San Francisco 2009 CMP Technical Appendices

GUIDANCE FOR CONSISTENCY OF

CONGESTION MANAGEMENT PROGRAMS

WITH THE REGIONAL TRANSPORTATION PLAN

Metropolitan Transportation Commission

May 2009

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

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I. INTRODUCTION

A. Purpose of This Guidance

The Congestion Management Program (CMP) statutes establish specific requirements for the content and development process for CMPs, for the relationship between CMPs and the metropolitan planning process, for CMA monitoring and other responsibilities, and for the responsibilities of MTC as the regional transportation agency. CMPs are not required in a county if a majority of local governments and the Board of Supervisors adopt resolutions electing to be exempt from this requirement (AB 2419 (Bowler) Chapter 293, Statutes of 1996). This Guidance is for those counties that prepare a CMP in accordance with state statutes. For counties that opt out of preparing a CMP, MTC will directly work with the appropriate county agencies to establish project priorities for funding.

CMP statutes also specify particular responsibilities involving CMPs for the regional transportation agency, in the Bay Area, MTC. These responsibilities include review of the consistency of the CMPs with the RTP, evaluation of the consistency and compatibility of the CMPs in the Bay Area, and inclusion of the CMP projects in the Regional Transportation Improvement Program (RTIP).

The purpose of this guidance is to focus on the relationship of the CMPs to the regional planning process and MTC's role in determining consistency of CMPs with the Regional Transportation Plan (RTP).

B. Legislative Requirement for Congestion Management Programs

Congestion Management Programs 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".

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 Regional Transportation Improvement Program.

C. The Role of CMPs in the Metropolitan Planning Process

CMPs play a role in the countywide and regional transportation planning processes:

- CMPs can identify specific near term projects to implement the longer-range vision established in a countywide plan.

- Through CMPs, the transportation investment priorities of the multiple jurisdictions in each county can be addressed in a countywide context.

- CMPs establish a link between local land use decision making and the transportation planning process.

- CMPs are a building block for the federally required Congestion Management Program.

II. MTC's ROLE and 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 Regional Transportation Plan (RTP) Regulatory Setting and Goals

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 metropolitan transportation planning regulations called out in SAFETEA-LU. These requirements call for the metropolitan transportation planning process to include the development of a transportation plan addressing no less than a 20-year planning horizon. The transportation plan shall include both long-range and

short-range strategies/actions that lead to the development of an integrated multimodal transportation system to facilitate the safe and efficient movement of people and goods in addressing current and future transportation demand.

According to these requirements, the metropolitan transportation planning process shall be continuous, cooperative, and comprehensive, and provide for consideration and implementation of projects, strategies, and services that will address the factors listed below:

- Support the economic vitality of the metropolitan area, especially by enabling global competitiveness, productivity, and efficiency;
- Increase the safety of the transportation system for motorized and non-motorized users;
- Increase accessibility and mobility of people and freight;
- Protect and enhance the environment, promote energy conservation, improve the quality of life, and promote consistency between transportation improvements and State and local planned growth and economic development patterns;
- Enhance the integration and connectivity of the transportation system, across and between modes, for people and freight;
- Promote efficient system management and operation; and
- Emphasize the preservation of the existing transportation system.

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.

State Regional Transportation Plan (RTP) Guidelines

The RTP Guidelines adopted by the California Transportation Commission (CTC) state that the CTC cannot program projects that are not identified in the RTP. Section 65080 states that the RTP shall contain three distinct elements:

- A **Policy Element** that reflects the mobility goals, policies and objectives of the region;
- 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.
- The Transportation 2035 Plan serves all the specific planning purposes outlined in the CTC RTP Guidelines

C. Consistency Findings

MTC's findings for the consistency of CMPs focus on five areas:

- Goals and objectives established in the RTP,
- Consistency of the system definition with adjoining counties,
- Consistency with federal and state air quality plans,
- Consistency with the MTC travel demand modeling database and methodologies; and
- RTP financial assumptions.

1) Goals and objectives established in the RTP

The Transportation 2035 Plan represents the transportation policy and action statement of how the Bay Area will approach the region's transportation needs over the next 25 years. It was prepared by MTC in partnership with the Association of Bay Area Governments (ABAG), the Bay Area Air Quality Management District (BAAQMD), and the Bay Conservation and Development Commission (BCDC) and in collaboration with Caltrans, the nine county-level Congestion Management Agencies (CMAs) or substitute agencies, over two dozen Bay Area transit operators, and numerous transportation stakeholders and the public.

At the core of the proposed Transportation 2035 Plan is a vision of what the Bay Area transportation network should look like in 2035. The purpose and goals of the Transportation 2035 Plan provide the framework for this vision. The purpose of the Transportation 2035 Plan is to encourage and promote the safe and efficient management, operation and development of a regional intermodal transportation system that will serve the mobility needs of people and goods. The Commission adopted a Statement of Vision for the Transportation 2035 Plan which can be read in full in the RTP.

The RTP includes the following principles: Economy, Environment and Equity, referred to as the Three Es, and associated goals. The plan goals are not entirely confined to any one of the Three Es, but rather cut across and reinforce all three principles; these are further explained in the RTP.

Three E Principles and Goals

Principle	*Goal*
Economy	Maintenance & Safety
	Reliability
	Efficient Freight Travel
	Security & Emergency Management
Environment	Clean Air
	Climate Protection
Equity	Equitable Access
	Livable Communities

Further, the RTP incorporates a set of performance objectives for each of the Three E principles as quantifiable measures against which progress may be evaluated, as shown below:

RTP Performance Objectives

Principle	*Goal*	*Performance Objectives*
Economy	Maintenance & Safety	*Maintenance* • Maintain local road pavement condition index (PCI) of 75 or greater for local streets and roads • State highway distressed pavement condition lane-miles not to exceed 10% of total system • Achieve an average age for all transit asset types that is no more than 50% of their useful life • Increase the average number of miles between service calls for transit service in the region to 8,000 miles *Collisions/Fatalities* • Reduce fatalities from motor-vehicle collisions by 15 percent from today by 2035 • Reduce bicycle and pedestrian fatalities attributed to motor vehicle collisions by 25 percent each from 2000 by 2035 • Reduce bicycle and pedestrian injuries attributed to motor vehicle collisions by 25 percent each from 2000 by 2035
	Reliability; Efficient Freight Travel; Security & Emergency Management	• Reduce per-capita delay by 20 percent from today by 2035

Environment	Clean Air; Climate Protection	• Reduce daily per-capita vehicle miles traveled (VMT) by 10 percent from today by 2035 • Reduce emissions of finer particulates ($PM_{2.5}$) by 10 percent from today by 2035 • Reduce emissions of coarse particulates (PM_{10}) by 45 percent from today by 2035 • Reduce carbon dioxide (CO_2) emissions to 40 percent below 1990 levels by 2035
Equity	Equitable Access; Livable Communities	• Decrease by 10 percent the combined share of low-income and lower-middle income residents' household income consumed by transportation and housing

Note that these performance objectives do not constitute legal mandates, nor do they constitute thresholds of significance under CEQA.

Regional Transit Expansion Program

The Regional Transit Expansion Program – adopted by the Commission as Resolution 3434 –calls for a nearly $12 billion investment in new rail and bus projects that will improve mobility and enhance connectivity for residents throughout the Bay Area. 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 Policy, as part of Res. 3434, that established 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 Appendix C).

2) Consistency of the system definition with adjoining counties

The CMP statutes 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.

Infill Opportunity Zones

Cities and counties may designate "Infill Opportunity Zones" in order to support development of infill housing and mixed use developments in proximity to transit (SB 1636 (Figueroa)(Chapter 505, Section 4, Statutes of 2002). Traffic Level of Service (LOS) standards shall not apply to the streets and highways within an infill opportunity zone. Rather, an alternative level of service standard, multimodal

composite, or personal level of service standard may be used, or a list of flexible level of service mitigation options, including transit, pedestrian and other infrastructure, may be approved. Infill opportunity zones may serve as a valuable tool as the CMAs continue to work to connect land use and transportation planning. MTC encourages the exchange of information between the CMAs regarding approaches to alternative levels of service.

3) Consistency with pertinent Air Quality Plans, as incorporated in the RTP

The RTP incorporates Transportation Control Measures (TCMs) contained 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 transportation control measures (TCMs) for the Federal and State Clean Air Plans. In addition, CMPs are encouraged to consider the benefits of greenhouse gas (GHG) reductions in developing the CIP, although GHG emission reductions are not currently required in either Federal or State Clean Air Plans.

A reference to the lists of federal and state TCMs is provided in Table 1 of Attachment B. The lists may be updated from time to time to reflect changes in the list of TCMs.

In particular, TCMs that require local implementation should be identified in the CMP, specifically in the CIP. If needed MTC will indicate TCMs that need to be emphasized to help achieve federal and state air quality standards.

4) 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 of highly consistent travel demand models, with coordinated regional and subregional models and shared databases, to provide a common foundation for transportation policy and investment analysis.

The Bay Area Travel Model User Community (BATMUC) of the Bay Area Partnership 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. BATMUC reports to the Partnership Technical Advisory Committee (PTAC). 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
- Auto ownership assumptions
- Trip generation methodology
- Trip distribution methodology
- Mode choice methodology
- Traffic assignment methodologies

5) RTP Financial Requirements and Projections

Under the federal SAFETEA, the actions, programs and projects in the RTP must be financially deliverable within reasonable estimates of public and private resources. While CMPs are not required by legislation to be financially 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 financially constrained RTPs.

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 congestion management programs 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 congestion management programs 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.

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 Regional Transportation Improvement Program (RTIP) on

a biennial cycle. The RTIP is the regional proposal for State and federal funding, adopted by MTC and provided to the California Transportation Commission (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 RTP that is currently in effect. The RTP is revised periodically.

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 Capital Improvement Program (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 category in the RTP. MTC, upon finding that the CMP is consistent with the RTP, shall incorporate the program into the RTIP, subject to specific programming and funding requirements. If MTC finds the program 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 targets for specific funds, based upon the fund estimate as adopted by the California Transportation Commission (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 Transportation 2035 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 AND 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 2009 CMP the RTP in effect will be Transportation 2035. 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.

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.

State TCMs:
For a list and description of current State TCMs, see "Bay Area 2005 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 congestions 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) – and particulate matter (PM10 and PM2.5), 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 a regionally consistent model "set" for application by MTC and the CMAs. The Partnership has finalized a report on modeling consistency issues recommending MTC develop and the CMAs incorporate a consistent set of model components on desktop computers (termed BAYCAST). For immediate use for the 2009 CMPs, the study recommended that the current Checklist format be utilized, and proposed specific tolerances. This revised Checklist incorporates the results of testing those specific tolerances, as well as additional analyses.

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 to be followed. North Bay counties are not subject to Products 3, 5, 12, and 15, although the assumptions used should be described.

Because of the complexity of the topic, the Checklist may need additional detailed information to explain differences in methodological approach or data. Significant differences will be resolved between MTC and the CMA, taking advantage of the Bay Area Travel Model User Community (BATMUC). Standard formats for model comparisons will be developed.

Incremental updates

The CMA forecasts must be updated every two years to be consistent with MTC's forecasts. Alternative approaches to fully rerunning the entire model are available, including incremental approaches through the application of factors to demographic inputs or to 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 full re-running of the model should be reviewed with MTC.

Defining the MTC model sets

Unless otherwise specified, the MTC model sets referred to below will be defined as those in use on October 1st of the year preceding the CMP update.

Using MTC Data for Key Assumptions
Key "bundles of assumptions" are needed for developing travel forecasts. These include Pricing Assumptions, Demographic Assumptions, Travel Behavior Assumptions, and Highway and Transit Network Assumptions.

A. Discuss the General Approach to Travel Demand Modeling by the CMA
Describe the model, and its relationship to the MTC model. If the model is based on MTC's model, describe any adjustments to model constants, coefficients, k-factor or friction factor re-estimation, market segmentation, and trip purposes.

PRODUCT 1: Description of the above.

B. Demographic/Economic/Land Use Forecasts:
Use exact ABAG Projections 2005 or Projections 2007 (preferred) for other Bay Area counties, and control totals (within 1 percent) for the county for population, households, jobs and employed residents. CMAs may reallocate growth forecasts within their own county in consultation with cities, MTC and ABAG. The latest set of ABAG's Projections must be used for all new demographic databases developed for baseline travel demand forecasting purposes after August 1 of the year preceding the CMP update. Future year forecasts should address the latest available ABAG Projection series. MTC, in consultation with the MCWG, will develop factors that may be used to achieve consistency with the most recent ABAG demographics. CMAs may also, of course, analyze alternative land use scenarios in addition to these forecasts. If a land use based model is utilized, production and attraction comparisons will be made with the MTC model.

PRODUCT 2: Summary sheet comparing ABAG Projections economic and demographic data (using the most current series) and CMP input data for population, households, jobs and employed residents for the 9 Bay Area counties for the base and forecast years (the year for comparison to the appropriate TIP must be included), and a statement establishing that the differences between the ABAG variables and those of the CMA input file do not exceed 1 percent at the county level for the subject county, and that no differences exist for the other 8 counties for a base case scenario.

C. Pricing Assumptions:
Use MTC's auto operating costs, transit fares, and bridge tolls.

PRODUCT 3: Statements establishing satisfaction of the above.

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 4: Statement establishing satisfaction of the above.

E. Auto Ownership Assumptions:

Use MTC auto ownership models or forecasts, or submit alternative models to MTC for review and comment.

PRODUCT 5: County and district level table(s) showing households by vehicle ownership level (0, 1, 2+ vehicle/household), and autos per household summaries at county and district levels, or autos per worker and total autos by district, and other pertinent auto ownership data if more appropriate. (Note that the term "district" used in these Guidelines may be interpreted as either MTC superdistricts or CMA defined districts.)

F. Trip Generation:

Use the BAYCAST person trip generation models for home-based work and non-work, and non-home based trips, or submit alternative models to MTC for review and comment. Results may be adjusted sub-regionally through calibration or modal constant adjustments.

PRODUCTS: 6) County and district level table(s) summarizing trip productions and trip attractions out of the trip generation model. Differences in trip productions and attractions for total person trips and for home based work trips should be no greater than 1% or 10,000 trips, whichever is higher, for comparisons for the subject county, each other county, and overall for the region or study area. For North Bay counties, figures are to be within 10% deviation for daily home based vehicle trips, using conversion factors as appropriate. Base year comparisons should be made with the Census data when available and appropriate.

7) Trip rate analysis, including home-based work trips per employed resident, home-based non-work trips per household, and non-home-based trips per total job.

8) Description of sub-regional adjustment factors, if any.

G. Trip Distribution:

Work trip distribution models must be calibrated to the 2000 Census Journey-to-Work commuter matrices. Trip distribution results must be balanced to productions, and attraction balancing problems should be discussed with MTC.

MTC, in consultation with the MCWG, will develop factors that may be used to achieve consistency with the most recent MTC trip distribution tables.

PRODUCTS: 9) County and district level table(s) showing attraction balancing analysis, i.e., comparison of "modeled" attractions from the trip distribution model to "desired" attractions from the trip generation (trip attraction) models.

10) County-to-county level trip tables. Differences in trip productions and attractions for total person trips and for home based work trips from and to the subject county should be no greater than 5% or 10,000 trips, whichever is higher, for comparisons for the subject county, interactions with each other county, and overall for the regional interaction with the subject county. For rural counties, CMAs should develop appropriate comparisons to MTC's model system, in consultation with MTC, using conversion factors as appropriate. Base year comparisons should be made with the Census data when available and appropriate.

11) District-to-district level trip tables for intra-county trips.

All trip distribution analyses are to be stratified by trip purpose.

H. Mode Choice:

If a legit mode choice model is to be used, MTC's BAYCAST models should be used, or submit alternative methodology for MTC review.

PRODUCTS: 12) County-to-county and district-to-district (intra-county) level table(s) showing mode choice forecasts by trip purpose and travel mode. There is no need to document the county-to-county mode choice forecasts for trips that do not start, end, or pass through the particular county of interest.

13) Vehicle trip tables, county-to-county and intra-county district-to-district, stratified by trip purpose.

Differences in trips for drive alone for total daily person trips and for home based work trips from and to the subject county should be no greater than 10% or 10,000 trips, whichever is higher, for each county interaction, and overall for the region/study area. For North Bay counties, conversion factors may be needed.

Differences in trips for transit, shared ride 3+, and shared ride 2 for total person trips and for home based work trips from and to the subject county - should be no greater than 10,000 trips for each county interaction, and 10% overall for the region/study area.

Base year comparisons should be made with the Census data when available and appropriate.

I. Traffic Assignment

Use capacity restrained assignment for peak hour or peak period traffic assignments, or submit alternative methodology for MTC review.

PRODUCTS: 14) Description of trip assignment methodology for daily and/or peak hour (period) assignment for both transit and highway.

15) Description of peaking factors and vehicle occupancy assumptions utilized.

Alternatively, CMAs may elect to utilize MTC zone-to-zone person/vehicle trip tables, adding network and zonal details within the county as appropriate, and then re-run the assignment. In this case, only Products 14 and 15 are applicable if vehicle trip tables are utilized, and additionally Products 12 and 13 if person trip tables are utilized.

Appendix C: MTC's Regional Transit Expansion Program of Projects (MTC Resolution 3434) TOD Policy

Res. No. 3434, TOD Policy (Appendix D-2), revised Sept 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
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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 region. Where 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

TABLE 1
Resolution 3434 Transit Extension Projects Subject to Corridor Thresholds

Project	Sponsor	Type	Threshold is met with current development?
BART East Contra Costa Rail Extension	BART/CCTA	Commuter Rail	No
BART – Downtown Fremont to San Jose / Santa Clara (a) Fremont to Warm Springs (b) Warm Springs to San Jose/Santa Clara	 (a) BART (b) VTA	BART extension	No
AC Transit Berkeley/Oakland/San Leandro Bus Rapid Transit: Phase 1	AC Transit	Bus Rapid Transit	Yes
Caltrain Downtown Extension/Rebuilt Transbay Terminal	TJPA	Commuter Rail	Yes
MUNI Third Street LRT Project Phase 2 – New Central Subway	MUNI	Light Rail	Yes
Sonoma-Marin Rail	SMART	Commuter Rail	No
Dumbarton Rail	SMTA, ACCMA, VTA, ACTIA, Capitol Corridor	Commuter Rail	No
Expanded Ferry Service to Berkeley, Alameda/Oakland/Harbor Bay, Hercules, Richmond, and South San Francisco; and other improvements.	WTA	Ferry	No

* 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.

the TOD policy requirements. Single station extensions to international airports are not subject to the TOD policy due to the infeasibility of housing development.

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

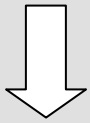
Transit Agency Action	**City Action**	**MTC/CMA/ABAG Action**
All parties in corridors that do not currently meet thresholds (see Table 1) establish Corridor Working Group to address corridor threshold. Conduct initial corridor performance evaluation, initiate station area planning. 		
Environmental 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 housing thresholds .		
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 / Threshold	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.

CALIFORNIA 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, "regional agency" means the agency responsible for preparation of the regional transportation improvement program.

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

(c) "Commission" means the California Transportation Commission.

(d) "Department" means the Department of Transportation.

(e) "Local jurisdiction" means a city, a county, or a city and county.

(f) "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.

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.

(g) "Infill opportunity zone" means a specific area designated by a city or county, pursuant to subdivision (c) of Section 65088.4, zoned for new compact residential or mixed use development within one-third mile of a site with an existing or future rail transit station, a ferry terminal served by either a bus or rail transit service, an intersection of at least two major bus routes, or within 300 feet of a bus rapid transit corridor, in counties with a population over 400,000. The mixed use development zoning shall consist of three or more land uses that facilitate significant human interaction in close proximity, with residential use as the primary land use supported by other land uses such as office, hotel, health care, hospital, entertainment, restaurant, retail, and service uses. The transit service shall have maximum scheduled headways of 15 minutes for at least 5 hours per day. A qualifying future rail station shall have broken ground on construction of the station and programmed operational funds to provide maximum scheduled headways of 15 minutes for at least 5 hours per day.

(h) "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.

(i) "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.

(j) "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.

(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) "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.

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. The city or county shall do either of the following:

(1) Include these streets and highways under an alternative areawide level of service standard or multimodal composite or personal level of service standard that takes into account both of the following:

(A) The broader benefits of regional traffic congestion reduction by siting new residential development within walking distance of, and no more than one-third mile from, mass transit stations, shops, and services, in a manner that reduces the need for long vehicle commutes and improves the jobs-housing balance.

(B) Increased use of alternative transportation modes, such as mass transit, bicycling, and walking.

(2) Approve a list of flexible level of service mitigation options that includes roadway expansion and investments in alternate modes of transportation that may include, but are not limited to, transit infrastructure, pedestrian infrastructure, and ridesharing, vanpool, or shuttle programs.

(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. A city or county may not designate an infill opportunity zone

after December 31, 2009.

(d) The city or county in which the infill opportunity zone is located shall ensure that a development project shall be completed within the infill opportunity zone not more than four years after the date on which the city or county adopted its resolution pursuant to subdivision (c). If no development project is completed within an infill opportunity zone by the time limit imposed by this subdivision, the infill opportunity zone shall automatically terminate.

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.

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.
Army Street (César Chávez)	Because of the size of the U.S. 101 interchange at Army Street circle, a break point was established on each side of it. One is at Kansas Street and a second is at Bryant Street.
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).

METROPOLITAN
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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.

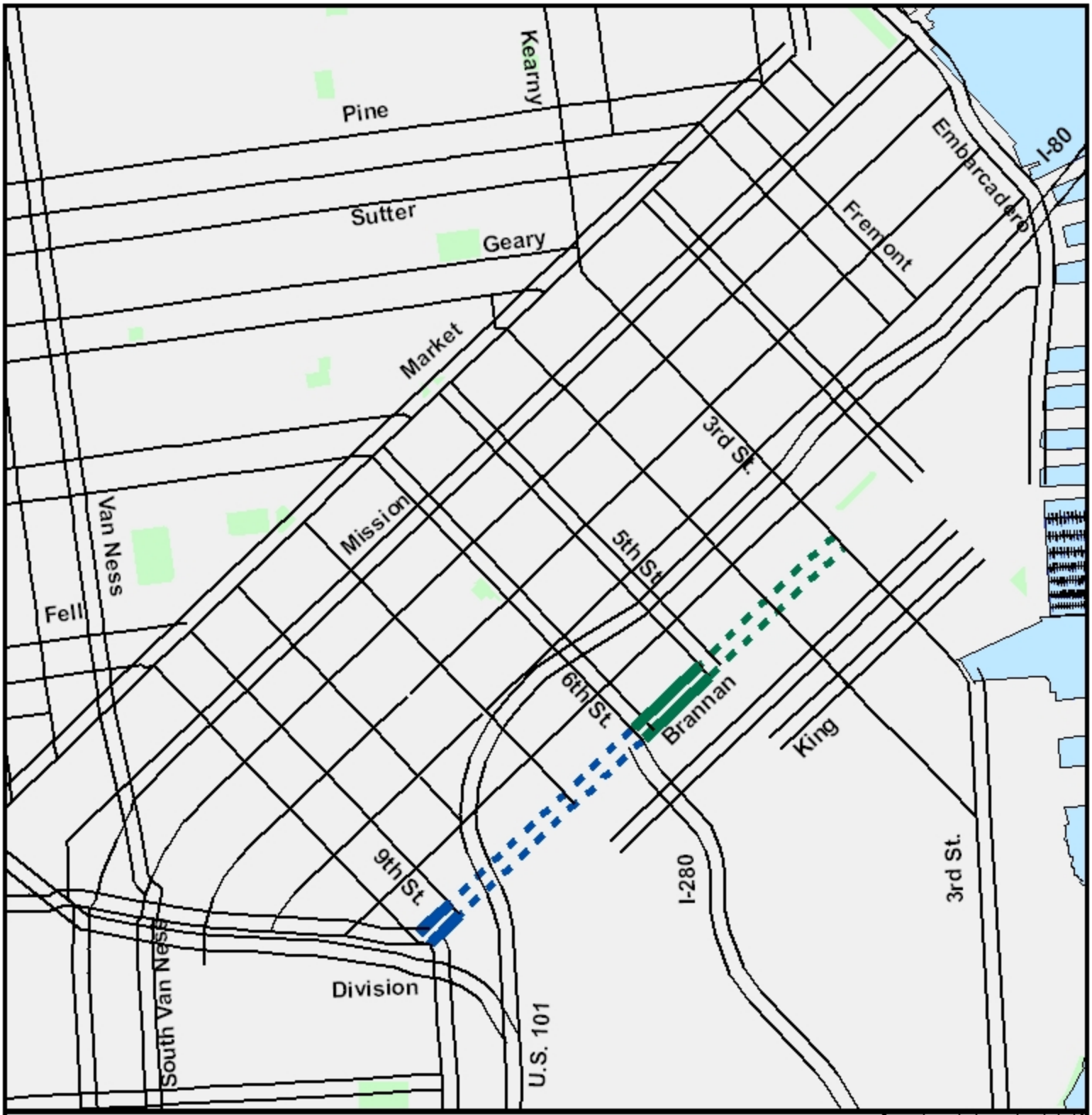
MTC expects monitoring on Brannan will take place on Brannan from Division to 6th Street and from 6th Street to 3rd Street effective spring 2007. Please let me know if there are any questions.

Yours truly,

Doug Johnson

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

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



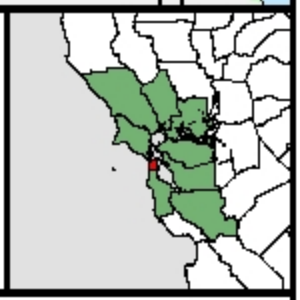
Existing Brannan Street segment from Division to 9th

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

N

Table A1 - AM CMP Segments Level of Service Monitoring
(1991 - 2009)

Name	From	To	Class	Travel Dir.	Dist. (mi)	Ave Speed 91	LOS 91	Ave Speed 92/3	LOS 92/3	Ave Speed 95	LOS 95	Ave Speed 97	LOS 97	Ave Speed 99	LOS 99	Ave Speed 2001	LOS 2001	Ave Speed 2004	LOS 2004	Ave Speed 2006	LOS 2006	Ave Speed 07	LOS 07	Ave Speed 2009	2009 LOS (HCM-1985)	2009 LOS Changes
1st Street	Market	Harrison	3	S	0.48		*	15.1	C							12.5	D	11.2	D	20.8	B	16.3	C	14.2	C	C to C
2nd Street	Market	Brannan	3	S	0.72															14.3	C	18.6	C	16.3	C	C to C
	Brannan	Market	3	N	0.72															10.1	D	10.8	D	12.2	D	D to D
3rd Street	Jamestown	Evans	3	N	1.62		*	25.4	B							23.5	B			17.9	C	20.5	B	24.6	B	B to B
	Evans	Jamestown	3	S	1.62		*	22.3	C							20.9	B			23.7	B	21.9	B	23.2	B	B to B
	Evans	Terry Francois	3	N	2.33	10.3	D	24.0	B							23.6	B			24.7	B	23.1	B	28.4	A	B to A
	Terry Francois	Evans	3	S	2.33	10.3	D	24.1	B							23.8	B			20.2	B	28.9	A	28.6	A	A to A
	Terry Francois	Market	3	N	1.08	12.1	D	12.1	D	15.3	C			10.8	D	9.2	D	6.2	F	8.1	E	9.7	D	20.0	B	D to B
4th Street/	O'Farrell	Harrison	3	S	0.56		*	11.6	D	8.1	E	14.6	C							11.3	D	9.4	D	13.4	C	D to C
	Harrison	Channel	3	S	0.62																	16.0	C	13.8	C	C to C
5th Street	Market	Brannan	3	S	0.72	7.9	E	11.6	C							9.9	D	10.6	D	11.8	D	11.4	D	19.3	B	D to B
	Brannan	Market	3	N	0.72	7.9	E	10.5	D	10.7	D	12.1	D	10.5	D	11.8	D	8.6	E	10.9	D	11.8	D	14.7	C	D to C
6th Street	Market	Brannan	3	S	0.72		*	22.4	B							10.0	D	8.3	E	13.6	C	14.2	C	15.1	C	C to C
	Brannan	Market	3	N	0.72		*	13.8	C							4.7	F	5.5	F	12.6	D	10.3	D	11.2	D	D to D
7th Street	Brannan	Market	3	N	0.72	8.9	E	13.9	C					14.2	C			6.8	F	13.4	C	19.1	B	18.9	C	B to C
8th Street	Market	Bryant	3	S	0.60		*	17.1	C					17.7	C			15.9	C	16.6	C	18.7	C	15.0	C	C to C
9th Street	Brannan	Market	3	N	0.72	9.9	D	12.5	D	13.3	C					10.3	D	9.6	D	14.2	C	13.0	C	11.4	D	C to D
10th Street	Market	Brannan	3	S	0.73	12.1	D	20.5	B							16.3	C	9.7	D	17.0	C	26.1	A	21.9	B	A to B
16th Street	Market	Mission	3	E	0.74															19.0	B	18.5	C	12.1	D	C to D
	Mission	Market	3	W	0.74															12.9	D	13.7	C	13.4	C	C to C
	Mission	Potrero	3	E	0.67															15.9	C	13.6	C	14.1	C	C to C
	Potrero	Mission	3	W	0.67															13.4	C	11.5	D	13.5	C	D to C
19th Avenue/	U.S. 101	Lake	1	S	1.33		*	38.3	A							47.2	A			42.2	A	40.3	A	40.7	A	A to A
Park Presidio	Lake	U.S. 101	1	N	1.21		*	38.8	A							28.6	B			34.7	B	44.0	A	45.3	A	A to A
	Lake	Lincoln	3	S	1.84		*	20.9	B					22.0	B					25.1	A	26.1	A	26.3	A	A to A
	Lincoln	Lake	3	N	1.84		*	21.9	B					19.7	B					19.9	B	20.4	B	19.9	B	B to B
	Lincoln	Sloat	3	S	2.13	11.1	D	17.2	C					18.4	C					21.8	B	22.2	B	19.2	B	B to B
	Sloat	Lincoln	3	N	2.13	11.1	D	19.2	B					15.0	C					17.9	C	18.6	C	13.8	C	C to C
	Sloat	J. Serra	3	S	1.25		*	20.2	B					21.2	B					20.2	B	17.2	C	21.6	B	C to B
	J. Serra	Sloat	3	N	1.25		*	19.2	B					23.1	B					22.1	B	16.4	C	18.2	C	C to C
Alemany	J. Serra	Lyell	3	E	2.94		*	25.6	B							20.0	C			20.9	B	21.5	B	28.3	A	B to A
	Lyell	County Line	3	W	3.03		*	25.6	B							15.1	C			19.1	B	21.4	B	25.3	A	B to A
	Lyell	Bayshore	3	E	1.59		*	28.5	A							19.0	C			23.7	B	28.5	A	26.1	A	A to A
	Bayshore	Lyell	3	W	1.52		*	35.4	A							28.4	A			37.5	A	25.4	A	30.7	A	A to A
Bay Street	Van Ness	Embarcadero	3	E	1.09	12.7	D	22.4	B							16.8	C			19.7	B	21.0	B	18.9	C	B to C
	Embarcadero	Van Ness	3	W	1.09	12.7	D	19.7	B							22.8	B			18.3	C	19.6	B	19.3	B	B to B
Bayshore	Jerrold	Industrial	3	S	0.72			21.0	B							17.5	C			17.6	C	29.9	A	25.4	A	A to A
	Industrial	C. Chavez	3	N	0.82			20.2	B							14.8	C			11.2	D	19.0	B	17.5	C	B to C
	Industrial	County Line	3	S	2.26			27.4	A							23.3	B			25.7	A	30.1	A	27.8	A	A to A
	County Line	Industrial	3	N	2.27			20.9	B							25.3	B			18.4	C	26.2	A	17.4	C	A to C
Beale/Davis	Clay	Mission	3	S	0.32		*	11.3	D	10.0	D	16.6	C	16.6	C					15.6	C	14.1	C	12.8	D	C to D
Brannan	Division	6th Street	3	E	0.54																	15.7	C	13.8	C	C to C
	6th Street	Division	3	W	0.54																	16.3	C	16.9	C	C to C
	6th Street	3rd Street	3	E	0.52																	21.8	B	15.8	C	B to C
	3rd Street	6th Street	3	W	0.52																	15.9	C	17.0	C	C to C
Broadway	Gough	Larkin	3	E	0.36		*	19.2	B					9.0	D	10.6	D	12.3	D	11.4	D	14.7	C	15.1	C	C to C
	Larkin	Gough	3	W	0.36		*	10.6	D	11.2	D	12.9	D	15.2	C	17.1	C	14.4	C	14.4	C	17.9	C	19.5	B	C to B
	Larkin	Powell	1	E	0.55		*	22.5	B					15.1	E	16.6	E	16.3	E	36.8	A	18.2	D	32.8	B	D to B
	Powell	Larkin	1	W	0.55		*	35.6	A					16.0	E	20.0	D	16.3	E	34.1	B	34.6	B	32.9	B	B to B
	Powell	Montgomery	3	E	0.35		*	16.8	C					8.0	E	10.9	D	11.8	D	13.9	C	15.4	C	20.1	B	C to B
	Montgomery	Powell	3	W	0.35		*	15.2	C					10.0	D	8.9	E	13.5	C	14.5	C	11.5	D	13.3	C	D to C
	Montgomery	Embarcadero	3	E	0.35		*	11.2	D	9.4	D	15.1	C	12.2	E	11.6	D	8.8	F	10.8	D	11.3	D	13.9	C	D to C
	Embarcadero	Montgomery	3	W	0.35		*	17.7	C					14.8	C	11.2	D	12.1	D	17.0	C	17.5	C	19.9	B	C to B

Table A1 - AM CMP Segments Level of Service Monitoring
(1991 - 2009)

Name	From	To	Class	Travel Dir.	Dist. (mi)	Ave Speed 91	LOS 91	Ave Speed 92/3	LOS 92/3	Ave Speed 95	LOS 95	Ave Speed 97	LOS 97	Ave Speed 99	LOS 99	Ave Speed 2001	LOS 2001	Ave Speed 2004	LOS 2004	Ave Speed 2006	LOS 2006	Ave Speed 07	LOS 07	Ave Speed 2009	2009 LOS (HCM-1985)	2009 LOS Changes
Brotherhood	J. Serra	Alemany	3	E	0.44																	21.3	B	25.8	A	B to A
	Alemany	J. Serra	3	W	0.47																	31.8	A	29.7	A	A to A
Bryant	Division	4th Street	3	E	0.99	7.7	E	12.2	D	13.2	C			12.9	D	13.2	C			12.2	D	11.2	D	13.1	C	D to C
	4th Street	Embarcadero	3	E	0.77		*	21.8	B					14.4	C					18.3	C		B	21.2	B	B to B
Bush	Masonic	Gough	3	E	1.24		*	17.3	C							22.4	B			18.2	C	17.2	C	18.0	C	C to C
	Gough	Market	3	E	1.46	3.2	F	10.9	D	9.6	D	11.4	D	11.6	D	12.6	D	8.7	E	10.7	D	11.7	D	10.9	D	D to D
Castro/	Pine	Geary	3	S	0.27		*	14.2	C					13.2	C	7.3	E	7.8	E	11.7	D	15.6	C	14.5	C	C to C
Divisadero	Geary	Pine	3	N	0.27		*	10.8	D	7.7	E	7.5	E	7.4	E	7.3	E	8.4	E	7.1	E	6.1	F	11.1	D	F to D
	Geary	14th	3	S	1.13		*	14.8	C					14.0	C	11.5	D	9.8	D	12.3	D	15.8	C	16.6	C	C to C
	14th	Geary	3	N	1.13	4.5	F	14.0	C					10.6	D	11.2	D	8.8	E	11.2	D	11.3	D	15.0	C	D to C
	14th Street	Market	3	S	0.32		*	11.9	D	10.4	D	13.3	C	14.2	C					10.3	D	16.4	C	9.9	D	C to D
	Market	14th Street	3	N	0.32		*	17.5	C					11.9	D	10.1	D	10.7	D	16.0	C	9.0	E	14.8	C	E to C
Cesar Chavez	Guerrero	Bryant	3	E	0.75			19.0	B							14.3	C			16.6	C	17.2	C	18.8	C	C to C
	Bryant	Guerrero	3	W	0.75			19.6	B							16.2	C			19.3	B	16.0	C	13.8	C	C to C
	Kansas	Bryant	3	W	0.37			17.7	C							31.9	A			30.1	A	26.2	A	23.5	B	A to B
	Bryant	Kansas	3	E	0.37			19.9	B							28.9	A			28.3	A	31.3	A	20.5	B	A to B
	Kansas	3rd Street	3	E	0.79			17.6	C							19.5	B			25.0	A	16.4	C	18.6	C	C to C
	3rd Street	Kansas	3	W	0.79			19.4	B							18.8	C			22.1	B	20.1	B	18.6	C	B to C
Clay	Kearny	Davis	3	E	0.38	11.7	D	3.7	E					12.5	D	10.6	D	9.2	D	10.8	D	14.3	C	19.1	B	C to B
Columbus	North Point	Greenwich	3	S	0.42		*	18.6	C					16.9	C					15.9	C	12.5	D	18.7	C	D to C
	Greenwich	North Point	3	N	0.42		*	22.6	B					9.1	D	18.2	C			18.8	C	16.6	C	10.6	D	C to D
	Greenwich	Montgomery	3	S	0.67		*	16.3	C					11.1	D	9.2	D	9.3	D	11.7	D	12.3	D	11.6	D	D to D
	Montgomery	Greenwich	3	N	0.67		*	14.0	C					14.9	C					13.3	C	14.3	C	14.9	C	C to C
Doyle/Lombard/	Marin County	SF County	1	E	1.00																	47.9	A	48.7	A	A to A
Richardson	SF County	Marin County	1	W	1.00																	48.6	A	45.3	A	A to A
	County Line	SF Cemetery	1	S	1.13															27.3	C	38.3	A	42.7	A	A to A
	SF Cemetery	County Line	1	N	1.13															28.7	B	41.3	A	44.1	A	A to A
	SF Cemetery	Lyon	1	E	0.95															28.3	B	19.3	D	12.5	F	D to F
	Lyon	SF Cemetery	1	W	0.98															31.4	B	40.3	A	37.8	A	A to A
	Francisco	Van Ness	3	E	1.28			22.2	B							13.7	C			20.9	B	21.2	B	20.8	B	B to B
	Van Ness	Francisco	3	W	1.28			19.7	B							16.9	C			16.6	C	18.3	C	17.7	C	C to C
Drumm	Washington	Market	3	S	0.22		*	5.3	F	5.3	F					22.0	B			8.4	E	11.6	D	8.7	E	D to E
	Market	Washington	3	N	0.22		*	19.9	B							23.0	B			12.9	D	13.1	C	16.8	C	C to C
Duboce/	Market	Mission	3	E	0.34		*	7.7	E	9.1	D	3.0	F	8.8	E	5.5	F	5.8	F	12.0	D			9.7	D	
Division	Mission	Market	3	W	0.34		*	10.7	D	11.7	D	9.4	D	13.5	C					14.7	C			14.6	C	
	Mission	Potrero	3	E	0.64	9.9	D	12.0	D	11.5	D	10.4	D	12.6	D	13.0	C			15.1	C			13.8	C	
	Potrero	Mission	3	W	0.64	9.9	D	17.1	C							11.3	D	5.8	F	12.7	D			12.8	D	
	Market	Howard	3	E	0.47																	10.2	D	11.0	D	D to D
	Howard	Market	3	W	0.47																	18.8	C	11.0	D	C to D
	Howard	Brannan	3	E	0.54																	11.5	D	13.1	C	D to C
	Brannan	Howard	3	W	0.54																	20.9	B	16.4	C	B to C
Embarcadero	Townsend	North Point	3	N	2.17		*	21.2	B							14.5	C			12.3	D	22.4	B	21.1	B	B to B
	North Point	Townsend	3	S	2.17		*	15.2	C							13.8	C			16.6	C	17.3	C	13.2	C	C to C
Evans	C. Chavez	3rd Street	3	S	0.73			16.3	C							20.4	B			16.1	C	16.9	C	20.7	B	C to B
	3rd Street	C. Chavez	3	N	0.73			19.9	B							17.0	C			28.4	A	24.8	B	22.5	B	B to B
Fell	Gough	Market	3	E	0.29		*	11.6	D	12.0	D	4.3	F	8.1	E	7.6	E	6.1	F	7.7	E	8.8	E	11.4	D	E to D
	Gough	Laguna	3	W	0.18		*	26.7	A							11.8	D	11.1	D	7.2	E	6.2	F	12.9	D	F to D
	Laguna	Stanyan	3	W	1.56		*	19.0	B							24.5	B	16.2	C	23.2	B	27.9	A	26.4	A	A to A
Folsom	13th Street	8th Street	3	E	0.48															10.2	D					
	8th Street	4th Street	3	E	0.69															24.8	B	13.3	C	14.9	C	C to C
	4th Street	1st Street	3	E	0.52															19.5	B	17.0	C	20.7	B	C to B
	1st Street	Embarcadero	3	E	0.35															11.5	D	18.6	C	13.2	C	C to C
	14th Street	8th Street	3	E	0.56																	12.7	D	15.2	C	D to C

Table A1 - AM CMP Segments Level of Service Monitoring
(1991 - 2009)

Name	From	To	Class	Travel Dir.	Dist. (mi)	Ave Speed 91	LOS 91	Ave Speed 92/3	LOS 92/3	Ave Speed 95	LOS 95	Ave Speed 97	LOS 97	Ave Speed 99	LOS 99	Ave Speed 2001	LOS 2001	Ave Speed 2004	LOS 2004	Ave Speed 2006	LOS 2006	Ave Speed 07	LOS 07	Ave Speed 2009	2009 LOS (HCM-1985)	2009 LOS Changes
Franklin	Market	Pine	3	N	1.06	8.5	E	13.3	C							11.5	D	9.0	D	13.5	C	16.9	C	14.9	C	C to C
	Pine	Lombard	3	N	0.83		*	14.0	C							26.3	A			18.3	C	18.3	C	20.5	B	C to B
Fremont	Harrison	Market	3	N	0.48		*	6.4	F							11.3	D	10.7	D	12.4	D	12.7	D	12.9	D	D to D
Fulton	Park P.	10th Avenue	3	E	0.20		*	16.7	C							15.2	C					30.8	A	27.2	A	A to A
	10th Avenue	Park P.	3	W	0.20			14.2	C							10.4	D	6.4	F			16.6	C	15.4	C	C to C
	10th Avenue	Arguello	3	E	0.53			22.4	B							16.3	C					29.5	A	19.2	B	A to B
	Arguello	10th Avenue	3	W	0.53			22.0	B							28.7	A					21.8	B	27.3	A	B to A
	Arguello	Masonic	3	E	0.66	9.8	D	18.6	C							11.5	D	9.9	D	15.0	C	12.5	D	16.2	C	D to C
	Masonic	Arguello	3	W	0.66		*	15.9	C							16.2	C			18.5	C	23.5	B	20.4	B	B to B
Geary	Great Hwy.	25th Avenue	3	E	1.78		*	24.2	B							23.5	B	16.4	C	21.5	B	25.3	A	25.0	B	A to B
	25th Avenue	Great Hwy.	3	W	1.78		*	28.3	A							26.0	A	14.7	C	23.3	B	24.3	B	23.9	B	B to B
	25th Avenue	Arguello	3	E	1.42		*	21.6	B					10.6	D	20.7	B	10.3	D	16.7	C	25.1	A	23.9	B	A to B
	Arguello	25th Avenue	3	W	1.42		*	21.3	B					13.7	C			11.0	D	15.5	C	23.0	B	22.1	B	B to B
	Arguello	Gough	3	E	1.89		*	25.3	A					24.6	B			15.0	C	23.6	B	23.4	B	28.5	A	B to A
	Gough	Arguello	3	W	1.89		*	23.8	B					24.7	B			15.4	C	17.7	C	20.2	B	20.1	B	B to B
	Kearny	Gough	3	W	1.18		*	12.3	D	15.4	C			7.2	E	15.2	C	9.5	D	15.0	C	14.2	C	15.1	C	C to C
Geneva	Ocean	Cayuga	3	E	0.56		*	15.0	C							20.4	B			14.7	C	13.3	C	8.8	E	C to E
	Cayuga	Ocean	3	W	0.56		*	4.5	F	15.5	C					15.0	C			11.0	D	6.9	F	9.6	D	F to D
	Cayuga	Paris	3	E	0.33	10.4	D	11.7	D	13.0	C					16.1	D	8.8	E	11.8	D	11.1	D	13.4	C	D to C
	Paris	Cayuga	3	W	0.33	10.4	D	11.6	D	13.3	C					18.7	C			10.4	D	9.9	D	8.2	E	D to E
	Paris	Santos	3	E	1.19		*	29.7	A							25.0	B			27.2	A	21.2	B	20.6	B	B to B
	Santos	Paris	3	W	1.19		*	27.4	A							27.3	A			26.7	A	22.8	B	23.4	B	B to B
Golden Gate	Masonic	Franklin	3	E	1.37		*	19.3	B							17.2	C			26.3	A	15.9	C	17.0	C	C to C
	Franklin	Market	3	E	0.65	12.2	D	16.9	C							13.2	C			12.2	D	12.4	D	10.7	D	D to D
Gough	Pine	Geary	3	S	0.26	9.5	D	25.6	A							28.4	A			21.5	B	23.6	B	20.6	B	B to B
	Geary	Golden Gate	3	S	0.33		*	20.1	B							20.1	B	20.9	B	15.3	C	22.5	B	23.2	B	B to B
	Golden Gate	Market	3	S	0.52	8.3	E	12.8	D	11.1	D	6.5	F	18.9	C			8.9	E	15.4	C	13.8	C	15.7	C	C to C
Guerrero/	Cesar Chavez	29th Street	3	S	0.28		*	26.3	A							20.5	B			19.9	C	22.4	B	21.2	B	B to B
San Jose	29th Street	Cesar Chavez	3	N	0.28	6.2	F	19.3	B							15.2	C			22.6	C	19.9	B	24.5	B	B to B
	29th Street	Monterey	1	S	1.19		*	23.7	B							31.6	B			23.1	C	26.1	C	30.3	B	C to B
	Monterey	29th Street	1	N	1.19		*	17.3	C							33.8	B			28.3	B	27.3	C	25.6	C	C to C
Harrison	Embarcadero	1st Street	3	W	0.34			34.8	A							13.8	C			18.6	C	12.7	D	20.1	B	D to B
	1st Street	4th Street	3	W	0.56			27.6	A							15.2	C			17.3	C	24.4	B	11.4	D	B to D
	4th Street	8th Street	3	W	0.69			28.9	A							26.2	A			19.1	B	16.0	C	15.8	C	C to C
	8th Street	Division	3	W	0.40			14.4	C							13.6	C			14.3	C	15.3	C	13.3	C	C to C
Hayes	Market	Gough	3	W	0.39		*	10.2	D	11.1	D	11.6	D	23.3	B			9.4	D	16.6	B	18.0	C	12.4	D	C to D
Howard	Embarcadero	SVanNess	3	W	2.11		*	14.9	C							14.2	C			15.6	D	16.2	C	14.2	C	C to C
J. Serra	Sloat	19th	1	S	1.21		*	32.4	B							20.9	D	18.9	D	18.7	D	16.1	E	22.1	C	E to C
	19th	Sloat	1	N	1.21		*	27.0	C							19.4	D	17.3	D	18.8	D	24.7	C	24.9	C	C to C
	19th	Brotherhood	1	S	0.31		*	19.9	B							30.7	B			43.0	A	39.4	A	39.6	A	A to A
	Brotherhood	19th	1	N	0.31	9.7	D	23.8	C							36.7	A			32.8	B	29.2	B	22.1	C	B to C
	Brotherhood	County Line	1	S	0.32		*	41.9	A							38.7	A			40.4	A	42.5	A	43.5	A	A to A
	County Line	Brotherhood	1	N	0.32		*	40.4	A							33.3	B			39.0	A	45.8	A	40.0	A	A to A
Kearny	Market	Columbus	3	N	0.65	6.3	F	13.7	C					8.8	E	12.9	D	5.4	F	14.1	C	13.7	C	13.8	C	C to C
King	5th Street	2nd Street	3	E	0.52															16.9	C			19.2	B	
	2nd Street	5th Street	3	W	0.52															27.0	A			24.2	B	
	4th Street	2nd Street	3	E	0.34																	20.9	B			
	2nd Street	4th Street	3	W	0.34																	18.3	C			
Lincoln/	19th Avenue	5th Ave.	3	E	0.83		*	22.6	B							11.4	D	13.4	C	17.2	C	23.9	B	22.4	B	B to B
Kezar	5th Ave.	19th Avenue	3	W	0.83		*	25.2	A							10.6	D	13.8	C	26.3	A	27.7	A	25.9	A	A to A
	5th Ave.	Stanyan	3	E	0.70		*	10.7	D	12.2	D	23.4	B							20.3	B	11.9	D	20.3	B	D to B
	Stanyan	5th Ave.	3	W	0.70		*	31.7	A							9.9	D	15.4	C	25.0	A	25.4	A	24.4	B	A to B
Main	Mission	Market	3	N	0.12		*	9.9	D	9.8	D	8.4	E	11.5	D	11.8	D	9.1	D	13.9	C	16.8	C	10.7	D	C to D

Table A1 - AM CMP Segments Level of Service Monitoring
(1991 - 2009)

Name	From	To	Class	Travel Dir.	Dist. (mi)	Ave Speed 91	LOS 91	Ave Speed 92/3	LOS 92/3	Ave Speed 95	LOS 95	Ave Speed 97	LOS 97	Ave Speed 99	LOS 99	Ave Speed 2001	LOS 2001	Ave Speed 2004	LOS 2004	Ave Speed 2006	LOS 2006	Ave Speed 07	LOS 07	Ave Speed 2009	2009 LOS (HCM-1985)	2009 LOS Changes
Market/	Sloat	Santa Clara	3	E	0.43		*	16.0	C					18.9	C					13.8	C	16.8	C	20.3	B	C to B
Portola	Santa Clara	Sloat	3	W	0.43		*	13.2	C					9.5	D	18.2	C			19.6	B	16.2	C	10.4	D	C to D
	Santa Clara	Burnett	3	E	1.34		*	24.1	B					33.0	A					18.6	C	20.5	B	19.5	B	B to B
	Burnett	Santa Clara	3	W	1.34		*	22.8	B					30.2	A					19.0	B	22.0	B	21.2	B	B to B
	Burnett	Castro	3	E	1.62	7.0	F	33.0	A					22.0	B					20.9	B	25.4	A	26.5	A	A to A
	Castro	Burnett	3	W	1.62		*	28.0	B					27.5	B					22.6	B	25.1	A	25.3	A	A to A
	Castro	Guerrero	3	E	0.79	8.7	E	20.0	B					15.7	C					13.2	C	10.1	D	15.7	C	D to C
	Guerrero	Castro	3	W	0.79		*	18.8	B					14.8	C					16.9	C	15.7	C	15.1	C	C to C
	Guerrero	Van Ness	3	E	0.43	8.3	E	16.3	C					9.3	D	16.2	C			6.7	F	8.9	E	16.0	C	E to C
	Van Ness	Guerrero	3	W	0.43	8.3	E	17.8	C					7.3	E	23.3	B			13.6	C	13.9	C	14.2	C	C to C
	Van Ness	Drumm	3	E	1.69	9.6	D	14.4	C							8.4	E	9.8	D	9.3	D	12.0	D	12.5	D	D to D
	Drumm	Van Ness	3	W	1.77	9.6	D	15.3	C							12.0	D	11.4	D	12.8	D	13.6	C	14.9	C	C to C
Masonic	Presidio	Geary	3	S	0.29	8.5	E	11.2	D	15.7	C					10.3	D	7.7	E	13.5	C	18.3	C	19.7	B	C to B
	Geary	Bush	3	N	0.19	8.5	E	14.6	C							9.7	D	7.9	E	14.2	C	23.8	B	27.0	A	B to A
	Geary	Page	3	S	0.79	10.0	D	16.4	C							14.8	C			11.8	D	16.2	C	17.2	C	C to C
	Page	Geary	3	N	0.79	10.0	D	13.1	C							11.3	D	9.4	D	15.4	C	16.3	C	19.9	B	C to B
Mission/	Embarcadero	3rd Street	3	S	0.74	9.7	D	8.0	E	10.8	D	14.3	C	10.7	D	9.7	D	10.7	D	13.2	C	13.1	C	13.8	C	C to C
Otis	3rd Street	Embarcadero	3	N	0.74	9.7	D	8.9	E	10.8	D	11.2	D	8.2	E	8.7	E	8.6	E	11.8	D	10.2	D	17.3	C	D to C
	3rd Street	9th Street	3	S	0.98		*	16.9	C					16.2	C			8.4	E	16.3	C	16.6	C	15.5	C	C to C
	9th Street	3rd Street	3	N	0.98		*	13.7	C					13.4	C			9.1	D	18.4	C	13.0	D	17.1	C	D to C
	9th Street	14th Street	3	S	0.68	9.7	D	12.8	D	12.8	D	10.7	D	11.7	D	8.7	E	5.8	F	14.1	C	15.2	C	15.8	C	C to C
	14th Street	9th Street	3	N	0.65		*	12.0	D	11.3	D	11.0	D	10.0	D	8.1	E	8.2	E	11.0	D	11.5	D	15.1	C	D to C
	14th Street	Cesar Chavez	3	S	1.39	10.9	D	17.9	C					14.8	C					16.0	C	13.5	C	17.9	C	C to C
	Cesar Chavez	14th Street	3	N	1.39	10.9	D	19.8	B					14.3	C					13.6	C	14.6	C	18.5	C	C to C
	Cesar Chavez	Ocean	3	S	1.96		*	17.6	C					19.6	B					18.9	C	16.7	C	20.1	B	C to B
	Ocean	Cesar Chavez	3	N	1.96		*	20.3	B					20.4	B	18.3	C			18.1	C	14.8	C	19.3	B	C to B
	Ocean	Sickles	3	S	1.45		*	20.8	B					31.8	A					20.7	B	25.3	A	22.3	B	A to B
	Sickles	Ocean	3	N	1.45		*	21.1	B					26.5	A					26.3	A	21.8	B	22.2	B	B to B
Montgomery	Broadway	Bush	3	S	0.51	6.2	F	6.5	F							9.3	D	8.5	E	10.2	D	11.7	D	14.1	C	D to C
North Point	Van Ness	Columbus	3	E	0.38		*	15.2	C							12.5	D	10.8	D	18.9	C	13.1	C	17.5	C	C to C
	Columbus	Van Ness	3	W	0.38		*	15.3	C							13.7	C			17.6	C	17.0	C	16.2	C	C to C
	Columbus	Embarcadero	3	E	0.61		*	14.9	C							15.4	C			17.6	C	23.5	B	18.7	C	B to C
	Embarcadero	Columbus	3	W	0.61		*	16.0	C							13.9	C			18.9	C	21.4	B	15.7	C	B to C
Oak	Divisadero	Fillmore	3	E	0.37		*		~							25.2	A			24.7	B	26.7	A	19.7	B	A to B
	Fillmore	Laguna	3	E	0.27	8.2			~							8.8	E	15.3	C	16.5	C	21.4	B	17.0	C	B to C
	Laguna	Franklin	3	E	0.27		*	20.0	B							7.5	E	7.0	E	14.8	C	12.4	D	15.1	C	D to C
	Stanyan	Divisadero	3	E	0.91			23.1	B							23.5	B			27.7	A	25.4	A	23.6	B	A to B
Ocean	19th Avenue	Miramar	3	E	1.11		*	19.5	B							7.6	E	11.4	D	14.3	C	13.6	C	18.7	C	C to C
	Miramar	19th Avenue	3	W	1.11		*	15.4	C							9.2	D	8.2	E	13.8	C	13.4	C	11.1	D	C to D
	Miramar	Howth	3	E	0.48		*									7.6	E	8.2	E	12.6	D	12.9	D	11.1	D	D to D
	Howth	Miramar	3	W	0.48		*	9.4	D	16.3	C					8.6	E	8.4	E	13.4	C	11.3	D	14.8	C	D to C
Octavia	Fell	Market	3	S	0.27															14.5	C	6.8	F	10.4	D	F to D
	Market	Fell	3	N	0.27															8.7	E	10.6	D	11.0	D	D to D
O'Farrell	Gough	Mason	3	E	0.85		*	16.6	C							13.5	C			11.9	D	12.7	D	13.4	C	D to C
	Mason	Market	3	E	0.28		*	18.7	C							10.9	D	8.3	E	8.2	E	9.1	D	11.6	D	D to D
Pine	Market	Kearny	3	W	0.38	4.6	F	9.9	D	7.3	E	8.1	E	8.3	E	7.9	E	7.2	E	7.5	E	7.3	E	8.8	E	E to E
	Kearny	Leavenworth	3	W	0.63		*	16.2	C							15.6	C			13.4	C	25.2	A	18.2	C	A to C
	Leavenworth	Franklin	3	W	0.46		*	17.2	C							9.4	D	9.4	D	12.3	D	18.3	C	17.7	C	C to C
	Franklin	Presidio	3	W	1.27		*	20.0	B							20.4	B			23.7	B	21.0	B	21.3	B	B to B
Potrero	Division	21st Street	3	S	0.80		*	24.8	B					18.2	C					21.5	B	20.5	B	23.9	B	B to B
	21st Street	Division	3	N	0.80		*	21.4	B					18.3	C					17.7	C	26.5	A	22.5	B	A to B
	21st Street	C. Chavez	3	S	0.62		*	20.1	B					13.5	C					19.1	B	25.5	A	22.0	B	A to B
	C. Chavez	21st Street	3	N	0.62		*	25.2	A					15.5	C					17.8	C	26.6	A	21.2	B	A to B
Skyline	Sloat	County Line	3	S	1.94		*	41.6	A							41.6	A			48.7	C	39.2	A	42.1	A	A to A
	County Line	Sloat	3	N	1.94		*	43.7	A							41.8	A			49.0	C	46.8	A	46.7	A	A to A

Table A1 - AM CMP Segments Level of Service Monitoring
(1991 - 2009)

Name	From	To	Class	Travel Dir.	Dist. (mi)	Ave Speed 91	LOS 91	Ave Speed 92/3	LOS 92/3	Ave Speed 95	LOS 95	Ave Speed 97	LOS 97	Ave Speed 99	LOS 99	Ave Speed 2001	LOS 2001	Ave Speed 2004	LOS 2004	Ave Speed 2006	LOS 2006	Ave Speed 07	LOS 07	Ave Speed 2009	2009 LOS (HCM-1985)	2009 LOS Changes
Sloat	Skyline	J. Serra	1	E	1.38		*	19.8	D	21.5	D	14.5	E	18.1	D	23.4	C			22.8	C	18.2	D	22.6	C	D to C
	J. Serra	Skyline	1	W	1.38		*	23.3	C							23.5	C			29.8	B	26.1	C	26.7	C	C to C
Stanyan	Fulton	Turk	3	N	0.20		*	12.2	D	12.8	D	13.2	C					13.7	C	15.7	C	16.6	C	15.6	C	C to C
	Turk	Fulton	3	S	0.20		*	11.6	D	7.4	E	16.7	C					11.7	D	16.6	C	12.3	D	11.1	D	D to D
Sutter	Market	Mason	3	W	0.56		*	11.6	D	10.2	D	13.2	C					11.2	D	11.2	D	16.9	C	17.5	C	C to C
	Mason	Gough	3	W	0.82	9.0	D	12.3	D	13.4	C					14.5	C			12.8	D	8.6	E	8.9	E	E to E
	Gough	Divisadero	3	W	0.82		*	14.1	C							15.5	C			15.1	C	15.3	C	15.0	C	C to C
	Divisadero	Gough	3	E	0.82		*	13.9	C							12.4	D	16.1	C	15.7	C	14.6	C	16.2	C	C to C
Townsend	7th Street	2nd Street	3	E	0.86															16.6	C	15.8	C	19.6	B	C to B
	2nd Street	7th Street	3	W	0.86															18.9	C	17.9	C	18.4	C	C to C
Turk	Market	Hyde	3	W	0.38		*	10.9	D	11.6	D	11.2	D	11.7	D	8.1	E	11.7	D	16.9	C	12.4	D	14.7	C	D to C
	Hyde	Gough	3	W	0.46		*	14.1	C							10.1	D	8.0	E	11.2	D	14.0	C	12.8	D	C to D
	Gough	Divisadero	3	W	0.82		*	22.1	B							22.4	B			24.4	B	28.4	A	19.8	B	A to B
	Divisadero	Stanyan	3	W	0.91		*	17.1	C							23.1	B			17.1	C	20.0	B	21.3	B	B to B
	Stanyan	Divisadero	3	E	0.91		*	21.0	B							15.5	C			17.7	C	20.8	B	18.0	C	B to C
Van Ness/	Lombard	Washington	3	S	0.58	4.5	F	18.2	C					7.6	E	12.2	D	13.4	C	12.7	D	17.8	C	16.4	C	C to C
SVanNess	Washington	Lombard	3	N	0.58		*	11.9	D	14.3	D	12.1	D	9.4	D	12.6	D	6.9	F	9.2	D	10.2	D	13.6	C	D to C
	Washington	Golden Gate	3	S	0.84		*	15.0	C					9.2	D	7.3	E	9.4	D	16.1	C	17.2	C	21.2	B	C to B
	Golden Gate	Washington	3	N	0.84		*	13.6	C					10.4	D	10.4	D	6.9	F	11.5	D	11.9	D	15.2	C	D to C
	Golden Gate	13th	3	S	0.80		*	17.3	C					16.6	C			7.4	E	12.7	D	11.8	D	15.7	C	D to C
	13th	Golden gate	3	N	0.80		*	15.9	C					18.2	C			7.3	E	11.8	D	14.6	C	15.0	C	C to C
	13th	C. Chavez	3	S	1.50	12.6	D	15.7	C					16.8	C			16.0	C	19.2	B	19.8	B	17.9	C	B to C
	Cesar Chavez	13th	3	N	1.50																	17.0	C	20.1	B	C to B
Washington	Drumm	Kearny	3	W	0.44		*	14.2	C					7.9	E	30.5	A					17.1	C	14.9	C	14.6	C	C to C
West Portal	Ulloa	Sloat	3	S	0.54		*	16.1	C							12.4	D	12.1	D	16.1	C	15.1	C	17.5	C	C to C
	Sloat	Ulloa	3	N	0.54		*	17.8	C							14.8	C			18.7	C	15.3	C	15.5	C	C to C
FREEWAY																										
I-280	J. Serra	Weldon	Fwy	E	4.29	22.9	F	43.0	E	27.3	F					43.2	D	43.6	D	31.9	E	56.7	B	47.6	D	B to D
	Weldon	6th/Brannan	Fwy	NE	3.37	closed		29.1	F							30.5	E	31.2	E	27.7	F	34.3	E	41.6	D	E to D
US 101	C & C Limit	Cortland	Fwy	N	2.31	10.9	F	47.2	D	31.0	E	30.1	E	35.7	E	44.8	D	37.1	E	57.5	B	59.0	B	50.6	C	B to C
	Cortland	I-80	Fwy	N	1.90	21.4	F	21.2	F							28.1	F	27.8	F	38.0	E	35.4	E	41.7	D	E to D
	I-80	Market	Fwy	NW	1.28	18.7	F	45.4	E	44.8	E	37.6	E	36.9	E	closed		closed		closed		20.9	F	21.9	F	F to F
I-80	Treasure Island	Fremont Exit	Fwy	S	2.72	17.5	F	32.2	E	26.5	F					28.8	F	22.3	F	36.8	E	34.4	E	50.8	C	E to C
	Fremont Exit	US-101	Fwy	SW	1.66	48.1	D	33.3	E	37.9	E	32.7	E	40.4	E	25.9	F	24.0	F	51.6	A	50.0	C	55.3	B	C to B
FREEWAY																										
I-280	6th/Brannan	Weldon	Fwy	W	3.35	closed		51.9	D	46.4	D	54.8	C			47.3	C	41.0	D	69.0	A	60.0	B	62.9	A	B to A
	Weldon	J. Serra	Fwy	SW	4.29	55.7	C	57.5	B							51.5	C	50.5	C	65.5	A	66.5	A	65.2	A	A to A
US 101	Market	I-80	Fwy	S	1.14	13.5	F	17.9	F							closed		closed		12.0	F	46.9	D	40.3	E	D to E
	I-80	Cortland	Fwy	S	1.99	45.8	E	53.6	D	36.4	E	42.3	E	44.7	D	40.1	E	31.7	E	40.3	E	54.8	C	54.6	C	C to C
	Cortland	Monster Pk Exit	Fwy	S	2.15	53.3	D	45.6	E	36.3	E	34.1	E	39.0	E	33.3	E	31.6	E	45.8	D	48.3	D	54.2	C	D to C
I-80	US-101	Fremont Exit	Fwy	N	1.75	18.6	F	53.6	D	36.0	E	32.4	E	28.8	F	16.3	F	24.9	F	12.3	F	38.1	E	48.1	D	E to D
	Fremont Exit	Treasure Island	Fwy	NE	2.72	50.6	D	50.8	D	39.9	E	40.3	E	30.5	F	36.5	E	20.2	F	43.7	D	50.2	C	56.0	B	C to B

Table A2 - PM CMP Segments Level of Service Monitoring
(1991 - 2009)

Name	From	To	Class	Travel Dir.	Old Dist. (mi)	Dist. (mi)	Ave Speed 91	LOS 91	Ave Speed 92/3	LOS 92/3	Ave Speed 95	LOS 95	Ave Speed 97	LOS 97	Ave Speed 99	LOS 99	Ave Speed 2001	LOS 2001	Ave Speed 2004	LOS 2004	Ave Speed 2006	LOS 2006	Ave Speed 2007	LOS 2007	Ave Speed 2009	2009 LOS (HCM-1985)	2009 LOS Changes
1st Street	Market	Harrison	3	S		0.48	1.2	F	15.5	C							2.1	F	2.6	F	4.2	F	12.8	D	13.1	C	D to C
2nd Street	Market	Brannan	3	S		0.72															13.4	C	11.9	D	10.6	D	D to D
	Brannan	Market	3	N		0.72															9.5	D	11.8	D	10.4	D	D to D
3rd Street	Jamestown	Evans	3	N		1.62		*	18.5	C							20.2	B			12.5	D	21.6	B	22.1	B	B to B
	Evans	Jamestown	3	S		1.62		*	17.6	C							18.1	C			15.8	C	22.2	B	22.3	B	B to B
	Evans	Terry Francois	3	N		2.33	10.3	D	18.5	C							20.5	B			24.0	B	26.1	A	30.1	A	A to A
	Terry Francois	Evans	3	S		2.33	10.3	D	17.0	C							20.2	B			21.8	B	30.7	A	27.8	A	A to A
	Terry Francois	Market	3	N		1.08	12.1	D	8.8	D	11.6	D	10.2	D	11.7	D	11.6	D	7.3	E	12.7	D	11.3	D	16.1	C	D to C
4th Street/	O'Farrell	Harrison	3	S		0.56	4.7	F	8.4	E	10.5	D	10.5	D	5.9	F	10.5	D	9.8	D	8.9	E	9.1	D	8.5	E	D to E
Stockton	Harrison	Channel	3	S		0.62																	14.1	C	14.3	C	C to C
5th Street	Market	Brannan	3	S		0.72	7.9	E	13.5	C							5.2	F	6.3	F	9.3	D	11.2	D	13.1	C	D to C
	Brannan	Market	3	N		0.72	7.9	E	12.7	D	7.7	E	11.3	D	7.6	E	16.5	C			9.8	D	9.5	D	15.6	C	D to C
6th Street	Market	Brannan	3	S		0.72	6.7	F	11.5	D	12.0	D	9.4	D	9.5	D	6.8	F	4.4	F	12.9	D	10.9	D	12.3	D	D to D
	Brannan	Market	3	N		0.72		*	12.7	D	7.6	E	11.2	D	9.0	D	6.4	F	6.6	F	12.7	D	11.7	D	11.1	D	D to D
7th Street	Brannan	Market	3	N		0.72	8.9	E	16.8	C					13.7	C			10.4	D	15.4	C	14.9	C	16.4	C	C to C
8th Street	Market	Bryant	3	S		0.60		*	15.8	C					15.7	C			13.0	C	15.9	C	21.2	B	17.0	C	B to C
9th Street	Brannan	Market	3	N		0.72	9.9	D	12.4	D	9.7	D	13.8	C	11.2	D	9.1	D	11.8	D	13.3	C	11.2	D	14.6	C	D to C
10th Street	Market	Brannan	3	S		0.73	12.1	D	20.5	B							13.7	C			16.4	C	20.9	B	16.3	C	B to C
16th Street	Market	Mission	3	E		0.74															11.0	D	10.5	D	10.7	D	D to D
	Mission	Market	3	W		0.74															10.6	D	14.1	C	12.3	D	C to D
	Mission	Potrero	3	E		0.67															13.1	C	9.8	D	12.8	D	D to D
	Potrero	Mission	3	W		0.67															11.2	D	13.6	C	15.2	C	C to C
19th Avenue/	U.S. 101	Lake	1	S	1.54	1.33		*	36.4	A							34.5	B			35.4	A	42.7	A	35.2	A	A to A
Park Presidio	Lake	U.S. 101	1	N	1.57	1.21		*	35.9	A							15.6	E			34.7	B	44.2	A	46.0	A	A to A
	Lake	Lincoln	3	S		1.84		*	26.4	A					20.3	B					24.1	B	15.8	C	19.8	B	C to B
	Lincoln	Lake	3	N		1.84		*	25.4	A					19.8	B					27.2	A	27.2	A	28.5	A	A to A
	Sloat	Lincoln	3	N		2.13	11.1	D	21.9	B					17.5	C					20.5	B	24.3	B	23.6	B	B to B
	Lincoln	Sloat	3	S		2.13	11.1	D	21.0	B					18.6	B					21.6	B	24.0	B	23.0	B	B to B
	J. Serra	Sloat	3	N		1.25		*	18.4	C					11.9	D			11.9	D	9.9	D	16.9	C	12.1	D	C to D
	Sloat	J. Serra	3	S		1.25		*	17.5	C					21.5	B					14.8	C	16.0	C	13.5	C	C to C
Alemany	J. Serra	Lyell	3	E		2.94		*	29.5	B							20.8	B			20.4	B	18.6	C	22.4	B	C to B
	Lyell	County Line	3	W		3.03		*	22.1	C							23.9	B			19.5	B	19.8	B	22.2	B	B to B
	Lyell	Bayshore	3	E	1.42	1.59		*	32.9	A							12.7	D	14.7	C	32.1	A	23.7	B	29.9	A	B to A
	Bayshore	Lyell	3	W	1.42	1.52	4.6	F	30.8	A							23.3	B			32.4	A	23.4	B	31.4	A	B to A
Bay Street	Van Ness	Embarcadero	3	E	0.71	1.09	12.7	D	16.8	C							12.1	E			13.4	C	18.2	C	16.5	C	C to C
	Embarcadero	Van Ness	3	W	0.71	1.09	12.7	D	12.0	D	15.7	C					13.1	D	13.5	C	18.7	C	18.6	C	16.2	C	C to C
Bayshore	Jerrold	Industrial	3	S		0.72			21.0	B							28.4	A			21.1	B	19.1	B	22.3	B	B to B
	Industrial	Cesar Chavez	3	N		0.82			26.4	A							16.4	C			13.1	C	22.1	B	14.4	C	B to C
	Industrial	County Line	3	S		2.26			22.0	B							26.4	A			19.7	B	27.0	A	26.3	A	A to A
	County Line	Industrial	3	N		2.27			22.6	B							33.9	A			22.0	B	20.7	B	21.5	B	B to B
Beale/Davis	Clay	Mission	3	S		0.32		*	13.4	C							8.4	E	8.4	E	14.6	C	10.7	D	11.2	D	D to D
Brannan	Division	6th Street	3	E		0.54																	11.6	D	13.7	C	D to C
	6th Street	Division	3	W		0.54																	17.2	C	9.8	D	C to D
	6th Street	3rd Street	3	E		0.52																	9.9	D	10.3	D	D to D
	3rd Street	6th Street	3	W		0.52																	8.6	E	14.0	C	E to C
Broadway	Gough	Larkin	3	E		0.36		*	14.6	C					14.2	C	10.0	D	12.0	D	11.5	D	10.2	D	10.5	D	D to D
	Larkin	Gough	3	W		0.36	7.7	E	14.6	C					7.8	E	9.9	D	8.8	E	7.3	E	10.9	D	11.3	D	D to D
	Larkin	Powell	1	E		0.55		*	38.9	A					25.5	C	11.0	F	12.7	F	26.1	C	31.8	B	36.1	A	B to A
	Powell	Larkin	1	W		0.55		*	24.7	C					25.3	C	11.0	F	10.6	F	32.7	B	31.0	B	32.3	B	B to B
	Powell	Montgomery	3	E		0.35		*	16.3	C					12.4	D	10.4	D	11.2	D	12.8	D	11.2	D	13.3	C	D to C
	Montgomery	Powell	3	W		0.35	6.2	F	8.4	E	9.2	D	12.5	D	8.5	E	8.3	E	10.2	D	8.0	E	10.1	D	7.7	E	D to E
	Montgomery	Embarcadero	3	E		0.35		*	13.1	C					8.4	E	7.9	E	7.2	E	9.0	D	9.4	D	14.7	C	D to C
	Embarcadero	Montgomery	3	W		0.35		*	15.4	C					9.6	D	4.4	F	6.9	F	10.1	D	13.1	C	14.9	C	C to C

Table A2 - PM CMP Segments Level of Service Monitoring
(1991 - 2009)

Name	From	To	Class	Travel Dir.	Old Dist. (mi)	Dist. (mi)	Ave Speed 91	LOS 91	Ave Speed 92/3	LOS 92/3	Ave Speed 95	LOS 95	Ave Speed 97	LOS 97	Ave Speed 99	LOS 99	Ave Speed 2001	LOS 2001	Ave Speed 2004	LOS 2004	Ave Speed 2006	LOS 2006	Ave Speed 2007	LOS 2007	Ave Speed 2009	2009 LOS (HCM-1985)	2009 LOS Changes
Brotherhood	J. Serra	Alemany	3	E		0.44																	21.0	B	26.6	A	B to A
	Alemany	J. Serra	3	W		0.47																	26.2	A	33.4	A	A to A
Bryant	Division	4th Street	3	E		0.99	7.7	E	11.8	D	9.8	D	12.8	D	15.7	C	10.6	D	9.6	D	13.3	C	8.8	E	12.7	D	E to D
	4th Street	Embarcadero	3	E		0.77		*	13.2	C							9.5	D	10.2	D	19.5	B	16.0	C	15.7	C	C to C
Bush	Masonic	Gough	3	E		1.24		*	20.0	B							20.5	B			19.0	B	19.6	B	21.2	B	B to B
	Gough	Market	3	E		1.46	3.2	F	10.1	D	11.5	D	11.7	D	11.6	D	10.2	D	9.2	D	12.5	D	13.9	C	14.3	C	C to C
Castro/	Pine	Geary	3	S		0.27		*	11.6	D	8.1	E	11.0	D	8.3	E	12.6	D	7.9	E	11.7	D	8.6	E	13.5	C	E to C
Divisadero	Geary	Pine	3	N		0.27		*	8.4	E	13.5	C			9.8	D	14.6	C			7.5	E	10.3	D	10.7	D	D to D
	Geary	14th	3	S		1.13		*	15.7	C					11.4	D	12.1	D	8.2	E	12.3	D	9.4	D	11.1	D	D to D
	14th	Geary	3	N		1.13	4.5	F	12.8	D	11.2	D	12.3	D	11.8	D	11.1	D	9.5	D	9.4	D	13.8	C	12.3	D	C to D
	14th Street	Market	3	S		0.32		*	13.8	C					14.3	C	17.3	C			12.0	D	11.6	D	15.2	C	D to C
	Market	14th Street	3	N		0.32	7.7	E	16.7	C					12.1	D	16.1	C			15.2	C	10.0	D	15.7	C	D to C
Cesar Chavez	Guerrero	Bryant	3	E		0.75			20.7	B							15.1	C			18.2	C	14.1	C	15.1	C	C to C
	Bryant	Guerrero	3	W		0.75			16.5	C							15.8	C			18.8	C	12.8	D	16.8	C	D to C
	Kansas	Bryant	3	W		0.37			17.5	C											30.4	A	30.4	A	21.0	B	A to B
	Bryant	Kansas	3	E		0.37			26.7	B							8.5	E			31.4	A	30.7	A	27.6	A	A to A
	Kansas	3rd Street	3	E		0.79			17.3	C							12.0	D	15.1	C	19.5	B	22.8	B	25.4	A	B to A
	3rd Street	Kansas	3	W		0.79			16.3	C											21.1	B	16.3	C	22.3	B	C to B
Clay	Kearny	Davis	3	E		0.38	11.7	D	7.0	E	8.7	E	10.4	D	10.4	D	9.4	D	6.5	F	8.7	E	16.3	C	11.7	D	C to D
Columbus	North Point	Greenwich	3	S	0.5	0.42		*	15.2	C					17.7	C					15.9	C	12.5	D	13.3	C	D to C
	Greenwich	North Point	3	N	0.5	0.42		*	13.4	C					16.2	C					13.3	C	16.8	C	9.2	D	C to D
	Greenwich	Montgomery	3	S		0.67	6.3	F	16.0	C					10.2	D	9.3	D	8.7	E	9.2	D	10.4	D	7.1	E	D to E
	Montgomery	Greenwich	3	N		0.67	6.3	F	12.8	D	12.9	D	10.3	D	11.1	D	15.0	C			12.8	D	21.0	B	14.1	C	B to C
Doyle/Lombard/	Marin County	SF County	1	E		1.00																	49.2	A	48.6	A	A to A
Richardson	SF County	Marin County	1	W		1.00																	46.3	A	45.7	A	A to A
	County Line	SF Cemetery	1	S		1.13															21.7	D	39.8	A	39.8	A	A to A
	SF Cemetery	County Line	1	N		1.13															24.2	C	38.8	A	41.0	A	A to A
	SF Cemetery	Francisco	1	E		0.95															23.8	C	32.7	B	35.8	A	B to A
	Francisco	SF Cemetery	1	W		0.98															23.5	C	35.2	A	39.4	A	A to A
	Francisco	Van Ness	3	E		1.28			16.4	C							14.8	C			14.5	C	15.7	C	18.2	C	C to C
	Van Ness	Francisco	3	W		1.28			20.5	B							22.4	B			15.3	C	16.0	C	15.7	C	C to C
Drumm	Washington	Market	3	S		0.22		*	9.3	D	3.6	F					17.4	C			9.7	D	6.1	F	7.6	E	F to E
	Market	Washington	3	N		0.22		*	12.8	D	13.5	C					24.7	B			11.7	D	11.2	D	16.2	C	D to C
Duboce/	Market	Mission	3	E		0.34		*	10.0	D	15.4	C					7.5	E	6.3	F	9.4	D			14.8	C	
Division	Mission	Market	3	W		0.34	6.3	F	6.2	F							7.4	E	6.0	F	6.5	F			10.6	D	
	Mission	Potrero	3	E		0.64	9.9	D	14.1	C							14.2	C			14.1	C			13.3	C	
	Potrero	Mission	3	W		0.64	9.9	D	16.4	C							12.0	D	7.1	E	9.4	D			9.6	D	
	Market	Howard	3	E		0.47																	14.8	C	15.0	C	C to C
	Howard	Market	3	W		0.47																	9.1	D	8.5	E	D to E
	Howard	Brannan	3	E		0.54																	12.2	D	12.8	D	D to D
	Brannan	Howard	3	W		0.54																	8.9	E	11.5	D	E to D
Embarcadero	North Point	Townsend	3	S		2.17		*	9.0	D	16.4	C					14.7	C			16.0	C	15.2	C	14.0	C	C to C
	Townsend	North Point	3	N		2.17		*	16.7	C							6.4	F	12.3	D	15.2	C	18.5	C	20.2	B	C to B
Evans	Cesar Chavez	3rd Street	3	S		0.73			21.4	B							15.4	C			19.1	B	21.8	B	21.6	B	B to B
	3rd Street	Cesar Chavez	3	N		0.73			20.3	B							15.2	C			23.8	B	22.7	B	20.1	B	B to B
Fell	Gough	Market	3	E		0.29		*	13.5	C							9.4	D	8.3	E	7.0	E	18.4	C	12.6	D	C to D
	Gough	Laguna	3	W		0.18	5.6	F	13.3	C	7.3	E	8.2	E	12.0	D	7.8	E	7.4	E	16.9	C	11.8	D	9.0	E	D to E
	Laguna	Stanyan	3	W		1.56		*	20.7	B							23.5	B			19.6	B	23.1	B	23.7	B	B to B
Folsom	13th Street	8th Street	3	E		0.48															18.0	C					
	8th Street	4th Street	3	E		0.69															18.8	C	21.2	B	17.2	C	B to C
	4th Street	1st Street	3	E		0.52															18.3	C	20.0	B	15.0	C	B to C
	1st Street	Embarcadero	3	E		0.35															10.0	D	17.0	C	12.1	D	C to D
	14th Street	8th Street	3	E		0.56																	12.5	D	14.2	C	D to C

Table A2 - PM CMP Segments Level of Service Monitoring
(1991 - 2009)

Name	From	To	Class	Travel Dir.	Old Dist. (mi)	Dist. (mi)	Ave Speed 91	LOS 91	Ave Speed 92/3	LOS 92/3	Ave Speed 95	LOS 95	Ave Speed 97	LOS 97	Ave Speed 99	LOS 99	Ave Speed 2001	LOS 2001	Ave Speed 2004	LOS 2004	Ave Speed 2006	LOS 2006	Ave Speed 2007	LOS 2007	Ave Speed 2009	2009 LOS (HCM-1985)	2009 LOS Changes
Franklin	Market	Pine	3	N		1.06	8.5	E	18.8	C							14.6	C			14.5	C	15.9	C	15.6	C	C to C
	Pine	Lombard	3	N		0.83		*	16.4	C							7.3	E	7.7	E	17.5	C	21.7	B	23.8	B	B to B
Fremont	Harrison	Market	3	N	0.85	0.48		*	9.3	D	10.6	D	16.6	C			3.2	F	5.2	F	14.1	C	10.5	D	10.1	D	D to D
Fulton	Park P.	10th Ave	3	E		0.2																			25.7	A	
	10th Ave	Park Presidio	3	W		0.2																			8.5	E	
	10th Ave	Arguello	3	E		0.53																			23.5	B	
	Arguello	10th Ave	3	W		0.53																			22.1	B	
	Arguello	Masonic	3	E		0.66	9.8	D	13.2	C							14.8	C			15.0	C	10.9	D	13.6	C	D to C
	Masonic	Arguello	3	W		0.66		*	18.9	C							14.7	C			20.7	B	23.9	B	20.6	B	B to B
Geary	Great Hwy.	25th Avenue	3	E		1.78		*	26.2	A							20.1	B	16.0	C	23.6	B	23.0	B	21.4	B	B to B
	25th Avenue	Great Hwy.	3	W		1.78		*	23.9	B							29.4	A	12.7	D	21.0	B	23.3	B	22.0	B	B to B
	25th Avenue	Arguello	3	E		1.42		*	21.5	B					15.0	C			8.4	E	14.9	C	21.0	B	22.9	B	B to B
	Arguello	25th Avenue	3	W		1.42	11.3	D	20.3	B					15.8	C			10.6	D	15.1	C	18.1	C	17.0	C	C to C
	Arguello	Gough	3	E		1.89	11.3	D	22.6	B					20.7	B			14.7	C	22.4	B	27.4	A	20.3	B	A to B
	Gough	Arguello	3	W		1.89		*	23.1	B					21.2	B			13.3	C	19.1	B	20.5	B	25.0	B	B to B
	Kearny	Gough	3	W		1.18	6.7	F	9.9	D	14.4	C			15.9	C	23.8	B	10.0	D	12.2	D	12.1	D	10.1	D	D to D
Geneva	Ocean	Cayuga	3	E		0.56		*	12.0	D	17.2	C					14.6	C			12.9	D	11.6	D	8.4	E	D to E
	Cayuga	Ocean	3	W		0.56	6.7	F	10.4	D	12.0	D	9.6	D	14.2	C					7.9	E	6.9	F	9.2	D	F to D
	Cayuga	Paris	3	E	0.4	0.33	10.4	D	12.1	D	10.5	D	15.5	C							8.8	E	9.2	D	10.8	D	D to D
	Paris	Cayuga	3	W	0.4	0.33	10.4	D	12.3	D	10.7	D	11.9	D	12.8	D	12.7	D	10.6	D	10.1	D	9.7	D	10.5	D	D to D
	Paris	Santos	3	E		1.19		*	20.5	B							22.1	B			21.0	B	20.5	B	21.2	B	B to B
	Santos	Paris	3	W		1.19		*	22.6	B							31.3	A			25.2	A	21.2	B	23.6	B	B to B
Golden Gate	Masonic	Franklin	3	E		1.37		*	20.4	B							16.0	C			25.9	A	20.1	B	18.9	C	B to C
	Franklin	Market	3	E		0.65	12.2	D	15.2	C							14.3	C			11.7	D	12.0	D	12.8	D	D to D
Gough	Pine	Geary	3	S		0.26	9.5	D	21.8	B							6.5	F	6.3	F	11.4	D	9.6	D	24.3	B	D to B
	Geary	Golden Gate	3	S		0.33		*	17.1	C							15.8	C	9.4	D	13.6	C	9.7	D	18.3	C	D to C
	Golden Gate	Market	3	S		0.52	8.3	E	16.4	C							7.6	E	6.4	F	7.0	E	7.2	E	8.7	E	E to E
Guerrero/	Cesar Chavez	29th Street	3	S		0.28		*	24.0	B							24.9	A			20.1	B	20.5	B	14.3	C	B to C
San Jose	29th Street	Cesar Chavez	3	N		0.28		*	12.6	D	7.9	E	17.8	C			15.6	C			14.1	C	16.4	C	20.0	B	C to B
	29th Street	Monterey	1	S		1.19		*	21.6	D	23.0	C					26.8	C			27.7	C	37.7	A	26.0	C	A to C
	Monterey	29th Street	1	N		1.19		*	30.8	B							41.2	A			27.0	C	26.3	C	23.7	C	C to C
Harrison	Embarcadero	1st Street	3	W		0.34			11.4	D	11.6	D	9.6	D	9.4	D	14.5	C			14.3	C	8.0	E	11.9	D	E to D
	1st Street	4th Street	3	W		0.56			20.5	B							14.0	C			20.0	B	22.4	B	16.7	C	B to C
	4th Street	8th Street	3	W		0.69	12.7	D	19.1	B							16.0	C			19.0	B	19.0	C	11.6	D	C to D
	8th Street	Division	3	W		0.40			13.6	C							13.0	C			12.4	D	12.7	D	13.2	C	D to C
Hayes	Market	Gough	3	W		0.39	5.6	F	11.7	D	15.7	C					10.9	D	7.1	E	11.8	D	13.3	C	9.6	D	C to D
Howard	Embarcadero	S. Van Ness	3	W		2.11	5.4	F	13.6	C							13.0	C			12.7	D	14.6	C	12.6	D	C to D
J. Serra	Sloat	19th	1	S	0.91	1.21		*	18.0	D	20.6	D	11.8	F	12.0	F	18.1	D	14.7	E	18.8	D	14.9	E	16.7	E	E to E
	19th	Sloat	1	N	0.91	1.21		*	20.5	D	18.9	D	12.8	F	19.3	D	14.4	E	14.6	E	11.8	F	15.5	E	22.8	C	E to C
	19th	Brotherhood	1	S	0.63	0.31		*	22.1	C							16.6	E	19.0	D	35.3	A	40.4	A	39.2	A	A to A
	Brotherhood	19th	1	N	0.63	0.31		*	19.1	D	21.7	D	23.6	D	26.5	C					16.2	E	16.4	E	15.2	E	E to E
	Brotherhood	County Line	1	S	0.37	0.32		*	48.1	A							26.3	B			39.2	A	44.5	A	39.6	A	A to A
	County Line	Brotherhood	1	N	0.37	0.32		*	40.4	A							26.3	B			41.8	A	41.0	A	35.6	A	A to A
Kearny	Market	Columbus	3	N		0.65	6.3	F	12.9	D	10.8	D	9.2	D	9.1	D	8.1	E	7.2	E	11.7	D	11.2	D	13.0	C	D to C
King	5th Street	2nd Street	3	E		0.52															13.2	C			17.8	C	
	2nd Street	5th Street	3	W		0.52															16.2	C			18.5	C	
	4th Street	2nd Street	3	E		0.34																	21.7	B			
	2nd Street	4th Street	3	W		0.34																	7.7	E			
Lincoln/	19th Avenue	5th Ave.	3	E		0.83		*	16.4	C							14.5	C			12.3	D	24.0	B	23.1	B	B to B
Kezar	5th Ave.	19th Avenue	3	W		0.83	11.3	D	20.8	B							12.0	D	9.1	D	22.7	B	12.8	D	12.9	D	D to D
	5th Ave.	Stanyan	3	E		0.70		*	22.8	B							14.0	C			22.8	B	21.8	B	21.7	B	B to B
	Stanyan	5th Ave.	3	W		0.70		*	21.3	B							9.8	D	9.9	D	23.6	B	18.1	C	29.1	A	C to A
Main	Mission	Market	3	N		0.12		*	9.8	D	8.4	E	6.7	F	7.7	E	5.4	F	7.5	E	14.4	C	16.3	C	19.3	B	C to B

Table A2 - PM CMP Segments Level of Service Monitoring
(1991 - 2009)

Name	From	To	Class	Travel Dir.	Old Dist. (mi)	Dist. (mi)	Ave Speed 91	LOS 91	Ave Speed 92/3	LOS 92/3	Ave Speed 95	LOS 95	Ave Speed 97	LOS 97	Ave Speed 99	LOS 99	Ave Speed 2001	LOS 2001	Ave Speed 2004	LOS 2004	Ave Speed 2006	LOS 2006	Ave Speed 2007	LOS 2007	Ave Speed 2009	2009 LOS (HCM-1985)	2009 LOS Changes
Market/	Sloat	Santa Clara	3	E		0.43		*	16.5	C					15.9	C					21.0	B	16.0	C	20.2	B	C to B
Portola	Santa Clara	Sloat	3	W		0.43	11.8	D	22.2	B					18.4	C					14.8	C	7.9	E	8.3	E	E to E
	Santa Clara	Burnett	3	E	2.45	1.34		*	23.6	B					37.4	A					20.6	B	22.2	B	24.0	B	B to B
	Burnett	Santa Clara	3	W	2.45	1.34		*	19.6	B					35.7	A					24.0	B	22.0	B	20.4	B	B to B
	Burnett	Castro	3	E		1.62		*	34.1	A					30.9	A					22.0	B	24.5	B	22.0	B	B to B
	Castro	Burnett	3	W		1.62		*	27.0	A					24.7	B					28.0	A	28.4	A	26.7	A	A to A
	Castro	Guerrero	3	E		0.79		*	15.0	C					9.2	D	14.8	C			10.0	D	10.6	D	9.9	D	D to D
	Guerrero	Castro	3	W		0.79		*	16.5	C					11.5	D	13.2	C			19.4	B	15.0	C	15.1	C	C to C
	Guerrero	Van Ness	3	E		0.43	8.3	E	17.9	C					7.4	E	6.7	F	9.0	D	7.0	E	10.5	D	12.1	D	D to D
	Van Ness	Guerrero	3	W		0.43	8.3	E	12.5	D	8.0	E	10.8	D	11.1	D	24.8	B			12.1	D	8.3	E	12.2	D	E to D
	Van Ness	Drumm	3	E		1.69	9.6	D	12.9	D	6.3	F					8.7	E	9.3	D	11.0	D	9.2	D	9.5	D	D to D
	Drumm	Van Ness	3	W		1.77	9.6	D	15.5	C							10.0	D	7.4	E	9.9	D	11.5	D	13.5	C	D to C
Masonic	Presidio	Geary	3	S		0.29	8.5	E	9.3	D	12.7	D	16.9	C							11.4	D	10.5	D	14.5	C	D to C
	Geary	Bush	3	N		0.19	8.5	E	21.5	B							15.1	C			15.5	C	24.7	B	27.0	A	B to A
	Geary	Page	3	S		0.79	10.0	D	13.4	C							16.3	C			11.1	D	12.5	D	16.9	C	D to C
	Page	Geary	3	N		0.79	10.0	D	13.6	C							11.9	D	7.3	E	13.8	C	14.7	C	18.8	C	C to C
Mission/	Embarcadero	3rd Street	3	S		0.74	9.7	D	7.6	D	13.0	C			10.7	D	9.7	D	8.6	E	13.4	C	11.3	D	13.9	C	D to C
Otis	3rd Street	Embarcadero	3	N		0.74	9.7	D	15.9	C					5.1	F	10.7	D	9.2	D	7.6	E	8.9	E	13.0	D	E to D
	3rd Street	9th Street	3	S		0.98		*	19.1	B					12.1	D	12.3	D	8.4	E	18.3	C	13.2	C	15.1	C	C to C
	9th Street	3rd Street	3	N		0.98		*	19.9	B					13.5	C	9.7	D	9.8	D	12.7	D	14.2	C	13.7	C	C to C
	9th Street	14th Street	3	S		0.68	9.7	D	14.9	C					16.7	C					12.9	D	13.4	C	13.4	C	C to C
	14th Street	9th Street	3	N		0.65		*	12.2	D	9.9	D	9.2	D	10.5	D	8.5	D	8.3	E	12.3	D	12.6	D	13.3	C	D to C
	14th Street	Cesar Chavez	3	S		1.39	10.9	D	14.9	C					13.2	C					13.3	C	13.4	C	15.2	C	C to C
	Cesar Chavez	14th Street	3	N		1.39	10.9	D	10.5	D	12.3	D	13.0	C	14.7	C					12.6	D	13.8	C	13.9	C	C to C
	Cesar Chavez	Ocean	3	S		1.96		*	15.6	C					14.7	C					14.7	C	14.5	C	13.8	C	C to C
	Ocean	Cesar Chavez	3	N		1.96		*	17.3	C					18.5	C					19.1	B	15.3	C	17.8	C	C to C
	Ocean	Sickles	3	S	1.88	1.45		*	15.1	C					24.9	B					21.3	B	16.6	C	20.3	B	C to B
	Sickles	Ocean	3	N	1.88	1.45		*	18.1	C					22.0	B					23.0	B	19.8	B	22.4	B	B to B
Montgomery	Broadway	Bush	3	S	0.38	0.51	6.2	F	2.4	F							12.4	D	8.2	E	8.2	E	5.5	F	9.2	D	F to D
North Point	Van Ness	Columbus	3	E		0.38		*	15.4	C							7.4	E	11.0	D	11.4	D	15.0	C	15.5	C	C to C
	Columbus	Van Ness	3	W		0.38	8.5	E	20.9	B							10.4	D	9.8	D	19.5	B	12.6	D	16.4	C	D to C
	Columbus	Embarcadero	3	E		0.61		*	14.5	C							11.4	D	9.9	D	12.8	D	20.3	B	15.9	C	B to C
	Embarcadero	Columbus	3	W		0.61		*	16.9	C							12.2	D	10.3	D	19.5	B	21.3	B	15.8	C	B to C
Oak	Divisadero	Fillmore	3	E		0.37		*		~							16.9	C			24.6	B	26.7	A	25.3	A	A to A
	Fillmore	Laguna	3	E		0.27	8.2	E		~							15.3	C	15.7	C	23.8	B	27.8	A	22.3	B	A to B
	Stanyan	Divisadero	3	E		0.91			21.6	B							15.6	C			23.0	B	27.4	A	21.5	B	A to B
	Laguna	Franklin	3	E		0.27		*	23.1	B							13.0	C	11.8	D	16.2	C	13.5	C	11.8	D	C to D
Ocean	19th Avenue	Miramar	3	E		1.11		*	17.1	C							9.4	D	12.5	D	12.4	D	14.9	C	12.9	D	C to D
	Miramar	19th Avenue	3	W		1.11		*	14.6	C							8.8	E	10.3	D	12.5	D	15.4	C	12.4	D	C to D
	Miramar	Howth	3	E		0.48	0.8	F	21.0	B							10.7	D	13.2	C	14.2	C	13.7	C	14.8	C	C to C
	Howth	Miramar	3	W		0.48	6.1	F	14.9	C							9.1	D	11.2	D	8.4	E	10.7	D	13.0	D	D to D
Octavia	Fell	Market	3	S		0.27															14.2	C	12.6	D	11.6	D	D to D
	Market	Fell	3	N		0.27															8.2	E	14.5	C	16.1	C	C to C
O'Farrell	Gough	Mason	3	E		0.85	5.7	F	13.7	C							12.6	D	14.6	C	9.9	D	10.0	D	11.2	D	D to D
	Mason	Market	3	E		0.28	6.9	F	7.9	E							4.2	F	6.7	F	6.7	F	6.1	F	9.0	E	F to E
Pine	Market	Kearny	3	W		0.38	4.6	F	10.8	D	7.3	E	10.3	D	6.7	F	8.0	E	4.3	F	8.9	E	5.9	F	8.9	E	F to E
	Kearny	Leavenworth	3	W		0.63		*	12.9	D	19.8	B					17.1	C			16.2	C	13.6	C	16.8	C	C to C
	Leavenworth	Franklin	3	W		0.46	4.8	F	13.2	C							9.4	D	6.5	F	12.6	D	10.9	D	14.3	C	D to C
	Franklin	Presidio	3	W		1.27		*	15.3	C							19.2	B			20.3	B	23.4	B	22.4	B	B to B
Potrero	Division	21st Street	3	S		0.80		*	22.6	B					18.8	C					16.5	C	20.5	B	25.2	A	B to A
	21st Street	Division	3	N		0.80		*	21.4	B					19.3	B					14.9	C	21.3	B	15.6	C	B to C
	21st Street	C. Chavez	3	S		0.62	4.8	F	13.7	C					19.1	B					15.5	C	15.8	C	19.4	B	C to B
	C. Chavez	21st Street	3	N		0.62		*	23.8	B					14.5	C					17.0	C	23.6	B	18.8	C	B to C
Skyline	Sloat	County Line	3	S	2.32	1.94		*	42.1	A							36.6	A			47.1	A	37.8	A	38.1	A	A to A
	County Line	Sloat	3	N		1.94		*	44.9	A							42.6	A			49.3	A	41.7	A	46.8	A	A to A

Table A2 - PM CMP Segments Level of Service Monitoring
(1991 - 2009)

Name	From	To	Class	Travel Dir.	Old Dist. (mi)	Dist. (mi)	Ave Speed 91	LOS 91	Ave Speed 92/3	LOS 92/3	Ave Speed 95	LOS 95	Ave Speed 97	LOS 97	Ave Speed 99	LOS 99	Ave Speed 2001	LOS 2001	Ave Speed 2004	LOS 2004	Ave Speed 2006	LOS 2006	Ave Speed 2007	LOS 2007	Ave Speed 2009	2009 LOS (HCM-1985)	2009 LOS Changes
Sloat	Skyline	J. Serra	1	E		1.38		*	19.2	D	24.9	C					19.9	D	18.4	D	25.9	C	17.6	D	20.7	D	D to D
	J. Serra	Skyline	1	W		1.38		*	23.2	C							27.4	C			24.8	C	27.2	C	26.9	C	C to C
Stanyan	Fulton	Turk	3	N		0.20	4.6	F	10.8	D	11.6	D	16.8	C							15.9	C	12.0	D	12.6	D	D to D
	Turk	Fulton	3	S		0.20		*	7.6	D	10.5	D	8.0	E	13.3	C					18.9	C	6.4	F	9.2	D	F to D
Sutter	Market	Mason	3	W		0.56		*	7.3	E	12.4	D	12.7	D	8.0	E	12.7	C			11.6	D	13.5	C	11.3	D	C to D
	Mason	Gough	3	W		0.82	9.0	D	17.0	C							14.6	C			13.3	C	12.4	D	14.6	C	D to C
	Gough	Divisadero	3	W		0.82		*	16.6	C							14.3	C			13.3	C	15.6	C	14.9	C	C to C
	Divisadero	Gough	3	E		0.82		*	15.4	C							12.8	C			15.8	C	15.9	C	15.5	C	C to C
Townsend	7th Street	2nd Street	3	E		0.86															21.3	B	16.8	C	11.9	D	C to D
	2nd Street	7th Street	3	W		0.86															18.7	C	18.0	C	12.8	D	C to D
Turk	Market	Hyde	3	W		0.38		*	14.9	C							7.3	E	8.3	E	12.8	D	13.3	C	11.1	D	C to D
	Hyde	Gough	3	W		0.46	8.7	E	14.9	C							9.1	D	11.3	D	10.5	D	10.6	D	9.3	D	D to D
	Gough	Divisadero	3	W		0.82		*	27.1	A							18.0	C			19.3	B	21.7	B	19.4	B	B to B
	Divisadero	Stanyan	3	W		0.91		*	19.2	B							14.6	C			21.3	B	18.9	C	25.6	A	C to A
	Stanyan	Divisadero	3	E		0.91		*	14.9	C							16.4	C			18.4	C	19.1	B	17.2	C	B to C
Van Ness/	Lombard	Washington	3	S		0.58		*	17.7	C					14.5	C	12.8		11.7	D	13.5	C	19.9	B	12.4	D	B to D
SVanNess	Washington	Lombard	3	N		0.58		*	13.2	C					18.0	C	26.1		9.2	D	22.4	B	26.6	A	26.4	A	A to A
	Washington	Golden Gate	3	S		0.84	4.6	F	11.7	D	7.0	E	8.4	E	9.7	D	10.0	D	9.8	D	8.0	E	10.4	D	12.2	D	D to D
	Golden Gate	Washington	3	N		0.84		*	15.1	C					11.4	D	12.8	D	9.8	D	16.6	C	16.9	C	17.4	C	C to C
	Golden Gate	13th	3	S	1.21	0.80	4.6	F	6.9	F					23.1	B			5.0	F	9.1	D	12.7	D	12.3	D	D to D
	13th	Golden Gate	3	N	1.21	0.80		*	13.7	C					18.3	C			6.6	F	10.2	D	12.8	D	14.7	C	D to C
	13th	Cesar Chavez	3	S		1.50	12.6		18.2	C					18.9	C					20.2	B	20.4	B	17.1	C	B to C
	Cesar Chavez	13th	3	N		1.50			22.4	B					16.9	C	26.1				16.3	C	15.5	C	14.7	C	C to C
Washington	Drumm	Kearny	3	W	0.28	0.44		*	10.3	D	12.5	D	8.0	E	9.5	D	18.4	C			14.1	C	15.2	C	11.3	D	C to D
West Portal	Ulloa	Sloat	3	S	0.38	0.54		*	18.2	C							11.3	D	8.0	E	17.1	C	15.4	C	15.2	C	C to C
	Sloat	Ulloa	3	N	0.38	0.54		*	17.1	C							11.6	D	10.0	D	15.1	C	15.1	C	12.6	D	C to D
FREEWAY SEGMENTS INBOUND																											
I-280	J. Serra	Weldon	Fwy	E		4.29	54.9	C	59.1	B					0		45.0	D	43.7	D	67.4	A	60.4	A	64.6	A	A to A
	Weldon	6th/Brannan	Fwy	NE		3.37	closed		46.3	D	51	D	48.6	D	38.6	E	38.9	E	42.3	D	25.5	F	50.8	C	41.8	D	C to D
US 101	C & C Limit	Cortland	Fwy	N		2.31	20.6	F	72.4	A							43.2	D	40.1	E	55.2	B	63.9	A	49.1	C	A to C
	Cortland	I-80	Fwy	N		1.90	24.6	F	45.8	E	31.8	E	40.9	E	6.2	F	24.0	F	17.8	F	53.1	C	48.6	D	23.6	F	D to F
	I-80	Market	Fwy	NW		1.28	12.2	F	15.3	F							closed		closed		closed		32.6	E	22.8	F	E to F
I-80	Treasure Island	Fremont Exit	Fwy	S		2.72	27.5	F	26.3	F							31.6	E	21.7	F	41.9	D	21.9	F	26.8	F	F to F
	Fremont Exit	US-101	Fwy	SW	2.13	1.66	18.6	F	21.5	F							24.9	F	13.8	F	22.4	F	18.2	F	24.5	F	F to F
FREEWAY SEGMENTS OUTBOUND																											
I-280	6th/Brannan	Weldon	Fwy	E		3.35	closed		22.9	F							30.9	E	28.5	F	29.8	F	54.8	C	54.5	C	C to C
	Weldon	J. Serra	Fwy	SW		4.29	51.9	D	56.6	B							44.5	D	31.4	E	54.3	C	53.5	C	45.7	D	C to D
US 101	Market	I-80	Fwy	S		1.14	18.8	F	13.4	F							closed		closed		closed		18.9	F	21.3	F	F to F
	I-80	Cortland	Fwy	S		1.99	31.6	E	46.3	D	47.2	D	35.5	E	32.4	E	44.4	D	21.4	F	30.3	E	45.2	D	45.6	D	D to D
	Cortland	Monster Pk Exit	Fwy	S		2.15	48.1	D	51.1	D	30.8	E	39.2	E	49	D	41.6	D	30.5	E	52.2	C	49.8	C	55.2	B	C to B
I-80	US-101	Fremont Exit	Fwy	N	2.13	1.75	19.0	F	25.9	F							14.8	F	10.0	F	8.9	F	19.6	F	7.0	F	F to F
	Fremont Exit	Treasure Island	Fwy	NE		2.72	29.3	F	37.7	E	34.6	E	45.6	E	23.1	F	21.6	F	14.6	F	41.5	D	45.7	D	36.0	E	D to E

Table A3: AM Additional Segments LOS Monitoring (2009)

Route Name	Start Intersection	End Intersection	Length (miles)	Class (HCM-1985)	2009 Average Speed (mph)	LOS (HCM-1985)	Class (HCM-2000)	LOS (HCM-2000)
1st St - SE	Washington St	Market St	0.35	3	12.1	D	4	D
1st St - SE	Greenwich St	Washington St	0.51	3	19.6	B	4	B
2nd St - NW	King St	Branan	0.19	3	11.7	D	4	D
2nd St - SE	Branan	King St	0.19	3	13.3	C	4	C
3rd St - NB	Bay Shore Blvd	Jamestown Ave	0.36	3	25.9	A	4	A
3rd St - SB	Jamestown Ave	Bayshore	0.46	3	33.1	A	4	A
5th St - NW	Townsend St	Brannan	0.12	3	15.5	C	4	C
5th St - SE	Brannan	Townsend St	0.12	3	19.0	C	4	C
8th St - SE	Bryant St	Brannan St	0.12	3	18.5	C	3	C
16th St - EB	Potrero Ave	03rd St	1.01	3	16.9	C	4	C
16th St - WB	03rd St	Potrero Ave	1.01	3	21.6	B	4	B
Bayshore - NB	Geneva	County Line	0.27	3	35.4	A	3	A
Bayshore - SB	County Line	Geneva	0.27	3	15.3	C	3	D
Brannan - EB	03rd St	The Embarcadero	0.47	3	19.2	B	4	B
Brannan - WB	The Embarcadero	03rd St	0.47	3	19.9	B	4	B
Castro / Divisadero - NB	Pine St	Clay St	0.19	3	19.4	B	4	B
Castro / Divisadero - NB	18th St	Market St	0.12	3	9.1	D	4	D
Castro / Divisadero - NB	Clay St	Marina Blvd	1.10	3	13.0	C	4	C
Castro / Divisadero - SB	Market St	18th St	0.12	3	11.8	D	4	D
Castro / Divisadero - SB	Marina Blvd	Clay St	1.10	3	13.2	C	4	C
Castro / Divisadero - SB	Clay St	Pine St	0.19	3	21.2	B	4	B
Clay - EB	Jones St	Kearny St	0.54	3	11.8	D	4	D
Evans - NW	Jennings St	03rd St	0.59	3	17.7	C	4	C
Evans - SE	03rd St	Jennings St	0.59	3	24.6	B	4	B
Fulton - EB	La Playa St	Park Presidio Blvd	2.09	3	27.7	A	3	B
Fulton - WB	Park Presidio Blvd	La Playa St	2.09	3	28.5	A	3	B
Geneva - EB	Santos St	Bayshore	0.76	3	31.4	A	3	A
Geneva - WB	Bayshore	Santos St	0.76	3	25.7	A	3	B
Gough - SB	Market St	Otis St	0.12	3	21.3	B	4	B
Guerrero / San Jose - NB	Cesar Chavez St	21st St	0.61	3	21.0	B	4	B
Guerrero / San Jose - NB	21st St	Market St	0.97	3	14.3	C	4	C
Guerrero / San Jose - SB	Market St	21st St	0.97	3	15.8	C	4	C
Guerrero / San Jose - SB	21st St	Cesar Chavez St	0.61	3	14.1	C	4	C
King - EB	02nd St	Townsend St	0.16	3	22.4	B	3	C
King - WB	Townsend St	02nd St	0.16	3	17.7	C	3	D
Lincoln / Kezar - EB	36th Ave	19th Ave	1.00	3	18.1	C	3	C
Lincoln / Kezar - WB	19th Ave	36th Ave	1.00	3	27.9	A	3	B
Main - NW	Folsom St	Mission St	0.24	3	11.5	D	4	D
Main - NW	Bryant St	Folsom St	0.24	3	14.5	C	4	C
Main - SE	Folsom St	Bryant St	0.24	3	12.0	D	4	D
Montgomery - SB	Bush St	Market St	0.16	3	8.3	E	4	E
Montgomery - SB	Market St	Howard St	0.24	3	9.5	D	4	D
Stanyan - NB	Fell St	Fulton St	0.23	3	10.2	D	4	D
Stanyan - SB	Fulton St	Fell St	0.23	3	7.3	E	4	E
Townsend - EB	02nd St	The Embarcadero	0.15	3	10.7	D	4	D
Townsend - EB	08th St	07th St	0.17	3	15.2	C	4	C
Townsend - WB	07th St	08th St	0.17	3	15.2	C	4	C
Townsend - WB	The Embarcadero	02nd St	0.15	3	14.4	C	4	C
Van Ness / South Van Ness - NB	Lombard St	North Point St	0.26	3	8.9	E	4	E
Van Ness / South Van Ness - SB	North Point St	Lombard St	0.26	3	8.3	E	4	E
Washington - WB	Kearny St	Powell St	0.26	3	10.3	D	4	D
Sacramento - WB	Kearny St	Jones St	0.54	3	12.0	D	4	D
Sacramento - WB	Drumm	Kearny St	0.44	3	10.3	D	4	D
Sansome - NB	Washington St	Chestnut St	0.64	3	17.6	C	4	C
Sansome - NB	Sutter	Washington St	0.38	3	8.2	E	4	E
Stockton - NB	Sutter St	Columbus Ave	0.70	3	9.0	E	4	E
Stockton - SB	Columbus Ave	Ofarrell St	0.90	3	11.3	D	4	D

Table A4: PM Additional Segments LOS Monitoring (2009)

Route Name	Start Intersection	End Intersection	Length (miles)	Class (HCM-1985)	2009 Average Speed (mph)	LOS (HCM-1985)	Class (HCM-2000)	LOS (HCM-2000)
1st St - SE	Washington St	Market St	0.35	3	8.7	E	4	E
1st St - SE	Greenwich St	Washington St	0.51	3	15.6	C	4	C
2nd St - NW	King St	Branan	0.19	3	13.3	C	4	C
2nd St - SE	Branan	King St	0.19	3	8.7	E	4	E
3rd St - NB	Bay Shore Blvd	Jamestown Ave	0.36	3	26.0	A	4	A
3rd St - SB	Jamestown Ave	Bayshore	0.46	3	34.5	A	4	A
5th St - NW	Townsend St	Brannan	0.12	3	15.4	C	4	C
5th St - SE	Brannan	Townsend St	0.12	3	15.5	C	4	C
8th St - SE	Bryant St	Brannan St	0.12	3	12.1	D	3	E
16th St - EB	Potrero Ave	03rd St	1.01	3	14.8	C	4	C
16th St - WB	03rd St	Potrero Ave	1.01	3	13.7	C	4	C
Bayshore - NB	Geneva	County Line	0.27	3	29.7	A	3	B
Bayshore - SB	County Line	Geneva	0.27	3	12.6	D	3	E
Brannan - EB	03rd St	The Embarcadero	0.47	3	14.7	C	4	C
Brannan - WB	The Embarcadero	03rd St	0.47	3	15.9	C	4	C
Castro / Divisadero - NB	Pine St	Clay St	0.19	3	18.4	C	4	C
Castro / Divisadero - NB	18th St	Market St	0.12	3	9.3	D	4	D
Castro / Divisadero - NB	Clay St	Marina Blvd	1.10	3	12.8	D	4	D
Castro / Divisadero - SB	Market St	18th St	0.12	3	14.8	C	4	C
Castro / Divisadero - SB	Marina Blvd	Clay St	1.10	3	12.4	D	4	D
Castro / Divisadero - SB	Clay St	Pine St	0.19	3	16.5	C	4	C
Clay - EB	Jones St	Kearny St	0.54	3	8.0	E	4	E
Evans - NW	Jennings St	03rd St	0.59	3	20.3	B	4	B
Evans - SE	03rd St	Jennings St	0.59	3	27.3	A	4	A
Fulton - EB	La Playa St	Park Presidio Blvd	2.09	3	26.1	A	3	B
Fulton - WB	Park Presidio Blvd	La Playa St	2.09	3	27.3	A	3	B
Geneva - EB	Santos St	Bayshore	0.76	3	24.4	B	3	B
Geneva - WB	Bayshore	Santos St	0.76	3	22.4	B	3	C
Gough - SB	Market St	Otis St	0.12	3	24.2	B	4	B
Guerrero / San Jose - NB	Cesar Chavez St	21st St	0.61	3	13.5	C	4	C
Guerrero / San Jose - NB	21st St	Market St	0.97	3	12.0	D	4	D
Guerrero / San Jose - SB	Market St	21st St	0.97	3	12.6	D	4	D
Guerrero / San Jose - SB	21st St	Cesar Chavez St	0.61	3	20.6	B	4	B
King - EB	02nd St	Townsend St	0.16	3	19.6	B	3	C
King - WB	Townsend St	02nd St	0.16	3	11.5	D	3	E
Lincoln / Kezar - EB	36th Ave	19th Ave	1.00	3	17.7	C	3	D
Lincoln / Kezar - WB	19th Ave	36th Ave	1.00	3	26.0	A	3	B
Main - NW	Folsom St	Mission St	0.24	3	16.4	C	4	C
Main - NW	Bryant St	Folsom St	0.24	3	12.8	D	4	D
Main - SE	Folsom St	Bryant St	0.24	3	16.7	C	4	C
Montgomery - SB	Bush St	Market St	0.16	3	3.6	F	4	F
Montgomery - SB	Market St	Howard St	0.24	3	10.4	D	4	D
Stanyan - NB	Fell St	Fulton St	0.23	3	9.5	D	4	D
Stanyan - SB	Fulton St	Fell St	0.23	3	6.8	F	4	F
Townsend - EB	02nd St	The Embarcadero	0.15	3	7.2	E	4	E
Townsend - EB	08th St	07th St	0.17	3	8.4	E	4	E
Townsend - WB	07th St	08th St	0.17	3	12.6	D	4	D
Townsend - WB	The Embarcadero	02nd St	0.15	3	16.7	C	4	C
Van Ness / South Van Ness - NB	Lombard St	North Point St	0.26	3	11.5	D	4	D
Van Ness / South Van Ness - SB	North Point St	Lombard St	0.26	3	7.9	E	4	E
Washington - WB	Kearny St	Powell St	0.26	3	4.6	F	4	F
Sacramento - WB	Kearny St	Jones St	0.54	3	10.8	D	4	D
Sacramento - WB	Drumm	Kearny St	0.44	3	11.9	D	4	D
Sansome - NB	Washington St	Chestnut St	0.64	3	18.0	C	4	C
Sansome - NB	Sutter	Washington St	0.38	3	10.0	D	4	D
Stockton - NB	Sutter St	Columbus Ave	0.70	3	10.6	D	4	D
Stockton - SB	Columbus Ave	Ofarrell St	0.90	3	8.3	E	4	E

Table A5-4 – AM Peak Period Freeway Average Speeds (HCM 2000 Segments)

Route Name	Segment	Average Speed (mph)	Length (feet)
I-280 - NB	County Line TO Entrance from John Daly (4 Lanes)	45.7	1045
I-280 - NB	Entrance from John Daly (4 Lanes) TO Entrance from San Jose Ave/Sickles Ave	59.8	4192
I-280 - NB	Entrance from San Jose Ave/Sickles Ave TO Exit to Ocean Ave	58.9	3496
I-280 - NB	Exit to Ocean Ave TO Entrance from Ocean Ave/Geneva Ave (5 Lanes)	61.2	2098
I-280 - NB	Entrance from Ocean Ave/Geneva Ave (5 Lanes) TO Exit to San Jose Ave (4 Lanes)	53.6	2904
I-280 - NB	Exit to San Jose Ave (4 Lanes) TO Entrance from Monterey Blvd	45.4	1998
I-280 - NB	Entrance from Monterey Blvd TO Exit to Alemany Blvd	43.7	2679
I-280 - NB	Exit to Alemany Blvd TO Entrance from Alemany Blvd	34.3	2166
I-280 - NB	Entrance from Alemany Blvd TO Exit to South 101	29.6	633
I-280 - NB	Exit to South 101 TO Left Exit to North 101 (2 Lanes)	34.9	581
I-280 - NB	Left Exit to North 101 (2 Lanes) TO Entrance from North 101 (3 lanes)	39.0	2877
I-280 - NB	Entrance from North 101 (3 lanes) TO Exit to Cesar Chavez	50.9	3069
I-280 - NB	Exit to Cesar Chavez TO Entrance from 25 St/C Chavez (4 Lanes)	60.5	5314
I-280 - NB	Entrance from 25 St/C Chavez (4 Lanes) TO Exit to 18th St/Mariposa St (3 Lanes)	60.2	1288
I-280 - NB	Exit to 18th St/Mariposa St (3 Lanes) TO Entrance from 18th St/Mariposa St (4 Lanes)	54.5	1592
I-280 - NB	Entrance from 18th St/Mariposa St (4 Lanes) TO Exit to 6th St (2 Lanes)	39.2	1520
I-280 - NB	Exit to 6th St (2 Lanes) TO Brannan	21.5	3024
I-280 - SB	Brannan TO Entrance from 6th St (4 Lanes)	50.0	2950
I-280 - SB	Entrance from 6th St (4 Lanes) TO Exit to Mariposa St/18th St (3 Lanes)	61.6	757
I-280 - SB	Exit to Mariposa St/18th St (3 Lanes) TO Entrance from Mariposa St/18th St	66.8	1803
I-280 - SB	Entrance from Mariposa St/18th St TO Exit to 25st/ C Chavez St	66.0	2164
I-280 - SB	Exit to 25st/ C Chavez St TO Entrance from 25st/ C Chavez St	66.5	1948
I-280 - SB	Entrance from 25st/ C Chavez St TO Exit to San Jose/South 101 (2 Lanes)	66.6	5680

Route Name	Segment	Average Speed (mph)	Length (feet)
I-280 - SB	Exit to San Jose/South 101 (2 Lanes) TO Entrance from South 101 (4 Lanes)	67.9	2799
I-280 - SB	Entrance from South 101 (4 Lanes) TO Entrance from North 101 (5 Lanes)	68.2	310
I-280 - SB	Entrance from North 101 (5 Lanes) TO Exit to Alemany Blvd/ Mission St (4 Lanes)	65.2	1263
I-280 - SB	Exit to Alemany Blvd/ Mission St (4 Lanes) TO Entrance from Alemany Blvd	63.9	2095
I-280 - SB	Entrance from Alemany Blvd TO Exit to Monterey Blvd	65.1	2799
I-280 - SB	Exit to Monterey Blvd TO Entrance from Bosworth St/San Jose Ave (5 lanes)	64.7	2230
I-280 - SB	Entrance from Bosworth St/San Jose Ave (5 lanes) TO Exit to Ocean Ave	65.3	2484
I-280 - SB	Exit to Ocean Ave TO Entrance from Geneva Ave	66.6	2395
I-280 - SB	Entrance from Geneva Ave TO Exit to Sagamore St (4 lanes)	64.7	2473
I-280 - SB	Exit to Sagamore St (4 lanes) TO Exit 49 to John Daly Blvd	68.4	4461
I-280 - SB	Exit 49 to John Daly Blvd TO 3 Lanes	62.6	572
I-280 - SB	3 Lanes TO County Line	57.1	1173
I-80 - EB	US 101 TO Entrance from Central Skyway/101 (4 Lanes)	50.6	1279
I-80 - EB	Entrance from Central Skyway/101 (4 Lanes) TO Exit to 7th St (3 lanes)	51.5	996
I-80 - EB	Exit to 7th St (3 lanes) TO Left Entrance from Bryant St (4 lane)	52.7	1029
I-80 - EB	Left Entrance from Bryant St (4 lane) TO 5 Lanes	47.8	498
I-80 - EB	5 Lanes TO Exit 2 to 4th St (3 Lanes)	45.4	1000
I-80 - EB	Exit 2 to 4th St (3 Lanes) TO Entrance from Bryant St	46.8	3446
I-80 - EB	Entrance from Bryant St TO Left Entrance from Essex St/1st St (5 Lane)	45.6	764
I-80 - EB	Left Entrance from Essex St/1st St (5 Lane) TO Left Exit 4a	54.9	10475
I-80 - EB	Left Exit 4a TO Exit to Hillcrest	56.2	1194
I-80 - EB	Exit to Hillcrest TO Entrance from Hillcrest Rd	66.0	388
I-80 - EB	Entrance from Hillcrest Rd TO Treasure Island End	66.0	1824
I-80 - WB	Treasure Island Begin TO Left Exit to Treasure Is	59.7	1903
I-80 - WB	Left Exit to Treasure Is TO Entrance from Macalla Rd	59.7	459
I-80 - WB	Entrance from Macalla Rd TO Entrance from	10.6	1002

Route Name	Segment	Average Speed (mph)	Length (feet)
	Treasure Is		
I-80 - WB	Entrance from Treasure Is TO Left Exit to 5th St (3 Lanes)	51.0	13234
I-80 - WB	Left Exit to 5th St (3 Lanes) TO Entrance from 4th St (4 Lanes)	58.1	1450
I-80 - WB	Entrance from 4th St (4 Lanes) TO Exit to 8th St (3 Lanes)	53.3	1864
I-80 - WB	Exit to 8th St (3 Lanes) TO Entrance from 4th St (4 lanes)	55.1	1092
I-80 - WB	Entrance from 4th St (4 lanes) TO Exit 1B to 101 (3 Lanes)	54.6	758
I-80 - WB	Exit 1B to 101 (3 Lanes) TO US 101	57.1	1201
US 101 - NB	County Line 4 Lanes TO Exit 429B to 3rd Street	51.0	1226
US 101 - NB	Exit 429B to 3rd Street TO 5 Lanes	49.2	307
US 101 - NB	5 Lanes TO Exit 429C to Paul Avenue	48.2	1139
US 101 - NB	Exit 429C to Paul Avenue TO Entrance from Bay Shore Blvd	47.8	1211
US 101 - NB	Entrance from Bay Shore Blvd TO Exit to I-280 (3 lanes)	48.6	2731
US 101 - NB	Exit to I-280 (3 lanes) TO Exit to Silver Ave	55.6	1872
US 101 - NB	Exit to Silver Ave TO Exit to Alemany/ Bayshore Blvd	55.5	1771
US 101 - NB	Exit to Alemany/ Bayshore Blvd TO Entrance from Alemany Blvd	52.7	1367
US 101 - NB	Entrance from Alemany Blvd TO Entrance from I-280 (5 Lanes)	47.8	618
US 101 - NB	Entrance from I-280 (5 Lanes) TO Exit to Cesar Chavez/ Potrero Ave (4 lanes)	40.6	1720
US 101 - NB	Exit to Cesar Chavez/ Potrero Ave (4 lanes) TO Entrance from Cesar Chavez/ Potrero Ave	43.3	3205
US 101 - NB	Entrance from Cesar Chavez/ Potrero Ave TO Exit to Vermont Street	40.1	3872
US 101 - NB	Exit to Vermont Street TO I-80 Exit 2 Lanes	44.7	1162
US 101 - NB	I-80 Exit 2 Lanes TO Exit 433C to Ninth St/ Civic Center	41.2	1643
US 101 - NB	Exit 433C to Ninth St/ Civic Center TO Left Entrance from I-80 (3 Lane)	31.6	1059
US 101 - NB	Left Entrance from I-80 (3 Lane) TO Exit 434A to Duboce Ave/ G G Br Mission St (2 Lanes)	33.2	1688
US 101 - NB	Exit 434A to Duboce Ave/ G G Br Mission St (2 Lanes) TO MARKET ST	11.4	2291
US 101 - SB	MARKET ST TO Entrance from Duboce Ave (3 Lanes)	36.9	2152
US 101 - SB	Entrance from Duboce Ave (3 Lanes) TO Exit to San Jose/ South 101 (2 Lanes)	41.8	2302

Route Name	Segment	Average Speed (mph)	Length (feet)
US 101 - SB	Exit to San Jose/ South 101 (2 Lanes) TO Left Entrance from I-80 (4 Lane)	41.4	1549
US 101 - SB	Left Entrance from I-80 (4 Lane) TO Exit to C Chavez East/Bayshore Blvd-C Chavez West/Potrero Ave	54.5	5792
US 101 - SB	Exit to C Chavez East/Bayshore Blvd-C Chavez West/Potrero Ave TO Entrance from C Chavez/Potrero Ave (5 Lanes)	52.3	1682
US 101 - SB	Entrance from C Chavez/Potrero Ave (5 Lanes) TO Exit to Daly City/ South 280 (3 Lanes)	52.7	2374
US 101 - SB	Exit to Daly City/ South 280 (3 Lanes) TO Entrance from Alemany Blvd (4 Lanes)	53.4	2328
US 101 - SB	Entrance from Alemany Blvd (4 Lanes) TO Exit to Silver Ave (3 Lanes)	58.7	940
US 101 - SB	Exit to Silver Ave (3 Lanes) TO Entrance from Silman St	53.0	864
US 101 - SB	Entrance from Silman St TO Left Entrance from I-280 (5 Lanes)	49.5	1251
US 101 - SB	Left Entrance from I-280 (5 Lanes) TO Exit to Mansell St	56.2	1531
US 101 - SB	Exit to Mansell St TO Exit to Bayshore Blvd	53.5	1212
US 101 - SB	Exit to Bayshore Blvd TO 4 Lanes	55.3	1029
US 101 - SB	4 Lanes TO Entrance from 3rd St/Bayshore Blvd (5 Lanes)	56.5	622
US 101 - SB	Entrance from 3rd St/Bayshore Blvd (5 Lanes) TO 4 Lanes	56.9	1042
US 101 - SB	4 Lanes TO Exit 429A to Tunnel Ave/Candlesick Park	55.1	1417
US 101 - SB	Exit 429A to Tunnel Ave/Candlesick Park TO County Line 4 Lane	55.5	518

Table A5-5 – PM Peak Period Freeway Average Speeds (HCM 2000 Segments)

Route Name	Segment	Average Speed (mph)	Length (feet)
I-280 - NB	County Line TO Entrance from John Daly (4 Lanes)	49.4	1045
I-280 - NB	Entrance from John Daly (4 Lanes) TO Entrance from San Jose Ave/Sickles Ave	61.0	4192
I-280 - NB	Entrance from San Jose Ave/Sickles Ave TO Exit to Ocean Ave	62.9	3496
I-280 - NB	Exit to Ocean Ave TO Entrance from Ocean Ave/Geneva Ave (5 Lanes)	66.8	2098
I-280 - NB	Entrance from Ocean Ave/Geneva Ave (5 Lanes) TO Exit to San Jose Ave (4 Lanes)	67.6	2904
I-280 - NB	Exit to San Jose Ave (4 Lanes) TO Entrance from Monterey Blvd	67.1	1998
I-280 - NB	Entrance from Monterey Blvd TO Exit to Alemany Blvd	68.4	2679
I-280 - NB	Exit to Alemany Blvd TO Entrance from Alemany Blvd	67.9	2166
I-280 - NB	Entrance from Alemany Blvd TO Exit to South 101	66.8	633
I-280 - NB	Exit to South 101 TO Left Exit to North 101 (2 Lanes)	66.6	581
I-280 - NB	Left Exit to North 101 (2 Lanes) TO Entrance from North 101 (3 lanes)	63.9	2877
I-280 - NB	Entrance from North 101 (3 lanes) TO Exit to Cesar Chavez	60.9	3069
I-280 - NB	Exit to Cesar Chavez TO Entrance from 25 St/C Chavez (4 Lanes)	61.4	5314
I-280 - NB	Entrance from 25 St/C Chavez (4 Lanes) TO Exit to 18th St/Mariposa St (3 Lanes)	59.5	1288
I-280 - NB	Exit to 18th St/Mariposa St (3 Lanes) TO Entrance from 18th St/Mariposa St (4 Lanes)	56.5	1592
I-280 - NB	Entrance from 18th St/Mariposa St (4 Lanes) TO Exit to 6th St (2 Lanes)	42.1	1520
I-280 - NB	Exit to 6th St (2 Lanes) TO Brannan	18.5	3024
I-280 - SB	Brannan TO Entrance from 6th St (4 Lanes)	50.7	2950
I-280 - SB	Entrance from 6th St (4 Lanes) TO Exit to Mariposa St/18th St (3 Lanes)	64.2	757
I-280 - SB	Exit to Mariposa St/18th St (3 Lanes) TO Entrance from Mariposa St/18th St	64.4	1803
I-280 - SB	Entrance from Mariposa St/18th St TO Exit to 25st/ C Chavez St	56.8	2164
I-280 - SB	Exit to 25st/ C Chavez St TO Entrance from 25st/ C Chavez St	54.4	1948
I-280 - SB	Entrance from 25st/ C Chavez St TO Exit to San Jose/South 101 (2 Lanes)	51.7	5680

Route Name	Segment	Average Speed (mph)	Length (feet)
I-280 - SB	Exit to San Jose/South 101 (2 Lanes) TO Entrance from South 101 (4 Lanes)	55.1	2799
I-280 - SB	Entrance from South 101 (4 Lanes) TO Entrance from North 101 (5 Lanes)	44.7	310
I-280 - SB	Entrance from North 101 (5 Lanes) TO Exit to Alemany Blvd/ Mission St (4 Lanes)	43.8	1263
I-280 - SB	Exit to Alemany Blvd/ Mission St (4 Lanes) TO Entrance from Alemany Blvd	33.5	2095
I-280 - SB	Entrance from Alemany Blvd TO Exit to Monterey Blvd	32.4	2799
I-280 - SB	Exit to Monterey Blvd TO Entrance from Bosworth St/San Jose Ave (5 lanes)	50.0	2230
I-280 - SB	Entrance from Bosworth St/San Jose Ave (5 lanes) TO Exit to Ocean Ave	54.9	2484
I-280 - SB	Exit to Ocean Ave TO Entrance from Geneva Ave	57.0	2395
I-280 - SB	Entrance from Geneva Ave TO Exit to Sagamore St (4 lanes)	52.4	2473
I-280 - SB	Exit to Sagamore St (4 lanes) TO Exit 49 to John Daly Blvd	55.1	4461
I-280 - SB	Exit 49 to John Daly Blvd TO 3 Lanes	50.6	572
I-280 - SB	3 Lanes TO County Line	45.5	1173
I-80 - EB	US 101 TO Entrance from Central Skyway/101 (4 Lanes)	3.1	1279
I-80 - EB	Entrance from Central Skyway/101 (4 Lanes) TO Exit to 7th St (3 lanes)	7.1	996
I-80 - EB	Exit to 7th St (3 lanes) TO Left Entrance from Bryant St (4 lane)	9.1	1029
I-80 - EB	Left Entrance from Bryant St (4 lane) TO 5 Lanes	8.1	498
I-80 - EB	5 Lanes TO Exit 2 to 4th St (3 Lanes)	8.0	1000
I-80 - EB	Exit 2 to 4th St (3 Lanes) TO Entrance from Bryant St	12.0	3446
I-80 - EB	Entrance from Bryant St TO Left Entrance from Essex St/1st St (5 Lane)	16.3	764
I-80 - EB	Left Entrance from Essex St/1st St (5 Lane) TO Left Exit 4a	36.9	10475
I-80 - EB	Left Exit 4a TO Exit to Hillcrest	41.1	1194
I-80 - EB	Exit to Hillcrest TO Entrance from Hillcrest Rd	39.4	388
I-80 - EB	Entrance from Hillcrest Rd TO Treasure Island End	39.4	1824
I-80 - WB	Treasure Island Begin TO Left Exit to Treasure Is	34.9	1903
I-80 - WB	Left Exit to Treasure Is TO Entrance from Macalla Rd	34.9	459
I-80 - WB	Entrance from Macalla Rd TO Entrance from Treasure Is	40.1	1002

Route Name	Segment	Average Speed (mph)	Length (feet)
I-80 - WB	Entrance from Treasure Is TO Left Exit to 5th St (3 Lanes)	22.0	13234
I-80 - WB	Left Exit to 5th St (3 Lanes) TO Entrance from 4th St (4 Lanes)	23.4	1450
I-80 - WB	Entrance from 4th St (4 Lanes) TO Exit to 8th St (3 Lanes)	28.3	1864
I-80 - WB	Exit to 8th St (3 Lanes) TO Entrance from 4th St (4 lanes)	27.6	1092
I-80 - WB	Entrance from 4th St (4 lanes) TO Exit 1B to 101 (3 Lanes)	28.6	758
I-80 - WB	Exit 1B to 101 (3 Lanes) TO US 101	23.9	1201
US 101 - NB	County Line 4 Lanes TO Exit 429B to 3rd Street	51.8	1226
US 101 - NB	Exit 429B to 3rd Street TO 5 Lanes	53.3	307
US 101 - NB	5 Lanes TO Exit 429C to Paul Avenue	53.3	1139
US 101 - NB	Exit 429C to Paul Avenue TO Entrance from Bay Shore Blvd	54.5	1211
US 101 - NB	Entrance from Bay Shore Blvd TO Exit to I-280 (3 lanes)	56.5	2731
US 101 - NB	Exit to I-280 (3 lanes) TO Exit to Silver Ave	59.9	1872
US 101 - NB	Exit to Silver Ave TO Exit to Alemany/ Bayshore Blvd	61.6	1771
US 101 - NB	Exit to Alemany/ Bayshore Blvd TO Entrance from Alemany Blvd	39.1	1367
US 101 - NB	Entrance from Alemany Blvd TO Entrance from I-280 (5 Lanes)	35.1	618
US 101 - NB	Entrance from I-280 (5 Lanes) TO Exit to Cesar Chavez/ Potrero Ave (4 lanes)	34.7	1720
US 101 - NB	Exit to Cesar Chavez/ Potrero Ave (4 lanes) TO Entrance from Cesar Chavez/ Potrero Ave	34.1	3205
US 101 - NB	Entrance from Cesar Chavez/ Potrero Ave TO Exit to Vermont Street	18.6	3872
US 101 - NB	Exit to Vermont Street TO I-80 Exit 2 Lanes	13.7	1162
US 101 - NB	I-80 Exit 2 Lanes TO Exit 433C to Ninth St/ Civic Center	35.5	1643
US 101 - NB	Exit 433C to Ninth St/ Civic Center TO Left Entrance from I-80 (3 Lane)	33.7	1059
US 101 - NB	Left Entrance from I-80 (3 Lane) TO Exit 434A to Duboce Ave/ G G Br Mission St (2 Lanes)	29.1	1688
US 101 - NB	Exit 434A to Duboce Ave/ G G Br Mission St (2 Lanes) TO MARKET ST	13.1	2291
US 101 - SB	MARKET ST TO Entrance from Duboce Ave (3 Lanes)	38.1	2152
US 101 - SB	Entrance from Duboce Ave (3 Lanes) TO Exit to San Jose/ South 101 (2 Lanes)	20.7	2302
US 101 - SB	Exit to San Jose/ South 101 (2 Lanes) TO Left Entrance from I-80 (4 Lane)	14.9	1549

Route Name	Segment	Average Speed (mph)	Length (feet)
US 101 - SB	Left Entrance from I-80 (4 Lane) TO Exit to C Chavez East/Bayshore Blvd-C Chavez West/Potrero Ave	42.0	5792
US 101 - SB	Exit to C Chavez East/Bayshore Blvd-C Chavez West/Potrero Ave TO Entrance from C Chavez/Potrero Ave (5 Lanes)	45.9	1682
US 101 - SB	Entrance from C Chavez/Potrero Ave (5 Lanes) TO Exit to Daly City/ South 280 (3 Lanes)	45.0	2374
US 101 - SB	Exit to Daly City/ South 280 (3 Lanes) TO Entrance from Alemany Blvd (4 Lanes)	51.0	2328
US 101 - SB	Entrance from Alemany Blvd (4 Lanes) TO Exit to Silver Ave (3 Lanes)	56.3	940
US 101 - SB	Exit to Silver Ave (3 Lanes) TO Entrance from Silman St	55.6	864
US 101 - SB	Entrance from Silman St TO Left Entrance from I-280 (5 Lanes)	58.4	1251
US 101 - SB	Left Entrance from I-280 (5 Lanes) TO Exit to Mansell St	60.2	1531
US 101 - SB	Exit to Mansell St TO Exit to Bayshore Blvd	53.5	1212
US 101 - SB	Exit to Bayshore Blvd TO 4 Lanes	52.5	1029
US 101 - SB	4 Lanes TO Entrance from 3rd St/Bayshore Blvd (5 Lanes)	52.1	622
US 101 - SB	Entrance from 3rd St/Bayshore Blvd (5 Lanes) TO 4 Lanes	56.0	1042
US 101 - SB	4 Lanes TO Exit 429A to Tunnel Ave/Candlesick Park	57.8	1417
US 101 - SB	Exit 429A to Tunnel Ave/Candlesick Park TO County Line 4 Lane	56.5	518

Table A6 - Average Speed and LOS for all Arterial HCM 2000 Segments

Route Name	Start Intersection	End Intersection	Length (mi)	HCM 2000 Class	AM Avg. Speed (mph)	AM LOS HCM 2000	PM Avg. Speed (mph)	PM LOS HCM 2000
1st St - SE	Greenwich St	Washington St	0.51	4	19.6	B	15.6	C
1st St - SE	Washington St	Market St	0.35	4	12.1	D	8.7	E
1st St - SE	Market St	Harrison St	0.48	4	14.2	C	13.1	C
2nd St - NW	King St	Brannan	0.19	4	11.7	D	13.3	C
2nd St - NW	Brannan	Market St	0.72	4	12.2	D	10.4	D
2nd St - SE	Market St	Brannan	0.72	4	16.3	C	10.6	D
2nd St - SE	Brannan	King St	0.19	4	13.3	C	8.7	E
3rd St - NB	Bay Shore Blvd	Jamestown Ave	0.36	4	25.9	A	26.0	A
3rd St - NB	Jamestown Ave	Evans Ave	1.62	4	24.6	B	22.1	B
3rd St - NB	Evans Ave	Terry A Francois Blvd	2.33	3	28.4	B	30.1	A
3rd St - NB	Terry A Francois Blvd	Berry St	0.11	3	21.3	C	21.3	C
3rd St - NB	Berry St	Market St	0.97	4	19.9	B	15.7	C
3rd St - SB	Terry A Francois Blvd	Evans Ave	2.33	3	28.6	B	27.8	B
3rd St - SB	Evans Ave	Jamestown Ave	1.62	4	23.2	B	22.3	B
3rd St - SB	Jamestown Ave	Bayshore	0.46	4	33.1	A	34.5	A
4th St / Stockton - SB	O'Farrell	Harrison	0.56	4	13.4	C	8.5	E
4th St / Stockton - SB	Harrison	Channel	0.62	4	13.8	C	14.3	C
5th St - NW	Townsend St	Brannan	0.12	4	15.5	C	15.4	C
5th St - NW	Brannan	Market St	0.72	4	14.7	C	15.6	C
5th St - SE	Market St	Brannan	0.72	4	19.3	B	13.2	C
5th St - SE	Brannan	Townsend St	0.12	4	19.0	C	15.5	C
6th St - NB	Brannan St	Market St	0.72	4	11.2	D	11.1	D
6th St - SB	Market St	Brannan St	0.72	4	15.1	C	12.3	D
7th St - NB	Brannan St	Market St	0.72	4	18.9	C	16.4	C
8th St - SE	Market St	Bryant St	0.60	3	15.0	D	17.0	D
8th St - SE	Bryant St	Brannan St	0.12	3	18.5	C	12.1	E
9th St - NB	Brannan St	Market St	0.72	4	11.4	D	14.6	C
10th St - SE	Market St	Brannan St	0.73	3	21.9	C	16.3	D
16th St - EB	Market St	Mission St	0.74	4	12.1	D	10.7	D
16th St - EB	Mission St	Potrero Ave	0.67	4	14.1	C	12.8	D
16th St - EB	Potrero Ave	03rd St	1.01	4	16.9	C	14.8	C
16th St - WB	03rd St	Potrero Ave	1.01	4	21.6	B	13.7	C
16th St - WB	Potrero Ave	Mission St	0.67	4	13.5	C	15.2	C
16th St - WB	Mission St	Market St	0.74	4	13.4	C	12.3	D
19th Ave/Park Presidio - NB	Junipero Serra Blvd	Sloat Blvd	1.25	3	18.2	C	12.1	E
19th Ave/Park Presidio - NB	Sloat Blvd	Lincoln Way	2.13	3	13.8	E	23.6	C
19th Ave/Park Presidio - NB	Lincoln Way	Fulton	0.93	2	20.0	D	32.5	B
19th Ave/Park Presidio - NB	Fulton	Lake	0.91	3	19.8	C	25.3	B
19th Ave/Park Presidio - NB	Lake	Us 101	1.21	1	45.3	A	46.0	A
19th Ave/Park Presidio - SB	Us 101	Lake	1.32	1	40.7	B	35.2	B
19th Ave/Park Presidio - SB	Lake	Fulton	0.91	3	24.0	B	21.7	C
19th Ave/Park Presidio - SB	Fulton	Lincoln Way	0.93	2	29.0	B	18.2	D
19th Ave/Park Presidio - SB	Lincoln Way	Sloat Blvd	2.13	3	19.2	C	23.0	C
19th Ave/Park Presidio - SB	Sloat Blvd	Junipero Serra Blvd	1.25	3	21.6	C	13.5	E
Alemany - EB	County Line	Lyell St	3.01	2	28.3	B	22.4	C
Alemany - EB	Lyell St	Bay Shore Blvd	1.59	2	26.1	C	29.9	B
Alemany - WB	Bay Shore Blvd	Lyell St	1.51	2	30.7	B	31.4	B
Alemany - WB	Lyell St	County Line	3.03	2	25.3	C	22.2	C
Bay - EB	Van Ness Ave	The Embarcadero	1.08	4	18.9	C	16.5	C
Bay - WB	The Embarcadero	Van Ness Ave	1.08	4	19.3	B	16.2	C
Bayshore - NB	Geneva	County Line	0.27	3	35.4	A	29.7	B
Bayshore - NB	County Line	Industrial St	2.26	3	17.4	D	21.5	C
Bayshore - NB	Industrial St	Cesar Chavez	0.83	3	17.5	D	14.4	D
Bayshore - SB	Cesar Chavez	Industrial St	0.83	3	25.4	B	22.3	C
Bayshore - SB	Industrial St	County Line	2.26	3	27.8	B	26.3	B
Bayshore - SB	County Line	Geneva	0.27	3	15.3	D	12.6	E
Beale / Davis - SB	Clay St	Mission St	0.33	4	12.8	D	11.2	D
Brannan - EB	10th St	06th St	0.54	4	13.8	C	13.6	C
Brannan - EB	06th St	03rd St	0.52	4	15.8	C	10.3	D
Brannan - EB	03rd St	The Embarcadero	0.47	4	19.2	B	14.7	C
Brannan - WB	The Embarcadero	03rd St	0.47	4	19.9	B	15.9	C
Brannan - WB	03rd St	06th St	0.52	4	17.0	C	14.0	C
Brannan - WB	06th St	10th St	0.54	4	16.9	C	9.8	D
Broadway - EB	Gough St	Larkin St	0.36	4	15.1	C	10.5	D
Broadway - EB	Larkin St	Powell St	0.55	1	32.8	C	36.1	B
Broadway - EB	Powell St	Montgomery St	0.35	4	20.1	B	13.3	C
Broadway - EB	Montgomery St	The Embarcadero	0.35	4	13.9	C	14.7	C

Route Name	Start Intersection	End Intersection	Length (mi)	HCM 2000 Class	AM Avg. Speed (mph)	AM LOS HCM 2000	PM Avg. Speed (mph)	PM LOS HCM 2000
Broadway - WB	The Embarcadero	Montgomery St	0.35	4	19.9	B	14.9	C
Broadway - WB	Montgomery St	Powell St	0.35	4	13.3	C	7.7	E
Broadway - WB	Powell St	Larkin St	0.55	1	32.9	C	32.3	C
Broadway - WB	Larkin St	Gough St	0.36	4	19.5	B	11.3	D
Brotherhood - EB	Junipero Serra	Alemany Blvd	0.44	3	25.8	B	26.6	B
Brotherhood - WB	Alemany Blvd	Junipero Serra	0.47	3	29.7	B	33.4	A
Bryant - EB	Division St	4th St	0.99	3	13.1	E	12.7	E
Bryant - EB	4th St	02nd St	0.34	3	24.5	B	19.1	C
Bryant - EB	02nd St	The Embarcadero	0.43	4	19.2	B	13.7	C
Bush - EB	Masonic Ave	Gough St	1.24	3	18.0	C	21.2	C
Bush - EB	Gough St	Market St	1.46	3	10.9	E	14.3	D
Castro / Divisadero - NB	18th St	Market St	0.12	4	9.1	D	9.3	D
Castro / Divisadero - NB	Market St	14th St	0.32	4	14.8	C	15.7	C
Castro / Divisadero - NB	14th St	Geary Blvd	1.13	4	15.0	C	12.3	D
Castro / Divisadero - NB	Geary Blvd	Pine St	0.27	4	11.1	D	10.7	D
Castro / Divisadero - NB	Pine St	Clay St	0.19	4	19.4	B	18.4	C
Castro / Divisadero - NB	Clay St	Marina Blvd	1.10	4	13.0	C	12.8	D
Castro / Divisadero - SB	Marina Blvd	Clay St	1.10	4	13.2	C	12.4	D
Castro / Divisadero - SB	Clay St	Pine St	0.19	4	21.2	B	16.5	C
Castro / Divisadero - SB	Pine St	Geary Blvd	0.27	4	14.5	C	13.5	C
Castro / Divisadero - SB	Geary Blvd	14th St	1.13	4	16.6	C	11.1	D
Castro / Divisadero - SB	14th St	Market St	0.32	4	9.9	D	15.2	C
Castro / Divisadero - SB	Market St	18th St	0.12	4	11.8	D	14.8	C
Cesar Chavez - EB	Guerrero St	South Van Ness Ave	0.36	4	20.3	B	13.5	C
Cesar Chavez - EB	South Van Ness Ave	Evans Ave	1.03	4	18.6	C	22.1	B
Cesar Chavez - EB	Evans Ave	Pennsylvania Ave	0.27	4	21.3	B	30.8	A
Cesar Chavez - EB	Pennsylvania Ave	03rd St	0.26	4	17.5	C	20.5	B
Cesar Chavez - WB	03rd St	Pennsylvania Ave	0.26	4	13.6	C	16.3	C
Cesar Chavez - WB	Pennsylvania Ave	Evans Ave	0.27	4	22.2	B	25.7	A
Cesar Chavez - WB	Evans Ave	South Van Ness Ave	1.03	4	21.2	B	22.7	B
Cesar Chavez - WB	South Van Ness Ave	Guerrero St	0.36	4	10.9	D	13.7	C
Clay - EB	Jones St	Kearny St	0.54	4	11.8	D	8.0	E
Clay - EB	Kearny St	Davis St	0.38	4	19.1	B	11.6	D
Columbus - NW	Montgomery St	Greenwich St	0.67	4	14.9	C	14.1	C
Columbus - NW	Greenwich St	North Point St	0.42	4	10.6	D	9.2	D
Columbus - SE	North Point St	Greenwich St	0.42	4	18.7	C	13.3	C
Columbus - SE	Greenwich St	Montgomery St	0.67	4	11.6	D	7.1	E
Doyle / Lombard / Richardson - SE	Golden Gate Vista Point	Golden Gate Bridge South End	1.56	1	48.7	A	48.6	A
Doyle / Lombard / Richardson - SE	Golden Gate Bridge South End	SF National Cemetery	1.15	1	42.7	A	39.8	B
Doyle / Lombard / Richardson - SE	SF National Cemetery	Francisco	0.95	1	12.5	F	35.8	B
Doyle / Lombard / Richardson - SE	Francisco	Broderick	0.19	3	14.9	D	18.9	C
Doyle / Lombard / Richardson - SE	Broderick	Pierce St	0.28	3	23.3	C	20.4	C
Doyle / Lombard / Richardson - SE	Pierce St	Laguna	0.46	3	25.1	B	21.1	C
Doyle / Lombard / Richardson - SE	Laguna	Van Ness Ave	0.36	3	19.1	C	14.3	D
Doyle / Lombard / Richardson - NW	Van Ness Ave	Laguna	0.36	3	12.1	E	11.7	E
Doyle / Lombard / Richardson - NW	Laguna	Pierce St	0.46	3	22.1	C	17.6	D
Doyle / Lombard / Richardson - NW	Pierce St	Broderick	0.28	3	21.6	C	16.9	D
Doyle / Lombard / Richardson - NW	Broderick	Francisco	0.19	3	20.9	C	22.0	C
Doyle / Lombard / Richardson - NW	Francisco	SF National Cemetery	0.98	1	37.8	B	39.4	B
Doyle / Lombard / Richardson - NW	SF National Cemetery	Golden Gate Bridge South End	1.15	1	44.1	A	41.0	B
Doyle / Lombard / Richardson - NW	Golden Gate Bridge South End	Golden Gate Vista Point	1.56	1	45.3	A	45.7	A
Drumm - NB	Market St	Washington St	0.22	4	16.8	C	16.2	C
Drumm - SB	Washington St	Market St	0.22	4	8.7	E	7.6	E
Duboce / Division - EB	Market St	Mission St	0.35	4	9.7	D	14.8	C
Duboce / Division - EB	Mission St	Brannan	0.66	4	13.8	C	13.3	C
Duboce / Division - WB	Brannan	Mission St	0.66	4	12.8	D	9.6	D
Duboce / Division - WB	Mission St	Market St	0.35	4	14.6	C	10.6	D
Embarcadero - NB	Townsend St	Bay St	2.06	3	20.9	C	21.0	C
Embarcadero - NB	Bay St	North Point St	0.10	4	26.7	A	11.4	D
Embarcadero - SB	North Point St	Bay St	0.10	4	13.7	C	11.6	D
Embarcadero - SB	Bay St	Townsend St	2.06	3	13.2	E	14.2	D
Evans - NW	Jennings St	03rd St	0.59	4	17.7	C	20.3	B
Evans - NW	03rd St	Cesar Chavez St	0.73	4	22.5	B	20.1	B
Evans - SE	Cesar Chavez St	03rd St	0.73	4	20.7	B	21.6	B
Evans - SE	03rd St	Jennings St	0.59	4	24.6	B	27.3	A
Fell - EB	Gough St	10th St	0.29	4	11.4	D	12.6	D
Fell - WB	Franklin St	Gough St	0.09	4	15.1	C	4.3	F
Fell - WB	Gough St	Laguna St	0.18	3	12.9	E	9.0	F
Fell - WB	Laguna St	Stanyan St	1.56	3	26.4	B	23.7	C

Route Name	Start Intersection	End Intersection	Length (mi)	HCM 2000 Class	AM Avg. Speed (mph)	AM LOS HCM 2000	PM Avg. Speed (mph)	PM LOS HCM 2000
Folsom - EB	14th St	11th St	0.25	4	13.3	C	11.9	D
Folsom - EB	11th St	08th St	0.31	3	17.2	D	16.9	D
Folsom - EB	08th St	04th St	0.69	3	14.9	D	17.2	D
Folsom - EB	04th St	01st St	0.52	3	20.7	C	15.0	D
Folsom - EB	01st St	The Embarcadero	0.34	3	13.2	E	12.1	E
Franklin - NB	Market St	Pine St	1.06	4	14.9	C	15.6	C
Franklin - NB	Pine St	Lombard St	0.83	4	20.5	B	23.8	B
Fremont - NB	Harrison St	Market St	0.48	4	12.9	D	10.1	D
Fulton - EB	La Playa St	Park Presidio Blvd	2.09	3	27.7	B	26.1	B
Fulton - EB	Park Presidio Blvd	Arguello	0.74	3	20.9	C	24.1	B
Fulton - EB	Arguello	Masonic	0.66	4	16.2	C	13.6	C
Fulton - WB	Masonic	Arguello	0.66	4	20.4	B	20.6	B
Fulton - WB	Arguello	Park Presidio Blvd	0.74	3	22.5	C	15.4	D
Fulton - WB	Park Presidio Blvd	La Playa St	2.09	3	28.5	B	27.3	B
Geary - EB	Great Hwy	25th Ave	1.78	4	25.0	B	21.4	B
Geary - EB	25th Ave	Arguello	1.42	4	23.9	B	22.9	B
Geary - EB	Arguello	Collins	0.48	4	27.7	A	13.2	C
Geary - EB	Collins	Gough St	1.41	3	28.7	B	24.7	B
Geary - WB	Kearny St	Gough St	1.18	4	15.1	C	10.1	D
Geary - WB	Gough St	Collins	1.41	3	19.4	C	25.3	B
Geary - WB	Collins	Arguello	0.48	4	22.7	B	24.1	B
Geary - WB	Arguello	25th Ave	1.42	4	22.1	B	17.0	C
Geary - WB	25th Ave	Great Hwy	1.78	4	23.9	B	22.0	B
Geneva - EB	Ocean Ave	Cayuga Ave	0.56	4	8.8	E	8.4	E
Geneva - EB	Cayuga Ave	Paris St	0.33	4	13.4	C	10.8	D
Geneva - EB	Paris St	Moscow St	0.36	4	15.8	C	13.4	C
Geneva - EB	Moscow St	Santos St	0.83	3	23.8	C	28.5	B
Geneva - EB	Santos St	Bayshore	0.76	3	31.4	A	24.4	B
Geneva - WB	Bayshore	Santos St	0.76	3	25.7	B	22.4	C
Geneva - WB	Santos St	Moscow St	0.83	3	24.5	B	27.7	B
Geneva - WB	Moscow St	Paris St	0.36	4	21.3	B	17.7	C
Geneva - WB	Paris St	Cayuga Ave	0.33	4	8.2	E	10.5	D
Geneva - WB	Cayuga Ave	Ocean Ave	0.56	4	9.6	D	9.2	D
Golden Gate - EB	Masonic Ave	Divisadero St	0.46	4	16.0	C	16.5	C
Golden Gate - EB	Divisadero St	Franklin	0.91	3	17.6	D	20.5	C
Golden Gate - EB	Franklin	Market St	0.65	4	10.7	D	12.8	D
Gough - SB	Pine St	Geary Blvd	0.26	4	20.6	B	24.3	B
Gough - SB	Geary Blvd	Golden Gate Ave	0.33	4	23.2	B	18.3	C
Gough - SB	Golden Gate Ave	Market St	0.53	4	15.7	C	8.7	E
Gough - SB	Market St	Otis St	0.12	4	21.3	B	24.2	B
Guerrero / San Jose - NB	Monterey Blvd	Randall St	0.89	1	27.5	C	30.4	C
Guerrero / San Jose - NB	Randall St	29th St	0.29	2	21.3	D	14.2	E
Guerrero / San Jose - NB	29th St	Cesar Chavez St	0.29	4	24.5	B	20.0	B
Guerrero / San Jose - NB	Cesar Chavez St	21st St	0.61	4	21.0	B	13.5	C
Guerrero / San Jose - NB	21st St	Market St	0.97	4	14.3	C	11.9	D
Guerrero / San Jose - SB	Market St	21st St	0.97	4	15.8	C	12.6	D
Guerrero / San Jose - SB	21st St	Cesar Chavez St	0.61	4	14.1	C	20.6	B
Guerrero / San Jose - SB	Cesar Chavez St	29th St	0.29	4	21.2	B	14.3	C
Guerrero / San Jose - SB	29th St	Randall St	0.29	2	16.6	E	12.1	F
Guerrero / San Jose - SB	Randall St	Monterey Blvd	0.89	1	41.6	B	41.9	B
Harrison - WB	The Embarcadero	02nd St	0.51	3	14.5	D	13.4	E
Harrison - WB	02nd St	04th St	0.34	3	12.8	E	16.3	D
Harrison - WB	04th St	08th St	0.69	3	15.8	D	11.6	E
Harrison - WB	08th St	10th St	0.21	3	12.8	E	13.5	E
Harrison - WB	10th St	Division/13th	0.19	4	13.9	C	13.0	D
Hayes - WB	Market St	Gough	0.39	4	12.4	D	9.6	D
Howard - WB	The Embarcadero	South Van Ness Ave	2.11	3	14.2	D	12.6	E
Junipero Serra - NB	County Line	Brotherhood Way	0.31	1	40.0	B	35.6	B
Junipero Serra - NB	Brotherhood Way	19th Ave	0.31	1	22.1	D	15.2	F
Junipero Serra - NB	19th Ave	Sloat Blvd	1.21	2	24.9	C	22.8	C
Junipero Serra - SB	Sloat Blvd	19th Ave	1.21	2	17.8	D	16.7	E
Junipero Serra - SB	19th Ave	Brotherhood Way	0.31	1	39.6	B	39.2	B
Junipero Serra - SB	Brotherhood Way	County Line	0.31	1	43.5	A	39.6	B
Kearny - NB	Market St	Columbus	0.65	4	13.8	C	13.0	C
King - EB	05th St	02nd St	0.52	4	19.2	B	17.8	C
King - EB	02nd St	Townsend St	0.16	3	22.4	C	19.6	C
King - WB	Townsend St	02nd St	0.16	3	17.7	D	11.5	E
King - WB	02nd St	05th St	0.52	4	24.2	B	18.5	C
Lincoln / Kezar - EB	36th Ave	19th Ave	1.00	3	18.1	C	17.7	D

Route Name	Start Intersection	End Intersection	Length (mi)	HCM 2000 Class	AM Avg. Speed (mph)	AM LOS HCM 2000	PM Avg. Speed (mph)	PM LOS HCM 2000
Lincoln / Kezar - EB	19th Ave	05th Ave	0.83	3	22.4	C	23.1	C
Lincoln / Kezar - EB	05th Ave	Martin Luther King Jr Dr	0.22	3	22.8	C	21.0	C
Lincoln / Kezar - EB	Martin Luther King Jr Dr	Stanyan St	0.48	4	19.4	B	22.0	B
Lincoln / Kezar - WB	Stanyan St	Martin Luther King Jr Dr	0.48	4	28.4	A	29.2	A
Lincoln / Kezar - WB	05th Ave	19th Ave	0.83	3	25.9	B	12.9	E
Lincoln / Kezar - WB	19th Ave	36th Ave	1.00	3	27.9	B	26.0	B
Main - NW	Bryant St	Folsom St	0.24	4	14.5	C	12.8	D
Main - NW	Folsom St	Mission St	0.24	4	11.5	D	16.4	C
Main - NW	Mission St	Market St	0.12	4	10.7	D	19.3	B
Main - SE	Folsom St	Bryant St	0.24	4	12.0	D	16.7	C
Market / Portola - EB	Sloat Blvd	Vicente St	0.43	3	20.3	C	20.2	C
Market / Portola - EB	Vicente St	Burnett Ave	1.34	3	19.5	C	24.0	C
Market / Portola - EB	Burnett Ave	Eureka St	1.43	3	29.8	B	23.4	C
Market / Portola - EB	Eureka St	Castro St	0.19	4	14.5	C	14.9	C
Market / Portola - EB	Castro St	Laguna St	0.79	3	15.7	D	9.9	F
Market / Portola - EB	Laguna St	Franklin St	0.32	3	17.7	D	11.0	E
Market / Portola - EB	Franklin St	South Van Ness Ave	0.11	4	12.5	D	17.2	C
Market / Portola - EB	South Van Ness Ave	Drumm St	1.77	4	12.5	D	9.5	D
Market / Portola - WB	Drumm St	South Van Ness Ave	1.77	4	14.9	C	13.5	C
Market / Portola - WB	South Van Ness Ave	Franklin St	0.11	4	23.9	B	10.1	D
Market / Portola - WB	Franklin St	Laguna St	0.32	3	12.4	E	13.1	E
Market / Portola - WB	Laguna St	Castro St	0.79	3	15.1	D	15.1	D
Market / Portola - WB	Castro St	Eureka St	0.19	4	21.8	B	25.6	A
Market / Portola - WB	Eureka St	Burnett Ave	1.43	3	25.9	B	26.9	B
Market / Portola - WB	Burnett Ave	Vicente St	1.34	3	21.2	C	20.4	C
Market / Portola - WB	Vicente St	Sloat Blvd	0.43	3	10.4	E	8.3	F
Masonic - NB	Page St	Geary Blvd	0.79	3	19.9	C	18.8	C
Masonic - NB	Geary Blvd	Euclid Ave	0.19	3	27.0	B	27.0	B
Masonic - SB	Presidio Ave	Geary Blvd	0.29	3	19.7	C	14.5	D
Masonic - SB	Geary Blvd	Page St	0.79	3	17.2	D	16.9	D
Mission / Otis - NB	Sickles Ave	Ocean Ave	1.45	4	22.2	B	22.4	B
Mission / Otis - NB	Ocean Ave	Cesar Chavez St	1.95	4	19.3	B	17.8	C
Mission / Otis - NB	Cesar Chavez St	14th St	1.39	4	18.5	C	13.9	C
Mission / Otis - NB	14th St	09th St	0.65	4	15.1	C	13.3	C
Mission / Otis - NB	09th St	03rd St	0.98	4	17.1	C	13.7	C
Mission / Otis - NB	03rd St	The Embarcadero	0.74	4	17.3	C	13.0	D
Mission / Otis - SB	The Embarcadero	03rd St	0.74	4	13.8	C	13.9	C
Mission / Otis - SB	03rd St	09th St	0.98	4	15.4	C	15.1	C
Mission / Otis - SB	09th St	14th St	0.68	4	15.8	C	13.4	C
Mission / Otis - SB	14th St	Cesar Chavez St	1.39	4	17.9	C	15.2	C
Mission / Otis - SB	Cesar Chavez St	Ocean Ave	1.95	4	20.1	B	13.8	C
Mission / Otis - SB	Ocean Ave	Sickles Ave	1.45	4	22.3	B	20.3	B
Montgomery - SB	Broadway	Bush St	0.51	4	14.1	C	9.2	D
Montgomery - SB	Bush St	Market St	0.16	4	8.3	E	3.6	F
Montgomery - SB	Market St	Howard St	0.24	4	9.5	D	10.4	D
North Point - EB	Van Ness Ave	Columbus	0.38	4	17.5	C	15.5	C
North Point - EB	Columbus	The Embarcadero	0.61	4	18.7	C	15.9	C
North Point - WB	The Embarcadero	Columbus	0.61	4	15.7	C	15.8	C
North Point - WB	Columbus	Van Ness Ave	0.38	4	16.2	C	16.4	C
Oak - EB	Stanyan St	Lyon St	0.64	3	24.4	B	26.0	B
Oak - EB	Lyon St	Divisadero St	0.27	3	21.9	C	15.4	D
Oak - EB	Divisadero St	Fillmore St	0.37	3	19.7	C	25.3	B
Oak - EB	Fillmore St	Laguna St	0.27	3	17.0	D	22.3	C
Oak - EB	Laguna St	Franklin St	0.27	3	15.1	D	11.8	E
Ocean - EB	19th Ave	Miramar	1.11	4	18.7	C	12.9	D
Ocean - EB	Miramar	Howth	0.48	4	11.1	D	14.8	C
Ocean - WB	Howth	Miramar	0.48	4	14.8	C	13.0	D
Ocean - WB	Miramar	19th Ave	1.11	4	11.1	D	12.3	D
Octavia - NB	Octavia St	Fell St	0.28	4	11.0	D	16.1	C
Octavia - SB	Fell St	Octavia St	0.28	4	10.4	D	11.6	D
O'Farrell - EB	Gough St	Mason	0.85	4	13.4	C	11.2	D
O'Farrell - EB	Mason	Market St	0.28	4	11.6	D	9.0	E
Pine - WB	Market St	Kearny St	0.38	3	8.8	F	8.9	F
Pine - WB	Kearny St	Leavenworth St	0.63	3	18.2	C	16.8	D
Pine - WB	Leavenworth St	Franklin St	0.46	3	17.7	D	14.3	D
Pine - WB	Franklin St	Presidio Ave	1.27	3	21.3	C	22.4	C
Potrero - NB	Cesar Chavez St	21st St	0.62	4	21.2	B	18.8	C
Potrero - NB	21st St	Division St	0.80	4	22.5	B	15.6	C
Potrero - SB	Division St	21st St	0.80	4	23.9	B	25.2	A

Route Name	Start Intersection	End Intersection	Length (mi)	HCM 2000 Class	AM Avg. Speed (mph)	AM LOS HCM 2000	PM Avg. Speed (mph)	PM LOS HCM 2000
Potrero - SB	21st St	Cesar Chavez St	0.62	4	22.0	B	19.4	B
Skyline - NB	County Line	Sloat Blvd	1.94	1	46.7	A	46.8	A
Skyline - SB	Sloat Blvd	County Line	1.94	1	42.1	A	38.1	B
Sloat - EB	Skyline Blvd	Junipero Serra Blvd	1.37	2	22.6	C	20.7	D
Sloat - WB	Junipero Serra Blvd	Skyline Blvd	1.37	2	26.7	C	26.9	C
Stanyan - NB	Fell St	Fulton St	0.23	4	10.2	D	9.5	D
Stanyan - NB	Fulton St	Turk Blvd	0.20	4	15.6	C	12.6	D
Stanyan - SB	Turk Blvd	Fulton St	0.20	4	11.1	D	9.2	D
Stanyan - SB	Fulton St	Fell St	0.23	4	7.3	E	6.8	F
Sutter - EB	Divisadero St	Gough St	0.82	4	16.2	C	15.5	C
Sutter - WB	Market St	Mason St	0.56	4	17.5	C	11.3	D
Sutter - WB	Mason St	Gough St	0.82	4	8.9	E	14.6	C
Sutter - WB	Gough St	Divisadero St	0.82	4	15.0	C	14.9	C
Townsend - EB	08th St	07th St	0.17	4	15.2	C	8.4	E
Townsend - EB	07th St	02nd St	0.86	4	19.6	B	11.9	D
Townsend - EB	02nd St	The Embarcadero	0.15	4	10.7	D	7.2	E
Townsend - WB	The Embarcadero	02nd St	0.15	4	14.4	C	16.7	C
Townsend - WB	02nd St	07th St	0.86	4	18.4	C	12.8	D
Townsend - WB	07th St	08th St	0.17	4	15.2	C	12.6	D
Turk - EB	Stanyan St	Divisadero St	0.91	4	18.0	C	17.2	C
Turk - WB	Market	Hyde	0.38	4	14.7	C	11.1	D
Turk - WB	Hyde	Van Ness Ave	0.27	4	18.1	C	9.2	D
Turk - WB	Van Ness Ave	Gough St	0.18	3	8.8	F	9.5	F
Turk - WB	Gough St	Divisadero St	0.82	3	19.8	C	19.4	C
Turk - WB	Divisadero St	Stanyan St	0.91	4	21.3	B	25.6	A
Van Ness / South Van Ness - NB	Cesar Chavez St	Hwy 101	1.49	4	20.1	B	14.7	C
Van Ness / South Van Ness - NB	Hwy 101	Golden Gate Ave	0.79	4	15.0	C	14.7	C
Van Ness / South Van Ness - NB	Golden Gate Ave	Washington St	0.84	4	15.2	C	17.4	C
Van Ness / South Van Ness - NB	Washington St	Lombard St	0.58	4	13.6	C	26.4	A
Van Ness / South Van Ness - NB	Lombard St	North Point St	0.26	4	8.9	E	11.5	D
Van Ness / South Van Ness - SB	North Point St	Lombard St	0.26	4	8.4	E	7.9	E
Van Ness / South Van Ness - SB	Lombard St	Washington St	0.58	4	16.4	C	12.4	D
Van Ness / South Van Ness - SB	Washington St	Golden Gate Ave	0.84	4	21.2	B	12.2	D
Van Ness / South Van Ness - SB	Golden Gate Ave	Hwy 101	0.79	4	15.7	C	12.3	D
Van Ness / South Van Ness - SB	Hwy 101	Cesar Chavez St	1.49	4	17.9	C	17.1	C
Washington - WB	Drumm St	Kearny St	0.44	4	14.6	C	11.3	D
Washington - WB	Kearny St	Powell St	0.26	4	10.3	D	4.6	F
West Portal - NB	Sloat Blvd	Ulloa St	0.54	4	15.5	C	12.6	D
West Portal - SB	Ulloa St	Sloat Blvd	0.54	4	17.5	C	15.2	C
Sacramento - WB	Drumm	Kearny St	0.44	4	10.3	D	11.9	D
Sacramento - WB	Kearny St	Jones St	0.54	4	12.0	D	10.8	D
Sansome - NB	Sutter	Washington St	0.38	4	8.2	E	10.0	D
Sansome - NB	Washington St	Chestnut St	0.64	4	17.6	C	18.0	C
Stockton - NB	Sutter St	Columbus Ave	0.70	4	9.0	E	10.6	D
Stockton - SB	Columbus Ave	O'Farrell St	0.90	4	11.3	D	8.3	E

TRANSPORTATION IMPACT ANALYSIS GUIDELINES
FOR ENVIRONMENTAL REVIEW

October 2002

The Planning Department
City and County of San Francisco

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I. Introduction

These guidelines replace the Transportation Impact Analysis Guidelines which were originally prepared in 1991 and updated on an interim basis in 2000 to aid consultants in preparing transportation impact analysis for environmental evaluation in San Francisco, including both Environmental Impact Reports (EIRs) and Negative Declarations. In those cases where a transportation study is required for environmental analysis, it is normally necessary that a separate transportation report be prepared, based on these guidelines, as background for the Negative Declaration or EIR.

The Planning Department will make a determination whether a transportation study and report are necessary. In most cases, the department evaluates conditions in the PM peak hour of the PM peak period (4:00 to 6:00PM). This period was chosen because it is the time period when the maximum use of much the transportation system occurs. It is also the time when most of the transportation system capacity and service is at a maximum. Generally, a transportation report may be required for an environmental analysis if one or more of the following conditions apply. Not all conditions apply to all projects.

1) The project would potentially add at least 50 PM Peak Hour person trips;

2) The project would potentially increase existing traffic volumes on streets in its vicinity by at least 5 percent;

3) The project would potentially impact nearby intersections and/or arterials which are believed to presently operate at LOS "D" or worse;

4) The project would provide parking which would appear likely to be deficient relative to both the anticipated project demand and code requirements by at least 20 percent;

5) The project has elements which have potential to adversely impact transit operations or the carrying capacity of nearby transit services;

6) The project has elements which have potential to adversely affect pedestrian or bicycle safety or the adequacy of nearby pedestrian or bicycle facilities;

7) The project would not fully satisfy truck loading demand on-site, when the anticipated number of deliveries and service calls may exceed ten daily.

Transportation reports shall be prepared by qualified consultants, working at the direction of the Planning Department staff. The purpose of the transportation study is to provide the comprehensive information necessary to identify the transportation issues and impacts of a project (including those of importance and significance), and provide potential solutions or mitigations to problems and significant impacts in the context of the overall policies and objectives of the City.

II. Overview of Process and Procedures

These guidelines update and revise the *Guidelines for Environmental Review: Transportation Impacts* (July, 1991) *and Interim Transportation Impact Analysis Guidelines for Environmental Review* (January 2000), and supersede all previously published transportation analysis guidelines. This document reflects the most current data available regarding San Francisco travel characteristics. A major portion of the analysis guidance is based on the findings of the *Citywide Travel Behavior Survey - Employees and Employers* (May, 1993), the *Citywide Travel Behavior Survey - Visitor Travel Behavior* (August, 1993), and updates or enhancements to those reports. In addition, the *Guidelines* employ certain findings and assumptions from major San Francisco study reports, including those for: Mission Bay (Case No. 1996.771E; EIR certified September 17, 1998); Transbay Terminal/Caltrain Extension (Case No. 2000.048E); and Van Ness Avenue (Case No. 1987.586; EIR certified on December 17, 1987). The data in the Citywide Travel Behavior Study (CTBS) was subsequently confirmed by the *1995 Citywide Travel Behavior Study* that was sponsored by the San Francisco County Transportation Authority.

It should be noted that these are only guidelines. It must not be assumed that the information provided herein constitutes a complete scope of work for any transportation analysis. The *Guidelines* provide a broad overview, while individual transportation study scopes of work are required to provide a level of detail tailored to fit the size and complexity of transportation issues associated with particular projects. Moreover, once a scope of work is prepared and approved under the direction of the Planning Department, the specific direction contained within that scope will provide a more precise focus than that which appears in these *Guidelines*.

For clarification, the following represents an overview of the process involved in the preparation of a transportation impact analysis for environmental review purposes. No estimate or assumption is made or inferred regarding time lines for the various steps.

(1) The project sponsor or a designated representative files an Environmental Review (EE) application with the Planning Department following the instructions contained in that application form (available at the Department and on-line). When the application is accepted by the Department, a case number is assigned and a staff person from the Department's Major Environmental Analysis section is designated as the coordinator for environmental review. This individual will likely be different than the staff person handling the Transportation Impact Report. All Department staff assigned to the project will coordinate activities throughout the review process. Filing for environmental review generally (but not always) precedes starting the review of transportation issues.

2) Determination concerning whether a transportation impact report is required is based on the scale, location, and/or potential level of activity of the proposed

project. To make this determination and/or to prepare a transportation work scope, if one is required, the project sponsor should provide the following information to the assigned environmental coordinator or to a senior transportation planner in the Major Environmental Analysis section:

- existing and proposed specific gross square footage of space for each commercial use such as office, retail, restaurant, hotel (including number of rooms), industrial, etc;

- existing and proposed number and type of housing units (including live/work units) including the number of single and multiple bedroom units, and senior, affordable, rental, or owner-occupied designations;

- existing and proposed amount of off-street parking and loading space, including specification of supply relative to Planning Code requirements;

- existing and proposed location of driveways and site plan showing access to off-street parking and/or loading;

- location of bus stops, nearby curbside loading zones and designations for all curbside space along the frontage of the property.

Upon receipt of the above material, Department staff will determine whether a transportation study is required. This decision is generally based on factors such as those articulated in the introduction to these *Guidelines* and staff knowledge of transportation issues in the site vicinity.

(3) If it is determined that preparation of a transportation report is warranted, a transportation scoping meeting will be scheduled with the transportation planner, the environmental staff coordinator (other Department staff may also be involved), the project sponsor, and the transportation consultant and environmental consultant hired by the project sponsor. The scoping meeting will determine the specific issues to be examined in the transportation impact report and determine other parameters as defined in these guidelines.

All fees are to be paid by the project sponsor to the Planning Department for the review of the Transportation Impact Report prior to scheduling a transportation scoping meeting for the project. The amount of these fees can be obtained from Department staff. (See Appendix A, Figure A-1 for details on this process.)

(4) The transportation consultant will then prepare a draft transportation scope of work for Departmental review and revision(s), if necessary, for final approval. No work should be initiated by the transportation consultant until a written scope of work has been approved by the Department, including the

assigned transportation and environmental planners, by transmittal to the consultant of the Planning Department approval form. (See Figure 2 in Appendix A)

The Department will make every reasonable effort to anticipate and include in the scope of work typical concerns of other City agencies. However, it is not possible for the Department to anticipate all issues and concerns which later may be raised by other City Departments such as the Municipal Railway (MUNI) or the Department of Parking and Traffic (DPT). Ultimately, the scope of work may need to be revised after its approval so that it adequately addresses relevant issues raised by all other City agencies and other relevant issues that may arise in the course of preparing the study report. Any contractual arrangement between the project sponsor and its consultant preparing the transportation report should reflect the flexibility to address the above issues as they are raised.

(5) Based on the approved scope of work, the transportation consultant conducts the required analysis independent of the project sponsor, and submits five copies of all drafts directly to the environmental project coordinator for review, comment, and approval. Three copies will be used within the Planning Department, one copy will be provided to MUNI, and another to the Department of Parking and Traffic. It is recognized that more than one submittal of preliminary transportation findings will normally be necessary in order to achieve a satisfactory final transportation report. Under normal circumstances, two drafts of a transportation study will be required before it is accepted as final. The Planning Department staff will provide consultants with a coordinated set of comments from all City reviewers on each draft. Consultants should revise draft reports to reflect City comments as directed, and should provide a detailed written explanation if any comments are not reflected in subsequent submittals.

(6) Pertinent information from the final transportation report will be summarized for inclusion in an Environmental Impact Report (EIR) or Negative Declaration. The specific information to be extracted and summarized for inclusion in an EIR or Negative Declaration, will be determined on a case-by-case basis under the direction and guidance from the environmental staff person assigned to the project.

The selection of the transportation consultant is at the discretion of the project sponsor, contingent upon submittal of an acceptable work scope to Department staff. The consultant's work effort is, however, to be entirely under the direction of the assigned Department staff. All submittals by the consultant are to be made directly to the assigned coordinator of the overall environmental review in the Department's Major Environmental Analysis section. Any comments by the project sponsor or its representatives must be directed to Department staff rather than to the environmental and/or transportation consultants to ensure the objectivity of the analysis. The role of

the project sponsor and its representatives during the preparation of the transportation report should be limited to provision of details concerning the project, response to recommended changes affecting project circulation, and indication of support or lack of support for recommended mitigation measures and other transportation improvements identified in the impact report.

Transportation analysis can be a complex and lengthy process. The Department strongly advises that it begin as early as possible, to avoid unnecessary delays. The Department also recommends that the consultant follow the explicit parameters found in the scope of work.

III. Study Report Preparation Guidelines

Each transportation impact report is to follow a consistent format, as presented here, and include all of the elements and information presented in these *Guidelines*. The appropriate level of detail needed for each project's transportation impact analysis with respect to particular issues will be specified in the transportation work scope developed at the scoping meeting. When these *Guidelines* are referenced in a transportation study report, we suggest using either the full title and date, or the "2002 Transportation Guidelines" so the version is properly identified.

1. Project Description

All analyses must include a detailed project description. This information is to be presented as the first section of the document. The project description typically includes the following information:

- Case file number for the project, as assigned by the Department.
- Location of the project site, address, Assessor's Block and Lot number(s), cross streets, and Superdistrict or C-3 District (Refer to Appendix A for maps showing the Superdistricts and the C-3 District).
- Figure showing the site plan.
- Existing and proposed total gross square footage for each land use type and the number of units for residential, hotel/motel, and live/work projects including the net changes for each type of use.
- Existing and proposed estimated number of employees and/or dwelling units by type of use, including net changes, if available.
- Existing and proposed number of off-street parking spaces and whether any on-street or off-street parking spaces will be removed as a result of

the project.

- Existing and proposed number of off-street and on-street freight loading spaces as well as any proposed changes affecting on-street loading spaces.

- Description and plans for use (if any) of public rights-of-way by present or proposed uses, either above or below grade (e.g., air rights, surface or subsurface revocable permits, etc.) including sidewalk width changes, changes in width or number of traffic lanes, function of lanes in terms of traffic channelization, and/or direction of travel.

- Detailed plans showing vehicular and pedestrian site access, including location of curb cuts for both existing and proposed uses, and internal vehicular circulation, presented in standard architectural or engineering scale.

- Figure identifying parking spaces, the proposed egress and ingress to the parking garage or lot, the circulation pattern within the parking facility and the number and location of parking spaces for the disabled.

- Figure showing the location, dimensions and access to the off-street freight loading spaces as well as the on-site location for trash and garbage storage.

- Identification of all transportation-related approval actions required by any City department including use permits, variances, encroachment permits, and changes in public rights-of-way. Describe the specific action.

- Identification of the location, number and type of bicycle parking spaces provided.

- Information regarding the project site's lot area, existing and proposed zoning, and a figure with the location of the lot on the Assessor's Block.

2. Project Setting

The setting information shall be presented immediately following the Project Description as a discrete chapter or report section. The goal is to provide a brief but complete description of existing transportation infrastructure and conditions in the vicinity of the project. Normally, the described vicinity is a radius between two blocks and 0.25 mile, however, a larger area may be determined in the scoping process.

The specific perimeters of the study area, for both setting and project impact analysis, are to be confirmed as part of the approval for the scope of work. It should be noted that when the boundaries of a study area are determined in a scope of work, the project area should include both sides of the streets designated as the project boundaries unless otherwise specified (e.g., for on-street parking surveys). Sometimes the study area differs for different purposes, e.g., traffic vs parking vs transit.

The Setting section typically includes the following text information but the level of detail to be provided should be according to specific direction in the transportation scoping meeting:

- Street designations and classifications as identified in the Transportation Element of the San Francisco General Plan. These designations can be found on the following maps in the General Plan: Vehicular Street Map; Congestion Management Network; Metropolitan Transportation System; Transit Preferential Streets; Citywide Pedestrian Network; Neighborhood Pedestrian Streets; and Bicycle Route Map.

- A description of the study area streets, including the number and width of lanes, direction of flow, and the presence of peak period tow-away lanes affecting roadway travel capacity, the presence of bicycle lanes, and any other significant street information.

- Access to regional highways and freeways, including location of, distance from, and routings to and from on-ramps and off-ramps.

- Description of public transit routes operating on streets within the study area, including: route character; service areas; hours of service; peak period headways; and type of vehicle (diesel coach, trolleybus, streetcar, light rail vehicle; etc.). For projects subject to Section 321 of the Planning Code (Office Development: Annual Limit), the report must specifically identify, by operator, all lines within 1/4, 1/3, and 1/2 mile radii of the site.

- Level of Service (LOS) analysis for existing conditions for the specific intersections identified in the scope of work for the PM peak hour or other hours if specified in the scope of work. Unless otherwise specified, the operations method of the 2000 Highway Capacity Manual (HCM) shall be used in the analysis of intersections. The date on which the data was collected for the analysis must be specified in the text and on the calculation sheets. The methodology for the calculation of the LOS for various types of intersection controls is provided in the Appendix B.

- Actual and effective widths of sidewalks immediately adjacent to the project site. For areas where the sidewalks are absent or known to be deficient, the official

sidewalk width should be included. (Information on the official or legislated widths is available from Department of Public Works, Maps and Surveys.) For the streets immediately adjacent to the project site, this may include the location of fire hydrants, light poles, MUNI poles, traffic control devices, and other significant physical items between the curb and property line.

- Characteristics of parking within the study area (typically within a two-block radius of the site, but as determined in the approved scope of work), including the number of on-street parking spaces, control of on-street parking (e.g., meters, signed for time limit, neighborhood residential permit parking, etc.) number of off-street parking facilities and spaces (public and private), and whether off-street parking is provided as independently-accessible stalls or tandem/stacked valet operation. On-street and off-street parking occupancy information should be provided for the time period(s) specified in the scope of work. The data collection periods for peak parking occupancies typically are mid-afternoon for commercial uses and early evening for residential uses. The effects of any special circumstances affecting the availability of parking in the vicinity of the proposed project (e.g., periods of peaking in parking demand, and large generators of localized parking demand, such as a major institution) should be identified.

The Setting section typically also provides graphics, including:

- Street maps of the study area showing: street names, number and direction of lanes; transit service by line number and with stop locations identified; the location and amount of parking facilities, and the location and class of bicycle lanes. For projects subject to Section 321 of the Planning Code, the transit map is to show transit lines and stops within 1/4, 1/3 and 1/2 mile radii lines.

- When appropriate, include mapping and supporting tables which show both off-street and on-street parking conditions in study area. For off-street parking inventories, the parking supply should be based on how facilities are actually operated, i.e., the number of spaces should be based on valet parking when this is used and on striped spaces when this would be appropriate. For on-street parking only, inventories should include parking on each side of all the streets within the parking study area. On-street parking inventories should identify spaces subject to Residential Permit Parking (RPP) areas, whether the proposed project would be eligible to participate in the RPP, and what the project's impact on area parking occupancy rates would be.

- All designated bicycle routes in the study area should be illustrated. The existing treatments for bicycles (e.g., Class 2 or Class 3) and any proposed treatments for bicycle routes as well as general characterization of the extent of bicycle usage should be described.

3. Travel Demand Analysis

Travel demand analysis shall include textual information, supported by tables or figures detailing the project's trip generation, trip distribution, trip assignment and modal split characteristics.

Net new travel demand generated by the project is to be estimated, based on the difference between existing and proposed land uses. Person trip generation rates per unit of square footage for each land use, or other unit as shown in Appendix C, are to be used for estimating levels of activity for the proposed project. The rates were developed by an examination of various studies and sources, including the Citywide Travel Behavior Study, the ITE Trip Generation manual and special purpose studies, many of which are specific to San Francisco. No single source or analysis provides, by itself, an adequate means to define trip generation for all the situations encountered in San Francisco. Trip generation rates may sometimes need to be determined by other means, such as surveys of similar land uses, if so specified in the scope of work.

To "net-out" existing land uses that will be replaced, the existing levels of trip activity should, in most cases, be based on actual observations rather than on estimates based on rates in these *Guidelines* or other sources.

Each analysis should apply the trip generation rates from the *Guidelines* individually to the proposed uses, compare the proposed trips to existing levels of trip activity, and show the differences ("net new") by land use and in aggregate.

The Travel Demand Analysis is to include the following, unless otherwise directed in the work scope (Note that different or additional analysis periods may be defined in the scope of work process.) :

- Trip Generation Information: Project trip generation information (total person trips) by land use for existing and proposed uses. The total unadjusted daily and P.M. peak hour trips by mode can be calculated. The number of daily and peak hour vehicles (autos) generated by the project should also be calculated by using the auto occupancy rates noted in the tables in Appendix E.

- Work and Non-Work Trip Generation Information: Since work and non-work trips have different characteristics in terms of distribution and the mode of travel, the number of work and non-work (visitor) trips should be calculated separately. Appendix C provides the methodology to compute the work and non-work

(visitor) trips for a specific land use.

- Trip Distribution, Assignment and Modal Split Information: Net new person trips distributed to various directions of travel and assigned to the appropriate modes of travel (auto, transit, walk, and other) should be calculated, presented in tables and a graphic diagram (for vehicle and transit trips), and discussed in the text. Modal assignments should also be calculated for daily and the P.M. Peak Hour.

The weekday P.M. Peak Period is generally 4:00-6:00, and traffic counts shall generally be conducted during this period, unless otherwise specified in the scope of work. The peak hour must be determined from the counts (normally recorded in 15 minute intervals) for the entire peak period, and should represent the single hour within the peak period with the highest counts. The Planning Department may also request data for other periods to reflect the peak period of trip generation by the land use.

4. Transportation Impact Analysis

Analysis for all projects is to be conducted for project-specific impacts, and for cumulative impacts.

A. Traffic Impacts

Project-Specific Impacts. The project generated traffic impacts must be calculated for intersections identified in the scope of work using the methodologies explained in Appendix B. LOS levels for the specified intersections must be discussed in the text and presented in a table showing Existing, Existing plus Project and Cumulative intersection levels of service. The traffic attributable to the project is normally assumed to be included in the cumulative forecast, and should not be added to the cumulative totals. The percent contribution of the project should be shown both as a percentage of the total cumulative traffic and as a percentage of the growth in traffic (cumulative less existing) for each intersection.

The specific intersections to be analyzed will be identified in the approved scope of work for the transportation analysis, and based on an initial assessment of areas that could be impacted by the project. When a wide area may be impacted, the intersections selected for analysis may only be those that would experience the greatest change or have the greatest likelihood of degrading to an unacceptable LOS with the addition of the project traffic.

Cumulative (Horizon Year) Impacts. The transportation impact analysis should present and discuss the cumulative traffic impacts. The horizon year (normally 10 to 20 years in the future, depending on the location) should be used for the cumulative analysis year unless otherwise specified in the scope of work. The analysis is to assume a growth factor of one percent per year for "background" traffic, unless an areawide cumulative

forecast is defined during the scoping process. Traffic generated by the project, and by nearby projects when applicable, are to be expressed as a percentage of this overall growth factor. If the localized share seems to represent an unreasonable share of the anticipated overall horizon year growth, the consultant will need to discuss the issue with Department staff who will determine the appropriate approach to determining the cumulative conditions.

Figures should be included for each intersection analyzed which clearly indicate growth for each movement generated by the project and from cumulative conditions compared to existing conditions. For each analysis scenario (i.e., typically, Existing, Existing plus Project, and Cumulative), each of the critical movements at each intersection should be clearly indicated in the intersection calculation sheets and preferably in the figures which show volumes for each movement. The presence or absence of significant traffic impacts shall be determined according to direction from MEA transportation staff.

B. Transit Impacts

The specific methodology for analyzing transit impacts is included in Appendix F. For projects within the greater downtown area (C-3, SOMA and Mission Bay districts), the methodology for the cumulative (horizon year) condition for MUNI and the regional transit operators uses an approach based on a screenline analysis. For projects outside the greater downtown area, the level of analysis will depend on the nature of the project and the transit service within the study area.

Transit trips, as determined by the travel demand analysis outlined in Section 3, need to be assigned to transit routes (aggregated or individual) based on the trip distribution data, and in accordance with the transit analysis methodology outlined in Appendix F. Trips on both MUNI and regional carriers must be accounted for. The normal evaluation requires a determination of the loading at maximum load points in relation to the available capacity for the Existing, Existing plus Project, and possibly a Cumulative condition. The frequency and load standards of the affected transit vehicles needs to be known if not contained within the aggregated data. Similar to traffic impact analyses, the focus is on conditions for the p.m. peak hour. Net new transit trips generated by the project should be cited and also expressed as a percentage of cumulative growth, by operator.

Any transit analysis needs to consider the access to transit service from the project site. Normally, transit riders need to walk to a transit stop or station from the project site. This walk trip can influence the choice of a particular line, or even the mode itself, especially if the walk link is a difficult or unpleasant experience due to inadequate sidewalks, unsafe pedestrian crossings or other related circumstances. The analysis should determine whether sidewalk improvements or other pedestrian-related improvements are necessary in order to provide adequate access to transit service.

Also, any potential transit conflicts or delays resulting from site-related activities need to be examined and described.

C. Parking Impacts

Parking supply, parking demand, and Code-required parking should be clearly distinguished. If there is already existing parking on the site, the amount of net new parking should be noted. The project's parking supply is the amount of on-site parking spaces provided by the project that will be available for use by the project's residents, employees or visitors. Parking demand is the amount of daily parking need generated by the proposed uses. The Code required parking is the number of parking spaces required by Section 151 of the San Francisco Planning Code for the proposed uses.

Project parking demand is to be calculated for long-term demand (employees) and short-term demand (visitors) for commercial projects, and for resident parking demand for residential projects.

In some situations (e.g., when overlapping work shifts of the project or adjacent uses cause an accumulation of parking demand greater than the daily average total), accumulated peak parking demand should also be quantified.

Parking demand for commercial projects should be generally calculated based on the number of auto trips and auto occupancy rates from Appendix E for each superdistrict. Turn-over rates should be taken into consideration in calculating the daily short-term parking demand. Appendix G explains the methodology for parking demand calculations in more detail. In cases where more accurate information about parking demand and employee shift changes are available, this information may be used instead of derived from Appendix E, if incorporated in the scope of work.

Residential parking demand should be calculated based on the information provided in Appendix G of this report.

If a proposed project would displace existing parking, the report should identify:

1) the amount of parking which is required parking for the current uses on-site;

2) the amount of parking which is accessory parking to an off-site use; and

3) the amount of parking which is available to the general public (specifically identify as: short term; long-term; independently accessible; or valet parking.)

Project parking demand (including, if appropriate, demand for parking displaced) should be compared to the amount of parking provided by the project (supply), and the parking required by the Planning Code.

Deficiencies or surpluses in the number of parking spaces relative to demand and/or Code requirements should be quantified. The manner in which any parking deficiency will be addressed, and its impact on the existing on-street and off-street parking supply in the study area, should also be identified.

The impact of any deficiency in parking supply relative to the estimated demand, including current users of public parking to be displaced by the project, should be quantified in terms of the estimated increase in occupancy of available on-street and off-street facilities.

The amount of parking to be provided for bicycles and the disabled should be cited and compared with Code requirements. Any designated on-street parking spaces for the disabled that may be used by those accessing the project should be noted.

Parking access (ingress and egress) should be identified and the dimensions noted. Any impacts or conflicts of parking access with Transit Preferential Streets, other streets identified in the General Plan, streets identified for full or partial priority for pedestrians or bicycles, and any potential conflicts affecting transit, pedestrian, bicycle or vehicular flow should be identified. In cases where there are exceptional peaks in the traffic entering or leaving a garage, a queuing analysis may be necessary.

Whenever on-site parking is proposed, sufficient details should be included to the extent possible in order to assess:

- potential for conflicts between ingress and egress traffic;
- location of control gates, ticket dispensing facilities, and payment/validation facilities;
- adequacy of on-site space to avoid the potential for queueing onto adjacent sidewalks and streets;
- potential for conflicts with pedestrians, transit, bicycles, autos, and access for other projects;
- measures to functionally separate parking spaces for residential and commercial uses;
- quantity, locations, access, safe and secure character, and provisions for associated showers and lockers for all bicycle parking spaces whenever required or provided; and quantity, dimensions and locations for all disabled parking spaces.

Any special circumstances affecting the availability of parking in the vicinity of the proposed project as identified in the Setting Section are to be taken into consideration in the analysis and noted.

D. Pedestrian Impacts

Pedestrian conditions and the project impact should be discussed qualitatively or quantitatively based on the project size and existing circumstances. The Planning Department will determine if a qualitative or quantitative analysis is necessary.

If a quantitative analysis is required, pedestrian trips generated by the proposed project should be estimated for P.M. Peak Hour, plus the peak period of pedestrian activity for the immediate area (often in the midday), and/or the proposed project's peak period of trip generation. Level of Service conditions, when appropriate, for existing and existing plus project scenarios are to be calculated. Pushkarev and Zupan *Pedestrian Level of Service Standards and Methodology for Average Flow Characteristics Related to Flow In Platoons,* or the 2000 Highway Capacity Manual methodology are considered acceptable methodologies for the analysis; appropriate references are to be included. Midblock sidewalk or corner pedestrian Level of Service analyses may, in some situations, be requested in addition to or instead of Level of Service analysis at pedestrian crosswalk (intersection) locations.

Pedestrian safety issues related to the project should be assessed. The study should examine potential conflicts between pedestrian movements at driveways, localized pedestrian hazards and, more generally, between pedestrians and vehicles. Any proposed changes affecting the public rights-of-way such as new or modified sidewalks or streets should be detailed and based on advance consultations with relevant City departments, including the Department of Public Works and the Department of Parking and Traffic.

Pedestrian access to the project by the disabled should be discussed. Points of ingress and egress that are accessible to the disabled should be identified. Also, accessible curb-cuts or ramps, and other on-street aids for the disabled, on the adjacent streets should be noted.

E. Bicycle Impacts

The existence of current or future bicycle facilities in the area should be identified from the San Francisco Bicycle Plan and by consultation with the Department of Parking and Traffic. The analysis should examine possible impacts on bicycle traffic on the streets in the vicinity of the project. This would include potential conflicts between auto, truck and bus traffic serving the project during loading and unloading, and potential conflicts due to turning movements across bicycle lanes or routes. Potential barriers or hazards to safe bicycle operations near the project should also be identified. Other conditions that may have a notable negative or positive impact on use, such as bicycle parking or the provision of shower facilities, should also be stated. Details regarding the location and access to any bicycle facilities included in the project should be described in the textual discussion and clearly shown on the site plan included in the background transportation

report. The information provided needs to be sufficient to ascertain whether the proposed bicuycle facilities would be secure and practical for bicyclists to use.

If sufficient bicycle traffic exists or is anticipated on a study area street, it may be necessary to include a quantitative analysis of the impacts using the methodology in the 2000 Highway Capacity Manual or some similar technique.

F. Freight Loading and Service Impacts

Off-street truck loading requirements should be specified according to the Planning Code. The analysis should include a description of the frequency of the service deliveries and the estimated mix in the types of vehicles that will be utilized in the freight loading activities for the project. If it is expected that the project will attract a high level of courier and other service deliveries, the report should discuss how these will be accommodated. The analysis of the project should compare the amount of loading space provided by the project (supply) with truck loading demand generated by the project and with the off-street freight loading requirements in the Planning Code.

Project truck loading demand and service rate for the peak loading period (which should be specified) and the entire day should be estimated based on proposed uses on the site (using the data shown in Appendix H), and compared with Planning Code requirements and the proposed on-site facilities. The truck loading supply is the number and sizes of off-street truck loading spaces provided by the project on-site. It should be compared to the truck loading demand that the proposed use would generate. The number and sizes of off-street freight loading spaces required should be determined based on Section 152 of the San Francisco Planning Code.

The location, number and dimensions (including vertical clearance) of all spaces provided for freight and service functions, including van size spaces substituted for full size spaces, should be specified in the text and on a figure. The figure should indicate the location of freight elevators relative to all loading and service parking and clearly identify the circulation path between the loading/service stalls and elevators.

If truck loading demand exceeds supply and/or if no off-street loading facilities are proposed to be included as part of the project, a quantification of the resulting impacts (e.g., time of day, number of instances and duration of double-parked vehicles) should be provided, and details may be required regarding how service needs would be accommodated.

If truck movements would require backing into or out of the site on public rights-of-way, the resultant delays to traffic, transit vehicles and pedestrians should be characterized.

Truck loading access affecting a Transit Preferential Street, or any street identified in the General Plan for full or partial priority for pedestrians, and any potential conflicts affecting transit, pedestrian or vehicular flow should be identified.

In any case in which a project proposes to rely on curbside yellow loading zones, an occupancy and turnover analysis is to be conducted for existing curbside loading spaces in the immediate vicinity of the project site to estimate the probable availability of such spaces to serve the needs of the proposed project, based on the specific use(s) proposed and area conditions.

Details should be provided adequate for analysis of garbage needs including dedicated on-site storage independent of loading areas, measures to avoid use of public rights-of-way for garbage storage in accordance with DPW requirements, and well-defined access to accommodate garbage pick-up in order to minimize disruptions to streets and sidewalks.

G. Passenger Loading Zones

If applicable, the extent of taxi, tour bus, or other types of passenger loading and unloading needs should be specified including details regarding how these functions would be served. Where a porte cochere or other off-street passenger loading area is required or provided, plans should be included showing the location, traffic and parking lanes, adjacent sidewalks, circulation patterns, and all dimensions. Any plans to seek colored, marked curbside areas from the Department of Parking and Traffic should be noted.

For cases in which a project proposes to rely on curbside pedestrian loading zones, an occupancy and turnover analysis for similar curbside passenger loading spaces should be made to estimate the probable availability of such spaces to serve the needs of the proposed project, based on the specific use(s) proposed and area conditions.

H. Construction Impacts

The number of daily and peak period construction truck trips by construction phase should be cited, with proposed truck routings and operating hours indicated.

Any proposed closures or temporary use of pedestrian ways, parking lanes or traffic lanes are to be identified, as well as the extent and duration of such closure or temporary use. Impacts associated with such occupation of public rights-of-way should be identified, in terms of parking lost, effect on transit operations, loading needs, or temporary degradation in levels of service for intersections and/or pedestrians. The need to remove or move any transit stops should also be noted. For large projects, the staging plans of construction trucks for materials delivery should be cited, and methods for addressing the parking needs of construction workers should be identified.

5. Transportation Mitigation Measures

Transportation reports are frequently used not only for environmental evaluation but also in the conditional use and other permit processes. It is important to recognize the differences between these processes.

There are also cases in which the transportation analysis for a specific project may conclude that significant transportation impacts are unlikely and that mitigation is not required. If the project has impacts, but they are not considered “significant” as defined by CEQA standards, the analysis should clearly state this at the beginning of the significant impacts and mitigation section. These impacts may be referred to as “non-significant” impacts, and the corresponding measures to alleviate them, as “improvement” measures. They may include desirable measures to improve transportation conditions which may be recommended and subsequently included as conditions of approval. Any recommended improvement measures should be listed, accompanied by identification of the appropriate entity responsible for implementation. Such measures are not to be identified as "mitigation" measures.

Mitigation measures required to deal with impacts determined to be environmentally significant according to CEQA standards should be clearly identified as such.

If a mitigation or improvement is proposed for an intersection that will change the Level of Service (LOS), then the corresponding LOS calculation sheets need to be included in the report. The calculation sheet (or an attachment) should identify the parameters that were changed, and what specific changes are proposed, including consultation with DPT regarding the feasibility of the proposed changes.

Whenever either type of measure is identified, the following should be cited:

- If the implementation would be the responsibility of the project sponsor, indicate whether the project sponsor supports or fails to support each specific recommendation.

- If implementation would be the responsibility of the City or another agency, the responsible department or agency should be identified and its position on each recommendation should be stated.

- The timing and linkages for implementation of each measure, and whether a monitoring plan is needed, should be specified.

In some unique situations, a cost estimate for a mitigation or improvement measure may be required. Every attempt will be made to identify these cases during the scoping process. If an estimate is deemed necessary, it should be prepared at a "planning level" of detail, which would be more general and less rigorous than a construction cost estimate. Such estimates should indicate the month and year in which they were prepared, so they can be adequately assessed at some future date.

Typical transportation mitigation measures for downtown area projects, to address significant impacts as defined by CEQA standards, are shown in Appendix I. While some of these may be appropriate for projects outside of the downtown area, mitigation measures for such projects would generally be a function of the specific conditions and impacts identified by the transportation study for each project.

A transportation management program and on-site brokerage services are required for office developments of 100,000 square feet or larger (25,000 square feet in the SSO District) that are located in the C-3 or South of Market Districts. (Reference the Zoning Map of the City and County of San Francisco.) An agreement for the transportation brokerage services and a transportation management plan must be executed with the Planning Department prior to the issuance of a permit of occupancy. The transportation study report should recognize this requirement when applicable. The actual transportation management plan need not be included in the study report, but could be added at the discretion of the project sponsor. Appendix J contains the Planning Code requirements for the plan and services.

6. Appendices for Inclusion in Transportation Reports

As appropriate, all transportation analyses should include the following appendices:

- Transportation Study Acknowledgment and Approval form, (Appendix A, Figure A-2) completed by the Planning Department (signed and dated), and a copy of the approved scope of work.
- Complete sets of all required traffic and pedestrian counts and estimated volumes. These should include Existing, Existing plus Project, and Cumulative conditions, at a minimum. The counts should include the date on which the data were collected.
- Complete sets of all traffic and pedestrian Level of Service calculations. Each Calculation sheet should indicate the date on which the data was collected. A summary of the rationales for use of adjustments or default values for the variables used in the calculations should be included.
- Complete sets of all analysis assumptions (including trip generation rates, transit patronage and capacities, parking turnover rates, mode splits, trip distribution, trip assignment, auto occupancy, etc.)
- Intersection LOS definitions and descriptions.
- Pedestrian LOS definitions and descriptions.

Amendment of the whole
in committee. 07/12/04

FILE NO. 040141 ORDINANCE NO. 199-04

[Transit Impact Development Fee]

Ordinance repealing San Francisco Administrative Code Chapter 38 (Transit Impact Development Fee) and replacing it with a new Chapter 38 (Sections 38.1 through 38.14), to enact a new Transit Impact Development Fee.

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

Section 1. The San Francisco Administrative Code is hereby amended by repealing Chapter 38 in its entirety; provided, however, that any sponsor who has been issued a building or site permit to develop office use that was subject to the Transit Impact Development Fee imposed by Ordinance No. 224-81, as amended, shall remain subject to all the terms and conditions of that ordinance, as amended. Chapter 38 of the Administrative Code shall be replaced with a new Chapter 38 to read as follows:

SEC. 38.1. DEFINITIONS.

For the purposes of this Chapter, the following definitions shall apply:

A. Accessory Use. A related minor use which is either necessary to the operation or enjoyment of a lawful principal use or conditional use, or is appropriate, incidental and subordinate to any such use and is located on the same lot as the principal or conditional use.

B. Base Service Standard. The relationship between revenue service hours offered by the Municipal Railway and the number of automobile and transit trips estimated to be generated by certain non-residential uses, expressed as a ratio where the numerator equals the average daily revenue service hours offered by MUNI, and the denominator equals the daily automobile and transit trips generated by non-residential land uses as estimated by the TIDF Study or updated under Section 38.7 of this ordinance.

C. Base Service Standard Fee Rate. The transit impact development fee that would allow the City to recover the estimated costs incurred by the Municipal Railway to meet

the demand for public transit resulting from new development in the economic activity categories for which the fee is charged, after deducting government grants, fare revenue, and costs for non-vehicle maintenance and general administration.

D. Board. The Board of Supervisors of the City and County of San Francisco.

E. Certificate of Final Completion and Occupancy. A certificate of final completion and occupancy issued by any authorized entity or official of the City, including the Director of the Department of Building Inspection, under the Building Code.

F. City. The City and County of San Francisco.

G. Covered Use. Any use subject to the TIDF.

H. Cultural/Institution/Education (CIE). An economic activity category that includes, but is not limited to, schools, as defined in subsections (g), (h), and (i) of Section 209.3 of the Planning Code and subsections (f) - (i) of Section 217 of the Planning Code; child care facilities, as defined in subsections (e) and (f) of Section 209.3 of the Planning Code and subsection (e) of Section 217 of the Planning Code; museums and zoos; and community facilities, as defined in Section 209.4 of the Planning Code and subsections (a) – (c) of Section 221 of the Planning Code.

I Director. The Director of Transportation of the MTA, or his or her designee.

J. Economic Activity Category. One of the following six categories of non-residential uses: Cultural/Institution/Education (CIE), Management, Information and Professional Services (MIPS), Medical and Health Services, Production/Distribution/Repair (PDR), Retail/Entertainment, and Visitor Services.

K. Gross Floor Area. The total area of each floor within the building's exterior walls, as defined in Section 102.9 of the San Francisco Planning Code.

L. Gross Square Feet of Use. The total square feet of gross floor area in a building and/or space within or adjacent to a structure devoted to all covered uses, including any

common areas exclusively serving such uses and not serving residential uses. Where a structure contains more than one use, areas common to two or more uses, such as lobbies, stairs, elevators, restrooms, and other ancillary space included in gross floor area that are not exclusively assigned to one use shall be apportioned among the two or more uses in accordance with the relative amounts of gross floor area, excluding such space, in the structure or on any floor thereof directly assignable to each use.

M. Management, Information and Professional Services (MIPS). An economic activity category that includes, but is not limited to, office use as defined in Section 313.1(35) of the Planning Code; medical offices and clinics, as defined in Section 890.114 of the Planning Code; and business services, as defined in Section 890.111 of the Planning Code.

N. Medical and Health Services. An economic activity category that includes, but is not limited to, those non-residential uses defined in Sections 209.3(a) and 217(a) of the Planning Code; animal services, as defined in subsections (a) and (b) of Section 224 of the Planning Code; and social and charitable services, as defined in subsection (d) of Section 209.3 of the Planning Code and subsection (d) of Section 217 of the Planning Code.

O. Municipal Railway; MUNI. The public transit system owned by City and under the jurisdiction of the Municipal Transportation Agency.

P. Municipal Transportation Agency; MTA. The agency of City created under Article 8A of the San Francisco Charter.

Q. Municipal Transportation Agency Board of Directors; MTA Board. The governing board of the MTA.

R. New Development. Any new construction, or addition to or conversion of an existing structure under a building or site permit issued after the effective date of this ordinance that results in 3,000 gross square feet or more of a covered use. In the case of mixed use development that includes residential development, the term "new development"

shall refer to only the non-residential portion of such development. "Existing structure" shall include a structure for which a sponsor already paid a fee under the prior TIDF ordinance, as well as a structure for which no TIDF was paid.

S. Planning Code. The Planning Code of the City and County of San Francisco, as it may be amended from time to time.

T. Production/Distribution/Repair (PDR). An economic activity category that includes, but is not limited to, manufacturing and processing, as defined in Section 226 of the Planning Code; those uses listed in Section 222 of the Planning Code; automotive services, as defined in Section 223(a) - (k) of the Planning Code; arts activities and spaces, as defined in Section 102.2 of the Planning Code; and research and development, as defined in Section 313.1(42) of the Planning Code.

U. Residential. Any type of use containing dwellings as defined in Section 209.1 of the Planning Code or containing group housing as defined in Section 209.2(a) - (c) of the Planning Code.

V. Retail/Entertainment. An economic activity category that includes, but is not limited to, retail use, as defined in Section 218 of the Planning Code; entertainment use, as defined in Section 313.1(15) of the Planning Code; massage establishments, as defined in Section 218.1 of the Planning Code; laundering, cleaning and pressing, as defined in Section 220 of the Planning Code; and wholesale sales, as defined in Section 890.54(b) of the Planning Code.

W. Revenue Service Hours. The number of hours that the Municipal Railway provides service to the public with its entire fleet of buses, light rail (including streetcars), and cable cars.

X. Sponsor. An applicant seeking approval for construction of new development subject to this Chapter, such applicant's successors and assigns, and/or any person or entity that controls or is under common control with such applicant.

Y. TIDF Study. The study commissioned by the San Francisco Planning Department and performed by Nelson/Nygaard Associates entitled "Transit Impact Development Fee Analysis - Final Report," dated May 2001, including all the Technical Memoranda supporting the Final Report and the Nelson/Nygaard update materials contained in Board of Supervisors File No. 040141.

Z. Transit Impact Development Fee; TIDF. The development fee that is the subject of this ordinance.

AA. Treasurer. Treasurer of the City and County of San Francisco.

BB. Trip Generation Rate. The total number of automobile and Municipal Railway trips generated for each 1,000 square feet of development in a particular economic activity category as established in the TIDF Study, or pursuant to the five-year review process established in Section 38.7 of this ordinance.

CC. Use. The purpose for which land or a structure, or both, are legally designed, constructed, arranged or intended, or for which they are legally occupied or maintained, let or leased.

DD. Visitor Services. An economic activity category that includes, but is not limited to, hotel use, as defined in Section 313.1(18) of the Planning Code; motel use, as defined in subsections (c) and (d) of Section 216 of the Planning Code; and time-share projects, as defined in Section 11003.5(a) of the California Business and Professions Code.

SEC. 38.2. FINDINGS.

A. In 1981, the City enacted an ordinance imposing a Transit Impact Development Fee ("TIDF") on new office development in the Downtown area of San Francisco. The

ordinance established a rate of $5.00 for each square foot of new office development. The TIDF was based on studies showing that the development of new office uses places a burden on the Municipal Railway, especially in the downtown area of San Francisco during commute hours, known as "peak periods." The TIDF was based on two cost analyses: one by the Finance Bureau of the City's former Public Utilities Commission, performed in 1981, and one by the accounting firm of Touche-Ross, performed in March 1983 to defend a legal challenge to the TIDF. The studies showed that the cost per square foot of new office development to provide public transit service was $9.18 and $8.36, respectively. The California Court of Appeal upheld the TIDF ordinance against legal challenges in *Russ Bldg. Partnership v. City and County of San Francisco*, 199 Cal.App.3d 1496 (1987), reprinted as directed by the California Supreme Court in *Russ Bldg. Partnership v. City and County of San Francisco*, 44 Cal.3d 839, 845-55 (1988). Among other things, the Court of Appeal found that the TIDF was a valid condition of development of real property, and not a special tax requiring voter approval. The Court also upheld the TIDF against equal protection and substantive due process challenges. Additionally, the California Supreme Court upheld the constitutionality of the TIDF as applied to development of new office uses approved before passage of the TIDF ordinance, where the City had conditioned approval of the new development on the developer's payment of a contemplated, but yet unknown, transit mitigation fee.

B. In 2000, the City's Planning Department, with assistance from the Municipal Transportation Agency, commissioned a study of the TIDF. The Planning Department issued a request for proposals for a consultant to consider various issues involving the TIDF, including: (1) whether the TIDF should be expanded to include types of land uses in addition to offices; (2) whether the TIDF should be expanded geographically beyond the Downtown area; (3) whether fee amounts should vary by geographic or land use categories; (4) what standards should be used for measuring the baseline performance of the Municipal Railway

("MUNI"); and (5) the developer fees that would be necessary to fund public transit to meet the additional demand resulting from new development.

C. In 2001, the Planning Department selected Nelson/Nygaard Associates, a nationally recognized transportation consulting firm, to perform the study. Later in 2001, Nelson/Nygaard issued its final report ("TIDF Study"). Before issuing the TIDF Study, Nelson/Nygaard prepared several Technical Memoranda, which provided detailed analyses of the methodology and assumptions used in the TIDF Study.

D. The TIDF Study concluded that new non-residential uses in San Francisco will generate demand for a substantial number of auto and transit trips ~~on MUNI~~ by the year 2020. The TIDF Study confirmed that while new office construction will ~~generate~~ have a substantial ~~demand for~~ impact on MUNI services, new development in a number of other land uses will ~~generate more trips on~~ also require MUNI to increase the number of revenue service hours. The TIDF Study recommended that the TIDF be extended to apply to most non-residential land uses ~~to address the increased demand for impact on public transportation~~. The TIDF Study found that certain types of new development generate very few daily ~~transit~~ trips and therefore may not appropriately be charged a new TIDF.

E. The TIDF Study also determined that the need to expand MUNI services to accommodate new development extends to all times of the day, not just peak periods, and therefore recommended that any measure of the existing level of service and additional service required by new development include service at all times of the day.

F. The former TIDF Ordinance applied the fee to developments in the traditional "Downtown" area of the City. The TIDF Study noted that since 1981, however, development has expanded out of the Downtown area of the City, and that such development has required MUNI to build transit infrastructure in areas outside of the boundary defined in the former TIDF Ordinance.

G. To meet the increased demand for public transit projected by the TIDF Study, MUNI must build new infrastructure and add or adjust service. For example, MUNI's 2002 publication, "A Vision for Rapid Transit in San Francisco" ("Vision Plan"), proposes transit projects along 12 major corridors in San Francisco, covering all areas of the City.

H. Even where employees and others drawn to new development use private transportation, their trips will increase the cost of maintaining MUNI's existing service level ("base service standard") because increasing traffic congestion will result in slower travel speeds for MUNI and require MUNI to add more service hours to maintain its base service standard Accordingly, new development will require MUNI to add service hours to maintain schedules and reliability that extends beyond the new riders seeking to use MUNI service.

I. New development will directly and indirectly require MUNI to (a) maintain and expand service capacity through adding revenue service hours; (b) purchase, maintain and repair rolling stock; (c) install new lines; and (d) add service to existing lines.

J. The TIDF Study recommended that the City enact an ordinance to impose transit impact fees that would allow MUNI to maintain its base service standard as new development occurs throughout the City. The proposed ordinance would require sponsors of new development in the City to pay a fee that is reasonably related to the financial burden imposed on MUNI by the new development. This financial burden is measured by the cost that will be incurred by MUNI to provide increased service to maintain the applicable base service standard over the life of such new development.

K. The TIDF Study expressed the base service standard as a ratio in which the numerator is the number of hours that MUNI provides service to the public on its entire fleet of vehicles ("revenue service hours"), and the denominator is the number of trips generated by all non-residential land uses. An increase in trips resulting from new non-residential development will reduce the ratio of revenue service hours to overall trips generated by new

development. To maintain the base service standard to accommodate the new development, MUNI must increase revenue service hours.

L. The TIDF Study developed a daily trip generation rate for each of six economic activity categories developed in the "Citywide Land Use Study," prepared for the Planning Department in 1998. The daily trip generation rate included automobile and public transit trips, but excluded non-motorized trips because such trips do not materially affect traffic congestion. The TIDF Study determined that the trip generation rates in each economic activity category do not vary geographically within the City. Therefore, the TIDF Study concluded that developer fee rates should not vary in different districts within the City. The trip generation rates contained in the TIDF Study represent the most reasonable rates available for the economic activity categories in the Study.

M. Using data obtained from MUNI and the fiscal year 2000 National Transit Database, the TIDF Study calculated the base service standard fee rates for each of the six economic activity categories in the following way:

(1) To calculate MUNI's total annual costs, the TIDF Study combined MUNI's fiscal year 2000 operating costs with an average annual capital budget, estimated by averaging the prior five years of MUNI's capital expenditures.

FY 2000 Operating Costs	$384,113,000
Average Annual Capital Costs	$310,000,000
Total Annual Costs	$694,113,000

(2) The Study calculated MUNI's net annual costs for fiscal year 2000 by subtracting fare box revenue and federal and state grant funds from MUNI's total costs.

Total Annual Costs	$ 694,113,000
FY 2000 Fare Box Revenue	($101,310,000)
FY 2000 Federal/State Grant Funds	($182,900,000)
Net Annual Costs	$ 409,903,000

(3) The Study then determined MUNI's net annual cost per revenue service hour by dividing MUNI's net annual costs by MUNI's average daily revenue service hours, as reported to the National Transit Database.

Net Annual Costs	Average Daily Revenue Service Hours	Net Annual Cost Per Revenue Service Hour
$ 409,903,000	÷ 8,436	$48,600

(4) The TIDF Study estimated the number of daily auto and transit trips within the City (9,035,282) by using trip generation rates and 2000 employment data supplied by the Planning Department. By dividing MUNI's average daily revenue service hours (8,436) by the estimated daily auto and transit trips within the City (9,035,282), the TIDF Study determined that MUNI provided approximately 0.9336 service hours for every 1,000 transit and auto trips. The TIDF Study multiplied the net annual cost per revenue service hour by 0.9336 to determine a net annual cost per trip.

Net Annual Cost Per Revenue Service Hour	Revenue Service Hours Per 1,000 Trips	Net Annual Cost Per Trip
$48,600	x 0.9336	$45.37

(5) The Study multiplied the net annual cost per trip by an adjusted daily trip rate per economic activity category to calculate a net annual cost per gross square foot (gsf) of new development for each economic activity category. The TIDF Study adjusted the daily trip rate to eliminate bicycle and pedestrian trips.

Economic Activity Category	Adjusted Daily Trip Rate Per 1,000 gsf	Net Annual Cost Per Trip	Net Annual Cost per gsf of Development
Cultural/Institution/Education	42.3	$45.37	$1.92
Management, Information and Professional Services	15.1	$45.37	$0.68
Medical and Health Services	23.9	$45.37	$1.08
Production/Distribution/Repair	9.6	$45.37	$0.44
Retail/Entertainment	166.8	$45.37	$7.57
Visitor Services	13.3	$45.37	$0.61

(6) Finally, the Study multiplied the net annual cost per gross square foot of development for each economic activity category by a net present value factor of 20.69 (based on a U.S. transportation industry index inflation rate of 2.05%, earning on an invested funds rate of 6.14%, and a building life span of 45 years) to establish the base service standard rates for each economic activity category that would be necessary to pay for increased transit services for the 45-year useful life of a new development.

Economic Activity Category	Net Present Value Factor	Net Annual Cost per gsf of Development	Base Service Standard Rates
Cultural/Institution/Education	20.69	$1.92	$39.67
Management, Information and Professional Services	20.69	$0.68	$14.17
Medical and Health Services	20.69	$1.08	$22.40
Production/Distribution/Repair	20.69	$0.44	$9.04
Retail/Entertainment	20.69	$7.57	$156.61
Visitor Services	20.69	$0.61	$12.53

N. In 2004, MUNI updated the base service standard rates established in the TIDF Study with fiscal year 2003 data (the "updated base service standard rates"). To calculate the

updated base service standard rates, MUNI modified certain variables in the TIDF Study's formula to reflect current information, as follows.

(1) Rather than using an estimated average annual capital budget (the methodology employed in the TIDF Study), MUNI used its actual capital costs for fiscal years 1999-2003, as reported to the fiscal year 2003 National Transit Database, in determining the average annual capital costs.

Operating Costs	$449,283,888
Average Capital Costs	$192,468,200
Total Costs	$641,752,088

(2) California Government Code Section 65913.8 prohibits including costs for facility maintenance and operations in a fee imposed on a developer for a public capital facility improvement. It is not clear whether this limitation applies to the TIDF. To comply with Government Code Section 65913.8, if applicable, and to achieve a more conservative estimate of the recoverable costs, MUNI deducted its costs for non-vehicle (facility) maintenance and general administration. MUNI could not separate general administration attributable to facility operations, so MUNI deducted 100% of the general administration costs for the entire department. Accordingly, the updated base service standard rates are even more conservative than may be required under Section 65913.8.

(3) MUNI applied its updated assumptions to the TIDF Study's methodology by deducting non-vehicle maintenance and general administration (in addition to farebox revenues and grant funds) from its total costs to calculate its annual net costs:

Total Annual Costs FY 2003	$ 641,752,088
Farebox Revenue FY 2003	($97,779,333)
Federal/State Grant Funds FY 2003	($89,445,000)
Non-Vehicle Maintenance FY 2003	($34,173,560)
General Administration FY 2003	($92,197,116)
Net Annual Costs FY 2003	$ 328,157,079

(4) To determine the net annual cost per revenue service hour, MUNI used the average daily revenue service hours for Fiscal Year 2003 (10,062), as reported to the National Transit Database:

Net Annual Costs	Average Daily Revenue Service Hours	Net Annual Cost Per Revenue Service Hour
$ 328,157,079	÷ 10,062	$32,614

(5) MUNI then calculated the net annual cost per trip by multiplying the net annual cost per revenue service hour by the number of revenue service hours per 1,000 trips:

Net Annual Cost Per Revenue Service Hour	Revenue Service Hours Per 1,000 Trips	Net Annual Cost Per Trip
$32,614	x 1.1136	$36.32

(6) MUNI multiplied the net annual cost per trip by the adjusted daily trip rate for each economic activity category to arrive at a net annual cost per gross square foot of new development for each category:

Economic Activity Category	Adjusted Daily Trip Rate Per 1,000 gsf	Net Updated Annual Cost Per Trip	Net Updated Annual Cost per gsf of Development
Cultural/Institution/Education	42.3	$36.32	$1.54
Management, Information and Professional Services	15.1	$36.32	$0.55
Medical and Health Services	23.9	$36.32	$0.87
Production/Distribution/Repair	9.6	$36.32	$0.35
Retail/Entertainment	166.8	$36.32	$6.06
Visitor Services	13.3	$36.32	$0.48

(7) MUNI also updated the net present value factor the TIDF Study used to calculate the updated base service standard rates by calculating the lump sum amount needed to fund $1.00 (in today's dollars) in annual costs over 45 years, increasing at a current inflation rate of 3.50% (the five-year Bay Area Consumer Price Index as calculated by the Association for Bay Area Governments), with the remaining fund balance invested at a current interest rate of 4.93% (the five-year average interest rate earned by the City's Treasurer's Department on pooled funds). Both the TIDF Study and MUNI used the interest rate earned by the City's Treasurer for the respective years. But MUNI elected to use the Bay Area Consumer Price Index rather than the U.S. Transportation Index on which the TIDF Study relied because the Bay Area index more accurately reflects the local inflation rate. The use of the different net present value factor yields the following updated base service standard rates:

Economic Activity Category	Net Annual Cost per gsf of Development	Net Present Value Factor	Updated Base Service Standard Rates
Cultural/Institution/ Education	$1.54	33.36	$51.25
Management, Information and Professional Services	$0.55	33.36	$18.30
Medical and Health Services	$0.87	33.36	$28.96
Production/Distribution/Repair	$0.35	33.36	$11.63
Retail/Entertainment	$6.06	33.36	$202.10
Visitor Services	$0.48	33.36	$16.11

O. In setting the TIDF rates, the City considered the updated base service standard rates and input from a variety of stakeholders, including business groups, developers, and civic organizations. The City set the TIDF rates well below the updated base service standard rates to reduce the costs of the TIDF to sponsors of new developments, who are subject to other development fees imposed by the City, and to guarantee that the TIDF does not exceed the reasonable cost to fund the additional transit improvements necessitated by new development. The TIDF rates are as follows:

Economic Activity Category	Updated Base Service Standard Rates	TIDF Schedule (from Sec. 38.4)
Cultural/Institution/Education	$51.25	$10.00
Management, Information and Professional Services	$18.30	$10.00
Medical and Health Services	$28.96	$10.00
Production/Distribution/Repair	$11.63	$8.00
Retail/Entertainment	$202.10	$10.00
Visitor Services	$16.11	$8.00

P. Based on projected new development over the next 20 years, the TIDF will provide revenue to MUNI that is significantly below the costs that MUNI will incur to mitigate the transit impacts resulting from the new development.

Q. The TIDF is the most practical and equitable method of meeting a portion of the demand for additional Municipal Railway service and capital improvements for the City caused by new non-residential development.

R. Based on the above findings, the City determines that the TIDF satisfies the requirements of the Mitigation Fee Act, California Government Code Section 66001, as follows:

(1) The purpose of the fee is to meet a portion of the demand for additional Municipal Railway service and capital improvements for the City caused by new non-residential development.

(2) Funds from collection of the TIDF will be used to increase revenue service hours reasonably necessary to mitigate the impacts of new non-residential development on public transit and maintain the applicable base service standard.

(3) There is a reasonable relationship between the proposed uses of the TIDF and the impact on transit of the new developments on which the TIDF will be imposed.

(4) There is a reasonable relationship between the types of new development on which the TIDF will be imposed and the need to fund public transit for the uses specified in Section 38.8 of this ordinance.

(5) There is a reasonable relationship between the amount of the TIDF to be imposed on new developments and the impact on public transit from the new developments.

SEC. 38.3. IMPOSITION OF TRANSIT IMPACT DEVELOPMENT FEE.

A. Subject to the exceptions set forth in subsections D and E below, each sponsor of a new development in the City shall pay to the City and deliver to the Treasurer upon issuance of any temporary certificate of occupancy, and as a condition precedent to issuance for such new development of any certificate of final completion and occupancy, whichever occurs first, a TIDF. The TIDF shall be calculated on the basis of the number of gross square

feet of new development, multiplied by the square foot rate then in effect for each of the applicable economic activity categories within the new development, as provided in Section 38.4 of this ordinance. An accessory use shall be charged at the same rate as the underlying use to which it is accessory. Whenever any new development or series of new developments results in more than 3,000 gross square feet of covered use within a structure, the TIDF shall be imposed on every square foot of such covered use (including any portion that was part of prior new development below the 3,000 square foot threshold).

B. No City official or agency, including the Department of Building Inspection ("DBI") and the Port of San Francisco, may issue a certificate of final completion and occupancy for any new development subject to the TIDF until it has received notification from the Treasurer that the TIDF in accordance with Section 38.4 of this Chapter has been paid.

C. Except as provided in Sections 38.3(D) and (E) below, the TIDF shall be payable with respect to any new development in the City for which a building or site permit is issued on or after the effective date of this ordinance.

D. The TIDF shall not be payable on new development, or any portion thereof, for which a transit impact development fee has been paid, in full or in part, under the prior Transit Impact Development Fee Ordinance adopted in 1981 (Ordinance No. 224-81; former Chapter 38 of this Administrative Code), except where (1) gross square feet of use is being added to the building; or (2) the TIDF rate for the new development is in an economic activity category with a higher fee rate than the rate set for MIPS, as set forth in Section 38.4.

E. No TIDF shall be payable on the following types of new development.

(1) New development on property owned (including beneficially owned) by the City, except for that portion of the new development that may be developed by a private sponsor and not intended to be occupied by the City or other agency or entity exempted under this ordinance, in which case the TIDF shall apply only to such non-exempted portion. New

development on property owned by a private person or entity and leased to the City shall be subject to the fee, unless the City is the beneficial owner of such new development or unless such new development is otherwise exempted under this Section.

(2) Any new development in Mission Bay North or South to the extent application of this ordinance would be inconsistent with the Mission Bay North Redevelopment Plan and Interagency Cooperation Agreement or the Mission Bay South Redevelopment Plan and Interagency Cooperation Agreement, as applicable.

(3) New development located on property owned by the United States or any of its agencies to be used exclusively for governmental purposes.

(4) New development located on property owned by the State of California or any of its agencies to be used exclusively for governmental purposes.

(5) New development for which an application for environmental evaluation or an application for a categorical exemption has been filed prior to April 1, 2004.

(6) The following types of new developments:

(a) Public facilities/ utilities, as defined in Section 209.6 of the Planning Code;

(b) Open recreation/horticulture, as defined in Section 209.5 of the Planning Code, including private noncommercial recreation open use, as referred to in Section 221(g) of the Planning Code;

(c) Vehicle storage and access, as defined in Section 209.7 of the Planning Code;

(d) Automotive services, as defined in Section 223(l) - (v) of the Planning Code;

(e) Wholesaling, storage, distribution, and open-air handling of materials and equipment, as defined in Section 225 of the Planning Code;

(f) Other Uses, as defined in Section 227 of the Planning Code;

In reviewing whether a development is subject to the fee, the Director shall consider the project in its entirety. A sponsor may not seek multiple building permits to evade paying the TIDF.

F. The sponsor shall pay, or cause to be paid, the TIDF to the Treasurer on the earliest of the following dates:

(1) The date when 50 percent of the net rentable area of the project has been occupied;

(2) The date of issuance of the first temporary permit of occupancy in the new development;

(3) Five days prior to the date of issuance of a final certificate of occupancy.

G. Upon payment of the fee in full to the Treasurer, and upon request of the sponsor, the Treasurer shall issue a certificate that the fee has been paid. The sponsor shall present such certification to DBI before the issuance of the final certificate of occupancy for the new development. DBI shall provide notice in writing to the Treasurer, the Planning Department, and MUNI at least five business days before issuing the final certificate of occupancy for any new development project. DBI may not issue a final certificate of occupancy for any new development until DBI has received notice from the Treasurer that the TIDF has been paid.

SEC. 38.4. TRANSIT IMPACT DEVELOPMENT FEE SCHEDULE.

A. TIDF Schedule. The TIDF Schedule shall be as follows:

Economic Activity Category	TIDF Per Gross Square Foot of Development
Cultural/Institution/Education	$10.00
Management, Information and Professional Services	$10.00
Medical and Health Services	$10.00
Production/Distribution/Repair	$8.00
Retail/Entertainment	$10.00
Visitor Services	$8.00

B. Biennial Adjustment. Biennially, beginning July 1, 2005, the TIDF Schedule shall be adjusted, without further action by the Board of Supervisors, to reflect the average annual change in the Bay Area Consumer Price Index for the prior two years, as reported by the Association of Bay Area Governments, and as determined by the Director.

SEC. 38.5. SETTING OF TIDF. Before obtaining the first building or site permit for any new development in the City after the effective date of this ordinance, each sponsor shall file with the Director, on such form as the Director may develop, a report indicating the number of gross square feet of use of the new development and any other information the Director may require to determine the sponsor's obligation to pay the TIDF. Each sponsor of a new development who had applied for a building or site permit, but who had not obtained an approval of the building permit or site permit before the effective date of this ordinance, shall file the same report prior to obtaining a final certificate of occupancy. Except where an exemption otherwise applies under this ordinance, the Director shall determine the number of gross square feet of use in each applicable economic activity category, disregarding the number of pre-existing gross square feet of use being retained in each such category, apply the fee schedule, and determine the fee. The Director shall mail a copy of his or her written determination to the sponsor. The sponsor may appeal the determination of the number of gross square feet of use subject to the fee, the economic activity category, or the credits described in Section 38.6, to the MTA Board. If the sponsor notifies the Director of its

acceptance of the determination, or does not submit an appeal to the MTA Board within 15 days following the date of mailing of notice of the Director's determination, the Director's determination shall be final, and a notice of such determination shall be provided to DBI and the Treasurer. DBI may not issue a site or building permit for any new development until it has received notice from the MTA of the final determination of the amount of the Transit Impact Development Fee to be paid. The MTA shall not change the amount of the TIDF based on changes to the amount of gross square feet of new development during construction of the new development unless the sponsor applies for a new building permit to reflect such changes.

SEC. 38.6. CREDITS. In determining the number of gross square feet of use to which the TIDF applies, the Director shall provide a credit for prior uses eliminated on the site, provided that a TIDF has not been paid for any prior use of the property. The credit shall be calculated according to the following formula:

(a) There shall be a credit for the number of gross square feet of use being eliminated by the new development, multiplied by an adjustment factor to reflect the difference in the fee rate of the use being added and the use being eliminated. The adjustment factor shall be determined by the Director as follows:

(1) The adjustment factor shall be a fraction, the numerator of which shall be the fee rate which the Director shall determine, in consultation with the Department of City Planning, if necessary, applies to the economic activity category in the most recent calculation of the TIDF Schedule approved by the MTA Board for the prior use being eliminated by the project.

(2) The denominator of the fraction shall be the fee rate for the use being added, as set forth in the most recent calculation of the TIDF Schedule approved by the MTA Board.

(b) A credit for a prior use may be given only if the prior use was active on the site within five years before the date of the application for a building or site permit for the proposed use.

(c) As of the effective date of this ordinance, no sponsor shall be entitled to a refund of the TIDF on a building for which the fee was paid under the former Chapter 38.

SEC. 38.7. REVIEW OF FEE SCHEDULE.

A. Five-Year Review.

(1) Commencing five years after the effective date of this ordinance, and every five years thereafter, or more often as the MTA Board may deem necessary, the Director shall prepare a report for the MTA Board and the Board of Supervisors with recommendations regarding whether the TIDF for each economic activity category should be increased, decreased, or remain the same. In making such recommendations, and to the extent that new information is available, the Director shall update the following information and estimates that were used in the TIDF Study to calculate the base service standard fee rates, and any other information that the Director deems appropriate.

(a) The base service standard;

(b) Capital and operating costs;

(c) Federal and state grant funds received by MUNI;

(d) Passenger fare revenue;

(e) Daily revenue service hours;

(f) Cost per revenue service hour;

(g) Trip generation rates by economic activity category;

(h) Cost per trip;

(i) Cost per gross square foot of development by economic activity category;

(j) Net present value factor;

(k) Useful life period(s) for new development by economic activity category;

(l) Estimated annual rate of return on the proceeds of the fee;

(m) The placement of particular land uses in economic activity categories.

Where applicable, the Director shall use the most recent MUNI information as submitted to the National Transit Database. The denominator of the revised base service standard shall be calculated using the most recent estimates of daily automobile and transit trips developed by the City's Planning Department or other City or state agency.

(2) In the report, the Director shall (a) identify the base service standard fee rates per gross square foot in each economic activity category; and (b) propose a fee for each economic activity category.

(3) After receiving this report and making it available for public distribution, the Board of Supervisors shall conduct a public hearing in which it shall consider the Director's report, hear testimony from any interested members of the public, and receive such other evidence as it may deem necessary. At the conclusion of that hearing, the Board shall make findings regarding whether the revenues projected to be recovered under the proposed Fee Schedule would be reasonably related to and would not exceed the costs incurred by MUNI to maintain the applicable base service standard, in light of demands caused by new development. The Board of Supervisors shall then make any necessary or appropriate revisions to the TIDF Schedule.

(4) The Board shall consider the Director's report in light of the most recent five-year review of the Housing Fee (Planning Code § 313.15), Child Care Fee (Planning Code § 314.7) and Inclusionary Housing Fee (Planning Code § 315.8(e)). MUNI and the

Amendment of the whole
in committee. 07/12/04

FILE NO. 040141 ORDINANCE NO. 199-04

[Transit Impact Development Fee]

Ordinance repealing San Francisco Administrative Code Chapter 38 (Transit Impact Development Fee) and replacing it with a new Chapter 38 (Sections 38.1 through 38.14), to enact a new Transit Impact Development Fee.

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

Section 1. The San Francisco Administrative Code is hereby amended by repealing Chapter 38 in its entirety; provided, however, that any sponsor who has been issued a building or site permit to develop office use that was subject to the Transit Impact Development Fee imposed by Ordinance No. 224-81, as amended, shall remain subject to all the terms and conditions of that ordinance, as amended. Chapter 38 of the Administrative Code shall be replaced with a new Chapter 38 to read as follows:

SEC. 38.1. DEFINITIONS.

For the purposes of this Chapter, the following definitions shall apply:

A. Accessory Use. A related minor use which is either necessary to the operation or enjoyment of a lawful principal use or conditional use, or is appropriate, incidental and subordinate to any such use and is located on the same lot as the principal or conditional use.

B. Base Service Standard. The relationship between revenue service hours offered by the Municipal Railway and the number of automobile and transit trips estimated to be generated by certain non-residential uses, expressed as a ratio where the numerator equals the average daily revenue service hours offered by MUNI, and the denominator equals the daily automobile and transit trips generated by non-residential land uses as estimated by the TIDF Study or updated under Section 38.7 of this ordinance.

C. Base Service Standard Fee Rate. The transit impact development fee that would allow the City to recover the estimated costs incurred by the Municipal Railway to meet

the demand for public transit resulting from new development in the economic activity categories for which the fee is charged, after deducting government grants, fare revenue, and costs for non-vehicle maintenance and general administration.

D. Board. The Board of Supervisors of the City and County of San Francisco.

E. Certificate of Final Completion and Occupancy. A certificate of final completion and occupancy issued by any authorized entity or official of the City, including the Director of the Department of Building Inspection, under the Building Code.

F. City. The City and County of San Francisco.

G. Covered Use. Any use subject to the TIDF.

H. Cultural/Institution/Education (CIE). An economic activity category that includes, but is not limited to, schools, as defined in subsections (g), (h), and (i) of Section 209.3 of the Planning Code and subsections (f) - (i) of Section 217 of the Planning Code; child care facilities, as defined in subsections (e) and (f) of Section 209.3 of the Planning Code and subsection (e) of Section 217 of the Planning Code; museums and zoos; and community facilities, as defined in Section 209.4 of the Planning Code and subsections (a) – (c) of Section 221 of the Planning Code.

I Director. The Director of Transportation of the MTA, or his or her designee.

J. Economic Activity Category. One of the following six categories of non-residential uses: Cultural/Institution/Education (CIE), Management, Information and Professional Services (MIPS), Medical and Health Services, Production/Distribution/Repair (PDR), Retail/Entertainment, and Visitor Services.

K. Gross Floor Area. The total area of each floor within the building's exterior walls, as defined in Section 102.9 of the San Francisco Planning Code.

L. Gross Square Feet of Use. The total square feet of gross floor area in a building and/or space within or adjacent to a structure devoted to all covered uses, including any

common areas exclusively serving such uses and not serving residential uses. Where a structure contains more than one use, areas common to two or more uses, such as lobbies, stairs, elevators, restrooms, and other ancillary space included in gross floor area that are not exclusively assigned to one use shall be apportioned among the two or more uses in accordance with the relative amounts of gross floor area, excluding such space, in the structure or on any floor thereof directly assignable to each use.

M. Management, Information and Professional Services (MIPS). An economic activity category that includes, but is not limited to, office use as defined in Section 313.1(35) of the Planning Code; medical offices and clinics, as defined in Section 890.114 of the Planning Code; and business services, as defined in Section 890.111 of the Planning Code.

N. Medical and Health Services. An economic activity category that includes, but is not limited to, those non-residential uses defined in Sections 209.3(a) and 217(a) of the Planning Code; animal services, as defined in subsections (a) and (b) of Section 224 of the Planning Code; and social and charitable services, as defined in subsection (d) of Section 209.3 of the Planning Code and subsection (d) of Section 217 of the Planning Code.

O. Municipal Railway; MUNI. The public transit system owned by City and under the jurisdiction of the Municipal Transportation Agency.

P. Municipal Transportation Agency; MTA. The agency of City created under Article 8A of the San Francisco Charter.

Q. Municipal Transportation Agency Board of Directors; MTA Board. The governing board of the MTA.

R. New Development. Any new construction, or addition to or conversion of an existing structure under a building or site permit issued after the effective date of this ordinance that results in 3,000 gross square feet or more of a covered use. In the case of mixed use development that includes residential development, the term "new development"

shall refer to only the non-residential portion of such development. "Existing structure" shall include a structure for which a sponsor already paid a fee under the prior TIDF ordinance, as well as a structure for which no TIDF was paid.

S. Planning Code. The Planning Code of the City and County of San Francisco, as it may be amended from time to time.

T. Production/Distribution/Repair (PDR). An economic activity category that includes, but is not limited to, manufacturing and processing, as defined in Section 226 of the Planning Code; those uses listed in Section 222 of the Planning Code; automotive services, as defined in Section 223(a) - (k) of the Planning Code; arts activities and spaces, as defined in Section 102.2 of the Planning Code; and research and development, as defined in Section 313.1(42) of the Planning Code.

U. Residential. Any type of use containing dwellings as defined in Section 209.1 of the Planning Code or containing group housing as defined in Section 209.2(a) - (c) of the Planning Code.

V. Retail/Entertainment. An economic activity category that includes, but is not limited to, retail use, as defined in Section 218 of the Planning Code; entertainment use, as defined in Section 313.1(15) of the Planning Code; massage establishments, as defined in Section 218.1 of the Planning Code; laundering, cleaning and pressing, as defined in Section 220 of the Planning Code; and wholesale sales, as defined in Section 890.54(b) of the Planning Code.

W. Revenue Service Hours. The number of hours that the Municipal Railway provides service to the public with its entire fleet of buses, light rail (including streetcars), and cable cars.

X. Sponsor. An applicant seeking approval for construction of new development subject to this Chapter, such applicant's successors and assigns, and/or any person or entity that controls or is under common control with such applicant.

Y. TIDF Study. The study commissioned by the San Francisco Planning Department and performed by Nelson/Nygaard Associates entitled "Transit Impact Development Fee Analysis - Final Report," dated May 2001, including all the Technical Memoranda supporting the Final Report and the Nelson/Nygaard update materials contained in Board of Supervisors File No. 040141.

Z. Transit Impact Development Fee; TIDF. The development fee that is the subject of this ordinance.

AA. Treasurer. Treasurer of the City and County of San Francisco.

BB. Trip Generation Rate. The total number of automobile and Municipal Railway trips generated for each 1,000 square feet of development in a particular economic activity category as established in the TIDF Study, or pursuant to the five-year review process established in Section 38.7 of this ordinance.

CC. Use. The purpose for which land or a structure, or both, are legally designed, constructed, arranged or intended, or for which they are legally occupied or maintained, let or leased.

DD. Visitor Services. An economic activity category that includes, but is not limited to, hotel use, as defined in Section 313.1(18) of the Planning Code; motel use, as defined in subsections (c) and (d) of Section 216 of the Planning Code; and time-share projects, as defined in Section 11003.5(a) of the California Business and Professions Code.

SEC. 38.2. FINDINGS.

A. In 1981, the City enacted an ordinance imposing a Transit Impact Development Fee ("TIDF") on new office development in the Downtown area of San Francisco. The

ordinance established a rate of $5.00 for each square foot of new office development. The TIDF was based on studies showing that the development of new office uses places a burden on the Municipal Railway, especially in the downtown area of San Francisco during commute hours, known as "peak periods." The TIDF was based on two cost analyses: one by the Finance Bureau of the City's former Public Utilities Commission, performed in 1981, and one by the accounting firm of Touche-Ross, performed in March 1983 to defend a legal challenge to the TIDF. The studies showed that the cost per square foot of new office development to provide public transit service was $9.18 and $8.36, respectively. The California Court of Appeal upheld the TIDF ordinance against legal challenges in *Russ Bldg. Partnership v. City and County of San Francisco*, 199 Cal.App.3d 1496 (1987), reprinted as directed by the California Supreme Court in *Russ Bldg. Partnership v. City and County of San Francisco*, 44 Cal.3d 839, 845-55 (1988). Among other things, the Court of Appeal found that the TIDF was a valid condition of development of real property, and not a special tax requiring voter approval. The Court also upheld the TIDF against equal protection and substantive due process challenges. Additionally, the California Supreme Court upheld the constitutionality of the TIDF as applied to development of new office uses approved before passage of the TIDF ordinance, where the City had conditioned approval of the new development on the developer's payment of a contemplated, but yet unknown, transit mitigation fee.

B. In 2000, the City's Planning Department, with assistance from the Municipal Transportation Agency, commissioned a study of the TIDF. The Planning Department issued a request for proposals for a consultant to consider various issues involving the TIDF, including: (1) whether the TIDF should be expanded to include types of land uses in addition to offices; (2) whether the TIDF should be expanded geographically beyond the Downtown area; (3) whether fee amounts should vary by geographic or land use categories; (4) what standards should be used for measuring the baseline performance of the Municipal Railway

("MUNI"); and (5) the developer fees that would be necessary to fund public transit to meet the additional demand resulting from new development.

C. In 2001, the Planning Department selected Nelson/Nygaard Associates, a nationally recognized transportation consulting firm, to perform the study. Later in 2001, Nelson/Nygaard issued its final report ("TIDF Study"). Before issuing the TIDF Study, Nelson/Nygaard prepared several Technical Memoranda, which provided detailed analyses of the methodology and assumptions used in the TIDF Study.

D. The TIDF Study concluded that new non-residential uses in San Francisco will generate demand for a substantial number of auto and transit trips ~~on MUNI~~ by the year 2020. The TIDF Study confirmed that while new office construction will ~~generate~~ have a substantial ~~demand for~~ impact on MUNI services, new development in a number of other land uses will ~~generate more trips on~~ also require MUNI to increase the number of revenue service hours. The TIDF Study recommended that the TIDF be extended to apply to most non-residential land uses ~~to address the increased demand for impact on public transportation~~. The TIDF Study found that certain types of new development generate very few daily ~~transit~~ trips and therefore may not appropriately be charged a new TIDF.

E. The TIDF Study also determined that the need to expand MUNI services to accommodate new development extends to all times of the day, not just peak periods, and therefore recommended that any measure of the existing level of service and additional service required by new development include service at all times of the day.

F. The former TIDF Ordinance applied the fee to developments in the traditional "Downtown" area of the City. The TIDF Study noted that since 1981, however, development has expanded out of the Downtown area of the City, and that such development has required MUNI to build transit infrastructure in areas outside of the boundary defined in the former TIDF Ordinance.

G. To meet the increased demand for public transit projected by the TIDF Study, MUNI must build new infrastructure and add or adjust service. For example, MUNI's 2002 publication, "A Vision for Rapid Transit in San Francisco" ("Vision Plan"), proposes transit projects along 12 major corridors in San Francisco, covering all areas of the City.

H. Even where employees and others drawn to new development use private transportation, their trips will increase the cost of maintaining MUNI's existing service level ("base service standard") because increasing traffic congestion will result in slower travel speeds for MUNI and require MUNI to add more service hours to maintain its base service standard Accordingly, new development will require MUNI to add service hours to maintain schedules and reliability that extends beyond the new riders seeking to use MUNI service.

I. New development will directly and indirectly require MUNI to (a) maintain and expand service capacity through adding revenue service hours; (b) purchase, maintain and repair rolling stock; (c) install new lines; and (d) add service to existing lines.

J. The TIDF Study recommended that the City enact an ordinance to impose transit impact fees that would allow MUNI to maintain its base service standard as new development occurs throughout the City. The proposed ordinance would require sponsors of new development in the City to pay a fee that is reasonably related to the financial burden imposed on MUNI by the new development. This financial burden is measured by the cost that will be incurred by MUNI to provide increased service to maintain the applicable base service standard over the life of such new development.

K. The TIDF Study expressed the base service standard as a ratio in which the numerator is the number of hours that MUNI provides service to the public on its entire fleet of vehicles ("revenue service hours"), and the denominator is the number of trips generated by all non-residential land uses. An increase in trips resulting from new non-residential development will reduce the ratio of revenue service hours to overall trips generated by new

development. To maintain the base service standard to accommodate the new development, MUNI must increase revenue service hours.

L. The TIDF Study developed a daily trip generation rate for each of six economic activity categories developed in the "Citywide Land Use Study," prepared for the Planning Department in 1998. The daily trip generation rate included automobile and public transit trips, but excluded non-motorized trips because such trips do not materially affect traffic congestion. The TIDF Study determined that the trip generation rates in each economic activity category do not vary geographically within the City. Therefore, the TIDF Study concluded that developer fee rates should not vary in different districts within the City. The trip generation rates contained in the TIDF Study represent the most reasonable rates available for the economic activity categories in the Study.

M. Using data obtained from MUNI and the fiscal year 2000 National Transit Database, the TIDF Study calculated the base service standard fee rates for each of the six economic activity categories in the following way:

(1) To calculate MUNI's total annual costs, the TIDF Study combined MUNI's fiscal year 2000 operating costs with an average annual capital budget, estimated by averaging the prior five years of MUNI's capital expenditures.

FY 2000 Operating Costs	$384,113,000
Average Annual Capital Costs	$310,000,000
Total Annual Costs	$694,113,000

(2) The Study calculated MUNI's net annual costs for fiscal year 2000 by subtracting fare box revenue and federal and state grant funds from MUNI's total costs.

Total Annual Costs	$ 694,113,000
FY 2000 Fare Box Revenue	($101,310,000)
FY 2000 Federal/State Grant Funds	($182,900,000)
Net Annual Costs	$ 409,903,000

(3) The Study then determined MUNI's net annual cost per revenue service hour by dividing MUNI's net annual costs by MUNI's average daily revenue service hours, as reported to the National Transit Database.

Net Annual Costs	Average Daily Revenue Service Hours	Net Annual Cost Per Revenue Service Hour
$ 409,903,000	÷ 8,436	$48,600

(4) The TIDF Study estimated the number of daily auto and transit trips within the City (9,035,282) by using trip generation rates and 2000 employment data supplied by the Planning Department. By dividing MUNI's average daily revenue service hours (8,436) by the estimated daily auto and transit trips within the City (9,035,282), the TIDF Study determined that MUNI provided approximately 0.9336 service hours for every 1,000 transit and auto trips. The TIDF Study multiplied the net annual cost per revenue service hour by 0.9336 to determine a net annual cost per trip.

Net Annual Cost Per Revenue Service Hour	Revenue Service Hours Per 1,000 Trips	Net Annual Cost Per Trip
$48,600	x 0.9336	$45.37

(5) The Study multiplied the net annual cost per trip by an adjusted daily trip rate per economic activity category to calculate a net annual cost per gross square foot (gsf) of new development for each economic activity category. The TIDF Study adjusted the daily trip rate to eliminate bicycle and pedestrian trips.

Economic Activity Category	Adjusted Daily Trip Rate Per 1,000 gsf	Net Annual Cost Per Trip	Net Annual Cost per gsf of Development
Cultural/Institution/Education	42.3	$45.37	$1.92
Management, Information and Professional Services	15.1	$45.37	$0.68
Medical and Health Services	23.9	$45.37	$1.08
Production/Distribution/Repair	9.6	$45.37	$0.44
Retail/Entertainment	166.8	$45.37	$7.57
Visitor Services	13.3	$45.37	$0.61

(6) Finally, the Study multiplied the net annual cost per gross square foot of development for each economic activity category by a net present value factor of 20.69 (based on a U.S. transportation industry index inflation rate of 2.05%, earning on an invested funds rate of 6.14%, and a building life span of 45 years) to establish the base service standard rates for each economic activity category that would be necessary to pay for increased transit services for the 45-year useful life of a new development.

Economic Activity Category	Net Present Value Factor	Net Annual Cost per gsf of Development	Base Service Standard Rates
Cultural/Institution/Education	20.69	$1.92	$39.67
Management, Information and Professional Services	20.69	$0.68	$14.17
Medical and Health Services	20.69	$1.08	$22.40
Production/Distribution/Repair	20.69	$0.44	$9.04
Retail/Entertainment	20.69	$7.57	$156.61
Visitor Services	20.69	$0.61	$12.53

N. In 2004, MUNI updated the base service standard rates established in the TIDF Study with fiscal year 2003 data (the "updated base service standard rates"). To calculate the

updated base service standard rates, MUNI modified certain variables in the TIDF Study's formula to reflect current information, as follows.

(1) Rather than using an estimated average annual capital budget (the methodology employed in the TIDF Study), MUNI used its actual capital costs for fiscal years 1999-2003, as reported to the fiscal year 2003 National Transit Database, in determining the average annual capital costs.

Operating Costs	$449,283,888
Average Capital Costs	$192,468,200
Total Costs	$641,752,088

(2) California Government Code Section 65913.8 prohibits including costs for facility maintenance and operations in a fee imposed on a developer for a public capital facility improvement. It is not clear whether this limitation applies to the TIDF. To comply with Government Code Section 65913.8, if applicable, and to achieve a more conservative estimate of the recoverable costs, MUNI deducted its costs for non-vehicle (facility) maintenance and general administration. MUNI could not separate general administration attributable to facility operations, so MUNI deducted 100% of the general administration costs for the entire department. Accordingly, the updated base service standard rates are even more conservative than may be required under Section 65913.8.

(3) MUNI applied its updated assumptions to the TIDF Study's methodology by deducting non-vehicle maintenance and general administration (in addition to farebox revenues and grant funds) from its total costs to calculate its annual net costs:

Total Annual Costs FY 2003	$ 641,752,088
Farebox Revenue FY 2003	($97,779,333)
Federal/State Grant Funds FY 2003	($89,445,000)
Non-Vehicle Maintenance FY 2003	($34,173,560)
General Administration FY 2003	($92,197,116)
Net Annual Costs FY 2003	$ 328,157,079

(4) To determine the net annual cost per revenue service hour, MUNI used the average daily revenue service hours for Fiscal Year 2003 (10,062), as reported to the National Transit Database:

Net Annual Costs	Average Daily Revenue Service Hours	Net Annual Cost Per Revenue Service Hour
$ 328,157,079	÷ 10,062	$32,614

(5) MUNI then calculated the net annual cost per trip by multiplying the net annual cost per revenue service hour by the number of revenue service hours per 1,000 trips:

Net Annual Cost Per Revenue Service Hour	Revenue Service Hours Per 1,000 Trips	Net Annual Cost Per Trip
$32,614	x 1.1136	$36.32

(6) MUNI multiplied the net annual cost per trip by the adjusted daily trip rate for each economic activity category to arrive at a net annual cost per gross square foot of new development for each category:

Economic Activity Category	Adjusted Daily Trip Rate Per 1,000 gsf	Net Updated Annual Cost Per Trip	Net Updated Annual Cost per gsf of Development
Cultural/Institution/Education	42.3	$36.32	$1.54
Management, Information and Professional Services	15.1	$36.32	$0.55
Medical and Health Services	23.9	$36.32	$0.87
Production/Distribution/Repair	9.6	$36.32	$0.35
Retail/Entertainment	166.8	$36.32	$6.06
Visitor Services	13.3	$36.32	$0.48

(7) MUNI also updated the net present value factor the TIDF Study used to calculate the updated base service standard rates by calculating the lump sum amount needed to fund $1.00 (in today's dollars) in annual costs over 45 years, increasing at a current inflation rate of 3.50% (the five-year Bay Area Consumer Price Index as calculated by the Association for Bay Area Governments), with the remaining fund balance invested at a current interest rate of 4.93% (the five-year average interest rate earned by the City's Treasurer's Department on pooled funds). Both the TIDF Study and MUNI used the interest rate earned by the City's Treasurer for the respective years. But MUNI elected to use the Bay Area Consumer Price Index rather than the U.S. Transportation Index on which the TIDF Study relied because the Bay Area index more accurately reflects the local inflation rate. The use of the different net present value factor yields the following updated base service standard rates:

Economic Activity Category	Net Annual Cost per gsf of Development	Net Present Value Factor	Updated Base Service Standard Rates
Cultural/Institution/ Education	$1.54	33.36	$51.25
Management, Information and Professional Services	$0.55	33.36	$18.30
Medical and Health Services	$0.87	33.36	$28.96
Production/Distribution/Repair	$0.35	33.36	$11.63
Retail/Entertainment	$6.06	33.36	$202.10
Visitor Services	$0.48	33.36	$16.11

O. In setting the TIDF rates, the City considered the updated base service standard rates and input from a variety of stakeholders, including business groups, developers, and civic organizations. The City set the TIDF rates well below the updated base service standard rates to reduce the costs of the TIDF to sponsors of new developments, who are subject to other development fees imposed by the City, and to guarantee that the TIDF does not exceed the reasonable cost to fund the additional transit improvements necessitated by new development. The TIDF rates are as follows:

Economic Activity Category	Updated Base Service Standard Rates	TIDF Schedule (from Sec. 38.4)
Cultural/Institution/Education	$51.25	$10.00
Management, Information and Professional Services	$18.30	$10.00
Medical and Health Services	$28.96	$10.00
Production/Distribution/Repair	$11.63	$8.00
Retail/Entertainment	$202.10	$10.00
Visitor Services	$16.11	$8.00

P. Based on projected new development over the next 20 years, the TIDF will provide revenue to MUNI that is significantly below the costs that MUNI will incur to mitigate the transit impacts resulting from the new development.

Q. The TIDF is the most practical and equitable method of meeting a portion of the demand for additional Municipal Railway service and capital improvements for the City caused by new non-residential development.

R. Based on the above findings, the City determines that the TIDF satisfies the requirements of the Mitigation Fee Act, California Government Code Section 66001, as follows:

(1) The purpose of the fee is to meet a portion of the demand for additional Municipal Railway service and capital improvements for the City caused by new non-residential development.

(2) Funds from collection of the TIDF will be used to increase revenue service hours reasonably necessary to mitigate the impacts of new non-residential development on public transit and maintain the applicable base service standard.

(3) There is a reasonable relationship between the proposed uses of the TIDF and the impact on transit of the new developments on which the TIDF will be imposed.

(4) There is a reasonable relationship between the types of new development on which the TIDF will be imposed and the need to fund public transit for the uses specified in Section 38.8 of this ordinance.

(5) There is a reasonable relationship between the amount of the TIDF to be imposed on new developments and the impact on public transit from the new developments.

SEC. 38.3. IMPOSITION OF TRANSIT IMPACT DEVELOPMENT FEE.

A. Subject to the exceptions set forth in subsections D and E below, each sponsor of a new development in the City shall pay to the City and deliver to the Treasurer upon issuance of any temporary certificate of occupancy, and as a condition precedent to issuance for such new development of any certificate of final completion and occupancy, whichever occurs first, a TIDF. The TIDF shall be calculated on the basis of the number of gross square

feet of new development, multiplied by the square foot rate then in effect for each of the applicable economic activity categories within the new development, as provided in Section 38.4 of this ordinance. An accessory use shall be charged at the same rate as the underlying use to which it is accessory. Whenever any new development or series of new developments results in more than 3,000 gross square feet of covered use within a structure, the TIDF shall be imposed on every square foot of such covered use (including any portion that was part of prior new development below the 3,000 square foot threshold).

B. No City official or agency, including the Department of Building Inspection ("DBI") and the Port of San Francisco, may issue a certificate of final completion and occupancy for any new development subject to the TIDF until it has received notification from the Treasurer that the TIDF in accordance with Section 38.4 of this Chapter has been paid.

C. Except as provided in Sections 38.3(D) and (E) below, the TIDF shall be payable with respect to any new development in the City for which a building or site permit is issued on or after the effective date of this ordinance.

D. The TIDF shall not be payable on new development, or any portion thereof, for which a transit impact development fee has been paid, in full or in part, under the prior Transit Impact Development Fee Ordinance adopted in 1981 (Ordinance No. 224-81; former Chapter 38 of this Administrative Code), except where (1) gross square feet of use is being added to the building; or (2) the TIDF rate for the new development is in an economic activity category with a higher fee rate than the rate set for MIPS, as set forth in Section 38.4.

E. No TIDF shall be payable on the following types of new development.

(1) New development on property owned (including beneficially owned) by the City, except for that portion of the new development that may be developed by a private sponsor and not intended to be occupied by the City or other agency or entity exempted under this ordinance, in which case the TIDF shall apply only to such non-exempted portion. New

development on property owned by a private person or entity and leased to the City shall be subject to the fee, unless the City is the beneficial owner of such new development or unless such new development is otherwise exempted under this Section.

(2) Any new development in Mission Bay North or South to the extent application of this ordinance would be inconsistent with the Mission Bay North Redevelopment Plan and Interagency Cooperation Agreement or the Mission Bay South Redevelopment Plan and Interagency Cooperation Agreement, as applicable.

(3) New development located on property owned by the United States or any of its agencies to be used exclusively for governmental purposes.

(4) New development located on property owned by the State of California or any of its agencies to be used exclusively for governmental purposes.

(5) New development for which an application for environmental evaluation or an application for a categorical exemption has been filed prior to April 1, 2004.

(6) The following types of new developments:

(a) Public facilities/ utilities, as defined in Section 209.6 of the Planning Code;

(b) Open recreation/horticulture, as defined in Section 209.5 of the Planning Code, including private noncommercial recreation open use, as referred to in Section 221(g) of the Planning Code;

(c) Vehicle storage and access, as defined in Section 209.7 of the Planning Code;

(d) Automotive services, as defined in Section 223(l) - (v) of the Planning Code;

(e) Wholesaling, storage, distribution, and open-air handling of materials and equipment, as defined in Section 225 of the Planning Code;

(f) Other Uses, as defined in Section 227 of the Planning Code;

In reviewing whether a development is subject to the fee, the Director shall consider the project in its entirety. A sponsor may not seek multiple building permits to evade paying the TIDF.

F. The sponsor shall pay, or cause to be paid, the TIDF to the Treasurer on the earliest of the following dates:

(1) The date when 50 percent of the net rentable area of the project has been occupied;

(2) The date of issuance of the first temporary permit of occupancy in the new development;

(3) Five days prior to the date of issuance of a final certificate of occupancy.

G. Upon payment of the fee in full to the Treasurer, and upon request of the sponsor, the Treasurer shall issue a certificate that the fee has been paid. The sponsor shall present such certification to DBI before the issuance of the final certificate of occupancy for the new development. DBI shall provide notice in writing to the Treasurer, the Planning Department, and MUNI at least five business days before issuing the final certificate of occupancy for any new development project. DBI may not issue a final certificate of occupancy for any new development until DBI has received notice from the Treasurer that the TIDF has been paid.

SEC. 38.4. TRANSIT IMPACT DEVELOPMENT FEE SCHEDULE.

A. TIDF Schedule. The TIDF Schedule shall be as follows:

Economic Activity Category	TIDF Per Gross Square Foot of Development
Cultural/Institution/Education	$10.00
Management, Information and Professional Services	$10.00
Medical and Health Services	$10.00
Production/Distribution/Repair	$8.00
Retail/Entertainment	$10.00
Visitor Services	$8.00

B. Biennial Adjustment. Biennially, beginning July 1, 2005, the TIDF Schedule shall be adjusted, without further action by the Board of Supervisors, to reflect the average annual change in the Bay Area Consumer Price Index for the prior two years, as reported by the Association of Bay Area Governments, and as determined by the Director.

SEC. 38.5. SETTING OF TIDF. Before obtaining the first building or site permit for any new development in the City after the effective date of this ordinance, each sponsor shall file with the Director, on such form as the Director may develop, a report indicating the number of gross square feet of use of the new development and any other information the Director may require to determine the sponsor's obligation to pay the TIDF. Each sponsor of a new development who had applied for a building or site permit, but who had not obtained an approval of the building permit or site permit before the effective date of this ordinance, shall file the same report prior to obtaining a final certificate of occupancy. Except where an exemption otherwise applies under this ordinance, the Director shall determine the number of gross square feet of use in each applicable economic activity category, disregarding the number of pre-existing gross square feet of use being retained in each such category, apply the fee schedule, and determine the fee. The Director shall mail a copy of his or her written determination to the sponsor. The sponsor may appeal the determination of the number of gross square feet of use subject to the fee, the economic activity category, or the credits described in Section 38.6, to the MTA Board. If the sponsor notifies the Director of its

acceptance of the determination, or does not submit an appeal to the MTA Board within 15 days following the date of mailing of notice of the Director's determination, the Director's determination shall be final, and a notice of such determination shall be provided to DBI and the Treasurer. DBI may not issue a site or building permit for any new development until it has received notice from the MTA of the final determination of the amount of the Transit Impact Development Fee to be paid. The MTA shall not change the amount of the TIDF based on changes to the amount of gross square feet of new development during construction of the new development unless the sponsor applies for a new building permit to reflect such changes.

SEC. 38.6. CREDITS. In determining the number of gross square feet of use to which the TIDF applies, the Director shall provide a credit for prior uses eliminated on the site, provided that a TIDF has not been paid for any prior use of the property. The credit shall be calculated according to the following formula:

(a) There shall be a credit for the number of gross square feet of use being eliminated by the new development, multiplied by an adjustment factor to reflect the difference in the fee rate of the use being added and the use being eliminated. The adjustment factor shall be determined by the Director as follows:

(1) The adjustment factor shall be a fraction, the numerator of which shall be the fee rate which the Director shall determine, in consultation with the Department of City Planning, if necessary, applies to the economic activity category in the most recent calculation of the TIDF Schedule approved by the MTA Board for the prior use being eliminated by the project.

(2) The denominator of the fraction shall be the fee rate for the use being added, as set forth in the most recent calculation of the TIDF Schedule approved by the MTA Board.

(b) A credit for a prior use may be given only if the prior use was active on the site within five years before the date of the application for a building or site permit for the proposed use.

(c) As of the effective date of this ordinance, no sponsor shall be entitled to a refund of the TIDF on a building for which the fee was paid under the former Chapter 38.

SEC. 38.7. REVIEW OF FEE SCHEDULE.

A. Five-Year Review.

(1) Commencing five years after the effective date of this ordinance, and every five years thereafter, or more often as the MTA Board may deem necessary, the Director shall prepare a report for the MTA Board and the Board of Supervisors with recommendations regarding whether the TIDF for each economic activity category should be increased, decreased, or remain the same. In making such recommendations, and to the extent that new information is available, the Director shall update the following information and estimates that were used in the TIDF Study to calculate the base service standard fee rates, and any other information that the Director deems appropriate.

(a) The base service standard;

(b) Capital and operating costs;

(c) Federal and state grant funds received by MUNI;

(d) Passenger fare revenue;

(e) Daily revenue service hours;

(f) Cost per revenue service hour;

(g) Trip generation rates by economic activity category;

(h) Cost per trip;

(i) Cost per gross square foot of development by economic activity category;

(j) Net present value factor;

(k) Useful life period(s) for new development by economic activity category;

(l) Estimated annual rate of return on the proceeds of the fee;

(m) The placement of particular land uses in economic activity categories.

Where applicable, the Director shall use the most recent MUNI information as submitted to the National Transit Database. The denominator of the revised base service standard shall be calculated using the most recent estimates of daily automobile and transit trips developed by the City's Planning Department or other City or state agency.

(2) In the report, the Director shall (a) identify the base service standard fee rates per gross square foot in each economic activity category; and (b) propose a fee for each economic activity category.

(3) After receiving this report and making it available for public distribution, the Board of Supervisors shall conduct a public hearing in which it shall consider the Director's report, hear testimony from any interested members of the public, and receive such other evidence as it may deem necessary. At the conclusion of that hearing, the Board shall make findings regarding whether the revenues projected to be recovered under the proposed Fee Schedule would be reasonably related to and would not exceed the costs incurred by MUNI to maintain the applicable base service standard, in light of demands caused by new development. The Board of Supervisors shall then make any necessary or appropriate revisions to the TIDF Schedule.

(4) The Board shall consider the Director's report in light of the most recent five-year review of the Housing Fee (Planning Code § 313.15), Child Care Fee (Planning Code § 314.7) and Inclusionary Housing Fee (Planning Code § 315.8(e)). MUNI and the

Planning Department shall make every effort to coordinate application of the TIDF with the City's other developer fees to avoid unnecessarily encumbering sponsors of new development.

B. Principles in Calculating Fee. The following principles have been and shall in the future be observed in calculating the TIDF:

(1) Actual cost information provided to the National Transit Database shall be used in calculating the fee rates. Where estimates must be made, those estimates should be based on such information as the Director or his or her delegate considers reasonable for the purpose.

(2) The rates shall be set at an actuarially sound level to ensure that the proceeds, including such earnings as may be derived from investment of the proceeds and amortization thereof, do not exceed the capital and operating costs incurred in order to maintain the applicable base service standard in light of the demands created by new development subject to the fee over the estimated useful life of such new development. For purposes of this Ordinance, the estimated useful life of a new development is 45 years.

SEC. 38.8. USE OF PROCEEDS FROM TRANSIT IMPACT DEVELOPMENT FEE.

Money received from collection of the TIDF, including earnings from investments of the TIDF, shall be held in trust by the Treasurer under Section 66006 of the Mitigation Fee Act (Cal. Gov. Code §§ 60000 *et seq.*) and shall be distributed according to the fiscal and budgetary provisions of the San Francisco Charter and the Mitigation Fee Act, subject to the following conditions and limitations. TIDF funds may be used to increase revenue service hours reasonably necessary to mitigate the impacts of new non-residential development on public transit and maintain the applicable base service standard, including, but not limited to: capital costs associated with establishing new transit routes, expanding transit routes, and increasing service on existing transit routes, including, but not limited to, procurement of

related items such as rolling stock, and design and construction of bus shelters, stations, tracks, and overhead wires; operation and maintenance of rolling stock associated with new or expanded transit routes or increases in service on existing routes; capital or operating costs required to add revenue service hours to existing routes; and related overhead costs. Proceeds from the TIDF may also be used for all costs required to administer, enforce, or defend this ordinance.

SEC. 38.9. RULES AND REGULATIONS.

The MTA is empowered to adopt such rules, regulations, and administrative procedures as it deems necessary to implement this Chapter. In the event of a conflict between any MTA rule, regulation or procedure and this ordinance, this ordinance shall prevail.

SEC. 38.10. NONPAYMENT, RECORDATION OF NOTICE OF FEE AND NOTICE OF DELINQUENCY, ADDITIONAL REQUEST; NOTICE OF ASSESSMENT OF INTEREST, AND INSTITUTION OF LIEN PROCEEDINGS.

A. Upon the Director's determination that a development is subject to this ordinance, he or she may cause the County Recorder to record a notice that such development is subject to the TIDF. The County Recorder shall serve or mail a copy of such notice to the persons liable for payment of the fee and the owners of the real property described in the notice. The notice shall include (1) a description of the real property subject to the fee; (2) a statement that the development is subject to the imposition of the fee; and (3) a statement that the amount of the fee to which the building is subject is determined under Sections 38.4, 38.5 and related provisions of this ordinance.

B. When the Director determines that the fee is due, the Director shall notify the Treasurer, who shall send a request for payment to the sponsor.

C. Payment of the TIDF imposed by this ordinance is delinquent if (1) in the case of a fee not payable in installments, the fee is not paid within 30 days of request for payment; (2) in the case of a fee payable in installments (for a fee determined prior to the effective date of this Ordinance), the fee installment is not paid within 30 days of the date fixed for payment.

D. Where the TIDF is not paid within 30 days of request for payment, and where the TIDF is payable in installments (for a fee determined prior to the effective date of this Ordinance) and any installment is not paid within 30 days of the date fixed for payment:

(1) The Treasurer or his or her designee may cause the County Recorder to record a notice of delinquent TIDF which shall include: (a) the amount of the delinquent fee; (b) the amount of the entire fee as reflected on the final determination and a statement of whether the fee is payable in installments; (c) the fee interest and penalty then due; (d) the interest and penalties that shall accrue on the delinquent fee if not promptly paid; (e) a description of the real property subject to the fee; (f) notification that if the fee is not promptly paid proceedings will be instituted before the Board of Supervisors to impose a lien for the unpaid fee together with any penalties and interest against the real property described in the delinquency notice; (g) notification of the fee payer's right to appeal the delinquency determination to the MTA Board within 15 days of the notice to the fee payer.

(2) Where the Treasurer determines to record a notice of delinquency, he or she shall also serve or mail the notice of delinquent TIDF to the persons liable for the fee and to the owners of the real property described on the notice.

(3) Where a notice of TIDF delinquency has been recorded and the delinquent fee is paid or the Treasurer's determination of delinquency is reversed by appeal to the MTA Board or the delinquency is otherwise cured, the Treasurer shall promptly cause the County Recorder to record a notice that the TIDF delinquency has been cured. Said notice shall include: (a) description of the real property affected; (b) the book and page number of

the county record wherein the notice of delinquency was recorded; (c) the date the notice of delinquency was recorded; (d) notification that the delinquency reflected on the notice of delinquency was cured and the date of cure; (e) the amount of the entire fee as reflected on the final determination; (f) if applicable, the amount of the fee paid to effect the cure; and (g) if applicable, a statement that the fee was payable in installments and specification of the delinquency installments cured; (h) if applicable, the amount of the fee paid to effect the cure.

(4) The Treasurer shall serve or mail the notice that the TIDF delinquency has been cured, referred to in Section 38.10.D(3) of this ordinance, to the persons liable for the fee and to the owners of the real property described in such notice.

E. Where the TIDF, not payable in installments, is not paid within 30 days of request for payment, and where the TIDF is payable in installments (for a fee determined prior to the effective date of this Ordinance) and the installment is not paid within 30 days of the date fixed for payment, the Treasurer or his or her designee shall mail an additional request for payment and notice to the owner stating the following:

(1) If the amount due is not paid within 30 days of the date of mailing the additional request and notice, interest at the rate of one and one-half percent per month or portion thereof shall be assessed upon the fee or installment due.

(2) With respect to both non-installment and installment fees, if the account is not current within 60 days of the date of mailing the additional request and notice, the Treasurer shall institute proceedings to record a lien in accordance with Section 38.11 for the entire balance and any accrued interest against the property upon which the fee is owed.

F. Thirty days after mailing the additional request for payment, the Treasurer may assess interest as specified in paragraph 38.10.E(1) above. Sixty days after mailing the additional request for payment and notice, the Treasurer may institute lien proceedings as specified in Section 38.11.

G. The Treasurer shall submit a report to the Director on a quarterly basis of all fees collected for the previous quarter, which report shall include the property address, name of sponsor or owner of the property, and the amount of the fee, including interest, if any, collected.

SEC. 38.11. LIEN PROCEEDINGS; NOTICE. If payment of the fee not payable in installments is not received within 30 days following mailing of the additional request and notice, or if with respect to installment payments, the account is not brought current within 60 days of the mailing of the additional request and notice, the Treasurer shall initiate proceedings in accordance with Article XX of Chapter 10 of the San Francisco Administrative Code to make the entire unpaid balance of the TIDF, including interest on the unpaid fee or installments, a lien against all parcels used for the development project. The Treasurer shall send all notices required by that Article to the owner of the property as well as the sponsor. The Treasurer shall also prepare a preliminary report notifying the sponsor of a hearing to confirm such report by the Board of Supervisors at least 10 days before the date of the hearing. The report to the sponsor shall contain the sponsor's name, a description of the sponsor's development project, a description of the parcels of real property to be encumbered as set forth in the Assessor's Map Books for the current year, a description of the alleged violation of this ordinance, and shall fix a time, date, and place for hearing. The Treasurer shall cause this report to be mailed to the sponsor and each owner of record of the parcels of real property subject to lien. Except for the release of the lien recording fee authorized by Administrative Code Section 10.237, all sums collected by the Tax Collector under this ordinance shall be held in trust by the Treasurer and distributed as provided in Section 38.6 of this Chapter.

SEC. 38.12. MANNER OF GIVING NOTICES.

Any notice required to be given under this ordinance to a sponsor or owner shall be sufficiently given or served upon the sponsor or owner for all purposes under this ordinance if personally served upon the sponsor or owner, or if deposited, postage prepaid, in a post office letter box addressed in the name of the sponsor or owner at the official address of the sponsor or owner maintained by the Tax Collector of the City and County for the mailing of tax bills; or, if no such address is available, to the sponsor at the address of the development project, and to the applicant for the site or building permit at the address on the permit application.

SEC. 38.13. CHARITABLE EXEMPTIONS.

A. When the property or a portion thereof will be exempt from real property taxation or possessory interest taxation under California Constitution, Article XIII, Section 4, as implemented by California Revenue and Taxation Code Section 214, then the sponsor shall not be required to pay the TIDF attributed to the new development in the exempt property or portion thereof, so long as the property or portion thereof continues to enjoy the aforementioned exemption from real property taxation.

B. The TIDF shall be calculated for exempt structures in the same manner and at the same time as for all other structures. The sponsor may apply to the MTA for an exemption under the standards set forth in subsection A above. In the event the Agency determines that the sponsor is entitled to an exemption under this Section, it shall cause to be recorded a notice advising that the TIDF has been calculated and imposed upon the structure and that the structure or a portion thereof has been exempted from payment of the fee but that if the property or portion thereof loses its exempt status during the 10-year period commencing with the date of the imposition of the TIDF, then the building owner shall be subject to the requirement to pay the fee.

C. If within 10 years from the date of the issuance of the Certificate of Final Completion and Occupancy, the exempt property or portion thereof loses its exempt status, then the sponsor shall, within 90 days thereafter, be obligated to pay the TIDF, reduced by an amount reflecting the duration of the charitable exempt status in relation to the useful life estimate used in determining the TIDF for that structure. The amount remaining to be paid shall be determined by recalculating the fee using a useful life equal to the useful life used in the initial calculation minus the number of years during which the exempt status has been in effect. After the TIDF has been paid, the Agency shall record a release of the notice recorded under subsection B. above.

D. In the event a property owner fails to pay a fee within the 90-day period, a notice for request of payment shall be served by the Treasurer under Section 38.10.B of this Chapter. Thereafter, upon nonpayment, a lien proceeding shall be instituted under Section 38.11 of this Chapter.

SEC. 38.14. SEVERABILITY.

The provisions of this ordinance shall not apply to any person, association, corporation or to any property as to whom or which it is beyond the power of the City to impose the fee herein provided. If any sentence, clause, section or part of this ordinance, or any fee imposed upon any person or entity is found to be unconstitutional, illegal or invalid, such unconstitutionality, illegality, or invalidity shall affect only such clause, sentence, section or part of this ordinance, or person or entity; and shall not affect or impair any of the remaining provisions, sentences, clauses, sections or other parts of this ordinance, or its effect on other persons or entities. It is hereby declared to be the intention of the Board of Supervisors of the City that this ordinance would have been adopted had such unconstitutional, illegal or invalid sentence, clause, section or part of this ordinance not been included herein; or had such

person or entity been expressly exempted from the application of this ordinance. To this end the provisions of this ordinance are severable.

Section 2. This ordinance shall become effective 60 days after the date of final approval of the ordinance.

APPROVED AS TO FORM:
DENNIS J. HERRERA, City Attorney

By: _____
Robin M. Reitzes
Deputy City Attorney

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

City and County of San Francisco

Tails

Ordinance

File Number: 040141 **Date Passed:**

Ordinance repealing San Francisco Administrative Code Chapter 38 (Transit Impact Development Fee) and replacing it with a new Chapter 38 (Sections 38.1, through 38.14), to enact a new Transit Impact Development Fee.

July 20, 2004 Board of Supervisors — PASSED ON FIRST READING

Ayes: 10 - Alioto-Pier, Ammiano, Daly, Dufty, Gonzalez, Ma, Maxwell, McGoldrick, Peskin, Sandoval
Noes: 1 - Hall

July 27, 2004 Board of Supervisors — FINALLY PASSED

Ayes: 10 - Alioto-Pier, Ammiano, Daly, Dufty, Gonzalez, Ma, Maxwell, McGoldrick, Peskin, Sandoval
Noes: 1 - Hall

File No. 040141

I hereby certify that the foregoing Ordinance was FINALLY PASSED on July 27, 2004 by the Board of Supervisors of the City and County of San Francisco.

Gloria L. Young
Clerk of the Board

AUG 05 2004

Date Approved

Mayor Gavin Newsom

File No. 040141

San Francisco Trip Reduction Efforts:
Relationship to Regional Transportation Control Measures (TCMs)
in the 2005 Bay Area Ozone Strategy

Regional TCM	Local Implementation
1. Support Voluntary Employer-Based Trip Reduction Programs.	The San Francisco transportation demand management (TDM) program focuses on the following activities: 1) compliance monitoring of office buildings required to have a TDM program; 2) commuter benefits program; 3) emergency ride Home program; 4) bicycle fleet program; and 5) regional ridesharing program.
3. Improve Local and Areawide Transit Service.	The Municipal Transportation Agency (MTA), in conjunction with the Controller's Office, recently completed a comprehensive analysis of Muni service and operations. This effort, known as the Transit Effectiveness Project (TEP), sets the stage for improvement of the Muni system with a focus on critical ridership corridors across the City. However, in the current fiscal environment, increasing local bus service in the near term remains difficult as operating funding sources have been significantly reduced. The Authority is currently leading environmental review of bus rapid transit (BRT) for the Van Ness and Geary corridors. BRT would bring operational and ridership benefits and improvements to these priority routes.
4. Upgrade and Expand Local and Regional Rail Service.	The initial operating segment (phase 1) of the Third Street Light Rail Project opened for full revenue service in April 2007. The overwhelming majority of the funding for Phase 1 came from the Authority's sales tax program. The Authority continues to advocate and program funds for Phase 2 of the Third Street Light Rail Project (Central Subway) and the downtown extension of Caltrain to the rebuilt Transbay Terminal.

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

TCM	Local Implementation
5. Improve Access to Rail and Ferries.	The installation of an Automatic Train Control System in the Muni Metro Market Street tunnel now permits more frequent and reliable light rail service to the Ferry Building. The Muni Metro extension to Mission Bay provides direct light rail service to the Caltrain depot. The F historic streetcar line connects the Ferry Terminal to waterfront destinations to the north and west to the Castro. The Authority has allocated Prop K funding for a bikestation at Caltrain's 4th and King station.
6. Improve interregional rail service.	The reconstructed Transbay Terminal will be the San Francisco terminus of the California High Speed Rail (HSR) project
7. Improve ferry service.	The Port of San Francisco and the Water Emergency Transportation Authority (WETA) have recently entered into a collaborative planning process to develop and implement the Downtown Ferry Terminal Expansion project. The plan would provide an implementation program for water transit and intermodal connection improvements.
8. Construct carpool / express bus lanes on freeways.	Freeway HOV lanes currently exist on the approaches to the Bay Bridge and Golden Gate Bridge.

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

TCM	Local Implementation
9. Improve bicycle access and facilities.	There has been essentially no implementation of San Francisco bicycle projects since a June 2006 injunction against the City's Bicycle Plan took effect. To address the injunction, the City completed and certified an Environmental Impact Report (EIR) for the Bicycle Plan in mid-2009. It is anticipated that the injunction will be lifted soon to enable implementation of numerous bike network projects that have been environmentally cleared. In November 2009, a San Francisco Superior Court ruled that the City can move forward with a handful of the least intrusive and most easily reversible projects, but did not lift the injunction. Projects approved by the court include installation of bike lanes on eight streets, bike racks, shared lane markings, and painted bike boxes. The Authority has been working closely with MTA to identify a funding and implementation strategy that can be put into place once the injunction is lifted.
10. Youth transportation.	Muni offers youth fares and youth monthly passes, and conducts public education campaigns in the schools. Extra Muni service is provided at numerous San Francisco schools at the end of the school day. MTA also improves school area safety through its safe routes to schools program.
11. Install freeway traffic management systems.	Implementation of this TCM is being coordinated by Caltrans and the Metropolitan Transportation Commission (MTC). In addition, MTA's SFgo Program is working with Caltrans to coordinate freeway improvements with the City's traffic management systems.
12. Arterial management measures.	MTA has undertaken a long-term project to replace aging signal controllers and install signals with transit priority capabilities on key transit routes. MTA's SFgo program is developing an integrated traffic management system managed from a centralized transportation control center.

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

TCM	Local Implementation
13. Transit Use Incentives.	Full implementation of this TCM requires additional funds from regional, state, or federal sources. The Authority is currently engaged with partner agencies in efforts to substantially improve system connectivity and ease interoperator transfers. This unified system, centered on a single farecard known as TransLink, is now operational in San Francisco and provides interoperator functionality.
14. Carpool and vanpool services and incentives.	MTA promotes the use of carpools and vanpools during the morning and evening commutes. The City provides a casual carpool pick-up location on the east side of Beale Street between Howard and Folsom Streets. MTA 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.
15. Local land use planning and development strategies.	The Authority promotes legislative activities that encourage smart growth and more sustainable transportation and development-related investment decisions by the City and developers. In 2007, the Authority, together with the San Francisco Mayor's Office of Housing, and in cooperation with several City and regional agencies, submitted an application for Priority Development Area (PDA) designation across a largely-continuous network of approved, proposed, and potential transit-oriented development zones. The Authority is also cooperating with City agencies to reform CEQA transportation impact analysis by replacing the automobile LOS impact measure with a measure of the automobile trips generated (ATG) by a project.
16. Public Education/ Intermittent Control Measures.	Implementation of this TCM (e.g., Spare the Air Days) is occurring through the Air District, MTC, and transit operators throughout the region.

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

TCM	Local Implementation
17. Conduct Demonstration Projects.	San Francisco is increasingly using pilot approaches to demonstrate projects that improve transportation system performance and improve air quality. The City's pavement-to-parks initiative is one such example.
18. Implement Transportation Pricing Reform.	The Authority continues to work with MTC and the Bay Area Partnership to identify new revenues sources. The Authority has developed two major transportation pricing studies, the On-Street Parking Management and Pricing Study and the Mobility, Access, and Pricing Study. These studies. These studies examine the potential for pricing to be used in combination with new technology and transportation enhancements to improve system performance and reduce emissions.
19. Improve Pedestrian Access and Facilities.	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 Authority funds pedestrian-related projects through Prop K and programs other fund sources to support pedestrian improvements. Many of these projects fall under MTA's programs related to traffic calming, pedestrian and bicycle safety, and school area safety.
20. Promote Traffic Calming Measures.	MTA's Traffic Calming Program seeks to reduce traffic impacts and increase safety for pedestrians and other street users through the redesign of streets and sidewalks. The Authority worked with MTA to facilitate a Technical Working Group and a Community Working Group, which help to develop guidelines for the program. The passage of Prop K in 2003 provided the first stable source of funding for this program.

Plan

Summary

SF Prop K Expenditure Plan Summary

2003 $Millions	Total Prop K[1]	Percentage of Prop K Funding[2]	Other Expected Funds	Total Expected Funding[2]
A. TRANSIT	**1,781.1**	**65.5%**	**8163.2**	**9,944.3**
I. Major Capital Projects	**689.6**		**3059.1**	**3,748.7**
a. MUNI	361.0		1041.0	1,402.0
Bus Rapid Transit/MUNI Metro Network	110.0		490.0	600.0
3rd Street Light Rail (Phase 1)	70.0		30.0	100.0
Central Subway (3rd St. LRT Phase 2)	126.0		521.0	647.0
Geary LRT	55.0		0.0	55.0
b. Caltrain	313.1		1827.9	2,141.0
Downtown Extension to a Rebuilt Transbay Terminal	270.0		1615.0	1,885.0
Electrification	20.5		162.0	182.5
Capital Improvement Program	22.6		50.9	73.5
c. BART Station Access, Safety and Capacity	10.5		89.5	100.0
d. Ferry	5.0		100.7	105.7
ii. Transit Enhancements	**52.5**		**148.2**	**200.7**
iii. System Maintenance and Renovation	**1,039.0**		**4955.9**	**5,994.9**
a Vehicles	575.0		2911.0	3,486.0
b Facilities	115.7		830.0	945.7
c Guideways	348.3		1214.9	1,563.2
B. PARATRANSIT [4]	**291.0**	**8.6%**	**105.3**	**396.3**
C. STREETS AND TRAFFIC SAFETY	**714.7**	**24.6%**	**1318.3**	**2,033.0**
I Major Capital Projects	**117.5**		**422.2**	**539.7**
a. Golden Gate Bridge South Access (Doyle Drive)	90.0		330.0	420.0
b. New and Upgraded Streets	27.5		92.2	119.7
ii. System Operations, Efficiency and Safety	**60.6**		**94.9**	**155.5**
a. New Signals and Signs	41.0		14.5	55.5
b. Advanced Technology and Information Systems (SFgo)	19.6		80.4	100.0
iii. System Maintenance and Renovation	**281.6**		**605.9**	**887.5**
a. Signals and Signs	99.8		70.7	170.5
b. Street Resurfacing, Rehabilitation, and Maintenance	162.7		517.5	680.2
c Pedestrian and Bicycle Facility Maintenance	19.1		17.7	36.8
iv. Bicycle and Pedestrian Improvements	**255.0**		**195.3**	**450.3**
a. Traffic Calming	70.0		72.0	142.0
b. Bicycle Circulation/Safety	56.0		21.6	77.6
c. Pedestrian Circulation/Safety	52.0		17.7	69.7
d. Curb Ramps	36.0		30.0	66.0
e. Tree Planting and Maintenance	41.0		54.0	95.0
D. TRANSPORTATION SYSTEM MANAGEMENT/STRATEGIC INITIATIVES	**33.2**	**1.3%**	**29.3**	**62.5**
I. Transportation Demand Management/Parking Management	**13.2**		**15.7**	**28.9**
ii. Transportation/Land Use Coordination	**20.0**		**13.6**	**33.6**
TOTAL	**2,820**	**100%**	**9616.1**	**12,436**
Total Prop K Priority 1 (conservative forecast)	2,350			
Total Prop K Priority 1 + 2 (medium forecast; most likely to materialize)	2,626			
Total Prop K Priority 1+2+3 (optimistic forecast)[5]	2,820			

NOTES

[1] The "Total Prop K" column fulfills the requirements in Section 131051(d) of the Public Utilities Code.

[2] Percentages are based Prop K Priority 1 and 2 forecasts of $2.626 billion.

[3] Total Expected Funding represents project costs or implementable phases of multi-phase projects and programs based on a 30-year forecast of expected revenues from existing federal, state and local sources, plus $2.82B in reauthorized sales tax revenues, $230M from a BART General Obligation Bond, and approximately $199M from the proposed 3rd dollar toll on the Bay Area state-owned toll bridges. The amounts in this column are provided in fulfillment of Sections 131051 (a)(1), (b) and (c) of the Public Utilities Code.

[4] With very limited exceptions, the funds included in the 30-year forecast of expected revenues are for capital projects rather than operations. Of all the funding sources that make up the $12.4B in expected funding, paratransit operating support is only eligible for Prop K and and up to 10% of MUNI's annual share of Federal Section 5307 funds (currently about $3.5 M annually). Therefore, total expected funding for Paratransit only reflects Prop K and Section 5307. The remaining paratransit operating costs for the next 30-years will be funded using other sources of operating funds, such as those currently included in MUNI's $460M annual operating budget.

[5] Priority 3 projects will only be funded if the revenues materialize under the optimistic scenario for sales tax revenues. They are also included in case Priority 1 or 2 projects realize costs savings, identify other unanticipated sources of funding, experience delays or are canceled.

Expenditure Plan Categories with 5-Year Prioritization Programs (5YPPs)

Current 5YPPs for the following Prop K categories can be found on the Authority's website at www.sfcta.org/fiveyears.

EP Line(s)[1]	Programmatic Category	Eligible Sponsors[2]
1	Bus Rapid Transit/Transit Preferential Streets/MUNI Metro Network	Muni, SFCTA
7	Caltrain Capital Improvement Program	PCJPB
8	BART Station Access, Safety and Capacity	BART, Muni, DPT, DPW
9	Ferry	Port of San Francisco, GGBHTD
10 - 16	Transit Enhancements	Muni, BART, DPT, PCJPB
17	New and Renovated Vehicles	Muni, BART, PCJPB
20	Facilities	Muni, BART, PCJPB
22	Guideways	Muni, BART, PCJPB
26 - 30	New and Upgraded Streets	DPW, Muni, SFCTA, PCJPB, Caltrans, SFCTA
31	New Signals and Signs	DPT, Muni
32	Advanced Technology and Information Systems (SFgo)	DPT, Muni
33	Signals and Signs	DPT
34 - 35	Street Resurfacing, Rehabilitation, and Maintenance	DPW
37	Pedestrian and Bicycle Facility Maintenance	DPT, DPW, Muni
38	Traffic Calming	DPT, DPW
39	Bicycle Circulation/Safety	DPT, DPW, BART, PCJPB
40	Pedestrian Circulation/Safety	DPT, Muni, DPW, BART, PCJPB
41	Curb Ramps	DPW, Muni
42	Tree Planting and Maintenance	DPW
43	Transportation Demand Management/Parking Management	Muni, DPT, Planning, SFCTA, DOE, DAS
44	Transportation/Land Use Coordination	DPT, DPW, Muni, Planning, SFCTA, BART, PCJPB

Notes:

[1]EP Line No corresponds to Expenditure Plan line numbers used in the 2009 Prop K Strategic Plan.

[2]The first sponsor listed is the lead agency responsible for coordinating development of the 5YPP. Sponsor acronyms include: Bay Area Rapid Transit District (BART), California Department of Transportation (Caltrans), Department of Administrative Services (DAS), Department of the Environment (DOE), Department of Parking and Traffic (DPT), Department of Public Works (DPW), Golden Gate Bridge Highway and Transportation District (GGBHTD), Peninsula Corridor Joint Powers Board (PCJPB), Planning Department (Planning), San Francisco County Transportation Authority (SFCTA), San Francisco Municipal Railway (Muni).

San Francisco CMP Discretionary Grant Programs – Non-Prop K
Project Grants Issued Since Publication of the 2007 CMP

TFCA Projects Programmed Since Publication of the 2007 CMP

TFCA Project	Sponsor [1]	TFCA Funds Programmed	Total Project Cost
CCSF Bicycle Fleet Program	DOE	$ 31,500	$ 31,500
Clean Air Light-duty Vehicles	DOE	$ 109,200	$ 1,643,200
Geneva Corridor TPS Equipment Improvements	MTA	$ 400,684	$ 400,684
Kirkham Street Class II Bike Lanes	SFMTA	$ 115,000	$ 115,000
PresidiGo CNG Shuttle	Presidio Trust	$ 46,884	$ 285,000
Missing Link--Campus Access Improvements	SFSU	$ 363,000	$ 536,000
CCSF Bicycle Fleet Program	DOE	$ 31,500	$ 41,500
Commuter Benefits Program	DOE	$ 86,000	$ 426,000
Emergency Ride Home Program	DOE	$ 18,000	$ 46,310
Light-duty Hybrid-electric Taxis	DOE	$ 243,600	$ 3,750,000
School Ridematching Program	DOE	$ 72,000	$ 72,000
Diesel Tow Truck Engine Repower	GGBHTD	$ 15,000	$ 15,000
17th Street Corridor Bicycle Lanes and Shared Roadway Markings	MTA	$ 86,200	$ 291,200
Wireless Traffic Signal Detection - TEP Rapid Corridors	MTA	$ 120,000	$ 120,000
Presidio Shuttle CNG Heavy Duty Vehicles	Presidio Trust	$ 97,500	$ 874,485
Shuttle Service to the San Bruno Jail	SFSD	$ 26,552	$ 31,395
	Total	**$ 1,862,620**	**$ 8,679,274**

[1] Project sponsor acronyms refer to the San Francisco Department of the Environment (DOE); San Francisco Municipal Transportation Agency (MTA); San Francisco State University (SFSU); the Golden Gate Bridge, Highway and Transportation District (GGBHTD); and the San Francisco Sheriff's Department (SFSD).

San Francisco Share 2008 Lifeline Transportation Program Projects (LTP) – Revised

LTP Project	Sponsor [1]	LTP Funds Programmed	Total Project Cost
Shopper Shuttle	MTA	$ 1,560,000	$ 2,894,000
Route 108 Treasure Island Enhanced Service	MTA	$ 262,228	$ 874,094
Route 29 Reliability Improvement Project	MTA	$ 727,200	$ 1,672,560
Persia Triangle Transit Access Improvements Project [2]	MTA	$ 802,734	$ 1,003,418
Randolph/Farallones/ Orizaba Transit Access Project [2]	MTA	$ 480,000	$ 600,000
San Bruno Avenue Transit Preferential Streets (TPS) Improvements	MTA	$ 1,564,919	$ 2,500,000
~~Balboa Park Station Westside Entrance and Walkway Project~~ Balboa Park Station Eastside Connections Project [3]	BART	$ 1,906,050	$ 2,801,050
~~Enhanced Transit Security in Bayview Hunters Point~~ [4]	~~MTA~~	-	
~~Discounted Lifeline Pass Program~~ [4]	~~MTA~~	-	
Total Available		$ 7,303,131	
Total Programmed		$ 7,303,131	
Difference		$ 0	

[1] Project sponsor acronyms include the San Francisco Municipal Transportation Agency (MTA) and the Bay Area Rapid Transit District (BART).

[2] MTC approved $802,734 for Persia Triangle Transit Access Improvements Project and $480,000 for Randolph/Farallones/Orizaba Transit Access Project for the FY 2008/09 cycle, but Caltrans only allocated $127,000 and $85,000, respectively, for project work scheduled for completion within 6 months. In November 2009, to meet the Prop 1B timely use of requirement, MTA requested and MTC approved advancing the unallocated balance from the two LTP projects ($1,070,739 in total) to Central Subway under the Urban Core Transit Improvements category. The advanced funds have been credited to the two LTP projects for FY 2009/10

[3] BART programmed a portion of its federal transit stimulus funds to the Balboa Park Station Westside Entrance and Walkway Project since the project was shovel ready and stimulus funds would be available immediately. BART proposed, and Authority staff concurred, that the $1.15 million in 2008 LTP funds could be reprogrammed to additional access and safety improvements at the Balboa Park Station once they became available.

[4] Due to Fiscal Year 2008/09 and 2009/10 budget cuts to the State Transit Assistance program, the MTA has determined that it is no longer able to deliver the Enhanced Transit Security in Bayview Hunters Point project and the Discounted Lifeline Fast Pass Program project.

San Francisco 2009 American Recovery and Reinvestment Act (ARRA) Projects

Project Title	Sponsor	ARRA Funds Programmed	Total Project Cost
Local Streets and Roads			
7th Ave & Laguna Honda Pavement Renovation	DPW	$ 2,787,467	$ 2,787,467
Bush Street Pavement Renovation	DPW	$ 2,000,000	$ 2,901,550
Divisadero Street Pavement Renovation	DPW	$ 2,395,831	$ 5,784,831
Geary Boulevard Intersections Paving	DPW	$ 524,462	$ 524,462
Jones Street Pavement Renovation	DPW	$ 1,410,277	$ 1,410,277
Turk Street Pavement Renovation	DPW	$ 1,195,042	$ 1,195,042
Various Locations Curb Ramps	DPW	$ 1,075,000	$ 1,075,000
Various Locations Curb Ramps #2	DPW	$ 651,921	$ 651,921
Williams Avenue Pavement Renovation	DPW	$ 1,500,000	$ 1,500,000
Transportation Enhancements			
Inner Sunset Traffic Calming & Transit Enhancement	MTA	$ 632,295	$ 1,258,000
Pedestrian Signal Upgrades	MTA	$ 300,000	$ 734,000
Total		$ 14,472,295	$ 19,822,550

[1] Project sponsor acronyms include the San Francisco Department of Public Works (DPW) and San Francisco Municipal Transportation Agency (MTA).

San Francisco 2010 Transportation Enhancements (TE) Projects

TE Project	Sponsor [1]	TE Funds Programmed	Total Project Cost
Arelious Walker Dr. Stairway Improvement Project	SFRA	$ 1,109,000	$ 1,119,000
Phelan Loop Pedestrian and Beautification Project	MTA	$ 574,000	$ 574,000
Church/Duboce Pedestrian Improvements	MTA	$ 388,000	$ 388,000
San Francisco Street Beautification Project	MTA	-	$ 280,000
Sunset Pedestrian Improvements and Safety Education	MTA	$ 611,500	$ 750,000
Point Lobos Pedestrian Improvements	DPW	$ 461,000	$ 496,000
San Francisco Bike Parking Program - Valencia and Mission District	MTA	$ 235,000	$ 235,000
Total Available		$ 3,378,500	
Total Programmed		$ 3,378,500	
Difference		$ 0	

[1] Applicant acronyms: SFRA: San Francisco Redevelopment Agency; MTA: San Francisco Municipal Transportation Agency; DPW: San Francisco Department of Public Works.

5YPP Project Delivery Snapshot -- EP 1

EP #	Sponsor	Project/Sub-Project Name	Phase(s) Funded	Current Allocation Amount (allocations less deobligations)	Status (Percent Complete) as of Jun '09	% current allocation reimbursed	Remaining Balance
1	MTA-DPT	19th Ave., Lincoln Way and Cross-Over Dr. Transit Stop Improvement	Planning	45,300	90%	37%	28,732
		6th & Irving St. TPS Upgrade	Design, Construction	60,000	pending	62%	22,714
		Carl/Cole Transit Center Feasibility Study	Planning	20,000	100%	100%	0
		Controller Upgrades at San Jose Ave./Randall St. & San Jose Ave./30th St.	Design, Construction	37,001	100%	100%	0
		Harrison St. Transit Lane between the Embarcadero & First St.	Design, Construction	46,704	100%	100%	0
		Improving F-Line Safety and Operation at Powell & Jefferson	Design, Construction	73,046	100%	100%	0
		Improving Light Rail Vehicle (LRV) and Pedestrian Safety at 9th Ave. & Irving/Judah	Planning, Design	60,000	100%	100%	0
		Improving LRV and Pedestrian Safety at 9th Ave. & Irving/Judah	Construction	187,542	100%	100%	0
		Improving Transit Operation on Van Ness North of North Point	Design, Construction	69,400	100%	93%	5,030
		LRV Vetag Detection System	Design, Construction	85,000	90%	0%	85,000
		Market St. - Calm the Safety Zone	Planning, Design, Con	223,500	On hold. 40% pending amendment.	2%	219,790
		Market St. - Improve Signal Timing to Improve Transit Operation	Design, Construction	44,703	100%	100%	0
		McAllister One-Way to Two-Way Conversion between Hyde & Jones	Design	142,000	100%	29%	101,443
		McAllister Two-Way Study from Hyde to Market	Planning	19,779	100%	100%	0
		TPS - 19th Ave. (Study Phase)	Planning	58,376	100%	100%	0
		TPS - Transit Signal Priority (Potrero)	Construction	208,090	100%	100%	0
		TPS Staffing	Planning	74,495	100%	100%	0
		Upgrade Market St. Transit Lane Signs and Pavement Markings	Planning, Construction	37,000	100%	76%	8,755
		Upgrade Transit Lanes Signs	Design, Construction	317,709	95%	63%	116,535
	MTA-MUNI	5-Year Prioritization Program - Bus Rapid Transit (BRT)/TPS	Operations	9,874	100%	100%	0
		Geneva TPS Study	Planning	150,000	35%	45%	82,047
		Inner Geary Corridor TPS Improvement Project	Construction	255,532	100%	89%	28,320
		Transit Preferential Streets (TPS) Staffing	Planning	49,522	100%	100%	0
	SFCTA	19th Avenue TPS Bulb-Outs	Design	717,000	5%	0%	717,000
		5-Year Prioritization Program - BRT/MUNI Metro Network	Operations	8,000	100%	100%	0
		Geary BRT EIR/EIS & Preliminary Engineering Part 1	Env. Studies, Planning	1,183,000	35%	0%	1,183,000
		Geary BRT Multilingual Outreach Project	Planning	20,000	100%	100%	0
		Geary Corridor Transit Study (FY04/05)	Planning	600,000	100%	89%	66,000
		Geary Corridor Transit Study (FY05/06)	Planning	160,000	100%	100%	0
		Van Ness BRT Conceptual Design	Planning	50,000	100%	0%	50,000
		Van Ness BRT Conceptual Design - Expanded Scope	Planning	100,000	100%	100%	0
		Van Ness BRT EIR/EIS & Preliminary Engineering	Env. Studies	1,950,000	60%	0%	1,950,000
		Grand Total					4,664,366

5YPP Project Delivery Snapshot -- EP 7

EP #	Sponsor	Project/Sub-Project Name	Phase(s) Funded	Current Allocation Amount (allocations less deobligations)	Status (Percent Complete) as of Jun '09	% current allocation reimbursed	Remaining Balance
7	PCJPB	22nd St. Stairs Replacement	Construction	100,000	100%	100%	0
		5-Year Prioritization Program - CIP	Operations	44,683	100%	100%	0
		Caltrain 2025 Implementation Plan	Planning	1,166,667	pending	12%	1,028,101
		Capital Project Development	Planning	166,667	pending	0%	166,667
		Infrastructure Database Update	Design	66,667	pending	49%	34,248
		Intelligent Grade Xing Warning Syst. & Collision Avoidance for Electrified Railroad Stu	Planning	250,000	pending	60%	99,393
		Maintenance of Engineering Standards	Design	145,000	pending	0%	145,000
		North Terminal Operations Improvement Project	Construction	414,286	100%	98%	9,976
		Operational Data Infrastructure (FY05/06)	Procurement	108,000	100%	100%	0
		Operational Data Infrastructure (FY07/08)	Procurement	108,667	100%	71%	31,456
		Operational Facilities & Equipment	Construction	265,187	100%	68%	84,607
		Operational Facilities & Equipment - CIP	Procurement, Design	519,028	100%	100%	2,588
		Parking Machine Replacement - Redwood City & Palo Alto	Procurement	38,698	100%	100%	0
		Rehabilitate & Update Radio & Communication Systems	Construction	71,227	pending	52%	34,398
		Rolling Stock Miscellaneous Spare Parts & Equipment (FY08/09)	Procurement	816,967	pending	19%	663,427
		ROW Fencing Program	Construction	139,651	pending	48%	72,503
		ROW Safety Program	Planning, Construction	100,000	100%	85%	14,741
		San Francisco Highway Replacement	Env. Studies, Design	345,000	pending	38%	213,380
		Security - Transit Safe Upgrade	Procurement	12,667	100%	100%	0
		Signal Construction	Planning, Design	54,000	100%	100%	137
		Signal Replacement & Upgrade Program	Design, Construction	312,667	13%	6%	292,668
		Station Improvements at 22nd St. Station	Construction	500,000	100%	100%	0
		Update of New Infrastructure Standards	Design	55,080	100%	100%	0
		Visual Message System	Design, Construction	12,000	pending	0%	12,000
		Capital Improvement Program (CIP) - Local Match - TVM Upgrade Program	Construction	54,000	10%	100%	137
		Capital Improvement Program (CIP) - Local Match - Install Crossovers and Control Points for Operational Improvements	Construction	312,667	100%	6%	292,668
		Capital Improvement Program (CIP) - Local Match - Update & Development of New Infrastructure Standards and Standard Procedures	Construction	500,000	100%	100%	0
		Capital Improvement Program (CIP) - Local Match - Caltrain Maintenance Facility	Construction	55,080	100%	100%	0
		Capital Improvement Program (CIP) - Local Match - Real Time Train Predictive Arrival GPS System	Construction	12,000	10%	0%	12,000
Grand Total							2,905,288

5YPP Project Delivery Snapshot -- EP 8

EP #	Sponsor	Project/Sub-Project Name	Phase(s) Funded	Current Allocation Amount (allocations less deobligations)	Status (Percent Complete) as of Jun '09	% current allocation reimbursed	Remaining Balance
8	BART	16th and Mission Street BART Station Northeast (NE) Plaza Redesign	Env. Studies, Design	517,669	100%	100%	0
		16th Street BART Station - NE Plaza	Construction	2,142,000	100%	90%	212,911
		16th Street BART Station - NE Plaza - Additional Funds	Construction	210,000	100%	0%	210,000
		5-Year Prioritization Program - BART Station Access, Safety, and Capacity	Operations	50,000	100%	100%	0
Grand Total							422,911

5YPP Project Delivery Snapshot -- EP 9

EP #	Sponsor	Project/Sub-Project Name	Phase(s) Funded	Current Allocation Amount (allocations less deobligations)	Status (Percent Complete) as of Jun '09	% current allocation reimbursed	Remaining Balance
9	PORT	5-Year Prioritization Program - Ferry	Operations	8,647	100%	100%	0
		Downtown Ferry Terminal	Planning	300,000	pending	9%	272,027

Grand Total

5YPP Project Delivery Snapshot -- EP 10-16

EP #	Sponsor	Project/Sub-Project Name	Phase(s) Funded	Current Allocation Amount (allocations less deobligations)	Status (Percent Complete) as of Jun '09	% current allocation reimbursed	Remaining Balance
13	MTA-MUNI	Balboa Park Station Area Plan Phase 1	Planning	570,000	12%	12%	503,294
14	MTA-MUNI	Oakdale Caltrain Station Ridership Study (MUNI portion)	Planning	6,287	93%	56%	2,744
	PCJPB	Oakdale Caltrain Station Ridership Study (PCJPB portion)	Planning	6,740	100%	0%	6,740
	SFCTA	Oakdale Caltrain Station Ridership Study (SFCTA portion)	Planning	36,975	93%	100%	0
16	BART	5-Year Prioritization Program - Transit Enhancements	Operations	8,616	100%	100%	0
		BART/MUNI Civic Center Station Direct Platform Connection	Design, Procurement	130,000	100%	80%	25,743
	MTA-MUNI	5-Year Prioritization Program - Transit Enhancements	Operations	3,868	100%	100%	0
		Mission Bay Loop	Design	238,000	50%	29%	169,073
		Mission Bay Loop - Additional Funds	Design	192,000	60%	100%	0
	PCJPB	5-Year Prioritization Program - Transit Enhancements	Operations	409	100%	100%	0
Grand Total							707,594

5YPP Project Delivery Snapshot -- EP 17

EP #	Sponsor	Project/Sub-Project Name	Phase(s) Funded	Current Allocation Amount (allocations less deobligations)	Status (Percent Complete) as of Jun '09	% current allocation reimbursed	Remaining Balance
17B	BART	5-Year Prioritization Program - Vehicles	Operations	0	100%	100%	0
17P	PCJPB	5-Year Prioritization Program - Vehicles	Operations	2,153	100%	100%	0
		Capital Improvement Program (CIP) - Vehicles - Local Match	Procurement	56,000	100%	100%	0
		Gallery Passsenger Car Seat Cushions	Construction	295,500	70%	67%	98,875
		Rolling Stock - Miscellaneous Spare Parts & Equipment (FY07/08)	Procurement	417,187	pending	92%	34,904
		Rolling Stock Replacement/Rehab	Procurement	393,380	100%	100%	(0)
		SEP-HEP Rehab Program for 6 MP36PH-3C locomotives	Procurement	397,077	pending	32%	269,970
17M	MTA-MUNI	30 30-ft Hybrid Electric Buses	Procurement	11,900,400	negotiating scope change	58%	4,985,918
		56 40-ft Hybrid Electric Buses	Procurement	18,618,495	negotiating scope change	46%	10,005,545
		Automatic Passenger Counter Equipment	Procurement	609,400	100%	100%	0
		Debit Cards	Procurement, Construc	491,284	90%	96%	21,123
		Paratransit Vans	Procurement,	491,284	100%	96%	21,123
		Paratransit Vehicle Procurement	Procurement	511,786	100%	100%	0
		Purchase and Modification of 45 1993 Gillig Motor Coaches (FY04/05)	Procurement	3,735,000	100%	100%	0
		Purchase and Modification of 45 1993 Gillig Motor Coaches (FY06/07)	Procurement	605,155	100%	100%	0
		Rear Wheel Safety Guards	Procurement	1,200,000	99%	78%	268,878
		Rehabilitation of Historic Streetcars	Construction	3,309,513	0%	0%	3,309,513
		Restoration of 8 Light Rail Vehicles	Construction	2,600,000	0%	0%	2,600,000
		Trolley Coach Rebuild	Procurement	1,045,594	20%	2%	1,022,669
		Trolley Coach Rebuild - 60 Articulates - Revised	Design	500,000	100%	100%	0
		Vehicle Driver Risk Management System (DriveCam)	Procurement	2,000,000	90%	0%	1,998,493
		Vehicles - 5-Year Prioritization Program	Operations	4,911	100%	100%	0
Grand Total							24,637,011

5YPP Project Delivery Snapshot -- EP 20

EP #	Sponsor	Project/Sub-Project Name	Phase(s) Funded	Current Allocation Amount (allocations less deobligations)	Status (Percent Complete) as of Jun '09	% current allocation reimbursed	Remaining Balance
20B	BART	5-Year Prioritization Program - Transit Facilities	Operations	0	100%	100%	0
		Replacement of Platform Edge Tiles, Stair Treads	Construction	260,000	100%	0%	260,000
		Ticket Vending Machine Expansion & Air Compressor Replacement	Construction	274,000	100%	86%	37,136
20P	PCJPB	5-Year Prioritization Program - Transit Facilities	Operations	3,426	100%	100%	0
		Advanced Traveler Information System (ATIS) for Caltrain	Design, Construction	165,196	pending	56%	73,204
		Capital Improvement Program (CIP) - Facilities - Local Match	Construction	930,000	100%	95%	50,289
		Lenzen Train & Engine Facilities	Planning, Design, Con	166,667	100%	86%	23,970
		Maintenance Facility	Construction	1,246,654	100%	100%	0
		North Terminal Operations Improvement Project Phase 2	Planning	100,000	pending	27%	73,290
		Operational Facilities & Equipment - Facilities	Procurement	125,251	100%	100%	0
		Parking Machine Replacement	Procurement	126,933	0%	0%	126,933
		Payment Card Industry (PCI) Compliance & Network Security Improvements	Procurement	73,333	pending	0%	73,333
		SF Station Access & Safety Improvements	Construction	72,867	100%	100%	0
		South Terminal Station	Construction	160,000	pending	0%	160,000
		Systemwide Station Improvements	Construction	333,333	pending	0%	333,333
		Systemwide Station Improvements - State of Good Repair Program	Design, Construction	100,000	pending	44%	55,982
20M	MTA-MUN	5-Year Prioritization Program - Transit Facilities	Operations	8,213	100%	100%	0
		Burke Ave. & Central Warehouse Facilities	Planning	299,016	100%	100%	0
		Burke Ave. Overhead Lines and Central Warehouse Facility	Construction	1,185,377	100%	100%	0
		Capital Planning & Grants Staffing (FY04/05)	Operations	360,000	100%	100%	0
		Central Control Facility Improvements	Procurement	172,398	100%	100%	1
		Escalator Rehab Design Engineering	Design	227,785	65%	44%	127,334
		Escalator Rehabilitation and Upgrade	Planning	65,000	100%	100%	0
		Green Roof and HVAC Replacement	Planning	223,594	suspended in 2009	100%	0
			Design	782,681	100%	0%	782,681
		Islais Creek Maintenance Facility	Construction	0	deobligated	100%	0
Grand Total							2,177,486

5YPP Project Delivery Snapshot -- EP 22

EP #	Sponsor	Project/Sub-Project Name	Phase(s) Funded	Current Allocation Amount (allocations less deobligations)	Status (Percent Complete) as of Jun '09	% current allocation reimbursed	Remaining Balance
22B	BART	5-Year Prioritization Program - Guideways	Operations	0	100%	100%	0
22P	PCJPB	5-Year Prioritization Program - Guideways	Operations	6,013	100%	100%	0
		Advanced Train Control System (ATCS) Microwave	Construction	105,500	100%	100%	0
		Bridge Rehab	Design, Construction	417,259	pending	66%	141,436
		Bridge Replacement and Rehab Program	Design, Construction	148,333	pending	2%	144,942
		Capital Improvement Program (CIP) - Guideways - Local Match	Design, Construction	383,919	100%	100%	0
		Railroad Signal System Rehab	Design	46,667	pending	0%	46,667
		San Mateo Bridge Rehab Program	Design	284,561	100%	0%	284,561
		San Mateo Bridge Rehab, Grade Modification, & Track Improvement Program	Design	266,667	pending	0%	266,667
		Signal Rehab	Construction	127,440	pending	99%	784
		Signal System Rehab - Air Switch/Pneumatic System at CP 4th St.	Construction	28,333	pending	63%	10,425
		Systemwide Track Rehab Program (FY06/07)	Design, Construction	44,404	100%	98%	804
		Systemwide Track Rehab Program (FY08/09)	Construction	216,667	pending	4%	207,106
		Systemwide Track Rehab Program (FY08/09) - Additional Funds	Construction	15,994	pending	59%	6,616
		Track Rehab & Infrastructure Standards Update	Planning, Design, Con	318,618	100%	98%	7,817
		Wide Spectrum Data Radio ATCS	Construction	138,333	pending	15%	117,508
22M	MTA-MUN	5-Year Prioritization Program - Guideways	Operations	5,155	100%	101%	(70)
		Advanced Train Control System (ATCS) Final Cutover	Planning	100,000	95%	0%	100,000
		ATCS Network Upgrades to Windows	Planning	100,000	75%	6%	93,557
		Cable Car Infrastructure Program	Construction	85,950	100%	100%	0
		Cable Car Propulsion Controller Upgrade	Construction	1,845,844	0%	0%	1,845,844
		Capital Planning & Grants Staffing (FY05/06)	Operations	380,000	100%	100%	0
		Capital Planning & Grants Staffing (FY06/07)	Operations	335,253	100%	100%	0
		Capital Planning & Grants Staffing (FY07/08)	Operations	305,877	100%	100%	0
		Capital Planning & Grants Staffing (FY08/09)	Operations	420,000	100%	100%	0
		Central Control HVAC Computer Room Upgrade	Construction	100,000	5%	14%	86,250
		Central Control UPS Replacement	Planning	100,000	5%	8%	92,063
		Church and Duboce Track Improvement - Additional Funds	Design	210,000	90%	0%	210,000
		Church and Duboce Track Work Replacement	Design	270,000	90%	24%	205,249
		Miscellaneous Rail Replacement	Construction	2,735,000	0%	0%	2,735,000
		Overhead Rehab - Traction Power Feeders - Additional Funding	Construction	437,278	0%	0%	437,278
		Overhead Rehab - Traction Power Substations - Additional Funding	Construction	907,973	0%	0%	907,973
		Overhead Rehab 1998-2009	Design	164,343	100%	100%	0
		Overhead Rehab 1998-2009 - 33 Stanyan/22 Fillmore	Construction	1,680,000	100%	16%	1,407,043
		Overhead Rehab 1998-2009 - 5 Fulton/21 Hayes	Planning	123,680	100%	100%	0
		Overhead Rehab 1998-2009 - Presidio	Construction	320,000	100%	100%	0
		Overhead Rehab 1998-2009 - Traction Power Feeders - Construction	Construction	1,301,000	0%	1%	1,286,789
		Overhead Rehab 1998-2009 - Traction Power Feeders - Design	Design	169,000	100%	100%	0
		Overhead Rehab 1998-2009 - Traction Power Substations	Design	99,000	100%	100%	0
		Overhead Rehab 1998-2009 - Traction Power Substations - Construction	Construction	1,850,000	0%	0%	1,843,069
		Overhead Rehabilitation Program -- Metro Subway Upgrade	Construction	3,176,000	100%	94%	182,288
		Overhead Rehabilitation Program -- Presidio Yard Poles	Construction	3,176,000	100%	94%	182,288
		Radio Communications System and CAD Replacement - Design	Planning, Design	2,692,559	95%	18%	2,195,191
		Rail Replacement Program -- Rail Grinding	Construction	2,173,000	0%	82%	386,133
		Rail Replacement Program -- West Portal Rail Replacement	Design, Construction	2,173,000	100%	82%	386,133
Grand Total							15,817,411

5YPP Project Delivery Snapshot -- EP 26-30

EP #	Sponsor	Project/Sub-Project Name	Phase(s) Funded	Current Allocation Amount (allocations less deobligations)	Status (Percent Complete) as of Jun '09	% current allocation reimbursed	Remaining Balance
27	DPW	Leland Bayshore Streetscape	Planning	50,000	100%	100%	0
	SFCTA	Bayshore Intermodal Station Access Study	Planning	45,000	0%	0%	45,000
		San Francisco/San Mateo Bi-county Study Update	Planning	100,000	55%	0%	100,000
28	PORT	Construct Illinois St. Inter-Modal Bridge over Islais Creek	Construction	2,000,000	100%	100%	0
30	MTA-DPT	19th Ave. Edge Line Striping	Design, Construction	185,000	90%	75%	46,746
		Mission & Geneva Pedestrian Improvements	Env. Studies, Design	27,000	pending	0%	27,000
	SFCTA	19th Avenue Corridor Transportation Plan	Planning	73,000	95%	100%	0
Grand Total							218,746

5YPP Project Delivery Snapshot -- EP 31

EP #	Sponsor	Project/Sub-Project Name	Phase(s) Funded	Current Allocation Amount (allocations less deobligations)	Status (Percent Complete) as of Jun '09	% current allocation reimbursed	Remaining Balance
31	MTA-DPT	5-Year Prioritization Program - New Signals and Signs	Operations	20,187	100%	100%	0
		New Street Signs (FY04/05)	Construction	476,198	100%	100%	0
		New Street Signs (FY05/06)	Planning, Procurement	400,000	100%	100%	0
		New Traffic Signal at Divisadero/Grove Sts-Conduit/Pull Boxes	Construction	22,540	100%	0%	22,540
		New Traffic Signal at Skyline Blvd., Herbst Rd., and Lake Merced Blvd.	Construction	106,650	20%	92%	8,450
		New Traffic Signal Contract 57	Planning, Design	321,458	100%	100%	0
			Construction	1,380,000	100%	83%	233,611
		New Traffic Signal Contract 58	Construction	1,577,170	100%	88%	194,630
			Planning, Design, Con	199,021	100%	100%	0
		New Traffic Signal Contract 59	Planning, Design	372,000	100%	98%	6,946
			Construction	1,493,596	73%	74%	389,684
		New Traffic Signal Contract 59 - Additional Funds	Construction	208,830	73%	10%	187,079
		New Truck for Sign Shop	Procurement	64,548	100%	100%	0
Grand Total							1,042,941

5YPP Project Delivery Snapshot -- EP 32

EP #	Sponsor	Project/Sub-Project Name	Phase(s) Funded	Current Allocation Amount (allocations less deobligations)	Status (Percent Complete) as of Jun '09	% current allocation reimbursed	Remaining Balance
32	MTA-DPT	3rd Street ITMS	Construction	700,000	19%	15%	594,907
		5-Year Prioritization Program - SFgo	Operations	35,903	100%	100%	0
		Center-to-Center Communications	Construction	70,000	100%	100%	0
		Network Communication Equipment - Pilot Project	Planning, Design	20,000	100%	100%	0
		Oak & Fell Streets Integrated Traffic Management System (ITMS) Deployment	Design	113,018	100%	100%	0
		Oak & Fell Streets ITMS Deployment	Construction	1,135,000	19%	51%	558,600
		Oak & Fell Streets ITMS Deployment - Supplemental Funds	Construction	463,300	19%	12%	405,618
		Traffic Signal Controller and Cabinet Replacement	Construction	345,000	90%	73%	93,927
Grand Total							1,653,052

5YPP Project Delivery Snapshot -- EP 33

EP #	Sponsor	Project/Sub-Project Name	Phase(s) Funded	Current Allocation Amount (allocations less deobligations)	Status (Percent Complete) as of Jun '09	% current allocation reimbursed	Remaining Balance
33	MTA-DPT	19th Ave. Signal Upgrades Phase 1	Construction	200,000	95%	100%	44
		5-Year Prioritization Program - Signals and Signs	Operations	26,300	100%	100%	0
		Market St. Wayfinding Signage Program	Planning	36,185	100%	100%	0
		Park Presidio/19th Ave. Signal Upgrades Phase 2	Design, Procurement,	5,024,692	60%	90%	502,293
		Raised Pavement Markers	Procurement, Construc	75,000	100%	78%	16,126
		Raised Pavement Markings	Procurement, Construc	75,000	100%	100%	0
		Traffic Sign Graffiti Program (FY05/06)	Planning, Procurement	368,000	100%	100%	0
		Traffic Sign Graffiti Program (FY06/07)	Planning, Procurement	160,000	100%	96%	6,550
		Traffic Sign Graffiti Program (FY07/08)	Procurement, Construc	160,000	100%	97%	4,080
		Traffic Sign Grafitti Program (FY08/09)	Procurement, Construc	122,500	100%	80%	24,580
		Traffic Signal Hardware Upgrades	Procurement	475,000	pending	64%	170,866
		Traffic Signal Modification Contract 32	Construction	1,981,197	97%	83%	345,259
		Traffic Signal Upgrades - Mission St.	Construction	2,455,500	100%	91%	219,885
		Traffic Signal Upgrades - Mission St. - Additional Funds	Construction	285,000	100%	69%	89,285
		Traffic Signal Upgrades (FY04/05)	Construction	2,367,376	100%	98%	50,000
		Traffic Signal Upgrades (FY05/06) -- Contract 31	Construction	5,953,000	100%	100%	15,607
		Traffic Signal Upgrades (FY05/06) -- Contract 32	Design	5,953,000	95%	100%	15,607
		Traffic Signal Upgrades (FY05/06) -- Park Presidio/19th Avenue	Construction	5,953,000	100%	100%	15,607
Grand Total							1,475,789

5YPP Project Delivery Snapshot -- EP 34-35

EP #	Sponsor	Project/Sub-Project Name	Phase(s) Funded	Current Allocation Amount (allocations less deobligations)	Status (Percent Complete) as of Jun '09	% current allocation reimbursed	Remaining Balance
34	DPW	5-Year Prioritization Program - Street Resurfacing	Operations	6,000	100%	100%	0
		Balboa St. Pavement Renovation	Design	230,000	100%	100%	0
		Balboa St. Pavement Renovation Phase 1	Construction	2,480,000	90%	68%	791,448
		Battery St. Pavement Renovation	Design	240,000	100%	100%	0
		Bush St. Pavement Renovation Phase 1	Design	400,000	99%	58%	169,368
		California St. Pavement Renovation	Construction	2,260,000	100%	90%	223,581
		Cortland Ave. Pavement Renovation	Construction	440,000	100%	58%	185,599
		Mission St. & Otis St. Pavement Renovation	Design, Construction	1,900,000	100%	96%	76,949
		Page St. Pavement Renovation	Construction	2,000,000	100%	72%	557,550
		Portola Dr. Pavement Renovation	Construction	3,550,000	100%	90%	350,243
		Street Resurfacing - Anza Street	Construction	1,980,669	100%	100%	0
		Street Resurfacing - City Forces - Various Locations	Construction	2,583,284	100%	100%	0
		Street Resurfacing - SOMA Pavement Restoration	Design	666,716	100%	100%	0
		Street Resurfacing (FY04/05)	Design, Construction	8,959,937	100%	100%	0
		Street Resurfacing (FY05/06)	Design, Construction	12,630,000	95%	99%	169,182
		Various Locations Pavement Renovation	Construction	3,300,000	100%	100%	0
35	DPW	Rehabilitation and Maintenance Equipment - 5 Year Prioritization Program	Planning	0	100%	100%	0
		Street Repair and Cleaning Equipment (FY04/05)	Procurement	1,033,625	100%	100%	0
		Street Repair and Cleaning Equipment (FY05/06)	Procurement	535,166	100%	100%	0
		Street Repair and Cleaning Equipment (FY06/07)	Procurement	669,830	95%	67%	224,281
		Street Repair and Cleaning Equipment (FY07/08)	Procurement	642,000	85%	25%	483,589
		Street Repair and Cleaning Equipment (FY08/09)	Procurement	670,000	15%	0%	670,000
Grand Total							3,901,790

5YPP Project Delivery Snapshot -- EP 37

EP #	Sponsor	Project/Sub-Project Name	Phase(s) Funded	Current Allocation Amount (allocations less deobligations)	Status (Percent Complete) as of Jun '09	% current allocation reimbursed	Remaining Balance
37	DPW	5-Year Prioritization Program - Pedestrian & Bicycle Facility Maintenance	Operations	8,500	100%	100%	0
		Public Sidewalk Repair (FY04/05)	Construction	634,628	100%	100%	0
		Public Sidewalk Repair (FY05/06)	Construction	495,880	100%	100%	0
		Public Sidewalk Repair (FY06/07)	Construction	509,680	100%	100%	0
		Public Sidewalk Repair (FY06/07) - Part 2	Construction	31,120	100%	100%	0
		Public Sidewalk Repair (FY07/08)	Construction	524,400	100%	100%	0
		Public Sidewalk Repair (FY08/09)	Construction	539,120	100%	100%	0
	MTA-DPT	Bicycle Facility Maintenance FY07/08	Design, Construction	101,900	pending	39%	61,809
		Maintain Bicycle Facilities	Construction	49,999	100%	100%	0
Grand Total							61,809

5YPP Project Delivery Snapshot -- EP 38

EP #	Sponsor	Project/Sub-Project Name	Phase(s) Funded	Current Allocation Amount (allocations less deobligations)	Status (Percent Complete) as of Jun '09	% current allocation reimbursed	Remaining Balance
38	MTA-DPT	24th and Mission BART Station Area Curb Bulb-Outs	Design, Construction	32,250	pending	0%	32,250
		5-Year Prioritization Program - Traffic Calming	Operations	96,800	100%	100%	0
		Buena Vista SR2S match	Planning	54,000	pending	0%	54,000
		Marshall SR2S Match	Planning, Design, Con	32,000	pending	4%	30,728
		SF Community/Monroe Safe Route to School (SR2S) Match	Planning, Design	57,000	pending	63%	21,216
		Tenderloin Pedestrian Improvements - Construction	Construction	1,053,000	pending	5%	996,321
		Tenderloin Pedestrian Improvements - Local Match	Env. Studies, Design	81,100	pending	55%	36,344
		Traffic Calming - 24th St., Church to Douglass Streets	Planning	16,000	33%	46%	8,714
		Traffic Calming - Broadway, between Fillmore & Franklin Streets	Planning	40,375	95%	94%	2,285
		Traffic Calming - Buena Vista Ave. - Site Specific	Planning	46,750	90%	78%	10,429
		Traffic Calming - Bulbouts/Gateways	Design, Construction	346,370	pending	9%	315,626
		Traffic Calming - Cerritos / Cedra Ave.	Planning	40,375	95%	85%	5,918
		Traffic Calming - Cesar Chavez, Church to Hampshire Streets	Planning	64,800	70%	59%	26,513
		Traffic Calming - Crestlake - Site Specific	Planning	46,750	90%	99%	492
		Traffic Calming - Divisidero St.	Planning	35,750	90%	85%	5,221
		Traffic Calming - Evaluation of Projects	Planning	50,000	pending	80%	10,243
		Traffic Calming - Evaluation of Requests / Outreach	Planning	46,000	100%	99%	586
		Traffic Calming - Evaluation of Requests and Outreach	Planning	50,000	100%	100%	0
		Traffic Calming - Fell/Oak/Valencia Local Match	Planning, Design	47,000	100%	100%	0
		Traffic Calming - Fillmore/Grove - Site Specific	Planning	16,000	90%	98%	318
		Traffic Calming - Garfield / Holloway	Planning	40,375	95%	92%	3,054
		Traffic Calming - Implementation - Arterials	Design, Construction	479,000	100%	94%	28,423
		Traffic Calming - Implementation - Arterials - Cessar Chavez Bulb-Out	Design, Construction	135,000	100%	44%	75,035
		Traffic Calming - Implementation - Atrerials - Clipper St.	Construction	58,000	pending	97%	1,794
		Traffic Calming - Implementation - Atrerials - Valencia St.	Design	9,354	100%	100%	0
		Traffic Calming - Implementation - Local Streets	Planning, Design, Con	712,580	100%	100%	0
			Design, Construction	226,700	100%	97%	6,245
		Traffic Calming - Inner Sunset Pedestrian and Transit Enhancements	Env. Studies, Design	76,000	pending	70%	23,031
		Traffic Calming - Kansas	Design, Construction	61,500	pending	97%	1,697
		Traffic Calming - Kirkham	Construction	25,000	pending	46%	13,576
		Traffic Calming - Lake St., between Arguello Blvd. & 25th Ave.	Planning	40,375	95%	90%	4,099
		Traffic Calming - Landscaping Support	Design, Construction	65,000	pending	57%	28,138
		Traffic Calming - Masonic Ave	Planning	120,000	pending	0%	120,000
		Traffic Calming - North Potrero Hill	Planning	186,250	95%	98%	3,982
		Traffic Calming - Ocean Ave.	Planning	16,000	90%	44%	8,921
		Traffic Calming - Outreach	Planning	20,000	pending	40%	11,948
		Traffic Calming - Park Presidio Bypass	Planning	186,250	95%	98%	3,759
		Traffic Calming - Pilot Projects	Design, Construction	43,500	pending	35%	28,473
		Traffic Calming - Planning - Arterials	Planning	15,000	100%	100%	0
		Traffic Calming - Planning - Local Streets	Planning	679,783	100%	100%	0
		Traffic Calming - San Jose Ave.	Planning	26,800	pending	14%	22,944
		Traffic Calming - School Area Safety	Planning	194,000	100%	100%	0
		Traffic Calming - Speed Humps and Traffic Islands	Planning, Design, Con	572,400	pending	84%	89,589
		Traffic Calming - Speed Humps/Cushions	Design, Construction	43,500	pending	35%	28,473
		Traffic Calming - St. Francis Wood - Areawide	Planning	58,100	90%	99%	397

5YPP Project Delivery Snapshot -- EP 38

EP #	Sponsor	Project/Sub-Project Name	Phase(s) Funded	Current Allocation Amount (allocations less deobligations)	Status (Percent Complete) as of Jun '09	% current allocation reimbursed	Remaining Balance
		Traffic Calming - Street Print	Design, Construction	60,900	pending	1%	60,191
		Traffic Calming - Sunnyside - Areawide	Planning	176,050	90%	76%	41,812
		Traffic Calming - Traffic Islands/Chicanes	Design, Construction	304,500	pending	56%	132,899
Grand Total							2,295,686

5YPP Project Delivery Snapshot -- EP 39

EP #	Sponsor	Project/Sub-Project Name	Phase(s) Funded	Current Allocation Amount (allocations less deobligations)	Status (Percent Complete) as of Jun '09	% current allocation reimbursed	Remaining Balance
39	BART	5-Year Prioritization Program - Bicycle Circulation/Safety	Operations	0	100%	100%	0
	DCP	Major Environmental Analysis Planner	Planning	153,750	25%	25%	115,313
	MTA-DPT	2nd, 5th, and Townsend Bike Lanes	Planning, Env. Studies	94,600	2nd: pending 5th: 97% Townsend: 97%	48%	49,600
		5-Year Prioritization Program - Bicycle Circulation/Safety	Operations	14,600	100%	0%	14,600
		Bicycle Projects - Market St.	Design, Construction	42,595	90%	100%	0
		Bicycle Projects - The Wiggle	Design, Construction	25,064	100%	100%	0
		Bicycle Projects & Programs - Various Locations (FY04/05)	Operations	585,258	100%	98%	12,406
		Bicycle Projects & Programs - Various Locations (FY05/06)	Operations	420,200	70%	71%	122,431
		Bicycle Report Card	Planning	126,218	100%	100%	0
		Bicycle Safety Education Classes	Operations	121,774	pending	2%	119,226
		Bicycle Safety Outreach Program	Operations	196,073	100%	100%	0
		Bicycle Safety Program (FY06/07)	Operations	216,761	100%	100%	(0)
		Bicycle Safety Program (FY07/08)	Operations	457,000	50%	47%	243,982
		Bike to Work Day Promotion	Operations	165,768	50%	8%	152,105
		Buckingham Way / 19th Ave. Bikeway Improvements	Design	50,000	100%	37%	31,622
		Cesar Chavez Bicycle Improvements, Sanchez to US-101	Design	65,100	100%	30%	45,570
		Citywide Bicycle Counters	Construction, Procurer	126,194	pending	0%	126,194
		Colored Bicycle Lane Experiment	Construction	225,000	pending	0%	225,000
		Division St. Bicycle Improvements, 9th to 11th	Design	11,400	97%	83%	1,961
		Fremont St. Bike Lane, Folsom to Harrison	Planning, Design	7,500	97%	26%	5,587
		Geary Corridor Bicycle Network Review	Planning	4,500	90%	95%	205
		Holloway Ave. Bike Blvd., Lee Ave. to Varela Ave.	Design	15,100	95%	63%	5,593
		Illinois St. Bike Lane, 16th St. to Islais Creek	Design	5,400	97%	46%	2,901
		Improve Bicycle Access to 16th St. BART Station	Planning	11,000	90%	49%	5,624
		Laguna Honda Blvd. Bike Lane, Plaza to Dewey Blvd.	Design	25,000	97%	76%	5,941
		Lee Ave. Bike Lanes, Holloway Ave. to Ocean Ave.	Design	16,700	100%	33%	11,267
		Market St. Bike Lane, Octavia Bloulevard to 17th St.	Design	34,500	90%	50%	17,325
		Market St. Bike Lanes Construction	Construction	43,000	90%	42%	25,029
		Masonic Ave. Bike Lane, Fell St. to Geary Blvd.	Design	35,600	90%	63%	13,099
		Point Lobos Ave., the Great Highway to El Camino Del Mar	Design	11,500	97%	66%	3,948
		Portola Dr. Bike Lanes, O'Shaughessy Blvd. to Sloat Blvd.	Design	18,000	97%	46%	9,704
		Potrero Ave. Bicycle Improvements, 17th to Division	Design	17,900	90%	80%	3,537
		Sagamore and Sickles Streets Bike Lanes, Alemany to Brotherhood Way	Design	6,300	97%	80%	1,287
		SF Bicycle Network Improvements - Local Match	Planning	15,000	pending	15%	12,778
	PCJPB	4th & King Bicycle Storage Facility	Construction	39,000		71%	11,143
	SFCTA	Geary Corridor Bicycle Network Review	Planning	16,300	100%	0%	16,300
Grand Total							1,411,277

5YPP Project Delivery Snapshot -- EP 40

EP #	Sponsor	Project/Sub-Project Name	Phase(s) Funded	Current Allocation Amount (allocations less deobligations)	Status (Percent Complete) as of Jun '09	% current allocation reimbursed	Remaining Balance
40	BART	5-Year Prioritization Program - Pedestrian Circulation/Safety (BART portion)	Operations	0	100%	100%	0
		Balboa Park Station Westside Entrance and Walkway	Design	25,000	1%	0%	25,000
			Construction	217,000	0%	0%	217,000
	MTA-DPT	3rd St. Light Rail Transit (LRT) APS	Planning, Env. Studies	192,074	pending	100%	0
		5-Year Prioritization Program - Pedestrian Circulation/Safety (DPT portion)	Operations	92,000	100%	100%	0
		APS - Construction	Construction	775,000	100%	16%	653,247
		APS Selection & Design	Planning, Env. Studies	159,734	28%	100%	0
		Corridors: Market St. Crosswalk Resptriping and Limit Lines	Construction	19,860	100%	100%	0
		Golden Gate Park Pedestrian and Bicycle Improvements - Local Match	Env. Studies, Design	20,531	100%	100%	0
		Ladder Crosswalks Maintenance (FY07/08)	Construction	42,750	100%	98%	757
		Ladder Crosswalks Maintenance (FY08/09)	Construction	71,250	100%	11%	63,710
		Median and Curb Ramp Accessibility	Design, Construction	54,941	100%	100%	0
		Pedestrian Accessible Pedestrian Signals (APS): Citywide Phase 2	Planning, Env. Studies	38,788	100%	100%	0
		Pedestrian Countdowns - Divisidero & Hayes	Planning	17,082	100%	48%	8,866
		Pedestrian Countdowns - Geary & Laguna	Design, Construction	2,211	100%	105%	(100)
		Pedestrian Countdowns - Van Ness	Planning, Design	26,162	100%	100%	0
		Pedestrian Islands and Crosswalks Improvements	Design, Construction	211,707	100%	100%	0
		Pedestrian Master Plan Part 3	Planning, Env. Studies	131,983	100%	100%	0
		Pedestrian Projects - Pedestrian Safe Curb Bulbs	Design	53,000	100%	0%	53,000
		Pedestrian Safety - Innovative Device Testing/Adjustments	Construction	130,776	100%	100%	0
		Pedestrian Signals - 16th and Folsom Streets	Construction	50,000	100%	38%	31,054
		Pedsafe Curb Bulbs	Construction	1,403	pending	100%	0
		Phelan Ave. Crosswalk Improvements - Neighborhood	Env. Studies, Design	35,065	100%	100%	(10)
		Phelan Ave. Pedestrian Improvements	Planning, Env. Studies	18,653	100%	100%	0
		Van Ness Ave. Pedestrian Countdown Signals	Construction	92,533	100%	100%	0
Grand Total							1,052,525

5YPP Project Delivery Snapshot -- EP 41

EP #	Sponsor	Project/Sub-Project Name	Phase(s) Funded	Current Allocation Amount (allocations less deobligations)	Status (Percent Complete) as of Jun '09	% current allocation reimbursed	Remaining Balance
41	DPW	5-Year Prioritization Program - Curb Ramps	Operations	6,607	100%	100%	0
		Curb Ramps (FY04/05)	Planning, Design, Con	864,839	100%	100%	0
		Curb Ramps (FY05/06)	Construction	617,000	100%	96%	22,409
		Curb Ramps (FY06/07)	Construction	644,000	100%	99%	8,616
		Curb Ramps (FY07/08)	Construction	672,000	95%	88%	82,003
		Curb Ramps (FY08/09)	Construction	701,000	0%	0%	701,000
Grand Total							814,028

5YPP Project Delivery Snapshot -- EP 42

EP #	Sponsor	Project/Sub-Project Name	Phase(s) Funded	Current Allocation Amount (allocations less deobligations)	Status (Percent Complete) as of Jun '09	% current allocation reimbursed	Remaining Balance
42	DPW	5-Year Prioritization Program - Tree Planting and Maintenance	Operations	8,100	100%	100%	0
		Tree Maintenance (FY06/07)	Construction	451,990	100%	100%	0
		Tree Maintenance (FY07/08)	Construction	472,338	100%	100%	0
		Tree Maintenance (FY08/09)	Construction	498,448	100%	99%	4,518
		Tree Planting (FY06/07)	Construction	442,009	100%	100%	0
		Tree Planting (FY07/08)	Construction	456,817	100%	100%	0
		Tree Planting (FY08/09)	Construction	478,968	100%	93%	33,684
		Tree Planting and Maintenance (FY04/05)	Construction	1,223,300	100%	100%	0
		Tree Planting and Maintenance (FY05/06)	Construction	857,000	100%	100%	0
Grand Total							38,202

5YPP Project Delivery Snapshot -- EP 43

EP #	Sponsor	Project/Sub-Project Name	Phase(s) Funded	Current Allocation Amount (allocations less deobligations)	Status (Percent Complete) as of Jun '09	% current allocation reimbursed	Remaining Balance
43	DOE	Clean Air Program - Regional Rideshare Program Delegate County	Construction	35,884	pending	0%	35,884
		Clean Air Program (FY04/05)	Planning	311,000	100%	97%	8,151
		Clean Air Program (FY05/06)	Construction	110,000	100%	99%	626
		Clean Air Program (FY06/07) - Bicycle Program	Procurement	10,000	100%	100%	0
		Clean Air Program (FY06/07) - Commuter Benefits Program	Operations	99,000	100%	100%	0
		Clean Air Program (FY06/07) - Emergency Ride Home	Operations	11,000	100%	100%	0
		Clean Air Program (FY07/08) - Bicycle Program	Construction	19,833	100%	100%	0
		Clean Air Program (FY07/08) - Commuter Benefits Program	Operations	99,079	100%	100%	0
		Clean Air Program (FY07/08) - Emergency Ride Home Program	Construction	10,902	100%	100%	0
		Clean Air Program (FY08/09) - Bicycle Program	Construction	10,000	pending	0%	10,000
		Clean Air Program (FY08/09) - Commuter Benefits	Operations	119,790	pending	0%	119,790
		Clean Air Program (FY08/09) - Emergency Ride Home	Operations	13,310	pending	0%	13,310
	MTA-DPT	Bicycle Plan Update Policy Framework Environmental Review	Planning	24,000	100%	100%	0
		Pedestrian Master Plan	Planning	115,854	100%	100%	0
		Pedestrian Master Plan Part 2	Planning	22,802	100%	pending further info	0
	SFCTA	5-Year Prioritization Program - Transportation Demand/Parking Management	Operations	8,000	100%	100%	0
		Congestion Pricing Feasibility Study	Planning	100,000	84%		
		On-Street Parking Management Study	Planning	45,000	pending		
		Pedestrian Master Plan Part 3	Planning	108,000	100%		
Grand Total							187,762

5YPP Project Delivery Snapshot -- EP 44

EP #	Sponsor	Project/Sub-Project Name	Phase(s) Funded	Current Allocation Amount (allocations less deobligations)	Status (Percent Complete) as of Jun '09	% current allocation reimbursed	Remaining Balance
44	BART	24th Street Community Plan Update	Planning	25,000	100%	100%	0
	DPW	Broadway Streetscape Improvement Project Phase 2	Design	29,000	100%	98%	438
			Construction	231,000	100%	100%	0
		Broadway Streetscape Improvements Project Phase 2 - Additional Construction	Construction	385,520	100%	64%	137,135
		Leland Ave. Streetscape Improvements Project	Design	53,120	100%	84%	8,511
			Construction	212,480	pending	0%	212,480
		Renewed Valencia Streetscape	Construction	500,000	0%	0%	500,000
		San Jose/Guerrero Livable Streets Plan	Planning	8,990	100%	100%	(0)
	SFCTA	Bayview Hunters Point Neighborhood Transportation Plan	Planning	11,000	17%	0%	11,000
		Central Freeway/Octavia Blvd. Circulation Study	Planning	90,000	0%	0%	90,000
		Columbus Ave. Revitalization Master Plan	Planning	12,000	17%	0%	12,000
		Eastern Neighborhoods Travel Behavior Survey Phase 2	Planning	50,000	5%	0%	50,000
		Mission South of Cesar Chavez Neighborhood Transportation Plan	Planning	50,000	99%	80%	10,000
		SF Model Land Use Allocation Tool	Planning	25,000	pending	0%	25,000
		Streetscape Master Plan (Better Streets)	Planning	90,000	75%	0%	90,000
		Tenderloin Traffic Calming and Circulation Improvements Project	Planning	15,000	pending	0%	15,000
		Tenderloin/Little Saigon Neighborhood Transportation Plan	Planning	40,000	100%	0%	40,000
		Western SOMA Neighborhood Transportation Planning Study	Planning	40,000	pending	0%	40,000
Grand Total							1,241,564

2009 Strategic Plan

Appendix F. Pro-Rata Share of Available Revenues by Expenditure Plan Line Item (YOE $'s)

EP Line	Title	FY2009/10	FY2010/11	FY2011/12	FY2012/13	FY2013/14	FY2014/15	FY2015/16	7-Year Total
1	Bus Rapid Transit/Transit Preferential Streets/MUNI Metro Network	$ 2,274,403	$ 2,929,925	$ 2,609,907	$ 2,782,410	$ 2,896,960	$ 3,014,628	$ 3,186,485	$ 19,694,718
2	3rd Street Light Rail (Phase 1)	$ 2,899,677	$ 2,930,744	$ 2,962,144	$ 2,993,880	$ 3,025,956	$ 3,058,376	$ 3,091,144	$ 20,961,921
3	Central Subway (3rd St. Light Rail - Phase 2)	$ 3,772,343	$ 3,812,760	$ 3,853,609	$ 3,894,897	$ 3,936,627	$ 3,978,804	$ 4,021,432	$ 27,270,471
4	Geary Light Rail	$ -	$ -	$ -	$ -	$ -	$ -	$ -	$ -
5	Downtown Extension to a Rebuilt Transbay Terminal	$ 5,449,855	$ 7,020,596	$ 6,253,778	$ 6,667,125	$ 6,941,608	$ 7,223,560	$ 7,635,358	$ 47,191,880
6	Electrification	$ 470,013	$ 605,478	$ 539,346	$ 574,994	$ 598,666	$ 622,983	$ 658,497	$ 4,069,977
7	Caltrain Capital Improvement Program	$ 456,256	$ 587,757	$ 523,560	$ 558,165	$ 581,144	$ 604,749	$ 639,224	$ 3,950,856
8	BART Station Access, Safety and Capacity	$ 210,933	$ 271,727	$ 242,048	$ 258,046	$ 268,670	$ 279,582	$ 295,521	$ 1,826,526
9	Ferry	$ 100,881	$ 129,956	$ 115,762	$ 123,413	$ 128,494	$ 133,713	$ 141,336	$ 873,556
10	MUNI Extension of Trolleybus Lines	$ 178,228	$ 229,596	$ 204,519	$ 218,036	$ 227,013	$ 236,233	$ 249,701	$ 1,543,325
11	F-Line Extension to Fort Mason	$ 93,804	$ 120,840	$ 107,641	$ 114,756	$ 119,480	$ 124,333	$ 131,421	$ 812,276
12	Purchase/Rehab Historic Street Cars	$ 26,265	$ 33,835	$ 30,140	$ 32,132	$ 33,455	$ 34,813	$ 36,798	$ 227,437
13	Balboa Park BART/MUNI Station Access	$ 182,355	$ 234,913	$ 209,255	$ 223,086	$ 232,270	$ 241,704	$ 255,483	$ 1,579,065
14	Caltrain Relocation of Paul Street to Oakdale	$ 148,773	$ 191,652	$ 170,719	$ 182,003	$ 189,496	$ 197,193	$ 208,434	$ 1,288,270
15	Purchase Additional Light Rail Vehicles	$ 108,813	$ 140,174	$ 124,864	$ 133,117	$ 138,597	$ 144,227	$ 152,449	$ 942,241
16	Other Transit Enhancements	$ 247,643	$ 319,017	$ 284,173	$ 302,956	$ 315,428	$ 328,240	$ 346,952	$ 2,144,410
17B	New and Renovated Vehicles - BART	$ 232,268	$ 299,212	$ 266,531	$ 284,147	$ 295,845	$ 307,862	$ 325,412	$ 2,011,277
17M	New and Renovated Vehicles - MUNI	$ 9,103,901	$ 11,727,800	$ 10,446,843	$ 11,137,333	$ 11,595,852	$ 12,066,849	$ 12,754,751	$ 78,833,330
17P	New and Renovated Vehicles - PCJPB	$ 464,536	$ 598,424	$ 533,061	$ 568,294	$ 591,691	$ 615,724	$ 650,825	$ 4,022,555
17U	New and Renovated Vehicles - Discretionary	$ 1,625,877	$ 2,094,482	$ 1,865,715	$ 1,989,030	$ 2,070,918	$ 2,155,034	$ 2,277,887	$ 14,078,942
18	Trolleybus Wheelchair-Lift Operations & Maintenance	$ -	$ -	$ -	$ -	$ -	$ -	$ -	$ -
19	F-Line Operations & Maintenance	$ -	$ -	$ -	$ -	$ -	$ -	$ -	$ -
20B	Rehab/Upgrades Existing Facilities - BART	$ 38,518	$ 49,620	$ 44,200	$ 47,121	$ 49,061	$ 51,054	$ 53,965	$ 333,540
20M	Rehab/Upgrades Existing Facilities - MUNI	$ 1,553,564	$ 2,001,328	$ 1,782,735	$ 1,900,565	$ 1,978,811	$ 2,059,186	$ 2,176,575	$ 13,452,763
20P	Rehab/Upgrades Existing Facilities - PCJPB	$ 156,136	$ 201,137	$ 179,168	$ 191,010	$ 198,874	$ 206,952	$ 218,750	$ 1,352,027
20U	Rehab/Upgrades Existing Facilities - Discretionary	$ 193,737	$ 249,575	$ 222,316	$ 237,010	$ 246,767	$ 256,790	$ 271,429	$ 1,677,625
21	Muni Metro Extension Operations & Maintenance	$ -	$ -	$ -	$ -	$ -	$ -	$ -	$ -
22B	Guideways - BART	$ 141,323	$ 182,055	$ 162,170	$ 172,889	$ 180,007	$ 187,318	$ 197,997	$ 1,223,761
22M	Guideways - MUNI	$ 5,624,672	$ 7,245,798	$ 6,454,382	$ 6,880,989	$ 7,164,276	$ 7,455,272	$ 7,880,279	$ 48,705,668
22P	Guideways - PCJPB	$ 563,275	$ 725,620	$ 646,365	$ 689,087	$ 717,456	$ 746,598	$ 789,159	$ 4,877,560
22U	Guideways - Discretionary	$ 702,579	$ 905,075	$ 806,219	$ 859,506	$ 894,892	$ 931,240	$ 984,328	$ 6,083,838
23	Paratransit	$ 4,629,052	$ 5,963,224	$ 5,311,896	$ 5,662,989	$ 5,896,132	$ 6,135,620	$ 6,485,396	$ 40,084,310
24	Golden Gate Bridge South Access (Doyle Drive)	$ 1,815,854	$ 2,339,214	$ 2,083,716	$ 2,221,440	$ 2,312,896	$ 2,406,840	$ 2,544,048	$ 15,724,009
25	Bernal Heights Street System Upgrade	$ 76,405	$ 77,224	$ 78,051	$ 78,887	$ 79,732	$ 80,587	$ 81,450	$ 552,335
26	Great Highway Erosion Repair	$ 46,543	$ 59,957	$ 53,408	$ 56,938	$ 59,283	$ 61,690	$ 65,207	$ 403,027
27	Visitacion Valley Watershed	$ 343,912	$ 443,033	$ 394,643	$ 420,727	$ 438,048	$ 455,841	$ 481,827	$ 2,978,032
28	Illinois Street Bridge	$ 59,878	$ 60,520	$ 61,168	$ 61,824	$ 62,486	$ 63,156	$ 63,832	$ 432,865
29	Golden Gate Park SR1 Traffic Study	$ 4,585	$ 5,907	$ 5,262	$ 5,610	$ 5,841	$ 6,078	$ 6,424	$ 39,707
30	Other Upgrades to Major Arterials	$ 81,507	$ 104,999	$ 93,530	$ 99,712	$ 103,817	$ 108,034	$ 114,193	$ 705,794
31	New Signals and Signs	$ 827,681	$ 1,066,233	$ 949,774	$ 1,012,550	$ 1,054,237	$ 1,097,057	$ 1,159,598	$ 7,167,130
32	Advanced Technology and Information Systems (SFgo)	$ 396,645	$ 510,965	$ 455,155	$ 485,239	$ 505,216	$ 525,737	$ 555,708	$ 3,434,664
33	Signals and Signs	$ 2,015,323	$ 2,596,173	$ 2,312,609	$ 2,465,462	$ 2,566,964	$ 2,671,228	$ 2,823,508	$ 17,451,267
34	Street Resurfacing, Rehabilitation, and Maintenance	$ 2,712,317	$ 3,494,053	$ 3,112,419	$ 3,318,136	$ 3,454,742	$ 3,595,066	$ 3,800,012	$ 23,486,745
35	Street Repair and Cleaning Equipment	$ 522,746	$ 673,410	$ 599,858	$ 639,505	$ 665,834	$ 692,878	$ 732,378	$ 4,526,609
36	Embarcadero Roadway Incremental Operations and Maintenance	$ -	$ -	$ -	$ -	$ -	$ -	$ -	$ -
37	Pedestrian and Bicycle Facility Maintenance	$ 398,938	$ 513,918	$ 457,786	$ 488,044	$ 508,136	$ 528,776	$ 558,920	$ 3,454,517
38	Traffic Calming	$ 1,393,989	$ 1,795,760	$ 1,599,620	$ 1,705,348	$ 1,775,556	$ 1,847,675	$ 1,953,007	$ 12,070,956
39	Bicycle Circulation/Safety	$ 632,798	$ 815,181	$ 726,143	$ 774,138	$ 806,009	$ 838,747	$ 886,562	$ 5,479,579
40	Pedestrian Circulation/Safety	$ 545,673	$ 702,946	$ 626,167	$ 667,554	$ 695,037	$ 723,268	$ 764,499	$ 4,725,144
41	Curb Ramps	$ 541,088	$ 697,039	$ 620,905	$ 661,944	$ 689,196	$ 717,190	$ 758,075	$ 4,685,437
42	Tree Planting and Maintenance	$ 752,020	$ 968,765	$ 862,953	$ 919,990	$ 957,866	$ 996,772	$ 1,053,596	$ 6,511,963
43	Transportation Demand Management/Parking Management	$ 265,958	$ 342,612	$ 305,191	$ 325,362	$ 338,757	$ 352,517	$ 372,613	$ 2,303,011
44	Transportation/Land Use Coordination	$ 403,523	$ 519,825	$ 463,048	$ 493,653	$ 513,977	$ 534,853	$ 565,344	$ 3,494,224
	Total	**$ 55,487,064**	**$ 69,590,053**	**$ 62,814,470**	**$ 66,581,053**	**$ 69,108,079**	**$ 71,702,629**	**$ 75,457,791**	**$ 470,741,139**

Note: Per the Strategic Plan's fiscal policy, 10% of revenues are held in reserve in FY2009/10 - FY2033/34.

CMP Route Name	Auto Start Intersection	Auto End Intersection	Auto Segment Length (mi)	Average Auto Speed (mph)	Transit Route	Transit Segment (stop-to-stop)	Average Transit Speed (mph)	Auto/Transit Speed Ratio
2nd St - NW	Brannan	Market St	0.72	10.4	10 Inbound	Brannan to Folsom	7.3	1.41
2nd St - SE	Market St	Brannan	0.72	10.6	10 Outbound	Howard to Brannan	7.4	1.43
3rd St - NB	Berry St	Market St	0.97	15.7	30 Outbound	Brannan to Market	7.7	2.03
					45 Outbound		7.7	2.04
4th St / Stockton - SB	O'Farrell	Harrison	0.56	8.5	30 Inbound	Geary to Folsom	4.8	1.75
					45 Inbound		4.5	1.87
4th St / Stockton - SB	Harrison	Channel	0.62	14.3	30 Inbound	Folsom to Townsend	7.3	1.95
					45 Inbound		6.9	2.06
4th St / Stockton - SB	Columbus Ave	O'Farrell St	0.90	8.3	30 Inbound	Columbus to Geary	6.4	1.29
					45 Inbound		6.2	1.34
4th St / Stockton - NB	Sutter St	Columbus Ave	0.70	10.6	30 Outbound	Sutter to Columbus	6.4	1.65
					45 Outbound		6.3	1.67
5th St - NW	Brannan	Market St	0.72	15.6	27 Inbound	Harrison to Market	6.8	2.30
5th St - SE	Market St	Brannan	0.72	13.2	27 Outbound	Market to Harrison	6.3	2.10
7th St - NB	Brannan St	Market St	0.72	16.4	19 Inbound	Brannan to Market	7.7	2.13
8th St - SE	Market St	Bryant St	0.60	17.0	19 Outbound	Market to Bryant	8.0	2.13
16th St - EB	Market St	Mission St	0.74	10.7	22 Outbound	Church to Mission	7.1	1.51
16th St - EB	Mission St	Potrero Ave	0.67	12.8	22 Outbound	Mission to Potrero	7.0	1.82
					33 Outbound		9.1	1.40
16th St - WB	Potrero Ave	Mission St	0.67	15.2	22 Inbound	Potrero to Mission	7.3	2.10
					33 Inbound		6.5	2.35
16th St - WB	Mission St	Market St	0.74	12.3	22 Inbound	Mission to Church	6.4	1.93
19th Ave/Park Presidio - NB	Junipero Serra Blvd	Sloat Blvd	1.25	12.1	28 Inbound	Junipero Serra to Sloat	10.4	1.16
19th Ave/Park Presidio - NB	Sloat Blvd	Lincoln Way	2.13	23.6	28 Inbound	Sloat to Lincoln	11.4	2.07
					28L Inbound	Vicente to Lincoln	16.1	1.46

CMP Route Name	Auto Start Intersection	Auto End Intersection	Auto Segment Length (mi)	Average Auto Speed (mph)	Transit Route	Transit Segment (stop-to-stop)	Average Transit Speed (mph)	Auto/Transit Speed Ratio
19th Ave/Park Presidio - NB	Lincoln Way	Fulton	0.93	32.5	28 Inbound	Lincoln to Fulton	19.8	1.64
					28L Inbound		19.0	1.71
19th Ave/Park Presidio - NB	Fulton	Lake	0.91	25.3	28 Inbound	Fulton to California	13.2	1.91
					28L Inbound	Fulton to Geary	15.3	1.66
19th Ave/Park Presidio - NB	Lake	Us 101	1.21	46.0	28 Inbound	California to GG Bridge	26.7	1.72
19th Ave/Park Presidio - SB	Us 101	Lake	1.32	35.2	28 Outbound	GG Bridge to California	25.0	1.41
19th Ave/Park Presidio - SB	Lake	Fulton	0.91	21.7	28 Outbound	California to Fulton	11.2	1.94
19th Ave/Park Presidio - SB	Fulton	Lincoln Way	0.93	18.2	28 Outbound	Fulton to Lincoln	14.8	1.23
19th Ave/Park Presidio - SB	Lincoln Way	Sloat Blvd	2.13	23.0	28 Outbound	Lincoln to Sloat	10.9	2.11
19th Ave/Park Presidio - SB	Sloat Blvd	Junipero Serra Blvd	1.25	13.5	28 Outbound	Sloat to Junipero Serra	12.0	1.12
Bayshore - NB	County Line	Industrial St	2.26	21.5	9 Inbound	Sunnydale to Marengo (via San Bruno)	11.4	1.89
Bayshore - NB	Industrial St	Cesar Chavez	0.83	14.4	9 Inbound	Marengo to 25th St	12.3	1.17
Bayshore - SB	Cesar Chavez	Industrial St	0.83	22.3	9 Outbound	25th St to Alemany	15.1	1.48
Bayshore - SB	Industrial St	County Line	2.26	26.3	9 Outbound	Alemany to Sunnydale	10.6	2.47
Beale / Davis - SB	Clay St	Mission St	0.33	11.2	41 Inbound	Clay & Front to Mission & Beale	8.9	1.26
Broadway - EB	Powell St	Montgomery St	0.35	13.3	12 Outbound	Stockton to Montgomery	6.7	1.98
Broadway - EB	Montgomery St	The Embarcadero	0.35	14.7	12 Outbound	Montgomery to The Embarcadero	7.1	2.07
Bryant - EB	Division St	4th St	0.99	12.7	27 Inbound	Division to 5th St	7.8	1.62
					47 Outbound		8.8	1.44
Castro / Divisadero - NB	Market St	14th St	0.32	15.7	24 Inbound	Market to 14th St	8.5	1.84
Castro / Divisadero - NB	14th St	Geary Blvd	1.13	12.3	24 Inbound		7.6	1.63
Castro / Divisadero - NB	Geary Blvd	Pine St	0.27	10.7	24 Inbound	Geary to Bush	6.6	1.63
Castro / Divisadero - NB	Pine St	Clay St	0.19	18.4	24 Inbound	Bush to Clay	8.1	2.27
Castro / Divisadero - SB	Clay St	Pine St	0.19	16.5	24 Outbound	Clay to Pine	6.8	2.41
Castro / Divisadero - SB	Pine St	Geary Blvd	0.27	13.5	24 Outbound	Pine to Geary	6.2	2.16

CMP Route Name	Auto Start Intersection	Auto End Intersection	Auto Segment Length (mi)	Average Auto Speed (mph)	Transit Route	Transit Segment (stop-to-stop)	Average Transit Speed (mph)	Auto/Transit Speed Ratio
Castro / Divisadero - SB	Geary Blvd	14th St	1.13	11.1	24 Outbound	Geary to 14th St	6.4	1.74
Castro / Divisadero - SB	14th St	Market St	0.32	15.2	24 Outbound	14th St to Market	9.0	1.68
Clay - EB	Jones St	Kearny St	0.54	8.0	1 Inbound	Jones to Kearny	6.4	1.25
Clay - EB	Kearny St	Davis St	0.38	11.6	1 Inbound	Kearny to Davis	7.1	1.64
Columbus - NW	Montgomery St	Greenwich St	0.67	14.1	30 Outbound	Stockton to Greenwich/Mason	6.4	2.19
					41 Outbound	Washington/Montgomery to Union	5.7	2.47
Columbus - NW	Greenwich St	North Point St	0.42	9.2	30 Outbound	Greenwich to North Point	8.5	1.09
Columbus - SE	North Point St	Greenwich St	0.42	13.3	30 Inbound	Bay to Filbert	7.8	1.70
Columbus - SE	Greenwich St	Montgomery St	0.67	7.1	41 Inbound	Union to Montgomery & Clay	5.6	1.26
Doyle / Lombard / Richardson - SE	Broderick	Pierce St	0.28	20.4	28 Inbound	Richardson/Francisco to Pierce	11.4	1.79
					43 Inbound	Broderick to Pierce	9.9	2.06
Doyle / Lombard / Richardson - SE	Pierce St	Laguna	0.46	21.1	28 Inbound	Pierce to Laguna/Chestnut	8.1	2.61
Doyle / Lombard / Richardson - NW	Laguna	Pierce St	0.46	17.6	28 Outbound	Laguna/Chestnut to Pierce	7.5	2.36
Doyle / Lombard / Richardson - NW	Pierce St	Broderick	0.28	16.9	28 Outbound	Pierce to Richardson/Francisco	11.6	1.46
					43 Outbound	Pierce to Lyon & Lombard	8.0	2.11
Drumm - NB	Market St	Washington St	0.22	16.2	1 Outbound	Main/Market to Sacramento/Davis	5.4	2.97
Drumm - SB	Washington St	Market St	0.22	7.6	1 Inbound	Davis/California to Beale/Mission	6.3	1.21
Evans - NW	Jennings St	03rd St	0.59	20.3	19 Inbound	Keith to Phelps	13.5	1.51
Evans - NW	03rd St	Cesar Chavez St	0.73	20.1	19 Inbound	Phelps to Chavez	14.8	1.36
Evans - SE	Cesar Chavez St	03rd St	0.73	21.6	19 Outbound	Chavez to Third St	16.7	1.29
Evans - SE	03rd St	Jennings St	0.59	27.3	19 Outbound	Third St to Keith	15.6	1.75
Folsom - EB	14th St	11th St	0.25	11.9	12 Inbound	14th St to 11th St	7.6	1.57
Folsom - EB	11th St	08th St	0.31	16.9	12 Inbound	11th to 8th St	7.7	2.20
Folsom - EB	08th St	04th St	0.69	17.2	12 Inbound	8th St to 4th St	10.2	1.68
Folsom - EB	04th St	01st St	0.52	15.0	12 Inbound	4th St to 1st St	8.0	1.86
Folsom - EB	01st St	The Embarcadero	0.34	12.1	12 Inbound	1st St to The Embarcadero	8.4	1.44

CMP Route Name	Auto Start Intersection	Auto End Intersection	Auto Segment Length (mi)	Average Auto Speed (mph)	Transit Route	Transit Segment (stop-to-stop)	Average Transit Speed (mph)	Auto/Transit Speed Ratio
Fremont - NB	Harrison St	Market St	0.48	10.1	10 Inbound	Folsom to Market	8.2	1.23
Fulton - EB	La Playa St	Park Presidio Blvd	2.09	26.1	5 Inbound	La Playa to Park Presidio	16.6	1.57
Fulton - EB	Park Presidio Blvd	Arguello	0.74	24.1	5 Inbound	Park Presidio to Arguello	11.2	2.15
Fulton - EB	Arguello	Masonic	0.66	13.6	5 Inbound	Arguello to Masonic	10.4	1.31
Fulton - WB	Masonic	Arguello	0.66	20.6	5 Outbound	Masonic to Arguello	9.2	2.24
Fulton - WB	Arguello	Park Presidio Blvd	0.74	15.4	5 Outbound	Arguello to Park Presidio	9.7	1.58
Fulton - WB	Park Presidio Blvd	La Playa St	2.09	27.3	5 Outbound	Park Presidio to La Playa	14.4	1.90
Geary - EB	Great Hwy	25th Ave	1.78	21.4	38 Inbound	45th Ave to 25th Ave	10.8	1.99
					38L Inbound		12.0	1.79
Geary - EB	25th Ave	Arguello	1.42	22.9	38 Inbound	25th Ave to Arguello	7.6	3.01
					38L Inbound		9.6	2.38
Geary - EB	Arguello	Collins	0.48	13.2	38 Inbound	Arguello to Collins	8.5	1.56
					38L Inbound	Arguello to Presidio	10.7	1.24
Geary - EB	Collins	Gough St	1.41	24.7	38 Inbound	Collins to Gough/Starr King	9.1	2.72
					38L Inbound	Presidio to Van Ness (via Starr King)	9.6	2.57
Geary - WB	Kearny St	Gough St	1.18	10.1	38 Outbound	Kearny to Gough	6.2	1.64
					38L Outbound	Kearny to Van Ness	8.0	1.27
Geary - WB	Gough St	Collins	1.41	25.3	38 Outbound	Gough to Collins	9.0	2.82
					38L Outbound	Van Ness to Presidio	9.3	2.71
Geary - WB	Collins	Arguello	0.48	24.1	38 Outbound	Collins to Arguello	11.7	2.05
					38L Outbound	Presidio to Arguello	12.0	2.01
Geary - WB	Arguello	25th Ave	1.42	17.0	38 Outbound	Arguello to 25th Ave	7.6	2.23
					38L Outbound		9.7	1.76
Geary - WB	25th Ave	Great Hwy	1.78	22.0	38 Outbound	25th Ave to 42nd Ave/Point Lobos	10.0	2.20
					38L Outbound		12.5	1.76
Geneva - EB	Ocean Ave	Cayuga Ave	0.56	8.4	9X Inbound	Ocean to Cayuga	7.1	1.19

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					43 Outbound	Howth to Cayuga	6.7	1.25
Geneva - EB	Cayuga Ave	Paris St	0.33	10.8	9X Inbound	Cayuga to Paris	6.8	1.60
					43 Outbound		6.5	1.65
Geneva - EB	Paris St	Moscow St	0.36	13.4	9X Inbound	Paris to Munich	9.4	1.42
Geneva - EB	Moscow St	Santos St	0.83	28.5	9X Inbound	Munich to Santos	13.4	2.13
Geneva - EB	Santos St	Bayshore	0.76	24.4	9 Inbound	Santos to Schwerin & MacDonald	10.5	2.32
Geneva - WB	Bayshore	Santos St	0.76	22.4	9 Outbound	Rio Verde to Santos	14.0	1.60
Geneva - WB	Santos St	Moscow St	0.83	27.7	9X Outbound	Santos to Moscow	14.6	1.89
Geneva - WB	Moscow St	Paris St	0.36	17.7	9X Outbound	Moscow to Paris	10.0	1.78
Geneva - WB	Paris St	Cayuga Ave	0.33	10.5	9X Outbound	Paris to Cayuga	7.1	1.47
					43 Inbound		7.3	1.43
Geneva - WB	Cayuga Ave	Ocean Ave	0.56	9.2	9X Outbound	Cayuga to Balboa Park Station	8.8	1.05
					43 Inbound	Cayuga to Balboa Park Station	7.9	1.16
Harrison - WB	The Embarcadero	02nd St	0.51	13.4	12 Outbound	The Embarcadero to 2nd St	9.1	1.48
Harrison - WB	02nd St	04th St	0.34	16.3	12 Outbound	2nd St to 4th St	8.5	1.91
Harrison - WB	04th St	08th St	0.69	11.6	12 Outbound	4th St to 8th St	9.4	1.23
					27 Outbound	5th to 8th	9.5	1.22
					47 Inbound		9.5	1.22
Harrison - WB	08th St	10th St	0.21	13.5	12 Outbound	8th St to 10th St	7.1	1.90
					27 Outbound		7.7	1.75
					47 Inbound		7.2	1.88
Hayes - WB	Market St	Gough	0.39	9.6	21 Outbound	Larkin to Gough	4.8	1.99
Junipero Serra - NB	Brotherhood Way	19th Ave	0.31	15.2	28 Inbound	Brotherhood to 19th Ave	14.8	1.03
Junipero Serra - SB	19th Ave	Brotherhood Way	0.31	39.2	28 Outbound	19th Ave to Font	13.4	2.94
Kearny - NB	Market St	Columbus	0.65	13.0	9X Inbound	Geary to Jackson	6.8	1.92
Lincoln / Kezar - EB	19th Ave	05th Ave	0.83	23.1	71 Inbound	19th Ave to 5th Ave	11.9	1.94

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Lincoln / Kezar - WB	05th Ave	19th Ave	0.83	12.9	71L Outbound	5th Ave to 19th Ave	12.2	1.05
Market / Portola - EB	South Van Ness Ave	Drumm St	1.77	9.5	5 Inbound	7th St to 1st St	8.5	1.12
					6 Inbound		8.3	1.15
					7 Inbound	Van Ness to Spear	7.8	1.22
					9 Inbound	11th to Spear	8.0	1.19
					38 Inbound	3rd St to 1st St	7.9	1.21
					71 Inbound	Van Ness to Spear	8.0	1.19
Market / Portola - WB	Drumm St	Van Ness Ave	1.77	13.5	5 Outbound	Fremont to Golden Gate & Taylor	6.5	2.07
					6 Outbound	2nd St to Van Ness	6.8	1.97
					7 Outbound	Front to Van Ness	7.4	1.82
					9 Outbound	Front to 11th St	7.1	1.91
					38 Outbound	Fremont to Montgomery	5.8	2.34
					71L Outbound	Drumm to Van Ness	7.2	1.87
Masonic - NB	Page St	Geary Blvd	0.79	18.8	43 Inbound	Haight to Geary	9.5	1.99
Masonic - SB	Geary Blvd	Page St	0.79	16.9	43 Inbound	Geary to Haight	8.9	1.90
Mission / Otis - NB	Sickles Ave	Ocean Ave	1.45	22.4	14 Inbound	Acton to Brazil	10.0	2.24
Mission / Otis - NB	Ocean Ave	Cesar Chavez St	1.95	17.8	14 Inbound	Brazil to 26th St	9.0	1.97
					49 Inbound		9.0	1.97
Mission / Otis - NB	Cesar Chavez St	14th St	1.39	13.9	14 Inbound	26th St to 14th St	6.9	2.01
					14L Inbound	26th St to 16th St	8.0	1.74
					49 Inbound	26th St to 14th St	6.5	2.13
Mission / Otis - NB	14th St	09th St	0.65	13.3	14 Inbound	14th St to 9th St	6.9	1.91
					14L Inbound	16th St to 9th St	8.1	1.63
Mission / Otis - NB	09th St	03rd St	0.98	13.7	14 Inbound	9th St to 3rd St	8.0	1.71
					14L Inbound		10.1	1.35
Mission / Otis - NB	03rd St	The Embarcadero	0.74	13.0	14 Inbound	3rd St to Main	7.5	1.74

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					14L Inbound		8.8	1.47
Mission / Otis - SB	The Embarcadero	03rd St	0.74	13.9	14 Outbound	Spear to Third	7.0	1.98
					14X Outbound		7.1	1.95
Mission / Otis - SB	03rd St	09th St	0.98	15.1	14 Outbound	3rd St to 9th St	7.6	2.00
Mission / Otis - SB	09th St	14th St	0.68	13.4	14 Outbound	9th St to 14th St	6.8	1.98
Mission / Otis - SB	14th St	Cesar Chavez St	1.39	15.2	14 Outbound	14th St to 26th St	6.5	2.34
					49 Outbound		6.8	2.25
Mission / Otis - SB	Cesar Chavez St	Ocean Ave	1.95	13.8	14 Outbound	26th to Norton	8.1	1.70
					49 Outbound		8.2	1.68
Mission / Otis - SB	Ocean Ave	Sickles Ave	1.45	20.3	14 Outbound	Norton to Sickles	9.0	2.25
					14L Outbound		12.8	1.58
North Point - EB	Van Ness Ave	Columbus	0.38	15.5	10 Outbound	Polk to Jones	8.5	1.82
					30 Inbound	Polk to Columbus & Bay	8.5	1.83
					47 Inbound	Polk to Jones	9.6	1.61
North Point - EB	Columbus	The Embarcadero	0.61	15.9	10 Outbound	Jones to Embarcadero (Kearny)	9.6	1.66
North Point - WB	The Embarcadero	Columbus	0.61	15.8	10 Inbound	Embarcadero (Kearny) to Jones	10.3	1.53
North Point - WB	Columbus	Van Ness Ave	0.38	16.4	10 Inbound	Jones to Polk	9.5	1.72
					30 Outbound	Columbus & North Point to Polk	7.1	2.31
					47 Outbound	Jones to Polk	7.9	2.09
O'Farrell - EB	Gough St	Mason	0.85	11.2	38 Inbound	Gough (via Starr King) to Taylor	6.9	1.62
					38L Inbound	Van Ness to Taylor	10.5	1.07
O'Farrell - EB	Mason	Market St	0.28	9.0	38 Inbound	Taylor to Grant	6.7	1.35
					38L Inbound		7.2	1.25
Potrero - NB	Cesar Chavez St	21st St	0.62	18.8	9 Inbound	25th St to 22nd St	7.3	2.58
Potrero - NB	21st St	Division St	0.80	15.6	9 Inbound	22nd St to 15th St	9.9	1.58
Potrero - SB	Division St	21st St	0.80	25.2	9 Outbound	Alameda to 21st St	10.0	2.53

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Potrero - SB	21st St	Cesar Chavez St	0.62	19.4	9 Outbound	21st St to 25th St	7.0	2.79
Sloat - EB	Skyline Blvd	Junipero Serra Blvd	1.37	20.7	23 Inbound	Skline to Junipero Serra	15.4	1.35
Sloat - WB	Junipero Serra Blvd	Skyline Blvd	1.37	26.9	23 Outbound	Junipero Serra to Skyline	14.2	1.89
Sutter - EB	Divisadero St	Gough St	0.82	15.5	2 Inbound	Divisadero to Gough & Post	8.2	1.89
Sutter - WB	Market St	Mason St	0.56	11.3	2 Outbound	Sansome to Mason	5.9	1.91
					3 Outbound	Kearny to Mason	6.3	1.80
Sutter - WB	Mason St	Gough St	0.82	14.6	2 Outbound	Mason to Gough	6.6	2.21
					3 Outbound		6.5	2.24
Sutter - WB	Gough St	Divisadero St	0.82	14.9	2 Outbound	Gough to Divisadero	7.9	1.89
Townsend - EB	07th St	02nd St	0.86	11.9	10 Inbound		10.4	1.14
Townsend - WB	02nd St	07th St	0.86	12.8	10 Outbound	2nd St to 7th St	10.3	1.25
Turk - EB	Stanyan St	Divisadero St	0.91	17.2	31 Inbound	Stanyan to Broderick	11.7	1.47
Turk - WB	Market	Hyde	0.38	11.1	31 Outbound	Taylor to Hyde	5.8	1.93
Turk - WB	Divisadero St	Stanyan St	0.91	25.6	31 Outbound	Broderick to Stanyan	10.4	2.46
Van Ness / South Van Ness - NB	Hwy 101	Golden Gate Ave	0.79	14.7	47 Inbound	Mission to Turk	6.7	2.18
					49 Inbound		6.0	2.47
Van Ness / South Van Ness - NB	Golden Gate Ave	Washington St	0.84	17.4	47 Inbound	Turk to Jackson	6.2	2.82
					49 Inbound		6.2	2.83
Van Ness / South Van Ness - NB	Washington St	Lombard St	0.58	26.4	47 Inbound	Jackson to Chestnut	8.6	3.09
					49 Inbound		8.5	3.12
Van Ness / South Van Ness - NB	Lombard St	North Point St	0.26	11.5	47 Inbound	Chestnut to North Point	7.5	1.54
Van Ness / South Van Ness - SB	North Point St	Lombard St	0.26	7.9	47 Outbound	North Point to Chestnut	5.2	1.50
Van Ness / South Van Ness - SB	Lombard St	Washington St	0.58	12.4	47 Outbound	Chestnut to Jackson	6.7	1.85
					49 Outbound		6.4	1.94
Van Ness / South Van Ness - SB	Washington St	Golden Gate Ave	0.84	12.2	47 Outbound	Jackson to McAllister	6.0	2.02
					49 Outbound		6.0	2.04

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Van Ness / South Van Ness - SB	Golden Gate Ave	Hwy 101	0.79	12.3	47 Outbound	McAllister to 11th & Mission	7.0	1.76
					49 Outbound	McAllister to Otis & S. Van Ness	6.1	2.03
Sacramento - WB	Drumm	Kearny St	0.44	11.9	1 Outbound	Davis to Kearny	5.7	2.07
Sacramento - WB	Kearny St	Jones St	0.54	10.8	1 Outbound	Kearny to Jones	5.8	1.86
Sansome - NB	Sutter	Washington St	0.38	10.0	10 Inbound	California to Washington	6.9	1.45
Sansome - NB	Washington St	Chestnut St	0.64	18.0	10 Inbound	Washington to Lombard	9.8	1.83

CMP Route Name	Auto Start Intersection	Auto End Intersection	Average Auto Speed (mph)	Transit Segment (stop-to-stop)	Transit Route	Average Transit Speed (mph)	Auto/Transit Speed Ratio
Van Ness / South Van Ness - NB	Washington St	Lombard St	26.4	Jackson to Chestnut	49 Inbound	8.5	3.12
Van Ness / South Van Ness - NB	Washington St	Lombard St	26.4	Jackson to Chestnut	47 Inbound	8.6	3.09
Geary - EB	25th Ave	Arguello	22.9	25th Ave to Arguello	38 Inbound	7.6	3.01
Drumm - NB	Market St	Washington St	16.2	Main & Market to Sacramento & Davis	1 Outbound	5.4	2.97
Junipero Serra - SB	19th Ave	Brotherhood Way	39.2	19th Ave to Font	28 Outbound	13.4	2.94
Van Ness / South Van Ness - NB	Golden Gate Ave	Washington St	17.4	Turk to Jackson	49 Inbound	6.2	2.83
Van Ness / South Van Ness - NB	Golden Gate Ave	Washington St	17.4	Turk to Jackson	47 Inbound	6.2	2.82
Geary - WB	Gough St	Collins	25.3	Gough to Collins	38 Outbound	9.0	2.82
Potrero - SB	21st St	Cesar Chavez St	19.4	21st St to 25th St	9 Outbound	7.0	2.79
Geary - EB	Collins	Gough St	24.7	Collins to Gough/Starr King	38 Inbound	9.1	2.72
Geary - WB	Gough St	Collins	25.3	Van Ness to Presidio	38L Outbound	9.3	2.71
Doyle / Lombard / Richardson - SE	Pierce St	Laguna	21.1	Pierce to Laguna/Chestnut	28 Inbound	8.1	2.61
Potrero - NB	Cesar Chavez St	21st St	18.8	25th St to 22nd St	9 Inbound	7.3	2.58
Geary - EB	Collins	Gough St	24.7	Presidio to Van Ness (via Starr King)	38L Inbound	9.6	2.57
Potrero - SB	Division St	21st St	25.2	Alameda to 21st St	9 Outbound	10.0	2.53
Bayshore - SB	Industrial St	County Line	26.3	Alemany to Sunnydale	9 Outbound	10.6	2.47
Van Ness / South Van Ness - NB	Hwy 102	Golden Gate Ave	14.7	Mission to Turk	49 Inbound	6.0	2.47
Columbus - NW	Montgomery St	Greenwich St	14.1	Washington/Montgomery to Union	41 Outbound	5.7	2.47
Turk - WB	Divisadero St	Stanyan St	25.6	Broderick to Stanyan	31 Outbound	10.4	2.46
Castro / Divisadero - SB	Clay St	Pine St	16.5	Clay to Pine	24 Outbound	6.8	2.41
Geary - EB	26th Ave	Arguello	22.9	25th Ave to Arguello	38L Inbound	9.6	2.38
Doyle / Lombard / Richardson - NW	Laguna	Pierce St	17.6	Laguna/Chestnut to Pierce	28 Outbound	7.5	2.36
17th St - WB	Potrero Ave	Mission St	15.2	Potrero to Mission	33 Inbound	6.5	2.35
Market / Portola - WB	Drumm St	South Van Ness Ave	13.5	Fremont to Montgomery	38 Outbound	5.8	2.34
Mission / Otis - SB	14th St	Cesar Chavez St	15.2	14th St to 26th St	14 Outbound	6.5	2.34
Geneva - EB	Santos St	Bayshore	24.4	Santos to Schwerin & MacDonald	9 Inbound	10.5	2.32
North Point - WB	Columbus	Van Ness Ave	16.4	Columbus & North Point to Polk	30 Outbound	7.1	2.31
5th St - NW	Brannan	Market St	15.6	Harrison to Market	27 Inbound	6.8	2.30
Castro / Divisadero - NB	Pine St	Clay St	18.4	Bush to Clay	24 Inbound	8.1	2.27
Mission / Otis - SB	15th St	Cesar Chavez St	15.2	14th St to 26th St	49 Outbound	6.8	2.25
Mission / Otis - SB	Ocean Ave	Sickles Ave	20.3	Norton to Sickles	14 Outbound	9.0	2.25
Sutter - WB	Mason St	Gough St	14.6	Mason to Gough	3 Outbound	6.5	2.24
Fulton - WB	Masonic	Arguello	20.6	Masonic to Arguello	5 Outbound	9.2	2.24
Mission / Otis - NB	Sickles Ave	Ocean Ave	22.4	Acton to Brazil	14 Inbound	10.0	2.24
Geary - WB	Arguello	25th Ave	17.0	Arguello to 25th Ave	38 Outbound	7.6	2.23
Sutter - WB	Mason St	Gough St	14.6	Mason to Gough	2 Outbound	6.6	2.21
Folsom - EB	11th St	08th St	16.9	11th to 8th St	12 Inbound	7.7	2.20
Geary - WB	25th Ave	Great Hwy	22.0	25th Ave to 42nd Ave/Point Lobos	38 Outbound	10.0	2.20
Columbus - NW	Montgomery St	Greenwich St	14.1	Stockton to Greenwich/Mason	30 Outbound	6.4	2.19
Van Ness / South Van Ness - NB	Hwy 101	Golden Gate Ave	14.7	Mission to Turk	47 Inbound	6.7	2.18
Castro / Divisadero - SB	Pine St	Geary Blvd	13.5	Pine to Geary	24 Outbound	6.2	2.16
Fulton - EB	Park Presidio Blvd	Arguello	24.1	Park Presidio to Arguello	5 Inbound	11.2	2.15
7th St - NB	Brannan St	Market St	16.4	Brannan to Market	19 Inbound	7.7	2.13
8th St - SE	Market St	Bryant St	17.0	Market to Bryant	19 Outbound	8.0	2.13
Geneva - EB	Moscow St	Santos St	28.5	Munich to Santos	9X Inbound	13.4	2.13
Mission / Otis - NB	Cesar Chavez St	16th St	13.9	26th St to 14th St	49 Inbound	6.5	2.13
Doyle / Lombard / Richardson - NW	Pierce St	Broderick	16.9	Pierce to Lyon & Lombard	43 Outbound	8.0	2.11
19th Ave/Park Presidio - SB	Lincoln Way	Sloat Blvd	23.0	Lincoln to Sloat	28 Outbound	10.9	2.11
5th St - SE	Market St	Brannan	13.2	Market to Harrison	27 Outbound	6.3	2.10
16th St - WB	Potrero Ave	Mission St	15.2	Potrero to Mission	22 Inbound	7.3	2.10
North Point - WB	Columbus	Van Ness Ave	16.4	Jones to Polk	47 Outbound	7.9	2.09
Sacramento - WB	Drumm	Kearny St	11.9	Davis to Kearny	1 Outbound	5.7	2.07
19th Ave/Park Presidio - NB	Sloat Blvd	Lincoln Way	23.6	Sloat to Lincoln	28 Inbound	11.4	2.07
Broadway - EB	Montgomery St	The Embarcadero	14.7	Montgomery to The Embarcadero	12 Outbound	7.1	2.07
Market / Portola - WB	Drumm St	South Van Ness Ave	13.5	Fremont to Golden Gate & Taylor	5 Outbound	6.5	2.07
5th St / Stockton - SB	Harrison	Channel	14.3	Folsom to Townsend	45 Inbound	6.9	2.06
Doyle / Lombard / Richardson - SE	Broderick	Pierce St	20.4	Broderick to Pierce	43 Inbound	9.9	2.06
Geary - WB	Collins	Arguello	24.1	Collins to Arguello	38 Outbound	11.7	2.05
4th St - NB	Berry St	Market St	15.7	Brannan to Market	45 Outbound	7.7	2.04
Van Ness / South Van Ness - SB	Washington St	Golden Gate Ave	12.2	Jackson to McAllister	49 Outbound	6.0	2.04
Van Ness / South Van Ness - SB	Golden Gate Ave	Hwy 102	12.3	McAllister to Otis & S. Van Ness	49 Outbound	6.1	2.03
3rd St - NB	Berry St	Market St	15.7	Brannan to Market	30 Outbound	7.7	2.03
Van Ness / South Van Ness - SB	Washington St	Golden Gate Ave	12.2	Jackson to McAllister	47 Outbound	6.0	2.02
Mission / Otis - NB	Cesar Chavez St	14th St	13.9	26th St to 14th St	14 Inbound	6.9	2.01
Geary - WB	Collins	Arguello	24.1	Presidio to Arguello	38L Outbound	12.0	2.01
Mission / Otis - SB	03rd St	09th St	15.1	3rd St to 9th St	14 Outbound	7.6	2.00
Geary - EB	Great Hwy	25th Ave	21.4	45th Ave to 25th Ave	38 Inbound	10.8	1.99
Hayes - WB	Market St	Gough	9.6	Larkin to Gough	21 Outbound	4.8	1.99
Masonic - NB	Page St	Geary Blvd	18.8	Haight to Geary	43 Inbound	9.5	1.99
Mission / Otis - SB	09th St	14th St	13.4	9th St to 14th St	14 Outbound	6.8	1.98
Mission / Otis - SB	The Embarcadero	03rd St	13.9	Spear to Third	14 Outbound	7.0	1.98
Broadway - EB	Powell St	Montgomery St	13.3	Stockton to Montgomery	12 Outbound	6.7	1.98

CMP Route Name	Auto Start Intersection	Auto End Intersection	Average Auto Speed (mph)	Transit Segment (stop-to-stop)	Transit Route	Average Transit Speed (mph)	Auto/Transit Speed Ratio
Market / Portola - WB	Drumm St	South Van Ness Ave	13.5	2nd St to Van Ness	6 Outbound	6.8	1.97
Mission / Otis - NB	Ocean Ave	Cesar Chavez St	17.8	Brazil to 26th St	14 Inbound	9.0	1.97
Mission / Otis - NB	Ocean Ave	Cesar Chavez St	17.8	Brazil to 26th St	49 Inbound	9.0	1.97
Mission / Otis - SB	The Embarcadero	4th St	13.9	Spear to Third	14X Outbound	7.1	1.95
4th St / Stockton - SB	Harrison	Channel	14.3	Folsom to Townsend	30 Inbound	7.3	1.95
Lincoln / Kezar - EB	19th Ave	05th Ave	23.1	19th Ave to 5th Ave	71 Inbound	11.9	1.94
19th Ave/Park Presidio - SB	Lake	Fulton	21.7	California to Fulton	28 Outbound	11.2	1.94
Van Ness / South Van Ness - SB	Lombard St	Washington St	12.4	Chestnut to Jackson	49 Outbound	6.4	1.94
Turk - WB	Market	Hyde	11.1	Taylor to Hyde	31 Outbound	5.8	1.93
16th St - WB	Mission St	Market St	12.3	Mission to Church	22 Inbound	6.4	1.93
Kearny - NB	Market St	Columbus	13.0	Geary to Jackson	9X Inbound	6.8	1.92
Harrison - WB	02nd St	04th St	16.3	2nd St to 4th St	12 Outbound	8.5	1.91
Mission / Otis - NB	14th St	09th St	13.3	14th St to 9th St	14 Inbound	6.9	1.91
19th Ave/Park Presidio - NB	Fulton	Lake	25.3	Fulton to California	28 Inbound	13.2	1.91
Market / Portola - WB	Drumm St	South Van Ness Ave	13.5	Front to 11th St	9 Outbound	7.1	1.91
Sutter - WB	Market St	Mason St	11.3	Sansome to Mason	2 Outbound	5.9	1.91
Masonic - SB	Geary Blvd	Page St	16.9	Geary to Haight	43 Inbound	8.9	1.90
Fulton - WB	Park Presidio Blvd	La Playa St	27.3	Park Presidio to La Playa	5 Outbound	14.4	1.90
Harrison - WB	08th St	10th St	13.5	8th St to 10th St	12 Outbound	7.1	1.90
Geneva - WB	Santos St	Moscow St	27.7	Santos to Moscow	9X Outbound	14.6	1.89
Sutter - EB	Divisadero St	Gough St	15.5	Divisadero to Gough & Post	2 Inbound	8.2	1.89
Sutter - WB	Gough St	Divisadero St	14.9	Gough to Divisadero	2 Outbound	7.9	1.89
Sloat - WB	Junipero Serra Blvd	Skyline Blvd	26.9	Junipero Serra to Skyline	23 Outbound	14.2	1.89
Bayshore - NB	County Line	Industrial St	21.5	Sunnydale to Marengo (via San Bruno)	9 Inbound	11.4	1.89
Harrison - WB	08th St	10th St	13.5	8th St to 10th St	47 Inbound	7.2	1.88
Market / Portola - WB	Drumm St	South Van Ness Ave	13.5	Drumm to Van Ness	71L Outbound	7.2	1.87
5th St / Stockton - SB	O'Farrell	Harrison	8.5	Geary to Folsom	45 Inbound	4.5	1.87
Sacramento - WB	Kearny St	Jones St	10.8		1 Outbound	5.8	1.86
Folsom - EB	04th St	01st St	15.0	4th St to 1st St	12 Inbound	8.0	1.86
Van Ness / South Van Ness - SB	Lombard St	Washington St	12.4	Chestnut to Jackson	47 Outbound	6.7	1.85
Castro / Divisadero - NB	Market St	14th St	15.7	Market to 14th St	24 Inbound	8.5	1.84
North Point - EB	Van Ness Ave	Columbus	15.5	Polk to Columbus & Bay	30 Inbound	8.5	1.83
Sansome - NB	Washington St	Chestnut St	18.0	Washington to Lombard	10 Inbound	9.8	1.83
Market / Portola - WB	Drumm St	South Van Ness Ave	13.5	Front to Van Ness	7 Outbound	7.4	1.82
North Point - EB	Van Ness Ave	Columbus	15.5	Polk to Jones	10 Outbound	8.5	1.82
16th St - EB	Mission St	Potrero Ave	12.8	Mission to Potrero	22 Outbound	7.0	1.82
Sutter - WB	Market St	Mason St	11.3	Kearny to Mason	3 Outbound	6.3	1.80
Geary - EB	Great Hwy	26th Ave	21.4	45th Ave to 25th Ave	38L Inbound	12.0	1.79
Doyle / Lombard / Richardson - SE	Broderick	Pierce St	20.4	Richardson/Francisco to Pierce	28 Inbound	11.4	1.79
Geneva - WB	Moscow St	Paris St	17.7	Moscow to Paris	9X Outbound	10.0	1.78
Geary - WB	Arguello	26th Ave	17.0	Arguello to 25th Ave	38L Outbound	9.7	1.76
Geary - WB	26th Ave	Great Hwy	22.0	25th Ave to 42nd Ave/Point Lobos	38L Outbound	12.5	1.76
Van Ness / South Van Ness - SB	Golden Gate Ave	Hwy 101	12.3	McAllister to 11th & Mission	47 Outbound	7.0	1.76
4th St / Stockton - SB	O'Farrell	Harrison	8.5	Geary to Folsom	30 Inbound	4.8	1.75
Evans - SE	03rd St	Jennings St	27.3	Third St to Keith	19 Outbound	15.6	1.75
Harrison - WB	08th St	10th St	13.5	8th St to 10th St	27 Outbound	7.7	1.75
Castro / Divisadero - SB	Geary Blvd	14th St	11.1	Geary to 14th St	24 Outbound	6.4	1.74
Mission / Otis - NB	Cesar Chavez St	15th St	13.9	26th St to 16th St	14L Inbound	8.0	1.74
Mission / Otis - NB	03rd St	The Embarcadero	13.0	3rd St to Main	14 Inbound	7.5	1.74
North Point - WB	Columbus	Van Ness Ave	16.4	Jones to Polk	10 Inbound	9.5	1.72
19th Ave/Park Presidio - NB	Lake	Us 101	46.0	California to GG Bridge	28 Inbound	26.7	1.72
Mission / Otis - NB	09th St	03rd St	13.7	9th St to 3rd St	14 Inbound	8.0	1.71
20th Ave/Park Presidio - NB	Lincoln Way	Fulton	32.5	Lincoln to Fulton	28L Inbound	19.0	1.71
Mission / Otis - SB	Cesar Chavez St	Ocean Ave	13.8	26th to Norton	14 Outbound	8.1	1.70
Columbus - SE	North Point St	Greenwich St	13.3	Bay to Filbert	30 Inbound	7.8	1.70
Castro / Divisadero - SB	14th St	Market St	15.2	14th St to Market	24 Outbound	9.0	1.68
Folsom - EB	08th St	04th St	17.2	8th St to 4th St	12 Inbound	10.2	1.68
Mission / Otis - SB	Cesar Chavez St	Ocean Ave	13.8	26th to Norton	49 Outbound	8.2	1.68
5th St / Stockton - NB	Sutter St	Columbus Ave	10.6	Sutter to Columbus	45 Outbound	6.3	1.67
North Point - EB	Columbus	The Embarcadero	15.9	Jones to Embarcadero (Kearny)	10 Outbound	9.6	1.66
20th Ave/Park Presidio - NB	Fulton	Lake	25.3	Fulton to Geary	28L Inbound	15.3	1.66
Geneva - EB	Cayuga Ave	Paris St	10.8	Cayuga to Paris	43 Outbound	6.5	1.65
4th St / Stockton - NB	Sutter St	Columbus Ave	10.6	Sutter to Columbus	30 Outbound	6.4	1.65
19th Ave/Park Presidio - NB	Lincoln Way	Fulton	32.5	Lincoln to Fulton	28 Inbound	19.8	1.64
Geary - WB	Kearny St	Gough St	10.1	Kearny to Gough	38 Outbound	6.2	1.64
Clay - EB	Kearny St	Davis St	11.6	Kearny to Davis	1 Inbound	7.1	1.64
Mission / Otis - NB	14th St	09th St	13.3	16th St to 9th St	14L Inbound	8.1	1.63
Castro / Divisadero - NB	Geary Blvd	Pine St	10.7	Geary to Bush	24 Inbound	6.6	1.63
Castro / Divisadero - NB	14th St	Geary Blvd	12.3	14th to Geary	24 Inbound	7.6	1.63
Bryant - EB	Division St	4th St	12.7	Division to 5th St	27 Inbound	7.8	1.62
O'Farrell - EB	Gough St	Mason	11.2	Gough (via Starr King) to Taylor	38 Inbound	6.9	1.62
North Point - EB	Van Ness Ave	Columbus	15.5	Polk to Jones	47 Inbound	9.6	1.61

CMP Route Name	Auto Start Intersection	Auto End Intersection	Average Auto Speed (mph)	Transit Segment (stop-to-stop)	Transit Route	Average Transit Speed (mph)	Auto/Transit Speed Ratio
Geneva - WB	Bayshore	Santos St	22.4	Rio Verde to Santos	9 Outbound	14.0	1.60
Geneva - EB	Cayuga Ave	Paris St	10.8	Cayuga to Paris	9X Inbound	6.8	1.60
Mission / Otis - SB	Ocean Ave	Sickles Ave	20.3	Norton to Sickles	14L Outbound	12.8	1.58
Potrero - NB	21st St	Division St	15.6	22nd St to 15th St	9 Inbound	9.9	1.58
Fulton - WB	Arguello	Park Presidio Blvd	15.4	Arguello to Park Presidio	5 Outbound	9.7	1.58
Fulton - EB	La Playa St	Park Presidio Blvd	26.1	La Playa to Park Presidio	5 Inbound	16.6	1.57
Folsom - EB	14th St	11th St	11.9	14th St to 11th St	12 Inbound	7.6	1.57
Geary - EB	Arguello	Collins	13.2	Arguello to Collins	38 Inbound	8.5	1.56
Van Ness / South Van Ness - NB	Lombard St	North Point St	11.5	Chestnut to North Point	47 Inbound	7.5	1.54
North Point - WB	The Embarcadero	Columbus	15.8	Embarcadero (Kearny) to Jones	10 Inbound	10.3	1.53
16th St - EB	Market St	Mission St	10.7	Church to Mission	22 Outbound	7.1	1.51
Evans - NW	Jennings St	03rd St	20.3	Keith to Phelps	19 Inbound	13.5	1.51
Van Ness / South Van Ness - SB	North Point St	Lombard St	7.9	North Point to Chestnut	47 Outbound	5.2	1.50
Harrison - WB	The Embarcadero	02nd St	13.4	The Embarcadero to 2nd St	12 Outbound	9.1	1.48
Bayshore - SB	Cesar Chavez	Industrial St	22.3	25th St to Alemany	9 Outbound	15.1	1.48
Mission / Otis - NB	4th St	The Embarcadero	13.0	3rd St to Main	14L Inbound	8.8	1.47
Geneva - WB	Paris St	Cayuga Ave	10.5	Paris to Cayuga	9X Outbound	7.1	1.47
Turk - EB	Stanyan St	Divisadero St	17.2	Stanyan to Broderick	31 Inbound	11.7	1.47
20th Ave/Park Presidio - NB	Sloat Blvd	Lincoln Way	23.6	Vicente to Lincoln	28L Inbound	16.1	1.46
Doyle / Lombard / Richardson - NW	Pierce St	Broderick	16.9	Pierce to Richardson/Francisco	28 Outbound	11.6	1.46
Sansome - NB	Sutter	Washington St	10.0	California to Washington	10 Inbound	6.9	1.45
Folsom - EB	01st St	The Embarcadero	12.1	1st St to The Embarcadero	12 Inbound	8.4	1.44
Bryant - EB	Division St	5th St	12.7	Division to 5th St	47 Outbound	8.8	1.44
2nd St - SE	Market St	Brannan	10.6	Howard to Brannan	10 Outbound	7.4	1.43
Geneva - WB	Paris St	Cayuga Ave	10.5	Paris to Cayuga	43 Inbound	7.3	1.43
Geneva - EB	Paris St	Moscow St	13.4	Paris to Munich	9X Inbound	9.4	1.42
2nd St - NW	Brannan	Market St	10.4	Brannan to Folsom	10 Inbound	7.3	1.41
19th Ave/Park Presidio - SB	Us 101	Lake	35.2	GG Bridge to California	28 Outbound	25.0	1.41
17th St - EB	Mission St	Potrero Ave	12.8	Mission to Potrero	33 Outbound	9.1	1.40
Evans - NW	03rd St	Cesar Chavez St	20.1	Phelps to Chavez	19 Inbound	14.8	1.36
Mission / Otis - NB	09th St	03rd St	13.7	10th St to 3rd St	14L Inbound	10.1	1.35
Sloat - EB	Skyline Blvd	Junipero Serra Blvd	20.7	Skline to Junipero Serra	23 Inbound	15.4	1.35
O'Farrell - EB	Mason	Market St	9.0	Taylor to Grant	38 Inbound	6.7	1.35
5th St / Stockton - SB	Columbus Ave	O'Farrell St	8.3	Columbus to Geary	45 Inbound	6.2	1.34
Fulton - EB	Arguello	Masonic	13.6	Arguello to Masonic	5 Inbound	10.4	1.31
Evans - SE	Cesar Chavez St	03rd St	21.6	Chavez to Third St	19 Outbound	16.7	1.29
4th St / Stockton - SB	Columbus Ave	O'Farrell St	8.3	Columbus to Geary	30 Inbound	6.4	1.29
Geary - WB	Kearny St	Gough St	10.1	Kearny to Van Ness	38L Outbound	8.0	1.27
Columbus - SE	Greenwich St	Montgomery St	7.1	Union to Montgomery & Clay	41 Inbound	5.6	1.26
Beale / Davis - SB	Clay St	Mission St	11.2	Clay & Front to Mission & Beale	41 Inbound	8.9	1.26
Townsend - WB	02nd St	07th St	12.8	2nd St to 7th St	10 Outbound	10.3	1.25
Geneva - EB	Ocean Ave	Cayuga Ave	8.4	Howth to Cayuga	43 Outbound	6.7	1.25
O'Farrell - EB	Mason	Market St	9.0		38L Inbound	7.2	1.25
Clay - EB	Jones St	Kearny St	8.0	Jones to Kearny	1 Inbound	6.4	1.25
Geary - EB	Arguello	Collins	13.2	Arguello to Presidio	38L Inbound	10.7	1.24
19th Ave/Park Presidio - SB	Fulton	Lincoln Way	18.2	Fulton to Lincoln	28 Outbound	14.8	1.23
Harrison - WB	04th St	08th St	11.6	4th St to 8th St	12 Outbound	9.4	1.23
Fremont - NB	Harrison St	Market St	10.1	Folsom to Market	10 Inbound	8.2	1.23
Harrison - WB	04th St	08th St	11.6	5th to 8th	27 Outbound	9.5	1.22
Market / Portola - EB	South Van Ness Ave	Drumm St	9.5	Van Ness to Spear	7 Inbound	7.8	1.22
Harrison - WB	04th St	08th St	11.6	5th to 8th	47 Inbound	9.5	1.22
Drumm - SB	Washington St	Market St	7.6	Davis & California to Beale & Mission	1 Inbound	6.3	1.21
Market / Portola - EB	South Van Ness Ave	Drumm St	9.5	3rd St to 1st St	38 Inbound	7.9	1.21
Market / Portola - EB	South Van Ness Ave	Drumm St	9.5	Van Ness to Spear	71 Inbound	8.0	1.19
Geneva - EB	Ocean Ave	Cayuga Ave	8.4	Ocean to Cayuga	9X Inbound	7.1	1.19
Market / Portola - EB	South Van Ness Ave	Drumm St	9.5	11th to Spear	9 Inbound	8.0	1.19
Bayshore - NB	Industrial St	Cesar Chavez	14.4	Marengo to 25th St	9 Inbound	12.3	1.17
Geneva - WB	Cayuga Ave	Ocean Ave	9.2	Cayuga to Balboa Park Station	43 Inbound	7.9	1.16
19th Ave/Park Presidio - NB	Junipero Serra Blvd	Sloat Blvd	12.1	Junipero Serra to Sloat	28 Inbound	10.4	1.16
Market / Portola - EB	South Van Ness Ave	Drumm St	9.5	7th St to 1st St	6 Inbound	8.3	1.15
Townsend - EB	07th St	02nd St	11.9	7th St to 2nd St	10 Inbound	10.4	1.14
19th Ave/Park Presidio - SB	Sloat Blvd	Junipero Serra Blvd	13.5	Sloat to Junipero Serra	28 Outbound	12.0	1.12
Market / Portola - EB	South Van Ness Ave	Drumm St	9.5	7th St to 1st St	5 Inbound	8.5	1.12
Columbus - NW	Greenwich St	North Point St	9.2	Greenwich to North Point	30 Outbound	8.5	1.09
O'Farrell - EB	Gough St	Mason	11.2	Van Ness to Taylor	38L Inbound	10.5	1.07
Lincoln / Kezar - WB	05th Ave	19th Ave	12.9	5th Ave to 19th Ave	71L Outbound	12.2	1.05
Geneva - WB	Cayuga Ave	Ocean Ave	9.2	Cayuga to Balboa Park Station	9X Outbound	8.8	1.05
Junipero Serra - NB	Brotherhood Way	19th Ave	15.2	Brotherhood to 19th Ave	28 Inbound	14.8	1.03

San Francisco Travel Demand Forecasting Model

MTC Consistency Report | October, 2009

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1. General Travel Modeling Approach

The San Francisco County Travel Demand Forecasting Model (San Francisco Model) was originally developed for the San Francisco County Transportation Authority (Authority) to provide detailed forecasts of travel demand for various planning applications. These applications included developing a countywide plan, providing input to microsimulation modeling for corridor and project-level evaluations, transit planning, neighborhood planning, and land use impacts analysis for Congestion Management Program purposes. The objective was to accurately represent the complexity of the destination, temporal and modal options and provide detailed information on travelers making discrete choices. These objectives led to the development of an activity-based model that uses synthesized population as the basis for decision-making rather than zonal-level aggregate data sources.

The Authority continually updates and refines the San Francisco Model. Since the creation of the original San Francisco Model in 2000, the model's geographic scope has been extended to the full nine-county Bay Area, along with significant improvements to pricing sensitivity and time-of-day modeling. The Metropolitan Transportation Commission (MTC) has also now developed an activity based model with a similar structure. Both models share a common population synthesizer, while the details of many model subcomponents differ in significant ways.

The consultant team originally estimated model components using household survey data collected in 1990 by MTC for San Francisco residents only. Each model component was calibrated using various observed data sources, then the full model was validated using traffic count and transit ridership data for each of five time periods. Some model components have been reestimated using the 2000 MTC household survey, and calibrated using the most recent data available, including the 2000 Census.

2. Demographic/Economic/Land Use Forecasts

The San Francisco Model uses the Projections 2007 ABAG projections for population, households, jobs, and employed residents. Outside of San Francisco, the direct land use inputs to the MTC model are used, and therefore not summarized. Within San Francisco, the San Francisco Planning Department allocates the countywide control totals for population, households, jobs, and employed residents to TAZs based on local knowledge of project build-out timelines. Some factoring is involved, therefore the San Francisco County land use inputs to the San Francisco Model are close (within the required 1%) but not exactly the Projections 2007 ABAG County control total. No differences between the ABAG Projections 2007 and the San Francisco model inputs exist for the remaining eight counties.

Table 1 San Francisco Land Use Assumptions

Year		Population	Households	Jobs	Employed Residents
2005	SF Model	799,847	341,248	551,994	389,938
	ABAG	795,800	338,920	553,060	388,100
	Difference	+0.51%	+0.69%	-0.20%	+0.47%
2035	SF Model	956,796	396,293	832,745	518,799
	ABAG	956,800	396,310	832,860	518,800
	Difference	-0.00%	-0.00%	-0.01%	-0.00%

Note that while this table shows the inputs to the model, a synthetic population is also used. The nature of the population synthesizer does not assure that the synthetic population exactly matches these totals.

3. Pricing Assumptions

The San Francisco Model uses the same assumptions for transit fares and bridge tolls in the current MTC Models. There may be slight differences in the inclusion of transit fares, but they have been coded to replicate as closely as possible the current fare matrices used by MTC. Auto operating costs were assumed at 12 cents per mile rather than the 8.8 cents per mile that MTC uses. This assumption was based on the evidence that auto-operating costs are higher within San Francisco County than for the Bay Area as a region[1]. The 12 cents per mile assumption is derived from the consultants experience in developing auto operating costs for other major metropolitan areas throughout the U.S.

The San Francisco Model uses the base year MTC parking costs (which is derived from monthly parking rates) as a model input as shown in Figure 1. These average parking rates were then factored based on the stated preference survey responses to the percent of people in an area who pay for parking compared to the percent of people who park for free. Outside of San Francisco, the only locations with paid parking are downtown Oakland, Berkeley, San Jose and Palo Alto. For the base year, the San Francisco Model uses the MTC parking costs as a direct substitute outside of San Francisco County.

An evaluation of the future-year MTC parking costs, however, revealed some zones for which the parking cost declined due to declining employment in the MTC employment forecasts. This result is inconsistent with what is expected for San Francisco, so a new approach for forecasting future year parking costs was developed, as described below. Figure 3 shows the results of this new methodology.

Only change parking costs for TAZs that either: (1) have free parking in 2000, but employment density increases by at 10 jobs per acre, or (2) have a parking cost in 2000 (work vs. non-work are considered independently). In the first case, the future parking cost is based on the following formulas:

$$\text{Work Parking Cost} = (0.1526 * \text{EmploymentDensity}_{\text{Future}}) + 19.0585$$

$$\text{Non-work Parking Cost} = (0.4565 * \text{EmploymentDensity}_{\text{Future}}) + 52.3066$$

In the second case (cost in 2000), the future parking cost uses the formulas:

```
Work Parking Cost = (0.1526 * Change in EmploymentDensity) + 2000 Work
  Parking Cost

Non-work Parking Cost  = (0.4565 * Change EmploymentDensity) + 2000 Non-
  work Parking Cost
```

[1] MTC bases the 8.8 cents per mile assumption for auto operating costs on a retail gas price of $1.45 per gallon in 1998 (Table 3 historical and Projected Auto Operating Costs, 1990 – 2020). However, in San Francisco retail gas prices were recorded at a much higher level of $1.83 per gallon (http://www.cnn.com/2000/US/03/13/gas.prices.01/).

Figure 1 Work Parking Cost (cents) 2000

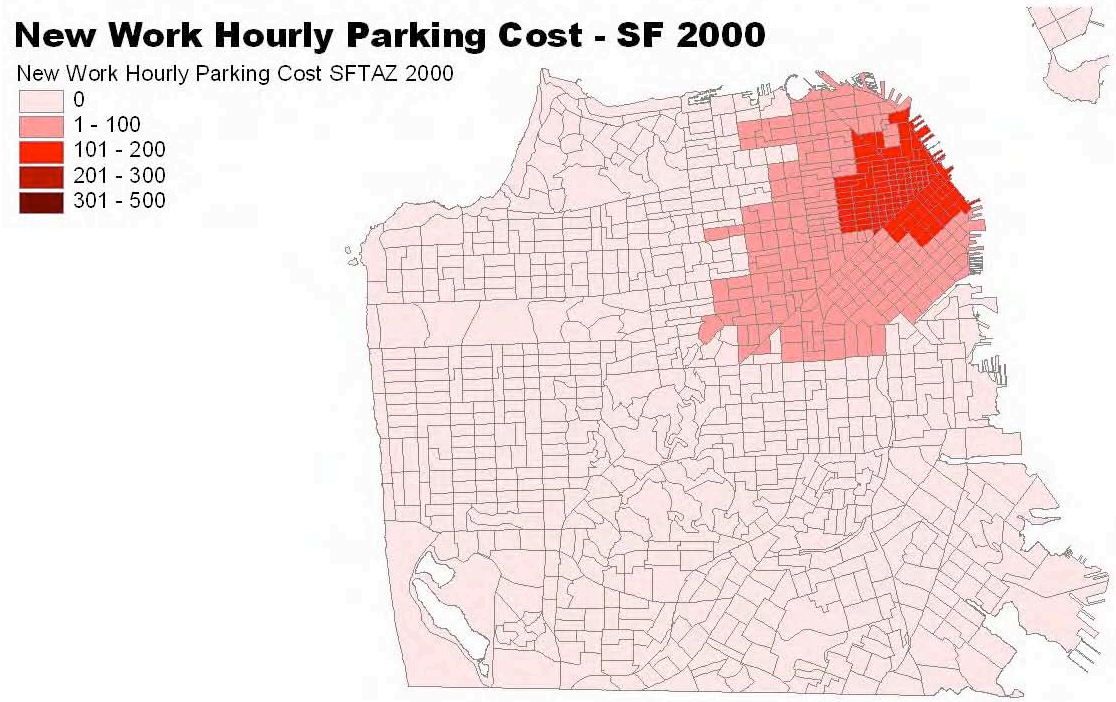
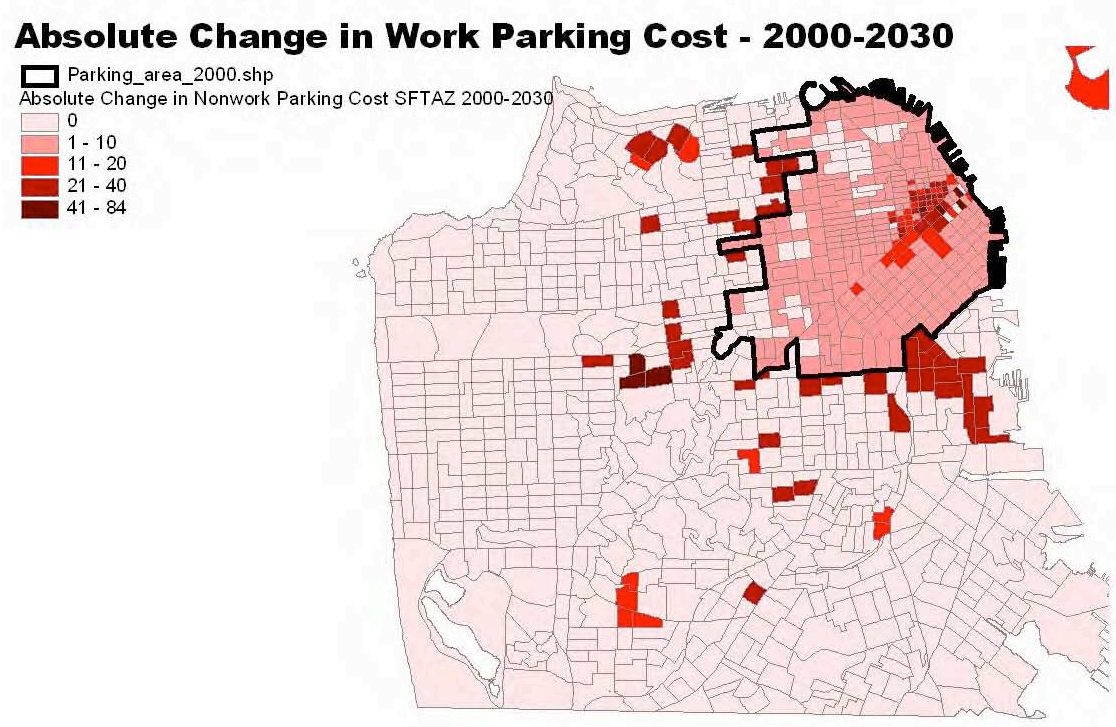


Figure 2 Work Parking Cost Change (cents) 2000 to 2030



3. Network Assumptions

The San Francisco Model uses network assumptions consistent with the MTC Regional Transportation Plan.

4. Auto Ownership Assumptions

The San Francisco auto ownership model is estimated based on BATS 2000 survey data and is a function of the mode choice and destination choice logsums as well as several household and person variables such as number of household adults, workers, income, age, presence of children, home zone parking cost, and land use characteristics of the home zone. The full model estimation can be found in the CHAMP-4 model documentation. Table 2 and Table 3 depict the base year model results for the San Francisco Model compared to the MTC model at both a super-district and county level.

Table 2 Super District Household Vehicle Ownership

Super-District	Number of Vehicles		
	2005 San Francisco Model		
	0	**1**	**2+**
1	61%	32%	7%
2	24%	50%	26%
3	15%	44%	41%
4	13%	42%	46%
Total	**27%**	**43%**	**30%**
	2006 MTC Model		
1	59%	31%	10%
2	25%	49%	26%
3	20%	44%	37%
4	13%	43%	43%
Total	**29%**	**43%**	**29%**
	Differences		
1	2%	1%	-3%
2	-1%	1%	0%
3	-5%	0%	4%
4	0%	-1%	3%
Total	**-2%**	**0%**	**1%**

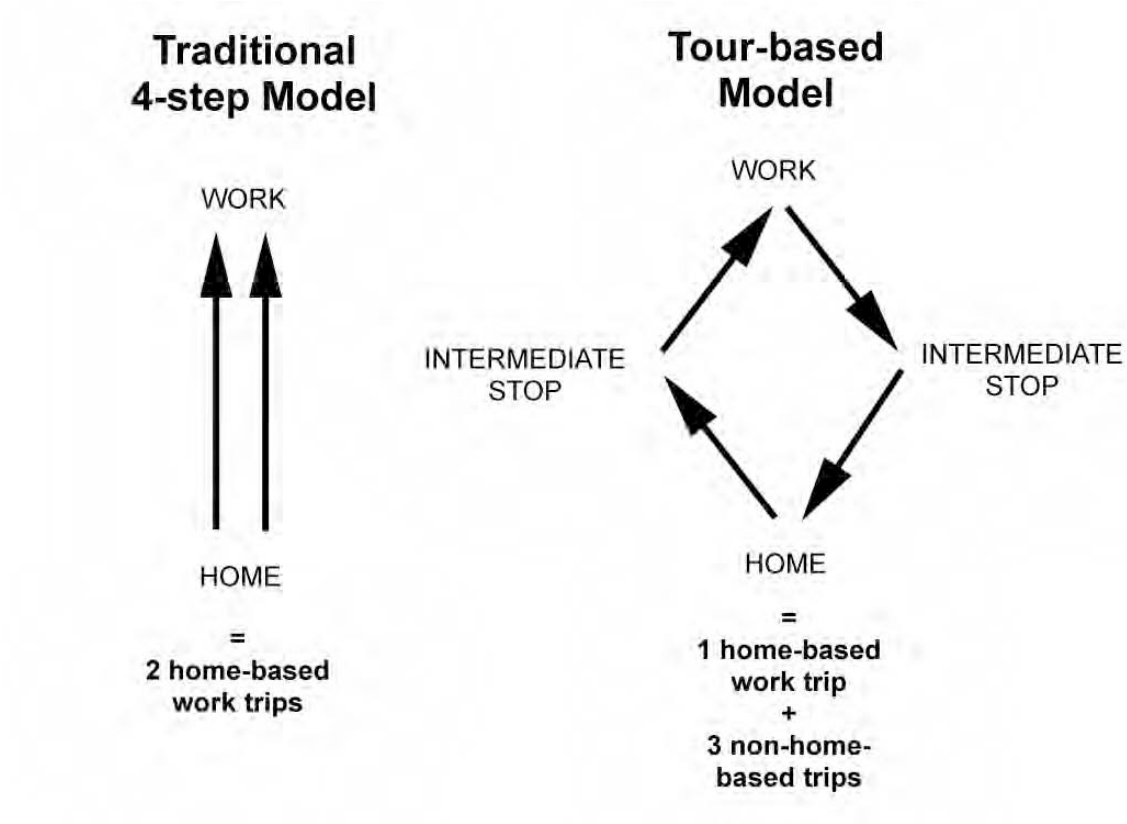
Table 3 County Level Household Vehicle Auto Ownership

County	Number of Vehicles		
	0	1	2+
2005 San Francisco Model			
San Francisco	27%	43%	30%
San Mateo	5%	32%	63%
Santa Clara	8%	32%	60%
Alameda	11%	33%	56%
Contra Costa	7%	30%	63%
Solano	7%	29%	63%
Napa	6%	32%	62%
Sonoma	7%	33%	61%
Marin	5%	36%	58%
Total	10%	33%	56%
2006 MTC Model			
San Francisco	29%	43%	29%
San Mateo	6%	32%	63%
Santa Clara	6%	29%	65%
Alameda	10%	34%	56%
Contra Costa	5%	29%	66%
Solano	5%	28%	66%
Napa	7%	28%	65%
Sonoma	5%	29%	66%
Marin	5%	35%	60%
Total	9%	32%	58%
Differences			
San Francisco	-2%	0%	1%
San Mateo	-1%	0%	0%
Santa Clara	2%	3%	-5%
Alameda	1%	-1%	0%
Contra Costa	2%	1%	-3%
Solano	2%	1%	-3%
Napa	-1%	4%	-3%
Sonoma	2%	4%	-5%
Marin	0%	1%	-2%
Total	1%	1%	-2%

5. Trip Generation

Product 6 is a summary of trip productions and attractions out of the trip generation model. Because productions and attractions are not produced within the San Francisco Model, this summary table is not included.

Figure 3 Trip Definitions: 4-step model vs. tour-based model



5.1 Trip Rate Analysis (Product 7)

Trip rates summarized in Table 4 below show that the San Francisco Model predicts around ten trips per household, which is similar (but higher) to the rest of the nation.

Table 4 Trip Rate Analysis for the San Francisco Model

Tour Types	Trips per Employed Resident	Trips per Household	Trips per Total Jobs	Trips per Person
Work	2.65	3.03	1.87	1.29
School	1.05	1.19	0.74	0.51
Other	4.49	5.14	3.18	2.19
Work-based	0.57	0.66	0.41	0.28
Total	8.76	10.02	6.19	4.27

Product 8 is a description of sub-regional adjustment factors and is not applicable for the San Francisco Model.

6. Trip Distribution

6.1 Production and Attraction Balancing Table (Product 9)

Product 9 contains the county and district-level tables showing attraction balancing analysis, but this is not applicable to the logit choice model approach to trip distribution and primarily is applicable to models that use the gravity model approach. A relative comparison is the summary of employment attracted to each zone as part of the work tour primary destination choice model. This is presented by county in Table 5 and Table 6 and by San Francisco superdistrict in Table 7. The work-tour flows from the San Francisco Model compare well to the BAYCAST work productions and attractions in all cases.

Table 5 Work Trips/Tours to San Francisco

Origin County	MTC 2006 Work Productions and Attractions	SF Model 2005 Work Tours
San Francisco	213,868	228,442
San Mateo	30,720	30,015
Santa Clara	12,539	11,723
Alameda	15,738	18,826
Contra Costa	4,348	4,026
Solano	342	414
Napa	226	272
Sonoma	679	862
Marin	7,491	5,868

Table 6 Worker Flow from San Francisco

Destination County	MTC 2006 Work Productions and Attractions	SF Model 2005 Work Tours
San Francisco	213,868	228,442
San Mateo	58,199	47,566
Santa Clara	11,962	7,570
Alameda	73,866	55,833
Contra Costa	38,621	32,797
Solano	7,513	7,137
Napa	1,262	804
Sonoma	3,878	5,068
Marin	16,716	17,662

Table 7 Work Tours within San Francisco by Superdistricts

	1	2	3	4	Total
SF Model Work Tour Origins and Destinations					
1	30,415	5,558	4,915	422	41,310
2	37,557	22,482	8,953	2,086	71,078
3	37,495	9,929	32,642	2,992	83,058
4	15,788	5,732	6,221	5,255	32,996
Total	121,255	43,701	52,731	10,755	228,442
SF Model Work Tour Origins and Destinations, Percent by District					
1	13%	2%	2%	0%	18%
2	16%	10%	4%	1%	31%
3	16%	4%	14%	1%	36%
4	7%	3%	3%	2%	14%
Total	53%	19%	23%	5%	100%
MTC Model Work Productions and Attractions					
1	28,906	2,970	2,957	629	35,462
2	25,995	30,169	7,808	2,464	66,435
3	36,179	8,132	31,018	3,282	78,611
4	11,978	4,652	8,295	8,434	33,360
Total	103,058	45,923	50,079	14,809	213,868
MTC Model Percent by District					
1	14%	1%	1%	0%	**17%**
2	12%	14%	4%	1%	**31%**
3	17%	4%	15%	2%	**37%**
4	6%	2%	4%	4%	**16%**
Total	**48%**	**21%**	**23%**	**7%**	**100%**

6.2 County Trip Tables (Product 10)

The total number of trips going to and from San Francisco in the San Francisco Model differs slightly compared to BAYCAST. Of particular note, the San Francisco model predicts more intra-San Francisco travel than BAYCAST. This is further broken down by super district for Product 11.

Table 8 Total Trips Destined to San Francisco

Origin County	MTC 2006 Model	San Francisco 2005 Model
San Francisco	2,055,188	2,875,124
San Mateo	348,983	241,244
Santa Clara	46,976	30,350
Alameda	190,075	144,477
Contra Costa	93,943	53,423
Solano	17,560	11,820
Napa	3,111	2,098
Sonoma	9,936	9,831
Marin	51,928	49,357

Table 9 Total Trips from San Francisco

Destination County	MTC 2006 Model	San Francisco 2005 Model
San Francisco	2,055,188	2,875,124
San Mateo	211,772	240,631
Santa Clara	34,063	30,545
Alameda	86,847	145,985
Contra Costa	27,608	52,304
Solano	4,235	11,825
Napa	1,291	2,063
Sonoma	4,008	9,867
Marin	43,779	49,380

6.3 District-to-District Trip Tables (Product 11)

Table 10 depicts the intra-San Francisco travel patterns predicted by the San Francisco Model and BAYCAST. While the similar percentages show that overall travel patterns do not differ greatly between the models, the total magnitude of travel predicted by the San Francisco model is substantially higher.

Table 10 Total Trips Within San Francisco by Superdistrict

	1	2	3	4	Total
SF Model Trips					
1	500,661	176,459	147,708	32,421	857,249
2	174,312	356,157	130,061	61,277	721,807
3	146,706	129,606	582,328	88,545	947,185
4	32,296	60,636	88,392	167,559	348,883
Total	853,975	722,858	948,489	349,802	2,875,124
SF Model Percent by District					
1	17%	6%	5%	1%	30%
2	6%	12%	5%	2%	25%
3	5%	5%	20%	3%	33%
4	1%	2%	3%	6%	12%
Total	30%	25%	33%	12%	100%
MTC Model Trips					
1	405,458	120,688	125,145	22,108	673,399
2	120,688	282,668	71,327	40,117	514,800
3	125,145	71,327	365,000	57,334	618,805
4	22,108	40,117	57,334	128,625	248,184
Total	673,399	514,800	618,805	248,184	2,055,188
MTC Model Percent by District					
1	20%	6%	6%	1%	33%
2	6%	14%	3%	2%	25%
3	6%	3%	18%	3%	30%
4	1%	2%	3%	6%	12%
Total	33%	25%	30%	12%	100%

7. Mode Choice

Inter- and intra-San Francisco mode choice for all trips and for home-based work trips have been summarized in Table 11a, Table 11b, and Table 12 for the San Francisco Model and the MTC model. The San Francisco Model uses its own mode choice models, described in the CHAMP-4 Documentation, and MTC-consistent, yet more detailed highway and transit networks. The primary difference between the San Francisco and MTC mode choice models are that the San Francisco Model estimates tour modes initially, and then trip modes for each tour segment; where the MTC Model estimates trip modes directly.

Even with these differences, there is significant similarity between the results of the mode shores by super-district, resulting from the fact that both mode choice models were developed form the same 1990 Bay Area Travel Survey (BATS) data, and calibrated to the 2000 BATS. The San Francisco Model calibration targets, however, were further refined based on Automatic Passenger Count data (APC) made available by SF-MTA.

7.1 Mode Choice Summary Tables (Product 12)

Table 11a Trip Mode Choice for All Trips Coming and Going from San Francisco (not within)

	Drive Alone	Shared Ride	Transit	Non-Motorized
SF Model				
To San Francisco	49%	29%	22%	1%
From San Francisco	50%	27%	21%	1%
MTC Model				
To San Francisco	51%	25%	22%	1%
From San Francisco	51%	25%	22%	1%

Table 11b Trip/Tour Mode Choice for Work Trips/Tours Coming and Going from San Francisco (not within)

	Drive Alone	Shared Ride	Transit	Non-Motorized
SF Model				
To San Francisco	41%	14%	45%	0%
From San Francisco	61%	17%	22%	0%
MTC Model				
To San Francisco	44%	17%	39%	1%
From San Francisco	44%	17%	39%	1%

District-to-District Mode Choice

Table 12 Superdistrict-to-Superdistrict Mode Share Comparisons for Total Trips

Drive Alone Share

SF Model	1	2	3	4	MTC Model	1	2	3	4
1	9%	25%	31%	34%	1	6%	26%	29%	24%
2	24%	27%	42%	45%	2	26%	33%	44%	49%
3	30%	42%	33%	45%	3	29%	44%	35%	46%
4	33%	45%	45%	31%	4	24%	49%	46%	37%

Shared Ride Share

SF Model	1	2	3	4	MTC Model	1	2	3	4
1	6%	15%	19%	16%	1	3%	10%	14%	11%
2	15%	17%	26%	29%	2	10%	15%	20%	25%
3	19%	25%	26%	32%	3	14%	20%	21%	22%
4	17%	29%	32%	26%	4	11%	25%	22%	19%

Transit Share

SF Model	1	2	3	4	MTC Model	1	2	3	4
1	16%	28%	34%	47%	1	17%	34%	43%	65%
2	28%	13%	15%	16%	2	34%	13%	18%	17%
3	33%	15%	10%	12%	3	43%	18%	14%	21%
4	47%	15%	12%	9%	4	65%	17%	21%	14%

Non-Motorized Share

SF Model	1	2	3	4	MTC Model	1	2	3	4
1	69%	31%	17%	3%	1	74%	30%	14%	1%
2	34%	44%	17%	10%	2	30%	38%	18%	9%
3	18%	18%	30%	11%	3	14%	18%	30%	10%
4	3%	10%	11%	34%	4	1%	9%	10%	30%

Table 13 Superdistrict-to-Superdistrict Mode Share Comparisons for Work PAs/Tours

Drive Alone Share

SF Model	1	2	3	4	MTC Model	1	2	3	4
1	10%	17%	23%	26%	1	13%	33%	38%	49%
2	24%	31%	42%	48%	2	33%	40%	52%	59%
3	26%	42%	43%	54%	3	25%	53%	47%	61%
4	26%	45%	50%	48%	4	16%	60%	55%	56%

Shared Ride Share

SF Model	1	2	3	4	MTC Model	1	2	3	4
1	3%	5%	6%	7%	1	6%	9%	14%	20%
2	7%	7%	9%	10%	2	11%	10%	16%	13%
3	8%	11%	9%	12%	3	12%	17%	14%	11%
4	8%	11%	11%	9%	4	7%	16%	19%	12%

Transit Share

SF Model	1	2	3	4	MTC Model	1	2	3	4
1	37%	38%	45%	63%	1	30%	44%	43%	25%
2	53%	27%	30%	30%	2	52%	20%	26%	21%
3	57%	32%	23%	23%	3	60%	27%	23%	26%
4	64%	35%	29%	20%	4	77%	23%	23%	10%

Non-Motorized Share

SF Model	1	2	3	4	MTC Model	1	2	3	4
1	50%	7%	4%	0%	1	51%	13%	5%	6%
2	20%	26%	6%	1%	2	3%	31%	6%	7%
3	11%	5%	26%	1%	3	3%	2%	17%	2%
4	1%	2%	2%	4%	4	0%	1%	3%	21%

8. Trip Assignment

8.1 Description of Methodology (Product 14)

Highway Assignment

Highway assignments are processed within the Cube/Voyager software environment for each of the five time periods. The time of day volume adjustment factor reduces the assigned link volume for the whole time period to an expected hourly volume for the purpose of relating volume to capacity in the congested travel time functions. The values were derived from total observed link counts during the busiest hour of the time period divided by total observed link counts over the entire time period. These values do not have to strictly adhere to the above definition, since obviously a typical hour is not the busiest hour. In addition, turn penalties and tow-away lanes are coded specific to each time period. Turn penalties are provided in separate files, as identified below. These time periods and adjustment factors are shown in Table 14.

Table 14 Time Periods used in San Francisco Model

Time Period	Hours	Hourly Volume Adjustment Factor	Turn Penalties
Early	3:00 AM to 5:59 AM	34.8%	Off-peak
AM peak	6:00 AM to 8:59 AM	15.4%	AM Peak
Midday	9:00 AM to 3:29 PM	33.7%	Off-peak
PM peak	3:30 PM to 6:29 PM	17.3%	PM Peak
Evening	6:30 PM to 2:59 AM	46.3%	Off-peak

Vehicles are assigned to one of twelve user classes based on auto occupancy, vehicle type, and whether the vehicle *will not* pay a value-toll, *will* pay a value-toll, or *has already paid* a value toll in an area-based congestion pricing situation :

1. **Drive Alone, No Value Toll**
2. **Shared-Ride Two, No Value Toll**
3. **Shared-Ride Three-Plus, No Value Toll**
4. **Drive Alone, Value Toll**
5. **Shared-Ride Two, Value Toll**
6. **Shared-Ride Three-Plus, Value Toll**
7. **Drive Alone, Already Paid Value Toll**
8. **Shared-Ride Two, Already Paid Value Toll**
9. **Shared-Ride Three-Plus, Already Paid Value Toll**
10. **Truck, No Value Toll**
11. **Truck, Value Toll**
12. **Truck, Already Paid Value Toll**

Link impedance is defined as a generalized cost by four classes. The generalized cost is a function of the congested link travel time in minutes, the value of time, toll cost in cents, auto operating cost, and vehicle occupancy. The value of time is assumed to be $30 per hour for trucks, and $15 per hour for autos. All auto operating costs are assumed to be 12 cents per mile.

```
Generalized CostDrive Alone=TIME + 0.04[(Distance x 12)+ Toll]

Generalized CostShared-Ride Two=TIME + 0.04[(Distance x 12)+ Toll/2]

Generalized CostShared-Ride Three-Plus=TIME + 0.04[(Distance x
  12)+Toll/3.5]

Generalized CostTruck=TIME + 0.02[(Distance x 12) + Toll]
```

Congested link travel times are calculated as a function of freeflow travel time, volume, and link capacity using the 1964 Bureau of Public Roads formula form shown below where V is the peak hourly volume for the time period and C is the hourly link capacity :

$$\text{Travel Time}_{Congested} = \gamma * \text{TravelTime}_{Freeflow}(1+\alpha(V/C)^{\beta}$$

The basic functions, twelve in total, were originally taken from the MTC assignment model. For the San Francisco Model, the relevant link facility types, and therefore indices of the volume delay functions are identified in Table . There are two points of deviation from this basic congested travel time function. First, links that contain a toll booth receive a several minute penalty over and above the congested travel time. Second, the travel time on centroid connectors is assessed based on the area type and is not demand-responsive.

Table 15 Volume-Delay Function Parameters

Facility Type	Facility Type Code	Alpha	Beta	Gamma
Freeway-to-Freeway Connector	1	2.4	5.5	1.3
Freeway	2	2.26	5.5	1.0
Expressway	3	1.04	2.1	1.0
Collector	4	2.83	8.5	1.8
Ramp	5	2.4	5.5	1.3
Centroid Connector /Dummy Link	6	2.4	5.5	1.3
Major Arterial	7	1.14	3.5	1.8
Local	11	2.83	8.5	1.8
Minor Arterial	12	1.14	3.5	1.8
Super Arterial	15	1.14	3.5	1.8

Freeflow travel times are calculated internally by Cube/Voyager using the freeflow speed and distance fields found in the input network. It was felt that these lookup speeds might be too high, and O/D travel time skims reflected that these values were probably too high. Therefore, adjustments to the volume delay functions incorporated a Gamma factor to address this problem. The lookup table speeds could have just as easily been modified and the network free flow speeds updated based on this change instead of using this Gamma factor. Changing the factor, though, was a more efficient way to get the desired effect and to calibrate the required factors through multiple executions of the highway assignment procedure. Freeflow speed values were derived from a lookup table of speeds based on area type and facility type. The Alpha and Beta coefficients are used to give the desired shape to the link travel time versus the link volume curves. NCHRP Report 365 gives some guidance as to the values to use based on urban link facility type and speed ranges. The values were originally taken to match the link types in the San Francisco Model as closely as possible, but were then adjusted to replicate observed link volumes and travel times.

For the first two full iterations of the model, the highway assignment is run until it reaches a relative gap of less than 0.01. For the final full iteration of the model, highway assignment iterations are run until the relative gap is less than 0.005.

Transit Assignment

The San Francisco Model uses TRNBUILD, a TP+ multi-path transit assignment algorithm based on the minimization of travel time for a certain origin-destination pair by time period. The trip mode choice model dictates which, of six transit modes is the "primary mode" for each user. Depending on the primary mode, other secondary modes may be made available as access and egress modes as detailed in Table 16.

Table 16 Mode Availability by Primary Mode

	Drive to Bart	Walk to Bart	Drive to Premium	Walk to Premium	Walk to Local	Walk to LRT
Drive Access/Egress	●	○	●	○	○	○
Walk Access/Egress	●	●	●	●	●	●
BART	●	●	○	○	○	○
Caltrain/ Ferry/ AMTRAK	●	●	●	●	○	○
Regional Bus Routes	●	●	●	●	●	●
LRT	●	●	●	●	○	●
Muni Local Bus	●	●	●	●	●	●
Muni Express Bus	●	●	●	●	●	●

All transit assignments use a series of assumptions regarding specific parameters:

- **Walk speed is 3 miles per hour**
- **Drive speed is derived from the highway network**
- **The minimum initial wait time is 1 minute and the maximum is 12 minutes.**
- **The maximum transfer wait time is 40 minutes.**
- **Maximum run time is set at 240 minutes and maximum path time is set at 300 minutes to be consistent with MTC.**
- **There is a weighting factor of 2.0 for all out-of-vehicle time and 1.5 for all "secondary modes"**
- **Each transfer is penalized with an equivalent of 6 minutes.**

8.2 Peaking Factors and Vehicle Occupancy Assumptions (Product 15)

Peaking factors are used by trip-based models to translate daily productions and attractions to origins and destinations by time of day. The San Francisco Model explicitly models the origins and destinations of tours by time of day; therefore, no peaking factors are needed. Further description of this methodology can be found in the CHAMP-4 Documentation.

Vehicle occupancies are assumed for each of the three auto modes, as follows:

- **1 person per vehicle for Drive Alone**
- **2 persons per vehicle for Shared Ride 2**
- **3.5 persons per vehicle for Shared Ride 3**

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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

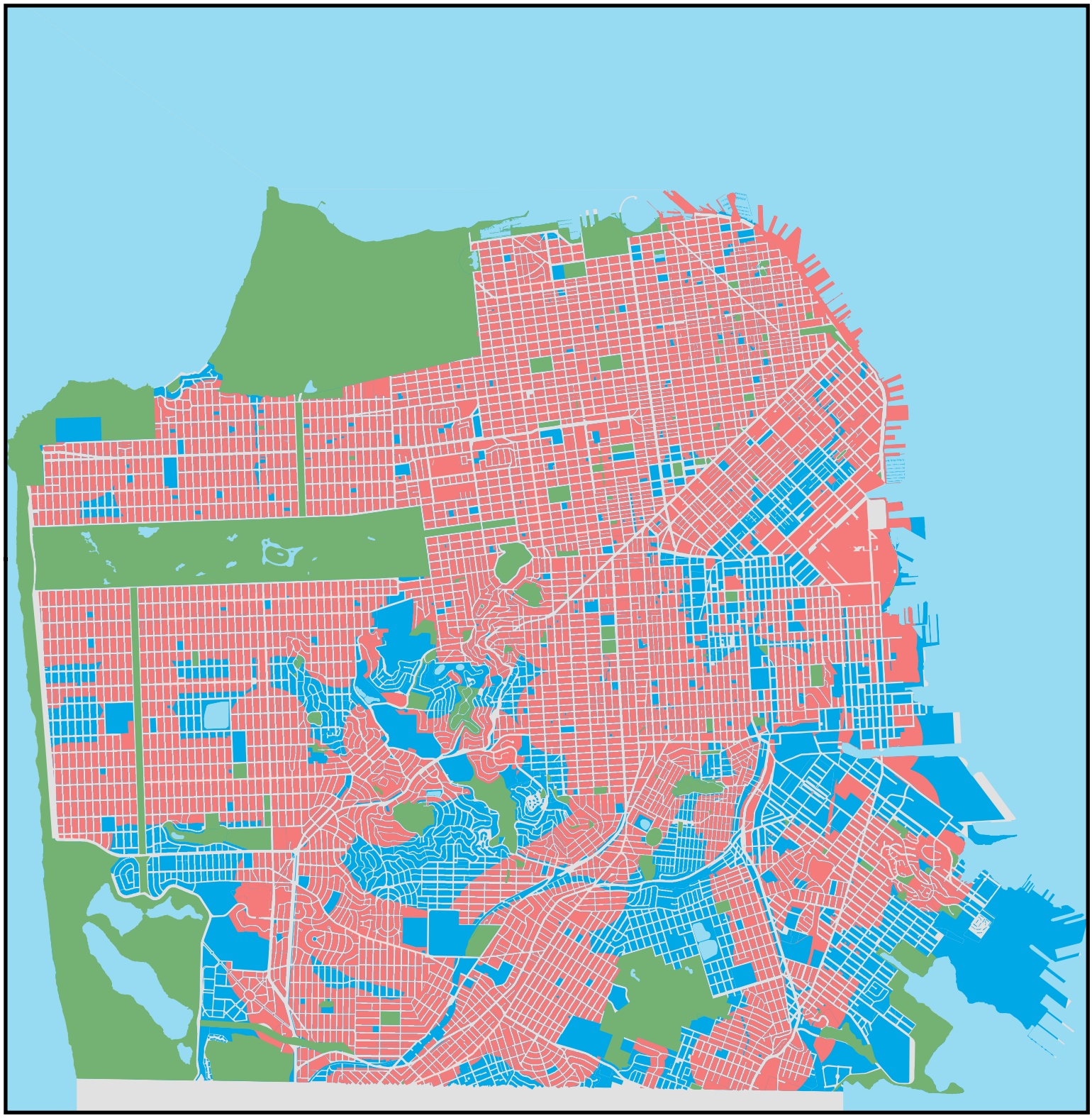
Residential development in industrial districts and the South of Market's Service and Secondary Office (SSO) district requires a Conditional Use Permit. Residential and mixed uses are also conditionally permitted in areas classified as M-1 and M-2, describing light and heavy industrial land uses, respectively.

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.