

**CHAPTER 6****TRAVEL DEMAND MANAGEMENT ELEMENT****Key Topics:**

- **Legislative Requirements**
- **Legislative Intent and Application to San Francisco**
- **City TDM Policy Framework**
- **Citywide TDM Initiative**
- **Key Milestones since last update**
- **Work Program**

**1. Legislative Requirements**

California Government Code Section 65089 (b)(3) requires development of 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.” Parking cash-out programs can be considered as well. Each local jurisdiction was expected to adopt a Trip Reduction and Travel Demand Ordinance that incorporates these policies no later than November 1992.

**2. Legislative Intent and Application to San Francisco**

The travel demand management element is a key feature of the CMP legislation. While the land use impacts analysis program and level-of-service monitoring activities fulfill primarily a diagnostic function, identifying potential or actual congestion problems so that solutions can be developed, the

travel demand management element encourages the local policy coordinated at the subregional (county) level, explicitly promoting changes in trip-making behavior).

**3. City Policy Framework**

While San Francisco does not have an official city-wide travel demand management ordinance, over the last two decades the City has adopted a variety of policies designed to discourage travel by single-occupant automobile and promote other modes of transportation. These policies allowed the City to accommodate unprecedented growth in travel demand without proportionate investments in highway and street capacity. In 1973, the City Planning Commission and the Board of Supervisors adopted the Transit First policy, giving priority to transit rather than accommodating the single occupant automobile. Over the next twenty years, Transit First has evolved into a set of policies advocating reduction in single occupant automobile trips and travel demand management. The City's Transit First Policy is documented in the Transportation Element of the City's General Plan, the Planning Code, and other City ordinances.

The General Plan's objectives and policies that focus on the Transit First policy as well as regional Transportation Control Measures designed to achieve air quality objectives are the policy framework for any TDM programs implemented through the CIP.

**A. Housing and Employment Balance**

A better balance between jobs and housing—meaning, in job-abundant San Francisco, more housing—would reduce pressure to accommodate incoming auto trips. Downtown San Francisco has the largest concentration of commercial activity and employment in the Bay Region. Much of the downtown employment growth occurred in the 1970-79 period. During that time about 100,000 new jobs were created and about 11,300 net new residential units were built in the City. For each 100 new jobs created in the city about 11 net new residential units were built during this period. This attracted many new workers from the region and significantly increased the number of suburban commuters into the City.

During the 1980's the rate of downtown employment growth has decreased, but at the same time, only about 87 net new housing units have been built for every 100 new jobs created during this period. This trend continued through the early 1990s until the dramatic employment growth of the late 1990s experienced, which was accompanied by only a modest increase in residential units.

In recent years, the City has promoted new housing in conjunction with new office developments. Presently new office buildings above 25,000 square feet in the downtown area are subject to housing requirements: Section 313.3 of the Planning Code, the Office/Affordable Housing Production Program (OAHPP). The project sponsor is required to either build housing at a rate of 38.6 units per 100,000 square feet of office, or pay \$7.20 per square foot to a housing developer to construct housing, or pay an in-lieu fee to the city-wide Affordable Housing Fund. OAHPP requires 62 percent of the units to be allocated for low or moderate-income housing.

Extensive rezonings undertaken in the city during 1980's have also actively promoted new residential development. The Downtown Plan, as well as the plans for Rincon Hill, North of Market, Chinatown, Neighborhood Commercial, Van Ness Avenue, South of Market, and South Beach, all have measures to retain and increase residential development. The Mission Bay project alone will add 6,090 new residential units in conjunction with the commercial development.

## B. Transportation Control Measures

In 1991 as required by the California Clean Air Act (CCAA), the Association of Bay Area Governments (ABAG), the Bay Area Air Quality Management District (BAAQMD), and the Metropolitan Transportation Commission (MTC) jointly prepared the Bay Area Clean Air Plan which included measures to reduce the total *number of trips* and miles traveled, ("Transportation Control Measures," or TCMs).

The TCM Plan has three major components. Phase 1 consisted of TCMs based on existing authority and funding implemented by 1997-2000. Phase 2 TCMs require new legislative authority and funding. Phase 3 TCMs are expected beyond 2003, and include market-based initiatives, such as parking manage-

ment and congestion pricing, which may require authorizing legislation.

Local agencies are expected to incorporate these TCMs into planning and implementation for transportation and land use programs. The region, through the MTC, is held responsible for overall progress toward the stated goals. The CMP process provides an opportunity to integrate local planning and programming into the regional air quality planning process.

In October 2003, after several years of attempting to be in conformance with federal air quality standards the Bay Area was found to be in attainment of Federal ozone standards, under the Clean Air Act. Being "in attainment" is required of regions in order to be eligible to receive federal transportation funds. Appendix VII lists regional TCMs and discusses how San Francisco's congestion management strategies contribute to, or reinforce these measures. Among the TCMs implemented by San Francisco are parking management and pricing rules, which are considered Phase 3 measures.

## C. Objectives and Policies in the General Plan

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

- Objective 11 **gives priority to public transit** as the means of meeting transportation needs;
- Objective 12 calls for reducing the number of single occupant vehicle trips;
- Objective 16 encourages **reducing parking demand** at employment centers citywide; and
- Objective 17 **discourages new long-term parking in the downtown area and promotes efficient use of existing parking facilities.**

## D. Existing Downtown-Oriented Strategies

Existing transportation demand management strategies in San Francisco focus on downtown. Transportation “brokerage” requirements and parking regulations are the primary TDM vehicles in existence.

### D.1. Transportation Management Programs and Brokerage Services

These programs to facilitate transit and rideshare commuting are intended to minimize the transportation impacts of employment growth at major job centers.

Transportation Management Programs (TMP) and Transportation Brokerage Services (TBS) are required under Section 163 of the Planning Code for office buildings in the greater downtown area and the South of Market area. Outside of the downtown area, these programs apply to office and commercial-industrial districts such as the Mission Bay Specific Plan area. Although not categorically subject to a specific Planning Code requirement, major institutions (e.g., hospitals and universities) subject to institutional master plans can also be required to provide on-site TMP and TBS, depending on the magnitude of development and anticipated transportation impacts. These requirements are imposed when an institution requests approval of building permits.

New buildings above 100,000 square feet of Gross floor area in the C-3 districts in the downtown area, and above 25,000 square feet of gross floor area in the South of Market area, are required to provide on-site TMP and TBS for the lifetime of the project.<sup>1</sup>

The TMP and TBS are designed to: 1) Promote and coordinate transit use among office tenants, institutions and their employees, through readily available transit information and on-site sale of transit passes; 2) Promote and coordinate ridesharing activities at each location; and 3) Reduce parking demand and ensure the proper and most efficient use of on-site or off-site parking;

<sup>1</sup> See the Developer's Manual, "Transportation Management Programs in Greater Downtown: Developer's Manual for Procedures and Performance Criteria"

Under the "Developer's Manual" the project owner is *required* to designate a permanent **Transportation Management Coordinator (TMC)**. For buildings with parking, the TMC must submit a Parking Management Plan (PMP) to the Department of City Planning. The parking plan should allocate parking among various users such as short-term, handicapped, carpools, vanpools and bicycles and provide a plan to market preferential on-site parking for carpools and vanpools and limit long-term parking leases to employees of the building.

For example, the Planning Commission adopted a formal policy to allocate a percentage of parking for office buildings in the downtown area to carpool and vanpool parking. The Department of Parking and Traffic (DPT) promotes use of carpools and vanpools during the morning and evening commutes. For trips with downtown destinations, DPT provides carpool drop-off areas on Howard Street near Fremont. DPT also administers a program through which major employers provide inexpensive carpool parking (\$60/yr) to their employees. California Pacific Medical Center, San Francisco General Hospital, and the AT&T lot at 4<sup>th</sup> and Folsom currently participate in the program. Low cost (\$60/yr) vanpool parking areas are also available along Folsom, Washington, Broadway, Otis and in the Civic Center area (currently along Van Ness Avenue). In addition, City regulations now allow permitted vanpool parking at any parking meter of 60 minutes or more.

To promote carpooling during the evening commute, in 1995 DPT coordinated with Caltrans to expand HOV evening hours from 4 to 6 pm to 3:30 to 7 pm. This has resulted in increased carpool use after 6 p.m. In addition, DPT has continued to set aside curb space for casual carpool pick-up areas along Beale Street between Howard and Folsom Streets, which were originally created during the September 1997 BART strike. This location provides direct access to the Sterling Street HOV on-ramp.

In addition, buildings must provide permanent **Transportation Brokerage Services** that include marketing, transit pass sales, ridematching, and employee commute behavior surveys.

The Transportation Management Association of San Francisco was established in 1989. The TMA is a

non-profit association of building owners and managers that coordinates and facilitates implementation of the TSM programs of member buildings. Presently there are approximately 70 buildings in the greater downtown area with TSM requirements, of which 56 buildings have joined the TMA organization.

## D.2. Parking

As described above, the General Plan and Planning and Zoning Codes guide parking management in San Francisco. San Francisco's existing parking policies are intended to support the city's development, and have been especially successful in the downtown area. Parking policies are also designed to support the city's Transit First policy through a combination of regulatory controls, revenue transfers, regulations, and incentives.

The Countywide Transportation Plan and Prop K Expenditure Plan category D1 provide policy guidance and funding for expanding parking management initiatives citywide, particularly at the neighborhood-level.

## 4. Citywide TDM Initiatives

To date, the city's Transportation Demand Management program has focused on employer-based initiatives in the downtown core; the TDM program has not been extended to other types of organizations or beyond the downtown area.

A Citywide TDM program implies an expansion to include small employers and other institutions, not just large property owners and employers. The existing TDM program in the downtown area has developed a Small Business Handbook that was oriented toward small businesses downtown and how to encourage alternative modes among their customers but could possibly be revised and extended to small business districts citywide, especially if parking management is aptly treated.

In terms of non-employer based programs, the City piloted the Non-Commute Trip Program, which was funded by the Authority, around 1997. The purpose of the program was to manage transportation demand for recreational and shopping trips to the Mission and North Beach on the weekends and evenings. These programs are no longer continuing, and it is unclear whether the initiatives met success.

These programs should be reviewed and assessed, and perhaps initiated again as part of a Citywide TDM strategy.

### A. Emergency (Guaranteed) Ride Home

A program administered by the City of San Francisco Department of the Environment supports alternative mode commutes by ensuring a free or low cost ride home or to a transit stop in cases of emergency. The program is designed to remove some of the risks and reliability concerns associated with carpooling or relying on limited transit schedules.

The program is based around registered employers. All employees of registered employers located in San Francisco are eligible. Transit, carpool and vanpool, walking, and bicycling are the commute modes eligible for the program.

A ride home is available to a registered user in the event of illness or crisis of the employee of immediate family, unscheduled overtime, disruption of carpool or vanpool, or bicycle problem.

The program is made possible by grant funds from the Authority and the Bay Area Air Quality Management District Transportation Fund.

### B. Institution-Based TDM

Institutions present another opportunity to expand TDM programs. Currently, institutional TDM programs (e.g. at schools and universities and building associations) are entirely voluntary, and the city currently is not actively working with any institutions on TDM programs. The Northern Waterfront Transportation Management Association (TMA) initiative is an example of an attempt to set up a TMA outside of the downtown area, several years ago. A number of property owners along the Northern Waterfront initiated a TMA in recognition of the shared need to maintain access and circulation in their area. However, this TMA never materialized to implement a program.

### C. On-Street Parking Management and Pricing Study

The Countywide Transportation Plan identifies the pressing need for better parking management at the

neighborhood level, citywide. Currently, the city regulates on-street parking supply through several means, including curb colors, metering, and the Residential Permit Program. Parking congestion in turn contributes to vehicular congestion and related safety conflicts and environmental impacts. The Countywide Transportation Plan calls for several parking management strategies and reforms that could further advance the city’s Transit First policy and overall transportation demand management goals.

Nearing completion, the On-Street Parking Management and Pricing Study will report on the potential for using price-based regulation and related strategies more widely and pro-actively as a parking and transportation demand management tool for on-street parking supplies. Launched in December 2005, the objective is to investigate the methods required to increase the daily utilization and general availability of on-street parking in congested neighborhoods. The study will evaluate the feasibility, potential benefits, costs and impacts of alternative strategies, as well as address the needed implementation mechanisms for any new programs. The larger goal is to expand the City’s parking management toolkit to guide neighborhoods in promoting better utilization of on-street parking spaces, in recognition of these as a scarce and valuable land use.

Surveys conducted in four San Francisco neighborhoods indicate the need for improved management of on-street parking. Inefficient utilization, indicated by occupancy rates above eight-five percent (85%), was found during various periods in each neighborhood.

These parking management tools may include neighborhood-level parking management plans (to coordinate the management of on- and off-street, public and private, residential and commercial parking supplies), strengthening of market-based and pricing strategies, including the potential to create parking benefit assessment districts, revised parking requirements and unbundling parking costs from housing within new developments, shared parking, carpool, vanpool, carshare and bicycle parking priority, improved signage and real time information systems, and better enforcement of parking regulations.

Neighborhood	Parking Occupancy				
	Residential			Commercial	
	AM	Mid-day	PM	Mid-day	Evening
Bernal Heights	99% wkdy	63% wkdy	77% wkdy	87% wkdy	87% wkdy
		80% wknd		96% wknd	
Cow Hollow	92% wkdy	94% wkdy	93% wkdy	93% wkdy	97% wkdy
		98% wknd		99% wknd	
Hayes Valley	80% wkdy	84% wkdy	93% wkdy	82% wkdy	78% wkdy
		86% wknd		82% wknd	
West Portal	42% wkdy	71% wkdy	73% wkdy	91% wknd	84% wkdy
		84% wknd		96% wknd	

Source: San Francisco County Transportation Authority, Parking Management and Pricing Study, 2007.

Of these management strategies, the area with the greatest need for further research and policy development is the pricing of on-street parking resources, in terms of the price structures and other factors that affect parking behavior. In addition, there is potential for wider community benefits being funded by parking revenues. It is anticipated that the final results of the study will be available by the end of 2007.

**B. Mobility, Access & Pricing Study**

In Spring 2007, the Authority launched its Mobility, Access and Pricing Study, subsequent to receiving a grant from the U.S. Department of Transportation’s Value Pricing Pilot Program to study the feasibility of using congestion pricing to manage traffic congestion and improve mobility in the city. The Authority and MTC are providing matching funds for the Study.

The Mobility, Access and Pricing Study is exploring congestion pricing through technical, economic, financial, and legal/institutional analyses. Public involvement and outreach to key stakeholders are key components of the study process. The Study’s primary objectives are as follows:

- Assess current congestion conditions and impacts;
- Evaluate the feasibility of pricing strategies in San Francisco;
- Define and study potential mobility packages that consider accessibility, economic vitality, and quality of life;
- Determine costs and revenues of feasible alternatives; and
- Develop recommendations and/or implementation plan.

A congestion pricing program has the potential to be a key travel demand management strategy that can deliver significant system performance and revenue generation benefits. With such a program in place, drivers would be charged a user fee to drive in specific, congested areas and/or corridors. Congestion pricing is used in major cities across the world and is based on personal choice—motorists can drive if the convenience is worth the fee, or use alternatives like transit, biking, carpooling, or walking. Revenues from the congestion charge are used to fund transportation improvements, such as enhanced transit service, road maintenance, and bicycle and pedestrian projects.

As of Fall 2007, the Study is proceeding on several substantial fronts, including the initiation of aggressive public outreach efforts and advanced modeling. The development and refinement of test alternatives and mobility packages will continue into 2008. A final report and potential implementation plan are expected in Summer 2008.

#### **D. Transit Impact Development Fee**

First enacted in 1981, the Downtown Transit Impact Development Fee (TIDF) ordinance was a way to have new development pay its fair share for expanded transit capacity to serve that development. TIDF assesses a one-time fee of \$5 (maximum) per square foot on new or converted office space in the downtown area.

In 2004, the Board of Supervisors recognized that a significant number of new transit trips would be generated by non-residential development. The Board subsequently approved an amendment to the TIDF legislation that expanded the ordinance to

include the following land uses: visitor services; medical and health services; cultural, institutional, and educational (CIE); retail and entertainment; office use; and production, distribution, and repair (PDR). The legislation was also amended to include all new developments citywide, rather than just in the downtown office area. The 2004 ordinance established the fee schedule shown below, which is subject to annual adjustment, without further action by the Board of Supervisors, to reflect changes in the relevant Consumer Price Index, as determined by the City Controller.

<b>Land Use Category</b>	<b>TIDF per sq. ft. of development</b>
Visitor Services	\$9.00
Medical and Health Services	\$14.00
Cultural/Institution/Education	\$14.00
Retail/Entertainment	\$35.00
Office Use/Business Services	\$14.00
Production/Distribution/Repair	\$9.00

Appendix VI contains a copy of the 2004 TIDF ordinance.

The revenues from the fee may subsidize capital and operating expenses for existing and new transit service. New development generates more transit trips, which add to the already heavily utilized transportation system, especially in the downtown area during peak periods. This, in turn, creates a greater burden on the City transit system. Because transit operates at or near capacity during peak periods, ridership growth must be addressed through increased Muni service frequencies. However, the Municipal Railway's 2005 Short Range Transit Plan estimates that by the year 2015, the Market Street subway will require additional trains to accommodate future demand. TIDF fees are one way to generate the revenue necessary for such expansions of the transit system.

The impact fee levied on developers must be related to providing new or expanded transit service to support peak period travel generated by new development (including any costs associated with operations or capital). The need for transit services as a result of new development must be established. Furthermore, the proposed expenditures of the fee and the dollar amount of the fee must also have a "nexus" to the development project impacts.

The current TIDF is not adequate to support ongoing operational transit subsidies. The impact fee is a one-time charge, while the cost of subsidizing transit operations is a recurring need.

In the future, the TIDF could also be expanded to cover regional transit operators that serve the City, such as BART or Caltrain.

## 5. Work Program Items - Key Milestones

- Evaluate the existing travel demand management activities of City departments and establish their effectiveness. Develop guidance for the use of Prop K TDM and Parking Management category funds to expand TDM and parking management programs citywide.
- Analyze effectiveness of the new TIDF given city growth trends.
- Complete the On-Street Parking Management and Pricing Study.
- Complete the Mobility, Access and Pricing Study.