

City of Goleta



Bicycle and Pedestrian Master Plan

Final | October 2018



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TABLE OF CONTENTS

1: Introduction	1
Study Area.....	2
Vision, Goals, and Objectives.....	3
Active Transportation Trends	5
Scope	6
Planning Context.....	7
Bicycle/Pedestrian Network History	7
Relationship to General Plan and Other City Planning Projects.....	15
Bicycle and Pedestrian Planning State of Practice.....	16
Applicable Legislation	18
Bicycling and Walking Benefits	23
Social Justice and Equity.....	25
The Way Forward	26
2: Existing Conditions and Analysis	27
Existing Conditions.....	28
Analysis.....	39
3: Community Engagement	59
Community Engagement Methods and Materials	60
Public Workshops	64
Online Survey and Map Results	70
Survey Results	72
Technical Advisory Committee (TAC).....	75

4: Recommendations	77
Recommendations Overview.....	78
Bicycle and Pedestrian Treatments	78
Six Key Performance Measures	79
Project Spotlight: Hollister Class I Multi-use Path - SRTS Project.....	82
Corridors Of Importance: Long-Term Vision Projects	92
Bicycle and Pedestrian Recommendations.....	100
School-zone Pedestrian Improvements	110
Pedestrian Integration with Public Transportation.....	120
Bicycle Integration with Public Transportation.....	121
Previously Proposed Projects - CIP List	122
Programs Overview	127
Signage and Wayfinding Guidelines.....	137
5: Policies	143
Policies.....	144
6: Funding	157
Potential Infrastructure Funding Sources.....	158

LIST OF FIGURES

Figure 1-1: Study Area	2
Figure 2-1: Existing Land Use	30
Figure 2-2: Proposed Land Use	31
Figure 2-3: Activity Centers.....	32
Figure 2-4: Street Classification.....	35
Figure 2-5: Traffic Volumes.....	36
Figure 2-6: Mobility Barriers.....	37
Figure 2-7: Transportation Mode Share.....	38
Figure 2-8: School Zone Infrastructure	41
Figure 2-9: Existing Bicycle Infrastructure	42
Figure 2-10: Previously Proposed Bicycle and Pedestrian Projects (CIPs)....	43
Figure 2-11: Bikeway Comparison Cities	44
Figure 2-12: Infrastructure Comparison—Race.....	45
Figure 2-13: Infrastructure Comparison—City Population.....	46
Figure 2-14: Infrastructure Comparison—City Household Income	46
Figure 2-15: Infrastructure Comparison—Bicycle Network Coverage.....	47
Figure 2-16: Bicycle and Pedestrian Collisions by Year.....	48
Figure 2-17: Bicycle and Pedestrian Collisions	49
Figure 2-18: Bicycle Gap Analysis	50
Figure 2-19: Pedestrian Gap Analysis.....	51
Figure 2-20: Pedestrian Gap Analysis	53
Figure 2-21: Bicycle and Pedestrian Propensity	55
Figure 2-22: Bicycle Level of Traffic Stress.....	57
Figure 2-23: Bicycle Parking Locations.....	58
Figure 3-1: Timeline of Events.....	60

Figure 3-2: Online Map Comment Points.....	70
Figure 3-3: Survey Heat Map	71
Figure 4-1: City-wide Project List Key Map.....	105
Figure 4-2: Project List Northwest Map	106
Figure 4-3: Project List Northeast Map	107
Figure 4-4: Project List Southwest Map	108
Figure 4-5: Project List Southeast Map	109
Figure 4-6: Brandon Elementary SRTS Map.....	111
Figure 4-7: Dos Pueblos High School SRTS Map	112
Figure 4-8: Ellwood Elementary SRTS Map.....	113
Figure 4-9: Goleta Valley Junior High, Private Schools SRTS Map	114
Figure 4-10: Kellogg Elementary SRTS Map.....	115
Figure 4-11: La Patera Elementary School SRTS Map.....	116
Figure 4-12: St. Raphael Elementary SRTS Map	117
Figure 4-13: Waldorf School Santa Barbara SRTS Map	118
Figure 4-14: Isla Vista Elementary School SRTS Map.....	119
Figure 4-15: Pedestrian Integration with Public Transportation Map	120
Figure 4-16: Bicycle Integration with Public Transportation Map	121
Figure 4-17: Previously Proposed Projects—CIP Map	122
Figure 4-18: Ellwood-Devereux Open Space Trails.....	125
Figure 4-19: Future Active Transportation Network Map	126

LIST OF TABLES

Table 4-1: Potential project list	101
Table 4-2: CIP list	123
Table 6-1: Funding Sources	159

APPENDICES

Appendix A: Prioritization Results
Appendix B: Top Ten Projects Planning Level Cost Estimates
Appendix C: City Council Resolution, Notice of Exemption, and Letter of Support
Appendix D: Active Transportation Plan and California Streets and Highway Code Requirements Checklist
Appendix E: City's Past Expenditures on Bicycle Facilities

1

INTRODUCTION

STUDY AREA

The City of Goleta is located in the County of Santa Barbara, approximately 100 miles northwest of Los Angeles, and 10 miles west of the City of Santa Barbara. A variety of multimodal options such as vehicular, train, transit, local roads, and bikeways exist for accessing the City. Goleta is bisected by the east-west US Route 101, a rail line serving Amtrak and the Union Pacific Railroad (UPRR), and a network of roads and bikeways. For the Bicycle and Pedestrian Master Plan (BPMP), the Public Works Department team also considered neighboring communities and unincorporated areas where existing and proposed bicycling or walking connections offered opportunities for increased regional connectivity. Because of the City's geographic location, the Public Works Department coordinated with the City of Santa Barbara, the County of Santa Barbara, and the University of California Santa Barbara (UCSB) throughout the planning process. Strengthening regional connections, in addition to being a standard active transportation planning goal, is required for State approval of a city's bicycle master planning.

Until the early 20th century, the Goleta area was predominately agricultural—primarily citrus farming. This was followed by the petroleum and aviation industries, and later the establishment of research and tech-based firms, aerospace firms, and UCSB.

The City is relatively young, having only incorporated in 2002. Since then, it has experienced remarkable growth and has been identified as a great place to live.

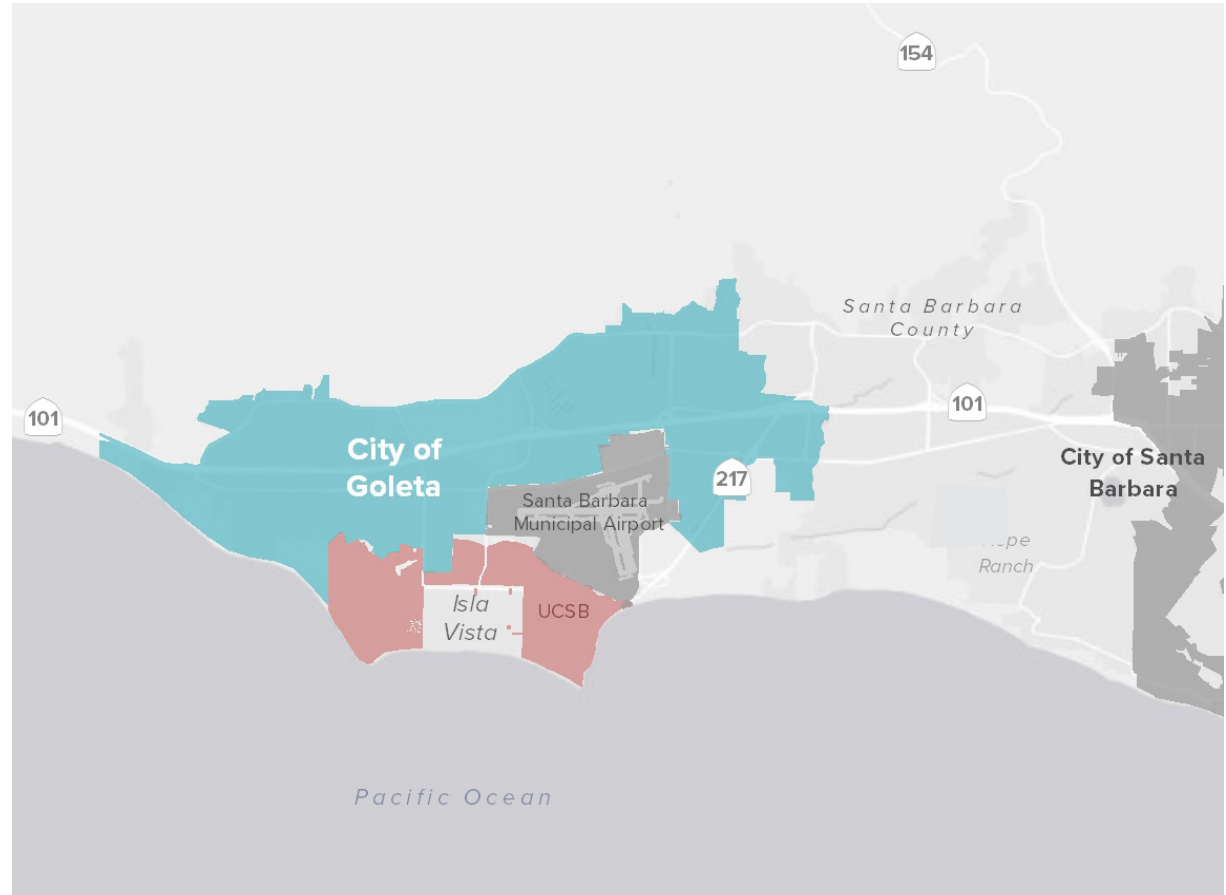


Figure 1-1: Study Area

VISION, GOALS, AND OBJECTIVES

VISION STATEMENT

To support Goleta's long-term vitality, the City envisions a future where transportation choices for people of all ages and abilities help sustain and improve Goleta's healthy, active, family-friendly, outdoor lifestyle, and provide access to jobs, schools, and recreation. This is envisioned through well-connected, safe, accessible bikeways, and walking routes that provide equitable benefits to all road users.

PURPOSE AND NEED STATEMENT

The Bicycle and Pedestrian Master Plan (BPMP) will serve the communities within Goleta through a holistic, iterative approach to transportation planning that includes community engagement and comprehensive analyses. The following goals will guide the planning process to ensure a successful plan that everyone can support and work towards implementation:

- (1) The BPMP will identify barriers, both actual and perceived, to bicycling and walking and provide opportunities through community outreach and improvement projects to remove the barriers and improve the network.
- (2) Implementing the BPMP will improve community health as access to more active means of transportation (bicycling and walking) are developed. The public health will benefit from increased exercise, collision reduction, and reduction in greenhouse gas emissions through less vehicle miles traveled as alternative methods are used and as the level of physical activity increases as a result of the system becoming more user friendly.
- (3) The disadvantaged community will benefit from a plan, and subsequent projects, that provide social equity. Many low-income residents rely on alternative transportation for jobs, access to medical facilities, and food options.
- (4) There will be an increased sense of pride in the community as a result of the community engagement, social interaction, and participating in achieving a common goal.

Based on the quote below, the State of California's desire to increase the number of bicycling and walking trips specifically addresses personal health, sustainability and economic concerns, but being able to safely and conveniently get around without needing a motor vehicle is the result of a community's commitment to a certain quality of life embracing active transportation. This BPMP aims to be the vehicle for Goleta's commitment to make the City a greener, more pedestrian and bicycle friendly community as part of a comprehensive sustainability strategy by reducing the need for motor vehicle travel and associated emissions.



It is the goal of the state to increase the number of trips Californians take by bicycling, walking, and other forms of active transportation in order to help meet the state's greenhouse gas emissions reduction goals, improve Californians' health by helping more people be active, and stimulate the economy. ”

~ Caltrans Design Information Bulletin (DIB) 89: Class IV Bikeway Guidance (Separated Bikeways/Cycle Tracks)

Eight percent of Goleta's residents commute by bicycling or walking, four percent each. Even though this is relatively high compared to other American cities, here where the climate is so favorable for walking and bicycling, why don't even more people walk or bicycle, or allow their children to do so? The primary barrier is widely perceived as the dangers of having to compete with motor vehicle traffic, and for many people, this makes driving simply feel more convenient and safer than walking or bicycling. The second largest barrier, both actual and perceived, is the lack of non-motorized, dedicated north-south crossings of US 101 and the UPRR.

This BPMP's primary purpose is to help to change these perceptions, reflecting Goleta's desire to reshuffle transportation priorities to encourage more people choosing to bicycle and walk instead of driving.

This BPMP forms a long-term vision supported by a variety of implementation measures. While addressing existing conditions and issues across Goleta, it also considers connections within the larger regional context. Its recommendations support an active transportation system better connected with regional systems linking Goleta with adjacent Santa Barbara County, the City of Santa Barbara, and the University of California Santa Barbara campus.

This travel network, coupled with education, enforcement, and promotional programs, will create a more bicycle and walking friendly City. This BPMP provides a framework for Goleta's active transportation network development, as well as supports eligibility for regional, State, and federal active transportation project funding. This resulting document helps to improve safety through identified prioritized bicycle and pedestrian infrastructure projects, associated encouragement programs, and policy recommendations.

Not exclusively focused on new infrastructure construction, the far-reaching strategies aims to support walking and bicycling through raising awareness for sustainable mobility, especially in support of more bicycling and walking to school, work, and play.

This BPMP sets the foundation for decisions and identifies a blueprint for future bicycle and walking development by helping to ensure that opportunities are not missed during decision making about related infrastructure, land use, and development.

Recommendations found in Chapter 4 include physical improvements across a range of project types. These project types include pedestrian and bicyclist improvements for safer crossings at busy intersections near activity centers, safe connections to transit, and improvements to important corridors. Associated programs and policies to encourage more bicycling and walking in Goleta are also included in this plan.

Infrastructure types perceived to be both the safest and most convenient virtually always receive the highest survey approval rates regardless of their cost or ability to readily implement them.

While the majority of proposed physical improvements reflect established infrastructure categories, an additional "visionary projects" category has been included. This category addresses the likely long-term "big picture" solutions to help make Goleta a truly bicycle and pedestrian friendly community through the implementation of a convenient network of "low-stress" infrastructure separated from motor vehicle traffic (see Figure 2-21). An example of this would be a backbone loop consisting of multi-use paths along Cathedral Oaks Road and Hollister Avenue, with extensions to popular destinations such as Goleta Beach Park, as well as connecting with existing and planned multi-use paths to UCSB.

The anticipated result of implementing the recommendations is a mode shift to increased bicycling and walking. Commuting increases will likely be primarily via bicycle, while intra-City travel increases will be via both bicycle and walking. Implementation will result in fewer daily vehicle trips and vehicle miles traveled (VMT). Recommended improvements are described in Chapter 4, but precise alignments and details will be developed during subsequent implementation phases.

ACTIVE TRANSPORTATION TRENDS

Many American cities were built on a foundation of auto-centric infrastructure, programs, and policies, but many of those same cities are embracing active transportation as a viable option to driving. Some of them are making minor improvements to support bicycling and walking, while others are working hard to undo decades of planning that privileged motor vehicle throughput. Environmental, health, and economic benefits reinforce the task of retrofitting American cities to make them bicycle and pedestrian friendly. The movement to make bicycling and walking viable transportation options is also supported by several recent pieces of California legislation.

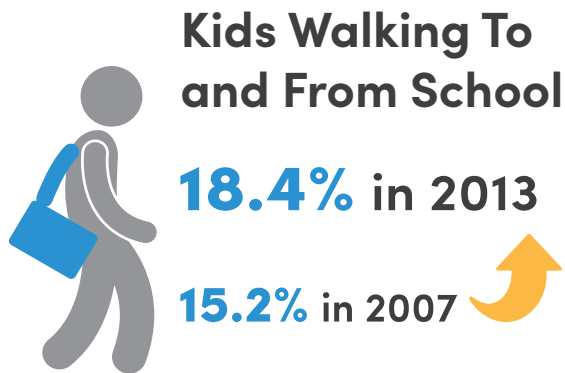
According to the US Public Interest Research Group, the average American drove six percent less in 2011 than 2004, and among young adults (16 to 34 year olds), car use plummeted 23 percent from 2001 to 2009⁽¹⁾. Diminished driving levels and increased preference for walkable, bikeable, and transit-connected communities among both Millennials and Empty Nesters is well documented. Millennials, in particular, are interested in living where getting around does not immediately imply driving a motor vehicle. They are driving less and walking, bicycling, and taking transit at significantly higher levels than previous generations. It is clear that this next generation of workers – and consumers – are less interested in driving than their parents.

Reasons for this trend likely include a blend of what was until recently a relatively slack job market (i.e. unemployed people drive less), as well as an increased use of technology (i.e. virtual interaction has replaced some face-to-face interaction), and a changing culture (i.e. preference for cities over suburbs and walkable places over drivable places).

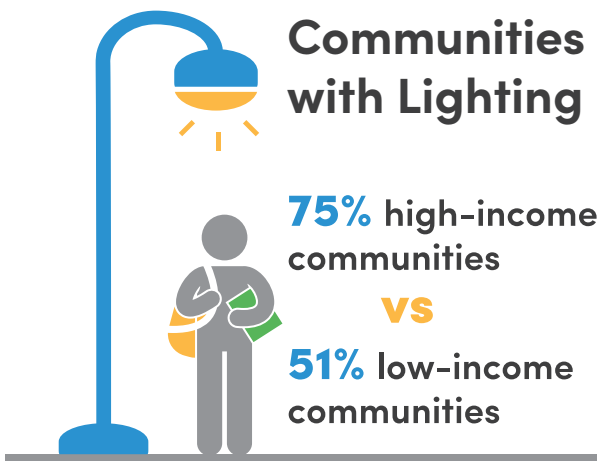
Decision makers should consider their community's demographic composition when making transportation decisions. Empty Nesters, particularly as the number of Baby Boomers reaching retirement age accelerates, are also showing a strong preference for communities that support walking. American Association of Retired Persons (AARP) surveys found that 70 percent of respondents age 65 and older agreed that living near where they want to go, such as grocery stores, health care providers, libraries, and social or religious organizations, was extremely or very important. Additionally, 51 percent agreed that it was extremely or very important to be able to walk easily in their community. Even though Goleta is a relatively young city, with 60 percent of the population under 45 and 86.5 percent of its population under 65, an estimated 4,085 residents are over 65.

⁽¹⁾ <https://uspirg.org/media/usp/young-people-driving-less-embrace-other-transportation>





Alliance for Biking and Walking Benchmarking Report, 2016



Bridging the Gap, Income Disparities in Street Features that Encourage Walking, 2012

In many California cities, non-motorized bikeway and trail network development have not kept up with demand. Bikeways and trails are often conditions of development, but relying on this can result in disconnected infrastructure. Many cities are addressing system gaps through completing fragmented or incomplete sidewalk networks, re-stripping streets to reallocate space to bicycles, updating bicycle and trails master planning, and securing grants for infrastructure construction.

Besides improvements specifically designed to improve pedestrian safety and comfort (i.e. curb extensions, refuge islands, improved signal timing, new user-activated signals), there has also been a growing preference for new bicycle infrastructure that enhance bicyclist safety, particularly protected bicycle lanes physically separated from motor vehicle traffic. Survey results for this Bicycle and Pedestrian Master Plan (BPMP) corroborate this trend and are reflected in improvement recommendations.

SCOPE

The City of Goleta is embarking on the next generation of mobility planning with this BPMP funded by the Proposition 84 Sustainable Communities Planning Grant and Incentives Program (Prop 84). Its scope addresses the grant objectives of promoting public health, reducing automobile usage, and fuel consumption, and promoting transportation equity. The BPMP will replace the existing Interim Bicycle Transportation Plan last revised in 2009, as well as guide future pedestrian planning.

The project scope includes developing a comprehensive BPMP that addresses the objectives listed above, as well as forming a Technical Advisory Committee (TAC) consisting of staff and members from partnering organizations, developing methods and metrics for evaluating and prioritizing projects, performing public outreach, and data collection, and updating the City's roadway design standards to incorporate bicycle and pedestrian transportation best management practices.

Consistent with Prop 84, the BPMP's goals include:

1. Identifying gaps and barriers, both perceived and actual, in the existing network where high priority routes are disconnected;
2. Developing a metric and methodology for prioritizing projects including identifying the need in the disadvantaged community (Old Town), family friendly routes, and a tiered network that serves experienced riders and less experienced riders;
3. Incorporating design guidance into City street standards that can be applied to a typology of different street types and provide for a sustainable community; and
4. Encouraging walking and bicycling as viable modes of transportation (currently 8% total).

PLANNING CONTEXT

2015 American Community Survey (ACS) data shows that more than 73 percent of Goleta's commuters drove alone to work, about four percent each rode bicycles or walked to work, and three percent used transit. However, it is important to note that the ACS data includes only trips to work and therefore omits many walking and bicycling trips, as well as the fact that all transit trips involve a walking or bicycling trip to reach the bus stop or train station.

The online application Walk Score categorizes Goleta as a "Car-Dependent City," earning a 42/100 walkability score. Although a corresponding bicycle score for Goleta is not available, it would probably be significantly higher than its walk score based on the longer distances reasonably covered by bicycle and several popular Class I multi-use paths connecting Goleta and the UCSB campus, which has one of the highest per capita rates of bicycle commuting among American universities. The campus website states that "over 10,000 people bicycle-commute between their home and UCSB on a daily basis." A recent survey noted that 53 percent of UCSB students get around by bicycle and the League of American Bicyclists (LAB) awarded UCSB a Gold-Level Bicycle Friendly University designation in 2011.

As demonstrated by strong participation in the BPMP's online survey (see Chapter 3), Goleta is a highly connected community. Nearby UCSB is the area's major center of economic activity and several well-known tech companies operate in the area, such as Citrix, Cisco, FLIR, and Raytheon.

BICYCLE/PEDESTRIAN NETWORK HISTORY

In 2005, the City of Goleta adopted an Interim Bicycle Transportation Plan that was essentially an administrative update of the County of Santa Barbara's original 1999 Bikeway Master Plan. It did not propose any significant new projects beyond those already identified in the county's plan.

In 2006, the City developed and adopted its General Plan/Coastal Land Use Plan (GP/CLUP) Transportation Element that included 15 Transportation Element Policies, 10 of which applied to bicycle or pedestrian transportation modes. Both the GP/CLUP and the Santa Barbara County Association of Governments' (SBCAG) 2040 Regional Transportation Plan/Sustainable Communities Strategy (RTP/SCS) noted that Goleta's existing circulation system was incomplete and/or underdeveloped and that existing gaps in the arterial and residential street system adversely affected community access to places of employment and transit centers. The GP/CLUP also specified the need to develop a Bicycle Master Plan and Pedestrian Master Plan.⁽²⁾

In 2009, the City Council adopted a resolution (09-57) to amend the 2005 Interim Bicycle Transportation Plan specifically to allow the City to submit a Bicycle Transportation Account (BTA) grant application for a Class I multi-use pathway along the south side of Hollister Avenue between Pacific Oaks Road and Ellwood Elementary School.

This Bicycle and Pedestrian Master Plan (BPMP) replaces the Interim Bicycle Transportation Plan the City adopted from the County and updated in 2009. Public Works included the pedestrian component (TE 10) into one master plan document.

REGIONAL PLANNING AND PREVIOUS MASTER PLANS

The following is a summary of bicycle and pedestrian policies from the planning documents noted previously in chronological order, as well as the 2012 Santa Barbara County Bicycle Master Plan and Santa Barbara County Association of Governments' (SBCAG) 2015 Regional Active Transportation Master Plan.

2005 INTERIM BICYCLE TRANSPORTATION PLAN

The City of Goleta was incorporated in 2002, and in 2005, adopted an Interim Bicycle Transportation Plan that was essentially an administrative update of the County of Santa Barbara's original 1999 Bikeway Master Plan. It did not propose any significant new projects that were not identified in the county's plan at that time.

2006 GENERAL PLAN/ COASTAL LAND USE PLAN TRANSPORTATION ELEMENT

Bicycle and pedestrian circulation is well represented in the City of Goleta General Plan/Coastal Land Use Plan (GP/CLUP) Transportation Element and referenced in most of its 15 policy sections.

⁽²⁾ Transportation Element: TE No. 10.2 and 11.5, Implementation Action TE-IA-6

The GP/CLUP introduction includes a list of transportation issues and needs that resulted from both transportation modeling and community input, highlighted by concerns such as improving crossings of US-101, safer bicycle and pedestrian accommodations on Hollister Avenue, and *“concerns about improving safety, for vehicles, bicyclists and pedestrians, at a number of locations within the city.”*

The GP/LP guiding principles and goals further describe the relative importance of bicycle and pedestrian travel, noting that *“Alternative transportation modes are also identified in this element to reduce dependency on the automobile and improve environmental quality.”* Two of the nine principles address bicycle and pedestrian travel, particularly stressing transportation system balance and diversity of choice of modes, including expanded bus transit, rail, bicycle, and pedestrian infrastructure, to manage congestion and improve mobility, and improving connectivity between the various travel modes.

Policy TE 1: Integrated Multi-Modal Transportation System

Objectives: To create and maintain a balanced and integrated transportation system to support the mobility needs of Goleta’s residents and workforce, with choice of bus transit, bicycle, and pedestrian as well as private automobile modes. To reduce the percentage of peak-hour person-trips that are made by automobile and provide the facilities that will enable diversion of trips from automobiles to other modes. To develop, maintain, and operate a balanced, safe, and efficient multi-modal transportation system to serve all persons, special-needs populations, and activities in the community.

Section TE 1.1 (Alternative Modes) describes the City’s intent to achieve a realistic and cost-effective balance *“between travel modes, including bikeways, pedestrian circulation, and bus transit,”* but also that the City is to encourage alternative modes of transportation, such as bus transit, bicycling, and walking.

Section TE 1.3 (Improved Connectivity in Street, Pedestrian, and Bikeway Systems) states that the City will give priority to creating *“one or more additional non-interchange crossings of US-101 to connect the community from north to south...to facilitate cross-town traffic, improve bicycle and pedestrian flow and safety.”*

Section TE 1.6 (Development Review) is also important because it specifically mentions development conditions of approval that may include *“Bicycle storage, parking spaces, and shower facilities for employees.”*

Policy TE 2: Transportation Demand Management

Objective: To attempt to influence individual travel behavior, particularly by workers at larger scale employers, to lower future increases in peak-hour commute trips and other trips by persons in single-occupant vehicles.

Section TE 2.1 (Reduction/Shifting of Peak-Hour Vehicle Trips) describes City support to limit traffic congestion by reducing low-occupancy auto trips through the possible provision of pedestrian and bicycle infrastructure and amenities.

Policy TE 3: Streets and Highways Plan and Standards

Objective: To provide a street network, including appropriate provisions for bicycles and pedestrians, that is adequate to support the mobility needs of city residents and businesses.

This policy addresses design standards for major and minor arterials, collector streets and roads, and notes that all *“shall include facilities to accommodate pedestrians and bicycles.”*

Policy TE 6: Street Design and Streetscape Character

Objectives: To ensure that the standards used for the design and development of new roadways and improvements to existing roadways reflect and support the character of adjacent development. To create streetscapes that will enhance neighborhood quality.

Section TE 6.2 (Component Features Included in Street Standards) specifies that street standards will include *“sidewalks or other facilities for pedestrians,”* and *“bicycle lanes or other appropriate facilities for bicycles, where shown on the Bikeways Plan Map.”*

Policy TE 9: Parking

Objectives: To ensure that an adequate amount of parking is provided to accommodate the needs of existing, new, and expanded development, with convenient accessibility and attention to good design. To assure that on- and off-street parking is responsive to the varying and unique needs of individual commercial areas and residential neighborhoods.

Section TE 9.5 (Parking Lot Design) defines design standards for parking lots of three or more spaces that include landscape or other buffering of pedestrian walkways between the parking area and the street, main entrance, and transit stops.

Section TE 9.6 (Old Town Parking) describes using on-street parking *"to create a buffer between pedestrians and vehicle traffic, reduce the speed of traffic, and provide for needed short-term parking."*

Policy TE 10: Pedestrian Circulation

Objective: To encourage increased walking for recreational and other purposes by developing an interconnected, safe, convenient, and visually attractive pedestrian circulation system.

This policy addresses design criteria, pedestrian safety and new development requirements, including *"benches, public art, informational signage, appropriate landscaping, and lighting."* Also of note is the statement that *"Dedications of public access easements shall be required where appropriate."*

Section TE 10.2 (Master Plan for Pedestrian Facilities) describes plan development and outlines suggested priorities, such as a continuous sidewalk network, ADA compliance, and achieving maximum separation of pedestrian pathways from vehicle traffic routes.

Policy TE 11: Bikeways Plan

Objective: To encourage increased bicycle use for commuting and recreational purposes by developing an interconnected circulation system for bicycles that is safe, convenient, and within a visually attractive environment.

This policy addresses the specifics of what is required for bicycle transportation planning, including listing items set forth in Section 891.2 of the California Streets and Highways Code, the enabling legislation that addresses bicycle planning in California.

Section TE 11.2 (Bicycle Transportation Plan) describes plan content, including most of the required elements needed for Caltrans approval. This is reiterated in Implementation Action TE-IA-6.

Section TE 11.4 (Facilities in New Development) specifically notes that *"bicycle facilities such as lockers, secure enclosed parking, and lighting shall be incorporated into the design of all new development to encourage bicycle travel and facilitate and encourage bicycle commuting."*

Policy TE 12: Transportation Systems Management

Objective: To establish operational controls that will manage the street network in a manner that will efficiently and safely utilize the existing limited capacity consistent with protection of the surrounding neighborhood.



Section TE 12.2 (Efficient Utilization of Transportation Facilities) emphasizes that *“a necessary priority in the future will be on making relatively minor improvements designed to achieve modest increases in capacity and to maximize efficient utilization of existing transportation facilities.”*

Policy TE 12 lists operational and safety improvements that affect bicycling and walking, including *“adjustments of signal timing to improve traffic flows, including installation of coordinated signal systems on arterials,”* and *“improved sidewalks and street crossings for pedestrians.”*

Policy TE 13: Mitigating Traffic Impacts of Development

Objective: To ensure that new development is supported by adequate capacities in transportation systems, including city streets and roads, without reducing the quality of services to existing residents, commuters, and other users of the city street system.

Section TE 13.4 (Options If Traffic Mitigations Are Not Fully Funded) describes four actions that can be taken if transportation capital improvements needed to maintain adopted transportation LOS standards are not able to be funded. One specifically addresses pedestrian and bicycle circulation by requiring *“the developer to identify alternative strategies, such as transit improvements, improving signalization, improving other streets, adding pedestrian or bicycle improvements, etc., to mitigate potential traffic impacts.”*

Policy TE 15: Regional Transportation

Objective: Participate in developing regional transportation solutions to expand choices for local citizens, make the highway system more efficient, improve regional bus service, consider potential commuter rail service, and create an interconnected system of bicycle routes and trails.

Section TE 15.2 (Linkages) This section notes that in developing street standards, *“the City and neighboring jurisdictions should work together to develop consistent”* standards and designations and that *“this effort should include developing appropriate links between pedestrian and bicycle routes.”*

2009 AMENDED BICYCLE TRANSPORTATION PLAN

In 2009, the City Council adopted resolution 09-57 to amend the 2005 Interim Bicycle Transportation Plan, specifically to allow the City to submit a Bicycle Transportation Account (BTA) grant application for a Class I multi-use pathway along the south side of Hollister Avenue between Pacific Oaks Road and Ellwood Elementary School. (This project was successfully funded and subsequently constructed in 2017.)

2012 SANTA BARBARA COUNTY BICYCLE MASTER PLAN

The 2012 Santa Barbara County Bicycle Master Plan was an update to conform to BTA requirements, which states that new projects must be designed and developed to achieve the functional commuting needs and physical safety of all bicyclists.

The County's primary bikeway planning goal was *“to give people who choose not to rely exclusively on the automobile safe and convenient transportation options by developing a comprehensive bike path network with seamless connections between the eight cities and the County.”* The overall bike path network therefore strives to connect residential areas with major job centers, shopping and services, and recreational areas.

Of particular interest are Chapter 2: Facilities, which describes County priorities and provides maps of existing and proposed infrastructure, and Chapter 5: Bicycle Policies and Plans, which describes how the county plan relates to the Community Plans and Regional Transportation Plan.

The County's plan notes that *“coordination between all eight cities and the County is crucial for the construction of a cost-effective, safe and convenient bike path network. Bicyclists should experience seamless connections on bike paths as they pass from jurisdiction to jurisdiction.”*

As part of its General Plan, the County has prepared Community Plans for each of the urbanized areas located in the unincorporated portions of Santa Barbara County. In updating the Bicycle Master Plan, County staff reviewed all adopted bikeway maps contained in the General Plan and each of the Community Plans. Proposed “future bike path links” shown in the County’s plan were culled from projects previously identified during development of the County’s adopted General Plan and Community Plans. They are intended to provide connections to and through major urban centers in both the incorporated and unincorporated parts of the County.

2007 GOLETA COMMUNITY PLAN

This community plan contains a number of actions applying to bicycle transportation, as well as mentions of pedestrian use. Safely crossing Highway 101 is noted several times.

Action CIRC-GV-2.3 notes that the County is to prioritize bicycle and pedestrian uses in transportation planning. It also addresses actions for specific situations, especially overpasses: *“When feasible, roadway improvements, including overpasses, shall be sited and designed to encourage and accommodate pedestrian and bicycle use. On-street parking and vehicle lanes may be removed where bike paths and pedestrian access would be enhanced. Where feasible, all new overpasses should provide for separated Class I pedestrian\|bicycle ways.”*

Action CIRC-GV-2.12 notes that the County Transportation Improvement Plan (TIP) *“shall explore the potential for locating bike paths under U.S. 101 utilizing existing creek channel tunnels.”*

Action CIRC-GV-2.16 addresses specific locations where bikeway repairs are to be prioritized as funding becomes available:

- Improve hazardous storm drain at intersection of Hollister Avenue and Fairview Avenue (partially within City of Santa Barbara);
- Trim hedges at intersection of Atascadero Bikeway and Patterson Avenue to provide visibility of the intersection;
- Provide a more stable surface on wooden bridges along Atascadero Bikeway;
- Stripe segment of westbound El Colegio Road bike lane from Camino Corto to Storke Road;
- Repair/replace damaged/missing portions of Fairview Avenue bike lane from Calle Real to approximately 1/4 mile south of Hollister Avenue; and
- Repair/replace damaged/missing portions of Los Carneros bike lane from Cathedral Oaks to Hollister Avenue.

DevStd CIRC-GC-4.1 addresses transportation project design guidelines for the Goleta Planning Area:

- US 101 Overpass Design: *“include either a Class I or Class II bicycle/pedestrian lane in all future construction of US 101 overcrossings. Measures shall be included in these bikeways to increase the safety and attractiveness of these facilities.”*
- Bicycle Paths along Creeks: *“bicycle paths along creeks shall be located to avoid significant habitat areas to the greatest extent feasible, and if feasible, riparian habitat restoration shall be included as part of any path proposed to be built adjacent to a creek.”*

Policy CIRC-GV-6 (Types of Bicycle Paths) addresses the County’s priorities for implementing bikeways. In particular, it notes the following:

- Separated facilities (Class I paths or modified Class II lanes) are a higher priority than on-road facilities, until all of the separated facilities are constructed.
- On-road lanes are a high priority where they address existing safety concerns, or where the majority of the funds that would be used to construct these paths are nor normally available for construction of separated facilities. Commuter paths are a higher priority than recreational paths for use of transportation impact fees.

- The highest priority bike paths are separated crossings over or under the freeway. The second highest priority are east-west paths and/or those providing direct connections between commercial/industrial and residential land uses.

Policy CIRC-GV-8 addresses siting and designing new development to *“provide maximum access to non-motor vehicle forms of transportation, including well designed walkways, paths and trails between new residential development and adjacent and nearby commercial uses and employment centers.”*

Policy CIRC-GV-9 directs the County to *“facilitate the use of the bicycle as an alternative mode of transportation...to meet the transportation and recreation needs of Goleta cyclists.”*

2015 EASTERN GOLETA VALLEY COMMUNITY PLAN

The Goleta Community Plan (GCP) was adopted in 1993, and since then, new development has occurred, population has grown, and the City of Goleta was incorporated. Issues of regional concern to the South Coast provided the momentum to revisit where, when, and how the Eastern Goleta Valley should change over the next 15 to 30 years. This plan is awaiting California Coastal Commission approval.

Goal 8 specifically addresses multi-modal transportation access: *“The community is served by an efficient transportation network serving the multi-modal needs of all users and abilities.”*

Objective TC-EGV-1 promotes enhancing the existing automobile transportation network with multi-modal improvements by making walking, biking and public transit more practical, safe, and attractive.

Policy TC-EGV-1.6 prioritizes specific Eastern Goleta Valley Community Corridors for multi-modal Complete Street improvements:

- Hollister Ave from the City of Goleta to the City of Santa Barbara;
- Calle Real from the City of Santa Barbara to its western terminus; and
- Turnpike Rd from Cathedral Oaks Rd to its southern terminus.

Policy TC-EGV-1.7 encourages transit/pedestrian design standards for new residential and commercial development *“to increase the appeal of walking, bicycling, and using public transit and decrease traffic congestion on roadways.”*

Policy TC-EGV-1.8 notes that the County’s long-range land use planning efforts will emphasize access to retail, commercial, recreational, and educational facilities via transit lines, bikeways and pedestrian trails.

Policy TC-EGV-1.10 (Regional Transportation) generally addresses increasing north-south and east-west roadway, bike path and pedestrian route multi-modal connectivity and accessibility, specifically the north and south sides of Eastern Goleta Valley over US 101 and the Southern Pacific RR, and between the Cities of Goleta and Santa Barbara

Program TC-EGV-1F addresses studying and constructing recommended multi-modal north-south and east-west routes to better connect Eastern Goleta Valley destinations, neighborhoods, and land uses, such as a bicycle/pedestrian connection over Maria Ygnacio Creek to extend Calle Real to the City of Goleta via Patterson Avenue, an overpass or underpass to provide safe alternative for students to bypass Turnpike Road, and a Highway 101 overpass to connect north side neighborhoods with south side commercial and transit opportunities.

Action TC-EGV-1G addresses creating north-south connections between Cathedral Oaks Road and Calle Real to through traffic, bicycles, and pedestrians, or installing permeable barriers that can be opened as needed and in the event of emergency or to address congested circulation.

Policy TC-EGV-2.3 (Priority Bicycle Facilities) describes the Eastern Goleta Valley's bicycle improvement priorities as Safe Routes to School, east-west paths and/or those providing direct commuter connections between commercial and residential land uses, and Class I and Class II crossings over or under local highways.

2015 SBCAG REGIONAL ACTIVE TRANSPORTATION PLAN

The Santa Barbara County Association of Governments (SBCAG) assists area governments with regional or multi-jurisdictional public policy issues, such as traffic, housing, air quality, and growth, because effectively addressing them often extend across jurisdictional boundaries. SBCAG's 2015 Active Transportation Plan therefore provides a regional outlook that was reviewed for references applicable to the City of Goleta and the vicinity.

The plan notes that the City of Goleta was recently awarded Measure A funding to prepare a bicycle and pedestrian plan and that the City received a U.S. Department of Transportation TIGER grant to create a Complete Streets plan for Hollister Avenue corridor in Old Town Goleta.

Several images in the document are from Goleta, UCSB, and nearby locations like Isla Vista. It highlights bikeway and intersection pedestrian improvements on Cathedral Oaks Road and El Colegio Road in Isla Vista, signage on the Obern Trail, and the recently completed Hollister Avenue Class I project in western Goleta.

Bicycle and Pedestrian Infrastructure and Model Practices

The plan notes that in 2012 the SBCAG region had 34.3 miles of Class I bikeways, 136.2 miles of Class II bicycle lanes, and 167.8 miles of Class III routes. *"Each of the SBCAG member governments recognizes the value of accommodating bicyclists, is beginning to employ the principles of complete streets policies, and prioritizes investments in active transportation infrastructure. These efforts are paying dividends: the SBCAG region beats the national average by nearly eight-to-one for the percentage of bicycle mode share."*

Connectivity with Other Modes

The plan notes that the Camino Real Marketplace at the intersection of Hollister Avenue and Storke Road is the terminus of seven Metropolitan Transit District (MTD) bus routes and is connected by both walkway and bicycle lanes with the surrounding commercial district. There is no bicycle parking near the bus stop itself, though bicycle racks are available throughout the Marketplace. The plan also notes the availability of bicycle parking at the Santa Barbara Airport and the Goleta Amtrak station.

Improving the Bicycle and Pedestrian Network

A key component of SBCAG's plan is the project list proposed to improve the region's bicycle and pedestrian environments. SBCAG worked closely with member jurisdictions and considered the input of advocacy groups and the public, to create a list based on local planning efforts.

These projects are in addition to projects to will be identified through more detailed local planning efforts, such as this bicycle and pedestrian planning efforts. These projects are intended to increase bicyclist and pedestrian mobility and improve safety. With a planning horizon of 2040, they align with the RTP-SCS, though updates will occur in the interim to tailor the project lists to evolving priorities. The plan lists 18 City of Goleta Planned Bicycle and Pedestrian Projects, ranging from master planning, to new bikeways, crosswalks, pedestrian activated crossing beacons, pathway lighting, habitat restoration, and a multi-modal bridge over US 101.

The SBCAG plan concludes with the following: Every bicycle or pedestrian trip:

- Is one fewer vehicle congesting our roads and polluting our air;
- Supports environmental and public health goals; and
- Contributes to desirable and vibrant communities.

FAST FORWARD 2040: SBCAG REGIONAL TRANSPORTATION PLAN AND SUSTAINABLE COMMUNITIES STRATEGY

The Regional Transportation Plan (RTP) is a long-range planning document that describes how the Santa Barbara region plans to invest in their transportation system over 20 years based on regional goals, multi-modal transportation needs for people and goods, and estimates of available funding. The RTP has five major goals:

Environment: Foster patterns of growth, development and transportation that protect natural resources and lead to a healthy environment.

Mobility & System Reliability: Optimize the transportation system to improve accessibility jobs, schools, and services, allow the unimpeded movement of people and goods, and ensure the reliability of travel by all modes.

Equity: Ensure that the transportation and housing needs of all socio-economic groups are adequately served.

Health & Safety: Improve public health and ensure the safety of the regional transportation system.

A Prosperous Economy: Achieve economically efficient transportation patterns and promote regional prosperity and economic growth.

Active Modes

The RTP includes a section regarding active transportation. It describes closing bikeway gaps, improving connectivity to transit, and financing programs such as Safe Routes to School education.

GOLETA CLIMATE ACTION PLAN

The 2014 Climate Action Plan (CAP) identifies measures to effectively meet greenhouse gas reduction targets. The plan describes that meeting reduction targets requires a commitment to local and federal actions. The following actions will contribute to the City's sustainability by:

- Conserving resources such as energy and water;
- Fostering the creation of green jobs; and
- Furthering Goleta's leadership in clean research and development (R&D) industries.

Chapter 3: Emissions Reduction Plan

Chapter 3 describes several strategies and measures regarding greenhouse gas and vehicle miles traveled reduction:

T-1: Develop Design Guidelines for Increased Density for New Developments

T-2: Develop Design Guidelines for Increased Destination Accessibility for New Developments

T-3: Create an Incentive Program for Increased Diversity for New Developments (Mixed Use)

T-4: Develop Design Guidelines for Improved Design for New Developments

T-7: Implement General Plan Policy TE 11: Bikeways Plan

T-8: Encourage Bicycle Parking through Development of Design Guidelines and Policies

T-11: Continue to Encourage End-of-Trip Facilities

T-13: Coordinate with School Administrative Staffs to Adopt Programs Reducing Vehicular Travel to School

T-14: Encourage Land Dedication for Trails

T-15: Identify Opportunities for Bike Parking at Strategic Transit Locations

HEALTHY EATING AND ACTIVE LIVING CITY RESOLUTION NO. 17-49 (2017)

The League of California Cities adopted an annual conference resolution in 2004 to encourage cities to embrace policies that promote healthier lifestyles and communities, including healthy diet and nutrition and adoption of city design and planning principles that enable citizens of all ages and abilities to undertake exercise. This is known as the Healthy Eating and Active Living (HEAL) program, which specifically addresses a number of criteria affecting healthy eating and active living, particularly the built environment, employee wellness, access to healthy food, and land use.

The resolution notes that obesity is a serious public health threat to the health and wellbeing of adults, children and families in Goleta. While individual lifestyle changes are necessary, individual effort alone is insufficient to combat obesity's rising tide. Societal and environmental changes are needed to support individual efforts to make healthier choices.

In support of the HEAL program, the City Council adopted Resolution No. 17-49, declaring Goleta a Healthy Eating and Active Living (HEAL) community.



RELATIONSHIP TO GENERAL PLAN AND OTHER CITY PLAN- NING PROJECTS

The Bicycle and Pedestrian Master Plan provides goals and objectives to create infrastructure, programs, and policies for implementation of bicycle and pedestrian related goals and policies in the General Plan. The General Plan is the primary document specifying goals and policies for the City, including those relating to walking and bicycling. Several other local and regional plans also contain goals and policies relating to bicycling and walking in Goleta as described in this chapter, and whose relevant goals and policies were summarized.

INTEGRATING HOLLISTER AVENUE COMPLETE STREETS CORRIDOR PLAN

Hollister Avenue serves as the primary corridor through Old Town and accesses adjacent businesses and neighborhoods. BPMP survey and workshop respondents generally described Hollister Avenue through Old Town as an uncomfortable bicycling route due to the lack of bicycle infrastructure coupled with motor vehicle traffic speeds and volumes. The City recently installed two user-activated mid-block crossing signals to help make the pedestrian environment safer.

The City of Goleta received TIGER VI Discretionary Grants Program funds to develop a Complete Streets Corridor Plan for the segment of Hollister Avenue between Fairview Avenue and SR 217. The Plan will identify improvements to Hollister Avenue through Old Town to make it easier and safer for drivers, transit users, pedestrians, and bicyclists - making Old Town a better place to live, work, shop, and dine. The project is aimed at developing a Corridor Plan that will:

- Make Old Town safer for all travel modes;
- Reduce cut-through traffic through Old Town;
- Provide safe and convenient multi-modal connections to residents, employees and visitors; and
- Improve the quality of life by making Hollister Avenue an appealing place to walk, cycle, drive, shop and dine.

The BPMP process included ongoing coordination to ensure this important element of Goleta's active transportation network becomes a well connected component of it. The conceptual design that results from the Hollister Avenue Complete Streets Plan are intended to integrally link it with the adjoining walking and bicycling systems described in this plan.

BICYCLE AND PEDESTRIAN PLANNING STATE OF PRACTICE

OVERVIEW

Providing safe, convenient, comfortable access for all users is the goal of “Complete Streets,” the conceptual basis for much new roadway design, construction, and renovation. Assembly Bill 1358 codifies Complete Streets into law by requiring that general plan circulation element updates: *“identify how the jurisdiction will provide for the routine accommodation of all users of the roadway including drivers, pedestrians, cyclists, individuals with disabilities, seniors and public transit users.”*

While pedestrians have benefited from “routine accommodation,” with features such as sidewalks, curb ramps, crosswalks, dedicated crosswalk signals, etc., these infrastructural improvements are still not universally applied, resulting in a walking environment often perceived as unsafe and uncomfortable, which therefore discourages people from walking. Pedestrian accommodation is being re-evaluated in the context of improving the overall street environment through the implementation of additional enhancements that make walking more comfortable, and therefore to encourage more people to do so.

Bicycle infrastructure state of practice in the United States has undergone a significant transformation in the last decade. Much of this may be attributed to bicycling’s changing role in the overall transportation system. Once viewed as an “alternative” mode, it is increas-

ingly viewed as a legitimate transportation mode and one that should be actively promoted as a means of achieving environmental, social, and economic goals.

While connectivity and convenience remain essential quality indicators, much recent research indicates the increased acceptance and practice of daily bicycling, in particular, will require “low-stress” bicycle infrastructure. Specific types and design interventions intended to encourage ridership among the “interested, but concerned” demographic tend to be those that separate bicyclists from high volume and high speed vehicular traffic.

PRIMARY DESIGN GUIDANCE

Just as the state of practice of bicycle and pedestrian infrastructure has evolved, so has technical guidance. While bikeway design guidance in California, in particular, has traditionally come from the State, especially Caltrans and the California *Manual on Uniform Traffic Control Devices* (CA MUTCD), cities are increasingly turning to national organizations for guidance on best practices. These are primarily the American Association of State Highway and Transportation Officials (AASHTO), the National Association of City Transportation Officials (NACTO) and the Federal Highway Administration (FHWA).

Fortunately for California cities, there is increased flexibility in design guidance offered by both Caltrans and the FHWA. In 2014, Caltrans officially endorsed the NACTO *Urban Street Design Guide and Urban Bikeway Design Guide* as valuable toolkits for designing and constructing safe, attractive streets for all users. California cities may also apply for experimental designation from the FHWA for projects not in conformance with the CA MUTCD.

The creation of more Complete Streets is supported by these manuals’ guidance, as well as by several pieces of important legislation. The following section provides a review of the state of practice for walking and bicycling infrastructure, particularly the AASHTO and NACTO guides. It also includes a discussion on Routine Accommodation, as well as summaries of relevant legislation at the local, regional, State, and national levels.

Infrastructure design improvement recommendations described later in this BPMP borrow heavily from the AASHTO *Guide to Bicycle Facilities* and the NACTO *Urban Bikeway and Urban Street Design Guides*, particularly for guidance on “innovative” infrastructure. The FHWA supports using these resources to further develop bicycling and walking transportation networks, particularly in urban areas. Bicycle master plan compliance with applicable guidelines and standards is also required by California *Street and Highways Code Section 891.2* and most grant programs.



Caltrans Highway Design Manual - Chapter 1000 – Bikeway Planning and Design

This reference has long been the official resource for bikeway planning and design in California, but now largely represents the minimum standards required for specific bikeway infrastructure types. Senate Bill 1 (*Road Repair and Accountability Act*) includes a provision for Caltrans to update the Highway Design Manual to incorporate “Complete Streets” design concepts.

AASHTO Guide to Bikeway Facilities

This memorandum expresses FHWA support for taking a flexible approach to bicycle and pedestrian infrastructure design. The AASHTO bicycle and pedestrian design guides are the primary national resources for planning, designing, and operating bicycle and pedestrian infrastructure. The NACTO *Urban Bikeway Design Guide* and the Institute of Transportation Engineers (ITE) *Designing Urban Walkable Thoroughfares* guide builds upon the flexibilities provided in the AASHTO guides, which can help communities plan and design safe and convenient walking and riding infrastructure.

NACTO Urban Bikeway and Urban Street Design Guides

The NACTO guides represent the industry standard for innovative bicycle and walking infrastructure and treatments in the United States. In 2014, Caltrans followed AASHTO and officially endorsed the NACTO *Urban Street Design Guide* and *Urban Bikeway Design Guide* as valuable toolkits for designing and constructing safe and attractive streets. At the time, Caltrans was only the third State Department of Transportation to officially endorse the Guides. It is important to note that virtually all of the bikeway guide’s design treatments (with two exceptions) are permitted under the Federal MUTCD. The NACTO *Urban Street Design Guide* is the more generalized of the two guides and organized into six sections. Each section is further subdivided, depending on topic. The NACTO *Urban Bikeway Design Guide* is also organized into six sections, but its information is bicycle-specific. For each section, it offers three levels of guidance: Required Features, Recommended Features, and Optional Features.

NACTO Transit Street Design Guide

As transit starts to gain a more prominent role in cities, more people are using buses, streetcars, and light rail than ever before. As a result, street design is shifting to give transit the space it deserves. The NACTO *Transit Street Design Guide* provides guidance for the development of transit infrastructure on streets, as well as for prioritizing transit, improving its service quality, and to support other related goals.

The majority of design elements included in this guide are consistent with MUTCD standards, including signage, markings, and signal elements that have received interim approval. These guidelines were developed using other design guidance as a basis, along with city case studies, best practices, research, and evaluation of existing designs, and professional consensus.

NACTO Urban Street Stormwater Guide

The NACTO *Urban Street Stormwater Guide* provides guidance on how to create resilient cities that are better prepared for climate change, while creating public spaces that deliver social and economic value. This guide focuses on green infrastructure within urban streets, including the design and engineering of stormwater management practices that support and improve mobility. It also intends to reduce the impacts of runoff and human activity on natural ecological processes.

One of the main goals of this guide is to encourage interdepartmental partnerships around sustainable infrastructure, which includes communicating the benefits of such projects. However, this guide does not address stormwater management strategies on private property, nor does it address drainage and infiltration around controlled-access highways.

APPLICABLE LEGISLATION

Several pieces of legislation support increased bicycling and walking in the State of California. Much of the legislation addresses greenhouse gas (GHG) reduction and employs bicycling and walking as means to achieve reduction targets. Other legislation highlights the intrinsic worth of bicycling and walking and treats the safe and convenient accommodation of bicyclists and pedestrians as a matter of equity. The most relevant legislation concerning bicycle and pedestrian policy, planning, infrastructure, and programs are described in the following section.

STATE LEGISLATION AND POLICIES

AB-32 California Global Warming Solutions (2006)

This bill calls for the reduction of greenhouse gas emissions and codifies the 2020 emissions reduction goal. This act also directs the California Air Resources Board to develop specific early actions to reduce greenhouse gases while also preparing a scoping plan to identify how best to reach the 2020 limit.

AB-390 Pedestrian Crossing Signals (2017)

AB-390 was signed by the governor in October 2017. Under the previous state law, it was illegal to step into a crosswalk if the countdown timer was counting down—even if the person crossing the street had enough time to make it to the other side before the traffic light changed. The new bill allows a pedestrian facing a flashing “DON’T WALK” or “WAIT” or approved “Up-raised hand” symbol with a “countdown” signal to proceed so long as a pedestrian completes the crossing before the display of the steady “Don’t Walk” or “Wait” or “upraised hand” symbol when the countdown ends..

AB-902 Traffic Violations and Diversion Programs (2015)

Existing law provides that a local authority may not allow a person who has committed a traffic violation under the Vehicle Code to participate in a driver awareness or education program as an alternative to the imposition of those penalties and procedures, unless the program is a diversion program for a minor who commits an infraction not involving a motor vehicle and for which no fee is charged.

This bill allows any person of any age who commits an infraction not involving a motor vehicle to participate in a diversion program that is sanctioned by local law enforcement. The bill eliminates the requirement that such a program charge no fee.

AB-1096 Electric Bicycles as Vehicles (2015)

This bill clarifies electric bicycle (e-bike) status in California as those with fully operable pedals and an electric motor of less than 750 watts. It establishes three classes of electric bicycles based on their motor speed and level of electric assist:

Class 1 e-bike, or low-speed pedal-assisted electric bicycle, is equipped with a motor that provides assistance only when the rider is pedaling and that stops providing assistance when the bicycle reaches 20 mph.

Class 2 e-bike, or low-speed throttle-assisted electric bicycle, is equipped with a motor that can exclusively propel the bicycle and that cannot provide assistance above 20 mph.

Class 3 e-bike, or speed pedal-assisted electric bicycle, is equipped with a motor that provides assistance only when the rider is pedaling and stops providing assistance when the bicycle reaches 28 mph.

E-bike operators do not need a driver's license, registration or license plate, but must abide by existing traffic laws. While Classes 1 and 2 are considered legal on streets and trails, Class 3 e-bikes are prohibited from paths, lanes, and trails unless specifically authorized by a local ordinance. Class 3 e-bikes operators must be 16 or older and wear a helmet.

AB-1193 Bikeways (2014)

This bill amends various code sections, all relating to bikeways in general, specifically by recognizing a fourth class of bicycle infrastructure, cycle tracks. However, the following may be even more significant to future bikeway development:

Existing law requires Caltrans, in cooperation with county and city governments, to establish minimum safety design criteria for the planning and construction of bikeways, and requires the department to establish uniform specifications and symbols regarding bicycle travel and traffic related matters. Existing law also requires all city, county, regional, and other local agencies responsible for the development or operation of bikeways or roadways to utilize all of those minimum safety design criteria and uniform specifications and symbols.

This bill revised these provisions to require Caltrans to establish minimum safety design criteria for each type of bikeway and also authorized local agencies to utilize different minimum safety criteria if adopted by resolution at a public meeting.

AB-1218 California Environmental Quality Act Exemption: Bicycle Transportation Plans (2017)

According to the Civil Code, Section 15262, Feasibility and Planning Studies:

"A project involving only feasibility or planning studies for possible future actions which the agency, board, or commission has not approved, adopted, or funded does not require the preparation of an EIR or Negative Declaration but does require consideration of environmental factors. This section does not apply to the adoption of a plan that will have a legally binding effect on later activities. Association of Environmental Professionals 2014 CEQA Guidelines 229."

AB-1218 extends CEQA exemptions for bicycle transportation plans for an urbanized area until January 1, 2021. These exemptions include restriping of streets and highways, bicycle parking and storage, signal timing to improve street and highway intersection operations, and related signage for bicycles, pedestrians, and vehicles under certain conditions. It exempts projects consisting of restriping of streets and highways for bicycle lanes in an urbanized area that are consistent with a bicycle transportation plan under certain conditions.

Planning projects such as this BPMP are generally exempt from CEQA analysis since they are planning and conceptual recommendations. As individual recommendations move forward toward further design and implementation, the City will then need to determine if there are impacts for which additional environmental review may be necessary.

AB-1358 Complete Streets (2008)

This bill requires the legislative body of a city or county, upon revision of the circulation element of their general plan, to identify how the jurisdiction will provide for the routine accommodation of all users of the roadway including drivers, pedestrians, cyclists, individuals with disabilities, seniors, and public transit users. The bill also directs the OPR to amend guidelines for general plan circulation element development so that the building and operation of local transportation infrastructure safely and conveniently accommodate everyone, regardless of their travel mode.

AB-1371 Passing Distance/Three Feet for Safety (2013)

This bill, widely referred to as the “Three Foot Passing Law,” requires drivers to provide at least three feet of clearance when passing cyclists. If traffic or roadway conditions prevent drivers from giving cyclists three feet of clearance, they must “*slow to a speed that is reasonable and prudent*” and wait until they reach a point where passing can occur without endangering the cyclist. Violations are punishable by a \$35 base fine, but drivers who collide with cyclists and injure them in violation of the law are subject to a \$220 fine.

AB-1581 Bicycle and Motorcycle Traffic Signal Actuation (2007)

This bill defines a traffic control device as a traffic-actuated signal that displays one or more of its indications in response to the presence of traffic detected by mechanical, visual, electrical or other means. Upon the first placement or replacement of a traffic-actuated signal, the signal would have to be installed and maintained, to the extent feasible and in conformance with professional engineering practices, so as to detect lawful bicycle or motorcycle traffic on the roadway. Caltrans has adopted standards for implementing the legislation.



California Bicycle Coalition Three Feet Passing for Safety Education Logo

SB-1 Road Repair and Accountability (2017)

This bill was drafted to address California’s significant funding shortfall in maintaining the state’s multi-modal transportation network, which is considered the state’s economic backbone and critical to quality of life. It is specifically intended to direct increased revenue to the state’s highest transportation needs, while fairly distributing the economic impact of increased funding across all user types.

SB-1 increases several taxes and fees to raise over \$5 billion annually in new transportation revenues, prioritizing funding towards maintenance and rehabilitation and safety improvements on state highways, local streets, and roads, and bridges and to improve the state’s trade corridors, transit, and active transportation infrastructure. Once fully implemented, approximately \$1.5 billion per year in new revenue is earmarked for local streets and roads maintenance and rehabilitation and other eligible uses, including Complete Streets projects.

In addition to augmenting the Active Transportation Program by \$100 million per year, SB 1 requires that Caltrans update the Highway Design Manual to incorporate “Complete Streets” design concepts.

SB-375 Redesigning Communities to Reduce Greenhouse Gases (2008)

This bill seeks to reduce vehicle miles traveled through land use and planning incentives. Key provisions require the larger regional transportation planning agencies to develop more sophisticated transportation planning models, and to use them for the purpose of creating “preferred growth scenarios” in their regional plans that reduce greenhouse gas emissions. The bill also provides incentives for local governments to incorporate these preferred growth scenarios into the transportation elements of their general land use plans.

SB-672 Traffic-Actuated Signals: Motorcycles and Bicycles (2017)

This bill extends indefinitely the requirement to install traffic-actuated signals to detect lawful bicycle or motorcycle traffic on the roadway. By indefinitely extending requirements regarding traffic-actuated signals applicable to local governments, this bill would impose a state-mandated local program. Existing law requires the state to reimburse local agencies and school districts for certain costs mandated by the state.

SB-743 CEQA Reform (2013)

For decades, vehicular congestion has been interpreted as an environmental impact. Projections of degraded Level of Service (LOS) has, at a minimum, driven up project costs and, at a maximum, precluded projects altogether, particularly on-street bicycle projects.

SB-743 removes the requirement of LOS as a measure of vehicle traffic congestion that must be used to analyze environmental impacts under the California Environmental Quality Act (CEQA). This is important because adequately accommodating bicyclists, particularly in built-out environments, often requires reallocation of right-of-way, and the potential for increased vehicular congestion. The reframing of LOS as a matter of driver inconvenience, rather than an environmental impact, forces planners to assess the impacts of transportation projects differently and may help to support active transportation projects that improve mobility for all roadway users. For example, as of November 2017, California state agencies stopped using LOS to measure environmental impacts in lieu of Vehicle Miles Traveled (VMT).

SB-760 Transportation Funding: Active Transportation: Complete Streets (2017)

This bill established a Division of Active Transportation within Caltrans to give attention to active transportation program matters to guide progress toward meeting the department’s active transportation program goals and objectives. This bill requires the California Transportation Commission (CTC) to give high priority to increasing safety for pedestrians and bicyclists and to the implementation of bicycle and pedestrian infrastructure. The bill also directs the department to update the Highway Design Manual to incorporate “Complete Streets” design concepts, including guidance for selection of bicycle infrastructure.

Caltrans’ Deputy Directive 64-R1

Deputy Directive 64-R1 is a policy statement affecting Caltrans mobility planning and projects requiring the agency to: “...provide for the needs of travelers of all ages and abilities in all planning, programming, design, construction, operations, and maintenance activities, and products on the State highway system. The Department (Caltrans) views all transportation improvements as opportunities to improve safety, access, and mobility for all travelers in California and recognizes bicycle, pedestrian, and transit modes as integral elements of the transportation system.” The directive goes on to describe the environmental, health and economic benefits of more Complete Streets.

FEDERAL LEGISLATION

S-2004/HR-2468 Safe Streets Act (2014)

HR2468 encourages safer streets through policy adoption at the state and regional levels, mirroring an approach already being used in many local jurisdictions, regional agencies and states governments. The bill calls upon all states and metropolitan planning organizations (MPOs) to adopt Safe Streets policies for federally funded construction and roadway improvement projects within two years. Federal legislation will ensure consistency and flexibility in road-building processes and standards at all levels of governance.

COMPLETE STREETS AND ROUTINE ACCOMMODATION

A Complete Street is one designed and operated to provide safe access for all users, including pedestrians, bicyclists, vehicle drivers, and transit riders of all ages and abilities. Complete Streets make it easy to cross the street, to walk to shops, and to bicycle to work. They allow buses to operate efficiently and make it safer for people to walk to and from transit locations.

An adopted Bicycle and Pedestrian Master Plan provides a road map to support planning and implementing a bicycle and pedestrian network, can help to integrate bicycle and pedestrian planning into broader planning efforts, and is required for State funding of active transportation projects.

For many cities, however, a bicycle and pedestrian plan alone is not enough to ensure the implementation of the plan's goals and projects. A hurdle many cities face is that their various plans are not well integrated. Despite many cities' attempts to support a "Complete Streets approach," entrenched and often contradictory policies can make implementation difficult. For instance, a Bicycle and Pedestrian Master Plan, an ADA transition plan, and a specific plan may address the same area, but ignore each other's recommendations. One plan may identify a certain project, but it may not be implementable due to prevailing policies and practices that prioritize vehicular flow and parking over other modes.

An adopted Complete Streets policy has the potential to address these shortcomings through the designation of some important corridors as Complete Streets, accommodating all roadway users, and other corridors as priority corridors for certain modes. A system that assigns priority for different modes to specific corridors, offset from one another, is referred to as a layered network.

Implementing Complete Streets policy often addresses increased flexibility to allow for the creation of a more balanced transportation system. In the case of a Bicycle and Pedestrian Master Plan, the network identified could become the bicycle and pedestrian layers. Identification in such a plan, reiteration within

a Complete Streets policy framework and exemption from traditional traffic analyses can make implementation more likely and much more affordable.

Legislative support for Complete Streets can be found at the State level (AB-1358) and is being developed at the national level (HR-2468). As noted in the previous section on applicable legislation, AB-1358 requires cities and counties to incorporate Complete Streets in their general plan updates and directs the State Office of Planning Research (OPR) to include Complete Streets principles in its update of guidelines for general plan circulation elements.

Examples of best practices in Complete Streets policies from around the United States can be found at: <https://smartgrowthamerica.org/resources/elements-complete-streets-policy/>.

BICYCLING AND WALKING BENEFITS

Numerous economic, environmental, and health benefits are attributed to bicycling and walking, especially as a substitute for driving a vehicle. Neighborhoods become more desirable when traffic slows down and residents have more transportation choices. Businesses can encourage shopping among loyal, local customers by making bicycling and walking there more appealing. Individuals benefit from increased levels of fitness and health that result in real cost savings, such as employers having employees who miss fewer days of work.

The following sections summarize benefits derived from research by the Pedestrian and Bicycle Information Center (PBIC) and Active Living Research (ALR).

ENVIRONMENTAL BENEFITS

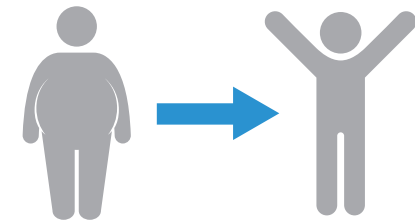
In California, 40 percent of carbon dioxide (CO₂) emissions are produced by the transportation sector. While CO₂ is not the most harmful greenhouse gas, it is the most abundant. Even after accounting for other greenhouse gases' global warming potentials (comparing them in terms of CO₂), 95 to 99 percent of vehicle emissions are CO₂. The Environmental Protection Agency (EPA) found that the average vehicle emits 0.95 pounds of CO₂ per mile, which means that almost a pound of carbon dioxide emissions could be avoided for every mile a person traveled by switched from driving to an active transportation mode like bicycling or walking.

⁽³⁾<https://www.ncbi.nlm.nih.gov/pubmed/22608371>

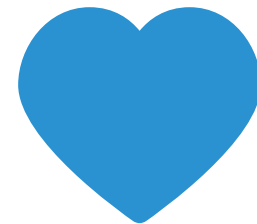
HEALTH BENEFITS

Despite dramatic strides in recent decades through regulations and technological improvements, vehicle emissions still pose a significant threat to air quality and human health. Vehicle-generated air pollution contains harmful greenhouse gas emissions, including carbon dioxide, carbon monoxide, methane, nitrous oxide and volatile organic compounds. These pollutants and irritants can cause asthma, bronchitis, pneumonia and decreased resistance to respiratory infections. Taking steps to reduce these emissions is particularly important in the United States, which leads the world in petroleum consumption. Converting vehicular trips to walking or bicycling trips is an opportunity to help reduce emissions and improve public health.

In addition to the universal public health benefits, such as improved air quality described above, walking and bicycling have the potential to positively impact personal health. A significant percentage of Americans are overweight or obese and recent projections indicate that 42 percent of the population will be obese by 2030.⁽³⁾ To combat this trend and prevent a variety of diseases and their associated societal costs, the Centers for Disease Control and Prevention (CDC) suggest 30 minutes of moderate intensity physical activity five days per week minimum. Not only does walking and bicycling qualify as "moderate intensity activity," they can also be seamlessly integrated into daily routine, especially for utilitarian purposes like commuting or running errands.



Active commuters lose an average of 13 lbs in their first year of cycling to work



Lower your risk of heart disease by

50%

Other health benefits associated with moderate activity, such as walking and bicycling, include improved strength and stamina through better heart and lung function. Regular exercise reduces the risk of high blood pressure, heart attacks, and strokes. In addition to heart disease, regular exercise can also help to prevent other health problems such as non-insulin dependent diabetes, osteoarthritis, and osteoporosis. Lastly, exercise has been shown to improve mental health by relieving depression, anxiety, and stress symptoms.

ECONOMIC BENEFITS

Bicycling and walking infrastructure and programs have increasingly been shown to deliver economic benefit to both individuals and society at large. The benefits of walking and bicycling may, in fact, outweigh their costs, especially when they can supplant the need for a car for all trips, or at least the need for more than one car. Besides the upfront cost of buying and operating a car are ongoing maintenance, insurance, and often parking costs. According to the American Automobile Association, the annual cost of owning a car and driving 15,000 miles a year is now just over \$9,000.

Increased walking and bicycling also translates to health-related savings, for both individuals and taxpayers, in the form of less need for preventative care. Converting even a fraction of automobile trips to bicycling or walking trips can create significant transportation-related savings as a result of reduced vehicle traffic congestion.

Bicycling's health benefits can also have a powerful economic impact. The City of Portland, Oregon determined that its residents could save between \$388 and \$594 million in individual health care costs by 2040, directly attributable to the city's increased investment in bike infrastructure and that health care cost savings and fuel savings over time amply justified investments in bicycling infrastructure and promotion, yielding benefit-cost ratios as high as 3.8 to 1.⁽⁴⁾ Additionally, accounting for lives saved from a reduction in deaths using value of statistical life, as is commonly done for transportation planning, further increased the benefits-cost ratio. The researchers felt that including other less easily monetizable benefits, such as less spending on motor vehicles and less time needed for additional exercise, would easily further bolster the economic case for bicycling investments.



Source: American Automobile Association

Investments in bicycling and walking infrastructure have been shown to make good economic sense as a cost-effective way to enhance shopping districts and communities, generate tourism, and support businesses. Studies indicate that more bicycling and walking increases commercial and residential property values and retail sales. For example, shoppers who reach their destination by bicycle have been shown to make smaller purchases, but shop more often and to spend more money overall. Shoppers who arrive by bicycle or on foot, by virtue of their more limited range, are also more likely to support local businesses, and serving a bicyclist or pedestrian does not require the relatively costly provision of a vehicle parking spot.

Bicycle Friendly America Program

The League of American Bicyclists' (LAB) Bicycle Friendly America Program provides a practical blueprint and guidance through hands-on assistance and resources to help states, communities, universities, and businesses to make places better for bicycling.

The LAB's Bicycle Friendly Business Program (BFB) is based on the League's belief that bicycles are good for businesses, employees, and the community. BFBs are recognized for their efforts through an award system based on essential elements to being bicycle friendly: Engineering, Education, Encouragement, Enforcement, Equity, and Evaluation and Planning. All BFB applicants receive feedback to help them become more bike-friendly, and all awarded BFBs must renew every four years to maintain the designation.

⁽⁴⁾ <https://www.ncbi.nlm.nih.gov/pubmed/21350262>

Bicycle Friendly Business Districts

Encouraging people to come to commercial corridors on foot, bicycle, or transit can effectively increase local economic activity, and reduces GHGs and VMTs. Bicycle Friendly Business Districts (BFBDs) encourage and incentivize residents and visitors to make local trips by bike, on foot, or via transit, as organized areas of shops and restaurants that cooperatively integrate bicycling into their business district's operations, events, and promotions. In San Diego, participating businesses offer discounts to customers who arrive by bicycle and identify themselves with a distinctive window sticker.

BFBDs enhance services and amenities for bicyclists, walkers, and transit riders within business districts and commercial corridors through partnerships with local governments, businesses, residents, and community groups. For businesses, a BFBD can mean more customers, increased sales, happier employees, and more parking options for visitors. For residents, BFBDs help create healthier, safer, and more attractive neighborhoods. For local governments, they can help reduce congestion, improve public health, and help spur economic activity. BFBDs incentivizing customers to bicycle instead of drive also opens up parking and minimizes the need to build more. This is good for taxpayers because car parking is considerably more expensive to build and maintain than bicycle parking. Provided bicycle parking (racks, corrals, and valets) is free for customers, business owners, and employees and conveniently located in front of businesses. Some BFBDs offer participating businesses free bicycle racks.

Bicycle Tourism

For a coastal community and climate like Goleta's, bicycle tourism has a significant potential positive impact. Bicycling is popular across America, and communities that have fostered that popularity by providing bicycle infrastructure for transportation and recreation have seen considerable economic benefits by attracting businesses, tourism, and active residents.

A well-known example of bicycle tourism's impact on a regional economy is North Carolina's Outer Banks, where it generates \$60 million in economic activity. This means that one-time investment of \$6.7 million in bicycle infrastructure has resulted in an annual nine-to-one return. The types of visitors drawn to bicycle on the Outer Banks also contribute with their ability to spend money. Survey results show that bicycle tourists tend to be affluent (half earn more than \$100,000 a year), and educated (40 percent have an advanced degree). It is important to note that the quality of bicycling has been shown to directly influence vacation planning. More than half of Outer Banks survey respondents said bicycling had a strong influence on their decision to return to the area.

Besides bicycle tourism, organized rides and races often draw thousands of people to host communities. Current local examples include the Amgen Tour of California and the AIDS LifeCycle Ride. Once there, riders and their friends and family need food and lodging, and often need ride-related supplies, all of which help boost the local economy.

SOCIAL JUSTICE AND EQUITY

DISADVANTAGED COMMUNITIES AND EXPANDED MOBILITY CHOICE

Bicycle and pedestrian planning also needs to address social justice issues. Research shows that disadvantaged communities face everyday conditions that make mobility more difficult than affluent communities. Bicycle and pedestrian planning has to be approached from a holistic manner and provide expanded mobility choice for all community members, regardless of their background.

There are numerous reports, such as AASHTO's 2013 *Commuting in America* publication, that shows that people of color living in disadvantaged communities (DACs) are less likely to own a personal vehicle, so many have no option but to walk, bicycle, or use public transit for work, school, or other personal trips. Residents of DACs therefore walk or bicycle much more often out of necessity, and less for recreation.

In an effort to equitably address these issues, planning must prioritize disadvantaged neighborhoods whose residents suffer the highest risks of traffic collisions and who lack affordable, safe transportation options. This will enable residents of low-income communities of color to benefit the soonest from safe and convenient active transportation infrastructure. Engaging, educating, and encouraging residents in a meaningful manner will result in an active transportation network that equitably benefits all.

THE WAY FORWARD

Perhaps more compelling than reducing GHG emissions or combating the obesity epidemic is the benefits walking and bicycling have to offer in terms of quality of life. For longer distances, bicycling is increasingly seen as a fun, low-cost, healthy, and sustainable way of getting around. The same applies to walking for shorter trips.

How can we make it easier for any person to choose to walk or bicycle for his or her daily trips? Research shows a strong latent interest in bicycling among those who identify as “interested, but concerned.” These individuals do not identify themselves as “bicyclists,” but they do not necessarily need to do so to benefit from programs to encourage bicycling. While all segments of the population may be encouraged to ride, it is through the encouragement of this “interested, but concerned” population segment that the greatest gains in mode share will be made. The field of bicycle planning is being redefined toward this end.

Similarly, in an effort to re-position walking as a safe and commonplace transportation mode and increasing the number of people walking, attention needs to be shifted toward making it an easier, and perhaps even an unconscious, decision for any person to choose to walk instead of driving for their everyday trips. The physical improvements represented by Complete Streets have been shown to increase walking by creating a safer, more comfortable, low-stress streetscape environment that makes walking a pleasure.

