



CHAPTER

# 2.0 CONTEXT

*San Francisco is a walker's city – a dense mix of uses, short blocks and small streets combine to make a convenient and desirable walking environment. However, existing conditions could be greatly improved to better promote a safe and comfortable pedestrian realm.*



CHAPTER

# 2.0

CONTEXT

- 2.1 Existing Conditions
- 2.2 Regulatory Context
- 2.3 Existing City Efforts





Embarcadero Plaza crosswalk



# 2.1

## EXISTING CONDITIONS

### Pedestrian Conditions

Walking plays a major role in San Francisco's transportation network. Each year, 4.5 million transportation trips are made in San Francisco; of these approximately 890,000 (20%) are walking trips. An additional 780,000 trips (17%) are made on transit, most of which include walking at the beginning and end of each trip.<sup>1</sup> (See table, following page)

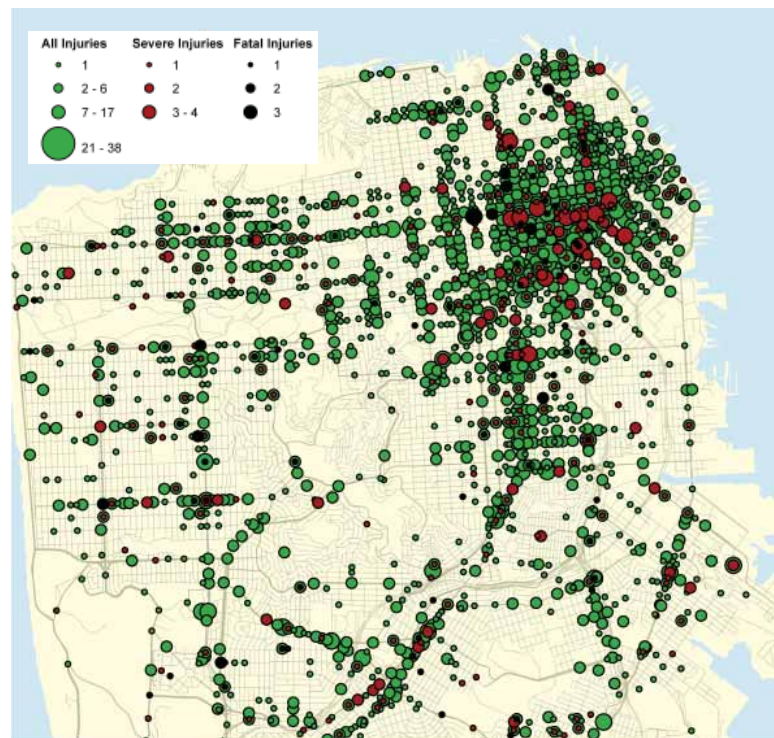
San Francisco's pedestrian network developed along with the city, thus most streets include basic pedestrian infrastructure such as sidewalks and marked crosswalks. As some formerly industrial areas transition to commercial and housing uses, gaps in the basic pedestrian network are being filled in.

<sup>1</sup> San Francisco County Transportation Authority, SF Plan

The size of blocks and intersection density affects the ease of walking in San Francisco's varying street grids. Shorter blocks in areas such as Downtown and Chinatown provide more access and direct routes for pedestrians. In other areas of the City, such as the Mission District, a network of alleys helps break up larger blocks to provide pedestrian connections. In other areas, such as SoMa, blocks are approximately four times longer than typical downtown blocks, making walking more difficult with less direct connections.

### Major pedestrian activity generators

Pedestrian activity in San Francisco is clustered in locations where activity generators, such as commercial corridors, transit facilities and other destinations, are concentrated.



▲ PEDESTRIAN INJURIES CITYWIDE 2002-2006

Source: Statewide Integrated Traffic Records System (SWITRS)



▲ VOLUME OF PEDESTRIANS PER HOUR AT SELECTED INTERSECTIONS

Source: SFMTA Traffic Counts



▲ PERCENTAGE (BY QUINTILE) OF POPULATION THAT WALKS TO WORK

Source: US Census, 2000

Observed walking rates have been collected by SFMTA at selected intersections. Currently, the only existing data source for citywide walking rates comes from the US Census journey to work survey, which asks respondents to name the mode of transportation they most often use to get to work. Because this data does not provide the full spectrum of transportation trips and because it only includes the mode most often used to get to work, it does not provide a comprehensive picture of transportation choice across the City. However, the journey to work data, does show the areas of San Francisco, most notably Downtown, where walking rates to work are most concentrated.

SAN FRANCISCO MODE SPLIT FOR ALL TRIPS, 2000

Auto	2,809,000	62%
Transit	777,000	17%
Walk	892,000	20%
Bike	40,000	1%
TOTAL	4,518,000	100%

Source: San Francisco County Transportation Authority

Collision Patterns

Data on pedestrian collisions in San Francisco comes from two sources: the Statewide Integrated Traffic Records System (SWITRS) and the PedSafe study, conducted by UC Berkeley researchers and the SFMTA, respectively. The SWITRS data, compiled by the California Highway Patrol, is based on San Francisco Police traffic collision reports, while the PedSafe study analyzed hospital discharge records in addition to police reports to include pedestrian injuries for collisions that were not reported to the police.

In recent years, reported pedestrian injury collisions have come down from the 900 to 1000 per year range recorded in the 1990's to 726 in 2006. Additional improvements are necessary, but the overall decline in pedestrian collision totals over the past 15 years is encouraging. The number of pedestrian fatal collisions decreased to 13 in 2006, which was the lowest number in the past decade. Unfortunately, there was a spike in 2007 to 27 pedestrian fatalities. In general, injury collisions are a more reliable

indicator of collision trends over time because fatal collisions, being rarer events, are more subject to random fluctuations.

According to the PedSafe study, both fatal and non-fatal injuries often occur at intersections with a traffic signal. According to 2001-2005 data from the 89 intersections with the most pedestrian collisions in San Francisco, all 17 fatal collisions occurred at signalized intersections. The majority of pedestrian injury collisions also occurred at intersections with a traffic signal, as shown at right.<sup>2</sup>

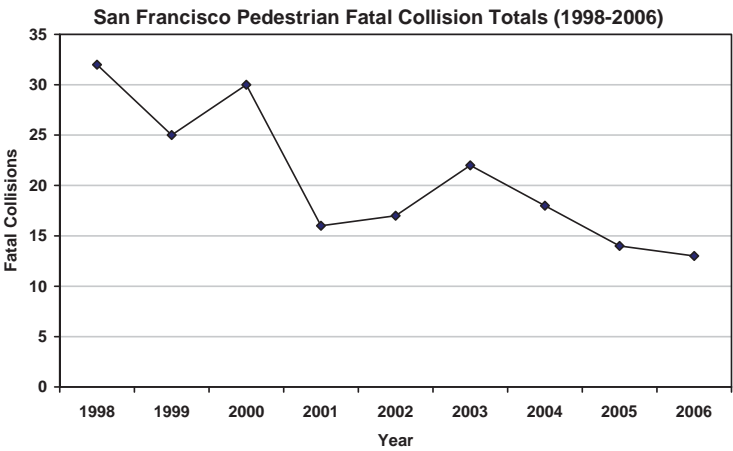
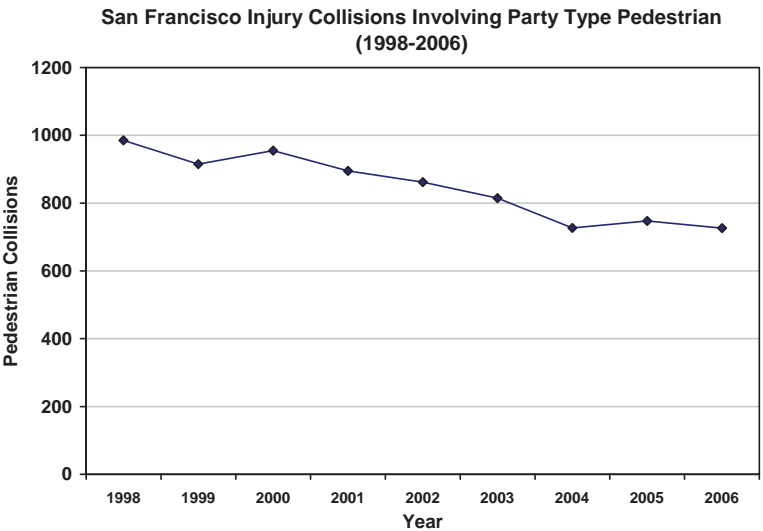
Pedestrian-injury collisions in San Francisco are highly concentrated in clusters. The *PedSafe Phase I Report* identified seven higher-risk zones based on injury density and severity and the potential to benefit from modest pedestrian-injury countermeasures in the absence of other major intervention programs for pedestrian safety. The seven zones, including three area and four linear zones, are:<sup>3</sup>

- South of Market West (SOMA)
- North Mission
- Chinatown/North Beach
- Outer Mission Street
- Geary Blvd./Cathedral Hill/Japantown
- Geary Blvd./Richmond
- Upper Market Street

Based on the San Francisco 2006 Collision Report, the four locations with the most pedestrian collisions at intersections are:<sup>4</sup>

- 4th St. and Market St. and Stockton St.
- Golden Gate Ave. and Jones St.
- 6th St. and Mission St.
- 16th St. and Potrero Ave.

<sup>2</sup> Collision Analysis Memo, page 9, based on PedSafe  
<sup>3</sup> Collision Analysis Memo, page 9  
<sup>4</sup> San Francisco Collision Analysis Memo, page 11Report



San Francisco Pedestrian Fatal Collision Totals (1998-2006)

Year	1998	1999	2000	2001	2002	2003	2004	2005	2006
Total	32	25	30	16	17	22	18	14	13

### TRAFFIC CONTROL FOR PEDESTRIAN INJURY COLLISIONS, TOP 89 INTERSECTIONS IN SAN FRANCISCO, 2001-2005

YEAR / CONTROL	SIGNAL	STOP	OTHER	TOTAL
2001	89	1	5	95
2002	109		3	112
2003	93		8	101
2004	105		1	106
2005	102		5	107
Total	498	1	22	521

Source: San Francisco PedSafe Study

#### Sidewalks, Stairs and Paths

Prior to 2005, the City of San Francisco relied primarily on public complaints to identify needed sidewalk repairs. In 2007, a new program to proactively identify needed sidewalk repairs was instituted by the Department of Public Works (DPW). The Sidewalk Inspection and Repair Program (SIRP) inspects all sidewalks on a 25 year cycle. The inspection schedule is prioritized by pedestrian usage. The SIRP program informs all responsible parties (both public and private property owners) of sidewalk damage, and DPW then coordinates repairs in a short time frame to increase efficiency and improve pedestrian safety.

#### Curb Ramps

Curb ramps were first installed in San Francisco in the early 1970's. Since that time, many different public and private entities have installed them in addition to the Department of Public Works (DPW). For example, utility companies are required by way of permit requirements through DPW's Bureau of Street Use and Mapping to install curb ramps when altering a street corner, and major construction projects have been required to install curb ramps in the areas of construction.<sup>6</sup>

<sup>6</sup> "Americans with Disabilities Act Transition Plan for Curb Ramps, Updates and Revisions," Mayor's Office on Disability, 2007-2008.

In San Francisco, senior pedestrians are at a higher risk of dying in collisions than any other age group. Seniors are most often hit by vehicles at signalized intersections and often involve drivers making a left turn. Unlike national and statewide trends (and trends in LA and San José), children are not overrepresented in pedestrian collisions in San Francisco.<sup>5</sup>

Pedestrian collisions are caused by a number of factors. However, most injury collisions are attributable to either motorists who violate pedestrian right-of-way (pedestrian right-of-way violations) or pedestrians who violate the vehicle code (pedestrian violations). See charts at left.

#### Pedestrian Surveys

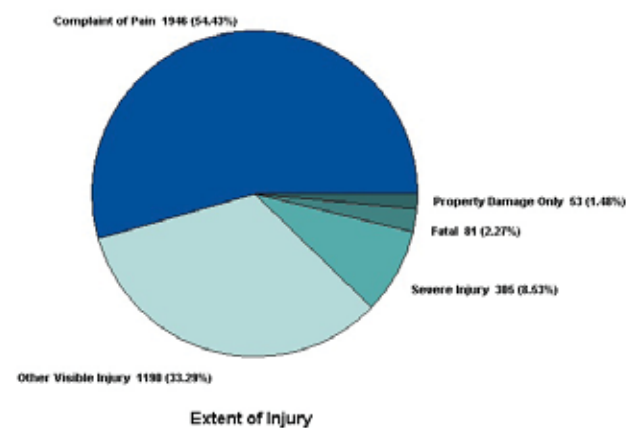
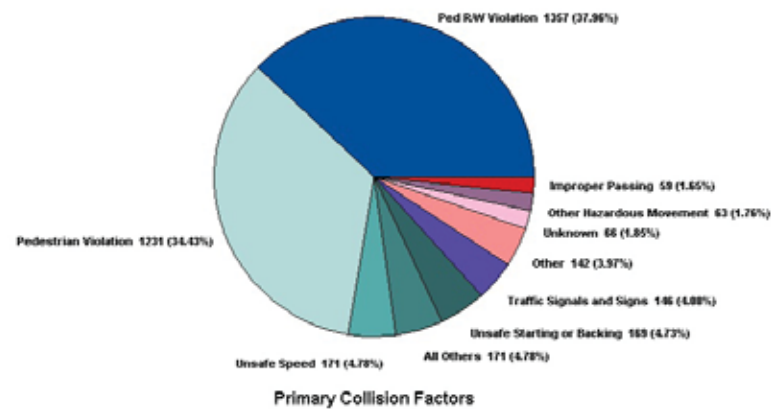
San Francisco has historically not done comprehensive studies of how pedestrians perceive the quality of the pedestrian environment, which have been completed in some other cities, including Sydney, Australia and New York City. The majority of data focuses on either pedestrian safety statistics, or physical conditions of existing infrastructure. However, the City is beginning to incorporate surveys of pedestrian perception into its data collection, which will give a more complete picture of pedestrian conditions.

### Condition of Existing Infrastructure

#### Pedestrian Signals

The SFMTA is working to install countdown signals at all traffic signals in the City. Across San Francisco, approximately 740 of 1155 signalized intersections (65%) have pedestrian countdown signals for all crosswalks. Another 50 intersections are programmed to receive countdown signals over the next few years. Of the remaining 365 intersections, 183 have countdown signals for some of the crosswalks and 182 have no countdown signals at all.

<sup>5</sup> Collision Analysis Memo, page 15, based on PedSafe



#### PRIMARY COLLISION FACTORS 2002-2006 (TOP)

#### AND EXTENT OF PEDESTRIAN INJURY 2002-2006 (BOTTOM).

Source: SFMTA



The City has approximately 7,200 intersections. DPW policy is to build one curb ramp at each end of each crosswalk. However, due to traffic considerations and to topographical or other physical and legal constraints, two curb ramps are not always feasible at each street corner. As a result, the citywide average is 1.82 potential curb ramp locations per corner.

In order to assess the location and condition of the City's existing curb ramps, and to determine locations where new curb ramps should be installed, DPW has created a detailed curb ramp database based on surveys of more than 29,000 intersections. The DPW has identified 21,300 street corners with curbs in need of reconstruction or some improvement, plus 1,000 street corners where no ramp is possible. There are also an additional 17,000 intersections that have not yet been surveyed.<sup>7</sup>

### Street Trees

There are an estimated 106,000 street trees on public rights-of-way in San Francisco. Of these, approximately 26,000 are maintained by DPW Bureau of Urban Forestry. The remaining trees are maintained by private property owners in accordance with the Public Works Code.

Due to its existing data management procedures, DPW is not able to track the maintenance or mortality of individual street trees. DPW has a goal of pruning street trees every three years; however the estimated actual time between prunings is seven years.

According to the 2005 City Survey, performed by the Controller's Office, 59% of residents reported that there are "not enough" trees **citywide** and 52% said the number of trees **in their neighborhood** was "about right."<sup>8</sup>

The City's recent "Clean and Green Initiative" seeks to plant an additional 5,000 trees every year for the next five years, including trees both on private land and in the public right-of-way.

<sup>7</sup> "Americans with Disabilities Act Transition Plan for Curb Ramps, Updates and Revisions," Mayor's Office on Disability, 2007-2008.

<sup>8</sup> "San Francisco City Survey 2005," Office of the Controller, page 4-4.

### Street Lighting

There are approximately 43,000 street lights in San Francisco. Of these, approximately 20,000 are managed and maintained by the San Francisco Public Utilities Commission (SFPUC), while 22,000 are maintained by the Pacific Gas and Electric Company (PGE).

Although the SFPUC estimated that a more comprehensive and effective maintenance program would require approximately \$9.2 million in the first year and between \$7.6 and \$7.9 million annually for four years thereafter, its FY 2006-2007 funding for streetlight maintenance was \$1.8 million. In FY2006-2007 the SFPUC also had a budget of \$5.6 million for streetlight replacement capital projects.



In 2007, the Streetlight Management Program Study recommended that the "City should develop a Street Lighting Policy that will support the City's goals for livable neighborhoods and urban development, ensure appropriate lighting levels for safety and comfort on public streets and sidewalks, and help create a system that is cost efficient, easy to operate and maintain."<sup>9</sup>

<sup>9</sup> "Streetlight Management Program Study Report," San Francisco Public Utilities Commission, April 2007.

### Site Furnishings

The City of San Francisco does not currently keep records on the maintenance conditions of street furnishings such as benches, nor does it have a palette of accepted street furnishings.

### Stormwater Infrastructure

The majority of San Francisco (90%) is served by a combined sewer system, which conveys both sanitary effluent and stormwater in the same set of pipes. The combined effluent is conveyed to sewage treatment facilities where it is treated to secondary standards, then discharged to the Bay and Ocean. Under most circumstances, the combined system allows for higher levels of stormwater treatment than is provided by conventional separate systems. However, when the capacity of the system is overwhelmed by large storm events, localized flooding and combined sewer overflows (CSOs) can occur. In the event of a CSO, the system discharges a mixture of partially treated sanitary and stormwater effluent to receiving water bodies. While these discharges are highly diluted (typically consisting of roughly six percent sewage and 94 percent stormwater), they can cause public health hazards and lead to beach closures. The SFPUC's NPDES permit, required under the Clean Water Act, sets design goals for the allowable number of CSOs per year, on average, based on location.

Approximately 10% of the City is served by separate storm sewer systems or is lacking stormwater infrastructure; in most of these areas stormwater flows directly to receiving waters without treatment.

San Francisco's first 250 miles of sewers were built in the late 1800s and by 1935 almost two thirds of the system we have today had been installed. The normal life expectancy of sewers ranges from 50 to 100 years, so a large portion of the City's pipes have exceeded their expected lifespan.

## 2.2

## REGULATORY CONTEXT

Federal, state and local policies guide the design and implementation of pedestrian elements. The federal Americans with Disabilities Act (ADA) provides guidelines for accessibility of elements such as sidewalks and curb ramps. Traffic control devices and geometrical design follow the standards set forth in the California Manual of Uniform Traffic Control Devices (MUTCD) and the American Association of State Highway and Transportation Officials (AASHTO) *Green Book*. Stormwater regulations are set primarily by the federal Clean Water Act. Additionally, a number of existing local regulations provide guidance on the prioritization and design of pedestrian facilities in San Francisco.

## Federal and State Policies

*Accessibility*

All new construction, additions and alteration to public rights-of-way must be accessible and usable by individuals with disabilities. Federal, state and local regulations apply. However, these regulations have significant gaps in scope and technical requirements for design and construction of accessible elements within the public right of way.

The prevailing accessibility standard, ADA Accessibility Guidelines (ADAAG), currently scopes accessibility requirements within sites, and not in the public right of way. ADA Title II, which is applicable to state and local governments, contains requirements for curb ramps, but lacks clarity on specific accessibility guidelines for other elements.

The US Access Board, the Federal agency responsible for developing accessibility guidelines, is in the process of redesigning ADAAG. When completed, the new guidelines (ADA/ABA) propose to include accessibility requirements for the public right of way (PROWAG). The process is not complete, and will require several years of further development and approval.

PROWAG is oriented to new construction. It does not provide a clear set of guidance for conditions where “...other existing physical or site constraints prohibit modification or addition of elements, spaces, or features which are in full and strict compliance with the minimum requirements for new construction and which are necessary to provide accessibility”. At best PROWAG

should be considered a “best practice” and not a strict, formal requirement. See Appendix D (Summary of Accessibility Guidelines) contains requirements and best practices for design of accessible components in the public right of way.

In San Francisco, Department of Public Works (DPW) standard plans set forth local requirements that incorporate accessibility guidelines for commonly implemented infrastructure improvements, such as curb ramps.

*Transportation*

The California Manual of Uniform Traffic Control Devices (MUTCD) provides uniform standards and specifications for the placement, construction, and maintenance of all traffic control devices including traffic signals (Part 7), traffic signs (Part 2), and street markings (Part 3).

The American Association of State Highway and Transportation Officials (AASHTO) has developed “A Policy on Geometric Design of Highways and Streets.” The guidance supplied in the policy is based on established practices and is supplemented by recent research. The intent of the policy is to provide guidance to the designer by referencing a recommended range of values for critical dimensions. The guidelines are intended to provide safety, comfort convenience and operation efficiency.

*Stormwater*

In 1972 Congress passed the Clean Water Act (CWA) to regulate the discharge of pollutants to receiving waters such as oceans, bays, rivers and lakes. The California State Water Resources Control Board (SWRCB) serves as the implementing agency for these regulations in California.

Most of the stormwater in San Francisco is collected in a combined stormwater and sanitary sewer system and treated prior to discharge to San Francisco Bay or the Pacific Ocean. The remainder is collected in a separate stormwater sewer system. Ownership of this separate system is divided between the two City agencies: the Port, for areas along the City waterfront, and the San Francisco Public Utilities Commission (SFPUC), for all other areas within the City’s jurisdiction.





Since 2004, the discharge of stormwater from the separate stormwater sewer system has been covered by a statewide general permit for small municipal separate storm sewer systems (also known as MS4), issued by the San Francisco Bay Regional Water Quality Control Board. As a requirement of the permit, the Port and SFPUC were required to develop detailed stormwater management plans (SWMPs) outlining implementation of various control measures required under the statewide general permit. One strategy the SWMPs employs is to set guidelines for incorporating design features into new development and redevelopment projects to permanently control stormwater runoff in compliance with the Clean Water Act.

## City of San Francisco Policies

Regulations related to street design are found in a number of existing City documents. Together, these documents require that streets be designed for all types of transportation, particularly walking and transit, and set forth design policies and guidelines to implement that goal.

### *The San Francisco General Plan*

The San Francisco General Plan provides policies to guide future City growth; all other planning regulations must be consistent with the General Plan policies. Two chapters of the General Plan contain numerous policies related to street design – the Urban Design Element and the Transportation Element. The Open Space and Recreation Element also contains policies to encourage the use of streets to provide public space.

### *The Better Streets Policy*

Chapter 98 of the City’s Administrative Code contains a “Better Streets Policy” for San Francisco, adopted in 2005. This policy recognizes that streets are for all types of transportation, particularly walking and transit. It also requires City agencies to coordinate the planning, design and use of public rights-of-way to carry out the vision for streets contained in the policy.

### *Transit First Policy*

The Board of Supervisors initially adopted the “Transit First Policy” in 1973 in response to the growing challenge of automo-

bile traffic congestion. In 1999, San Francisco voters approved Proposition E, which amended the City Charter to strengthen the policy by making it the City’s primary transportation policy framework. The Transit First Policy states that the City should prioritize street improvements that enhance travel by public transit, by bicycle and on foot as an attractive alternative to travel by private automobile.

### *“Complete Streets” Policy*

The “Complete Streets” Policy (Section 2.4.13 of the Public Works Code) directs the City to include pedestrian, bicycle, and streetscape improvements as part of any planning or construction of the right-of-way.

### *Area Plans*

Several Area Plans, Master Plans and Specific Plans include regulations for a specific geographic area of the City. Two area plans with Citywide significance are the Downtown Streetscape Plan, adopted in 1995, which guides development of the downtown pedestrian network and the Waterfront Design and Access Element, adopted in 1997 as part of the Port’s Waterfront Land Use Plan, which guides the physical aspects of waterfront revitalization.

### *City Codes*

The City’s various codes include specific regulations to implement the policies in the General Plan, Area Plans and other policy documents.

**Administrative Code** As mentioned in the previous section, Chapter 98 of the San Francisco Administrative Code includes the “Better Streets Policy.” In addition, Chapter 25 of the code contains several sections related to streetlights.

**Building Code** San Francisco has five regulatory codes that are sometimes collectively referred to as the “building code:” the Building Code proper and the Electrical, Housing, Mechanical, and Plumbing codes. Together, these codes include a small number of policies related to how buildings interface with the public right-of-way.

**City Charter** The City Charter of the City and County of San Francisco, which serves as the fundamental law of the City and County, includes the Transit First Policy, described above.

**Fire Code** The City’s Fire Code has one section that is highly relevant to streetscape design. Section 7.01 (found under part IX, “Appendices”) establishes requirements for street sizes to facilitate emergency equipment access.

**Planning Code** The San Francisco Planning Code includes detailed regulations to implement the policies of the General Plan. It contains a number of regulations related to street design, including policies to control how private development impacts public streets and use of public streets.

**Public Works Code** The San Francisco Public Works Code contains most of the local rules and regulations that are of relevance to streetscape design and maintenance.

**Transportation Code** The City’s Transportation Code is a compilation of local rules and regulations governing vehicle traffic.

### *Departmental Standards and Guidelines*

**DPW Director’s Orders** In addition to adopted plans and policies, the Department of Public Works issues Director’s Orders, which set specific technical guidance for features such as curb ramps, streetlights and sidewalks.

**DPW Standard Specifications and Plans** DPW has developed standard specifications and plans for design and construction within the City and County of San Francisco, including streetscape and pedestrian features such as curb ramps and traffic circles.

**SFMTA Traffic Calming Guidelines** The SFMTA has developed guidelines to direct implementation of traffic calming measures in San Francisco. The guidelines are largely procedural, and also include a table describing which traffic calming measures are appropriate on particular street types.

# 2.3

## EXISTING CITY EFFORTS

### Existing City Street Design Process

Design, construction and management of the pedestrian realm in San Francisco today is scattered across several different departments, agencies, private developers, and organizations. Though there are many good projects, results are inconsistent depending on the project sponsor, and the process can be expensive, time-consuming, and confusing.

This section gives a brief overview of processes and responsibilities regarding street design in the City today.

### *Capital Planning*

Streetscape improvement projects are identified through the capital planning efforts of a variety of implementation agencies, including SFMTA, DPW, SFPUC, the Port and the Redevelopment Agency. Each department or agency develops their own capital plan based on their long term planning programs, community generated request, and opportunities to coordinate with other agency's projects. Department capital plans are informed by the Congestion Management Program (CMP) which is developed and administered by the San Francisco County Transportation Authority.





Agencies and departments submit their budgets to the City's Capital Planning Program, which is under the City Administrator's office. This program reviews and analyzes infrastructure needs and facility conditions, evaluates capital project requests, and establishes financing strategies to meet the City's long- and short-term capital needs. Capital components of department budgets are incorporated into the City's ten year Capital Plan upon the approval of the Capital Planning Committee. The Board of Supervisors adopts the Capital Plan annually.

Opportunities to more closely coordinate long term capital planning efforts between agencies could result in cost savings and leveraging opportunities.

## Funding

Funding for street improvements is available from Federal, State, Regional, County and City sources. Beginning in 1991, the US Federal Highway bill, which is financed through gas tax revenues, was re-formulated to include programs for pedestrian safety and infrastructure. The current version of this act, Safe, Accountable, Flexible, Efficient Transportation Equity Act: A Legacy for Users (SAFETEA-LU), provides funding, through State and Regional bodies, for programs including Environmental Enhancement and Mitigation, Safe Routes to Schools, and the Transportation for Livable Communities Program. SAFETEA-LU expires in 2009.

The Bay Area region has created additional programs to fund specific transportation-related improvements. The regional Metropolitan Transportation Commission (MTC) funds the Lifeline Transportation Program to improve mobility for low-income communities, and the Bay Area Air Quality Management District (BAAQMD) administers a program funded by a gas tax surcharge called the Transportation Fund for Clean Air.

In 2003, San Francisco voters approved Proposition K, which authorized the City to collect a one-half cent sales tax to fund a new 30-year Transportation Expenditure Plan. Proposition K funds are administered through the San Francisco County Transportation Authority (SFCTA).

In 2006, California voters approved Propositions 1B and 1C, which authorized the issuance of general obligation bonds for transportation infrastructure and housing infrastructure, respectively. Both the SFMTA and DPW receive formula funds from the transportation infrastructure bond, and grants are available to fund infrastructure related to infill and transit-oriented housing development allocated through the housing infrastructure bond.

The City of San Francisco also has a number of tools available to fund street improvement projects. Currently, a small amount of the City's General Fund supports street improvement projects. Developer fees, assessment districts, and tax-increment financing in redevelopment areas are all tools available to the City for future sources of street improvement revenue.

Although there are a number of potential funding sources for streetscape and pedestrian improvements, the total is fairly insignificant compared to the level of need in the City today, and the City can only build a handful of streetscape improvement projects each year. Additional revenue sources must be sought to fully build the vision of the Better Streets Plan.

## Planning and design

Street design may be done by any number of departments. DPW, SFMTA, the Planning Department, the San Francisco Redevelopment Agency, the SFPUC, and the Port of San Francisco all may undertake street improvement projects as part of on-going programs. Each of these agencies has a unique mission, and thus project proposals may differ greatly from one project to the next. In addition, large-scale private development projects may design and build streets (reviewed and approved by City agencies) as part of development proposals.

Generally, agencies will coordinate with one another on street improvement projects, through technical advisory committees, on-going meeting bodies, or informal coordination. This is generally ad hoc, and there are few formal structures for interagency planning coordination.

## Regulation and Permitting

As with planning and design, many agencies are responsible for permitting of public realm improvements. Generally speaking, DPW's Bureau of Street Use and Mapping is responsible for most street and sidewalk encroachment permits, SFMTA is responsible for traffic and parking changes, SFPUC regulates stormwater run-off, and sidewalk changes may require approvals or recommendations from DPW, SFMTA, Planning, and TASC (an interdepartmental body) before going to the Board of Supervisors for approval.

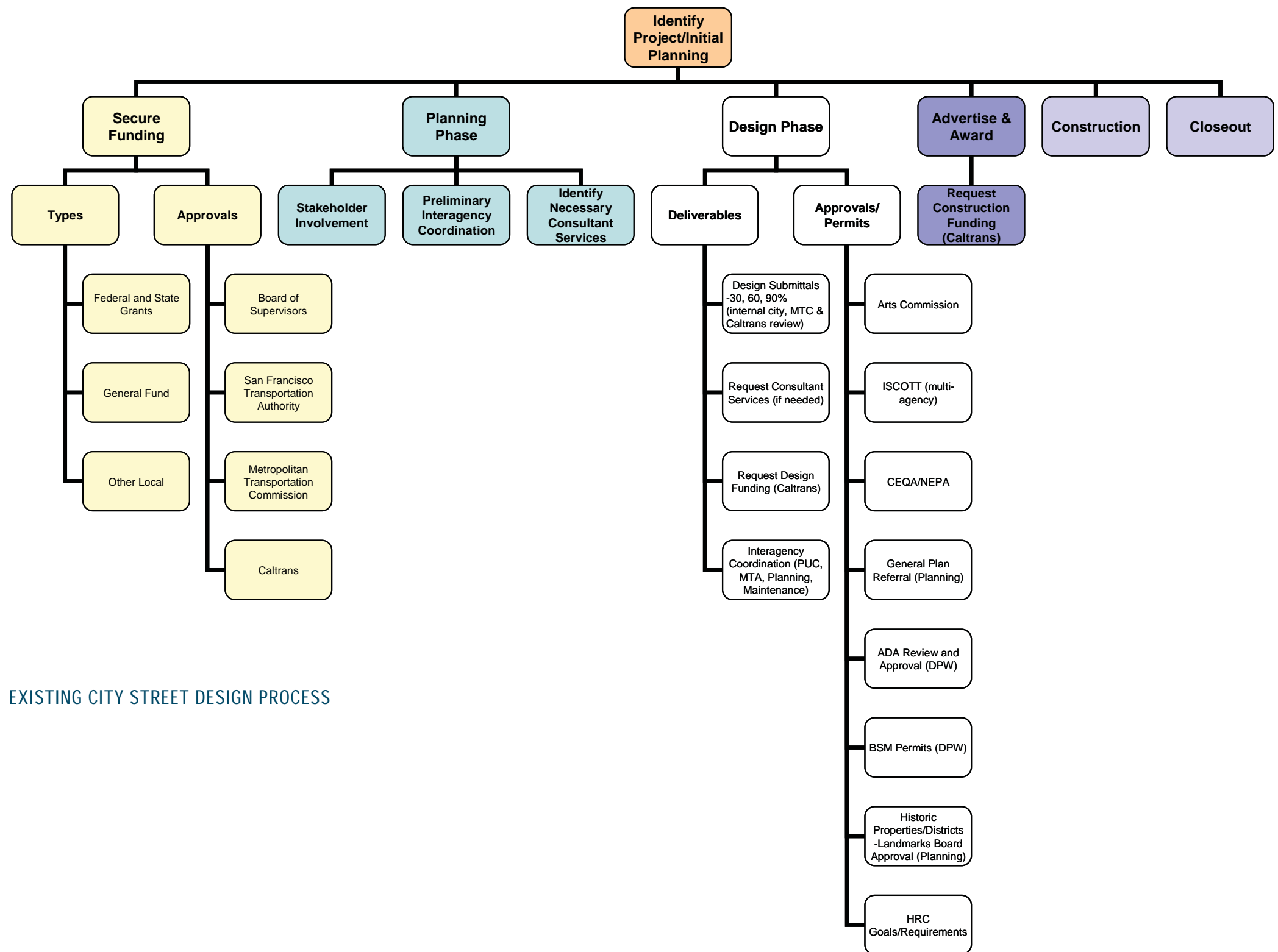
In many cases, acquiring simple permits may be a burdensome and expensive endeavor, discouraging community members from making streetscape improvements. The Sidewalk Landscape Permit which enables people to create planter beds in the sidewalk in front of their house, was recently streamlined and made cheaper to facilitate these types of improvements.

## Maintenance and Repair

Street maintenance responsibility is shared between City agencies and property owners. On most streets, property owners are responsible for sidewalk, driveway, street tree, and landscape maintenance (DPW has responsibility on the remainder of streets). Most street repair and maintenance from the City side is carried out by DPW. This includes day to day maintenance such as street sweeping, less frequent maintenance such as catch basin cleaning, and repairs such as re-paving. One notable exception is street lighting: the PUC owns most street light poles and is responsible for maintaining them.

## Typical streetscape design process

The typical steps for streetscape improvement projects from project identification to completion are shown on the opposite page. Many of these steps vary from project to project, depending on funding source, physical conditions, and agencies that need to be involved. In addition, though the process appears linear, there is



EXISTING CITY STREET DESIGN PROCESS



often considerable iteration, meaning that one must go back and forth between steps to deal with issues that have been brought up at a particular step. This often results in time delays and costly design revisions.

To further the Better Streets Plan, the City intends to undertake a management analysis to streamline, clarify and make more effective its street design and management efforts, with an eye towards achieving world-class street design.

## Other Planning Efforts

### *Stormwater Design Guidelines*

The Port of San Francisco and the San Francisco Public Utilities Commission are developing the San Francisco Stormwater Design Guidelines. The Guidelines will improve San Francisco's environment by reducing pollution in stormwater runoff in areas of new development and redevelopment. The Design Guidelines will be applied in areas of San Francisco served by separate storm sewers that discharge directly to local lakes or San Francisco Bay.

### *Transit Effectiveness Project (TEP)*

The Transit Effectiveness Project (TEP) is a project to review, evaluate, and make recommendations on the existing Muni transit system, with the goals of making service more attractive to the public and stabilizing operating costs.

### *Urban Forest Plan*

The Urban Forest Plan will be a long-term comprehensive plan that sets policy for the management of the City's public and private trees. The Planning Department is working with the Department of the Environment to develop the plan.

## Awareness and Education Efforts

The San Francisco Department of Public Health (DPH) Community Health Promotion and Prevention (CHPP) Division coordinates with other City agencies to promote pedestrian safety and comfort through community awareness, advocacy,

and education. The awareness and advocacy program focuses on building local community-based organizations' capacity building through its mini-grant program. The education program tries to change social norms through media campaigns which highlight pedestrian safety, traffic enforcement, and traffic engineering.

Since 2001, the DPH has awarded mini-grants to community-based organizations (CBOs) to work on pedestrian traffic and safety in their respective communities. DPH helps each CBO collect data and has created a detailed database available for download on the DPH traffic safety website. DPH staff also provide ongoing education, training, and technical assistance to CBO awardees. DPH then helps CBOs identify engineering, enforcement, encouragement and education solutions. Detailed descriptions of funded CBO projects can be found at <http://www.sfdph.org/dph/comupg/oprograms/CHPP/TrafficSafety/default.asp>.

DPH and the Department of Parking and Traffic (now part of MTA) started their annual media outreach campaign in 2002. Themes of DPH's media campaign include preventing aggressive driving, drinking and driving, and red-light running; increasing courtesy between drivers and pedestrians, and reducing speeding.

In addition to preventing pedestrian injuries, DPH-CHPP is actively working to promote physical activity in San Francisco. To that end, DPH is one of the most active organizations in the Shape Up SF Coalition - a public/private partnership which seeks to create healthy environments where people live, play, work and learn. The Coalition's mission is to increase the awareness of and opportunities for increased physical activity and improved nutrition where people live, play, work and learn. An upcoming project of Shape Up is a Citywide Safe Routes to Schools program. The main goals of Safe Routes to School will be to 1) increase pedestrian and bicycle safety around schools and 2) increase number of schoolchildren walking and biking to and from school. The Safe Routes to School program will include 15 pilot projects in schools around San Francisco.

## Enforcement

Traffic and parking enforcement is mainly carried out by the San Francisco Police Department and the SFMTA. The SFPD enforces traffic violations such as speeding, violation of pedestrian right-of-way, and the like. SFMTA, in collaboration with the SFPD, enforces parking violations.

This section will be developed further in the coming months.



