

CHAPTER 1**BACKGROUND AND PROGRAM OVERVIEW****Key Topics:**

- **CMP Background**
- **Congestion Management in San Francisco**
- **2007 Program Overview and Key changes from 2005 CMP**

1. Background**Purpose of the CMP**

The 2007 San Francisco Congestion Management Program, prepared by the San Francisco County Transportation Authority, (the Authority) will:

- i. Comply with state law by adopting a biennial Congestion Management Program (CMP) and submitting the CMP to the Metropolitan Transportation Commission (MTC) for a conformance finding. Conformance ensures the City's eligibility for the state fuel tax revenues authorized by CMP legislation.
- ii. Guide San Francisco agencies involved in congestion management.
- iii. Outline the congestion management work program for fiscal years 2007/08 and 2008/09.
- iv. Set forth policies and technical tools to implement the CMP work program.

Organization and Approach

The document follows MTC's *Guidance for Consistency of Congestion Management Programs with the Regional Transportation Plan*, per MTC Resolution 3000, last revised June, 2007.¹

Each element required by the CMP legislation is discussed in a separate chapter. Each chapter describes any unresolved issues, the work plan, and implementation guidance. The Authority Board will adopt any revisions developed during fiscal years 2007/08 and 2008/09 as amendments to the 2007 San Francisco CMP.

The 2007 CMP updates data from the 2005 CMP and evolves—rather than significantly changing—local interpretation of congestion management policy. The Authority developed most of the 2007 CMP. The data in Chapter 4: Level of Service Monitoring is extracted from a report prepared by Carter & Burgess, available separately from the Authority. The Municipal Transportation Agency, Department of Public Works, Planning Department, MTC, regional transit operators, and the Bay Area Air Quality Management District provided input to the Trip Reduction and Travel Demand and Multimodal Performance Measures chapters of the CMP.

Origins and Intent of the CMP Legislation

Congestion Management Program requirements were established in 1989 as part of a bi-partisan state legislative package, known as the Katz-Kopp-Baker-Campbell Transportation Blueprint for the Twenty-First Century (AB 471). These requirements became effective when voters approved Proposition 111 on June 5, 1990. AB 1963 (Katz) in September 1994 and AB 2419 (Bowler) in July 1996 further modified CMP law. In addition, the passage of AB 298 (Rainey), effective January 1, 1997, made the CMP exempt from the California Environmental Quality Act. For the complete text of the CMP legislation, see Appendix II.

¹ For the complete text of MTC's guidance please refer to Appendix I.

The 1989 state legislation not only provided for increases in transportation funding, but also made significant changes in the requirements for planning and programming the transportation projects funded from these revenue sources. The goal of the legislation is to prioritize transportation funding decisions based on measurable traffic congestion relief, local land use decisions and their impacts on transportation, and transportation control measures that meet air quality goals.

The CMP requirements are the legislature's response to the traffic congestion experienced by all urbanized areas of California. Traffic congestion is widely perceived as outpacing the ability of the traditional transportation planning process to provide solutions. In San Francisco, with its high-intensity land uses and extensive transit network, traffic congestion poses a different problem than in lower-density counties, challenging conventional interpretations of the nature of the congestion problem. For the majority of the state's highly suburbanized metropolitan areas, traffic congestion has its roots in the following:

- a. *Transit does not work well in the suburbs.* The low-density suburban growth pattern throughout the state's metropolitan areas does not lend itself to cost-effective transit service, and therefore mobility depends on automobiles and freeways.
- b. *Freeways full of solo drivers are inefficient investments.* Pricing strategies (e.g., tolls, paid parking at work sites) are politically volatile, and ridesharing strategies (i.e., carpooling and vanpooling) have shown limited success in sprawled suburbs. Most automobiles still carry just one person, regardless of trip purpose or time of day. The result is inefficient roadway facilities: even when full of cars, they carry only a fraction of the number of *people* they could accommodate.
- c. *Building freeways and widening roads to address transportation demand is not cost-effective.* These high-cost facilities, which maximize automobile trips but do not maximize the number of *people* carried, result in a high cost per person transported
- d. *It is hard to keep up with transportation demand by building freeways and widening roads, and we cannot afford such investments either.* Because land for transportation facilities is scarce, construction costs are rising, and environmental constraints are significant, the real costs of capital investment in roads have risen dramatically. Combined with an economic downturn, fewer and fewer new miles of roadway facilities are built every year to address a growing demand for transportation.

The CMP legislation aims to increase the productivity of existing transportation infrastructure and encourage more efficient use of scarce new dollars for transportation investments, in order to fend off congestion, improve air quality, and ultimately allow continued development. In order to achieve this, the CMP law is based on five mandates:

- a. Require more coordination between federal, state, regional, and local agencies involved in the planning, programming, and delivery of transportation projects and services;
- b. Favor transportation investments that provide measurable and quick congestion relief;
- c. Link local land use decisions with their effect on the transportation system;
- d. Favor multimodal transportation solutions that improve air quality; and
- e. Emphasize local responsibility by requiring a Congestion Management Agency in each urban county in the state.

2. Congestion Management in San Francisco

Applicability of the Concept

The main impetus for the CMP legislation derives from worsening *suburban* transportation conditions, caused by land use patterns that perpetuate over-reliance on the private automobile. San Francisco has an extensive transit network and long standing policies to encourage a multimodal transportation system. Congestion management goals are reinterpreted here (within the constraints of State law) to add value to San Francisco's transportation planning process. The City's Transit First policy, for instance, gives rise to our local interpretation of CMP rules: San Francisco tolerates a certain level of traffic congestion in order to enhance the competitiveness of transit service in comparison to private automobiles. The San Francisco General Plan also specifically discourages roadway capacity increases, stating that:

"The existing vehicular capacity of the bridges, highways and freeways entering the city should not be increased and should be reduced where possible." (SF General Plan, Transportation Element, Objective 3, Policy 1).

If interpreted as improving the throughput of *cars* in the roadway network, congestion management is at odds with this policy. However, by reinterpreting congestion management as maximizing *person* throughput, then we have opportunities to capitalize on the City's significant supply of transit services, high densities, and relatively pedestrian-friendly environment. San Francisco can achieve congestion management goals if the measures of performance support the City's transportation and land use patterns.

The City's Congestion Management Track Record

San Francisco has managed travel demand well, especially automobile access to the downtown area during peak commute times. Many of the transportation demand management and land use regu-

lations described in Chapters 6 and 7 have existed for over twenty years and have allowed substantial growth in downtown trip-making without significant deterioration in the operating conditions (or traffic levels of service) of downtown streets. This success is clearly the result of the combined application of several major policies, in particular parking pricing and supply policies that discourage driving into downtown.

The City's winning strategy is a balanced multi-modal transportation system, which serves each travel market with the transportation modes best suited for it.

Other factors aided the City's ability to absorb the extraordinary levels of employment growth between 1970 and 1985, including:

- *the City's historic record of investment in local public transit* – High levels of transit service and coverage within the City provided a credible option to driving and made development impact mitigation fees and parking pricing policies politically viable;
- *the BART system and the demographics of downtown employment* – A large portion of employment growth in this period was absorbed by suburban residents. The opening of BART in 1973 expanded transit capacity to provide: a) excellent regional access to stations within walking distance of most downtown employment locations, and b) no financial burden to the City for providing adequate transit coverage at the residential (suburban) end of the BART trip; and
- *the City's investment in its street system* – San Francisco's dense grid of streets and arterials is seldom recognized as a major transportation asset. It provides multiple travel route options, keeps local trips from clogging the freeway system (as is so often the case in the suburbs), and enhances the system's ability to recover quickly when congestion problems occur.

Relationship to RTP Goals

The goals established in the 2005 RTP – safety, reliability, access, livable communities, clean air, and efficient freight travel – are embodied in the CMP. These goals are directly advanced in San Francisco’s CMP through the performance measures the Authority uses to monitor the CMP network.

RTP Goal	CMP Performance Measure
Safety	Collisions (all modes), % involving pedestrian and severity; maintenance performed.
Reliability	Prop E: transit on-time performance—schedule and headway adherence.
Access	Transit coverage/frequency; auto/transit speed ratios.
Livable Communities	Transit speeds; transit coverage standards; see also Safety.
Clean Air	Estimated mode shares; fleet mix and replacement cycles.
Efficient Freight Travel	Roadway LOS.

Future Strategies

The City's track record highlights the importance of maintaining travel *options*, not just to prevent worsening congestion, but to improve access and mobility for all San Franciscans, as the city continues to grow and develop.

Understanding demographic trends is important in charting future action. A development boom in the 1970s and 1980s was characterized by the growth of the City's financial district. This boom was followed by modest employment growth until the mid 1990s. By the late 1990s, San Francisco and the rest of the Bay Area experienced another employment boom accompanied by an increase in construction.² Even so, San Francisco residents are out-commuting to take advantage of work opportunities in other Bay Area counties in increasing numbers: today the number of San Francisco residents traveling daily to work in Santa Clara

² Commerce and Industry (Element of the General Plan, Eighth Annual Inventory), San Francisco Planning Department, 2000.

County is nearly double the number of Santa Clara County residents employed in San Francisco.³ In addition, nearly 57% of all drive-alone work trips into downtown office buildings come from within San Francisco.⁴ These trends are disturbing at a time when the fiscal conditions at the State and local governments curtail funding for transit operating expenses. The challenge of preparing for future growth is imminent: ABAG's Projections 2007 targets San Francisco to absorb an additional 47,388 households by 2030 over the current level of 338,921 households (2005 baseline). Enriching the City's inventory of available transportation options – particularly transit system development – will be a key strategy for congestion management in San Francisco.

Maintaining transit service levels is essential to ensure that transit remains a viable option to the private automobile as new residential neighborhoods develop, especially in the city's southeast quadrant. Non-traditional transit options (zonal express bus service, demand responsive, etc.) may need to be explored as alternatives to drive-alone in some of these cases.

Bicycling is a primary mode of travel for a growing number of trips. Bicycling is a suitable modal shift for many San Francisco automobile trips, especially in combination with transit.

Finally, every trip begins or ends as a pedestrian trip, and many San Franciscans make a substantial number of their trips entirely as pedestrians. Pedestrian safety and access are critical, combined with transit as well.

Congestion and demand management measures are also necessary to avoid further deterioration of transit travel times. San Francisco's congestion management activities will also need to focus on

³ San Francisco to Santa Clara: 20,591; Santa Clara to San Francisco: 11,244 Source MTC 2000 trip tables (original validation of the model set called RVAL90).

⁴ Daily drive alone work trips within San Francisco to downtown San Francisco: 30,238; total drive alone work trips to downtown San Francisco: 76,808; percent of daily drive alone work trips to downtown San Francisco from San Francisco: 39.4%. Source: MTC 2000 trip tables (original validation of the model set called RVAL90).

key improvements to congested roadway facilities to enable transit to get out of auto traffic. Particular attention will be paid to projects that improve the operating efficiency of the existing system, such as bus transit priority treatments and interconnection of traffic signals to improve vehicular traffic flow. These projects help transit regain operating speed and retain its market share.

Bus Rapid Transit studies are currently underway in two key corridors in the Transit Priority Network: Van Ness Avenue and Geary Boulevard. These studies are examples of the Authority's commitment to separating transit right-of-way from congested city streets in an effort improve overall person throughput and reduce transit travel times in key corridors.

The 2004 Countywide Transportation Plan also identified pricing as an emerging demand management tool in the city's congestion management toolkit. The Authority is conducting a neighborhood on-street parking management study that is examining the role of parking pricing to manage demand and increase availability. The Authority also recently launched a study of the feasibility of implementing congestion pricing in the downtown area. This *Mobility, Access, and Pricing Study* will inform policy-makers of the potential benefits, costs and impacts of alternative pricing schemes for San Francisco.

Congestion management activities during the next two fiscal years are set forth in the "work plan" section at the end of each chapter.

Tools for implementing future strategies

The Prop K Transportation Sales Tax Program Expenditure Plan is the city's investment blueprint for congestion relief: On November 4, San Francisco voters passed the 30-year extension of the local sales tax for transportation, and associated Expenditure Plan, with a 75% approval rate. The primary goal of the Expenditure Plan is to implement the priorities of the Countywide Transportation Plan through investment in a set of projects and programs that include planning, maintenance and rehabilitation, and improvements to the city's multi-modal transportation system.

San Francisco's Transportation and Land Use Coordination (T-PLUS) workplan agreement with MTC will also guide our efforts to better support integrated planning efforts and decision-making about land use and transportation system development. Chapter 7 outlines these activities.

Congestion management activities during the next two fiscal years will also include advancing planning studies and continued focus on neighborhood transportation planning efforts. Finally, the Authority will continue to develop the San Francisco Travel Demand Model, in order to measure performance of the multimodal system, analyze CIP changes, and to improve forecasting of system performance impacts associated with transportation investments, policies, and land use changes. These activities are discussed in Chapter 10.

3. Program Overview and Key Changes from the 2005 CMP

A. Mandated Program Components

The following statutory requirements of CMP legislation are mandated for all urban counties in the state:

1. A CMP updated biennially. The CMP must contain the following:
 - A designated CMP roadway network
 - Traffic level of service (LOS) standards and a methodology for monitoring LOS on the designated CMP roadway network
 - Transit service standards
 - A multimodal performance element
 - A land use impact analysis methodology
 - A seven-year multimodal capital improvement program;
2. A common database and method to analyze impacts of local land use decisions on the CMP network; and
3. A designated Congestion Management Agency for the county.

B. Changes to Transportation Fund Programming

The CMP legislation included the creation of new funding sources, as well as changes to existing fund programming mechanisms, tied to implementation of CMP requirements. The Authority at the local level and the MTC at the regional level have been empowered to make CMP conformance determinations affecting funding eligibility.

1. State Fuel Tax Increment: The CMP legislation established a 9-cent per gallon increase in the state's fuel tax. In order to receive these revenues, urban counties must conform with CMP requirements, particularly the LOS congestion monitoring, and implementation of required CMP elements. The CMP document itself must be updated every two years.
2. Regional Improvement Program (RIP): These funds are programmed through the Regional Transportation Improvement Program (RTIP), which is developed and adopted by MTC, and subsequently adopted into the State Transportation Improvement Program (STIP) by the California Transportation Commission. In order to be considered for funding through the RTIP, transportation projects must be first included in the Capital Improvement Program of the CMP.
3. Federal Surface Transportation Program (STP) and Congestion Management and Air Quality (CMAQ) Program Funds: In 1992, the California legislature passed SB 1435, which reconciled the CMP programming process with the new Federal Intermodal Surface Transportation and Efficiency Act (ISTEA). As a result, projects seeking STP or CMAQ funds (continued under TEA-21 and SAFETEA-LU) must first be prioritized by each Congestion Management Agency in their biennial Capital Improvement Program for the CMP.

C. Relationship to Ongoing Planning and Programming Efforts

Congestion management programs are a component of a more comprehensive set of ongoing transportation planning and programming efforts at the local and regional levels:

1. Regional Transportation Plan (RTP): The CMP implements the local portion of the regional transportation plan and must be consistent with it. MTC determines consistency among CMPs in the region. MTC makes these determinations as a part of the conformance finding process for CMPs.
2. Regional Transportation Improvement Program (RTIP): A seven-year transportation capital improvements program must be included in the CMP. For certain projects to be included in the RTIP, they must be included in the capital improvement program of the CMP. The CMPs are therefore a main source from which the RTIP's program of projects is derived.
3. City of San Francisco General Plan: According to the City Charter (section 3.524), the General Plan is a comprehensive, long-term, guide for the future development of the City and County. The General Plan guides transportation demand management measures that are addressed as part of the CMP. Chapter 8 addresses the Planning Department's role in making consistency findings for the CMP's Capital Improvement Program.

While the General Plan provides the policy framework, State law does not require that the CMP be incorporated into the General Plan.

4. Air Quality Attainment Plans: MTC's Regional Transportation Plan is required by federal law to conform to the State Implementation Plan for improvement of air quality. Since the CMP must be found con-

sistent with the Regional Transportation Plan, the CMP must therefore also conform to the provisions of the State Implementation Plan. In addition, the San Francisco CMP documents implementation of transportation control measures (TCMs) included in the Clean Air Plan adopted by the Bay Area Air Quality Management District pursuant to State requirements.

D. Key Changes from 2005 CMP

The following sections highlight the most significant updates proposed for the 2007 CMP.

Chapter 4: This CMP update incorporates the results of the Spring 2007 LOS monitoring and guides the next LOS monitoring cycle that is being conducted in Spring 2009. The results of the Spring 2007 LOS Monitoring are presented in Chapter 4.

Chapter 5: In this CMP update, the Authority reports on progress of the Authority's Automobile Trip Generation Measure study, and advances a new performance measure—transit speed—to expand the definition of performance on the CMP network. This chapter includes new reporting of transit speeds—including in comparison to automobile speeds—on segments of the CMP network for which data is currently available.

Chapter 6: The Transportation Demand Management Element has been updated to reflect the work of our On-Street Parking Management & Pricing Study and Mobility, Access & Pricing Study. These studies examine the potential for pricing to be used in combination with new technology and transportation enhancements made possible by the generation of revenue from user fees.

Chapter 7: This chapter has been updated to reflect the current challenges of meeting the City's growth plans while finding new mechanisms to pay for needed transit and other improvements as development decisions are made. In addition, details are provided regarding the Authority's Neighborhood Transportation Plans (NTPs) program, as well as recent multi-agency work to identify Priority Development Areas (PDAs) as part of the regional Focusing our Vision program.

Chapter 8: This chapter reflects amendments made to the Capital Improvement Program (CIP). Per adopted procedures, the CIP is amended concurrently with Authority programming decisions. An ongoing work program item related to the CIP includes monitoring of state and federal funds to ensure that timely use of funds requirements are met. These requirements impose deadlines for project milestones such as obligation of funds, award of contracts and completion of construction. Failure to meet the deadlines can result in loss of funds to the project and permanent loss of funds to the County.

Chapter 10: The Authority's San Francisco Travel Demand Forecasting Model has undergone a major update, which was operationally complete in Spring 2007. The changes include a more-refined zonal system, the modeling of transit speeds based on auto speeds, and a model calibration refresh that incorporates the 2000 Census and 2000 Bay Area Transportation Survey.

E. Coordination and Public Input

The 2007 San Francisco CMP was developed with input from the Authority's Technical Working group, comprised of city departments, transit operators, and other interested agencies.

The Authority's Citizens Advisory Committee reviewed the updated chapters and recommended approval of the 2007 CMP at the September 26, 2007 CAC meeting.

A public hearing on the 2007 San Francisco CMP was held at the October 16, 2007 meeting of the Authority's Plans and Programs Committee. The Plans and Programs Committee recommended approval of the CMP.

The Authority Board adopted the 2007 CMP on October 30, 2007.