

INTRODUCTION

PURPOSE

The Monterey Bay Area Complete Streets Guidebook provides resources and procedures for developing streets in the Monterey Bay Area that meet the needs of all users including non-drivers of all ages and abilities. Although great strides have been made by local jurisdictions across the Monterey Bay Area to provide adequate facilities for all roadway users, many streets are not “complete” in the Monterey Bay Area due to lack of sufficient bicycle and pedestrian facilities. In recognizing that roadways have primarily been designed to serve the automobile, the Monterey Bay Area Complete Streets Guidebook highlights bicycle and pedestrian access as an essential design objective.

The policy guidance and recommendations herein may be adopted by jurisdictions to address the following:

- Ensure future changes to roadways function well for all roadway users;
- Pursuant to the Strategic Growth Council grant, meet Sustainable Communities Strategies requirements in state law;
- Comply with California Complete Streets legislation (AB 1358);
- Adopt a planning process in which all roadway users considered;
- Reduce vehicle miles traveled and reach regional greenhouse gas targets pursuant to California law (SB 375); and
- Achieve objectives identified in local Climate Action Plans.

Unlike many guidebooks, which may be more prescriptive, the Monterey Bay Area Complete Streets Guidebook places greater emphasis on process and the importance of understanding the trade-offs between different design considerations. Balancing the needs of all roadway users can be challenging in the Monterey Bay Area, where right-of-way and funding is limited. The planning processes recommended by this guidebook seek to ensure that the resulting streets provide for the safety and comfort of all users to the greatest extent possible.

Goals of the Complete Streets Guidebook

- Provide tools for transitioning streets to complete streets
- Improve safety, especially for the most vulnerable users
- Facilitate understanding the impacts on communities of implementing complete streets policies
- Identify types of improvements needed to accommodate growth and address congestion in areas of compact development
- Better integrate land use and transportation to reduce vehicle miles traveled
- Establish a collaborative process for integrating planning and designing streets
- Serve as a resource for implementing the California Complete Streets Act (AB1358)



HOW TO USE THE GUIDEBOOK

Interested parties may use the Guidebook in whole or in part to address the following:

- Practice six steps to successfully implementing Complete Streets: addressing complete streets from planning and design to implementation (**Chapter 6: Projects and Implementation**)
- Incorporate Complete Streets into community plans (**Chapter 1: Vision , Goals and Policy**)
- Measure the effectiveness of complete streets policy (**Chapter 2: Performance Measures & Targets**)
- Provide a context for how Complete Streets can affect current systems and procedures (**Chapter 3: Complete Streets Action Plan**)
- Develop projects based on land use context and street functional classifications (**Chapter 4: Complete Street Types**)
- Design treatments for complete streets (**Chapter 5: Design Treatments**)
- Become familiar with tools for transitioning to complete streets (**Chapter 7: Transitioning to Complete Streets**)
- Learn about programs that enhance or are improved by complete streets projects (**Chapter 8: Education, Enforcement and Encouragement**)
- Communicate the benefits of complete streets and engage the community (**Chapter 9: Talking about Complete Streets**)

ADOPTION

This guidebook is suitable for full or partial adoption by local jurisdictions and regional agencies to guide the planning and design of streets. Adoption of this guidebook represents an agency's commitment to incorporate complete streets into policy, project evaluation, design, implementation, training, and public involvement. Jurisdictions may also adopt a complete streets ordinance or resolution that references the Monterey Bay Area Complete Streets Guidebook.

It is recommended that local and regional agencies that adopt or use this guidebook should:

- Review their approach to street design through all stages of the process, from advanced planning through preliminary design and construction;
- Update existing design manuals and training materials to address complete streets concepts;
- Incorporate a comprehensive range of policies which address complete streets in the general plan or regional plan;
- Support training for planners and engineers in complete street concepts and design considerations; and
- Seek ongoing public input from the community.

Adoption of the guidebook, in whole or in part, is a necessary first step in ensuring complete streets are consistently developed in the Monterey Bay Area. Agencies may have to take additional steps and modify their internal processes in order to fully and successfully implement the guidebook. Tools to assist local jurisdictions in these tasks can be found throughout the Monterey Bay Area Complete Streets Guidebook.

BACKGROUND

The Monterey Bay Area Complete Streets Guidebook was developed to address complete streets on local and regional scales. In 2011, the Association of Monterey Bay Area Governments (AMBAG), which serves as the Metropolitan Planning Organization for the three county region of Monterey, Santa Cruz and San Benito Counties, in coordination with the three Regional Transportation Planning Agencies (RTPAs) in each county, received a grant from the Strategic Growth Council to conduct a complete streets needs assessment and develop a complete streets guidebook specific to the Monterey Bay Area. In addition to addressing regional complete streets issues, the Guidebook is a tool to help jurisdictions meet State complete streets requirements. The California Complete Streets Act (AB 1358), passed in 2008, requires that any major revision of a jurisdiction's General Plan include modification to the circulation element to "plan for a balanced, multimodal transportation network that meets the needs of all users of streets, roads and highways" (California Government Code section 65302(b)(2)). Several jurisdictions in Santa Cruz, Monterey and San Benito Counties currently meet this requirement but many do not.

The Monterey Bay Area Complete Streets Guidebook will benefit the entire region by encouraging bicycle, pedestrian and transit usage. The Metropolitan Transportation Plan (MTP) is prepared by AMBAG in cooperation with the RTPAs to plan for the long-range transportation needs of the region over the next 25 years. Pursuant to California Senate Bill 375, the MTP incorporates a Sustainable Communities Strategy and a transportation and land use strategy that will achieve regional greenhouse gas emissions reduction targets established by California Air Resources Board. The regional targets are: a 0% increase in greenhouse gas emissions by 2020 and a 5% reduction from 2005 greenhouse gas levels by 2035. Implementation of complete streets projects will contribute to reductions in greenhouse gas emissions by providing safe, convenient alternatives to driving.

The Monterey Bay Area Complete Streets Guidebook builds on best practices from across the nation. The policies, processes and design treatments included in the Monterey Bay Area Complete Streets Guidebook have been vetted, refined, and approved by experts, planners, advocates and policy makers nationally and locally. The materials included in the Monterey Bay Area Complete Streets Guidebook include references from similar documents such as the Charlotte Department of Transportation Urban Design Guidelines, the Manual for Living Streets developed by the County of Los Angeles, the Smart Growth America Best Complete Streets Policy, and Caltrans Complete Streets Action Plan.

Complete streets are being incorporated into every level of transportation planning in the Monterey Bay Area from the Metropolitan Transportation Plan and Regional Transportation Plans to local plans and projects.



Metropolitan
Transportation
Plan/SCS



Regional
Transportation
Plans



Local General
Plans



Area Plans



Local Projects

WHAT ARE COMPLETE STREETS?

Complete streets are roadways designed to safely and comfortably accommodate all users, including, but not limited to motorists, cyclists, pedestrians, transit and school bus riders, delivery and service personnel, freight haulers, and emergency responders. Complete streets accommodate people of all ages and abilities. Complete streets expand transportation choices by making walking, bicycling, and public transportation more convenient and safe. This includes consideration of varying levels of tolerance for traffic stress when choosing a transportation mode, particularly as it relates to bicycling.

The Monterey Bay Area Complete Streets Guidebook does not prescribe “one size fits all”. Complete streets facilities should look different depending on the surrounding land use context and user needs. Each street in a complete streets network is designed to provide safe accommodation for the various intended users. This does not mean all streets must be designed to equally support all users. Instead, a diverse palette of street design options that consider the location, land uses, and multimodal transportation volumes should be considered.

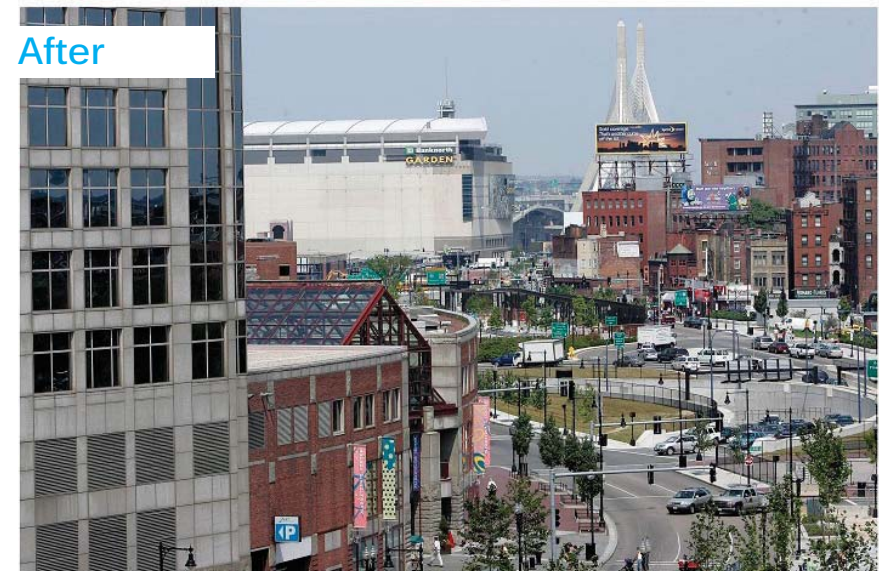
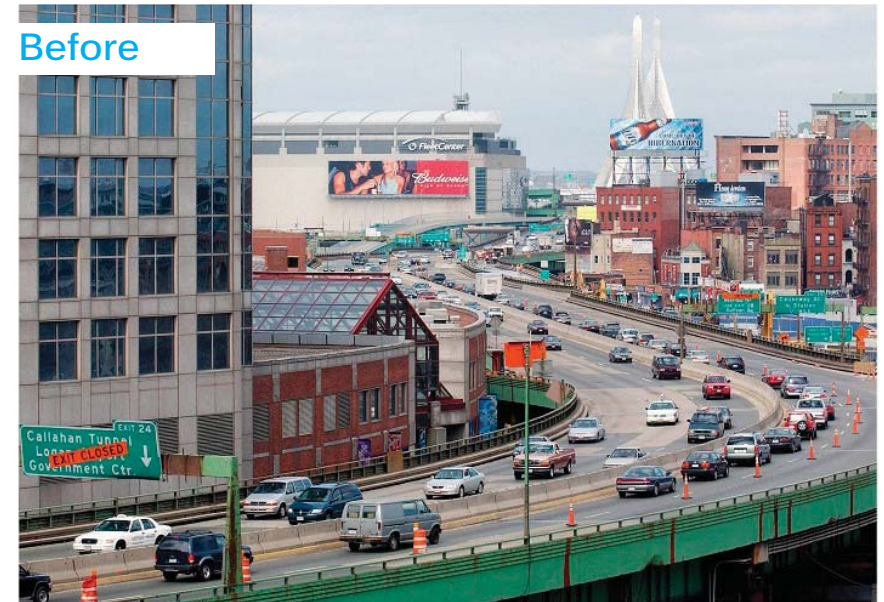


WHY COMPLETE STREETS?

More and more complete streets are being developed across California as decision-makers realize the value they add to their communities. Complete Streets projects address user needs across multiple modes, and provide numerous individual and community-wide benefits; although trade-offs between modes are often required in areas where there are right of way and funding constraints.

Improving access to goods and services has long been an important transportation goal and has guided transportation policy, facility design and measures of success. Historically the focus has been on accessibility for motorists to goods and services. Concentrating all efforts on one mode of transportation meets the needs of only a portion of roadway users. Complete streets can more fully improve a transportation network by increasing accessibility and mobility for non-motorized modes and addressing trade-offs between modes.

"Big Dig" Boston, MA



User Needs

The need for diverse transportation systems has existed among non-drivers for many years. In recent years there has been an increasing demand for alternatives to the automobile from individuals who historically have chosen to drive. Young people in particular are opting to ride the bus, bicycle and walk in greater numbers and fewer young people have driver's licenses or own automobiles than previous generations.

The number of older, low-income and disabled non-drivers is also increasing, as is the need for alternative ways to get around. An aging population may mean higher demand for public transit and in particular, paratransit. Restructuring existing transportation systems to address special needs can benefit not only the users of the system but also the service provider. Monterey-Salinas Transit, for example, has started a senior shuttle service in the Carmel Valley Area to begin meeting this new demand. The smaller senior shuttle vehicles allow for increased route flexibility and lower fuel demand, which benefits both transit riders and Monterey-Salinas Transit.

Today, the majority of Monterey Bay Area residents use an automobile as their primary mode of transport. Congestion and safety are the two greatest concerns of automobile drivers. Like other transportation investments, complete streets may impact local automobile congestion, automobile access, traffic patterns in neighborhoods, and parking. Potential impacts are dependent on the local context, application and design timeframe.



Cost-Effectiveness

Complete streets can be affordable to users and implementing agencies. The cost of transportation is increasing relative to fuel prices. For many American households the cost of car ownership is the second largest monthly expense after housing. Households that are dependent upon daily automobile use spend more income on transportation and have less disposable income (See Figure 0-1). Rising transportation expenses have a negative effect on the local economy and particularly on low income individuals with limited mobility many of whom are seniors and those under eighteen. In the face of rising automotive transportation costs, complete streets provide more affordable transportation options such as riding the bus, bicycling and walking.

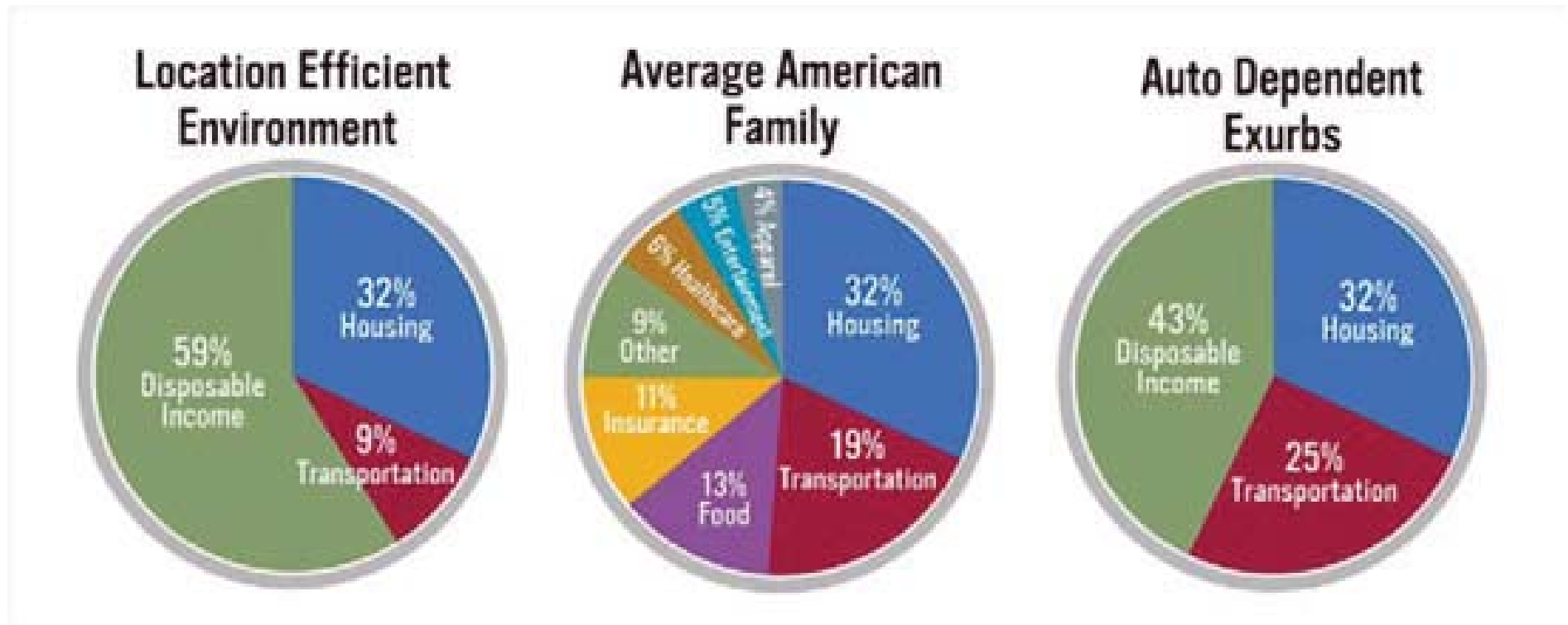


Figure 0-1: U.S. Department of Transportation

When it comes to implementing complete streets, jurisdictions can incorporate complete streets elements into currently planned projects by incorporating them in the early design stage. A cost-effective way to develop complete streets projects is to re-evaluate pending roadway projects and identify opportunities to accommodate additional users within the existing right-of-way.

For example, a standard resurfacing/restriping project could be modified to undergo a road diet or provide striping for bicycles at intersections. A road diet reduces the number of travel lanes, typically from four to two and adds a center left-turn lane and bicycle lanes or bicycle lanes and a sidewalk (Figure 0-2). Striping bicycle lanes at intersections dedicates space and indicates where the bicyclist should position themselves in order to cross more safely. These types of project can benefit all users of the roadway by providing a smoother road for drivers, decreasing conflicts between bicyclists and motorists, and creating greater separation between automobile traffic and pedestrians on sidewalks.

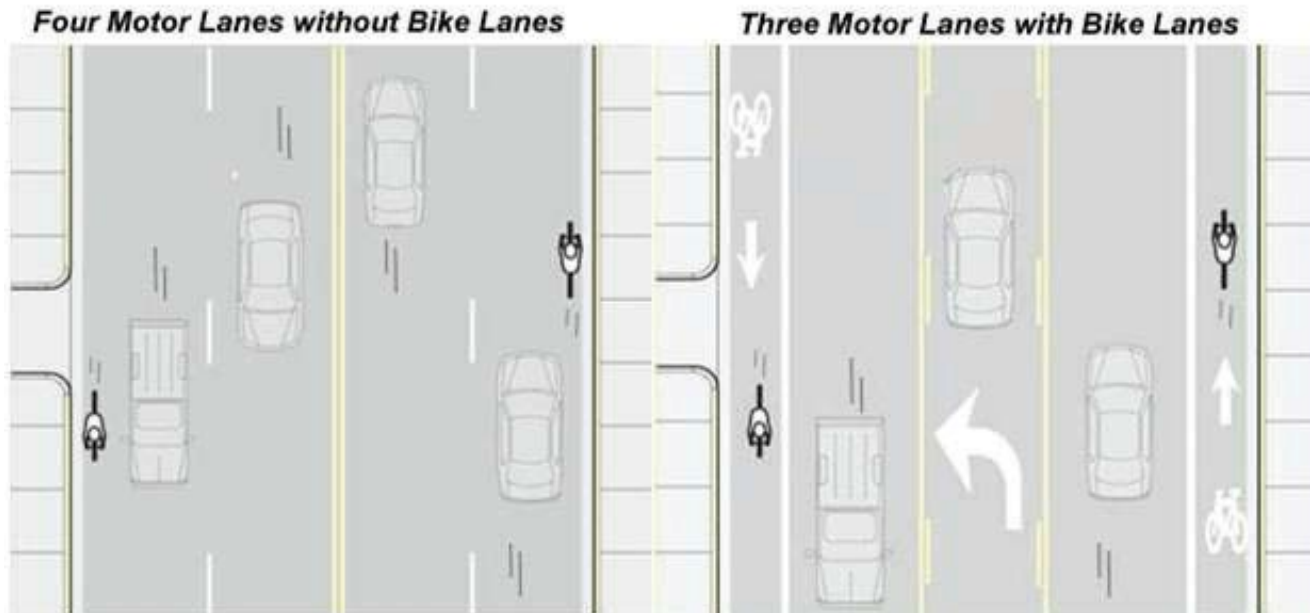


Figure 0-2: Road Diet Before and After (nozziwalkablestreets.com)

Benefits

Complete Streets can provide the following benefits:

Transportation Equity - Different travelers may expect varying accommodations by a street. A street design that works well for a motorist may not work well for a pedestrian or a bicyclist. People experiencing poverty or language barriers, people of color, older adults, youth, people with disabilities and other groups with limited or no access to a vehicle tend to experience a disproportionately small share of benefits from transportation investments focused on motorists. Complete street design attempts to restore equity in the transportation system by improving transportation options for non-drivers and enabling greater use of the transportation system.

Safe, Convenient and Attractive Travel Choices - Surveys throughout the Monterey Bay Area indicate residents desire to have a greater number of transportation choices. Typically, the primary reason given for not using non-motorized transport is safety concerns. Complete street design emphasizes safe and convenient travel choices for all modes.

Reduced Traffic Congestion - Increasingly more people are choosing not to drive and some are moving into cities where there are more transportation options. Complete streets can provide attractive choices for individuals who desire an alternative to automobile; thereby decreasing automobile volumes.

Increased Roadway Capacity – While populations continue to grow constraints such as environmental, physical and cost limit the opportunity to increase roadway capacity with more travel lanes. Complete streets can accommodate more people if they are complete and support travel by bus, bicycle or on foot, instead of by car.



Healthy Communities, Economy and Environment – There is a correlation between a diversified transportation network and healthier communities, and a stronger economy and a cleaner environment. By encouraging active transportation such as walking and cycling, complete streets can result in improved health for residents. Reduced GHG and criteria pollutant emissions may result in reduced incidence of respiratory disease. These factors have the potential to keep the local workforce healthier and more productive.



Improved Access for People with Disabilities - Individuals with disabilities are more likely to use the sidewalk network and take transit. Yet, roadways are often difficult to navigate for people who use wheelchairs, have diminished vision, can't hear well, or for people who move slowly. Complete streets policies can have the effect of removing barriers to independent travel by designing facilities to meet the needs of all users.



Reinvestment in the Local Economy – Improved complete streets will incentivize non-automotive modes of travel which are less expensive than driving and vehicle ownership. By reducing vehicle related expenses for commuters, they will have discretionary incomes which can be invested locally.



Economic Activity- Property values, business activity, redevelopment, fiscal health of governments and economic growth can all be positively impacted by complete street investments as a result of increased trip volumes, improved trip quality, benefits to safety and health, potential reductions in construction and maintenance costs, and provisions for new public amenities. A detailed discussion of the correlation between complete streets and economic activity is included in Appendix J.

HOW TO BALANCE ROADWAY USERS NEEDS

All of the possible benefits derived from complete streets investments must be evaluated in the context of how they affect the transportation network as a whole and the tradeoffs between alternative investments. For instance, prioritizing bicycle and pedestrian facilities on neighborhood streets may have potential impacts on automobile congestion, automobile access, traffic patterns, and parking. In contrast, prioritizing automobile facilities can have impacts on bicycle and pedestrian safety, and access, and may reduce opportunities for convenient alternatives to driving. The impacts on congestion and safety for all modes must be considered in the discussion of tradeoffs between modes as it relates to complete streets planning and design.

Despite challenges, many local jurisdictions in the Monterey Bay Area have made significant investments in bicycle and pedestrian infrastructure during the past two decades in an effort to serve a larger and more diverse group of roadway users. The result has been a considerable improvement in the bicycle network and pedestrian facilities. However, in many cases bicycle and pedestrian facilities are not provided when projects are constrained by right of ways or lack of funding. Prior planning practices have supported an approach to project design that emphasizes maintaining the existing roadway function first and adding bicycle and pedestrian improvements only where space and funding allow. In some cases a street may have been made more complete had alternative designs been considered. The trade-offs between investments can be challenging and the balance between modes is a result of a complex factors.

The tools provided in the Monterey Bay Area Complete Streets Guidebook, and discussed in detail below, are intended to support a transparent discussion of trade-offs amongst design features and roadway users and encourage evaluation of design alternatives. Consideration of all roadways users current and future needs using the complete streets framework promoted in the Monterey Bay Area Complete Streets Guidebook should result in cost-effective investments that provide convenient and safe facilities for all modes in the most appropriate locations.