Complete Streets Policy Fact Sheet

Overview

This policy fact sheet provides:

1. Top 15 Facts about Complete Streets and Pedestrian/Bicycle Transportation.
2. What are Complete Streets?
3. Checklist of What to Look For in a Draft Station Area Plan. The Three E's – Engineering, Education/Encouragement and Enforcement.
4. Policy Tools that Create Complete Streets
    a. Institutional Setting
    b. Design and Development Standards
    c. Funding Complete Streets
    d. Monitor Implementation Success
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1. Top 15 Facts About Complete Streets and Pedestrian/Bicycle Transportation

Demographics of Non-Drivers:

- In the Bay Area households living and working within a half mile of a transit station are:
    1. 4 times more likely to walk to their work and non work trips
    2. 30% car-free
    3. Drive 50% less[1]
- **Lower income families own fewer cars** and are more likely to benefit from improvements to pedestrian and non-vehicle infrastructure. Annual income per worker for households without access to vehicles is $35,748, which is 34% lower than the regional average ($54,200).
- 10% of Bay Area households do not own any cars.[2]
- **People without cars walk at twice as much**: In the Bay Area individuals without access to a vehicle make at least twice as many walk trips than those with vehicles available for travel.[3]
- **The Senior Population Boom**: 71 million Americans will be over 65 years old by 2030, which is one in five Americans, according to the US Census Bureau. Making sure seniors can maintain independence through safe, walkable communities is also a way to maintain health. In European countries where cities are denser and there is better pedestrian infrastructure, up to 50% of their seniors walk or bike compared to just 8% of American seniors.[4]

Pedestrian and Bicyclist Injuries

- **Pedestrians and Bicyclists Suffer a Disproportionate Number of Fatalities**: In the Bay Area, fatal collisions involving pedestrians and cyclists represent a disproportionate 28% of all fatal motor vehicle collisions.[5]
- **Seniors are more vulnerable**: In 2005, older Americans made up 20% of all pedestrian fatalities.[6]

- In the U.S. for every mile traveled, pedestrian fatalities are 36 times higher and bicycling fatalities 11 times higher than car occupant fatalities. [7]
- **Higher Speeds = More Severe Injuries**: Below 20mph, only 20% of collisions cause a serious or fatal injury to a pedestrian. Above 35mph, most vehicle collisions are fatal or incapacitating.[8]
- **Intersection Improvements Improve Pedestrian Safety**: Designing for pedestrian travel by installing raised medians and redesigning intersections and sidewalks reduced pedestrian risk by 28%.[9]

Health Benefits of Biking and Walking

- According to the Centers or Disease Control, a "shift in auto trips to walking and biking" is the number one strategy to reduce diseases related to inactivity, such as heart disease, diabetes, and some types of cancer.
- **Health and Inactivity**: More than 60% of American adults are not regularly active, and 25% of adults are not active at all. One study has estimated the US economic cost of coronary heart disease from physical inactivity to be around $5.7 billion per year.[10]

Build it and They will Come

- **Most trips are short trips**: There are significant opportunities to convert short auto trips we make in the U.S. to bicycling and walking trips: According the 2001 NHTS, half of all trips are shorter than 3 miles—just a 15 minute bike ride.[11]
- **People want better non-motorized facilities**: A recent Harris poll found that 70% of U.S. adults want better facilities for non-motorized transport. [12]
- **Bike lanes = more bicyclists**: Bicycle traffic on Valencia Street in San Francisco increased by 140% (from 88/hour to 215/hour) after bicycle lanes were added and the number of traffic lanes in each direction reduced from two to one.[13]
- **Sidewalks = more walkers**: People are 65% more likely to walk in a neighborhood with sidewalks.[14]
- **Lack of Pedestrian Plans**: Of 101 Bay Area cities, only three have pedestrian master plans, and in total only 16% of cities in the Bay Area have an adopted pedestrian that is part of a non-motorized transportation plan or a joint bicycle-pedestrian master plan.[15]
- **More bikers/walkers=safer streets**: As the number and proportion of people bicycling and walking increases, deaths and injuries decline.[16]
- **Complete Streets = Safer Streets**: Safer streets can serve as community spaces. More people on the street deter crime. A movement to prevent crime through environmental design has been shown to reduce robberies by 30-84% depending on how many improvements were implemented.[17]

2. What are Complete Streets?

Complete Streets are streets that include room and accommodation for all modes of transportation and abilities. By contrast, incomplete streets fail to serve pedestrians, cyclists, transit, the disabled and both the youngest and oldest members of our communities. Complete Streets also include consideration for the environment by promoting green building concepts from reducing paved surfaces and increasing greenscapes that reduce storm water runoff while beautifying streets and making them inviting places to be. A Complete Streets plan should include a comprehensive approach that considers all possible circulation elements in one place. One plan would replace pedestrian and bicycle master plans, streetscape plans, greenway plans, and piecemeal street

improvement plans. Although developing a Complete Streets approach is ideally applied on the citywide level a station area plan can be a great starting point for a city to try out pilot policies.

The term was created to shift how pedestrian and bicycle access are accommodated in a traditional car dominant transportation system. Cities typically plan for bicycle and pedestrian infrastructure through bicycle and pedestrian master plans. These plans are frequently separate documents from the General Plan and zoning code. Not being fully integrated with transportation planning in the city as a whole, they are left to wither on shelves without implementation.

3. Checklist of What to Look For

As a station area plan is being drafted start with the city's bicycle or pedestrian master plan if there is one. If there isn't the following considerations should be integrated into the transportation section of a station area plan. If there is a plan take an inventory of what proposed projects or proposed facilities are included within a half mile to three mile radius of the station area. Also if there is an adopted plan, make sure the station area plan refers to elements of the pedestrian or bicycle master plans.

- Is there a citywide Pedestrian or Bicycle Plan? You will use this to cite pedestrian and bicycle supportive policies or identify improvement projects.
- Are barriers to pedestrian and bicycle access to the transit station mapped in the Station Area Plan or Bike/Pedestrian Plan?
- Are there specific recommendations, preliminary cost estimates and funding identified for improvements in the Station Area Plan or Bike/Pedestrian Plan?
- Is there a continuous network of sidewalks, walkways and bikeways throughout the 1/2 mile surrounding station area in the Station Area Plan?
- Does this network connect the primary destinations (station, shops, offices, jobs, and community services)?
- Are there a variety of facilities from greenways, bike lanes, paseos, or cut through paths to varying widths of sidewalks and pedestrian plazas?
- Are there policies in place to require new development to provide pedestrian amenities such as: benches, lighting, landscaping, water fountains, public art, directional signage, and trash cans, within the public right of way?
- Do project recommendations include the three E's of a comprehensive improvement strategy including: Engineering, Education/Encouragement and Enforcement?
- Are there minimum bicycle parking standards based on the square footage of building space rather than on car spaces? Are there provisions for long-term and short-term bike parking arrangements that allow for protection from the elements as needed?
- Is there a program for providing comprehensive bicycle route or network signage citywide?
- Is there a landscaping program to provide street trees along sidewalks?

4. Recommended Policy Tools for Complete Streets

A. The Institutional Setting

At a minimum a city should have a pedestrian and bicycle advisory committee actively involved in providing input and reviewing the proposed station area plan.

The city should also have an interdisciplinary technical advisory group that includes staff from the city's various departments affected by changes to street design policies including: city planning,

public works, parking and traffic, utilities, recreation and parks, local transit agency and the county public health department.

B. Design and Development Standards

Design guidelines or development standards are typically created as a part of a station area plan or developed as an implementation step of the plan once it is adopted. These are very important as they provide the city with a palette of options for addressing various projects to improve the pedestrian or bicycle realm, particularly for public streets or spaces that are being retrofitted.

Development standards apply to new private development. They typically prescribe minimum elements that must be included in the project or "conditions of approval" for individual development proposals. The following are policies that should be incorporated into Design and Development Standards:

- Standards for completeness should be created for different street typologies and modes. For an example, see Chapter 5 – Development Guidelines and Streetscape Standards of the Santa Rosa Downtown Station Area Specific Plan. This plan breaks up street types into: Urban Center Street Type, Shop Front Street Type, Neighborhood Street Type, Entryway Street Type, Boulevard Street Type, Live Work Street Type. These Streetscape standards do a good job of describing required building form, lighting, crossings, travel lane types, locating parking spaces, and street furniture, however it definitely fails to include minimum sidewalk widths.
- Require Routine Accommodation of pedestrians and bicyclists for both private and public roadway projects. Presently, projects funded all or in part with regional funds (e.g. federal, STIP, bridge tolls) must consider the accommodation of non-motorized travelers, as described in Caltrans Deputy Directive 64. Exceptions to these design standards should be carefully considered and only granted in extreme cases.
- Establish policy to accept and review traffic calming requests from the public.
- Standard recommendations for categories of street types can be collected into a guide that includes illustrations, best practices, and methods for implementation. For some examples of designing routine accommodations in projects, see San Francisco Bicycle Plan Supplemental Design Guidelines (2005), VTA's Bicycle Technical Guidelines (1999), and VTA's Pedestrian Technical Guidelines (2003). They include descriptions, technical information, and an array of details pertaining to bicycle and pedestrian facilities in various environments. Among other things, design Standards can cover:
  - maximum block lengths
  - minimum sidewalk widths
  - maximum lane widths
  - use of chicanes, pedestrian bulbouts, raised medians, in street pedestrian signs, etc.
  - crosswalk types
  - distances between crossings
  - tree plantings
  - lighting types
  - bike lane and path preferences and specifications

C. Funding Complete Streets

- **Bicycle Transportation Account** – Caltrans has a department devoted to funding bicycle master plan projects that are included in a Caltrans approved plan. If your city has an existing Caltrans approved bicycle plan, it should be amended to include projects identified through in the station area plan in order to become eligible for BTA funding. Cities with an approved bicycle master plan are typically aware of BTA grant requirements, application cycles and process to apply for funding. See the following website for more information and a list of past funded projects:
  http://www.dot.ca.gov/hq/LocalPrograms/bta/btawebPage.htm
- **Safe Routes to Transit.** Regional Measure 2 (RM2), approved in March 2004, raised the toll on seven state-owned Bay Area bridges by one dollar. This fee increase funds operational improvements and capital projects which reduce congestion or improve travel in the bridge corridors. Over the life of the measure, $20 million of RM2 funds the Safe Routes to Transit Program (SR2T), which provides competitive grant funding for capital and planning projects that improve bicycle and pedestrian access to transit facilities. Eligible projects must be shown to reduce congestion on one or more of the Bay Area's toll bridges. Competitive funding is awarded in five $4 million grant cycles. The first round of funding was awarded in December 2005. Future funding cycles will be in 2007, 2009, 2011 and 2013. Minimum project amount is $100,000. TALC currently administers the SR2T program. Web Address:
  http://www.transcoalition.org/c/bikeped/bikeped_saferoutes.html
- **Safe Routes to School.** There is currently both a state run program and a federal program. The state program currently funds 90% of project costs with a $900,000 maximum. Additionally up to 10% of the project cost can be allocated to non-construction programmatic elements. See the website below for details on application deadlines and cycles. As of the end of the 2007 legislative season, thanks to AB 57, the state Safe Routes to School funding is will be continued indefinitely without a sunset date.
  http://www.dot.ca.gov/hq/LocalPrograms/saferoutes/saferoutes.htm
- **MTC – Transportation for Liveable Communities.** MTC offers two kinds of assistance through the TLC program: capital improvement and planning. TLC grants are competitive funds meant to fund small-scale transportation improvements that are designed to make a big difference in a community's vitality. Eligible projects include streetscape improvements, transit, pedestrian, and bicycle oriented developments. Projects should be designed to "bring new vibrancy" to downtown areas, commercial cores and neighborhoods, enhancing their amenities and ambience and making them places where people want to live and visit. Funds vary from year to year, but for FY 2007/08 $16.7 million was awarded to projects around the Bay Area. A call for 2008/09 cycle grants will be released spring 2008. Web Address:
  http://www.mtc.ca.gov/planning/smart_growth/tlc_grants.htm
- **Housing Incentive Program.** MTC's Housing Incentive Program (HIP) rewards local governments that build homes near transit stops. The key objectives of this program are to (1) increase the number of homes in areas of the region with existing infrastructure and services in place; (2) locate new homes where non-automotive transportation options are viable transportation choices, and (3) establish the residential density and ridership markets necessary to support high-quality transit service.

    1. HIP funds are intended to be used for transportation capital projects that support Transportation for Livable Communities (TLC) goals. Typical capital projects include pedestrian and bicycle facilities that connect the new homes to adjacent land

uses and transit; improved sidewalks and crosswalks linking the homes to a nearby community facility such as a school or a public park; or streetscape improvements that support increased pedestrian, bicycle, and transit activities and safety.

2. The dollar amount of HIP funds that may be requested is determined by the density of the qualifying housing development and the number of affordable and market rate bedrooms that will be provided. The maximum grant amount per jurisdiction is $3 million. In order to qualify for HIP funds, local agencies must be able to demonstrate that:
   a. The qualifying housing development meets the minimum density requirements of **30 units per acre**.
   b. The qualifying housing development has not yet received required planning entitlements.
   c. The qualifying housing development must be within a 1/2 mile of a rail transit station.
   d. The transit that serves the qualifying housing development must come at least every 15-minutes during peak commute hours.
3. Following the Commission's approval, grant recipients will have two years to break ground on the housing project (i.e., issuance of a building permit) and one year to obligate the federal funds through the federal-aid process for the TLC capital project in accordance with the deadlines specified by MTC.
   Web Address: http://www.mtc.ca.gov/planning/smart_growth/hip.htm

- **Business Improvement Districts (BIDs)** – Streetscape improvement projects are often funded by these districts as a way to improve business and customer attraction and safety. These districts are typically led by local merchants for the purpose of marketing their businesses. Merchants essentially tax themselves to provide added street sweeping, graffiti abatement or banners and signage increasing the district's visibility. They have also been known to fund public squares, public art, and sidewalk or crossing improvements. Members of the California Main Street Association have also created BID's. For a list of California cities with this program see: http://www.camainstreet.org/who.html
- **Transportation Improvement Districts or Parking Benefit Districts**– As a part of the station area plan process, cities can create parking permit districts with metered parking or public parking structures that raise funds for sidewalk and street improvements such as funding the purchase of new lighting, street furniture, landscaping, cleanups, increased patrolling or security. The following website is a description of PBD's: http://transtoolkit.mapc.org/Parking/Strategies/Parking_benefit_district.htm
- **Routine Accommodation**: Road improvement projects funded all or in part with regional discretionary funds must consider bicycle and pedestrian facilities in the full project cost, consistent with Deputy Directive 64. The Federal Highway Administration recommends including up to 20% of the project cost to address non-motorized access improvements.

D. Working with Traditional Automobile Level of Service

Many cities that are trying to create vibrant liveable communities are finding that their antiquated transportation policies actual create barriers to balancing a community's transportation profile. It is important to seize the opportunity to address these disparities during a station plan process. These old policies force the city's transportation engineers to focus only on improving the vehicle

circulation, which often has the perverse effect of making it harder to get around on foot, bicycle, or on transit. The primary impediment is the concept of vehicle "level of service" (LOS).

Traditional Automobile Level of Service (LOS)

Vehicle Level of Service is a measure of the percentage of capacity of a roadway or intersection being used during the peak hour, as determined by the City Engineer and in accordance with the definition contained in the Highway Capacity Manual, HRB Special Report 87. Most communities have adopted a standard for each of their major street intersections. These standards set the standard for home much delay is acceptable at the time of day with the worst possible traffic. Typically these standards are defined as an A thru F scale which, similar to academic grading, it represents best to worst conditions. Below is what the City of Alameda defines as their A thru F levels of service:

Level of Service	Vehicle Delay	Number of vehicles stopping
A	no delay to less than 5 seconds	none
B	5.1 to 15 seconds	
C	15.1 to 25 seconds	
D	25.1 to 40 seconds	
E	40.1 to 60 seconds	
F	greater than 60 seconds	Many vehicles waiting through more than one cycle

The table above only measures the convenience of the transportation system for cars and it only measures it at the worst time of day for cars. For many cities this is the only factor considered in measuring the success of a transportation system.

The table to the right shows how the City of Alameda applied their standards to various major intersections in the City. It shows the existing condition and the expected future condition as growth in residents and jobs increases over the life of the General Plan:

EXISTING CONDITIONS AND BUILDOUT

Intersection	1988-89 Service Level	Buildout Service Level With Mitigation
Main & Atlantic Ave	C	D[1]
Third & Atlantic Ave	B	C
Poggi & Atlantic Ave	B	C

Traditional use of LOS in EIR's and mitigations

In an environmental review process the City establishes a threshold for what they consider a significant impact to the roadway network. During the review process, transportation consultants derive the expected addition of vehicle trips from a particular development depending on the mix of jobs and housing. These numbers are typically derived from the ITE Trip generation manuals. If the proposed development or plan creates, for example, 1,650 new vehicle trips a day, these trips will be dispersed through the adjacent network according to observed traffic count and turning movement data. After this exercise, if certain intersections go beyond their adopted thresholds, the impact is considered significant and typically will require mitigations.

Traditional vehicle LOS analysis does not account for modal shift, or people deciding to shift from driving to other ways of getting around. The measurement standards address only the worst possible hour of the day. In a system that only values the speedy movement of cars, this is appropriate. But when we are trying to achieve a balanced system that allows all people to get around safely and easily, this system fails miserably.

The mitigations for decreased vehicle LOS typically involve intersection widening, removing crosswalks, narrowing sidewalks and/or speeding up the walking phase of traffic signal. Reducing vehicle delays comes at a cost to the pedestrian, bicycle, and disabled circulation networks.

Why do Station Area Plans need better standards?
For neighborhoods around transit stations the transportation components should prioritize access by walking and bicycling, then buses, car share/carpool and lastly private single-occupant vehicle access. If vehicle LOS is the only measure that quantifies environmental impacts the outcome will be all a worse environment for everyone not in a car.

For example the Santa Rosa Station Area Plan process experienced this exact scenario. The EIR analysis assumed proposed land use changes would increase vehicle traffic. Proposed mitigations included wider intersections, more dedicated right hand turn lanes, and multiple left hand turn lanes. Although pedestrian and bicycle infrastructure improvements were rhetorically recognized as important, there were no metrics for quantifying how vehicle improvements were going to impact the pedestrian environment because the LOS framework only measured impacts on cars.

How to amend vehicle LOS analysis?
The best solution to this problem is to adopt Multi-Modal Level of Service standards (see next section). But if a city only has a vehicle LOS there are multiple strategies that will help prevent an unbalanced emphasis on vehicle movement.

- **LOS E and F:** A city can adopt LOS E and F as an allowable standard for intersections within station areas. If a city adopts a policy that certain intersections adjacent to transit stations are expected to have vehicle delays, then there would be no need to include mitigations and infrastructure investments to improve them for vehicle use. In fact many cities are adopting LOS E and F for their main street commercial districts. Slower traffic speeds are found to improve the health of local businesses that benefit from passing vehicles getting a chance to see their shops.
- **Broaden the vehicle LOS measures to consider vehicle volumes for an entire day**: rather than just the worst (peak) hour of the day. LOS can also be broadened to include an average corridor speed or capacity so that a particular intersection with congestion doesn't merit attention until the entire corridor is adversely impacted.
- **Traffic Calming to Improve LOS:** Recognize that reduced vehicle speeds can actually improve the overall movement of vehicles through an intersection. Traffic calming strategies can actually benefit both pedestrians and cars.
- **Implement pedestrian and bicycle improvements to mitigate worsened vehicle LOS:** Recognize the ability for improved pedestrian and bicycle improvements to alleviate driving demand and counteract projected decreases in vehicle LOS.

E. Multi-Modal Levels of Service

Adopt Multi-Modal LOS Standards to Quantify Complete Transportation Impacts of a Plan
The Sacramento Transportation and Air Quality Collaborative, a collaboration funded by ten agencies including the Sacramento Are Council of Governments (SACOG) and the Solano County Transportation Authority (STA), has recognized that "a city may wish to prioritize pedestrian or bicycle level-of-service over auto level-of-service," and that, "there are established ways to measure bicycle and pedestrian level-of-service." Those ways of measuring Bicycle and pedestrian LOS are included in their Best Practices for Bicycle and Pedestrian Planning document. This document is a

companion piece to their 2005 'Best Practices for Complete Streets' www.sactaqc.org/Resources/Agreements/CompleteStreets.pdf

Pedestrian Level of Service (PLOS)
The Highway Capacity Manual calculates PLOS based on capacity and space requirements. Instead of intersection or corridor specific approach the measurements address an entire district. PLOS measures fall into three categories: physical characteristics, location factors and user factors. The ease with which streets can be crossed, as well as sidewalk continuity, street density, and topography can all factor into PLOS. Some communities use PLOS to predict pedestrian trips associated with transit access. Montgomery County, Maryland assesses sidewalk ratio, circuity, connectivity, delay, and hazard to measure the quality of a pedestrian trip accessing transit.

Bicycle Level of Service (BLOS)
The BLOS uses measurable traffic and roadway factors such as vehicle speed, volumes and surface conditions to evaluate bicycling conditions, particularly for roadways shared between vehicles and bicycles. BLOS measures quantify bicyclist comfort level for specific roadway geometries and traffic conditions. Bicycling 'compatibility' is defined by factors including roadway width, bike lane widths and striping combinations, traffic volume, pavement surface conditions, motor vehicles' speed and type, and on-street parking.

Alternative LOS Applications:

Pleasanton- Uses an alternative called **Quality of Life LOS**, to determine the "livability" of residential streets. These standards are adopted to preserve residential district livability rather than ease of vehicle movement through intersections. It preserves safe and convenient walking and biking although it doesn't include any quantifiable measures. The primary difference compared to traditional LOS is that it actually keeps vehicle volumes and speeds low.[18]

San Jose – exempted Transit Oriented Developments from LOS requirements under CEQA.

E. Monitoring and Maintenance

- Adopt measurement standards to monitor the success of improving the pedestrian and bicycling environments. This can include a systematic pedestrian and bicycle count program, periodic assessment of accident and injury locations and frequencies, or other standards.
- Establish bicycle or pedestrian improvement citizen request programs. San Francisco (http://www.sfmta.com/cms/bpark/3176.html) has a program that allows citizens to request installation of bicycle parking where it is lacking.

F. Education and Encouragement Programs

These programs are very grass roots driven. If there is a local non-profit that is available to organize volunteers to start programs and gain enough interest, cities might take them over. However most cities are limited for time and can only partner by providing printed materials or coordinated mailings. Unfortunately there typically isn't enough funding for these types of projects however they are a great way to bring together a variety of groups that are interested in promoting a similar vision of a greater community. Establishing local education and encouragement programs also has a positive impact on scoring grant applications for funding construction projects for Complete Streets.

Encouragement Programs

- Establish and promote Safe Routes to School programs. See http://transcoalition.org/c/sr2s/index.html for examples of programs being piloted in Alameda County schools. These programs are eligible for grant funding, see prior section on funding Complete Streets.
- Establish and promote Safe Routes to Transit programs. See http://transcoalition.org/c/bikeped/bikeped_saferoutes.html for examples of projects that are being funded under the regional Safe Routes to Transit program. The prior section on funding Complete Streets describes the program in brief.
- Create, publish and disseminate a comprehensive bikeway map to the public free or at nominal cost. San Francisco developed a color bikeway map that is included in telephone books.
- Hold Bike/Walk/Ride to Work Events as well as street bike fairs and races that have interactive education components (i.e. repair workshops and urban bicycle skills workshops)
- Encourage employers and institutions to start Bike Share programs whereby employees or students can check out bicycles free of charge to try commuting by bicycle without a major investment
- Promote Car Free/Spare the Air days.
- Ensure bicycle and easy disabled access to transit
- Adopt a Bikeway programs can allow local businesses and organizations to support bike facilities in exchange for recognition. Parks & Recreation departments may be able to administer such programs
- Partner with a nonprofit to establish a bicycle repair program whereby unclaimed police recovered and donated bicycles are worked on by and ultimately given to city youth. Youth under 18 should be given the opportunity to participate for free. However, membership in the program might also be extended to the general public and for a fee, members can repair and claim bicycles. See Cycles of Change as an example of an established program. http://www.cyclesofchange.org/
- Institute a City Bike Auction whereby unclaimed, police recovered bikes are sold to the public as is.

Education Programs

- Create, fund, and implement official Police bicycle-safety curricula for the general public and targeted populations, such as motorists and youth.
    - Create bicycle safety classes for city employees and transit operators as well as other large vehicle fleet operators
    - Partner with the school district to create and implement curricula such as Youth Bicycle Education and Riding Skills classes.
- Create, fund, and implement Bicycle-Safety Outreach Campaigns for the general public– e.g. San Francisco's Coexist campaign sponsored by the SF Bicycle Coalition and the Department of Parking and Traffic. http://www.sfbike.org/?coexist
- Include bicycle and pedestrian education materials in mailings from city agencies and ensure that the materials are available in all widely used languages
- Implement Police Training Programs educating officers on the rights of pedestrians and bicyclists
- Create a bicycle traffic school curriculum as an option for bicycle traffic law violators. Such curriculum might be web based and therefore relatively low-cost.

5. Who else is doing this: (Case Studies)

Among the states with complete street policies are: Oregon, Kentucky, Florida, Tennessee, Virginia, South Carolina, and Georgia. A number of other states such as California and Illinois require routine accommodation for bicyclists and pedestrians.

1) San Francisco, Better Streets Plan, Adopted March 2006 (http://www.sfgov.org/site/uploadedfiles/planning/Citywide/Better_Streets/index.htm):
This ambitious Complete Streets Ordinance requires that City agencies coordinate their activities to promote more coherent street design for both public and private projects. The Better Streets Plan considers streets as belonging to all users and places to promote transportation modes beyond driving and also as an essential environmental component of the city.
The supporting principles outlined in the plan guide street design to:

- address the scale and character of the street in the context of the surrounding environment;
- support multiple uses and prioritize public space for pedestrians, bicycles, and public transit over automobiles;
- ameliorate the negative impacts of traffic while enhancing property values and increasing the safety and attractiveness of neighborhoods;
- address the characteristics and challenges of watershed management by reducing runoff, increasing use of permeable surfaces, and including street trees and landscaping wherever possible;
- reduce visual clutter from signage, signals, and other structures;
- consider the impact of vehicular traffic on pedestrians, bicyclists, and public transit users and operators;
- prioritize pedestrian safety, enjoyment, and comfort;
- convert excess paved space into planted and open space areas;
- use new technologies and other best practices to manage storm water runoff and reduce pollution and water use; and
- collaborate with residents, businesses, and other stakeholders in local neighborhoods.

2) Sacramento Transportation and Air Quality Collaborative, Best Practices Guide, Fall 2005 (http://www.sactaqc.org/agreements.htm)
A number of different groups and agencies have formulated their own complete street policies and guides and The Sacramento Transportation and Air Quality Collaborative has created one of the more comprehensive guides. The Collaborative produced five separate toolkits for local agencies' use in the planning of developments in the entitlement process and in the planning, design and maintenance of transportation facilities.

3) City of Chicago, Safe Streets for Chicago and accompanying Department of Transportation Programs, October, 2006. (http://www.tiny.cc/chicago)
Chicago's complete streets policy is embedded in a comprehensive pedestrian safety initiative and involves several city departments, from the Police Department and Department of Transportation to the Office of Emergency Management and Communications Traffic Management Authority. The policy employs several strategies and involves various components--enforcement, infrastructure, technology, policies and design standards, and public awareness--to accommodate and balance "the safety and convenience of all users of the transportation system including pedestrians, bicyclists, transit users, freight, and motor vehicle drivers so that even the most vulnerable – children, elderly,

and persons with disabilities – can travel safely within the public right of way." The Chicago DOT also has a 'Green Alleys" program focused on producing alleys that present environmental benefits and a streetscape program with an accompanying Streetscape Guidelines Booklet.

6. Dig A Little Deeper:

http://www.greatcommunities.org/index_files/toolkit.htm
The Great Communities Collaborative Toolkit is full of information about transit-oriented development and makes available handouts about the benefits of less traffic as well as designing for walking and biking.

http://www.completethestreets.org/
A great place to find early success stories, additional information about the benefits of complete streets, how to complete your streets, updated information about relevant legislation, other resources and more.

http://www.completethestreets.org/completestreets/Tab1-%20Early%20Success%20Stories/Complete_Streets_Policies.pdf
List detailing existing complete streets policies and where to find them.

http://www.thunderheadalliance.org/completestreets.htm#CS_Policies
The Thunderhead Alliance is pursuing a national Complete the Streets Campaign and has compiled a guide which includes useful information on existing policies and how you can secure a complete streets policy for your community

http://www.sfbike.org/?los
The San Francisco Bicycle Coalition assembled a web page with resources and further information about the vehicle versus multi-modal level of service.

www.pedbikeinfo.org
Locate information about various engineering best practices for a variety of pedestrian and bicycling improvements. There is a great image library showing built examples of these improvements.

http://www.fhwa.dot.gov/environment/bikeped/design.htm#d4
This USDOT Policy Statement about integrating bicycling and walking into transportation infrastructure can help inform local complete street policy formation. This recommended approach also references a host of other pedestrian, bicycle, traffic calming and other design resources.

http://www.calbike.org/legislation.htm#AB1358
Read about California's AB 1358, The Complete Streets Act. This bill will ensure that any revisions or updates to a jurisdictions transportation or circulation element of the general plan will include how the jurisdiction will provide for the routine accommodation for all users or the roadway including pedestrians, bicyclists, users of public transit, motorists, children, the elderly, and the disabled. AB 1358 will be continued to the next legislative session in 2008.

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[1] Metropolitan Transportation Commission. 2006. New Places, New Choices: Transit Oriented Development in the San Francisco Bay Area.

[2] Metropolitan Transportation Commission. Bay Area Travel Survey. 2004.

[3] Metropolitan Transportation Commission. Bay Area Travel Survey. 2004.
[4] Linda Bailey. "Aging Americans: Stranded Without Options." Surface Transportation Policy Project. April 2004.
[5] Metropolitan Transportation Commission and Caltrans District 4. Bay Area Transportation: State of the System. 2006.
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[7] John Pucher and L. Dijkstra. "Making walking and cycling safety: lessons from Europe." Transportation Quarterly Vol. 54, 2000, pp. 25–50.
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