N	0.42442		22.6			9.1	18.2		18.8	16.6	10.6	10.5	13.6	12.5	11.5	10.9	8.7	13.7	12.9
75	Columbus	North Poin	Greenwich	S	0.42442		18.6			16.9			15.9	12.5	18.7	18.4	13.4	12.8	11	11.0	9.3	14.4	14.5
76	Columbus	Greenwich	Montgome	S	0.670646		16.3			11.1	9.2	9.3	11.7	12.3	11.6	12.0	12.9	11.8	11.2	11.7	10.8	16.6	11.5
77	Doyle/Lom	County Lin	SF Cemete	E	1.157919		45.2						27.3	38.3	42.7		32.3	25.4	30.8	43.6	45.8	55.9	51.6
78	Doyle/Lom	SF Cemete	Lyon/Franc	E	0.925784		34.2						28.3	19.3	12.5		25.0	15.3	17.8	15.0	13.3	38.1	57.2
79	Doyle/Lom	Lyon/Franc	Van Ness	E	1.290043		22.2				13.7		20.9	21.2	20.8	19.2	19.8	19.0	18.6	17.7	17.6	24.5	18.1
80	Doyle/Lom	Van Ness	Lyon/Franc	W	1.290043		19.7				16.9		16.6	18.3	17.7	16.6	20.4	16.4	13.5	14.3	9.2	15.6	18.2
81	Doyle/Lom	Lyon/Franc	SF Cemete	W	0.958092		47.7						31.4	40.3	37.8		37.5	32.3	46.1	39.9	37.8	43.6	37.5
82	Doyle/Lom	SF Cemete	County Lin	W	1.147186		43.3						28.7	41.3	44.1		39.3	35.1	48.3	50.7	52.0	55.3	55.2
83	Drumm	Market	Washingto	N	0.216252		19.9				23		12.9	13.1	16.8	16.1	11.2	13.0	9	10.0	8.1	12.6	10.4
84	Drumm	Washingto	Market	S	0.216552		5.3	5.3			22		8.4	11.6	8.7	20.3	6.8	7.5	7	8.4	6.9	8.9	8.8
85	Duboce/Di	Market	Mission	E	0.348379		7.7	9.1	3	8.8	5.5	5.8	12		9.7	16.6	19.6	13.3	9.2	9.5	8.4	15.5	10.8
86	Duboce/Di	Mission	Potrero	E	0.662292	9.9	12	11.5	10.4	12.6	13		15.1		13.8	23.5	12.7	13.7	11.3	16.5	11.5	18.8	18.1
87	Duboce/Di	Potrero	Mission	W	0.662127	9.9	17.1				11.3	5.8	12.7		12.8	18.0	11.8	13.5	11	14.4	13.6	15.6	15.0
88	Duboce/Di	Mission	Market	W	0.348637		10.7	11.7	9.4	13.5			14.7		14.6	14.1	16.6	11.2	8.4	8.6	8.0	12.3	10.9
89	Embarcade	Townsend	North Poin	N	2.164954		21.2				14.5		12.3	22.4	21.1	20.4	17.5	16.0	13.2	14.4	14.9	18.2	14.4
90	Embarcade	North Poin	Townsend	S	2.164916		15.2				13.8		16.6	17.3	13.2	14.1	16.1	14.3	13.2	14.3	12.9	17.7	14.3
91	Evans	Cesar Chav	3rd	S	0.72542		16.3				20.4		16.1	16.9	20.7	15.7	14.8	12.8	10.4	16.6	15.7	19.9	16.2
92	Evans	3rd	Cesar Chav	N	0.72542		19.9				17		28.4	24.8	22.5	15.9	15.3	13.4	16.5	14.9	14.1	16.2	13.7
93	Fell	Gough	Market	E	0.292938		11.6	12	4.3	8.1	7.6	6.1	7.7	8.8	11.4	8.7	17.8	9.1	8.1	8.3	6.2	11.5	10.1
94	Fell	Gough	Laguna	W	0.181759		26.7				11.8	11.1	7.2	6.2	12.9	15.2	17.5	14.2	9.8	11.2	12.3	14.9	11.4
95	Fell	Laguna	Stanyan	W	1.562636		19				24.5	16.2	23.2	27.9	26.4	26.3	23.8	20.0	20.5	20.0	19.4	18.1	18.5
96	Folsom	13th	8th	E	0.487049								10.2			18.2	19.4	14.8	12.5	12.5	11.8	14.4	12.7
97	Folsom	8th	4th	E	0.687213								24.8	13.3	14.9	17.0	18.1	12.6	12.8	13.3	13.4	13.6	14.0
98	Folsom	4th	1st	E	0.515704								19.5	17.0	20.7	18.8	18.9	15.1	11.7	11.8	9.4	12.9	10.9
99	Folsom	1st	Embarcade	E	0.34468								11.5	18.6	13.2	10.8	16.4	12.2	7	7.2	6.2	12.9	8.5
100	Franklin	Market	Pine	N	1.061302	8.5	13.3				11.5	9	13.5	16.9	14.9	12.7	15.6	11.1	9.9	10.1	10.4	12.5	10.8
101	Franklin	Pine	Lombard	N	0.830625		14				26.3		18.3	18.3	20.5	21.1	21.0	17.8	18	18.6	18.5	18.6	15.2
102	Fremont	Harrison	Market	N	0.481454		6.4				11.3	10.7	12.4	12.7	12.9	13.6	16.3	11.2	9.6	9.8	9.5	12.1	8.9
103	Fulton	Park Presic	10th Ave	E	0.204862		16.7				15.2			30.8	27.2	24.5	21.7	19.3	18.3	17.6	16.2	21.5	19.0
104	Fulton	10th Ave	Arguello	E	0.533347		22.4				16.3			29.5	19.2	17.0	18.1	16.4	15.6	18.4	16.9	21.5	18.6
105	Fulton	Arguello	Masonic	E	0.659455	9.8	18.6				11.5	9.9	15	12.5	16.2	13.4	15.6	14.5	13.4	13.7	12.7	17.6	17.1
106	Fulton	Masonic	Arguello	W	0.659455		15.9				16.2		18.5	23.5	20.4	16.5	18.2	17.1	15.2	16.0	15.0	16.9	18.3
107	Fulton	Arguello	10th Ave	W	0.533347		22				28.7			21.8	27.3	17.4	19.8	20.7	19.9	19.9	20.1	22.6	23.0
108	Fulton	10th Ave	Park Presic	W	0.204862		14.2				10.4	6.4		16.6	15.4	11.8	19.1	19.6	17	18.5	19.1	22.6	19.5
109	Geary	Great Hwy	25th Ave	E	1.778423		24.2				23.5	16.4	21.5	25.3	25.0	23.1	18.3	14.4	17.5	19.4	20.2	23.2	20.6
110	Geary	25th Ave	Arguello	E	1.418415		21.6			10.6	20.7	10.3	16.7	25.1	23.9	20.3	16.7	13.6	14.7	15.5	16.2	22.3	17.9
111	Geary	Arguello	Gough	E	1.913905		25.3			24.6		15	23.6	23.4	28.5	22.2	20.5	16.4	19.6	18.8	17.0	22.5	17.6
112	Geary	Kearny	Gough	W	1.176397		12.3	15.4		7.2	15.2	9.5	15	14.2	15.1	14.1	13.4	11.2	10.3	10.9	9.4	13.3	11.5
113	Geary	Gough	Arguello	W	1.915118		23.8			24.7		15.4	17.7	20.2	20.1	20.3	21.0	16.2	17.5	17.0	16.7	18.8	19.1
114	Geary	Arguello	25th Ave	W	1.42316		21.3			13.7		11	15.5	23.0	22.1	19.8	16.4	14.2	13.4	13.8	12.3	15.9	15.9
115	Geary	25th Ave	Great Hwy	W	1.787611		28.3				26	14.7	23.3	24.3	23.9	24.5	18.3	15.4	16.8	18.6	18.8	20.0	19.4
116	Geneva	Ocean	Cayuga	E	0.558813		15				20.4		14.7	13.3	8.8	11.9	13.8	10.9	10.1	11.6	10.2	17.4	14.5
117	Geneva	Cayuga	Paris	E	0.328792	10.4	11.7	13			16.1	8.8	11.8	11.1	13.4	15.3	14.7	11.7	12.4	12.3	11.0	17.4	13.9
118	Geneva	Paris	Santos	E	1.188472		29.7				25		27.2	21.2	20.6	22.9	22.6	15.8	18.6	19.3	18.1	22.9	20.9
119	Geneva	Santos	Paris	W	1.188472		27.4				27.3		26.7	22.8	23.4	22.7	20.0	16.6	18.4	17.9	16.4	22.3	20.9
120	Geneva	Paris	Cayuga	W	0.328792	10.4	11.6	13.3			18.7		10.4	9.9	8.2	8.7	12.9	10.7	8.5	9.5	9.0	16.5	12.5
121	Geneva	Cayuga	Ocean	W	0.527711		4.5	15.5			15		11	6.9	9.6	8.8	13.6	10.2	8.2	9.2	8.3	14.8	11.6
122	Golden Ga	Masonic	Franklin	E	1.372961		19.3				17.2		26.3	15.9	17.0	15.4	13.6	12.1	17.1	14.5	13.7	13.0	13.8
123	Golden Ga	Franklin	Market	E	0.654019	12.2	16.9				13.2		12.2	12.4	10.7	12.3	10.9	8.1	10.2	8.0	7.6	12.7	8.1
124	Gough	Pine	Geary	S	0.25562	9.5	25.6				28.4		21.5	23.6	20.6	16.4	19.1	13.5	13.2	13.3	15.0	16.0	13.7
125	Gough	Geary	Golden Ga	S	0.330298		20.1				20.1	20.9	15.3	22.5	23.2	19.1	16.8	12.7	9.6	10.8	10.4	16.0	11.4

126	Gough	Golden Ga	Market	S	0.541309	8.3	12.8	11.1	6.5	18.9		8.9	15.4	13.8	15.7	15.9	16.0	10.5	11	9.5	10.0	15.3	10.3
127	Guerrero/S	Monterey	29th	N	1.169806		17.3				33.8		28.3	27.3	25.6	24.4	21.2	12.7	13.4	12.5	12.9	28.2	17.5
128	Guerrero/S	29th	Cesar Chav	N	0.285708	6.2	19.3				15.2		22.6	19.9	24.5	10.2	17.1	15.1	12.5	16.3	12.3	18.4	14.5
129	Guerrero/S	Cesar Chav	29th	S	0.284217		26.3				20.5		19.9	22.4	21.2	12.2	20.7	15.6	14.6	15.6	12.2	16.6	18.3
130	Guerrero/S	29th	Monterey	S	1.165953		23.7				31.6		23.1	26.1	30.3	30.0	27.8	24.3	24.7	25.3	21.3	32.1	26.3
131	Harrison	Embarcade	1st	W	0.342951		34.8				13.8		18.6	12.7	20.1	17.5	17.4	13.6	9.3	9.9	9.7	14.9	13.5
132	Harrison	1st	4th	W	0.516426		27.6				15.2		17.3	24.4	11.4	14.0	17.8	12.3	11.2	10.7	10.9	14.9	12.7
133	Harrison	4th	8th	W	0.686807		28.9				26.2		19.1	16.0	15.8	19.5	17.9	17.2	16.9	17.1	14.3	14.2	15.3
134	Harrison	8th	Division	W	0.399154		14.4				13.6		14.3	15.3	13.3	14.4	15.8	14.0	10.1	10.1	10.1	12.4	10.1
135	Hayes	Market	Gough	W	0.391577		10.2	11.1	11.6	23.3		9.4	16.6	18.0	12.4	12.5	15.3	12.9	9.1	8.5	9.3	12.3	11.0
136	Howard	Embarcade	S Van Ness	W	2.108573		14.9				14.2		15.6	16.2	14.2	15.0	16.2	13.3	10.9	10.7	10.2	12.7	12.5
137	Junipero S	County Lin	Brotherhoo	N	0.289362		40.4				33.3		39	45.8	40.0	44.1	27.0	27.0	18.7	15.0	15.4	51.5	19.9
138	Junipero S	Brotherhoo	19th	N	0.338532	9.7	23.8				36.7		32.8	29.2	22.1	10.8	12.8	13.1	10.2	11.1	8.2	25.4	12.0
139	Junipero S	19th	Sloat	N	1.210695		27				19.4	17.3	18.8	24.7	24.9	19.8	21.6	20.6	22.9	23.0	20.7	28.6	22.3
140	Junipero S	Sloat	19th	S	1.210665		32.4				20.9	18.9	18.7	16.1	22.1	10.8	25.3	21.6	23.4	23.2	20.0	26.8	20.0
141	Junipero S	19th	Brotherhoo	S	0.333727		19.9				30.7		43	39.4	39.6	42.3	42.7	39.3	42.8	45.3	42.3	45.6	44.9
142	Junipero S	Brotherhoo	County Lin	S	0.296424		41.9				38.7		40.4	42.5	43.5	44.1	49.0	48.7	54.6	51.5	48.4	55.2	53.0
143	Kearny	Market	Columbus	N	0.647422	6.3	13.7			8.8	12.9	5.4	14.1	13.7	13.8	14.7	11.7	8.6	7.5	7.7	8.0	11.8	9.8
144	King	4th	2nd	E	0.344638									20.9			14.9	12.4	13	13.0	13.9	18.0	16.7
145	King	2nd	4th	W	0.344638									18.3			15.9	13.6	11.7	11.5	12.7	21.6	16.8
146	Lincoln/ Ke	19th Ave	5th Ave	E	0.83121		22.6				11.4	13.4	17.2	23.9	22.4	26.9	20.2	15.4	17.7	17.7	14.7	22.3	19.5
147	Lincoln/ Ke	5th Ave	Stanyan	E	0.699061		10.7	12.2	23.4				20.3	11.9	20.3	21.1	16.0	16.7	13.2	14.3	15.5	20.4	17.9
148	Lincoln/ Ke	Stanyan	5th Ave	W	0.699713		31.7				9.9	15.4	25	25.4	24.4	24.3	25.5	24.4	24	24.4	24.8	24.2	23.1
149	Lincoln/ Ke	5th Ave	19th Ave	W	0.830037		25.2				10.6	13.8	26.3	27.7	25.9	29.2	23.6	21.6	18.2	18.7	19.0	22.9	21.6
150	Main	Mission	Market	N	0.121791		9.9	9.8	8.4	11.5	11.8	9.1	13.9	16.8	10.7	21.7	12.0	5.3	8.9	9.1	9.3	12.6	9.9
151	Market/Po	Sloat	Santa Clara	E	0.431052		16			18.9			13.8	16.8	20.3	25.1	21.8	14.0	13.4	13.7	14.2	22.0	16.6
152	Market/Po	Santa Clara	Burnett	E	1.338841		24.1			33			18.6	20.5	19.5	18.5	21.0	15.9	15.7	16.3	15.9	21.5	20.2
153	Market/Po	Burnett	Castro	E	1.623965	7	33			22			20.9	25.4	26.5	21.1	23.5	18.8	20	18.3	18.3	24.3	22.6
154	Market/Po	Castro	Guerrero	E	0.793811	8.7	20						13.2	10.1	15.7	9.2	13.6	10.4	12.8	13.2	12.4	16.4	12.7
155	Market/Po	Guerrero	Van Ness	E	0.431522	8.3	16.3			9.3	16.2		6.7	8.9	16.0	12.9	16.2	10.6	9.9	9.8	9.5	13.0	12.0
156	Market/Po	Van Ness	Drumm	E	1.771597	9.6	14.4				8.4	9.8	9.3	12.0	12.5	11.6	12.3	10.1	7.5	7.2	7.5	11.0	10.3
157	Market/Po	Drumm	Van Ness	W	1.771597	9.6	15.3				12	11.4	12.8	13.6	14.9	15.7	13.1	11.8	7.1	7.9	8.2	8.8	8.3
158	Market/Po	Van Ness	Guerrero	W	0.431522	8.3	17.8			7.3	23.3		13.6	13.9	14.2	13.8	15.2	14.3	13.7	13.7	12.6	13.8	13.2
159	Market/Po	Guerrero	Castro	W	0.793811		18.8						16.9	15.7	15.1	12.5	17.7	15.1	12.4	12.7	12.8	16.9	15.4
160	Market/Po	Castro	Burnett	W	1.625441		28			27.5			22.6	25.1	25.3	22.4	23.3	19.9	21.3	22.0	19.0	23.3	24.2
161	Market/Po	Burnett	Santa Clara	W	1.338778		22.8			30.2			19	22.0	21.2	23.5	20.3	18.5	16.9	18.4	16.8	23.3	20.6
162	Market/Po	Santa Clara	Sloat	W	0.430782		13.2			9.5	18.2		19.6	16.2	10.4	12.5	18.6	15.4	13.6	14.3	14.7	19.6	15.4
163	Masonic	Page	Geary	N	0.787685	10	13.1				11.3	9.4	15.4	16.3	19.9	12.8	20.2	12.3	14.6	15.0	11.6	15.3	14.2
164	Masonic	Geary	Bush/Eucli	N	0.200552	8.5	14.6				9.7	7.9	14.2	23.8	27.0	15.4	23.1	15.7	17.6	16.8	15.0	17.9	15.9
165	Masonic	Presidio	Geary	S	0.292436	8.5	11.2	15.7			10.3	7.7	13.5	18.3	19.7	10.0	17.5	14.9	16.5	16.8	16.1	17.6	16.7
166	Masonic	Geary	Page	S	0.787685	10	16.4				14.8		11.8	16.2	17.2	11.1	19.2	14.3	13.5	14.1	12.3	15.3	14.3
167	Mission/Ol	Sickles	Ocean	N	1.447533		21.1			26.5			26.3	21.8	22.2	21.8	16.8	13.5	13.4	13.3	11.4	17.7	17.5
168	Mission/Ol	Ocean	Cesar Chav	N	1.947536		20.3			20.4	18.3		18.1	14.8	19.3	17.2	14.2	13.1	11.9	12.9	12.4	18.2	16.4
169	Mission/Ol	Cesar Chav	14th	N	1.391509	10.9	19.8			14.3			13.6	14.6	18.5	15.7	13.7	12.7	11.4	11.6	9.5	13.2	13.2
170	Mission/Ol	14th	9th	N	0.649405		12	11.3	11	10	8.1	8.2	11	11.5	15.1	16.3	14.3	12.4	10.3	10.8	9.6	14.0	12.1
171	Mission/Ol	9th	3rd	N	0.979368		13.7			13.4		9.1	18.4	13.0	17.1	16.2	16.2	13.2	14	14.4	13.2	14.8	14.1
172	Mission/Ol	3rd	Embarcade	N	0.735527	9.7	8.9	10.8	11.2	8.2	8.7	8.6	11.8	10.2	17.3	12.2	14.7	10.1	7.5	8.6	7.0	12.8	10.0
173	Mission/Ol	Embarcade	3rd	S	0.73607	9.7	8	10.8	14.3	10.7	9.7	10.7	13.2	13.1	13.8	10.1	14.7	10.5	8.7	9.2	8.4	13.4	10.8
174	Mission/Ol	3rd	9th	S	0.979368		16.9			16.2		8.4	16.3	16.6	15.5	15.4	16.7	14.4	13	13.2	12.9	14.6	16.2
175	Mission/Ol	9th	14th	S	0.682813	9.7	12.8	12.8	10.7	11.7	8.7	5.8	14.1	15.2	15.8	19.4	14.4	12.0	10.5	9.8	9.1	14.7	11.7
176	Mission/Ol	14th	Cesar Chav	S	1.391509	10.9	17.9			14.8			16	13.5	17.9	15.0	14.1	13.2	14	14.2	12.7	15.0	15.8
177	Mission/Ol	Cesar Chav	Ocean	S	1.947536		17.6			19.6			18.9	16.7	20.1	18.8	16.2	14.6	12.9	13.2	12.1	16.7	16.4
178	Mission/Ol	Ocean	Sickles	S	1.447533		20.8			31.8			20.7	25.3	22.3	22.0	17.2	15.6	16	16.8	15.9	18.1	18.2
179	Montgome	Broadway	Bush	S	0.506858	6.2	6.5				9.3	8.5	10.2	11.7	14.1	11.1	14.1	10.3	8.9	9.6	8.5	11.0	9.7
180	North Poin	Van Ness	Columbus	E	0.383452		15.2				12.5	10.8	18.9	13.1	17.5	18.9	14.4	13.3	13.2	13.4	17.2	17.9	16.3
181	North Poin	Columbus	Embarcade	E	0.613771		14.9				15.4		17.6	23.5	18.7	22.2	21.4	12.2	13	14.2	13.8	16.3	15.1
182	North Poin	Embarcade	Columbus	W	0.613771		16				13.9		18.9	21.4	15.7	18.6	15.2	13.9	12.5	12.9	12.6	15.8	15.4
183	North Poin	Columbus	Van Ness	W	0.383452		15.3				13.7		17.6	17.0	16.2	16.1	16.0	12.7	11.8	8.9	8.5	13.6	13.1
184	Oak	Stanyan	Divisadero	E	0.917342		23.1				23.5		27.7	25.4	23.6	25.0	19.7	17.0	19.3	19.7	18.5	19.7	18.9
185	Oak	Divisadero	Fillmore	E	0.366017						25.2		24.7	26.7	19.7	20.4	14.9	12.6	11.5	8.1	10.4	16.2	12.4
186	Oak	Fillmore	Laguna	E	0.273836	8.2					8.8	15.3	16.5	21.4	17.0	8.8	11.8	12.9	7.1	8.1	10.4	16.2	7.8
187	Oak	Laguna	Franklin	E	0.273284		20				7.5	7	14.8	12.4	15.1	17.0	13.4	9.1	9.9	10.3	10.0	16.2	11.4
188	Ocean	19th Ave	Miramar	E	1.10967		19.5				7.6	11.4	14.3	13.6	18.7	13.9	15.0	14.5	13.6	14.0	12.8	16.5	15.8
189	Ocean	Miramar	Howth	E	0.48447						7.6	8.2	12.6	12.9	11.1	11.4	14.1	11.9	11.9	11.9	12.0	14.7	12.8
190	Ocean	Howth	Miramar	W	0.48447		9.4	16.3			8.6	8.4	13.4	11.3	14.8	15.8	13.4	11.4	10.1	9.1	10.9	14.9	12.6
191	Ocean	Miramar	19th Ave	W	1.109708		15.4				9.2	8.2	13.8	13.4	11.1	14.6	14.3	13.3	11.2	11.2	12.0	16.2	14.4
192	Octavia	Market	Fell	N	0.272347								8.7	10.6	11.0	10.1	5.8	7.3	8.1	8.2	7.7	8.6	6.5
193	Octavia	Fell	Market	S	0.278272								14.5	6.8	10.4	7.5	3.3	2.8	7.5	8.5	7.3	16.0	9.2
194	O'Farrell	Gough	Mason	E	0.847471		16.6				13.5		11.9	12.7	13.4	12.2	14.6	11.9	10.2	9.7	9.0	12.5	11.9
195	O'Farrell	Mason	Market	E	0.283457		18.7				10.9	8.3	8.2	9.1	11.6	9.6	13.3	9.9	8.8	9.9	8.1	12.5	9.9
196	Pine	Market	Kearny	W	0.382655	4.6	9.9	7.3	8.1	8.3	7.9	7.2	7.5	7.3	8.8	10.5	6.9	7.4	6.5	7.6	6.8	14.3	8.8
197	Pine	Kearny	Leavenwor	W	0.628423		16.2				15.6		13.4	25.2	18.2	24.1	15.2	17.6	14.2	13.6	14.7	14.3	14.3
198	Pine	Leavenwor	Franklin	W	0.455701		17.2				9.4	9.4	12.3	18.3	17.7	17.7	13.5	7.5	9.9	11.9	11.5	15.3	13.1
199	Pine	Franklin	Presidio	W	1.265863		20				20.4		23.7	21.0	21.3	21.8	17.3	17.1	16.1	20.0	19.3	17.7	17.2
200	Potrero	Cesar Chav	21st	N	0.605892		25.2			15.5			17.8	26.6	21.2	23.5	15.2	10.4	14	15.1	16.9	15.1	13.8
201	Potrero	21st	Division	N	0.795214		21.4			18.3			17.7	26.5	22.5	24.3	19.0	19.5	11.7	14.8	14.4	18.9	16.9
202	Potrero	Division	21st	S	0.795214		24.8			18.2			21.5	20.5	23.9	19.0	19.2	14.4	15.5	15.5	15.4	17.9	16.1
203	Potrero	21st	Cesar Chav	S	0.6015		20.1			13.5			19.1	25.5	22.0	23.3	17.2	14.5	17.3	16.4	18.1	21.4	18.1
204	Skyline	County Lin	Sloat	N	1.944104		43.7				41.8		49	46.8	46.7	44.5	38.1	34.8	35.4	30.0	38.9	45.6	39.9
205	Skyline	Sloat	County Lin	S	1.944218		41.6				41.6		48.7	39.2	42.1	40.6	41.0	32.4	34.6	32.9	35.2	40.6	39.6
206	Sloat	Skyline	Junipero S	E	1.377516		19.8	21.5	14.5	18.1	23.4		22.8	18.2	22.6	19.0	24.3	23.0	20.3	21.5	21.7	27.1	23.3
207	Sloat	Junipero S	Skyline	W	1.37871		23.3				23.5		29.8	26.1	26.7	32.0	27.7	24.0	24.9	25.4	25.7	27.7	25.2
208	Stanyan	Fulton	Turk	N	0.197824		12.2	12.8	13.2			13.7	15.7	16.6	15.6	14.2	18.2	14.1	14	14.9	13.8	15.8	15.1
209	Stanyan	Turk	Fulton	S	0.19965		11.6	7.4	16.7			11.7	16.6	12.3	11.1	11.2	19.2	16.2	13.5	14.3	15.9	15.5	15.8
210	Sutter	Divisadero	Gough	E	0.822183		13.9				12.4	16.1	15.7	14.6	16.2	14.5	15.9	10.9	11	11.6	11.1	13.0	13.6
211	Sutter	Market	Mason	W	0.56425		11.6	10.2	13.2			11.2	11.2	16.9	17.5	17.8	13.4	12.6	8.9	9.1	9.2	11.7	9.9
212	Sutter	Mason	Gough	W	0.820507	9	12.3	13.4			14.5		12.8	8.6	8.9	10.5	11.2	10.6	11.4	10.3	9.4	12.2	11.3
213	Sutter	Gough	Divisadero	W	0.822183		14.1				15.5		15.1	15.3	15.0	13.6	13.4	11.5	11.2	12.0	12.0	13.3	12.9
214	Townsend	7th	2nd	E	0.859493								16.6	15.8	19.6	17.3	17.2	14.1	11.2	11.6	11.2	17.4	16.1
215	Townsend	2nd	7th	W	0.85994								18.9	17.9	18.4	13.9	17.5	12.4	10.4	11.2	10.1	18.2	16.1
216	Turk	Stanyan	Divisadero	E	0.912411		21				15.5		17.7	20.8	18.0	17.7	17.7	15.7	12.8	13.6	12.2	18.2	16.1
217	Turk	Market	Hyde	W	0.37566		10.9	11.6	11.2	11.7	8.1	11.7	16.9	12.4	14.7	12.8	10.3	12.6	10.5	10.7	8.6	11.0	9.2
218	Turk	Hyde	Gough	W	0.4563		14.1				10.1	8	11.2	14.0	12.8	12.8	14.1	12.6	10.3	10.3	8.5	11.0	10.7
219	Turk	Gough	Divisadero	W	0.821631		22.1				22.4		24.4	28.4	19.8	19.7	21.5	17.4	16.5	16.9	16.8	16.6	16.8
220	Turk	Divisadero	Stanyan	W	0.912411		17.1				23.1		17.1	20.0	21.3	16.3	18.4	18.4	16.3	19.0	17.7	20.2	18.4
221	Van Ness/S	Cesar Chav	13th	N	1.48805									17.0	20.1	18.4	18.8	16.0	15.1	15.6	15.6	17.2	13.8
222	Van Ness/S	13th	Golden Ga	N	0.807721		15.9			18.2		7.3	11.8	14.6	15.0	20.2	13.9	13.0	8.9	9.1	9.4	12.3	12.5
223	Van Ness/S	Golden Ga	Washingto	N	0.839652		13.6			10.4	10.4	6.9	11.5	11.9	15.2	16.8	12.1	11.1	10.2	10.3	9.1	12.3	11.8
224	Van Ness/S	Washingto	Lombard	N	0.576467		11.9	14.3	12.1	9.4	12.6	6.9	9.2	10.2	13.6	11.3	13.1	12.7	10	10.5	8.7	12.5	13.1
225	Van Ness/S	Lombard	Washingto	S	0.576466	4.5	18.2			7.6	12.2	13.4	12.7	17.8	16.4	16.4	12.2	13.0	11.3	11.9	12.1	16.1	8.1
226	Van Ness/S	Washingto	Golden Ga	S	0.839659		15			9.2	7.3	9.4	16.1	17.2	21.2	21.6	14.1	12.8	11.6	12.0	13.8	16.0	14.2
227	Van Ness/S	Golden Ga	13th	S	0.795408		17.3			16.6		7.4	12.7	11.8	15.7	14.0	15.3	11.7	10.7	11.0	7.7	15.6	11.4
228	Van Ness/S	13th	Cesar Chav	S	1.488333	12.6	15.7			16.8		16	19.2	19.8	17.9	12.8	16.3	15.1	15	14.8	15.7	18.0	15.4
229	Washingto	Drumm	Kearny	W	0.443558		14.2			7.9	30.5		17.1	14.9	14.6	12.8	10.1	11.8	9.6	10.8	10.2	11.0	11.3
230	West Porta	Sloat	Ulloa	N	0.535165		17.8				14.8		18.7	15.3	15.5	16.8	14.4	15.9	11.5	10.5	14.5	15.0	14.1
231	West Porta	Ulloa	Sloat	S	0.535165		16.1				12.4	12.1	16.1	15.1	17.5	17.4	17.2	14.8	15.8	10.9	16.4	14.0	12.7
232	I-280	Junipero S	Weldon	E	4.025805	22.9	43	27.3			43.2	43.6	31.9	56.7	47.6	37.5	35.2	29.9	24.7	21.4	20.9	64.0	33.5
233	I-280	Weldon	6th/Brann	N	3.514703		29.1				30.5	31.2	27.7	34.3	41.6	28.1	35.4	36.8	33.9	30.0	28.2	45.8	49.9
234	US-101	County Lin	Cortland	N	2.310922	10.9	47.2	31	30.1	35.7	44.8	37.1	57.5	59.0	50.6	43.0	25.9	25.8	20.7	21.8	19.0	51.4	22.0
235	US-101	Cortland	I-80	N	1.902121	21.4	21.2				28.1	27.8	38	35.4	41.7	36.9	29.6	28.2	25.9	25.8	26.3	31.7	26.6
236	US-101	I-80	Market	N	1.269058	18.7	45.4	44.8	37.6	36.9				20.9	21.9	13.9	24.6	23.6	21.4	12.3	18.6	13.1	13.3
237	I-80	Treasure Is	Fremont E	W	2.710141	17.5	32.2	26.5			28.8	22.3	36.8	34.4	50.8	44.5	46.4	42.2	46	38.4	40.0	41.0	29.5
238	I-80	Fremont E	US-101	W	1.704997	48.1	33.3	37.9	32.7	40.4	25.9	24	51.6	50.0	55.3	48.7	50.4	49.5	46.4	43.4	46.6	47.1	29.2
239	I-280	6th/Brann	Weldon	S	3.469719		51.9	46.4	54.8		47.3	41	69	60.0	62.9	55.1	58.1	57.9	55.9	58.0	53.0	54.4	62.9
240	I-280	Weldon	Junipero S	S	4.071654	55.7	57.5				51.5	50.5	65.5	66.5	65.2	60.6	64.3	63.5	64.8	64.1	62.6	63.9	63.5
241	US-101	Market	I-80	S	1.166088	13.5	17.9						12	46.9	40.3	41.3	26.1	33.2	31.2	36.2	24.3	42.1	24.1
242	US-101	I-80	Cortland	S	1.968191	45.8	53.6	36.4	42.3	44.7	40.1	31.7	40.3	54.8	54.6	51.8	40.9	46.5	40.8	39.7	39.8	59.0	43.4
243	US-101	Cortland	Monster P	S	2.298268	53.3	45.6	36.3	34.1	39	33.3	31.6	45.8	48.3	54.2	48.7	31.5	32.3	24.7	24.6	24.2	65.3	32.6
244	I-80	US-101	Fremont E	E	1.738536	18.6	53.6	36	32.4	28.8	16.3	24.9	12.3	38.1	48.1	48.5	36.8	34.7	42.3	37.1	38.7	40.9	48.6
245	I-80	Fremont E	Treasure Is	E	2.69955	50.6	50.8	39.9	40.3	30.5	36.5	20.2	43.7	50.2	56.0	51.4	44.2	46.6	58.7	51.2	47.3	56.7	55.3

Attachment 5.2 - CMP Segments Average Speed Monitoring (PM Peak) (1991 - 2023)

cmp id	Name	From	To	Travel Direction	Length (mi)	Ave Speed 91	Ave Speed 92/3	Ave Speed 95	Ave Speed 97	Ave Speed 99	Ave Speed 2001	Ave Speed 2004	Ave Speed 2006	Ave Speed 2007	Ave Speed 2009	Ave Speed 2011	Ave Speed 2013	Ave Speed 2015	Ave Speed 2017 (TMC)	Ave Speed 2017 (XD)	Ave Speed 2019	Ave Speed 2021	Ave Speed 2023
1	1st St	Market	Harrison	S	0.481558	1.2	15.5				2.1	2.6	4.2	12.8	13.1	18.2	13.2	4.8	4.3	4.3	4.5	6.7	6.3
2	2nd St	Brannan	Market	N	0.721664								9.5	11.8	10.4	13.3	3.1	5.3	6.6	7.9	8.5	11.9	9.4
3	2nd St	Market	Brannan	S	0.721664								13.4	11.9	10.6	12.2	6.0	6.9	11.1	9.5	8.7	14.2	10.2
4	3rd St	Jamestowr	Evans	N	1.6237		18.5				20.2		12.5	21.6	22.1	24.0	17.8	17.8	16.0	15.9	11.7	16.9	15.4
5	3rd St	Evans	Terry Fran	N	2.359989	10.3	18.5				20.5		24.0	26.1	30.1	30.0	20.4	14.1	13.8	13.9	11.2	17.7	14.5
6	3rd St	Terry Fran	Market	N	1.048898	12.1	8.8	11.6	10.2	11.7	11.6	7.3	12.7	11.3	16.1	12.9	12.8	9.7	8.8	8.9	10.6	14.4	9.7
7	3rd St	Terry Fran	Evans	S	2.360565	10.3	17.0				20.2		21.8	30.7	27.8	29.5	20.5	16.6	17.9	18.0	14.4	19.7	17.3
8	3rd St	Evans	Jamestowr	S	1.6237		17.6				18.1		15.8	22.2	22.3	22.7	18.7	17.5	15.6	15.2	11.4	14.9	14.8
9	4th St/Stoc	O'Farrell	Harrison	S	0.564056	4.7	8.4	10.5	10.5	5.9	10.5	9.8	8.9	9.1	8.5	15.1	11.5	9.8	9.8	10.1	7.3	10.5	7.5
10	4th St/Stoc	Harrison	Channel	S	0.596755									14.1	14.3	14.9	12.6	8.7	7.3	8.0	8.0	11.6	10.0
11	5th St	Brannan	Market	N	0.722306	7.9	12.7	7.7	11.3	7.6	16.5		9.8	9.5	15.6	15.7	4.0	6.5	3.5	7.9	7.5	12.0	9.9
12	5th St	Market	Brannan	S	0.722304	7.9	13.5				5.2	6.3	9.3	11.2	13.1	13.8	5.4	6.7	7.0	8.1	7.7	12.7	9.1
13	6th St	Brannan	Market	N	0.722783		12.7	7.6	11.2	9.0	6.4	6.6	12.7	11.7	11.1	11.0	12.1	7.5	7.6	7.8	7.7	13.8	10.3
14	6th St	Market	Brannan	S	0.72278	6.7	11.5	12.0	9.4	9.5	6.8	4.4	12.9	10.9	12.3	9.6	11.8	11.0	10.4	10.6	8.8	18.3	9.1
15	7th St	Brannan	Market	N	0.722735	8.9	16.8			13.7		10.4	15.4	14.9	16.4	20.9	13.7	8.3	8.3	8.5	8.8	13.4	10.5
16	8th St	Market	Bryant	S	0.602908		15.8			15.7		13.0	15.9	21.2	17.0	23.8	15.9	8.4	8.4	8.7	11.8	10.7	9.0
17	9th St	Brannan	Market	N	0.722619	9.9	12.4	9.7	13.8	11.2	9.1	11.8	13.3	11.2	14.6	13.4	12.9	8.7	7.7	7.6	7.4	12.0	10.7
18	10th St	Market	Brannan	S	0.726749	12.1	20.5				13.7		16.4	20.9	16.3	20.4	20.5	13.4	13.7	14.3	14.2	17.5	12.7
19	16th St	Market	Mission	E	0.735954								11.0	10.5	10.7	11.9	14.9	13.5	9.2	9.0	7.7	11.9	11.1
20	16th St	Mission	Potrero	E	0.666427								13.1	9.8	12.8	11.7	14.8	11.9	7.9	8.3	7.9	13.0	10.9
21	16th St	Potrero	Mission	W	0.666427								11.2	13.6	15.2	13.4	12.5	11.1	9.5	10.1	8.3	13.7	11.5
22	16th St	Mission	Market	W	0.73603								10.6	14.1	12.3	8.4	17.0	11.7	10.1	10.7	10.6	14.3	11.8
23	19th Ave/F	Junipero Se	Sloat	N	1.248889		17.5			21.5			14.8	16.0	13.5	23.2	16.9	15.2	17.0	18.9	17.2	24.2	19.6
24	19th Ave/F	Sloat	Lincoln	N	2.129077	11.1	21.0			18.6			21.6	24.0	23.0	21.4	17.4	19.5	18.9	19.2	18.2	21.7	16.5
25	19th Ave/F	Lincoln	Lake	N	1.846013		25.4			19.8			27.2	27.2	28.5	29.3	28.1	22.9	19.3	15.0	13.6	28.9	19.0
26	19th Ave/F	Lake	US-101	N	1.18461		35.9				15.6		34.7	44.2	46.0	43.0	44.6	17.7	40.8	39.5	40.5	39.2	38.7
27	19th Ave/F	US-101	Lake	S	1.259089		36.4				34.5		35.4	42.7	35.2	30.9	42.9	38.0	22.8	24.1	24.6	44.5	24.5
28	19th Ave/F	Lake	Lincoln	S	1.846014		26.4			20.3			24.1	15.8	19.8	24.6	19.0	16.4	13.6	13.7	12.7	15.9	12.5
29	19th Ave/F	Lincoln	Sloat	S	2.129074	11.1	21.9			17.5			20.5	24.3	23.6	27.7	20.2	19.8	20.5	21.1	19.3	19.5	16.4
30	19th Ave/F	Sloat	Junipero Se	S	1.248889		18.4			11.9		11.9	9.9	16.9	12.1	17.7	18.2	15.8	16.6	20.4	21.3	21.5	16.7
31	Alemany	Junipero Se	Lyell	E	2.949454		29.5				20.8		20.4	18.6	22.4	22.0	24.3	19.9	16.8	17.3	17.2	22.2	20.8
32	Alemany	Lyell	Bay Shore	E	1.591704		32.9				12.7	14.7	32.1	23.7	29.9	30.2	33.0	29.2	26.4	25.1	28.2	28.0	27.8
33	Alemany	Bay Shore	Lyell	W	1.566291	4.6	30.8				23.3		32.4	23.4	31.4	24.7	31.2	27.6	24.4	25.2	23.3	26.7	26.6
34	Alemany	Lyell	Junipero Se	W	3.026555		22.1				23.9		19.5	19.8	22.2	22.5	29.6	22.2	15.7	16.0	14.5	20.5	19.6
35	Bay	Van Ness	Embarcade	E	1.074704	12.7	16.8				12.1		13.4	18.2	16.5	18.2	20.7	15.6	13.3	13.5	13.5	17.8	15.0
36	Bay	Embarcade	Van Ness	W	1.074706	12.7	12.0	15.7			13.1	13.5	18.7	18.6	16.2	16.4	19.9	14.9	14.4	14.6	14.6	20.5	15.2
37	Bayshore	County Lin	Industrial	N	2.265298		22.6				33.9		22.0	20.7	21.5	23.1	23.1	20.2	18.9	19.3	17.5	24.2	19.4
38	Bayshore	Industrial	Cesar Chav	N	0.82965		26.4				16.4		13.1	22.1	14.4	15.5	17.6	17.3	15.2	15.2	13.1	20.1	14.9
39	Bayshore	Jerrold	Industrial	S	0.802764		21.0				28.4		21.1	19.1	22.3	15.3	20.5	19.3	16.2	16.7	14.6	22.0	20.0
40	Bayshore	Industrial	County Lin	S	2.260688		22.0				26.4		19.7	27.0	26.3	21.8	25.5	20.6	17.7	18.3	15.8	23.7	20.3
41	Beale/Davi	Clay	Mission	S	0.324643		13.4				8.4	8.4	14.6	10.7	11.2	11.7	5.2	5.4	8.1	8.4	6.4	13.4	7.5
42	Brannan	Division	6th	E	0.543687									11.6	13.7	13.6	14.7	9.9	15.7	11.2	9.0	13.3	11.1
43	Brannan	6th	3rd	E	0.510995									9.9	10.3	17.2	14.1	8.5	7.3	7.7	7.0	13.4	12.1
44	Brannan	3rd	6th	W	0.516217									8.6	14.0	16.4	16.9	11.0	7.9	8.6	8.4	16.4	12.2
45	Brannan	6th	Division	W	0.544047									17.2	9.8	8.8	21.1	14.4	9.9	10.4	10.1	14.3	13.0
46	Broadway	Gough	Larkin	E	0.364312		14.6			14.2	10.0	12.0	11.5	10.2	10.5	10.2	12.8	10.5	9.2	11.3	10.4	14.7	13.2
47	Broadway	Larkin	Powell	E	0.547817		38.9			25.5	11.0	12.7	26.1	31.8	36.1	33.6	25.2	29.8	24.1	18.3	19.4	29.7	26.8
48	Broadway	Powell	Montgome	E	0.354654		16.3			12.4	10.4	11.2	12.8	11.2	13.3	14.2	9.0	10.6	9.5	11.0	9.8	14.7	11.9
49	Broadway	Montgome	Embarcade	E	0.348306		13.1			8.4	7.9	7.2	9.0	9.4	14.7	13.2	6.8	5.0	8.9	9.5	8.1	15.4	12.7
50	Broadway	Embarcade	Montgome	W	0.348438		15.4			9.6	4.4	6.9	10.1	13.1	14.9	13.3	9.9	10.5	9.6	10.9	8.6	13.1	11.6
51	Broadway	Montgome	Powell	W	0.354654	6.2	8.4	9.2	12.5	8.5	8.3	10.2	8.0	10.1	7.7	11.8	6.6	5.3	4.6	9.3	8.9	14.0	10.0
52	Broadway	Powell	Larkin	W	0.547817		24.7			25.3	11.0	10.6	32.7	31.0	32.3	29.6	25.5	27.8	27.3	22.1	15.5	30.4	29.1
53	Broadway	Larkin	Gough	W	0.363564	7.7	14.6			7.8	9.9	8.8	7.3	10.9	11.3	11.1	12.6	8.1	7.1	12.6	11.5	14.4	10.7
54	Brotherhoo	Junipero Se	Alemany	E	0.429306									21.0	26.6	24.6	29.4	22.0	21.7	21.7	20.6	23.6	20.2
55	Brotherhoo	Alemany	Junipero Se	W	0.470988									26.2	33.4	31.5	31.6	24.8	25.4	27.0	26.7	28.5	26.1
56	Bryant	Division	4th	E	0.993047	7.7	11.8	9.8	12.8	15.7	10.6	9.6	13.3	8.8	12.7	14.3	13.9	8.6	8.0	8.4	8.3	13.1	11.0
57	Bryant	4th	Embarcade	E	0.772988		13.2				9.5	10.2	19.5	16.0	15.7	14.0	18.2	13.3	10.1	9.5	10.9	14.0	11.8
58	Bush	Masonic	Gough	E	1.243158		20.0				20.5		19.0	19.6	21.2	21.9	22.7	19.1	17.1	16.3	17.7	17.6	15.8
59	Bush	Gough	Market	E	1.454974	3.2	10.1	11.5	11.7	11.6	10.2	9.2	12.5	13.9	14.3	11.3	16.0	10.5	9.1	9.3	9.1	13.4	10.0
60	Castro/Div	Market	14th	N	0.322083	7.7	16.7			12.1	16.1		15.2	10.0	15.7	15.2	14.7	12.8	11.9	12.4	11.9	13.9	11.9
61	Castro/Div	14th	Geary	N	1.134082	4.5	12.8	11.2	12.3	11.8	11.1	9.5	9.4	13.8	12.3	11.6	14.0	11.4	10.6	10.6	9.9	12.3	11.5
62	Castro/Div	Geary	Pine	N	0.265206		8.4	13.5		9.8	14.6		7.5	10.3	10.7	9.2	13.7	11.4	9.4	9.8	9.4	12.3	9.9
63	Castro/Div	Pine	Geary	S	0.265206		11.6	8.1	11.0	8.3	12.6	7.9	11.7	8.6	13.5	10.1	13.0	10.2	9.3	9.7	8.8	10.9	9.7
64	Castro/Div	Geary	14th	S	1.133676		15.7			11.4	12.1	8.2	12.3	9.4	11.1	10.3	12.7	9.6	9.6	10.1	9.5	10.4	9.1
65	Castro/Div	14th	Market	S	0.322083		13.8			14.3	17.3		12.0	11.6	15.2	11.6	13.4	10.5	9.7	10.1	9.8	11.2	8.9
66	Cesar Chav	Guerrero	Bryant	E	0.755058		20.7				15.1		18.2	14.1	15.1	10.6	15.6	10.8	9.9	11.0	10.5	13.0	12.1
67	Cesar Chav	Bryant	Kansas	E	0.375196		26.7				8.5		31.4	30.7	27.6	30.0	27.8	21.2	21.8	17.7	17.3	23.0	23.4
68	Cesar Chav	Kansas	3rd	E	0.795213		17.3				12.0	15.1	19.5	22.8	25.4	22.8	22.2	18.1	16.1	15.8	16.1	22.4	18.7
69	Cesar Chav	3rd	Kansas	W	0.797392		16.3						21.1	16.3	22.3	19.5	23.7	18.7	17.1	16.3	16.4	21.4	17.5
70	Cesar Chav	Kansas	Bryant	W	0.377772		17.5						30.4	30.4	21.0	23.4	23.6	19.4	18.3	17.1	16.3	21.3	17.4
71	Cesar Chav	Bryant	Guerrero	W	0.754606		16.5				15.8		18.8	12.8	16.8	11.6	16.2	12.2	10.3	11.0	10.7	14.3	11.3
72	Clay	Kearny	Davis	E	0.378529	11.7	7.0	8.7	10.4	10.4	9.4	6.5	8.7	16.3	11.7	16.2	6.6	8.7	8.2	8.8	8.3	11.6	10.2
73	Columbus	Montgome	Greenwich	N	0.670646	6.3	12.8	12.9	10.3	11.1	15.0		12.8	21.0	14.1	12.7	12.4	12.5	11.9	12.4	12.2	16.4	13.4
74	Columbus	Greenwich	North Poin	N	0.42442		13.4			16.2			13.3	16.8	9.2	13.4	13.3	12.6	12.4	11.6	10.5	15.3	13.5
75	Columbus	North Poin	Greenwich	S	0.42442		15.2			17.7			15.9	12.5	13.3	14.0	11.5	10.8	8.8	9.1	7.9	12.8	12.5
76	Columbus	Greenwich	Montgome	S	0.670646	6.3	16.0			10.2	9.3	8.7	9.2	10.4	7.1	12.3	11.9	10.2	8.9	9.5	8.6	13.2	10.8
77	Doyle/Lom	County Lin	SF Cemete	E	1.157919		55.3						21.7	39.8	39.8		34.1	39.9	39.4	48.7	48.6	54.4	50.0
78	Doyle/Lom	SF Cemete	Lyon/Franc	E	0.925784		32.3						23.8	32.7	35.8		38.9	35.1	29.7	20.9	19.8	34.2	58.8
79	Doyle/Lom	Lyon/Franc	Van Ness	E	1.290043		16.4				14.8		14.5	15.7	18.2	15.3	18.7	13.8	12.1	13.4	11.9	18.6	16.9
80	Doyle/Lom	Van Ness	Lyon/Franc	W	1.290043		20.5				22.4		15.3	16.0	15.7	16.4	18.0	13.3	13.4	14.2	13.3	18.3	15.7
81	Doyle/Lom	Lyon/Franc	SF Cemete	W	0.958092		43.9						23.5	35.2	39.4		26.0	13.0	40.2	36.0	37.2	42.4	31.8
82	Doyle/Lom	SF Cemete	County Lin	W	1.147186		32.6						24.2	38.8	41.0		22.4	14.2	37.3	38.8	35.3	50.6	36.4
83	Drumm	Market	Washingto	N	0.216252		12.8	13.5			24.7		11.7	11.2	16.2	17.2	8.0	6.3	8.3	8.8	7.2	13.1	9.8
84	Drumm	Washingto	Market	S	0.216552		9.3	3.6			17.4		9.7	6.1	7.6	17.7	5.5	6.0	7.6	7.2	8.1	9.3	7.7
85	Duboce/Di	Market	Mission	E	0.348379		10.0	15.4			7.5	6.3	9.4		14.8	16.7	22.5	15.5	11.3	10.9	9.3	12.6	10.2
86	Duboce/Di	Mission	Potrero	E	0.662292	9.9	14.1				14.2		14.1		13.3	18.5	10.5	10.7	10.2	12.4	11.5	14.1	12.4
87	Duboce/Di	Potrero	Mission	W	0.662127	9.9	16.4				12.0	7.1	9.4		9.6	16.2	8.6	7.2	7.1	12.1	7.5	15.7	13.4
88	Duboce/Di	Mission	Market	W	0.348637	6.3	6.2				7.4	6.0	6.5		10.6	9.6	14.7	8.3	6.5	6.5	7.0	13.4	9.6
89	Embarcade	Townsend	North Poin	N	2.164954		9.0	16.4			14.7		16.0	15.2	14.0	8.9	14.0	11.8	12.8	13.5	14.1	17.6	13.5
90	Embarcade	North Poin	Townsend	S	2.164916		16.7				6.4	12.3	15.2	18.5	20.2	17.6	13.8	9.0	9.3	10.1	10.3	14.3	10.4
91	Evans	Cesar Chav	3rd	S	0.72542		21.4				15.4		19.1	21.8	21.6	17.5	16.8	13.1	13.8	17.2	16.4	22.6	18.2
92	Evans	3rd	Cesar Chav	N	0.72542		20.3				15.2		23.8	22.7	20.1	21.5	16.9	12.2	24.6	16.8	16.0	21.1	17.4
93	Fell	Gough	Market	E	0.292938		13.5				9.4	8.3	7.0	18.4	12.6	12.9	18.6	12.0	8.9	9.2	6.7	11.6	10.6
94	Fell	Gough	Laguna	W	0.181759	5.6	13.3	7.3	8.2	12.0	7.8	7.4	16.9	11.8	9.0	9.3	17.2	12.7	10.1	10.2	11.1	15.8	12.2
95	Fell	Laguna	Stanyan	W	1.562636		20.7				23.5		19.6	23.1	23.7	24.1	22.5	19.1	18.7	20.2	18.7	16.6	15.8
96	Folsom	13th	8th	E	0.487049								18.0			14.6	18.4	13.4	9.4	9.5	9.5	12.7	10.1
97	Folsom	8th	4th	E	0.687213								18.8	21.2	17.2	19.4	17.3	9.5	8.2	8.8	8.3	11.4	12.1
98	Folsom	4th	1st	E	0.515704								18.3	20.0	15.0	16.9	14.8	6.4	7.8	8.2	7.3	10.7	7.6
99	Folsom	1st	Embarcade	E	0.34468								10.0	17.0	12.1	12.1	16.0	11.4	7.5	7.6	7.0	10.7	8.2
100	Franklin	Market	Pine	N	1.061302	8.5	18.8				14.6		14.5	15.9	15.6	13.4	17.9	12.0	10.3	10.7	10.9	14.1	11.9
101	Franklin	Pine	Lombard	N	0.830625		16.4				7.3	7.7	17.5	21.7	23.8	20.8	21.3	16.1	16.7	17.1	17.5	17.2	12.8
102	Fremont	Harrison	Market	N	0.481454		9.3	10.6	16.6		3.2	5.2	14.1	10.5	10.1	10.6	16.8	8.9	7.8	8.3	9.9	13.6	10.1
103	Fulton	Park Presic	10th Ave	E	0.204862										25.7	25.0	23.4	20.6	19.1	17.1	17.3	18.9	19.2
104	Fulton	10th Ave	Arguello	E	0.533347										23.5	15.0	18.6	17.4	14.3	17.8	18.5	18.9	17.8
105	Fulton	Arguello	Masonic	E	0.659455	9.8	13.2				14.8		15.0	10.9	13.6	12.2	14.8	15.2	12.2	11.9	11.1	16.4	14.1
106	Fulton	Masonic	Arguello	W	0.659455		18.9				14.7		20.7	23.9	20.6	13.8	18.0	15.8	13.1	13.9	13.3	16.2	17.1
107	Fulton	Arguello	10th Ave	W	0.533347										22.1	17.7	18.1	17.6	16.1	15.3	14.8	20.1	20.1
108	Fulton	10th Ave	Park Presic	W	0.204862										8.5	11.3	18.1	14.7	13.5	14.5	13.9	20.1	14.2
109	Geary	Great Hwy	25th Ave	E	1.778423		26.2				20.1	16.0	23.6	23.0	21.4	23.8	18.2	14.0	15.6	17.9	18.2	19.7	17.7
110	Geary	25th Ave	Arguello	E	1.418415		21.5			15.0		8.4	14.9	21.0	22.9	21.5	16.9	12.8	14.7	15.6	15.3	17.2	16.6
111	Geary	Arguello	Gough	E	1.913905	11.3	22.6			20.7		14.7	22.4	27.4	20.3	20.1	18.5	14.9	17.6	17.6	14.5	18.4	15.4
112	Geary	Kearny	Gough	W	1.176397	6.7	9.9	14.4		15.9	23.8	10.0	12.2	12.1	10.1	12.9	12.0	10.2	7.9	8.3	8.8	12.8	10.5
113	Geary	Gough	Arguello	W	1.915118		23.1			21.2		13.3	19.1	20.5	25.0	25.1	22.3	15.0	18.5	18.5	17.0	20.0	17.4
114	Geary	Arguello	25th Ave	W	1.42316	11.3	20.3			15.8		10.6	15.1	18.1	17.0	17.1	15.9	11.8	13.3	14.2	14.3	17.1	15.1
115	Geary	25th Ave	Great Hwy	W	1.787611		23.9				29.4	12.7	21.0	23.3	22.0	22.7	16.9	15.0	17.1	18.0	18.0	19.9	19.5

116	Geneva	Ocean	Cayuga	E	0.558813		12.0	17.2			14.6		12.9	11.6	8.4	12.9	14.2	9.6	10.0	10.1	9.2	15.1	12.5
117	Geneva	Cayuga	Paris	E	0.328792	10.4	12.1	10.5	15.5				8.8	9.2	10.8	11.5	14.4	10.7	10.6	11.1	9.9	15.1	11.2
118	Geneva	Paris	Santos	E	1.188472		20.5				22.1		21.0	20.5	21.2	22.0	22.4	15.6	19.1	20.0	18.7	21.4	19.7
119	Geneva	Santos	Paris	W	1.188472		22.6				31.3		25.2	21.2	23.6	23.4	20.4	15.5	17.5	17.0	15.0	21.7	19.8
120	Geneva	Paris	Cayuga	W	0.328792	10.4	12.3	10.7	11.9	12.8	12.7	10.6	10.1	9.7	10.5	8.1	13.2	10.8	9.5	10.3	9.7	16.0	12.6
121	Geneva	Cayuga	Ocean	W	0.527711	6.7	10.4	12.0	9.6	14.2			7.9	6.9	9.2	10.2	13.1	9.7	9.1	10.0	9.7	14.4	10.9
122	Golden Ga	Masonic	Franklin	E	1.372961		20.4				16.0		25.9	20.1	18.9	13.8	16.1	15.5	14.9	15.4	14.7	13.3	12.8
123	Golden Ga	Franklin	Market	E	0.654019	12.2	15.2				14.3		11.7	12.0	12.8	8.9	9.5	3.5	6.2	7.2	6.8	12.2	8.8
124	Gough	Pine	Geary	S	0.25562	9.5	21.8				6.5	6.3	11.4	9.6	24.3	23.0	18.4	12.6	11.6	12.0	12.5	11.1	12.1
125	Gough	Geary	Golden Ga	S	0.330298		17.1				15.8	9.4	13.6	9.7	18.3	20.2	14.7	9.5	6.5	6.9	8.0	11.1	7.1
126	Gough	Golden Ga	Market	S	0.541309	8.3	16.4				7.6	6.4	7.0	7.2	8.7	12.3	12.6	7.9	8.1	8.3	8.8	11.1	8.1
127	Guerrero/S	Monterey	29th	N	1.169806		30.8				41.2		27.0	26.3	23.7	24.2	27.0	14.5	15.1	14.0	14.3	29.5	15.6
128	Guerrero/S	29th	Cesar Chav	N	0.285708		12.6	7.9	17.8		15.6		14.1	16.4	20.0	12.7	18.9	14.1	14.4	17.4	12.8	14.0	12.3
129	Guerrero/S	Cesar Chav	29th	S	0.284217		24.0				24.9		20.1	20.5	14.3	20.8	18.7	12.7	9.7	8.9	6.3	15.1	16.0
130	Guerrero/S	29th	Monterey	S	1.165953		21.6	23.0			26.8		27.7	37.7	26.0	27.6	27.2	21.9	19.1	19.9	16.0	25.1	20.4
131	Harrison	Embarcade	1st	W	0.342951		11.4	11.6	9.6	9.4	14.5		14.3	8.0	11.9	12.8	14.6	7.6	5.3	6.0	6.6	14.3	8.2
132	Harrison	1st	4th	W	0.516426		20.5				14.0		20.0	22.4	16.7	18.9	16.5	13.1	7.8	8.3	9.4	14.3	11.8
133	Harrison	4th	8th	W	0.686807	12.7	19.1				16.0		19.0	19.0	11.6	14.9	16.0	14.3	13.7	14.1	12.7	13.9	13.9
134	Harrison	8th	Division	W	0.399154		13.6				13.0		12.4	12.7	13.2	11.6	16.1	12.8	10.5	10.7	10.6	12.8	9.9
135	Hayes	Market	Gough	W	0.391577	5.6	11.7	15.7			10.9	7.1	11.8	13.3	9.6	8.8	11.5	11.2	7.5	7.2	7.9	11.9	9.0
136	Howard	Embarcade	S Van Ness	W	2.108573	5.4	13.6				13.0		12.7	14.6	12.6	12.2	15.5	11.1	9.3	9.9	9.4	13.3	11.1
137	Junipero Se	County Lin	Brotherhoo	N	0.289362		40.4				26.3		41.8	41.0	35.6	47.1	26.0	20.8	17.4	14.1	15.7	49.4	10.6
138	Junipero Se	Brotherhoo	19th	N	0.338532		19.1	21.7	23.6	26.5			16.2	16.4	15.2	10.5	13.8	12.9	10.7	11.8	9.2	25.1	10.3
139	Junipero Se	19th	Sloat	N	1.210695		20.5	18.9	12.8	19.3	14.4	14.6	11.8	15.5	22.8	22.0	24.6	20.5	24.7	24.8	21.6	27.9	23.6
140	Junipero Se	Sloat	19th	S	1.210665		18.0	20.6	11.8	12.0	18.1	14.7	18.8	14.9	16.7	16.8	26.3	18.5	20.4	20.2	17.5	23.0	18.6
141	Junipero Se	19th	Brotherhoo	S	0.333727		22.1				16.6	19.0	35.3	40.4	39.2	40.3	38.0	34.0	37.3	42.5	39.7	42.7	41.6
142	Junipero Se	Brotherhoo	County Lin	S	0.296424		48.1				26.3		39.2	44.5	39.6	45.3	50.6	48.9	53.6	49.9	47.5	52.0	50.8
143	Kearny	Market	Columbus	N	0.647422	6.3	12.9	10.8	9.2	9.1	8.1	7.2	11.7	11.2	13.0	14.8	11.9	8.9	8.3	8.3	9.0	12.7	9.8
144	King	4th	2nd	E	0.344638									21.7			13.9	11.5	12.3	12.7	12.1	15.7	13.4
145	King	2nd	4th	W	0.344638									7.7			12.0	8.7	8.0	8.0	8.5	19.0	12.1
146	Lincoln/ Ke	19th Ave	5th Ave	E	0.83121		16.4				14.5		12.3	24.0	23.1	20.6	21.5	18.9	18.0	16.7	16.6	19.7	18.1
147	Lincoln/ Ke	5th Ave	Stanyan	E	0.699061		22.8				14.0		22.8	21.8	21.7	22.8	22.0	21.1	20.0	20.2	20.3	19.9	18.1
148	Lincoln/ Ke	Stanyan	5th Ave	W	0.699713		21.3				9.8	9.9	23.6	18.1	29.1	24.8	21.4	18.6	20.9	21.1	19.7	20.1	19.7
149	Lincoln/ Ke	5th Ave	19th Ave	W	0.830037	11.3	20.8				12.0	9.1	22.7	12.8	12.9	18.9	18.0	16.4	14.5	15.2	14.4	17.5	17.3
150	Main	Mission	Market	N	0.121791		9.8	8.4	6.7	7.7	5.4	7.5	14.4	16.3	19.3	14.3	3.2	5.0	11.0	6.7	8.4	13.1	12.8
151	Market/Po	Sloat	Santa Clara	E	0.431052		16.5			15.9			21.0	16.0	20.2	21.1	22.1	16.5	15.1	15.3	15.7	21.4	17.4
152	Market/Po	Santa Clara	Burnett	E	1.338841		23.6			37.4			20.6	22.2	24.0	20.0	23.1	20.2	19.0	19.8	19.9	22.2	21.2
153	Market/Po	Burnett	Castro	E	1.623965		34.1			30.9			22.0	24.5	22.0	23.5	24.6	20.9	21.4	21.0	21.8	21.0	21.2
154	Market/Po	Castro	Guerrero	E	0.793811		15.0			9.2	14.8		10.0	10.6	9.9	10.3	13.9	11.4	10.0	10.4	11.0	13.8	12.5
155	Market/Po	Guerrero	Van Ness	E	0.431522	8.3	17.9			7.4	6.7	9.0	7.0	10.5	12.1	14.8	20.3	12.2	9.1	8.3	7.8	12.5	10.1
156	Market/Po	Van Ness	Drumm	E	1.771597	9.6	12.9	6.3			8.7	9.3	11.0	9.2	9.5	10.6	11.9	8.9	6.4	6.4	6.1	12.3	10.5
157	Market/Po	Drumm	Van Ness	W	1.771597	9.6	15.5				10.0	7.4	9.9	11.5	13.5	12.1	11.7	9.4	5.6	7.4	7.3	10.2	8.7
158	Market/Po	Van Ness	Guerrero	W	0.431522	8.3	12.5	8.0	10.8	11.1	24.8		12.1	8.3	12.2	11.3	12.9	10.9	11.0	11.6	10.4	15.1	13.0
159	Market/Po	Guerrero	Castro	W	0.793811		16.5			11.5	13.2		19.4	15.0	15.1	12.7	16.0	13.0	15.4	15.8	13.6	17.0	14.0
160	Market/Po	Castro	Burnett	W	1.625441		27.0			24.7			28.0	28.4	26.7	30.1	26.3	21.9	21.2	22.0	21.7	23.4	24.2
161	Market/Po	Burnett	Santa Clara	W	1.338778		19.6			35.7			24.0	22.0	20.4	21.4	22.0	17.2	16.4	18.1	16.2	22.7	19.9
162	Market/Po	Santa Clara	Sloat	W	0.430782	11.8	22.2			18.4			14.8	7.9	8.3	14.0	19.5	13.5	13.3	14.0	13.6	20.4	14.4
163	Masonic	Page	Geary	N	0.787685	10.0	13.6				11.9	7.3	13.8	14.7	18.8	17.2	17.8	12.7	12.4	12.6	11.1	13.8	12.9
164	Masonic	Geary	Bush/Eucli	N	0.200552	8.5	21.5				15.1		15.5	24.7	27.0	22.4	24.1	15.8	16.8	17.0	16.7	17.9	15.4
165	Masonic	Presidio	Geary	S	0.292436	8.5	9.3	12.7	16.9				11.4	10.5	14.5	9.2	15.9	9.5	11.1	11.4	7.8	13.0	10.5
166	Masonic	Geary	Page	S	0.787685	10.0	13.4				16.3		11.1	12.5	16.9	13.5	19.2	13.4	12.6	12.7	12.8	11.8	9.0
167	Mission/Ot	Sickles	Ocean	N	1.447533		18.1			22.0			23.0	19.8	22.4	20.3	17.3	14.2	14.1	14.2	12.4	16.7	16.6
168	Mission/Ot	Ocean	Cesar Chav	N	1.947536		17.3			18.5			19.1	15.3	17.8	16.3	14.1	13.9	13.3	14.0	12.8	16.3	15.0
169	Mission/Ot	Cesar Chav	14th	N	1.391509	10.9	10.5	12.3	13.0	14.7			12.6	13.8	13.9	14.2	11.8	11.1	9.6	9.7	9.4	12.3	11.6
170	Mission/Ot	14th	9th	N	0.649405		12.2	9.9	9.2	10.5	8.5	8.3	12.3	12.6	13.3	12.2	14.7	13.3	9.2	9.8	9.4	13.7	12.8
171	Mission/Ot	9th	3rd	N	0.979368		19.9			13.5	9.7	9.8	12.7	14.2	13.7	12.4	15.1	10.3	10.1	10.5	10.0	13.6	11.4
172	Mission/Ot	3rd	Embarcade	N	0.735527	9.7	15.9			5.1	10.7	9.2	7.6	8.9	13.0	10.9	14.3	8.3	6.7	7.3	5.9	12.1	8.6
173	Mission/Ot	Embarcade	3rd	S	0.73607	9.7	7.6	13.0		10.7	9.7	8.6	13.4	11.3	13.9	11.0	12.8	9.3	7.3	7.7	7.5	12.9	9.2
174	Mission/Ot	3rd	9th	S	0.979368		19.1			12.1	12.3	8.4	18.3	13.2	15.1	14.4	14.5	11.1	11.4	11.7	10.7	13.0	11.7
175	Mission/Ot	9th	14th	S	0.682813	9.7	14.9			16.7			12.9	13.4	13.4	13.5	12.4	10.9	10.5	9.2	9.2	13.0	8.6
176	Mission/Ot	14th	Cesar Chav	S	1.391509	10.9	14.9			13.2			13.3	13.4	15.2	13.8	12.8	11.5	10.5	10.8	9.6	13.6	11.9
177	Mission/Ot	Cesar Chav	Ocean	S	1.947536		15.6			14.7			14.7	14.5	13.8	15.5	13.3	11.8	11.1	11.2	10.0	15.2	14.0
178	Mission/Ot	Ocean	Sickles	S	1.447533		15.1			24.9			21.3	16.6	20.3	19.4	15.9	13.8	14.4	13.1	12.5	17.2	16.8
179	Montgome	Broadway	Bush	S	0.506858	6.2	2.4				12.4	8.2	8.2	5.5	9.2	7.2	12.8	5.5	5.0	6.1	5.6	8.9	7.5
180	North Poin	Van Ness	Columbus	E	0.383452		15.4				7.4	11.0	11.4	15.0	15.5	14.4	9.3	8.9	9.7	9.2	12.7	15.4	13.3
181	North Poin	Columbus	Embarcade	E	0.613771		14.5				11.4	9.9	12.8	20.3	15.9	16.3	17.7	8.4	9.3	11.4	15.0	16.6	14.6
182	North Poin	Embarcade	Columbus	W	0.613771		16.9				12.2	10.3	19.5	21.3	15.8	20.2	18.0	12.4	15.8	14.6	17.4	18.4	17.1
183	North Poin	Columbus	Van Ness	W	0.383452	8.5	20.9				10.4	9.8	19.5	12.6	16.4	13.2	10.4	13.2	12.2	9.5	9.1	14.8	13.5
184	Oak	Stanyan	Divisadero	E	0.917342		23.1				13.0	11.8	16.2	13.5	11.8	16.4	21.1	20.6	20.6	20.9	19.6	19.5	18.9
185	Oak	Divisadero	Fillmore	E	0.366017						16.9		24.6	26.7	25.3	26.4	23.8	18.7	19.2	8.6	12.1	12.5	13.0
186	Oak	Fillmore	Laguna	E	0.273836	8.2					15.3	15.7	23.8	27.8	22.3	24.5	16.6	12.4	6.2	8.6	12.1	12.5	7.0
187	Oak	Laguna	Franklin	E	0.273284		21.6				15.6		23.0	27.4	21.5	22.6	17.9	11.0	8.8	10.1	9.8	12.5	9.4
188	Ocean	19th Ave	Miramar	E	1.10967		17.1				9.4	12.5	12.4	14.9	12.9	12.8	13.8	13.8	12.0	12.4	11.7	15.5	14.3
189	Ocean	Miramar	Howth	E	0.48447	0.8	21.0				10.7	13.2	14.2	13.7	14.8	12.7	14.2	11.1	10.7	11.0	10.6	13.2	11.9
190	Ocean	Howth	Miramar	W	0.48447	6.1	14.9				9.1	11.2	8.4	10.7	13.0	11.9	12.5	8.6	8.0	7.9	7.9	13.9	9.9
191	Ocean	Miramar	19th Ave	W	1.109708		14.6				8.8	10.3	12.5	15.4	12.4	14.5	14.2	13.1	11.8	12.0	12.1	15.9	14.3
192	Octavia	Market	Fell	N	0.272347								8.2	14.5	16.1	13.6	10.9	10.4	10.3	10.5	9.3	10.0	8.8
193	Octavia	Fell	Market	S	0.278272								14.2	12.6	11.6	9.9	9.8	4.0	6.8	7.5	7.2	14.2	9.3
194	O'Farrell	Gough	Mason	E	0.847471	5.7	13.7				12.6	14.6	9.9	10.0	11.2	11.2	13.3	10.8	8.6	8.6	8.4	11.2	10.5
195	O'Farrell	Mason	Market	E	0.283457	6.9	7.9				4.2	6.7	6.7	6.1	9.0	8.0	12.5	8.5	6.8	7.9	7.2	11.2	8.2
196	Pine	Market	Kearny	W	0.382655	4.6	10.8	7.3	10.3	6.7	8.0	4.3	8.9	5.9	8.9	13.2	4.3	6.7	5.4	6.9	6.7	13.1	8.5
197	Pine	Kearny	Leavenwor	W	0.628423		12.9	19.8			17.1		16.2	13.6	16.8	16.2	12.1	13.8	9.1	12.6	12.7	13.1	12.9
198	Pine	Leavenwor	Franklin	W	0.455701	4.8	13.2				9.4	6.5	12.6	10.9	14.3	14.5	8.5	5.2	6.0	9.3	9.1	15.5	10.5
199	Pine	Franklin	Presidio	W	1.265863		15.3				19.2		20.3	23.4	22.4	22.0	14.5	16.7	13.7	18.8	18.4	17.9	17.2
200	Potrero	Cesar Chav	21st	N	0.605892		23.8			14.5			17.0	23.6	18.8	21.3	15.1	7.7	12.9	14.2	14.0	16.8	12.9
201	Potrero	21st	Division	N	0.795214		21.4			19.3			14.9	21.3	15.6	23.2	15.3	6.3	13.5	13.5	12.3	17.3	13.5
202	Potrero	Division	21st	S	0.795214		22.6			18.8			16.5	20.5	25.2	22.6	14.0	8.5	15.7	16.3	13.3	16.4	14.7
203	Potrero	21st	Cesar Chav	S	0.6015	4.8	13.7			19.1			15.5	15.8	19.4	18.0	8.5	3.9	17.3	13.9	11.0	15.6	12.4
204	Skyline	County Lin	Sloat	N	1.944104		44.9				42.6		49.3	41.7	46.8	42.2	42.6	35.8	35.8	29.1	33.7	41.0	35.4
205	Skyline	Sloat	County Lin	S	1.944218		42.1				36.6		47.1	37.8	38.1	38.3	38.5	30.9	34.6	33.3	33.8	38.4	34.7
206	Sloat	Skyline	Junipero Se	E	1.377516		19.2	24.9			19.9	18.4	25.9	17.6	20.7	17.7	25.4	22.6	19.9	21.7	20.1	24.5	22.0
207	Sloat	Junipero Se	Skyline	W	1.37871		23.2				27.4		24.8	27.2	26.9	29.6	29.5	24.7	24.6	24.1	22.3	25.8	24.3
208	Stanyan	Fulton	Turk	N	0.197824	4.6	10.8	11.6	16.8				15.9	12.0	12.6	15.6	18.3	13.3	13.2	14.0	12.7	15.4	14.2
209	Stanyan	Turk	Fulton	S	0.19965		7.6	10.5	8.0	13.3			18.9	6.4	9.2	8.6	15.9	11.5	9.9	10.4	13.7	10.9	8.7
210	Sutter	Divisadero	Gough	E	0.822183		15.4				12.8		15.8	15.9	15.5	13.4	15.2	12.0	11.0	10.9	9.4	12.9	11.5
211	Sutter	Market	Mason	W	0.56425		7.3	12.4	12.7	8.0	12.7		11.6	13.5	11.3	12.7	11.9	10.4	8.0	8.1	8.1	12.5	10.1
212	Sutter	Mason	Gough	W	0.820507	9.0	17.0				14.6		13.3	12.4	14.6	11.8	12.3	10.9	10.8	10.4	10.8	13.0	12.0
213	Sutter	Gough	Divisadero	W	0.822183		16.6				14.3		13.3	15.6	14.9	13.6	13.0	11.8	11.2	11.8	12.2	14.1	13.6
214	Townsend	7th	2nd	E	0.859493								21.3	16.8	11.9	15.9	17.2	8.4	9.0	9.6	8.6	16.5	12.6
215	Townsend	2nd	7th	W	0.85994								18.7	18.0	12.8	11.4	16.5	9.4	9.1	10.1	9.0	17.9	13.7
216	Turk	Stanyan	Divisadero	E	0.912411		14.9				16.4		18.4	19.1	17.2	17.2	19.5	17.9	13.9	14.8	13.6	18.6	14.7
217	Turk	Market	Hyde	W	0.37566		14.9				7.3	8.3	12.8	13.3	11.1	11.4	13.4	12.5	9.2	9.7	8.5	11.5	9.7
218	Turk	Hyde	Gough	W	0.4563	8.7	14.9				9.1	11.3	10.5	10.6	9.3	11.3	14.6	12.0	9.9	10.2	8.6	11.5	10.2
219	Turk	Gough	Divisadero	W	0.821631		27.1				18.0		19.3	21.7	19.4	18.3	22.1	16.7	15.9	16.3	16.1	16.5	15.7
220	Turk	Divisadero	Stanyan	W	0.912411		19.2				14.6		21.3	18.9	25.6	17.4	19.4	17.4	15.8	17.4	17.9	18.8	17.8
221	Van Ness/S	Cesar Chav	13th	N	1.48805		22.4			16.9	26.1		16.3	15.5	14.7	13.9	18.5	14.7	14.6	14.8	15.1	16.6	12.7
222	Van Ness/S	13th	Golden Ga	N	0.807721		13.7			18.3		6.6	10.2	12.8	14.7	13.7	13.4	9.7	8.5	8.7	7.6	15.0	12.7
223	Van Ness/S	Golden Ga	Washingto	N	0.839652		15.1			11.4	12.8	9.8	16.6	16.9	17.4	21.9	14.8	11.7	13.6	13.7	13.3	16.6	11.6
224	Van Ness/S	Washingto	Lombard	N	0.576467		13.2			18.0	26.1	9.2	22.4	26.6	26.4	24.5	17.6	16.4	15.5	16.1	16.6	18.6	11.1
225	Van Ness/S	Lombard	Washingto	S	0.576466		17.7			14.5	12.8	11.7	13.5	19.9	12.4	17.1	13.7	12.3	11.4	11.9	10.4	13.1	10.1
226	Van Ness/S	Washingto	Golden Ga	S	0.839659	4.6	11.7	7.0	8.4	9.7	10.0	9.8	8.0	10.4	12.2	11.5	12.8	9.8	7.9	8.2	9.2	11.6	8.6
227	Van Ness/S	Golden Ga	13th	S	0.795408	4.6	6.9			23.1		5.0	9.1	12.7	12.3	16.5	14.2	7.8	6.9	7.3	7.5	11.7	9.2
228	Van Ness/S	13th	Cesar Chav	S	1.488333	12.6	18.2			18.9			20.2	20.4	17.1	18.7	19.0	15.1	14.7	14.8	13.8	15.5	12.1
229	Washingto	Drumm	Kearny	W	0.443558		10.3	12.5	8.0	9.5	18.4		14.1	15.2	11.3	14.9	8.1	9.1	10.9	10.0	9.5	11.3	11.5
230	West Porta	Sloat	Ulloa	N	0.535165		17.1				11.6	10.0	15.1	15.1	12.6	15.4	13.7	11.6	12.3	9.5	12.1	12.9	11.5
231	West Porta	Ulloa	Sloat	S	0.535165		18.2				11.3	8.0	17.1	15.4	15.2	16.7	13.4	14.3	13.0	10.2	11.5	13.2	10.2
232	I-280	Junipero Se	Weldon	E	4.025805	54.9	59.1				45.0	43.7	67.4	60.4	64.6	61.3	65.9	63.8	65.0	63.3	56.7	66.4	63.9
233	I-280	Weldon	6th/Branna	N	3.514703		46.3	51.0	48.6	38.6	38.9	42.3	25.5	50.8	41.8	35.6	36.3	32.1	26.4	23.6	25.5	46.0	40.2
234	US-101	County Lin	Cortland	N	2.310922	20.6	72.4				43.2	40.1	55.2	63.9	49.1	49.0	53.1	51.3	52.4	53.2	51.3	65.2	41.0
235	US-101	Cortland	I-80	N	1.902121	24.6	45.8	31.8	40.9	6.2	24.0	17.8	53.1	48.6	23.6	18.3	13.3	12.8	14.8	13.8	12.6	23.5	8.5
236	US-101	I-80	Market	N	1.269058	12.2	15.3					8.2	13.5	32.6	22.8	30.5	31.8	24.6	20.6	12.4	13.5	25.4	23.0

237	I-80	Treasure Is	Fremont E:	W	2.710141	27.5	26.3				31.6	21.7	41.9	21.9	26.8	30.3	23.8	19.5	20.3	17.9	17.5	35.4	13.0
238	I-80	Fremont E:	US-101	W	1.704997	18.6	21.5				24.9	13.8	22.4	18.2	24.5	19.9	17.4	15.9	16.7	16.0	14.3	19.4	12.9
239	I-280	6th/Brann:	Weldon	S	3.469719		22.9				30.9	28.5	29.8	54.8	54.5	41.5	37.8	36.4	39.0	35.4	41.1	51.4	47.1
240	I-280	Weldon	Junipero S	S	4.071654	51.9	56.6				44.5	31.4	54.3	53.5	45.7	50.6	52.1	48.4	45.4	45.7	43.1	58.2	45.3
241	US-101	Market	I-80	S	1.166088	18.8	13.4					14.9	8.9	18.9	21.3	13.1	13.4	12.6	14.3	16.0	14.1	15.8	13.9
242	US-101	I-80	Cortland	S	1.968191	31.6	46.3	47.2	35.5	32.4	44.4	21.4	30.3	45.2	45.6	46.9	49.6	43.3	46.7	46.8	43.5	49.8	43.1
243	US-101	Cortland	Monster P:	S	2.298268	48.1	51.1	30.8	39.2	49.0	41.6	30.5	52.2	49.8	55.2	51.3	59.4	58.3	59.4	58.6	56.3	62.0	58.5
244	I-80	US-101	Fremont E:	E	1.738536	19.0	25.9				14.8	10.0	8.9	19.6	7.0	10.8	9.7	7.6	7.2	6.9	6.4	8.7	8.0
245	I-80	Fremont E:	Treasure Is	E	2.69955	29.3	37.7	34.6	45.6	23.1	21.6	14.6	41.5	45.7	36.0	32.0	35.2	33.4	36.0	31.8	33.8	33.3	29.6

Attachment 5.3 - CMP Segments Level of Service (LOS) (2023)

cmp id	Name	From	To	Travel Direction	Length (mi)	HCM 1985 Class	HCM 2000 Class	AM LOS (HCM 1985)	AM LOS (HCM 2000)	PM LOS (HCM 1985)	PM LOS (HCM 2000)
1	1st St	Market	Harrison	S	0.481558	3	4	C	C	F	F
2	2nd St	Brannan	Market	N	0.721664	3	4	D	D	D	D
3	2nd St	Market	Brannan	S	0.721664	3	4	C	C	D	D
4	3rd St	Jamestown	Evans	N	1.6237	3	4	C	C	C	C
5	3rd St	Evans	Terry Franc	N	2.359989	3	3	C	D	C	D
6	3rd St	Terry Franc	Market	N	1.048898	3	4	D	D	D	D
7	3rd St	Terry Franc	Evans	S	2.360565	3	3	C	C	C	D
8	3rd St	Evans	Jamestown	S	1.6237	3	4	C	C	C	C
9	4th St/Stoc	O'Farrell	Harrison	S	0.564056	3	4	D	D	E	E
10	4th St/Stoc	Harrison	Channel	S	0.596755	3	4	D	D	D	D
11	5th St	Brannan	Market	N	0.722306	3	4	D	D	D	D
12	5th St	Market	Brannan	S	0.722304	3	4	D	D	D	D
13	6th St	Brannan	Market	N	0.722783	3	4	D	D	D	D
14	6th St	Market	Brannan	S	0.72278	3	4	C	C	D	D
15	7th St	Brannan	Market	N	0.722735	3	4	D	D	D	D
16	8th St	Market	Bryant	S	0.602908	3	3	D	E	E	F
17	9th St	Brannan	Market	N	0.722619	3	4	D	D	D	D
18	10th St	Market	Brannan	S	0.726749	3	3	C	D	D	E
19	16th St	Market	Mission	E	0.735954	3	4	D	D	D	D
20	16th St	Mission	Potrero	E	0.666427	3	4	C	C	D	D
21	16th St	Potrero	Mission	W	0.666427	3	4	C	C	D	D
22	16th St	Mission	Market	W	0.73603	3	4	C	C	D	D
23	19th Ave/P	Junipero Se	Sloat	N	1.248889	3	3	C	C	B	C
24	19th Ave/P	Sloat	Lincoln	N	2.129077	3	3	C	D	C	D
25	19th Ave/P	Lincoln	Lake	N	1.846013	3	3	B	B	B	C
26	19th Ave/P	Lake	US-101	N	1.18461	1	1	A	A	A	B
27	19th Ave/P	US-101	Lake	S	1.259089	1	1	A	B	C	D
28	19th Ave/P	Lake	Lincoln	S	1.846014	3	3	B	C	D	E
29	19th Ave/P	Lincoln	Sloat	S	2.129074	3	3	C	D	C	D
30	19th Ave/P	Sloat	Junipero Se	S	1.248889	3	3	A	B	C	D
31	Alemany	Junipero Se	Lyell	E	2.949454	3	2	B	C	B	D
32	Alemany	Lyell	Bay Shore	E	1.591704	3	2	A	C	A	C
33	Alemany	Bay Shore	Lyell	W	1.566291	3	2	A	B	A	C
34	Alemany	Lyell	Junipero Se	W	3.026555	3	2	B	D	B	D
35	Bay	Van Ness	Embarcade	E	1.074704	3	4	C	C	C	C
36	Bay	Embarcade	Van Ness	W	1.074706	3	4	C	C	C	C
37	Bayshore	County Lin	Industrial	N	2.265298	3	3	C	D	B	C
38	Bayshore	Industrial	Cesar Chav	N	0.82965	3	3	C	D	C	D
39	Bayshore	Jerrold	Industrial	S	0.802764	3	3	B	C	B	C
40	Bayshore	Industrial	County Lin	S	2.260688	3	3	B	C	B	C
41	Beale/Davi	Clay	Mission	S	0.324643	3	4	D	D	E	E
42	Brannan	Division	6th	E	0.543687	3	4	C	C	D	D
43	Brannan	6th	3rd	E	0.510995	3	4	C	C	D	D
44	Brannan	3rd	6th	W	0.516217	3	4	C	C	D	D
45	Brannan	6th	Division	W	0.544047	3	4	C	C	D	D
46	Broadway	Gough	Larkin	E	0.364312	3	4	C	C	C	C
47	Broadway	Larkin	Powell	E	0.547817	1	1	D	E	C	D
48	Broadway	Powell	Montgome	E	0.354654	3	4	C	C	D	D
49	Broadway	Montgome	Embarcade	E	0.348306	3	4	C	C	D	D
50	Broadway	Embarcade	Montgome	W	0.348438	3	4	C	C	D	D
51	Broadway	Montgome	Powell	W	0.354654	3	4	C	C	D	D
52	Broadway	Powell	Larkin	W	0.547817	1	1	B	C	B	C
53	Broadway	Larkin	Gough	W	0.363564	3	4	C	C	D	D
54	Brotherhoc	Junipero Se	Alemany	E	0.429306	3	3	B	C	B	C
55	Brotherhoc	Alemany	Junipero Se	W	0.470988	3	3	A	B	A	B
56	Bryant	Division	4th	E	0.993047	3	3	C	D	D	E

57	Bryant	4th	Embarcade	E	0.772988	3	3	C	E	D	E
58	Bush	Masonic	Gough	E	1.243158	3	3	C	D	C	D
59	Bush	Gough	Market	E	1.454974	3	3	D	E	D	E
60	Castro/Divi	Market	14th	N	0.322083	3	4	D	D	D	D
61	Castro/Divi	14th	Geary	N	1.134082	3	4	D	D	D	D
62	Castro/Divi	Geary	Pine	N	0.265206	3	4	D	D	D	D
63	Castro/Divi	Pine	Geary	S	0.265206	3	4	D	D	D	D
64	Castro/Divi	Geary	14th	S	1.133676	3	4	C	C	D	D
65	Castro/Divi	14th	Market	S	0.322083	3	4	D	D	E	E
66	Cesar Chav	Guerrero	Bryant	E	0.755058	3	4	D	D	D	D
67	Cesar Chav	Bryant	Kansas	E	0.375196	3	4	B	B	B	B
68	Cesar Chav	Kansas	3rd	E	0.795213	3	4	C	C	C	C
69	Cesar Chav	3rd	Kansas	W	0.797392	3	4	C	C	C	C
70	Cesar Chav	Kansas	Bryant	W	0.377772	3	4	B	B	C	C
71	Cesar Chav	Bryant	Guerrero	W	0.754606	3	4	C	C	D	D
72	Clay	Kearny	Davis	E	0.378529	3	4	D	D	D	D
73	Columbus	Montgome	Greenwich	N	0.670646	3	4	C	C	C	C
74	Columbus	Greenwich	North Poin	N	0.42442	3	4	D	D	C	C
75	Columbus	North Poin	Greenwich	S	0.42442	3	4	C	C	D	D
76	Columbus	Greenwich	Montgome	S	0.670646	3	4	D	D	D	D
77	Doyle/Lom	County Lin	SF Cemete	E	1.157919	1	2	A	A	A	A
78	Doyle/Lom	SF Cemete	Lyon/Franc	E	0.925784	1	2	A	A	A	A
79	Doyle/Lom	Lyon/Franc	Van Ness	E	1.290043	3	4	C	C	C	C
80	Doyle/Lom	Van Ness	Lyon/Franc	W	1.290043	3	4	C	C	C	C
81	Doyle/Lom	Lyon/Franc	SF Cemete	W	0.958092	1	2	A	A	B	B
82	Doyle/Lom	SF Cemete	County Lin	W	1.147186	1	2	A	A	A	A
83	Drumm	Market	Washingto	N	0.216252	3	4	D	D	D	D
84	Drumm	Washingto	Market	S	0.216552	3	4	E	E	E	E
85	Duboce/Di	Market	Mission	E	0.348379	3	4	D	D	D	D
86	Duboce/Di	Mission	Potrero	E	0.662292	3	4	C	C	D	D
87	Duboce/Di	Potrero	Mission	W	0.662127	3	4	C	C	C	C
88	Duboce/Di	Mission	Market	W	0.348637	3	4	D	D	D	D
89	Embarcade	Townsend	North Poin	N	2.164954	3	3	C	D	C	E
90	Embarcade	North Poin	Townsend	S	2.164916	3	3	C	D	D	E
91	Evans	Cesar Chav	3rd	S	0.72542	3	4	C	C	C	C
92	Evans	3rd	Cesar Chav	N	0.72542	3	4	C	C	C	C
93	Fell	Gough	Market	E	0.292938	3	4	D	D	D	D
94	Fell	Gough	Laguna	W	0.181759	3	3	D	E	D	E
95	Fell	Laguna	Stanyan	W	1.562636	3	3	C	C	C	D
96	Folsom	13th	8th	E	0.487049	3	3	D	E	D	E
97	Folsom	8th	4th	E	0.687213	3	3	C	D	D	E
98	Folsom	4th	1st	E	0.515704	3	3	D	E	E	F
99	Folsom	1st	Embarcade	E	0.34468	3	3	E	F	E	F
100	Franklin	Market	Pine	N	1.061302	3	4	D	D	D	D
101	Franklin	Pine	Lombard	N	0.830625	3	4	C	C	D	D
102	Fremont	Harrison	Market	N	0.481454	3	4	E	E	D	D
103	Fulton	Park Presid	10th Ave	E	0.204862	3	4	B	B	B	B
104	Fulton	10th Ave	Arguello	E	0.533347	3	4	C	C	C	C
105	Fulton	Arguello	Masonic	E	0.659455	3	4	C	C	C	C
106	Fulton	Masonic	Arguello	W	0.659455	3	4	C	C	C	C
107	Fulton	Arguello	10th Ave	W	0.533347	3	4	B	B	B	B
108	Fulton	10th Ave	Park Presid	W	0.204862	3	4	B	B	C	C
109	Geary	Great Hwy	25th Ave	E	1.778423	3	4	B	B	C	C
110	Geary	25th Ave	Arguello	E	1.418415	3	4	C	C	C	C
111	Geary	Arguello	Gough	E	1.913905	3	4	C	C	C	C
112	Geary	Kearny	Gough	W	1.176397	3	4	D	D	D	D
113	Geary	Gough	Arguello	W	1.915118	3	4	B	B	C	C
114	Geary	Arguello	25th Ave	W	1.42316	3	4	C	C	C	C
115	Geary	25th Ave	Great Hwy	W	1.787611	3	4	B	B	B	B
116	Geneva	Ocean	Cayuga	E	0.558813	3	4	C	C	D	D
117	Geneva	Cayuga	Paris	E	0.328792	3	4	C	C	D	D

118	Geneva	Paris	Santos	E	1.188472	3	4	B	B	B	B
119	Geneva	Santos	Paris	W	1.188472	3	4	B	B	B	B
120	Geneva	Paris	Cayuga	W	0.328792	3	4	D	D	D	D
121	Geneva	Cayuga	Ocean	W	0.527711	3	4	D	D	D	D
122	Golden Gat	Masonic	Franklin	E	1.372961	3	4	C	C	D	D
123	Golden Gat	Franklin	Market	E	0.654019	3	4	E	E	E	E
124	Gough	Pine	Geary	S	0.25562	3	4	C	C	D	D
125	Gough	Geary	Golden Gat	S	0.330298	3	4	D	D	E	E
126	Gough	Golden Gat	Market	S	0.541309	3	4	D	D	E	E
127	Guerrero/S	Monterey	29th	N	1.169806	1	2	D	D	E	E
128	Guerrero/S	29th	Cesar Chav	N	0.285708	3	4	C	C	D	D
129	Guerrero/S	Cesar Chav	29th	S	0.284217	3	4	C	C	C	C
130	Guerrero/S	29th	Monterey	S	1.165953	1	2	C	C	D	D
131	Harrison	Embarcade	1st	W	0.342951	3	3	C	E	E	F
132	Harrison	1st	4th	W	0.516426	3	3	D	E	D	E
133	Harrison	4th	8th	W	0.686807	3	3	C	D	C	E
134	Harrison	8th	Division	W	0.399154	3	3	D	E	D	F
135	Hayes	Market	Gough	W	0.391577	3	4	D	D	E	E
136	Howard	Embarcade	S Van Ness	W	2.108573	3	4	D	D	D	D
137	Junipero Se	County Lin	Brotherhoc	N	0.289362	1	1	D	E	F	F
138	Junipero Se	Brotherhoc	19th	N	0.338532	1	1	F	F	F	F
139	Junipero Se	19th	Sloat	N	1.210695	1	2	C	C	C	C
140	Junipero Se	Sloat	19th	S	1.210665	1	2	D	D	D	D
141	Junipero Se	19th	Brotherhoc	S	0.333727	1	1	A	A	A	B
142	Junipero Se	Brotherhoc	County Lin	S	0.296424	1	1	A	A	A	A
143	Kearny	Market	Columbus	N	0.647422	3	4	D	D	D	D
144	King	4th	2nd	E	0.344638	3	4	C	C	C	C
145	King	2nd	4th	W	0.344638	3	4	C	C	D	D
146	Lincoln/ Ke	19th Ave	5th Ave	E	0.83121	3	3	B	C	C	C
147	Lincoln/ Ke	5th Ave	Stanyan	E	0.699061	3	3	C	D	C	C
148	Lincoln/ Ke	Stanyan	5th Ave	W	0.699713	3	3	B	C	B	C
149	Lincoln/ Ke	5th Ave	19th Ave	W	0.830037	3	3	B	C	C	D
150	Main	Mission	Market	N	0.121791	3	4	D	D	D	D
151	Market/Po	Sloat	Santa Clara	E	0.431052	3	3	C	D	C	D
152	Market/Po	Santa Clara	Burnett	E	1.338841	3	3	B	C	B	C
153	Market/Po	Burnett	Castro	E	1.623965	3	4	B	B	B	B
154	Market/Po	Castro	Guerrero	E	0.793811	3	3	D	E	D	E
155	Market/Po	Guerrero	Van Ness	E	0.431522	3	3	D	E	D	E
156	Market/Po	Van Ness	Drumm	E	1.771597	3	4	D	D	D	D
157	Market/Po	Drumm	Van Ness	W	1.771597	3	4	E	E	E	E
158	Market/Po	Van Ness	Guerrero	W	0.431522	3	3	C	E	C	E
159	Market/Po	Guerrero	Castro	W	0.793811	3	3	C	D	C	E
160	Market/Po	Castro	Burnett	W	1.625441	3	4	B	B	B	B
161	Market/Po	Burnett	Santa Clara	W	1.338778	3	3	B	C	B	C
162	Market/Po	Santa Clara	Sloat	W	0.430782	3	3	C	D	C	D
163	Masonic	Page	Geary	N	0.787685	3	3	C	D	D	E
164	Masonic	Geary	Bush/Euclic	N	0.200552	3	3	C	D	C	D
165	Masonic	Presidio	Geary	S	0.292436	3	3	C	D	D	E
166	Masonic	Geary	Page	S	0.787685	3	3	C	D	D	F
167	Mission/Ot	Sickles	Ocean	N	1.447533	3	4	C	C	C	C
168	Mission/Ot	Ocean	Cesar Chav	N	1.947536	3	4	C	C	C	C
169	Mission/Ot	Cesar Chav	14th	N	1.391509	3	4	C	C	D	D
170	Mission/Ot	14th	9th	N	0.649405	3	4	D	D	D	D
171	Mission/Ot	9th	3rd	N	0.979368	3	4	C	C	D	D
172	Mission/Ot	3rd	Embarcade	N	0.735527	3	4	D	D	E	E
173	Mission/Ot	Embarcade	3rd	S	0.73607	3	4	D	D	D	D
174	Mission/Ot	3rd	9th	S	0.979368	3	4	C	C	D	D
175	Mission/Ot	9th	14th	S	0.682813	3	4	D	D	E	E
176	Mission/Ot	14th	Cesar Chav	S	1.391509	3	4	C	C	D	D
177	Mission/Ot	Cesar Chav	Ocean	S	1.947536	3	4	C	C	C	C
178	Mission/Ot	Ocean	Sickles	S	1.447533	3	4	C	C	C	C

179	Montgome	Broadway	Bush	S	0.506858	3	4	D	D	E	E
180	North Poin	Van Ness	Columbus	E	0.383452	3	4	C	C	C	C
181	North Poin	Columbus	Embarcade	E	0.613771	3	4	C	C	C	C
182	North Poin	Embarcade	Columbus	W	0.613771	3	4	C	C	C	C
183	North Poin	Columbus	Van Ness	W	0.383452	3	4	C	C	C	C
184	Oak	Stanyan	Divisadero	E	0.917342	3	3	C	C	C	C
185	Oak	Divisadero	Fillmore	E	0.366017	3	3	D	E	C	E
186	Oak	Fillmore	Laguna	E	0.273836	3	3	E	F	F	F
187	Oak	Laguna	Franklin	E	0.273284	3	3	D	E	D	F
188	Ocean	19th Ave	Miramar	E	1.10967	3	4	C	C	C	C
189	Ocean	Miramar	Howth	E	0.48447	3	4	D	D	D	D
190	Ocean	Howth	Miramar	W	0.48447	3	4	D	D	D	D
191	Ocean	Miramar	19th Ave	W	1.109708	3	4	C	C	C	C
192	Octavia	Market	Fell	N	0.272347	3	4	F	F	E	E
193	Octavia	Fell	Market	S	0.278272	3	4	D	D	D	D
194	O'Farrell	Gough	Mason	E	0.847471	3	4	D	D	D	D
195	O'Farrell	Mason	Market	E	0.283457	3	4	D	D	E	E
196	Pine	Market	Kearny	W	0.382655	3	3	E	F	E	F
197	Pine	Kearny	Leavenwor	W	0.628423	3	3	C	D	D	E
198	Pine	Leavenwor	Franklin	W	0.455701	3	3	C	E	D	E
199	Pine	Franklin	Presidio	W	1.265863	3	3	C	D	C	D
200	Potrero	Cesar Chav	21st	N	0.605892	3	4	C	C	D	D
201	Potrero	21st	Division	N	0.795214	3	4	C	C	C	C
202	Potrero	Division	21st	S	0.795214	3	4	C	C	C	C
203	Potrero	21st	Cesar Chav	S	0.6015	3	4	C	C	D	D
204	Skyline	County Lin	Sloat	N	1.944104	3	1	A	B	A	B
205	Skyline	Sloat	County Lin	S	1.944218	3	1	A	B	A	B
206	Sloat	Skyline	Junipero Se	E	1.377516	1	2	C	C	D	D
207	Sloat	Junipero Se	Skyline	W	1.37871	1	2	C	C	C	C
208	Stanyan	Fulton	Turk	N	0.197824	3	4	C	C	C	C
209	Stanyan	Turk	Fulton	S	0.19965	3	4	C	C	E	E
210	Sutter	Divisadero	Gough	E	0.822183	3	4	C	C	D	D
211	Sutter	Market	Mason	W	0.56425	3	4	D	D	D	D
212	Sutter	Mason	Gough	W	0.820507	3	4	D	D	D	D
213	Sutter	Gough	Divisadero	W	0.822183	3	4	D	D	C	C
214	Townsend	7th	2nd	E	0.859493	3	4	C	C	D	D
215	Townsend	2nd	7th	W	0.85994	3	4	C	C	C	C
216	Turk	Stanyan	Divisadero	E	0.912411	3	4	C	C	C	C
217	Turk	Market	Hyde	W	0.37566	3	4	D	D	D	D
218	Turk	Hyde	Gough	W	0.4563	3	4	D	D	D	D
219	Turk	Gough	Divisadero	W	0.821631	3	3	C	D	C	D
220	Turk	Divisadero	Stanyan	W	0.912411	3	4	C	C	C	C
221	Van Ness/S	Cesar Chav	13th	N	1.48805	3	4	C	C	D	D
222	Van Ness/S	13th	Golden Gat	N	0.807721	3	4	D	D	D	D
223	Van Ness/S	Golden Gat	Washingto	N	0.839652	3	4	D	D	D	D
224	Van Ness/S	Washingto	Lombard	N	0.576467	3	4	C	C	D	D
225	Van Ness/S	Lombard	Washingto	S	0.576466	3	4	E	E	D	D
226	Van Ness/S	Washingto	Golden Gat	S	0.839659	3	4	C	C	E	E
227	Van Ness/S	Golden Gat	13th	S	0.795408	3	4	D	D	D	D
228	Van Ness/S	13th	Cesar Chav	S	1.488333	3	4	C	C	D	D
229	Washingto	Drumm	Kearny	W	0.443558	3	4	D	D	D	D
230	West Porta	Sloat	Ulloa	N	0.535165	3	4	C	C	D	D
231	West Porta	Ulloa	Sloat	S	0.535165	3	4	D	D	D	D
232	I-280	Junipero Se	Weldon	E	4.025805	Fwy	Fwy	E		A	
233	I-280	Weldon	6th/Branna	N	3.514703	Fwy	Fwy	C		E	
234	US-101	County Lin	Cortland	N	2.310922	Fwy	Fwy	F		E	
235	US-101	Cortland	I-80	N	1.902121	Fwy	Fwy	F		F	
236	US-101	I-80	Market	N	1.269058	Fwy	Fwy	F		F	
237	I-80	Treasure Is	Fremont Ex	W	2.710141	Fwy	Fwy	F		F	
238	I-80	Fremont Ex	US-101	W	1.704997	Fwy	Fwy	F		F	
239	I-280	6th/Branna	Weldon	S	3.469719	Fwy	Fwy	A		D	

240	I-280	Weldon	Junipero Se	S	4.071654	Fwy	Fwy	A	D
241	US-101	Market	I-80	S	1.166088	Fwy	Fwy	F	F
242	US-101	I-80	Cortland	S	1.968191	Fwy	Fwy	D	D
243	US-101	Cortland	Monster Pa	S	2.298268	Fwy	Fwy	E	B
244	I-80	US-101	Fremont E›	E	1.738536	Fwy	Fwy	D	F
245	I-80	Fremont E›	Treasure Is	E	2.69955	Fwy	Fwy	B	F

Attachment 5.4 - CMP Segments Auto Travel Time Reliability

(2017 - 2021)

cmp id	Name	From	To	Travel Dir	Class	Dist. (mi)	AM Buffer Index 2017	AM Buffer Index 2019	AM Buffer Index 2021	AM Buffer Index 2023	PM Buffer Index 2017	PM Buffer Index 2019	PM Buffer Index 2021	PM Buffer Index 2023
1	1st St	Market	Harrison	S	3	0.481558	44%	35%	21%	31%	42%	74%	34%	23%
2	2nd St	Brannan	Market	N	3	0.721664	38%	36%	19%	30%	57%	33%	19%	25%
3	2nd St	Market	Brannan	S	3	0.721664	54%	31%	28%	21%	33%	38%	19%	30%
4	3rd St	Jamestown	Evans	N	3	1.6237	26%	26%	19%	16%	29%	31%	18%	12%
5	3rd St	Evans	Terry Franc	N	3	2.359989	30%	26%	17%	15%	56%	32%	12%	27%
6	3rd St	Terry Franc	Market	N	3	1.048898	42%	41%	22%	36%	44%	34%	16%	28%
7	3rd St	Terry Franc	Evans	S	3	2.360565	23%	24%	17%	13%	29%	17%	15%	17%
8	3rd St	Evans	Jamestown	S	3	1.6237	32%	28%	18%	18%	30%	24%	15%	15%
9	4th St/Stoc	O'Farrell	Harrison	S	3	0.564056	39%	45%	14%	18%	41%	35%	15%	20%
10	4th St/Stoc	Harrison	Channel	S	3	0.596755	39%	44%	13%	22%	40%	45%	14%	35%
11	5th St	Brannan	Market	N	3	0.722306		32%	19%	39%		39%	20%	24%
12	5th St	Market	Brannan	S	3	0.722304		35%	18%	23%		30%	27%	37%
13	6th St	Brannan	Market	N	3	0.722783	57%	44%	34%	30%	59%	33%	38%	21%
14	6th St	Market	Brannan	S	3	0.72278	27%	38%	12%	29%	31%	49%	15%	33%
15	7th St	Brannan	Market	N	3	0.722735	51%	52%	22%	35%	46%	44%	13%	14%
16	8th St	Market	Bryant	S	3	0.602908	36%	39%	16%	17%	70%	60%	18%	40%
17	9th St	Brannan	Market	N	3	0.722619	50%	43%	27%	33%	67%	50%	9%	18%
18	10th St	Market	Brannan	S	3	0.726749	33%	32%	23%	21%	47%	38%	25%	43%
19	16th St	Market	Mission	E	3	0.735954	48%	48%	26%	29%	44%	34%	14%	18%
20	16th St	Mission	Potrero	E	3	0.666427	51%	32%	18%	27%	36%	32%	16%	19%
21	16th St	Potrero	Mission	W	3	0.666427	28%	34%	21%	28%	45%	42%	16%	24%
22	16th St	Mission	Market	W	3	0.73603	28%	33%	18%	26%	44%	28%	10%	19%
23	19th Ave/P	Junipero Se	Sloat	N	3	1.248889	26%	36%	16%	52%	34%	30%	15%	22%
24	19th Ave/P	Sloat	Lincoln	N	3	2.129077	51%	55%	34%	40%	29%	29%	23%	34%
25	19th Ave/P	Lincoln	Lake	N	3	1.846013	28%	28%	16%	19%	153%	32%	13%	58%
26	19th Ave/P	Lake	US-101	N	1	1.18461	12%	11%	11%	10%	21%	51%	9%	16%
27	19th Ave/P	US-101	Lake	S	1	1.259089	84%	87%	11%	29%	116%	78%	11%	95%
28	19th Ave/P	Lake	Lincoln	S	3	1.846014	31%	32%	14%	43%	69%	28%	57%	55%
29	19th Ave/P	Lincoln	Sloat	S	3	2.129074	30%	27%	18%	50%	19%	21%	23%	56%
30	19th Ave/P	Sloat	Junipero Se	S	3	1.248889	47%	25%	13%	18%	32%	30%	28%	34%
31	Alemany	Junipero Se	Lyell	E	3	2.949454	43%	23%	14%	14%	63%	17%	11%	11%
32	Alemany	Lyell	Bay Shore	E	3	1.591704	39%	51%	15%	31%	19%	23%	14%	16%
33	Alemany	Bay Shore	Lyell	W	3	1.566291	35%	14%	12%	13%	28%	13%	12%	16%
34	Alemany	Lyell	Junipero Se	W	3	3.026555	39%	22%	14%	11%	32%	20%	7%	10%
35	Bay	Van Ness	Embarcade	E	3	1.074704	54%	51%	12%	28%	26%	25%	12%	12%
36	Bay	Embarcade	Van Ness	W	3	1.074706	26%	31%	12%	17%	41%	33%	14%	18%
37	Bayshore	County Lin	Industrial	N	3	2.265298	39%	55%	16%	41%	36%	37%	11%	23%
38	Bayshore	Industrial	Cesar Chav	N	3	0.82965	52%	59%	23%	21%	46%	47%	13%	32%
39	Bayshore	Jerrold	Industrial	S	3	0.802764	48%	36%	16%	25%	36%	40%	15%	17%
40	Bayshore	Industrial	County Lin	S	3	2.260688	23%	32%	13%	17%	35%	33%	12%	18%
41	Beale/Davi	Clay	Mission	S	3	0.324643			19%	25%			12%	41%
42	Brannan	Division	6th	E	3	0.543687	39%	26%	13%	24%	41%	41%	21%	39%
43	Brannan	6th	3rd	E	3	0.510995	62%	37%	15%	22%	45%	41%	17%	32%
44	Brannan	3rd	6th	W	3	0.516217	48%	32%	19%	25%	47%	54%	17%	27%
45	Brannan	6th	Division	W	3	0.544047	41%	32%	25%	21%	48%	33%	28%	24%
46	Broadway	Gough	Larkin	E	3	0.364312	55%	49%	14%	27%	37%	36%	23%	20%
47	Broadway	Larkin	Powell	E	1	0.547817	113%	81%	21%	115%	67%	31%	14%	16%
48	Broadway	Powell	Montgome	E	3	0.354654	43%	52%	26%	40%	38%	37%	18%	23%
49	Broadway	Montgome	Embarcade	E	3	0.348306	42%	34%	28%	27%	42%	34%	18%	22%
50	Broadway	Embarcade	Montgome	W	3	0.348438	74%	45%	23%	26%	34%	54%	19%	31%
51	Broadway	Montgome	Powell	W	3	0.354654	64%	53%	19%	25%	41%	53%	14%	39%
52	Broadway	Powell	Larkin	W	1	0.547817	33%	34%	29%	23%	30%	25%	12%	12%
53	Broadway	Larkin	Gough	W	3	0.363564	45%	36%	14%	30%	35%	20%	11%	26%
54	Brotherhoc	Junipero Se	Alemany	E	3	0.429306	37%	40%	24%	32%	49%	45%	22%	28%
55	Brotherhoc	Alemany	Junipero Se	W	3	0.470988	51%	49%	21%	32%	50%	33%	18%	21%
56	Bryant	Division	4th	E	3	0.993047	26%	37%	16%	17%	52%	48%	22%	29%
57	Bryant	4th	Embarcade	E	3	0.772988	59%	45%	14%	28%	102%	45%	22%	41%
58	Bush	Masonic	Gough	E	3	1.243158	37%	26%	12%	27%	26%	20%	11%	17%
59	Bush	Gough	Market	E	3	1.454974	33%	33%	14%	26%	30%	21%	14%	19%
60	Castro/Divi	Market	14th	N	3	0.322083	53%	48%	27%	43%	24%	43%	16%	21%
61	Castro/Divi	14th	Geary	N	3	1.134082	33%	29%	23%	28%	28%	28%	11%	16%
62	Castro/Divi	Geary	Pine	N	3	0.265206	33%	28%	26%	26%	23%	19%	12%	23%
63	Castro/Divi	Pine	Geary	S	3	0.265206	35%	27%	17%	23%	37%	28%	21%	26%
64	Castro/Divi	Geary	14th	S	3	1.133676	32%	30%	18%	25%	52%	24%	14%	26%

65	Castro/Divi	14th	Market	S	3	0.322083	34%	28%	25%	27%	44%	25%	24%	23%
66	Cesar Chav	Guerrero	Bryant	E	3	0.755058	68%	49%	38%	42%	36%	41%	28%	27%
67	Cesar Chav	Bryant	Kansas	E	3	0.375196	34%	33%	18%	28%	35%	37%	15%	26%
68	Cesar Chav	Kansas	3rd	E	3	0.795213	40%	51%	23%	19%	46%	36%	18%	18%
69	Cesar Chav	3rd	Kansas	W	3	0.797392	56%	48%	21%	16%	41%	34%	13%	22%
70	Cesar Chav	Kansas	Bryant	W	3	0.377772	41%	41%	20%	18%	42%	29%	14%	23%
71	Cesar Chav	Bryant	Guerrero	W	3	0.754606	36%	38%	30%	27%	35%	33%	19%	23%
72	Clay	Kearny	Davis	E	3	0.378529		27%	20%	21%		41%	16%	25%
73	Columbus	Montgome	Greenwich	N	3	0.670646	23%	27%	26%	22%	35%	31%	17%	18%
74	Columbus	Greenwich	North Poin	N	3	0.42442	25%	25%	25%	29%	22%	25%	15%	20%
75	Columbus	North Poin	Greenwich	S	3	0.42442	41%	28%	14%	20%	27%	26%	16%	23%
76	Columbus	Greenwich	Montgome	S	3	0.670646	45%	33%	19%	33%	36%	29%	20%	20%
77	Doyle/Lom	County Lin	SF Cemete	E	1	1.157919	56%	20%	7%	9%	12%	10%	6%	9%
78	Doyle/Lom	SF Cemete	Lyon/Franc	E	1	0.925784	63%	49%	19%	14%	73%	84%	49%	9%
79	Doyle/Lom	Lyon/Franc	Van Ness	E	3	1.290043	36%	28%	13%	18%	35%	33%	21%	14%
80	Doyle/Lom	Van Ness	Lyon/Franc	W	3	1.290043	34%	39%	43%	18%	42%	38%	22%	30%
81	Doyle/Lom	Lyon/Franc	SF Cemete	W	1	0.958092	20%	20%	14%	17%	43%	165%	10%	14%
82	Doyle/Lom	SF Cemete	County Lin	W	1	1.147186	9%	8%	8%	9%	140%	204%	3%	225%
83	Drumm	Market	Washingto	N	3	0.216252			14%	25%			19%	27%
84	Drumm	Washingto	Market	S	3	0.216552			28%	23%			17%	26%
85	Duboce/Di	Market	Mission	E	3	0.348379	68%	50%	41%	41%	44%	41%	26%	26%
86	Duboce/Di	Mission	Potrero	E	3	0.662292		41%	31%	31%		73%	29%	22%
87	Duboce/Di	Potrero	Mission	W	3	0.662127	58%	58%	32%	28%	76%	69%	23%	22%
88	Duboce/Di	Mission	Market	W	3	0.348637	57%	45%	34%	28%	51%	43%	21%	35%
89	Embarcade	Townsend	North Poin	N	3	2.164954	46%	35%	27%	28%	33%	21%	10%	25%
90	Embarcade	North Poin	Townsend	S	3	2.164916	27%	25%	15%	21%	45%	32%	16%	34%
91	Evans	Cesar Chav	3rd	S	3	0.72542		57%	17%	23%		60%	13%	21%
92	Evans	3rd	Cesar Chav	N	3	0.72542		48%	24%	35%		34%	24%	22%
93	Fell	Gough	Market	E	3	0.292938	65%	35%	44%	35%	49%	53%	30%	28%
94	Fell	Gough	Laguna	W	3	0.181759	48%	36%	24%	31%	49%	28%	13%	22%
95	Fell	Laguna	Stanyan	W	3	1.562636	29%	20%	21%	25%	26%	24%	21%	32%
96	Folsom	13th	8th	E	3	0.487049	38%	29%	16%	26%	51%	35%	15%	24%
97	Folsom	8th	4th	E	3	0.687213	44%	36%	14%	30%	43%	44%	15%	34%
98	Folsom	4th	1st	E	3	0.515704	40%	39%	17%	27%	93%	53%	19%	30%
99	Folsom	1st	Embarcade	E	3	0.34468	37%	33%	17%	30%	40%	29%	19%	22%
100	Franklin	Market	Pine	N	3	1.061302	45%	43%	37%	42%	34%	26%	27%	24%
101	Franklin	Pine	Lombard	N	3	0.830625	32%	28%	16%	13%	21%	17%	15%	18%
102	Fremont	Harrison	Market	N	3	0.481454	53%	52%	35%	35%	43%	39%	24%	29%
103	Fulton	Park Presid	10th Ave	E	3	0.204862	40%	30%	20%	28%	56%	30%	18%	22%
104	Fulton	10th Ave	Arguello	E	3	0.533347	53%	34%	20%	32%	61%	25%	18%	30%
105	Fulton	Arguello	Masonic	E	3	0.659455	47%	37%	13%	30%	136%	29%	14%	29%
106	Fulton	Masonic	Arguello	W	3	0.659455	23%	32%	21%	21%	68%	26%	16%	21%
107	Fulton	Arguello	10th Ave	W	3	0.533347	33%	24%	19%	26%	70%	36%	18%	17%
108	Fulton	10th Ave	Park Presid	W	3	0.204862	38%	37%	19%	29%	59%	34%	18%	35%
109	Geary	Great Hwy	25th Ave	E	3	1.778423	18%	19%	11%	14%	24%	18%	11%	10%
110	Geary	25th Ave	Arguello	E	3	1.418415	35%	38%	23%	42%	30%	33%	12%	15%
111	Geary	Arguello	Gough	E	3	1.913905	26%	26%	17%	14%	26%	24%	13%	10%
112	Geary	Kearny	Gough	W	3	1.176397	25%	29%	10%	15%	30%	31%	17%	16%
113	Geary	Gough	Arguello	W	3	1.915118	25%	31%	15%	10%	30%	21%	11%	13%
114	Geary	Arguello	25th Ave	W	3	1.42316	21%	29%	18%	15%	30%	21%	12%	15%
115	Geary	25th Ave	Great Hwy	W	3	1.787611	20%	20%	16%	14%	23%	25%	11%	12%
116	Geneva	Ocean	Cayuga	E	3	0.558813	51%	34%	16%	21%	47%	31%	16%	16%
117	Geneva	Cayuga	Paris	E	3	0.328792	32%	40%	16%	34%	27%	35%	16%	24%
118	Geneva	Paris	Santos	E	3	1.188472	33%	32%	14%	33%	24%	27%	10%	21%
119	Geneva	Santos	Paris	W	3	1.188472	26%	38%	17%	22%	35%	40%	11%	15%
120	Geneva	Paris	Cayuga	W	3	0.328792	58%	39%	18%	27%	33%	40%	11%	24%
121	Geneva	Cayuga	Ocean	W	3	0.527711	49%	36%	24%	36%	28%	32%	10%	21%
122	Golden Gat	Masonic	Franklin	E	3	1.372961		20%	11%	11%		17%	11%	13%
123	Golden Gat	Franklin	Market	E	3	0.654019		34%	13%	14%		30%	15%	17%
124	Gough	Pine	Geary	S	3	0.25562	60%	38%	34%	25%	89%	57%	39%	56%
125	Gough	Geary	Golden Gat	S	3	0.330298	80%	63%	34%	78%	39%	56%	39%	41%
126	Gough	Golden Gat	Market	S	3	0.541309	27%	36%	29%	47%	35%	37%	37%	19%
127	Guerrero/S	Monterey	29th	N	1	1.169806	35%	35%	29%	54%	42%	44%	11%	34%
128	Guerrero/S	29th	Cesar Chav	N	3	0.285708	63%	64%	26%	45%	59%	32%	16%	29%
129	Guerrero/S	Cesar Chav	29th	S	3	0.284217	42%	41%	26%	29%	79%	67%	34%	64%
130	Guerrero/S	29th	Monterey	S	1	1.165953	28%	33%	17%	20%	43%	35%	35%	27%
131	Harrison	Embarcade	1st	W	3	0.342951	40%	41%	15%	29%	61%	69%	20%	37%
132	Harrison	1st	4th	W	3	0.516426	64%	42%	15%	14%	71%	44%	20%	24%
133	Harrison	4th	8th	W	3	0.686807	34%	29%	14%	21%	25%	30%	14%	22%
134	Harrison	8th	Division	W	3	0.399154	42%	41%	13%	17%	47%	29%	17%	19%

135	Hayes	Market	Gough	W	3	0.391577	25%	39%	23%	21%	27%	26%	19%	20%
136	Howard	Embarcade	S Van Ness	W	3	2.108573	25%	24%	13%	12%	23%	26%	13%	16%
137	Junipero Se	County Lin	Brotherhoc	N	1	0.289362	85%	98%	19%	174%	28%	46%	19%	32%
138	Junipero Se	Brotherhoc	19th	N	1	0.338532	52%	47%	54%	52%	42%	28%	40%	21%
139	Junipero Se	19th	Sloat	N	1	1.210695	36%	31%	17%	21%	28%	18%	14%	12%
140	Junipero Se	Sloat	19th	S	1	1.210665	29%	19%	18%	13%	33%	30%	14%	13%
141	Junipero Se	19th	Brotherhoc	S	1	0.333727	11%	8%	13%	12%	13%	15%	12%	14%
142	Junipero Se	Brotherhoc	County Lin	S	1	0.296424	11%	8%	11%	12%	15%	12%	13%	13%
143	Kearny	Market	Columbus	N	3	0.647422	47%	40%	31%	29%	30%	24%	27%	17%
144	King	4th	2nd	E	3	0.344638	65%	35%	29%	28%	48%	38%	22%	39%
145	King	2nd	4th	W	3	0.344638	85%	41%	14%	30%	66%	51%	20%	30%
146	Lincoln/ Ke	19th Ave	5th Ave	E	3	0.83121	56%	50%	21%	38%	40%	32%	13%	19%
147	Lincoln/ Ke	5th Ave	Stanyan	E	3	0.699061	40%	40%	55%	58%	26%	25%	15%	15%
148	Lincoln/ Ke	Stanyan	5th Ave	W	3	0.699713	19%	23%	15%	14%	29%	22%	12%	16%
149	Lincoln/ Ke	5th Ave	19th Ave	W	3	0.830037	42%	31%	20%	25%	45%	32%	17%	25%
150	Main	Mission	Market	N	3	0.121791	83%		14%	41%	34%		19%	16%
151	Market/Po	Sloat	Santa Clara	E	3	0.431052	71%	98%	22%	50%	47%	43%	13%	25%
152	Market/Po	Santa Clara	Burnett	E	3	1.338841	44%	33%	15%	23%	29%	30%	11%	14%
153	Market/Po	Burnett	Castro	E	3	1.623965	34%	34%	15%	20%	26%	23%	10%	13%
154	Market/Po	Castro	Guerrero	E	3	0.793811	45%	34%	27%	30%	33%	36%	14%	17%
155	Market/Po	Guerrero	Van Ness	E	3	0.431522	49%	43%	36%	40%	47%	44%	14%	24%
156	Market/Po	Van Ness	Drumm	E	3	1.771597	19%	25%		29%	18%	20%		32%
157	Market/Po	Drumm	Van Ness	W	3	1.771597	14%	18%			25%	15%		
158	Market/Po	Van Ness	Guerrero	W	3	0.431522	37%	42%	20%	19%	38%	37%	16%	18%
159	Market/Po	Guerrero	Castro	W	3	0.793811	49%	48%	13%	17%	35%	30%	13%	15%
160	Market/Po	Castro	Burnett	W	3	1.625441	31%	29%	11%	12%	32%	65%	8%	12%
161	Market/Po	Burnett	Santa Clara	W	3	1.338778	34%	31%	15%	20%	47%	35%	11%	15%
162	Market/Po	Santa Clara	Sloat	W	3	0.430782	43%	49%	15%	40%	56%	43%	20%	44%
163	Masonic	Page	Geary	N	3	0.787685	31%	34%	27%	34%	26%	26%	13%	17%
164	Masonic	Geary	Bush/Eucli	N	3	0.200552	82%	46%	29%	31%	41%	44%	20%	26%
165	Masonic	Presidio	Geary	S	3	0.292436	54%	61%	27%	26%	55%	52%	40%	44%
166	Masonic	Geary	Page	S	3	0.787685	32%	25%	17%	23%	75%	32%	18%	38%
167	Mission/Ot	Sickles	Ocean	N	3	1.447533	28%	16%	17%	17%	28%	16%	12%	13%
168	Mission/Ot	Ocean	Cesar Chav	N	3	1.947536	37%	30%	15%	22%	24%	20%	13%	14%
169	Mission/Ot	Cesar Chav	14th	N	3	1.391509	29%	18%	18%	17%	24%	18%	11%	10%
170	Mission/Ot	14th	9th	N	3	0.649405	44%	36%	15%	23%	39%	38%	12%	19%
171	Mission/Ot	9th	3rd	N	3	0.979368	37%	27%	17%	24%	36%	33%	13%	26%
172	Mission/Ot	3rd	Embarcade	N	3	0.735527	50%	32%	16%	25%	37%	29%	21%	22%
173	Mission/Ot	Embarcade	3rd	S	3	0.73607	27%	28%	22%	18%	32%	24%	18%	20%
174	Mission/Ot	3rd	9th	S	3	0.979368	31%	34%	18%	18%	34%	28%	12%	19%
175	Mission/Ot	9th	14th	S	3	0.682813	29%	55%	17%	30%	36%	47%	12%	34%
176	Mission/Ot	14th	Cesar Chav	S	3	1.391509	23%	22%	12%	15%	32%	20%	14%	15%
177	Mission/Ot	Cesar Chav	Ocean	S	3	1.947536	31%	18%	13%	16%	28%	23%	11%	18%
178	Mission/Ot	Ocean	Sickles	S	3	1.447533		21%	13%	14%		20%	14%	15%
179	Montgome	Broadway	Bush	S	3	0.506858	35%		14%	24%	52%		16%	17%
180	North Poin	Van Ness	Columbus	E	3	0.383452		37%	28%	18%		38%	19%	19%
181	North Poin	Columbus	Embarcade	E	3	0.613771		39%	36%	19%		43%	26%	18%
182	North Poin	Embarcade	Columbus	W	3	0.613771		38%	18%	18%		35%	15%	18%
183	North Poin	Columbus	Van Ness	W	3	0.383452		42%	24%	17%		39%	23%	27%
184	Oak	Stanyan	Divisadero	E	3	0.917342	42%	37%	25%	34%	32%	25%	13%	16%
185	Oak	Divisadero	Fillmore	E	3	0.366017	61%	59%	48%	75%	44%	46%	25%	73%
186	Oak	Fillmore	Laguna	E	3	0.273836	61%	59%	48%	48%	44%	46%	25%	32%
187	Oak	Laguna	Franklin	E	3	0.273284	65%	53%	48%	68%	49%	36%	25%	28%
188	Ocean	19th Ave	Miramar	E	3	1.10967	30%	21%	17%	20%	22%	20%	12%	13%
189	Ocean	Miramar	Howth	E	3	0.48447	40%	40%	21%	37%	33%	38%	16%	19%
190	Ocean	Howth	Miramar	W	3	0.48447	41%	55%	16%	38%	44%	43%	13%	21%
191	Ocean	Miramar	19th Ave	W	3	1.109708	36%	33%	16%	28%	25%	20%	11%	12%
192	Octavia	Market	Fell	N	3	0.272347	51%	40%	22%	8%	40%	30%	24%	25%
193	Octavia	Fell	Market	S	3	0.278272	36%	32%	34%	32%	45%	36%	18%	33%
194	O'Farrell	Gough	Mason	E	3	0.847471	32%	32%	14%	16%	29%	25%	12%	19%
195	O'Farrell	Mason	Market	E	3	0.283457	31%	31%	14%	26%	39%	33%	12%	31%
196	Pine	Market	Kearny	W	3	0.382655	35%	36%	30%	25%	29%	24%	19%	29%
197	Pine	Kearny	Leavenwor	W	3	0.628423	36%	55%	30%	38%	40%	39%	19%	32%
198	Pine	Leavenwor	Franklin	W	3	0.455701		44%	27%	26%		33%	20%	35%
199	Pine	Franklin	Presidio	W	3	1.265863		19%	19%	15%		19%	11%	13%
200	Potrero	Cesar Chav	21st	N	3	0.605892	37%	35%	28%	22%	47%	31%	25%	33%
201	Potrero	21st	Division	N	3	0.795214	33%	28%	18%	18%	34%	29%	15%	26%
202	Potrero	Division	21st	S	3	0.795214	26%	23%	19%	17%	32%	41%	17%	21%
203	Potrero	21st	Cesar Chav	S	3	0.6015	35%	25%	17%	29%	56%	73%	56%	67%
204	Skyline	County Lin	Sloat	N	3	1.944104	52%	64%	12%	22%	43%	41%	11%	19%

205	Skyline	Sloat	County Lin	S		3	1.944218	57%	18%	11%	19%	26%	44%	7%	29%
206	Sloat	Skyline	Junipero Se	E		1	1.377516	36%	41%	14%	24%	27%	25%	10%	13%
207	Sloat	Junipero Se	Skyline	W		1	1.37871	55%	23%	15%	21%	54%	21%	12%	10%
208	Stanyan	Fulton	Turk	N		3	0.197824	49%	29%	22%	26%	56%	31%	19%	18%
209	Stanyan	Turk	Fulton	S		3	0.19965	59%	77%	20%	32%	74%	82%	37%	45%
210	Sutter	Divisadero	Gough	E		3	0.822183	31%	20%	9%	15%	19%	15%	17%	11%
211	Sutter	Market	Mason	W		3	0.56425	33%	22%	17%	21%	32%	21%	25%	17%
212	Sutter	Mason	Gough	W		3	0.820507	30%	21%	12%	22%	30%	22%	15%	17%
213	Sutter	Gough	Divisadero	W		3	0.822183	21%	16%	11%	14%	22%	16%	8%	14%
214	Townsend	7th	2nd	E		3	0.859493	43%	48%	16%	22%	49%	37%	10%	39%
215	Townsend	2nd	7th	W		3	0.85994	28%	32%	22%	23%	35%	39%	12%	26%
216	Turk	Stanyan	Divisadero	E		3	0.912411	38%	25%	14%	18%	31%	24%	10%	20%
217	Turk	Market	Hyde	W		3	0.37566	37%	38%	23%	23%	39%	31%	15%	17%
218	Turk	Hyde	Gough	W		3	0.4563	41%	44%	23%	20%	31%	29%	15%	17%
219	Turk	Gough	Divisadero	W		3	0.821631	32%	43%	13%	20%	33%	26%	9%	15%
220	Turk	Divisadero	Stanyan	W		3	0.912411	32%	35%	14%	19%	54%	23%	13%	15%
221	Van Ness/S	Cesar Chav	13th	N		3	1.48805	25%	19%	17%	31%	26%	25%	15%	25%
222	Van Ness/S	13th	Golden Gat	N		3	0.807721	40%	51%	32%	36%	39%	42%	16%	31%
223	Van Ness/S	Golden Gat	Washingto	N		3	0.839652	36%	38%	23%	24%	44%	40%	18%	27%
224	Van Ness/S	Washingto	Lombard	N		3	0.576467	45%	57%	25%	19%	37%	43%	16%	20%
225	Van Ness/S	Lombard	Washingto	S		3	0.576466	51%	44%	34%	35%	50%	38%	19%	27%
226	Van Ness/S	Washingto	Golden Gat	S		3	0.839659	67%	88%	23%	47%	66%	45%	24%	37%
227	Van Ness/S	Golden Gat	13th	S		3	0.795408	74%	48%	20%	39%	49%	52%	28%	18%
228	Van Ness/S	13th	Cesar Chav	S		3	1.488333	16%	20%	16%	15%	23%	25%	17%	18%
229	Washingto	Drumm	Kearny	W		3	0.443558		26%	11%	23%		27%	13%	20%
230	West Porta	Sloat	Ulloa	N		3	0.535165		26%	16%	25%		26%	18%	22%
231	West Porta	Ulloa	Sloat	S		3	0.535165			16%	26%			20%	25%
232	I-280	Junipero Se	Weldon	E	Fwy		4.025805	36%	59%	13%	86%	7%	13%	4%	6%
233	I-280	Weldon	6th/Branna	N	Fwy		3.514703	37%	54%	79%	37%	39%	55%	41%	74%
234	US-101	County Lin	Cortland	N	Fwy		2.310922	52%	51%	137%	58%	34%	53%	5%	56%
235	US-101	Cortland	I-80	N	Fwy		1.902121	29%	44%	102%	23%	78%	92%	90%	34%
236	US-101	I-80	Market	N	Fwy		1.269058	41%	52%	54%	35%	59%	83%	73%	88%
237	I-80	Treasure Is	Fremont E›	W	Fwy		2.710141	44%	44%	41%	40%	32%	27%	135%	32%
238	I-80	Fremont E›	US-101	W	Fwy		1.704997	50%	49%	17%	41%	27%	25%	40%	24%
239	I-280	6th/Branna	Weldon	S	Fwy		3.469719	10%	9%	7%	6%	66%	32%	12%	83%
240	I-280	Weldon	Junipero Se	S	Fwy		4.071654	8%	9%	5%	7%	26%	25%	18%	31%
241	US-101	Market	I-80	S	Fwy		1.166088	96%	51%	24%	60%	51%	50%	33%	36%
242	US-101	I-80	Cortland	S	Fwy		1.968191	119%	90%	12%	98%	48%	49%	16%	49%
243	US-101	Cortland	Monster Pa	S	Fwy		2.298268	38%	60%	5%	80%	19%	20%	4%	27%
244	I-80	US-101	Fremont E›	E	Fwy		1.738536	80%	77%	125%	25%	62%	39%	22%	20%
245	I-80	Fremont E›	Treasure Is	E	Fwy		2.69955	19%	20%	13%	13%	47%	64%	48%	40%

Attachment 8.1: AM Transit Speed Monitoring Results (2006 – 2023)

cmp id	Name	From	To	Dir	2006				2007				2009				2011				2013				2015				2017				2019				2021				2023			
					Avg. Transit Speed (mph)	S.D Transit Speed (mph)	Coefficient of Variation	Auto:Transit Speed Ratio	Avg. Transit Speed (mph)	S.D Transit Speed (mph)	Coefficient of Variation	Auto:Transit Speed Ratio	Avg. Transit Speed (mph)	S.D Transit Speed (mph)	Coefficient of Variation	Auto:Transit Speed Ratio	Avg. Transit Speed (mph)	S.D Transit Speed (mph)	Coefficient of Variation	Auto:Transit Speed Ratio	Avg. Transit Speed (mph)	S.D Transit Speed (mph)	Coefficient of Variation	Auto:Transit Speed Ratio	Avg. Transit Speed (mph)	S.D Transit Speed (mph)	Coefficient of Variation	Auto:Transit Speed Ratio	Avg. Transit Speed (mph)	S.D Transit Speed (mph)	Coefficient of Variation	Auto:Transit Speed Ratio	Avg. Transit Speed (mph)	S.D Transit Speed (mph)	Coefficient of Variation	Auto:Transit Speed Ratio	Avg. Transit Speed (mph)	S.D Transit Speed (mph)	Coefficient of Variation	Auto:Transit Speed Ratio	Avg. Transit Speed (mph)	S.D Transit Speed (mph)	Coefficient of Variation	Auto:Transit Speed Ratio
1	1st St	Market	Harrison	S																																								
2	2nd St	Brannan	Market	N									9.0			1.3	7.3	2.0	28.1	1.9	6.7	2.4	35.8	1.7	7.2	2.7	37.5	1.3	7.8	0.9	11.9	1.2	6.2	2.1	34.1	1.4								
3	2nd St	Market	Brannan	S									9.1			1.8	7.7	1.9	24.1	2.7	9.3	1.9	20.4	1.0	7.5	1.5	20.0	1.6	8.2	0.9	11.4	1.3	7.7	2.5	32.9	1.4								
4	3rd St	Jamestowr	Evans	N													5.7	2.6	45.5	4.2																	8.5	1.5	17.7	1.8				
5	3rd St	Evans	Terry Fran	N													7.7	3.1	39.7	3.6													7.2	1.1	14.6	1.9	9.6	2.7	27.9	1.9	12.5	2.1	16.6	1.4
6	3rd St	Terry Fran	Market	N													6.0	2.5	41.1	2.5	7.4	0.5	6.8	1.8	7.7	0.6	7.8	1.6	7.7	0.4	5.7	1.4	6.8	1.2	17.4	1.6	9.4	2.2	23.7	1.5	8.1	1.6	19.0	1.2
7	3rd St	Terry Fran	Evans	S													8.7	2.8	32.6	3.2																	11.2	2.8	24.9	1.7	13.0	2.5	19.1	1.4
8	3rd St	Evans	Jamestowr	S													5.9	3.4	58.4	4.3																	8.2	2.3	28.1	1.9				
9	4th St/Sto	O'Farrell	Harrison	S	6.2			1.8	5.1			1.8	5.6			2.4	5.6	1.6	28.7	3.0													5.0	1.2	23.7	2.1	6.3	2.2	35.7	2.1	6.9	1.4	20.5	1.5
10	4th St/Sto	Harrison	Channel	S					7.3			2.2					7.9	1.8	22.3	2.1	8.1	2.1	25.9	1.6																				
11	5th St	Brannan	Market	N									7.6			1.9	7.7	2.2	28.8	2.1	6.5	2.0	30.8	1.5	5.5	0.7	12.7	1.8	5.5	0.6	10.2	1.6												
12	5th St	Market	Brannan	S									7.2			2.7	6.3	2.1	33.6	2.6	7.1	0.5	7.0	1.6	5.9	0.4	6.8	1.8	6.4	0.5	7.5	1.8	5.7	1.4	25.6	1.9								
13	6th St	Brannan	Market	N																													7.2	1.8	24.7	1.5								
14	6th St	Market	Brannan	S																																								
15	7th St	Brannan	Market	N									7.8			2.4	7.0	2.3	33.2	2.7	5.8	1.3	22.4	2.7	6.6	1.4	21.2	1.6	6.2	1.2	20.0	1.4	5.5	1.3	23.6	1.8	8.8	1.9	22.1	1.5	7.1	1.9	27.2	1.4
16	8th St	Market	Bryant	S									7.9			1.9	7.2	2.2	30.1	2.5	6.7	1.3	19.4	2.4	6.7	1.5	22.4	2.0	6.8	1.3	18.9	1.8	6.8	1.1	15.9	1.9	8.3	1.7	20.5	1.5	8.1	1.7	20.8	1.4
17	9th St	Brannan	Market	N																																								
18	10th St	Market	Brannan	S													7.6	1.8	23.5	2.8																								
19	16th St	Market	Mission	E	5.8			3.3	6.1			3.0	7.6			1.6	6.5	2.3	35.6	2.1	6.3	1.0	15.9	2.6	5.9	0.7	11.9	2.2	5.3	0.5	10.0	1.8	5.8	1.6	27.8	1.4	8.5	2.4	27.9	1.8	6.8	2.1	30.6	1.8
20	16th St	Mission	Potrero	E	7.0			2.3	6.5			2.1	7.8			1.8	7.4	1.9	25.1	1.8	6.4	0.8	12.5	2.3	7.3	1.6	21.9	1.8	6.1	0.6	10.3	1.7	7.1	1.7	23.3	1.5	8.9	1.9	21.5	1.7	8.3	1.6	19.4	1.6
21	16th St	Potrero	Mission	W	7.7			1.7	6.8			1.7	8.7			1.6	8.4	2.3	27.3	1.4	7.6	0.6	7.9	1.9	8.0	0.6	7.5	1.6	7.7	0.3	4.4	1.5	7.4	2.0	27.3	1.6	9.6	4.4	45.7	1.5	8.7	1.9	21.7	1.5
22	16th St	Mission	Market	W	7.0			1.8	7.2			1.9	7.7			1.7	6.4	1.9	30.1	2.0	6.3	0.7	11.1	2.5	6.4	0.7	10.9	2.1	6.0	0.6	10.5	1.8	5.7	1.0	17.8	1.9	7.2	1.4	19.5	1.8	6.7	1.3	18.8	2.1
23	19th Ave/F	Junipero S	Sloat	N									12.6			1.4	9.8	2.5	25.6	1.7	9.8	1.4	14.3	1.6	12.2	2.6	21.3	1.4	12.3	0.8	6.9	1.4	10.6	2.4	22.4	1.6	14.1	2.8	20.1	1.6	12.4	3.0	24.3	1.5
24	19th Ave/F	Sloat	Lincoln	N									11.9			1.2	10.3	2.8	27.4	1.5	9.8	0.8	8.2	1.7	7.9	2.3	29.1	1.7	8.4	0.7	8.9	1.6	8.0	1.5	18.5	2.0	9.6	2.4	25.0	2.2	9.3	2.2	23.2	1.7
25	19th Ave/F	Lincoln	Lake	N									11.7			1.7	13.6	2.4	17.2	1.6	12.1	0.5	4.1	2.0	12.5	1.6	12.8	1.7	11.8	0.9	7.9	1.7	13.2	1.5	11.1	1.5	17.2	2.8	16.3	1.6				
26	19th Ave/F	Lake	US-101	N									26.4			1.7					19.3	0.8	4.1	2.6	19.9	3.3	16.6	1.9	23.8	1.5	6.5	1.9												
27	19th Ave/F	US-101	Lake	S									26.3			1.5	18.2	4.2	23.1	1.3	17.3	3.5	20.2	2.5	17.9	3.4	19.0	2.2	21.3	3.4	15.9	1.5												
28	19th Ave/F	Lake	Lincoln	S									13.3			2.0	15.6	2.7	17.3	1.8	14.5	1.5	10.3	1.8	13.4	1.7	12.7	1.7	11.7	0.7	6.3	1.9	14.0	2.1	14.8	1.5	14.9	2.5	16.8	1.9	13.1	3.0	22.7	1.7
29	19th Ave/F	Lincoln	Sloat	S									11.0			1.7	10.5	2.1	19.8	1.8	11.0	1.4	12.7	1.6	11.0	1.4	12.7	1.6	10.3	0.4	4.2	1.8	10.4	1.6	15.4	1.8	10.6	1.4	12.7	2.0	9.0	1.9	21.0	1.6
30	19th Ave/F	Sloat	Junipero S	S									13.0			1.7	13.4	3.4	25.4	1.8	11.1	1.6	14.4	2.1	13.9	2.2	15.8	1.7	11.8	1.7	14.3	2.1	12.2	1.7	13.5	2.2	12.1	3.6	29.6	2.3	14.9	3.3	22.3	1.7
31	Alemany	Junipero S	Lyell	E													8.4	2.9	34.2	2.8																								
32	Alemany	Lyell	Bay Shore	E													9.9	2.6	25.7	2.9																								
33	Alemany	Bay Shore	Lyell	W													15.1	3.1	20.1	1.9																								
34	Alemany	Lyell	Junipero S	W													12.8	4.2	33.0	1.7																								
35	Bay	Van Ness	Embarcade	E																																								
36	Bay	Embarcade	Van Ness	W																																								
37	Bayshore	County Lin	Industrial	N									10.1			1.7	5.9	2.4	40.6	3.2																								
38	Bayshore	Industrial	Cesar Cha	N									11.9			1.5	11.4	3.3	28.6	1.1	9.3	1.6	17.2	1.7	9.0	1.6	17.8	1.8	7.0	0.9	12.8	2.2	10.6	1.9	17.8	1.0	15.7	2.7	17.0	1.1				
39	Bayshore	Jerrold	Industrial	S									16.4			1.6	13.2	3.3	25.0	1.5	7.1	2.0	28.2	3.1	8.9	2.7	30.3	2.7	7.7	1.2	16.1	2.5	11.1	2.7	24.3	1.7	12.0	3.7	30.5	1.9	10.5	2.8	26.5	1.9
40	Bayshore	Industrial	County Lin	S									12.0			2.3	9.2	3.3	35.8	2.6																								
41	Beale/Davi	Clay	Mission	S									6.8			1.9	6.2	2.7	43.9	2.0	7.2	1.5	20.8	1.2	6.8	1.0	14.7	1.4	6.3	1.4	22.4	1.5	5.3	1.0	19.1	1.8								
42	Brannan	Division	6th	E																																								
43	Brannan	6th	3rd	E																																								
44	Brannan	3rd	6th	W																																								
45	Brannan	6th	Division	W																																								
46	Broadway	Gough	Larkin	E																																								
47	Broadway	Larkin	Powell	E																																								
48	Broadway	Powell	Montgome	E									8.2			2.4	6.3	1.9	29.8	2.5	6.9	1.2	17.4	1.6	7.2	1.6	22.2	1.5	5.7	0.6	11.3	1.4	6.8	1.9	27.8	1.7	8.5	3.3	38.6	2.1	6.9	2.4	34.6	1.9
49	Broadway	Montgome	Embarcade	E									7.1			2.0	6.5	2.2	34.4	2.4	5.9	1.6	27.1	1.9	6.0	1.7	28.3	1.7																
50	Broadway	Embarcade	Montgome	W																																								
51	Broadway	Montgome	Powell	W																																								
52	Broadway	Powell	Larkin	W													6.3	1.9	29.8	5.0																								
53	Broadway	Larkin	Gough	W																																								
54	Brotherho	Junipero S	Alemany	E																																								
55	Brotherho	Alemany	Junipero S	W																																								
56	Bryant	Division	4th	E									8.7			1.5	8.0	2.1	25.6	2.4	9.2	1.6	17.4	1.7	9.2	1.9	20.7	1.6	7.2	0.6	8.5	1.6	6.7	1.9	28.9	1.7								
57	Bryant	4th	Embarcade	E																																								
58	Bush	Masonic	Gough	E																																								
59	Bush	Gough	Market	E													5.7	2.0	34.2	2.4																								
60	Castro/Div	Market	14th	N	10.7			1.5	9.3			1.0	8.5			1.7	7.2	2.1	29.1	2.2	6.7	0.9	13.4	2.1	7.1	0.7	9.9	1.8	6.8	1.0	14.6	1.5	6.7	1.3	19.8	1.6	7.9	1.9	24.1	1.8	6.7	1.6	23.3	1.7
61	Castro/Div	14th	Geary	N	6.9			1.6	6.8			1.7	7.2			2.1	7.3	2.0	27.4	2.0	6.4	0.5	7.8	2.3	6.6	0.5	7.6	1.8	6.4	1.1	16.5	1.6	5.8	1.1	19.3	1.6	7.0	1.0	14.6	1.8	6.3	1.1	17.3	1.8
62	Castro/Div	Geary	Pine	N	6.0			1.2	6.0			1.0					6.1	1.6	26.0	1.3	6.6	0.9	13.6	2.0	6.1	1.3	21.3	1.7	5.1	0.7	14.0	1.5	5.3	1.0	18.5	1.7	5.5	1.4	25.3	2.3	4.8	1.0	21.2	2.0
63	Castro/Div	Pine	Geary	S	7.4			1.6	7.5			2.1	7.8			1.9	7.2	2.1	29.6	1.8	6.2	1.7	27.4	2.2	6.8	1.1	16.2	1.6	7.4	1.5	19.8	1.6	6.6	2.1	31.5	1.5	6.0	1.8	29.7	2.1	5.7	1.4	23.8	1.8
64	Castro/Div	Geary	14th	S	7.0			1.8	7.3			2.2	7.9			2.1	7.3	2.0	26.7	1.7	7.1	0.7	9.9	2.1	6.9	0.6	8.7	1.7	7.0	0.6	8.7	1.8	7.0	0.9	12.7	1.7	7.5	1.0	13.9	1.8	6.9	1.0	14.9	1.9
65	Castro/Div	14th	Market	S	10.1			1.0	10.4			1.6	10.1			1.0	9.1	2.8	30.4	1.7	9.7	1.7	17.5	1.5	9.3	1.6	17.2	1.3	8.7	1.3	15.2	1.3	7.9	1.6	20.6	1.4	7.9	1.8	22.1	1.9	7.7	1.8	23.6	1.6
66	Cesar Cha	Guerrero	Bryant	E													7.8	2.2	28.4	2.2	4.8	2.1	43.8	3.6	8.0	1.3	16.3	1.6	7.6	0.8	10.5	1.7					12.0	2.9	24.6	1.5	7.8	2.3	29.7	1.5
67	Cesar Cha	Bryant	Kansas	E													7.5	2.4	32.0	3.6																								
68	Cesar Cha	Kansas	3rd	E													11.6	4.0	34.7	1.7																								
69	Cesar Cha	3rd	Kansas	W													7.8	3.1	39.7	3.0																								
70	Cesar Cha	Kansas	Bryant	W													9.2	3.9	42.0	2.8																								
71	Cesar Cha	Bryant	Guerrero	W													7.8	2.1	27.1	1.9	3.4	2.2	64.7	4.5	6.0	1.6	26.7	2.2	6.9	0.7	10.8	1.4												
72	Clay	Kearny	Davis	E									6.8			2.8	6.6	1.9	28.2	2.9	7.2	0.7	9.7	1.7	7.5	1.3	17.3	1.3	7.3	0.7	8.9	1.5	5.7	1.0	17.8	1.8	6.0	1.7	28.4	2.0	5.4	1.3	24.9	1.9
73	Columbus	Montgome	Greenwich	N									7.2			2.1	6.7	2.0	29.3	1.9	6.1	0.5	8.2	2.2	6.6	1.1	16.7	1.9	6.6	0.6	9.4	1.8	5.9	1.3	21.5	1.8								
74	Columbus	Greenwich	North Poir	N	8.9			2.1	7.1			2.3	8.8			1.2	8.1	1.9	23.4	1.3	7.4	0.6	8.1	1.8	8.0	1.3	16.3	1.6	7.7	0.8	10.5	1.5	6.4	1.6	24.9	1.4	7.3	1.7	23.8	1.9	6.6	1.7	25.4	1.9
75	Columbus	North Poir	Greenwich	S	8.5			1.9	7.0			1.8	8.1			2.3	7.1	2.2	31.7	2.6	6.6	1.1	16.7	2.0	6.5	0.7	10.8	2.0	6.5	1.1	17.0	1.7	4.7	1.0	21.8	2.0	5.2	1.4	27.7	2.8	5.1	1.1	21.4	2.8
76	Columbus	Greenwich	Montgome	S									6.0			1.9	5.8	1.8	31.0	2.1	4.7	0.4	8.5	2.7	4.8	0.6	12.5	2.5	5.7	0.8	13.6	2.0												
77	Doyle/Lom	County Lin	SF Cemete	E																	11.8	2.1	17.8	2.7	9.7	3.1	32.0	2.6	14.4	2.8	19.7	2.1												
78	Doyle/Lom	SF Cemete	Lyon/Franc	E																	11.8	2.1	17.8	2.1	9.7	3.1	32.0	1.6	14.4	2.8	19.7	1.2												
79	Doyle/Lom	Lyon/Franc	Van Ness	E									9.8			2.1					11.4	1.4	12.3	1.7	13.7	3.3	24.1	1.4	11.0	0.6	5.8	1.7	10.7	1.3	11.7	1.6					11.8	1.6	13.6	1.5
80	Doyle/Lom	Van Ness	Lyon/Franc	W									12.2			1.4					9.4	0.9	9.6	2.2	9.5	2.1	22.1	1.7	9.1	0.4	4.3	1.5	9.5	1.2	12.3	1.0					11.0	1.4	13.1	1.7
81	Doyle/Lom	Lyon/Franc	SF Cemete	W																	21.8	2.0	9.2	1.7	16.2	6.5	40.1	2.0	29.2	2.6	9.1	1.6												
82	Doyle/Lom	SF Cemete	County Lin	W																	21.8	2.0	9.2	1.8	16.2	6.5	40.1	2.2	29.2	2.6	9.1	1.7												
83	Drumm	Market	Washingto	N									5.7			2.9	4.3	5.4	125.4	3.7																								
84	Drumm	Washingto	Market	S									7.3			1.2																												
85	Duboce/Di	Market	Mission	E																																								
86	Duboce/Di	Mission	Potrero	E													9.7	2.4	24.5	2.4																								
87	Duboce/Di	Potrero	Mission	W													8.4	1.9	22.9	2.1																								
88	Duboce/Di	Mission	Market	W																																								
89	Embarcade	Townsend	North Poir	N																																								
90	Embarcade	North Poir	Townsend	S																																								
91	Evans	Cesar Cha	3rd	S									13.8			1.5	10.8	3.9	36.1	1.5	11.2	2.0	17.9	1.3	9.8	4.4	44.9	1.3	9.9	2.1	20.9	1.1	10.5	3.0	28.2	1.5	9.7	3.6	37.1	2.0	9.4	2.8	29.5	1.7
92	Evans	3rd	Cesar Cha	N									16.7			1.3	14.4	4.2	29.1	1.1	12.8	2.6	20.3	1.2	13.5	1.7	12.6	1.0	12.5	1.8	14.5	1.3	16.1	2.8	17.3	0.9	13.9	3.2	23.1	1.2	13.3	3.5	25.9	1.0
93	Fell	Gough	Market	E																																								
94	Fell	Gough	Laguna	W																																								
95	Fell	Laguna	Stanyan	W																																								
96	Folsom	13th	8th	E																	9.2	2.4	26.1	2.1	8.6	1.9	22.1	1.7	7.6	1.0	13.2	1.6	8.6	2.7	31.6	1.4					8.9	1.9	21.7	1.4
97	Folsom	8th	4th	E									9.8			1.5	9.1	2.2	23.7	1.9	7.5	1.4	18.7	2.4	7.1	2.1	29.6	1.8	8.2	1.2	14.7	1.6	8.2	2.0	23.9	1.6					7.3	1.4	19.4	1.9
98	Folsom	4th	1st	E									8.9			2.3	9.1	2.8	31.1	2.1																					6.5	2.5	38.0	1.7
99	Folsom	1st	Embarcade	E									7.8			1.7	8.4	5.7	67.0	1.3																								
100	Franklin	Market	Pine	N																																								
101	Franklin	Pine	Lombard	N																																								
102	Fremont	Harrison	Market	N									7.6			1.7																												
103	Fulton	Park Presic	10th Ave	E					8.0			3.8	11.6			2.4					8.7	1.2	13.8	2.5	9.2	2.9	31.5	2.1					8.5	2.0	23.6	1.9	13.4	3.4	25.6	1.6	12.0	2.5	20.6	1.6
104	Fulton	10th Ave	Arguello	E					8.0			3.7	11.6			1.7					6.7	1.7	25.4	2.7	8.8	1.6	18.2	1.9	8.0	1.9	23.5	2.0	9.1	2.2	24.1	1.9	9.5	2.8	29.4	2.3	10.0	3.3	32.8	1.9
105	Fulton	Arguello	Masonic	E	10.2			1.5	9.6			1.3	10.9			1.5	9.4	2.7	29.0	1.4	8.6	0.5	5.8	1.8	7.8	0.8	10.3	1.9	7.8	1.0	12.6	1.7	8.1	1.5	18.3	1.6	11.3	2.5	21.9	1.6	9.6	2.1	21.6	1.8
106	Fulton	Masonic	Arguello	W	11.6			1.6	10.9			2.2	10.8			1.9	10.1	2.7	26.9	1.6	8.6	1.1	12.8	2.1	9.9	1.0	10.1	1.7	9.5	0.8	8.3	1.6	8.9	1.6	18.0	1.7	7.7	1.8	22.9	2.2	8.5	1.3	14.8	2.1
107	Fulton	Arguello	10th Ave	W					10.2			2.1	12.2			2.2	7.6	1.9	24.5	2.3	10.9	2.3	21.1	1.8	13.8	2.3	16.7	1.5	16.9	3.7	21.9	1.2	11.5	2.5	21.8	1.7	9.6	2.4	24.4	2.3	11.1	2.6	23.7	2.1
108	Fulton	10th Ave	Park Presic	W					10.2			1.6	12.2			1.3	7.6	1.9	24.5	1.5	11.5	3.5	30.4	1.7	12.1	3.5	28.9	1.6					11.0	3.2	28.8	1.7	10.5	2.6	24.8	2.1	9.8	3.1	31.2	2.0
109	Geary	Great Hwy	25th Ave	E									11.6			2.2	11.6	3.0	26.0	2.0	9.5	0.8	8.4	1.9	10.6	1.0	9.4	1.4	9.2	1.0	11.1	1.9	11.5	1.7	14.6	1.8	12.8	2.0	15.3	1.8	11.5	1.4	11.9	1.8
110	Geary	25th Ave	Arguello	E									9.9			2.4	9.4	2.2	23.2	2.2	9.4	1.0	10.6	1.8	8.6	0.6	7.0	1.6	8.3	0.7	8.0	1.8	9.0	1.6	17.8	1.8	10.1	1.5	14.6	2.2	9.6	1.5	15.2	1.9
111	Geary	Arguello	Gough	E									10.7			2.7	10.1	2.5	25.0	2.2	9.4	0.7	7.4	2.2	9.2	0.5	5.4	1.8	7.8	1.0	13.2	2.5	10.9	1.5	13.7	1.6	10.8	1.7	15.9	2.1	10.2	1.5	15.0	1.7
112	Geary	Kearny	Gough	W									8.3			1.8	8.0	2.2	28.2	1.8	8.3	0.6	7.2	1.6	8.4	0.9	10.7	1.3	8.9	2.2	24.8	1.2	8.1	1.4	17.5	1.2	8.2	1.5	17.9	1.6	8.0	1.5	18.4	1.4
113	Geary	Gough	Arguello	W									10.2			2.0	9.8	2.3	22.9	2.1	8.8	1.1	12.5	2.4	9.3	0.6	6.5	1.7	9.6	1.6	16.7	1.8	10.4	1.5	14.3	1.6	10.3	1.5	14.7	1.8	10.1	1.5	14.8	1.9
114	Geary	Arguello	25th Ave	W									9.7			2.3	8.8	1.9	21.7	2.3	8.0	0.5	6.3	2.1	8.9	0.6	6.7	1.6	8.7	0.8	8.8	1.5	8.9	1.3	14.8	1.4	8.9	1.4	15.6	1.8	8.6	1.1	13.1	1.8
115	Geary	25th Ave	Great Hwy	W									11.6			2.1	8.1	1.9	23.0	3.0	11.0	0.7	6.4	1.7	10.7	0.8	7.5	1.4	8.5	2.1	24.8	2.0	11.0	1.7	15.4	1.7	11.3	1.7	14.8	1.8	10.9	1.6	14.4	1.8
116	Geneva	Ocean	Cayuga	E									8.3			1.1	7.7	2.3	29.9	1.6	7.4	0.6	8.1	1.9	6.9	1.1	15.9	1.6	7.1	0.8	10.9	1.4	7.8	1.6	20.4	1.3	8.8	1.9	21.7	2.0	8.9	1.8	20.4	1.6
117	Geneva	Cayuga	Paris	E									8.6			1.6	7.8	2.2	27.9	2.0	6.3	1.1	17.5	2.3	6.9	1.2	17.4	1.7	6.8	0.5	7.8	1.8	5.9	1.6	27.1	1.9	6.8	1.9	27.5	2.5	6.6	1.9	28.6	2.1
118	Geneva	Paris	Santos	E									15.1			1.4	11.2	2.9	25.4	2.0	10.4	1.2	11.5	2.2	10.0	1.4	14.0	1.6	11.3	2.4	21.3	1.6	10.8	1.9	17.2	1.7	13.5	2.2	16.2	1.7	11.0	2.8	25.5	1.9
119	Geneva	Santos	Paris	W									13.9			1.7	10.2	3.1	30.4	2.2	10.3	1.2	11.7	1.9	10.2	0.7	6.9	1.6	8.3	1.0	12.4	2.2	10.2	1.5	15.0	1.6	11.4	1.7	15.0	2.0	10.9	2.0	18.5	1.9
120	Geneva	Paris	Cayuga	W									6.8			1.2	6.6	1.8	26.4	1.3	4.3	0.6	14.0	3.0	4.9	0.6	12.2	2.2	4.8	0.5	9.5	1.8	5.3	1.5	27.8	1.7	6.9	1.8	25.3	2.4	6.7	1.6	24.3	1.9
121	Geneva	Cayuga	Ocean	W									8.8			1.1	7.3	2.2	30.5	1.2	7.2	0.7	9.7	1.9	6.6	0.6	9.1	1.5	5.4	0.7	13.9	1.5	6.4	1.3	20.7	1.3	7.0	1.2	17.7	2.1	6.7	1.4	20.5	1.7
122	Golden Ga	Masonic	Franklin	E																																								
123	Golden Ga	Franklin	Market	E																	9.3	1.8	19.4	1.2	7.5	1.9	25.3	1.1	6.2	1.0	16.3	1.6	5.5	1.2	21.2	1.4								
124	Gough	Pine	Geary	S																																								
125	Gough	Geary	Golden Ga	S																																								
126	Gough	Golden Ga	Market	S																																								
127	Guerrero/S	Monterey	29th	N																													19.9	4.9	24.5	0.6	21.5	6.1	28.6	1.3				
128	Guerrero/S	29th	Cesar Cha	N																																								
129	Guerrero/S	Cesar Cha	29th	S																																								
130	Guerrero/S	29th	Monterey	S																													21.0	5.7	27.1	1.0								
131	Harrison	Embarcade	1st	W									10.8			1.9																												
132	Harrison	1st	4th	W									11.0			1.0					9.3	2.9	31.2	1.9	8.5	2.2	25.9	1.4	7.7	0.9	11.8	1.5	7.9	2.0	25.1	1.4					10.3	1.9	18.6	1.2
133	Harrison	4th	8th	W									10.0			1.6	9.6	2.3	23.6	2.0	9.2	1.2	13.0	1.9	8.6	1.4	16.3	2.0	8.8	0.5	6.0	1.9	9.4	2.2	23.0	1.5	10.5	2.9	28.0	1.4	9.7	3.0	30.7	1.6
134	Harrison	8th	Division	W									8.4			1.6	7.5	2.5	33.1	1.9	6.4	0.8	12.5	2.5	6.0	1.1	18.3	2.3	6.6	0.7	10.9	1.5	5.5	1.0	18.0	1.8	5.7	0.9	16.6	2.2				
135	Hayes	Market	Gough	W	7.2			2.3	6.5			2.8	6.9			1.8	5.7	1.8	31.6	2.2	6.6	1.5	22.7	2.3	6.6	0.8	12.1	2.0	6.5	1.1	17.1	1.4	6.7	1.6	23.8	1.4					6.8	1.9	28.2	1.6
136	Howard	Embarcade	S Van Ness	W													25.1	5.6	22.2	0.6																								
137	Junipero S	County Lin	Brotherho	N													5.1	1.6	31.2	8.7					9.8	7.7	78.6	2.8	7.9	2.6	32.5	2.4												
138	Junipero S	Brotherho	19th	N									17.6			1.3	7.3	2.5	34.3	1.5	8.0	1.2	15.0	1.6	7.2	4.3	59.7	1.8	9.1	1.7	18.7	1.1	9.8	4.7	48.3	0.8	12.4	4.0	32.3	2.0				
139	Junipero S	19th	Sloat	N																																								
140	Junipero S	Sloat	19th	S																																								
141	Junipero S	19th	Brotherho	S									16.7			2.4					18.2	1.8	9.9	2.3	18.9	12.2	64.6	2.1	23.8	6.7	28.0	1.8	15.2	4.4	29.1	2.8	12.9	3.8	29.7	3.5				
142	Junipero S	Brotherho	County Lin	S													17.2	3.1	17.7	2.6									14.5	0.7	5.0	3.8												
143	Kearny	Market	Columbus	N									6.7			2.1	5.2	2.1	40.4	2.9	7.2	0.8	11.1	1.6	6.1	0.4	6.6	1.4	5.6	1.3	22.7	1.3	5.0	1.1	21.5	1.6	5.3	1.3	25.1	2.2	4.7	1.0	22.1	2.1
144	King	4th	2nd	E																																								
145	King	2nd	4th	W																																	7.0	2.0	28.7	3.1				
146	Lincoln/ K	19th Ave	5th Ave	E									11.4			2.0	11.3	3.3	29.6	2.4	10.8	1.9	17.6	1.9	10.5	1.1	10.5	1.5	10.0	1.2	12.3	1.8	9.6	2.9	30.1	1.5	13.4	2.6	19.7	1.7	11.7	2.1	18.1	1.7
147	Lincoln/ K	5th Ave	Stanyan	E													13.2	5.1	38.8	1.6																								
148	Lincoln/ K	Stanyan	5th Ave	W													11.2	2.8	25.2	2.2																								
149	Lincoln/ K	5th Ave	19th Ave	W													14.1	4.4	31.0	2.1	14.0	2.3	16.4	1.7	13.9	0.9	6.5	1.6	14.5	2.2	15.4	1.3	12.1	2.8	23.3	1.6	13.7	3.1	22.7	1.7	12.7	3.7	28.7	1.7
150	Main	Mission	Market	N	4.5			3.1	4.4			3.8					3.3	1.7	50.6	6.6	5.8	6.3	108.6	2.1	8.0	2.5	31.3	0.7	4.9	1.0	20.3	1.8												
151	Market/Po	Sloat	Santa Clar	E													5.6	3.9	70.5	4.5																								
152	Market/Po	Santa Clar	Burnett	E													12.6	4.4	34.5	1.5	10.0	3.1	31.0	2.1	12.4	1.3	10.5	1.3	10.4	1.4	13.3	1.5	12.2	3.5	28.5	1.3					10.9	3.0	27.3	1.9
153	Market/Po	Burnett	Castro	E													9.2	2.7	29.2	2.3																	21.0	3.1	14.7	1.2				
154	Market/Po	Castro	Guerrero	E	7.5			1.8	6.9			1.5					6.7	1.7	25.6	1.4	6.6	1.2	18.2	2.1	6.1	0.9	14.8	1.7	6.5	1.1	17.4	2.0					9.1	2.6	28.8	1.8				
155	Market/Po	Guerrero	Van Ness	E	5.8			1.2	6.2			1.4					6.7	1.7	25.6	1.9	10.1	1.8	17.8	1.6	5.9	0.9	15.3	1.8	4.6	0.5	11.7	2.2					9.2	3.1	33.2	1.4				
156	Market/Po	Van Ness	Drumm	E	7.0			1.3	6.8			1.8	8.6			1.4	7.6	1.9	25.5	1.5	7.5	0.3	4.0	1.6	6.7	0.3	4.5	1.5	6.0	0.2	4.0	1.3	6.5	1.2	18.4	1.1	7.6	1.2	15.9	1.5	6.6	0.9	13.7	1.6
157	Market/Po	Drumm	Van Ness	W	7.4			1.7	7.3			1.9	8.4			1.8	6.7	2.0	29.4	2.3	8.1	0.4	4.9	1.6	7.9	0.2	2.5	1.5	6.8	0.3	3.8	1.0	6.0	0.7	12.0	1.4	7.1	0.8	11.2	1.2	6.7	0.9	13.5	1.2
158	Market/Po	Van Ness	Guerrero	W	8.2			1.7	8.3			1.7					6.9	2.4	34.4	2.0	6.5	1.0	15.4	2.3	6.4	2.2	34.4	2.2	7.4	1.3	17.3	1.9					7.6	1.7	22.5	1.8				
159	Market/Po	Guerrero	Castro	W	6.3			2.7	6.2			2.5					6.9	2.4	34.4	1.8	6.5	0.7	10.8	2.7	5.4	1.5	27.8	2.8	5.6	1.5	27.7	2.2					7.5	1.5	20.3	2.3				
160	Market/Po	Castro	Burnett	W													5.9	2.3	38.2	3.8																	18.8	3.1	16.7	1.2	13.1	1.2	9.1	1.8
161	Market/Po	Burnett	Santa Clar	W													11.9	3.7	31.1	2.0	10.0	2.6	26.0	2.0	11.2	2.3	20.5	1.7	9.9	1.6	16.5	1.7	11.0	2.3	20.8	1.5	14.4	1.4	9.9	1.6	12.3	3.4	27.4	1.7
162	Market/Po	Santa Clar	Sloat	W																																								
163	Masonic	Page	Geary	N									9.0			2.2	8.6	2.7	31.2	1.5	7.5	1.4	18.7	2.7	7.4	3.1	41.9	1.7	8.6	1.0	11.4	1.7	7.0	2.1	29.6	1.6	11.7	3.8	32.7	1.3	8.8	2.7	30.7	1.6
164	Masonic	Geary	Bush/Eucli	N													10.7	2.0	19.0	1.4																								
165	Masonic	Presidio	Geary	S													5.4	2.0	37.5	1.9																								
166	Masonic	Geary	Page	S													7.7	1.8	23.8	1.4	7.5	0.6	8.0	2.6	7.7	1.1	14.3	1.9	7.7	0.4	5.2	1.8	8.2	1.7	21.2	1.5	10.3	2.0	19.0	1.5	9.0	1.8	19.5	1.6
167	Mission/O	Sickles	Ocean	N	9.3			2.8	8.1			2.7	9.6			2.3	10.0	2.4	24.0	2.2	9.5	1.0	10.5	1.8	9.9	0.6	6.1	1.4	9.9	6.0	60.6	1.4	9.6	1.6	16.3	1.2	12.5	2.3	18.7	1.4	11.1	2.1	19.1	1.6
168	Mission/O	Ocean	Cesar Cha	N	9.1			2.0	8.0			1.8	8.9			2.2	9.4	2.1	22.3	1.8	7.7	0.5	6.5	1.8	7.5	0.7	9.3	1.7	8.9	1.3	14.6	1.3	8.6	1.5	16.9	1.4	11.8	2.0	16.7	1.5	10.3	1.9	18.6	1.6
169	Mission/O	Cesar Cha	14th	N	8.1			1.7	7.7			1.9	7.6			2.4	8.1	1.9	23.2	1.9	8.0	0.6	7.5	1.7	7.8	0.4	5.1	1.6	9.1	1.3	14.4	1.3	8.7	1.5	17.2	1.1	9.1	1.6	17.3	1.5	8.6	1.5	17.2	1.5
170	Mission/O	14th	9th	N	6.7			1.6	6.2			1.9	6.9			2.2	7.8	2.2	28.3	2.1	5.8	0.8	13.8	2.5	5.4	0.5	9.3	2.3	6.5	3.4	52.1	1.6	6.4	1.3	20.9	1.5	7.1	1.5	21.2	2.0	6.1	1.3	21.7	2.0
171	Mission/O	9th	3rd	N	9.1			2.0	8.5			1.5	8.7			2.0	9.5	1.9	20.2	1.7	9.6	0.8	8.3	1.7	8.4	1.2	14.3	1.6	10.6	1.5	14.1	1.3	9.6	1.9	19.4	1.4	9.4	1.6	17.0	1.6	9.0	1.3	14.4	1.6
172	Mission/O	3rd	Embarcade	N	5.5			2.1	5.2			2.0	8.0			2.1	6.9	2.1	30.7	1.8	6.7	0.9	13.4	2.2	6.8	0.9	13.2	1.5	6.1	1.7	27.9	1.2	6.0	1.4	23.3	1.2	7.0	1.7	24.7	1.8	6.4	1.3	20.8	1.6
173	Mission/O	Embarcade	3rd	S	6.9			1.9	6.2			2.1	7.7			1.8	4.7	3.3	69.6	2.2	3.8	1.3	34.2	3.9	6.2	0.8	12.9	1.7	6.4	2.4	37.6	1.4	5.2	1.1	22.2	1.6	5.6	2.0	36.7	2.4	5.5	1.3	24.1	2.0
174	Mission/O	3rd	9th	S	9.1			1.8	8.2			2.0	8.8			1.7	9.6	2.4	25.3	1.6	8.2	1.0	12.2	2.0	9.3	0.9	9.7	1.5	11.4	1.6	14.4	1.1	9.6	1.8	18.5	1.3	11.2	2.6	23.2	1.3	9.4	2.2	23.0	1.7
175	Mission/O	9th	14th	S	7.9			1.8	7.0			2.2	7.9			2.0	8.4	2.3	27.4	2.3	6.8	0.9	13.2	2.1	6.8	0.7	10.3	1.8	3.6	0.8	21.3	2.9									8.6	1.8	20.9	1.4
176	Mission/O	14th	Cesar Cha	S	8.7			1.8	7.8			1.7	8.4			2.1	8.8	2.1	24.1	1.7	8.6	0.9	10.5	1.6	8.9	0.5	5.6	1.5	9.3	1.8	19.6	1.5	10.6	2.1	20.2	1.2	11.0	2.3	21.2	1.4	9.5	1.8	19.1	1.7
177	Mission/O	Cesar Cha	Ocean	S	10.6			1.8	9.6			1.7	9.8			2.1	9.8	2.1	21.8	1.9	8.7	0.9	10.3	1.9	8.7	0.5	5.7	1.7	10.5	1.8	17.4	1.2	10.4	1.9	18.3	1.2	11.7	2.3	19.5	1.4	10.5	2.1	19.6	1.6
178	Mission/O	Ocean	Sickles	S	12.3			1.7	10.2			2.5	13.4			1.7	12.1	2.3	19.4	1.8	10.1	0.9	8.9	1.7	9.6	0.9	9.4	1.6	12.7	1.3	10.4	1.3	11.5	2.3	20.5	1.4	12.0	2.0	16.8	1.5	10.4	1.7	16.2	1.7
179	Montgome	Broadway	Bush	S													6.2	1.7	27.4	1.8																								
180	North Poir	Van Ness	Columbus	E	8.7			2.2	5.9			2.2	11.0			1.6	10.0	3.2	31.8	1.9	9.9	1.7	17.2	1.5	10.2	2.0	19.6	1.3	9.5	0.9	9.9	1.4	7.7	2.1	27.2	2.2					7.5	2.4	32.0	2.2
181	North Poir	Columbus	Embarcade	E									11.2			1.7	10.8	2.6	23.9	2.0	7.9	3.6	45.6	2.7	9.4	2.7	28.7	1.3	11.0	1.8	16.5	1.2	9.3	3.4	37.0	1.5	9.8	4.1	41.3	1.7				
182	North Poir	Embarcade	Columbus	W									11.1			1.4	6.5	2.7	41.2	2.8	9.2	1.9	20.7	1.6	6.4	1.4	21.9	2.2	7.6	1.4	18.8	1.6												
183	North Poir	Columbus	Van Ness	W	9.7			1.8	7.7			2.2	9.8			1.7	7.7	2.2	28.7	2.1	7.5	1.2	16.0	2.1	7.7	1.9	24.7	1.6	8.0	0.7	8.2	1.5	7.8	1.9	24.9	1.1	7.3	2.2	29.6	1.8	8.1	1.7	21.5	1.6
184	Oak	Stanyan	Divisadero	E																																								
185	Oak	Divisadero	Fillmore	E																																								
186	Oak	Fillmore	Laguna	E																																								
187	Oak	Laguna	Franklin	E																																								
188	Ocean	19th Ave	Miramar	E	12.2			1.2	9.4			1.4																					8.8	2.5	27.9	1.5	13.2	4.0	30.5	1.2				
189	Ocean	Miramar	Howth	E	10.0			1.3	8.2			1.6					1.7	0.9	57.0	6.9	5.5	1.6	29.1	2.6	5.5	0.6	10.9	2.2	5.7	0.6	11.1	2.1	6.7	1.5	21.8	1.8	8.7	2.3	26.2	1.7	7.6	2.1	27.1	1.7
190	Ocean	Howth	Miramar	W	9.0			1.5	7.4			1.5					8.6	2.9	34.2	1.8	7.1	1.6	22.5	1.9	5.7	1.6	28.1	2.0	6.0	0.8	13.7	1.7	7.4	1.4	18.7	1.5	6.8	1.7	24.3	2.2				
191	Ocean	Miramar	19th Ave	W	9.6			1.4	8.0			1.7																					7.5	1.0	13.4	1.6	10.0	2.7	26.6	1.6				
192	Octavia	Market	Fell	N																																								
193	Octavia	Fell	Market	S																																								
194	O'Farrell	Gough	Mason	E									9.4			1.4	8.1	2.0	24.9	1.5	9.1	0.8	8.8	1.6	8.6	0.8	9.3	1.4	6.8	2.1	31.0	1.5	9.2	1.6	17.6	1.0	9.2	1.7	18.0	1.4	9.0	2.1	23.2	1.3
195	O'Farrell	Mason	Market	E									7.6			1.5	6.3	1.8	28.5	1.5	10.1	1.0	9.9	1.3	7.0	1.6	22.9	1.4	6.4	3.5	55.4	1.4	7.0	1.7	24.3	1.2	9.2	1.9	21.1	1.4				
196	Pine	Market	Kearny	W																																								
197	Pine	Kearny	Leavenwor	W																																								
198	Pine	Leavenwor	Franklin	W																																								
199	Pine	Franklin	Presidio	W																																								
200	Potrero	Cesar Cha	21st	N	7.1			2.5	6.4			4.2	7.5			2.8	9.2	2.8	30.6	2.5	8.3	2.0	24.1	1.8	7.1	1.0	14.1	1.5	7.4	1.3	17.5	1.9	6.9	1.3	18.7	2.4	7.2	1.3	18.1	2.1	6.8	1.3	19.3	2.0
201	Potrero	21st	Division	N	11.7			1.5	10.9			2.4	9.9			2.3	9.9	2.5	25.5	2.5	9.3	1.0	10.8	2.0	9.3	1.9	20.4	2.1	9.5	1.1	11.7	1.2	9.7	2.4	25.1	1.5	11.9	3.7	31.3	1.6	9.3	2.0	21.8	1.8
202	Potrero	Division	21st	S	9.4			2.3	11.1			1.8	10.4			2.3	10.5	2.5	23.8	1.8	10.2	1.6	15.7	1.9	10.0	1.4	14.0	1.4	9.3	0.8	8.8	1.7	9.7	1.6	16.8	1.6	10.4	2.6	24.6	1.7	9.6	2.0	20.4	1.7
203	Potrero	21st	Cesar Cha	S	8.8			2.2	8.9			2.9	6.8			3.2	9.7	2.9	30.0	2.4	7.4	1.2	16.2	2.3	6.8	1.2	17.6	2.1	8.4	1.0	12.3	2.1	7.4	1.2	16.7	2.4	8.1	1.4	17.6	2.6	8.0	1.5	19.3	2.3
204	Skyline	County Lin	Sloat	N													28.5	4.9	17.2	1.6	19.8	7.3	36.9	1.9	19.8	4.5	22.7	1.8	21.3	3.8	17.9	1.7												
205	Skyline	Sloat	County Lin	S													19.7	3.7	18.8	2.1									15.0	1.9	13.0	2.3	19.3	1.5	7.7	1.8								
206	Sloat	Skyline	Junipero S	E									15.5			1.5	13.2	3.1	23.5	1.4	11.5	1.4	12.2	2.1	11.1	1.9	17.1	2.1	11.5	2.0	17.5	1.8	11.4	2.7	23.7	1.9					13.3	3.7	27.8	1.8
207	Sloat	Junipero S	Skyline	W									16.2			1.6	15.2	3.9	25.7	2.1	13.9	1.8	12.9	2.0	14.0	1.4	10.0	1.7	10.5	2.2	21.2	2.4	14.0	2.1	14.9	1.8					14.1	3.5	24.8	1.8
208	Stanyan	Fulton	Turk	N													5.5	2.0	36.0	2.6																								
209	Stanyan	Turk	Fulton	S																																								
210	Sutter	Divisadero	Gough	E	11.0			1.4	9.1			1.6					8.2	2.1	25.4	1.8	9.0	2.3	25.6	1.8	9.0	1.5	16.7	1.2	8.8	0.7	7.6	1.3	8.2	1.4	16.7	1.3					8.2	0.9	11.5	1.7
211	Sutter	Market	Mason	W	7.3			1.5	6.7			2.5	7.1			2.5	6.6	2.3	35.3	2.7	7.2	1.4	19.4	1.9	6.6	1.7	25.8	1.9	7.3	0.9	12.6	1.2	5.9	1.5	24.5	1.5					7.0	1.3	19.1	1.4
212	Sutter	Mason	Gough	W	7.1			1.8	6.8			1.3	7.4			1.2	6.4	1.6	25.2	1.6	6.6	0.7	10.6	1.7	6.8	1.0	14.7	1.6	6.7	0.4	6.5	1.7	6.0	0.9	15.6	1.6					6.4	1.0	15.4	1.8
213	Sutter	Gough	Divisadero	W	10.2			1.5	9.0			1.7	8.8			1.7	7.7	2.1	27.7	1.8	8.1	0.8	9.9	1.7	8.7	1.2	13.8	1.3	8.7	0.7	7.9	1.3	7.9	1.3	16.8	1.5					8.1	1.2	14.8	1.6
214	Townsend	7th	2nd	E									10.5			1.9	8.9	2.4	26.3	1.9	8.2	1.3	15.9	2.1	8.4	1.5	17.9	1.7	8.0	1.0	12.8	1.4	8.1	2.3	28.2	1.4								
215	Townsend	2nd	7th	W									11.0			1.7	10.3	2.8	26.7	1.3	9.7	1.5	15.5	1.8	9.2	3.9	42.4	1.3	8.2	1.3	16.3	1.3	9.6	1.3	13.3	1.0								
216	Turk	Stanyan	Divisadero	E	10.2			1.7	9.3			2.2	10.7			1.7	9.7	3.2	33.1	1.8	9.3	2.8	30.1	1.9	7.4	2.1	28.4	2.1	8.5	0.6	7.6	1.5	8.5	1.7	20.2	1.4					8.8	1.6	17.8	1.8
217	Turk	Market	Hyde	W									6.1			2.4	6.0	1.9	30.9	2.1	6.3	1.3	20.6	1.6	7.0	1.3	18.6	1.8	6.4	2.2	34.0	1.6	4.5	0.7	16.0	1.9					3.9	0.6	15.9	2.3
218	Turk	Hyde	Gough	W													6.7	1.8	27.1	1.9	9.7	2.8	28.9	1.5																				
219	Turk	Gough	Divisadero	W																																								
220	Turk	Divisadero	Stanyan	W	11.4			1.5	10.9			1.8	11.6			1.8	10.8	3.3	30.8	1.5	11.4	1.3	11.4	1.6	9.9	1.8	18.2	1.9	10.4	1.5	14.8	1.6	9.9	1.9	19.6	1.8					9.3	2.0	22.0	2.0
221	Van Ness/S	Cesar Cha	13th	N																																								
222	Van Ness/S	13th	Golden Ga	N	6.1			1.9	6.1			2.4	6.8			2.2	6.8	1.9	28.4	3.0	6.7	0.8	11.9	2.1	6.4	0.8	12.5	2.0	6.8	0.8	11.2	1.3	7.1	1.7	24.0	1.3	7.6	2.6	33.6	1.6				

223	Van Ness/	Golden Ga	Washingto	N	5.7	2.0	5.9	2.0	5.8	2.6	5.4	1.3	24.6	3.1	5.4	0.4	7.4	2.2	5.4	0.3	5.6	2.1	6.2	0.4	6.8	1.6	6.4	0.7	11.0	1.4	6.4	1.2	18.4	1.9	8.1	1.7	20.6	1.5
224	Van Ness/	Washingto	Lombard	N	6.6	1.4	6.6	1.5	7.2	1.9	6.5	2.0	30.3	1.7	5.3	0.6	11.3	2.5	5.2	0.4	7.7	2.4	5.1	0.5	10.0	2.0	4.9	0.7	14.4	1.8	5.2	1.0	18.9	2.4				
225	Van Ness/	Lombard	Washingto	S	7.0	1.8	7.7	2.3	6.9	2.4	6.8	2.5	37.1	2.4	7.0	0.6	8.6	1.7	6.6	0.9	13.6	2.0	8.0	0.9	11.0	1.4	7.9	1.7	21.8	1.5	8.4	2.5	29.4	1.9	7.8	1.6	20.7	1.0
226	Van Ness/	Washingto	Golden Ga	S	6.0	2.7	6.4	2.7	6.7	3.2	6.2	2.4	39.1	3.5	5.9	0.7	11.9	2.4	5.7	0.4	7.0	2.2	6.0	0.6	10.2	1.9	6.4	1.5	23.2	2.2	7.7	1.4	18.8	2.1	8.0	1.2	15.0	1.8
227	Van Ness/	Golden Ga	13th	S	6.5	2.0	6.4	1.8	6.5	2.4	6.6	1.7	25.5	2.1	6.8	1.0	14.7	2.3	6.2	0.6	9.7	1.9	5.2	0.8	15.0	2.1	4.9	1.2	24.7	1.6								
228	Van Ness/	13th	Cesar Cha	S							6.5	2.1	31.9	2.0																								
229	Washingto	Drumm	Kearny	W							7.7	2.6	33.5	1.7																								
230	West Port	Sloat	Ulloa	N	7.9	2.4	7.1	2.2			7.2	2.5	34.8	2.3	9.7	2.3	23.7	1.5	11.4	1.9	16.7	1.4	10.6	1.4	12.8	1.1					9.2	3.2	34.8	1.6				
231	West Port	Ulloa	Sloat	S	10.6	1.5	8.1	1.9			4.7	1.4	30.8	3.7	11.2	1.8	16.1	1.5	7.0	1.8	25.7	2.1	6.3	1.1	18.1	2.5	7.7	2.2	28.1	2.1	6.9	2.1	30.4	2.0				
232	I-280	Junipero S	Weldon	E																																		
233	I-280	Weldon	6th/Brann	N																							20.2	5.3	26.3	1.4								
234	US-101	County Lin	Cortland	N																																		
235	US-101	Cortland	I-80	N																																		
236	US-101	I-80	Market	N																																		
237	I-80	Treasure Is	Fremont E	W																			25.6	2.0	7.9	1.8												
238	I-80	Fremont E	US-101	W																																		
239	I-280	6th/Brann	Weldon	S																																		
240	I-280	Weldon	Junipero S	S																																		
241	US-101	Market	I-80	S																																		
242	US-101	I-80	Cortland	S																																		
243	US-101	Cortland	Monster P	S																																		
244	I-80	US-101	Fremont E	E																																		
245	I-80	Fremont E	Treasure Is	E																			21.2	2.3	10.7	2.8												

Attachment 8.2: PM Transit Speed Monitoring Results (2006 – 2021)

cmp id	Name	From	To	Dir	2006				2007				2009				2011				2013				2015				2017				2019				2021				2023			
					Avg. Transit Speed (mph)	S.D Transit Speed (mph)	Coefficient of Variation	Auto:Transit Speed Ratio	Avg. Transit Speed (mph)	S.D Transit Speed (mph)	Coefficient of Variation	Auto:Transit Speed Ratio	Avg. Transit Speed (mph)	S.D Transit Speed (mph)	Coefficient of Variation	Auto:Transit Speed Ratio	Avg. Transit Speed (mph)	S.D Transit Speed (mph)	Coefficient of Variation	Auto:Transit Speed Ratio	Avg. Transit Speed (mph)	S.D Transit Speed (mph)	Coefficient of Variation	Auto:Transit Speed Ratio	Avg. Transit Speed (mph)	S.D Transit Speed (mph)	Coefficient of Variation	Auto:Transit Speed Ratio	Avg. Transit Speed (mph)	S.D Transit Speed (mph)	Coefficient of Variation	Auto:Transit Speed Ratio	Avg. Transit Speed (mph)	S.D Transit Speed (mph)	Coefficient of Variation	Auto:Transit Speed Ratio	Avg. Transit Speed (mph)	S.D Transit Speed (mph)	Coefficient of Variation	Auto:Transit Speed Ratio	Avg. Transit Speed (mph)	S.D Transit Speed (mph)	Coefficient of Variation	Auto:Transit Speed Ratio
1	1st St	Market	Harrison	S																																								
2	2nd St	Brannan	Market	N									7.3			1.4	6.3	2.6	40.8	2.1	6.5	1.8	27.7	0.5	5.7	2.5	43.9	0.9	6.5	1.5	22.9	1.0	6.8	1.7	24.6	1.2								
3	2nd St	Market	Brannan	S									7.4			1.4	6.8	2.7	39.7	1.8	7.1	1.3	18.3	0.8	4.6	1.5	32.6	1.5	6.4	1.2	18.7	1.7	7.1	1.8	25.4	1.2								
4	3rd St	Jamestowr	Evans	N													5.4	2.6	47.1	4.4																	7.9	1.1	14.3	2.1				
5	3rd St	Evans	Terry Fran	N													8.3	3.2	38.9	3.6																	11.1	3.6	32.8	1.6	12.4	2.5	19.9	1.2
6	3rd St	Terry Fran	Market	N													5.6	2.0	36.1	2.3	6.6	1.0	15.2	1.9	7.1	1.3	18.3	1.4	6.6	0.6	8.8	1.3	6.6	1.0	15.4	1.6	8.5	2.2	25.8	1.7	7.4	1.9	26.2	1.3
7	3rd St	Terry Fran	Evans	S													8.1	2.9	36.1	3.7																	12.3	3.4	27.6	1.6	11.8	1.9	16.0	1.5
8	3rd St	Evans	Jamestowr	S													5.0	2.7	54.6	4.6																	8.3	1.2	14.9	1.8				
9	4th St/Sto	O'Farrell	Harrison	S	5.1			1.7					4.8			1.8	4.6	1.7	37.0	3.3													3.4	0.7	21.6	2.2	6.0	1.8	29.3	1.8	5.9	1.3	21.6	1.3
10	4th St/Sto	Harrison	Channel	S									7.3			1.9	6.5	1.7	26.3	2.3	7.4	3.4	45.9	1.7																				
11	5th St	Brannan	Market	N									6.8			2.3	6.3	2.2	34.4	2.5	4.7	1.9	40.4	0.9	3.8	1.7	44.7	1.7	2.8	0.6	22.5	1.3												
12	5th St	Market	Brannan	S									6.3			2.1	5.2	1.5	29.2	2.6	5.5	0.5	9.1	1.0	4.2	0.4	9.5	1.6	4.6	0.5	11.0	1.5	4.7	0.8	17.7	1.6								
13	6th St	Brannan	Market	N																																								
14	6th St	Market	Brannan	S																																								
15	7th St	Brannan	Market	N									7.7			2.1	7.4	2.5	33.4	2.8	6.2	1.0	16.1	2.2	4.7	0.9	19.1	1.8	5.5	1.2	21.8	1.5	5.1	1.5	29.4	1.7	8.8	1.6	18.0	1.5	7.3	1.7	22.7	1.4
16	8th St	Market	Bryant	S									8.0			2.1	7.0	2.1	30.7	3.4	7.2	1.6	22.2	2.2	5.7	1.3	22.8	1.5	6.1	1.2	19.1	1.4	5.4	1.1	20.3	2.2	8.2	2.3	27.4	1.3	7.1	1.9	26.2	1.3
17	9th St	Brannan	Market	N																																								
18	10th St	Market	Brannan	S													7.7	1.7	22.5	2.7																								
19	16th St	Market	Mission	E	5.5			2.0	8.1			1.3	7.1			1.5	6.1	1.6	25.9	2.0	6.1	0.5	8.2	2.4	6.0	0.6	10.0	2.3	5.8	0.6	9.7	1.6	5.5	1.1	19.3	1.4	7.3	1.5	20.9	1.6	6.1	1.5	24.5	1.8
20	16th St	Mission	Potrero	E	6.5			2.0	6.3			1.5	8.1			1.6	7.3	2.1	29.1	1.6	6.2	0.9	14.5	2.4	6.3	1.1	17.5	1.9	5.7	0.4	7.6	1.4	6.0	1.1	18.4	1.3	7.7	1.5	19.2	1.7	6.8	1.3	18.5	1.6
21	16th St	Potrero	Mission	W	5.9			1.9	10.0			1.4	6.9			2.2	6.8	1.8	27.0	2.0	6.0	0.8	13.3	2.1	6.1	0.8	13.1	1.8	5.5	0.7	11.9	1.7	5.6	1.6	28.8	1.5	9.3	3.9	41.9	1.5	7.6	1.6	21.4	1.5
22	16th St	Mission	Market	W	5.9			1.8	10.2			1.4	6.4			1.9	6.1	1.8	29.4	1.4	6.6	1.0	15.2	2.6	6.0	0.6	10.0	2.0	5.1	0.5	10.2	2.0	5.6	1.0	17.6	1.9	7.1	1.4	19.9	2.0	6.2	1.1	17.5	1.9
23	19th Ave/I	Junipero S	Sloat	N									10.4			1.3	8.4	2.4	28.4	2.8	10.0	1.3	13.0	1.7	9.5	1.1	11.6	1.6	11.5	1.0	9.0	1.5	10.1	1.7	16.5	1.7	12.9	2.9	22.2	1.9	10.9	2.0	17.8	1.8
24	19th Ave/I	Sloat	Lincoln	N									13.7			1.7	11.7	2.5	21.1	1.8	9.0	2.0	22.2	1.9	10.0	2.0	20.0	2.0	10.4	0.9	8.7	1.8	10.7	1.9	17.9	1.7	11.2	2.0	17.5	1.9	10.2	1.4	14.2	1.6
25	19th Ave/I	Lincoln	Lake	N									13.3			2.2	14.6	2.6	17.6	2.0	13.3	1.2	9.0	2.1	13.1	2.2	16.8	1.7	11.6	1.8	15.2	1.7	14.3	1.8	12.6	0.9	17.6	2.7	15.7	1.6				
26	19th Ave/I	Lake	US-101	N									26.7			1.7					18.9	1.8	9.5	2.4	11.3	4.8	42.5	1.6	23.2	2.3	10.0	1.8												
27	19th Ave/I	US-101	Lake	S									25.0			1.4	18.1	4.5	24.8	1.7	19.0	1.7	8.9	2.3	18.8	3.6	19.1	2.0	16.3	4.9	30.3	1.4												
28	19th Ave/I	Lake	Lincoln	S									11.2			1.8	13.3	2.8	20.9	1.8	9.9	2.2	22.2	1.9	10.0	1.8	18.0	1.6	8.0	1.4	17.9	1.7	10.0	1.8	18.3	1.3	9.1	2.7	29.8	1.8	8.5	2.0	24.0	1.5
29	19th Ave/I	Lincoln	Sloat	S									10.9			2.2	10.7	2.7	25.3	2.6	11.3	1.0	8.8	1.8	11.1	1.1	9.9	1.8	10.3	0.5	4.6	2.0	10.2	1.6	15.5	1.9	11.1	1.8	16.2	1.8	9.4	1.6	17.0	1.7
30	19th Ave/I	Sloat	Junipero S	S									12.0			1.0	11.5	3.1	26.6	1.5	9.0	1.8	20.0	2.0	9.4	1.1	11.7	1.7	9.1	1.0	10.7	1.8	9.2	1.5	16.3	2.3	12.2	2.6	21.3	1.8	9.5	2.1	21.7	1.8
31	Alemany	Junipero S	Lyell	E													5.6	2.7	48.0	3.9																								
32	Alemany	Lyell	Bay Shore	E													8.8	1.9	21.5	3.4																								
33	Alemany	Bay Shore	Lyell	W													13.2	3.7	28.3	1.9																								
34	Alemany	Lyell	Junipero S	W													11.3	3.4	30.1	2.0																								
35	Bay	Van Ness	Embarcad	E																																								
36	Bay	Embarcad	Van Ness	W																																								
37	Bayshore	County Lin	Industrial	N									11.4			1.9	6.7	3.3	49.3	3.5																								
38	Bayshore	Industrial	Cesar Cha	N									12.3			1.2	11.3	3.0	26.8	1.4	9.5	1.2	12.6	1.9	9.7	3.1	32.0	1.8	8.1	1.1	14.0	1.9	11.0	1.6	14.5	1.2	14.1	3.8	27.4	1.4				
39	Bayshore	Jerrold	Industrial	S									15.1			1.5	10.8	2.8	26.4	1.4	6.9	2.3	33.3	3.0	7.5	2.8	37.3	2.6	8.0	1.2	15.5	2.0	9.4	2.3	23.9	1.6	11.5	3.3	28.7	1.9	9.4	2.4	25.7	2.1
40	Bayshore	Industrial	County Lin	S									10.6			2.5	8.3	2.5	30.0	2.6																								
41	Beale/Davi	Clay	Mission	S									8.9			1.3	5.8	2.2	38.0	2.0	6.6	1.4	21.2	0.8	7.1	2.6	36.6	0.8	6.0	1.3	22.4	1.4	4.8	1.2	24.4	1.3								
42	Brannan	Division	6th	E																																								
43	Brannan	6th	3rd	E																																								
44	Brannan	3rd	6th	W																																								
45	Brannan	6th	Division	W																																								
46	Broadway	Gough	Larkin	E																																								
47	Broadway	Larkin	Powell	E																																								
48	Broadway	Powell	Montgome	E									6.7			2.0	6.1	1.5	23.8	2.3	6.1	0.9	14.8	1.5	6.8	1.4	20.6	1.6	5.6	0.5	9.5	1.7	5.6	1.1	19.2	1.8	6.8	1.9	28.8	2.2	5.3	1.3	24.2	2.3
49	Broadway	Montgome	Embarcad	E									7.1			2.1	6.1	1.5	24.5	2.2	6.2	1.6	25.8	1.1	5.6	1.7	30.4	0.9																
50	Broadway	Embarcad	Montgome	W																																								
51	Broadway	Montgome	Powell	W																					3.0	0.8	26.7	1.8	3.5	1.4	40.5	1.3												
52	Broadway	Powell	Larkin	W																																								
53	Broadway	Larkin	Gough	W																																								
54	Brotherho	Junipero S	Alemany	E																																								
55	Brotherho	Alemany	Junipero S	W																																								
56	Bryant	Division	4th	E									8.3			1.5	7.5	2.4	32.6	1.9	8.4	1.5	17.9	1.7	6.1	1.5	24.6	1.4	5.9	0.7	12.1	1.4	5.8	1.1	19.4	1.4								
57	Bryant	4th	Embarcad	E																																								
58	Bush	Masonic	Gough	E																																								
59	Bush	Gough	Market	E													6.2	2.4	38.0	1.8																								
60	Castro/Div	Market	14th	N	9.6			1.6	9.2			1.1	8.5			1.8	6.9	1.9	27.9	2.2	6.9	0.9	13.0	2.1	7.6	0.7	9.2	1.7	6.8	1.2	17.5	1.8	7.0	1.4	20.1	1.7	7.5	1.8	24.8	1.9	6.7	1.4	20.6	1.8
61	Castro/Div	14th	Geary	N	6.7			1.4	7.9			1.7	7.6			1.6	6.9	1.6	22.9	1.7	6.1	0.4	6.6	2.3	6.7	0.6	9.0	1.7	6.5	0.6	8.7	1.6	6.1	0.7	12.2	1.6	7.0	0.8	12.1	1.8	6.4	0.7	11.1	1.8
62	Castro/Div	Geary	Pine	N	5.5			1.4	8.2			1.3	6.6			1.6	6.2	2.2	35.0	1.5	7.6	1.1	14.5	1.8	6.6	1.4	21.2	1.7	5.2	1.5	28.8	1.8	5.3	1.5	28.2	1.8	5.4	1.4	25.4	2.3	5.3	1.3	24.4	1.9
63	Castro/Div	Pine	Geary	S	5.6			2.1	5.8			1.5	6.2			2.2	5.8	1.4	23.5	1.7	5.4	0.9	16.7	2.4	5.5	1.1	20.0	1.9	5.7	1.2	21.2	1.6	5.3	1.5	28.6	1.7	5.3	1.5	27.4	2.1	5.1	1.3	26.0	1.9
64	Castro/Div	Geary	14th	S	5.5			2.2	5.7			1.7	6.4			1.7	5.9	1.4	23.9	1.8	5.7	0.5	8.8	2.2	5.6	0.5	8.9	1.7	5.3	1.0	19.6	1.8	5.6	0.7	13.3	1.7	6.1	1.1	17.8	1.7	5.6	1.1	19.3	1.6
65	Castro/Div	14th	Market	S	9.1			1.3	6.1			1.9	9.0			1.7	8.0	2.2	28.1	1.5	8.6	1.1	12.8	1.6	8.3	1.4	16.9	1.3	7.3	1.9	26.3	1.3	6.4	1.6	25.4	1.5	7.6	1.6	20.8	1.5	6.6	1.4	21.9	1.4
66	Cesar Cha	Guerrero	Bryant	E													7.6	2.4	31.3	1.4	6.0	1.2	20.0	2.6	6.8	2.2	32.4	1.6	6.5	1.1	16.2	1.5					8.9	2.5	28.6	1.5	7.9	1.9	24.0	1.5
67	Cesar Cha	Bryant	Kansas	E													7.6	2.4	31.7	4.0																								
68	Cesar Cha	Kansas	3rd	E													9.6	2.4	24.8	2.4																								
69	Cesar Cha	3rd	Kansas	W													8.7	2.9	33.8	2.3																								
70	Cesar Cha	Kansas	Bryant	W													8.7	2.7	31.5	2.7																								
71	Cesar Cha	Bryant	Guerrero	W													7.4	2.4	32.4	1.6	5.4	1.4	25.9	3.0	6.3	1.6	25.4	1.9	5.2	0.9	16.6	2.0												
72	Clay	Kearny	Davis	E									7.1			1.6	6.1	1.9	30.6	2.6	6.5	0.6	9.2	1.0	6.6	1.9	28.8	1.3	7.7	0.9	12.2	1.1	6.6	1.2	18.0	1.3	8.0	2.4	30.0	1.5	6.8	2.3	34.3	1.5
73	Columbus	Montgome	Greenwich	N									6.1			2.3	5.8	1.9	32.4	2.2	4.5	0.7	15.6	2.8	4.4	1.0	22.7	2.8	5.5	0.5	9.3	2.2	4.8	0.9	18.2	2.5								
74	Columbus	Greenwich	North Poir	N	8.1			1.6	6.7			2.5	8.5			1.1	7.8	2.3	30.1	1.7	7.3	0.7	9.6	1.8	7.0	0.9	12.9	1.8	6.6	0.7	9.9	1.9	6.2	1.5	24.1	1.7	7.5	1.8	23.7	2.0	6.1	1.6	26.0	2.2
75	Columbus	North Poir	Greenwich	S	7.3			2.2	8.5			1.5	7.8			1.7	6.2	1.8	28.4	2.3	6.7	0.7	10.4	1.7	6.3	0.7	11.1	1.7	6.7	0.6	9.2	1.3	4.8	1.0	20.5	1.6	5.5	1.2	22.1	2.3	4.5	0.9	19.9	2.8
76	Columbus	Greenwich	Montgome	S									5.6			1.3	5.2	1.7	32.8	2.4	4.1	0.5	12.2	2.9	4.2	0.5	11.9	2.4	5.7	2.1	37.2	1.6												
77	Doyle/Lom	County Lin	SF Cemete	E																	19.7	1.9	9.6	1.7	18.5	3.0	16.2	2.2	21.3	4.9	22.8	1.8												
78	Doyle/Lom	SF Cemete	Lyon/Fran	E																	19.7	1.9	9.6	2.0	18.5	3.0	16.2	1.9	21.3	4.9	22.8	1.4												
79	Doyle/Lom	Lyon/Fran	Van Ness	E									8.1			2.3					10.3	1.4	13.6	1.8	12.5	2.3	18.4	1.1	8.2	0.6	7.2	1.5	7.9	1.0	12.8	1.5					9.0	1.3	14.5	1.9
80	Doyle/Lom	Van Ness	Lyon/Fran	W									11.6			1.4					8.9	1.0	11.2	2.0	8.1	2.0	24.7	1.6	8.9	0.7	8.4	1.5	7.8	1.2	15.3	1.7					11.1	1.6	14.8	1.4
81	Doyle/Lom	Lyon/Fran	SF Cemete	W																	13.5	4.1	30.4	1.9	10.8	4.0	37.0	1.2	24.5	2.9	11.7	1.6												
82	Doyle/Lom	SF Cemete	County Lin	W																	13.5	4.1	30.4	1.7	10.8	4.0	37.0	1.3	24.5	2.9	11.7	1.5												
83	Drumm	Market	Washingto	N									5.4			3.0	4.9	2.7	54.6	3.5																								
84	Drumm	Washingto	Market	S									6.3			1.2																												
85	Duboce/Di	Market	Mission	E																																								
86	Duboce/Di	Mission	Potrero	E													9.7	2.6	27.0	1.9																								
87	Duboce/Di	Potrero	Mission	W													6.9	1.7	24.9	2.3																								
88	Duboce/Di	Mission	Market	W																																								
89	Embarcad	Townsend	North Poir	N																																								
90	Embarcad	North Poir	Townsend	S																																								
91	Evans	Cesar Cha	3rd	S									16.7			1.3	13.3	4.4	33.3	1.3	13.6	3.6	26.5	1.2	10.5	2.2	21.0	1.2	11.4	1.5	12.8	1.2	10.7	2.7	25.1	1.5	10.7	3.9	36.4	2.1	10.1	2.7	26.2	1.8
92	Evans	3rd	Cesar Cha	N									14.8			1.4	14.2	3.6	25.5	1.5	11.8	2.7	22.9	1.4	12.0	2.0	16.7	1.0	12.4	3.9	31.5	2.0	15.4	3.9	25.1	1.0	15.4	3.5	23.0	1.4	13.6	3.1	22.8	1.3
93	Fell	Gough	Market	E																																								
94	Fell	Gough	Laguna	W																																								
95	Fell	Laguna	Stanyan	W																																								
96	Folsom	13th	8th	E																	9.4	1.6	17.0	2.0	7.8	2.3	29.5	1.7	5.5	0.9	17.2	1.7	6.5	1.5	23.6	1.5	7.1	1.4	20.0	1.8	7.2	1.7	23.0	1.4
97	Folsom	8th	4th	E									10.2			1.7	9.5	2.7	28.1	2.0	7.3	1.3	17.8	2.4	4.6	1.6	34.8	2.1	6.0	0.9	15.1	1.4	6.4	1.2	19.1	1.3					6.6	1.9	28.7	1.8
98	Folsom	4th	1st	E									8.0			1.9	7.0	2.4	34.8	2.4																					4.5	1.1	24.8	1.7
99	Folsom	1st	Embarcad	E									8.4			1.4	6.7	8.9	133.0	1.8																								
100	Franklin	Market	Pine	N																																								
101	Franklin	Pine	Lombard	N																																								
102	Fremont	Harrison	Market	N									8.2			1.2																												
103	Fulton	Park Presic	10th Ave	E									11.2			2.3					10.2	2.2	21.6	2.3	8.8	3.3	37.5	2.3	8.6	5.3	61.8	2.2	8.1	1.9	22.9	2.1	15.5	2.9	18.6	1.2	12.0	2.6	21.4	1.6
104	Fulton	10th Ave	Arguello	E									11.2			2.1					4.5	2.8	62.2	4.1	9.9	1.6	16.2	1.8	7.5	2.4	31.5	1.9	9.4	2.5	26.3	2.0	9.3	2.9	31.1	2.0	9.9	3.1	31.0	1.8
105	Fulton	Arguello	Masonic	E	9.6			1.6	6.2			1.8	10.4			1.3	8.9	2.7	30.1	1.4	8.3	1.5	18.1	1.8	8.6	1.0	11.6	1.8	7.9	1.4	18.0	1.5	8.9	1.6	18.0	1.2	11.0	3.0	27.6	1.5	8.1	1.8	22.3	1.7
106	Fulton	Masonic	Arguello	W	10.3			2.0	6.4			3.7	9.2			2.2	8.8	2.5	28.4	1.6	7.3	0.5	6.8	2.5	8.5	0.7	8.2	1.9	8.3	1.3	16.1	1.6	8.0	1.0	12.3	1.7	7.3	1.4	18.7	2.2	7.8	1.4	17.9	2.2
107	Fulton	Arguello	10th Ave	W									9.7			2.3	6.2	2.0	31.9	2.9	10.6	1.0	9.4	1.7	11.3	1.8	15.9	1.6	10.0	2.1	20.7	1.6	9.2	1.5	16.2	1.6	9.0	1.9	21.2	2.2	9.5	1.9	19.6	2.1
108	Fulton	10th Ave	Park Presic	W									9.7			0.9	6.2	2.0	31.9	1.8	8.7	1.6	18.4	2.1	6.7	3.1	46.3	2.2	7.2	4.2	58.8	1.9	7.6	2.4	31.9	1.8	8.5	3.0	35.7	2.4	7.2	2.2	30.6	2.0
109	Geary	Great Hwy	25th Ave	E									11.4			1.9	11.3	3.2	28.2	2.1	9.4	0.6	6.4	1.9	10.2	1.1	10.8	1.4	12.3	5.0	40.8	1.3	11.2	1.5	13.8	1.6	11.5	1.9	16.2	1.7	10.7	1.4	13.5	1.6
110	Geary	25th Ave	Arguello	E									8.6			2.7	8.4	1.8	21.6	2.6	8.3	0.6	7.2	2.0	8.4	0.4	4.8	1.5	8.7	1.9	21.6	1.7	8.5	1.2	14.1	1.8	8.7	1.3	15.2	2.0	8.3	1.3	16.0	2.0
111	Geary	Arguello	Gough	E									9.1			2.2	8.6	2.1	24.4	2.3	8.2	0.4	4.9	2.3	8.3	0.3	3.6	1.8	7.9	1.5	19.0	2.2	9.2	1.1	12.4	1.6	9.1	1.3	14.4	2.0	8.8	1.2	13.6	1.8
112	Geary	Kearny	Gough	W									7.1			1.4	6.9	1.9	27.3	1.9	6.9	0.6	8.7	1.7	7.3	0.7	9.6	1.4	7.0	0.9	12.6	1.1	7.2	1.2	16.6	1.2	8.0	1.6	20.3	1.6	7.3	1.4	19.8	1.4
113	Geary	Gough	Arguello	W									9.0			2.8	9.6	2.6	27.5	2.6	9.6	0.6	6.3	2.3	8.5	0.6	7.1	1.8	8.8	1.3	15.1	2.1	10.0	1.5	15.4	1.7	10.7	1.6	14.7	1.9	10.0	1.7	16.8	1.7
114	Geary	Arguello	25th Ave	W									8.6			2.0	8.2	1.8	21.5	2.1	8.0	0.5	6.3	2.0	7.8	0.3	3.8	1.5	7.7	0.6	7.9	1.7	8.2	1.3	15.7	1.7	8.7	1.3	15.4	2.0	8.3	1.4	16.6	1.8
115	Geary	25th Ave	Great Hwy	W									11.3			2.0	10.8	2.6	23.7	2.1	11.0	0.5	4.5	1.5	10.7	0.8	7.5	1.4	9.1	0.6	7.0	1.9	9.6	1.2	12.4	1.9	10.3	2.0	19.3	1.9	10.1	1.4	14.0	1.9
116	Geneva	Ocean	Cayuga	E									6.9			1.2	6.2	1.9	30.1	2.1	5.7	1.2	21.1	2.5	5.9	0.9	15.3	1.6	6.5	1.0	15.0	1.5	6.5	1.2	19.0	1.4	8.1	1.4	16.9	1.9	7.7	1.8	23.2	1.6
117	Geneva	Cayuga	Paris	E									6.7			1.6	6.3	1.8	29.1	1.8	5.0	0.6	12.0	2.9	5.3	1.0	18.9	2.0	4.9	0.5	9.4	2.2	4.4	1.1	25.0	2.2	5.1	1.9	37.2	2.9	5.1	1.5	30.6	2.2
118	Geneva	Paris	Santos	E									13.4			1.6	9.9	2.5	25.3	2.2	9.1	1.1	12.1	2.5	9.4	0.9	9.6	1.7	11.2	1.2	10.9	1.7	10.8	1.8	16.4	1.7	12.7	2.5	19.9	1.7	11.1	2.4	21.4	1.8
119	Geneva	Santos	Paris	W									14.6			1.6	10.8	2.6	23.8	2.2	10.3	0.8	7.8	2.0	11.1	0.9	8.1	1.4	10.8	2.8	25.6	1.6	11.2	2.0	17.9	1.3	11.8	2.1	17.9	1.8	11.0	2.0	17.8	1.8
120	Geneva	Paris	Cayuga	W									7.2			1.4	6.8	1.8	26.5	1.2	4.8	0.7	14.6	2.8	5.6	0.7	12.5	1.9	5.6	0.6	11.3	1.7	5.8	1.4	23.2	1.7	6.6	1.7	26.5	2.4	6.9	1.6	23.5	1.8
121	Geneva	Cayuga	Ocean	W									8.4			1.1	6.8	1.6	23.8	1.5	6.5	0.8	12.3	2.0	6.4	0.6	9.4	1.5	6.2	1.0	16.5	1.5	7.0	1.3	18.6	1.4	6.9	1.4	20.7	2.1	7.1	1.6	22.7	1.5
122	Golden Ga	Masonic	Franklin	E																																								
123	Golden Ga	Franklin	Market	E																																								
124	Gough	Pine	Geary	S																																								
125	Gough	Geary	Golden Ga	S																																								
126	Gough	Golden Ga	Market	S																																								
127	Guerrero/	Monterey	29th	N																													18.2	3.9	21.5	0.8	21.2	5.0	23.6	1.4				
128	Guerrero/	29th	Cesar Cha	N																																								
129	Guerrero/	Cesar Cha	29th	S																																								
130	Guerrero/	29th	Monterey	S																													18.2	2.3	12.5	0.9	32.6	14.4	44.2	0.8				
131	Harrison	Embarcad	1st	W									9.1			1.3																												
132	Harrison	1st	4th	W									8.5			2.0					7.2	1.8	25.0	2.3	5.6	2.0	35.7	2.3	5.4	1.5	26.9	1.4	6.7	2.2	32.0	1.4					7.4	1.9	25.9	1.6
133	Harrison	4th	8th	W									9.5			1.2	8.9	2.7	30.0	1.7	8.4	0.8	9.5	1.9	8.4	1.5	17.9	1.7	8.3	0.7	8.3	1.7	7.4	1.5	20.7	1.7	10.2	2.8	27.3	1.4	8.9	2.8	30.9	1.6
134	Harrison	8th	Division	W									7.1			1.9	7.3	2.4	32.9	1.6	5.4	1.0	18.5	3.0	6.2	1.8	29.0	2.1	6.3	0.5	8.2	1.7	5.5	1.0	18.7	1.9	6.6	2.5	37.8	1.9				
135	Hayes	Market	Gough	W	6.1			1.9	5.3			2.5	4.8			2.0	4.3	1.5	34.0	2.0	4.5	0.9	20.0	2.6	5.4	1.1	20.4	2.1	4.8	0.8	17.3	1.6	4.9	0.8	15.4	1.6					5.2	1.1	21.8	1.7
136	Howard	Embarcad	S Van Ness	W													21.7	4.2	19.5	0.6																								
137	Junipero S	County Lin	Brotherho	N																					13.2	4.9	37.1	1.6	6.6	1.0	15.2	2.6												
138	Junipero S	Brotherho	19th	N									14.8			1.0	9.3	4.2	45.2	1.1	8.8	1.5	17.0	1.6	7.9	1.7	21.5	1.6	9.2	1.3	13.9	1.2	7.8	1.7	21.3	1.2	12.9	3.7	29.0	1.9				
139	Junipero S	19th	Sloat	N																																								
140	Junipero S	Sloat	19th	S																																								
141	Junipero S	19th	Brotherho	S									13.4			2.9					14.5	1.3	9.0	2.6	17.2	6.2	36.0	2.0	14.7	6.0	40.5	2.5	12.7	3.1	24.5	3.1	12.9	3.9	30.2	3.3				
142	Junipero S	Brotherho	County Lin	S													16.3	5.0	30.4	2.8									14.1	0.7	4.7	3.8												
143	Kearny	Market	Columbus	N									6.8			1.9	5.4	2.9	53.5	2.8	7.5	1.2	16.0	1.6	6.8	0.6	8.8	1.3	6.6	1.7	25.7	1.3	5.7	0.9	16.4	1.6	6.8	2.2	32.5	1.9	5.3	1.0	19.3	1.8
144	King	4th	2nd	E																																								
145	King	2nd	4th	W																																								
146	Lincoln/ K	19th Ave	5th Ave	E									11.9			1.9	10.6	3.2	30.0	1.9	9.9	1.3	13.1	2.2	10.1	0.9	8.9	1.9	9.4	2.1	22.8	1.9	10.2	2.5	24.2	1.6	12.3	3.4	27.6	1.6	10.5	2.3	21.8	1.7
147	Lincoln/ K	5th Ave	Stanyan	E													11.7	3.7	31.1	1.9																								
148	Lincoln/ K	Stanyan	5th Ave	W													6.3	0.6	9.6	3.9																								
149	Lincoln/ K	5th Ave	19th Ave	W									12.2			1.1	11.1	3.1	28.2	1.7	11.1	2.2	19.8	1.6	11.7	1.0	8.5	1.4	10.0	1.5	15.0	1.5	8.8	2.1	23.8	1.6	9.8	2.7	28.0	1.8	10.0	2.3	23.2	1.7
150	Main	Mission	Market	N	4.1			3.5	4.1			4.0					3.6	1.8	48.6	3.9	5.5	1.4	25.5	0.6	6.0	5.5	91.7	0.8	4.8	1.0	21.1	2.3												
151	Market/Po	Sloat	Santa Clar	E													4.8	1.9	40.3	4.4																								
152	Market/Po	Santa Clar	Burnett	E													12.1	4.2	34.3	1.6	11.2	2.0	17.9	2.1	12.4	3.4	27.4	1.6	11.1	1.0	8.8	1.7	12.4	3.4	27.1	1.6	16.6	2.7	16.0	1.3	12.1	3.2	26.3	1.7
153	Market/Po	Burnett	Castro	E													10.5	2.5	23.3	2.2																	20.3	3.1	15.1	1.0				
154	Market/Po	Castro	Guerrero	E	7.0			1.4	6.6			1.6					5.8	1.4	24.0	1.8	7.2	0.8	11.1	1.9	6.2	0.7	11.3	1.8	5.4	0.5	8.4	1.9					6.6	1.0	15.7	2.1				
155	Market/Po	Guerrero	Van Ness	E	5.5			1.3	5.4			1.9					5.8	1.4	24.0	2.6	9.6	3.3	34.4	2.1	5.3	1.2	22.6	2.3	3.8	1.1	30.2	2.4					6.5	0.9	14.4	1.9				
156	Market/Po	Van Ness	Drumm	E	6.6			1.7	7.8			1.2	8.1			1.2	6.7	2.3	34.2	1.6	6.6	0.5	7.6	1.8	6.0	0.7	11.7	1.5	5.7	0.3	5.6	1.1	5.7	0.8	13.5	1.1	6.5	0.9	14.7	1.9	5.9	0.6	10.8	1.8
157	Market/Po	Drumm	Van Ness	W	6.2			1.6	5.4			2.1	6.8			2.0	6.1	1.9	31.4	2.0	7.0	0.3	4.3	1.7	7.0	0.5	7.1	1.3	6.1	0.2	3.6	0.9	5.5	0.9	17.0	1.3	7.8	1.0	13.1	1.3	7.0	0.9	13.1	1.3
158	Market/Po	Van Ness	Guerrero	W	6.5			1.9	7.2			1.2					5.2	1.4	27.0	2.2	4.6	0.9	19.6	2.8	4.8	1.2	25.0	2.3	5.8	0.8	13.8	1.9					7.3	2.5	33.9	2.1				
159	Market/Po	Guerrero	Castro	W	6.3			3.1	5.1			2.9					5.2	1.4	27.0	2.4	6.1	0.7	11.5	2.6	4.8	0.7	14.6	2.7	5.5	0.9	15.6	2.8					7.9	1.6	19.9	2.2				
160	Market/Po	Castro	Burnett	W													6.1	1.8	30.1	5.0																	19.3	2.6	13.4	1.2				
161	Market/Po	Burnett	Santa Clar	W													13.0	3.8	29.3	1.7	10.6	1.1	10.4	2.1	11.3	2.4	21.2	1.5	11.3	2.0	17.9	1.5	13.7	3.0	22.0	1.2	15.4	4.4	28.7	1.5	12.8	2.8	22.2	1.6
162	Market/Po	Santa Clar	Sloat	W																																								
163	Masonic	Page	Geary	N									9.5			2.0	8.1	2.0	24.9	2.1	7.6	1.0	13.2	2.3	6.6	1.2	18.2	1.9	8.0	1.1	13.7	1.6	7.6	1.0	13.1	1.5	8.8	1.6	18.2	1.6	7.2	1.6	21.8	1.8
164	Masonic	Geary	Bush/Eucli	N													9.7	2.9	29.8	2.3																								
165	Masonic	Presidio	Geary	S													3.1	1.0	31.3	2.9																								
166	Masonic	Geary	Page	S									8.9			1.9	7.2	1.7	22.8	1.9	7.8	0.8	10.3	2.5	7.4	1.5	20.3	1.8	7.1	1.5	21.3	1.8	7.5	1.7	22.3	1.7	8.0	2.9	36.9	1.5	6.5	2.2	33.8	1.4
167	Mission/O	Sickles	Ocean	N	9.4			2.4	7.1			2.8	10.0			2.2	10.2	2.4	23.9	2.0	7.2	1.7	23.6	2.4	9.8	0.5	5.1	1.4	12.1	1.2	9.9	1.2	10.2	1.7	16.8	1.2	11.9	2.0	16.8	1.4	10.4	1.8	17.1	1.6
168	Mission/O	Ocean	Cesar Cha	N	8.8			2.2	5.3			2.9	9.0			2.0	9.1	2.1	22.6	1.8	8.1	0.4	4.9	1.7	8.2	0.4	4.9	1.7	9.7	1.8	18.9	1.4	9.4	1.6	17.5	1.4	11.8	2.1	17.5	1.4	9.9	1.6	16.2	1.5
169	Mission/O	Cesar Cha	14th	N	7.0			1.8	7.1			1.9	7.1			1.9	7.1	1.7	24.4	2.0	6.8	0.4	5.9	1.7	6.8	0.3	4.4	1.6	7.9	0.7	8.8	1.2	7.6	1.2	16.3	1.2	8.2	1.2	15.0	1.5	7.2	1.0	14.6	1.6
170	Mission/O	14th	9th	N	6.6			1.9	5.7			2.2	7.5			1.8	7.4	2.1	28.4	1.7	5.4	0.6	11.1	2.7	5.4	0.9	16.7	2.5	3.8	1.3	34.1	2.4	5.4	1.1	20.3	1.7	7.0	1.7	23.9	1.9	6.1	1.2	20.0	2.1
171	Mission/O	9th	3rd	N	8.5			1.5	6.4			2.2	9.1			1.5	8.0	1.8	22.3	1.6	8.1	0.5	6.2	1.9	7.0	0.7	10.0	1.5	7.9	1.1	14.4	1.3	7.0	1.4	20.8	1.4	9.1	1.9	21.2	1.5	7.6	1.8	24.0	1.5
172	Mission/O	3rd	Embarcad	N	5.6			1.4	6.5			1.4	8.2			1.6	6.9	2.3	33.5	1.6	6.8	1.3	19.1	2.1	6.0	1.6	26.7	1.4	7.6	2.2	29.5	0.9	5.0	1.4	28.5	1.2	6.6	2.0	30.7	1.8	5.2	1.7	32.5	1.6
173	Mission/O	Embarcad	3rd	S	7.0			1.9	8.6			1.3	7.1			2.0	4.0	3.6	89.9	2.8	3.5	0.7	20.0	3.7	6.9	0.9	13.0	1.3	8.9	2.7	30.0	0.8	4.8	1.0	20.1	1.6	5.7	3.2	55.6	2.3	4.5	1.3	29.1	2.0
174	Mission/O	3rd	9th	S	8.4			2.2	4.2			3.1	7.6			2.0	7.8	2.1	27.5	1.9	6.9	0.8	11.6	2.1	7.0	0.8	11.4	1.6	9.8	1.2	12.5	1.2	7.5	1.6	21.8	1.4	9.8	2.0	20.6	1.3	8.1	1.8	21.7	1.4
175	Mission/O	9th	14th	S	6.7			1.9	5.7			2.3	6.8			2.0	7.2	2.1	29.1	1.9	4.9	1.0	20.4	2.5	5.6	0.8	14.3	1.9	2.1	0.5	21.8	5.0									7.5	2.6	34.5	1.2
176	Mission/O	14th	Cesar Cha	S	6.5			2.0	5.4			2.5	6.6			2.3	6.9	1.7	24.3	2.0	6.6	0.6	9.1	1.9	6.7	0.3	4.5	1.7	7.3	0.9	11.7	1.4	7.9	1.6	19.8	1.2	9.1	1.6	17.3	1.5	7.6	1.3	16.5	1.6
177	Mission/O	Cesar Cha	Ocean	S	8.2			1.8	7.5			1.9	8.1			1.7	8.2	1.9	23.2	1.9	7.2	0.4	5.6	1.8	7.0	0.4	5.7	1.7	9.1	1.3	14.6	1.2	8.4	1.5	17.2	1.2	9.8	1.7	16.9	1.5	9.0	1.5	17.0	1.6
178	Mission/O	Ocean	Sickles	S	9.7			2.2	9.3			1.8	10.9			1.9	9.8	2.1	21.2	2.0	9.0	0.5	5.6	1.8	8.5	0.6	7.1	1.6	8.8	1.8	19.9	1.6	9.1	1.8	19.4	1.4	10.8	2.0	18.5	1.6	9.0	2.3	25.9	1.9
179	Montgome	Broadway	Bush	S													6.8	2.1	30.7	1.1																								
180	North Poir	Van Ness	Columbus	E	6.8			1.7	6.1			2.5	8.9			1.7	7.8	2.8	35.5	1.8	2.7	0.9	33.3	3.4	8.0	1.5	18.8	1.1	8.2	0.9	11.1	1.2	5.9	2.5	42.7	2.2	6.6	3.3	49.0	2.3	6.1	1.8	29.8	2.2
181	North Poir	Columbus	Embarcad	E									9.6			1.7	8.4	2.4	28.8	1.9	7.8	3.6	46.2	2.3	7.9	3.8	48.1	1.1	7.5	3.3	44.1	1.2	10.1	2.8	27.8	1.5	11.9	3.6	30.4	1.4				
182	North Poir	Embarcad	Columbus	W									10.3			1.5	5.3	2.1	38.7	3.8	7.8	1.8	23.1	2.3	6.6	1.1	16.7	1.9	8.0	1.3	15.7	2.0												
183	North Poir	Columbus	Van Ness	W	7.4			2.6	5.5			2.3	8.2			2.0	5.6	2.2	39.3	2.4	5.2	1.2	23.1	2.0	5.7	1.1	19.3	2.3	6.1	0.7	12.2	2.0	6.6	2.3	35.0	1.4	7.8	2.9	37.2	1.9	6.8	2.1	31.0	2.0
184	Oak	Stanyan	Divisadero	E																																								
185	Oak	Divisadero	Fillmore	E																																								
186	Oak	Fillmore	Laguna	E																																								
187	Oak	Laguna	Franklin	E																																								
188	Ocean	19th Ave	Miramar	E	9.5			1.3	5.5			2.7																					6.8	1.3	19.1	1.7	12.2	3.3	27.2	1.3				
189	Ocean	Miramar	Howth	E	9.0			1.6	5.4			2.5					1.5	0.9	59.2	8.6	5.4	1.1	20.4	2.6	5.5	0.7	12.7	2.0	6.0	0.6	9.9	1.8	7.3	1.9	25.6	1.4	8.4	2.3	26.8	1.6	7.6	1.7	22.4	1.6
190	Ocean	Howth	Miramar	W	8.3			1.0	6.0			1.8					8.4	2.3	27.5	1.4	5.5	1.2	21.8	2.3	4.3	0.6	14.0	2.0	4.8	1.1	22.1	1.7	6.1	1.1	18.2	1.3	5.2	2.1	39.7	2.7				
191	Ocean	Miramar	19th Ave	W	9.5			1.3	7.6			2.0																					7.3	0.9	12.0	1.7	11.2	2.8	25.3	1.4				
192	Octavia	Market	Fell	N																																								
193	Octavia	Fell	Market	S																																								
194	O'Farrell	Gough	Mason	E									8.7			1.3	7.7	1.8	23.4	1.5	8.5	0.7	8.2	1.6	8.0	0.9	11.3	1.4	4.6	1.8	38.2	1.9	8.6	1.5	17.4	1.0	8.9	1.9	21.1	1.3	8.7	2.7	31.0	1.2
195	O'Farrell	Mason	Market	E									6.9			1.3	5.7	1.7	30.6	1.4	8.1	1.1	13.6	1.5	5.3	1.1	20.8	1.6	5.3	3.1	57.7	1.3	5.7	1.5	26.2	1.3	8.1	1.9	23.7	1.4				
196	Pine	Market	Kearny	W																					8.9	4.2	47.2	0.8	6.0	1.1	18.5	0.9	4.7	1.3	26.6	1.4								
197	Pine	Kearny	Leavenwor	W																																								
198	Pine	Leavenwor	Franklin	W																																								
199	Pine	Franklin	Presidio	W																																								
200	Potrero	Cesar Cha	21st	N	6.4			2.7	5.8			4.1	7.3			2.6	8.9	2.3	25.7	2.4	8.4	1.6	19.0	1.8	7.9	0.9	11.4	1.0	7.1	1.6	22.7	1.8	6.4	1.5	23.1	2.2	8.5	1.8	20.9	2.0	6.7	1.7	25.6	1.9
201	Potrero	21st	Division	N	9.7			1.5	6.1			3.5	9.9			1.6	8.9	2.0	22.5	2.6	7.8	1.0	12.8	2.0	9.0	1.0	11.1	0.7	9.4	1.5	15.5	1.4	9.0	2.8	30.8	1.4	11.3	3.7	32.7	1.5	8.6	1.8	21.4	1.6
202	Potrero	Division	21st	S	9.4			1.8	7.6			2.7	10.0			2.5	9.6	2.7	28.2	2.4	9.0	1.8	20.0	1.6	8.2	1.5	18.3	1.0	8.8	0.9	10.3	1.8	8.9	1.6	18.0	1.5	10.2	2.6	25.3	1.6	8.7	1.5	16.9	1.7
203	Potrero	21st	Cesar Cha	S	7.4			2.1	5.7			2.8	7.0			2.8	8.6	2.7	31.0	2.1	6.0	1.2	20.0	1.4	6.0	1.2	20.0	0.7	8.0	1.6	20.1	2.2	7.9	2.0	24.6	1.4	8.5	2.1	24.5	1.8	8.2	2.4	28.8	1.5
204	Skyline	County Lin	Sloat	N													25.9	4.6	17.9	1.6	21.7	3.1	14.3	2.0	16.4	3.0	18.3	2.2	24.9	3.0	11.9	1.4												
205	Skyline	Sloat	County Lin	S													20.0	3.8	19.0	1.9									13.8	1.6	11.8	2.5												
206	Sloat	Skyline	Junipero S	E									15.4			1.3	12.4	4.4	35.8	1.4	11.5	5.6	48.7	2.2	11.2	10.8	96.4	2.0	10.5	1.4	13.6	1.9	11.0	2.5	22.4	1.8					11.9	3.5	28.9	1.8
207	Sloat	Junipero S	Skyline	W									14.2			1.9	13.7	4.2	31.0	2.2	12.8	1.9	14.8	2.3	13.2	1.5	11.4	1.9	10.8	1.8	16.4	2.3	12.6	2.6	20.4	1.8					13.2	2.8	21.1	1.8
208	Stanyan	Fulton	Turk	N													5.4	1.3	24.4	2.9																								
209	Stanyan	Turk	Fulton	S																																								
210	Sutter	Divisadero	Gough	E	11.4			1.4	5.2			3.1	8.2			1.9	7.2	1.7	23.2	1.9	8.1	1.0	12.3	1.9	7.9	1.1	13.9	1.5	7.7	0.5	6.7	1.4	7.5	1.0	13.0	1.3					8.2	1.0	12.0	1.4
211	Sutter	Market	Mason	W	5.7			2.0	5.8			2.3	6.1			1.9	5.4	2.0	37.6	2.3	5.7	1.4	24.6	2.1	5.7	1.0	17.5	1.8	6.3	0.6	9.9	1.3	4.9	0.9	18.7	1.7					5.5	0.9	17.1	1.8
212	Sutter	Mason	Gough	W	6.5			2.0	8.4			1.5	6.6			2.2	6.1	1.6	26.2	1.9	6.6	0.9	13.6	1.9	6.4	1.4	21.9	1.7	6.9	0.4	6.0	1.6	5.7	0.9	15.8	1.9					5.5	0.7	12.0	2.2
213	Sutter	Gough	Divisadero	W	9.1			1.5	6.6			2.4	7.9			1.9	6.8	1.3	19.1	2.0	7.6	1.2	15.8	1.7	7.6	0.8	10.5	1.6	7.9	0.7	9.2	1.4	6.8	1.0	15.0	1.8					7.6	0.8	10.1	1.8
214	Townsend	7th	2nd	E									10.4			1.1	9.2	2.4	25.6	1.7	7.5	2.0	26.7	2.3	5.1	1.7	33.3	1.6	5.5	1.6	29.8	1.6	6.6	2.4	36.9	1.3								
215	Townsend	2nd	7th	W									10.3			1.3	7.9	2.3	29.2	1.5	5.7	1.2	21.1	2.9	5.7	3.5	61.4	1.6	5.2	1.1	20.8	1.8	8.0	1.3	15.7	1.1								
216	Turk	Stanyan	Divisadero	E	10.5			1.8	5.4			3.5	11.7			1.5	9.8	3.1	32.0	1.8	10.5	2.3	21.9	1.9	10.1	1.2	11.9	1.8	9.5	1.5	16.0	1.5	8.4	1.8	21.1	1.6					8.4	1.6	18.7	1.7
217	Turk	Market	Hyde	W									5.8			1.9	5.5	1.6	29.4	2.1	7.0	1.6	22.9	1.9	6.7	1.6	23.9	1.9	6.0	0.8	12.8	1.5	4.5	1.0	23.0	1.9					3.8	0.6	15.9	2.6
218	Turk	Hyde	Gough	W													6.6	2.1	31.5	1.7	8.0	1.5	18.8	1.8									4.6	0.9	19.4	1.9								
219	Turk	Gough	Divisadero	W																																								
220	Turk	Divisadero	Stanyan	W	10.2			2.1	10.3			1.8	10.4			2.5	9.1	3.2	35.5	1.9	8.0	1.8	22.5	2.4	9.0	1.7	18.9	1.9	8.5	1.2	13.6	1.9	8.2	1.8	21.4	2.2					9.1	1.6	17.2	1.9

221	Van Ness/	Cesar Cha	13th	N																																								
222	Van Ness/	13th	Golden Ga	N	5.0			2.0	5.1			2.5	6.4			2.3	5.9	1.8	31.1	2.3	5.7	0.9	15.8	2.4	5.7	0.7	12.3	1.7	6.2	0.6	10.0	1.4	6.3	1.4	21.6	1.2	9.2	2.3	24.7	1.6				
223	Van Ness/	Golden Ga	Washingtc	N	5.3			3.1	7.2			2.4	6.2			2.8	5.5	1.7	30.7	4.0	5.4	0.4	7.4	2.7	5.2	0.4	7.7	2.3	6.4	0.6	8.8	2.1	6.1	0.9	14.1	2.2	8.1	1.7	20.6	2.0	8.9	1.6	17.7	1.3
224	Van Ness/	Washingtc	Lombard	N	7.9			2.8	6.1			4.4	8.5			3.1	7.8	2.1	26.8	3.2	7.6	0.9	11.8	2.3	7.4	0.7	9.5	2.2	6.8	1.0	14.7	2.3	5.6	1.3	22.7	3.0	7.0	1.7	24.6	2.7				
225	Van Ness/	Lombard	Washingtc	S	6.4			2.1	5.4			3.7	6.6			1.9	6.6	2.2	32.8	2.6	6.4	0.7	10.9	2.1	6.2	0.4	6.5	2.0	6.6	0.8	12.2	1.7	6.4	1.0	15.7	1.6	6.8	1.4	20.4	1.9	6.6	1.5	22.1	1.5
226	Van Ness/	Washingtc	Golden Ga	S	4.1			2.0	7.6			1.4	6.0			2.0	5.6	1.3	23.9	2.1	5.4	0.6	11.1	2.4	5.2	0.6	11.5	1.9	5.2	0.9	17.5	1.5	5.1	0.7	12.9	1.8	6.4	1.2	19.5	1.8	6.8	0.8	12.2	1.3
227	Van Ness/	Golden Ga	13th	S	11.4			0.8	7.7			1.6	6.5			1.9	6.2	1.9	30.0	2.7	6.1	1.0	16.4	2.3	4.7	0.6	12.8	1.7	4.2	0.4	9.2	1.6	4.5	0.9	19.6	1.6	7.1	1.7	24.5	1.6				
228	Van Ness/	13th	Cesar Cha	S													7.1	1.7	24.2	2.6																								
229	Washingtc	Drumm	Kearny	W													6.2	2.0	32.3	2.4																								
230	West Porta	Sloat	Ulloa	N	6.6			2.3	7.1			2.1					6.1	2.2	36.0	2.5	7.8	3.3	42.3	1.8	11.4	2.4	21.1	1.0	10.9	1.2	11.1	1.1					8.6	2.5	29.0	1.5				
231	West Porta	Ulloa	Sloat	S	8.9			1.9	6.6			2.3					4.1	1.4	35.3	4.1	8.5	1.8	21.2	1.6	5.8	0.8	13.8	2.5	5.7	1.3	22.8	2.3	6.3	1.8	28.8	1.8	6.7	1.9	29.1	2.0				
232	I-280	Junipero S	Weldon	E																																								
233	I-280	Weldon	6th/Brann	N																																								
234	US-101	County Lin	Cortland	N																																								
235	US-101	Cortland	I-80	N																																								
236	US-101	I-80	Market	N																																								
237	I-80	Treasure Is	Fremont E	W																									17.4	3.5	20.3	1.2												
238	I-80	Fremont E	US-101	W																																								
239	I-280	6th/Brann	Weldon	S																																								
240	I-280	Weldon	Junipero S	S																																								
241	US-101	Market	I-80	S																																								
242	US-101	I-80	Cortland	S																																								
243	US-101	Cortland	Monster P	S																																								
244	I-80	US-101	Fremont E	E																																								
245	I-80	Fremont E	Treasure Is	E																									18.9	2.3	12.3	1.9												