



TO: Mayor and Councilmembers

FROM: Robert Woodward and Masoud Mahmoud, Interim Public Works Director

CONTACT: James Winslow, Sr. Project Engineer

SUBJECT: Update on the Goleta Bicycle and Pedestrian Master Plan Project Number

9059

RECOMMENDATION:

Receive an update on the Goleta Bicycle and Pedestrian Master Plan.

BACKGROUND:

The City's General Plan/Coastal Land Use Plan (GP/CLUP) Transportation Element (TE 11.2) states that the City shall periodically prepare and adopt a Bicycle Transportation Plan (BTP) that addresses the required elements that comprise a Bicycle Transportation Plan, as identified in Section 891.2 of the California Streets and Highways Code (Attachment 1). The GP/CLUP states that the BTP shall be regularly reviewed and updated to respond to changing conditions and needs. The City uses the BTP as a reference document to support the pursuit and procurement of future grant funding for capital projects.

In February 2005, the City adopted an Interim BTP. This plan was essentially an administrative update of the County of Santa Barbara's original 1999 Bikeway Master Plan. No new significant projects were proposed in this interim plan and the plan met the California Streets and Highways Code requirements. In December 2009, the City amended the 2005 Interim BTP, essentially adding the Hollister Avenue Class I Bike Path to the list of proposed priority projects. City Council has not revisited the BTP since the 2009 amendment.

A Bicycle and Pedestrian Master Plan (BPMP) is listed in both the Santa Barbara County Association of Governments' (SBCAG) 2040 Regional Transportation Plan/Sustainable Communities Strategy and the Regional Active Transportation Plan. This BPMP will replace the current Interim BTP, fulfill the requirements GP/CLUP and the California Streets and Highways Code, and provide a clear strategy for future projects. The BPMP combines bicycle and pedestrian components into one master planning document, thereby incorporating pedestrian modes of travel into a document that

previously focused only on bicycle modes of travel. This format is more in keeping with the Complete Streets philosophy of planning for a balanced, multimodal transportation network that meets the needs of all users of streets, roads, and highways for safe and convenient travel in a manner that is suitable to the City. The BPMP will list future bicycle and pedestrian projects, identify gaps in the network, provide recommended infrastructure improvements and/or identify barriers to regional bikeway connectivity. These gaps and barriers can significantly affect the community's access to bike lanes, places of employment, and transit centers. The BPMP will also incorporate the new Caltrans Active Transportation Plan requirements for active transportation plans, which expands upon the previous California Streets and Highways Code Section 891.2 by adding six new requirements for active transportation plans to be compliant or will be brought into compliance with the Complete Streets Act, AB 1358 (Chapter 657, Statutes of 2008) and be competitive for funding (Attachment 1).

On May 17, 2016, Council authorized a Professional Services Agreement with KTU&A for a total amount not to exceed \$220,000 with a termination date of December 31, 2018. On December 5, 2017, Council authorized Amendment No. 1 to the KTU&A Agreement (No. 2016-045) for an additional \$75,000 for expanded project scope including: coordinating with the Complete Streets project, evaluating Fairview Avenue and Storke Road corridors, additional meetings and presentations, and additional analysis. Council also received an update on the BPMP at the December 5, 2017, Council meeting as part of the Bicycle Capital Improvement Program Project Update. A table outlining the history of Council and staff actions, Technical Advisory Committee (TAC) meetings, and public meetings is provided as Attachment 2.

The consultant team has completed the initial data gathering, analysis, public outreach (online survey), assessment, matrix methodologies, and initial ranking. The team has also completed an initial draft of the potential list of improvements, vision, policies, and draft BPMP Chapters 1 through 4 (Attachment 3). The consultant team is currently working on incorporating staff, TAC, public, and future Council comments and revisions to the draft plan, including the policy recommendations. The consultant team is also working on Phase II of the project which includes creating the City's street and roadway design standards. Staff will return to Council with a draft of the street and roadway design standards.

The BPMP is funded through two grants – a State Department of Conservation, Division of Land Resource Protection Sustainable Communities Planning Grant in the amount of \$203,415 and a local Measure A Grant in the amount of \$73,350.

DISCUSSION:

Staff is providing an update to Council to present the draft BPMP based upon input from the consultant, staff, TAC, and public comments. This is the first step towards developing and approving the final BPMP. For discussion purposes and completeness, the draft BPMP, as presented, includes proposed language collected through the initial process. Staff will collect all input, analyze comments, refine the document, and present a recommended draft document to Council in the summer 2018. Next steps include

more public comment, workshops, TAC meetings, presentations to Planning Commission, and future Council meeting.

The draft BPMP includes the current status, public outreach, and draft BPMP document in conformance with the Grant objectives. The goal of the City's BPMP is to encourage the development of an integrated bicycle and pedestrian system throughout the City of Goleta with connections to other regional bike systems. The existing Interim BTP does not include an updated list of projects, current next generation mobility planning, or a formal pedestrian planning component. In essence, it does not meet the current requirements. The BPMP will incorporate these items into the final planning document. In developing the BPMP, the TAC team developed a draft Vision Statement and employed the goals and objectives identified in the Sustainable Communities Planning Grant (listed below).

The City's General Plan Vision Statement (from the General Plan/Coastal Land Use Plan, pg 1-2, bullet no. 13) state's the following:

Goleta's Vision: The Good Land.

This General Plan/Coastal Land Use Plan builds on Goleta's current distinguishing qualities and character by envisioning the future city as a community:

• Where all forms of transportation, including walking, bicycling, bus transit, and automobile, operate efficiently and safely.

Building upon this vision from the General Plan, the TAC team developed a BPMP draft 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 pedestrian thoroughfares that provide equitable benefits to all road users.

The BPMP goal will be accomplished using the following four key elements:

- 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 alternative transportation projects including identifying the need in disadvantaged communities such as Old Town, family friendly routes, and a tiered bicycle network that would serve experienced riders and less experienced riders;
- Incorporating bicycle and pedestrian design guidance into City street standards that can be applied to a typology of different streets and provide for a sustainable community; and
- 4) Encouraging the use of walking and biking as viable alternative modes of transportation.

The City's Sustainable Communities Planning grant application lists three primary objectives that are being used to evaluate meeting the goals identified in the grant. The three primary objectives include the following:

- 1. Promote Public Health,
- 2. Reduce Automobile Usage and Fuel Consumption, and
- 3. Promote Equity.

Each primary objective includes corresponding indicators, data source, indicator baseline, grant-term milestones, implementation milestones, and anticipated outcomes. Staff will use the indicators and metrics to determine meeting the grant goals and objectives.

Public Workshops and Outreach

Staff developed the Community Outreach Plan (Outreach Plan) to ensure successful completion of the BPMP. The Outreach Plan has four goals:

- 1) Encourage participation at our public workshops,
- 2) Encourage residents to complete the online survey,
- 3) Provide meaningful opportunities for community input, and
- 4) Deliver clear and consistent messages in the community.

Messaging includes encouraging those who work and live here to walk and bike in Goleta; communicating that together we will improve safety and reduce gaps in the network; prioritizing projects based on community input and support; reducing greenhouse gas emissions; and promoting public health and transportation equity. The Outreach Plan is geared towards Goleta residents, businesses, UCSB faculty, staff and students, and users of the facilities (individuals outside the City limits). Staff implemented the Outreach Plan and is successfully engaging the community, local agencies, non-profits, and community organization groups throughout this process. Based on the data below, the team is successful in meeting the goals identified in the Outreach Plan.

Staff has held twelve public meetings, workshops, and outreach events, five City meetings, and five TAC meetings that have been open to the public (Attachment 1). Public participation has so far been very successful and well received by the Community. Over 2,500 comments have been received on the BPMP, of those, 1,617 were survey responses received in both electronic and hard copy format during the formal public comment period between October 2016 and February 2017. Additionally, staff received numerous comments directly to the printed maps at the public meetings and workshops. Comments continue to come in at commission and TAC meetings, via email, and YouTube videos. This response far exceeds any past outreach event and anything the consultant has experienced. The survey and continued community engagement has been a huge outreach success for the City of Goleta with a total population of approximately 30,000.

The first two community events included a booth at the Lemon Festival on September 24, 2016 and the Farmer's Market on September 25, 2016 hosted by staff and the consultant. These booths provided excellent opportunities to engage directly with attendees, present information, and collect opinions from locals and visitors in the area. Attendees marked up maps, provided comments and input, and took the survey either digitally or on paper. The consultant and staff team provided handouts with the link to the online survey and Quick Response (QR) code. This code eases future access for individuals who preferred to provide comments after the events. An estimated 175 people on September 24, 2016 and 75 people on September 25, 2016 stopped by the booths. Approximately 70 postcards that contain the link to the survey and online map were handed out.

The consultant, staff, and TAC team hosted three community workshops – two in early November 2016 at the Goleta Valley Community Center and at UCSB and one in early December 2016 at Encina Royale. The purpose of these workshops was to connect and engage with individuals living and working in Goleta and to broaden outreach and input on the plan. The workshops began with a brief presentation of the project that included 1) goals and purpose, 2) timeframes, 3) expectations, 4) next steps. After allowing time for questions and answers, staff then opened the meeting up to for an interactive public review and comment on the maps and figures. Staff had approximately ten (10) printed maps placed on tables around the room. The maps reflected the existing and planned walking and bicycling routes already identified in the City. Two maps of the entire City – one each for walking and bicycling – were available to mark-up. To help identify specific, smaller areas of concern, staff divided the City into four quadrants and maps of each quadrant were printed and available to mark-up – four maps each for walking and bicycling. Approximately 35-45 individuals showed up to each of the three workshops held in the fall. Spanish translation services were provided at workshops in Old Town.

Staff posted the online survey on the City's website on September 22, 2016. The Survey was closed on February 21, 2017. The online survey identified demographic information including whether a respondent is a resident, student, business owner, visitor, etc. The survey also included a link to an interactive GIS map. The map provided a supplemental method of input where users added location-specific issues. The survey was available in English and in Spanish.

The final survey results indicate that, of the 1,617 responses, almost 48% of respondents are Goleta residents. Almost 54% of respondents identify as male, and almost 50% checked that they are in the age range of 19-44 years. Almost 70% of the respondents indicated that they bike through Goleta as one of their travel means, while 51% indicated they walk, and almost 86% indicated that they drive (likely a walk or bike and drive combination). Overwhelmingly, the respondents reported they would like to see better bicycle and pedestrian facilities near shopping centers, Old Town Goleta, and parks and schools.

Staff also received almost 200 unique responses (not repeated) about barriers to walking more often for short trips, in addition to the two most checked major obstacles to walking: "sidewalks, paths or crossings are missing or in poor condition" and "need to

transport other people and things". For biking, respondents primarily indicated that they regularly bicycle for "leisure or fitness" and "to commute to work". Most indicated a typical distance of between 1-3 miles and 4-5 miles. Barriers to bicycling more often for short trips results in the top three major obstacles being: "Lack of and/or poor condition of bike facilities," "traffic too fast and heavy," and "need to transport other people and things." Approximately 145 unique responses were received to this question.

Unlike most surveys where anonymity is more common, approximately 31% of respondents provided their name and email address to stay informed about the project. This high percentage along with responses received and quality of the comments are significant in providing useful feedback and implies that public participation is high for this project.

Spanish translation services were provided at workshops in Old Town. Staff is continuing to receive and seek public comment on BPMP.

Project Branding and Communications

Staff, along with the consultant team, designed a branding initiative specific to Goleta. The initiative includes a logo and catch phrase that incorporate pedestrian as well as bicycling activities (see below).



Data Analysis

After the survey closed, the consultant analyzed the comments and entered them into a database. The consultant generated maps using Geographic Information Systems (GIS) showing the locations as a heat map of intensity which means that the greater the volume of comments at one location the darker the color. The consultant also analyzed all the background and other pertinent data. This includes such things as attractors, schools, reported collisions, gap closures identified, Safe Routes to Schools and Safe Routes for Seniors corridors, the public transportation network, and Census Bureau and federal statistics such as children under 14 years of age, seniors over 65 years of age, percent of the population that walks to work, households with no vehicles, and population and employment density. In addition to reviewing the previous interim Bicycle Transportation Plans from 2005 and 2009, the consultant also reviewed the sections of the General Plan that apply to walking and bicycling to ensure that the BPMP is consistent with the General Plan Transportation Element and other element policies.

Following the data analysis period, the consultant, staff, and TAC team held a follow-up workshop at the Goleta Valley Community Center on June 21, 2017. The purpose of this workshop was to present the results of the analysis of the existing data combined with the public comments and a preliminary list that identifies the short to intermediate

time frame potential improvements. Because the City received such strong public comments combined with data analysis, the consultant created a robust map of the City showing the areas of potential concern and comments.

The compilation of comments revealed that the area of Fairview Avenue, Calle Real, US 101 overcrossing area is in need of significant improvements. Staff identified this as the "Focus Area". In response to public inquiries, a list of approximately ten initial locations in the City showing potential improvements that could be made within a short-term to intermediate timeframe was provided including a list of the Capital Improvement Plan (CIP) projects that are already in the City's budget. During the outreach process, the City received comments regarding opportunities for improvements in areas that are outside the City boundaries. Staff is sharing those comments and feedback from the public outreach process regarding these potential areas of concern with our neighboring agencies – County of Santa Barbara, City of Santa Barbara, and UCSB. The City had approximately 20 members from the public attend the meeting. Spanish translation services were provided.

Following the June 21, 2017, meeting and in response to questions from the public meeting, staff revised the potential list of improvements from the top 10 prioritized short-term and intermediate list to include all the potential improvements. The Goleta Bicycle and Pedestrian Master Plan – Potential Improvements List is divided into five categories:

- 1) Public comments corresponding improvements,
- 2) Potential improvements proposed in the General Plan Transportation Element,
- 3) Planned improvements identified in the CIP,
- 4) Potential city-wide improvements (those such as street lighting and pavement maintenance applied city-wide), and
- 5) Long-term vision (future opportunities) projects.

The Potential Improvements List also summarizes the methodologies and weighting factors typically applied using GIS software to provide an initial potential improvement prioritization analysis ranking score – both weighed and non-weighted. These categories include the following factors:

- Safety assessment,
- Importance to the community score,
- Collisions.
- Gap closure potential
- An aggregate of the Census data,
- Proximity to schools,
- Proximity to seniors over 65, and
- Grant competitiveness.

Technical Advisory Committee

Staff invited members from the local adjacent agencies as well as non-profit groups to join the Project in two capacities. First, agencies and organizations such as the Santa Barbara Bicycle Coalition (SBBike), Coalition for Sustainable Transportation (COAST), and UCSB agreed to partner with the City on the Project by providing in-kind services towards the grant through staffing the workshops and assisting with the process. The second method is through participating on the TAC. The TAC is made up of members from the Goleta Public Works Department, Planning and Environmental Review Department, County of Santa Barbara, City of Santa Barbara, UCSB, SBBike, COAST, Santa Barbara Metropolitan Transit District (MTD), Santa Barbara County Association of Governments (SBCAG), Goleta Union School District Board, Goleta Chamber of Commerce, Traffic Solutions, Goleta Neighborhood Clinic, and community associations.

The City has held seven TAC meetings to date with two more planned in the coming months. Most of the TAC meetings were held in Council Chambers and were open to the public. The TAC's role is to provide comments and assistance reviewing the data, potential list of improvements, policies, and the draft BPMP. The consultant drafted the document outline which staff presented to the TAC for review and comment. Staff adjusted the document outline and reorganized the order slightly based on TAC and Planning Commission feedback. The master plan document outline includes the following: Vision, Goals, and Objectives; Relationships to Planning documents; Benefits of Walking and Bicycling; Community Input; Facility types; Current states of practice; Existing Conditions and Analysis; Recommendations; and Potential Future Funding Opportunities.

On November 16, 2017, and again on March 1, 2018, the TAC met to discuss the draft policies. During the previous months, the TAC had made recommendations on the format and content of the draft policies. The consultant and staff team reviewed and incorporated many of the recommended policies into the draft document. The consultant is compiling a matrix identifying how proposed policies compare with the City's General Plan and Zoning Ordinance, and identifying methods to address any potential conflict (e.g. potential General Plan Amendment, future Transportation Element update, not adopting the policy, etc.). The TAC also met on November 30, 2017, to review and discuss the draft chapters of the BPMP document. This meeting was open to the public. Staff provided agendas, the draft chapters, and the draft policy language to the TAC representatives in advance of the meetings.

Current Status

The consultant and staff team has prepared a draft BPMP that generally includes the following elements: vision, goals, scope, objectives, background and history, existing conditions and analysis, collision data, public outreach and summary, and recommendations. The recommendations include infrastructure options, proposed list of improvements, mapping, proposed policies, discussion of current Capital Improvement Program (CIP) bicycle and pedestrian budgeted projects, and future opportunities (especially along corridors).

Chapter 1 – Introduction

The BPMP draft Chapter 1 is a summary of the background, process, justification, legislation, and best practices. Many of these items are listed above and are part of the original Sustainable Communities Planning Grant application. Draft Chapter 1 identifies the scope, vision, goals, objectives, and study area of the BPMP. Chapter 1 provides a history of the City's bicycle and pedestrian network, connection to local (including references to applicable sections from the City's General Plan Transportation Element and Zoning Ordinance) and regional plans, current best practices, and applicable recent legislation. The chapter concludes with a discussion on the benefits of bicycling and walking, including environmental, health, economic, and social justice benefits.

Chapter 2 – Existing Conditions & Analysis

Draft Chapter 2 focuses on the existing conditions and analysis performed. The first half of the chapter discusses the existing and proposed land uses, activity centers, population, employment, median income, street classifications, traffic volumes, and mobility barriers (both perceived and actual). The chapter includes a section on transportation mode share and commuter mode splits. The rest of Chapter 2 focuses on the analysis of the data. The consultant used Geographic Information System (GIS) spatial analysis, fieldwork, and community and stakeholder input to perform the analysis. This multi-pronged approach allowed for maximum data capture and crossreferencing of findings. The analysis included reviewing existing bicycle and pedestrian infrastructure, planned and budgeted projects (listed in the City's CIP), a comparison of potential treatments, a review of bicycle and pedestrian collisions, and an analysis of the gaps in the current network. The consultant developed a Bicycle-Pedestrian Priority Model that identified where bicyclists and pedestrians are most likely to be. The model is comprised of three sub-models: Attractor (e.g. schools, employment centers, shopping), Generator (developed from demographic data such as population density or primary modes of transportation), and Barrier (physical barriers such as intersection or gaps or perceived barriers based on level of stress or perceived difficulty) Models.

Chapter 3 – Public Outreach

Draft Chapter 3 provides a discussion on the public outreach employed and results observed during the process. As noted above, the community input and engagement has been very high and the response thus far exceeds any outreach event in the past and anything the consultant has experienced. Staff continues to seek and incorporate community feedback on the project. The survey and continued community engagement has been a significant outreach success.

Chapter 4 – Recommendations

Draft Chapter 4 presents a discussion of the recommendations. This discussion includes infrastructure options, a proposed list of improvements, mapping of future improvements, proposed policies, a discussion of current Capital Improvement Program (CIP) bicycle and pedestrian budgeted projects, and future opportunities (especially along corridors). The chapter identifies conventional bicycle and pedestrian infrastructure options followed by newer enhanced options. The section includes the proposed draft list of improvements with an overarching discussion of long-term vision specifically for the City's corridors: Cathedral Oaks, Hollister Avenue, Calle Real,

Fairview Avenue, Los Carneros Road, Storke Road, and Cathedral Oaks Road/Winchester Canyon.

Based on the data analysis, community input, and TAC and staff recommendations, the consultant, staff, and TAC team identified 37 short-/intermediate-term projects. Staff ranked the list based on the prioritization and weighting factors identified above and presented in proposed list in the draft document. The factors include: safety, collision, corridor, importance to the community score, gap closure potential, an aggregate of the Census data, proximity to schools, proximity to seniors over 65, and grant competitiveness. In addition to the list of CIP bicycle and pedestrian projects, the list also includes a recommended list and discussion on long-term visionary projects (Visionary List). This Visionary List focuses on the City's east-west and north-south corridors and future options for improvements based on funding, available right-of-way, US 101 overcrossing replacement schedules, or unfortunate natural disasters that require rebuilding. The future opportunities provide a discussion of the "stress network" and recommendations to lower the level of stress along bicycling and walking networks.

The draft document includes a section on school-zone pedestrian improvements. Staff discusses the recommended improvements that could be implemented in a quarter-mile walkshed at each of the schools within the City boundaries. The schools include: Dos Pueblos High School, Goleta Valley Junior High, Brandon Elementary, Ellwood Elementary, Kellogg Elementary, La Patera Elementary, Santa Barbara Charter School, Montessori Center School, Waldorf School, St. Raphael Elementary, and Coastline Christian Academy.

Chapter 4 includes a discussion of the analysis and recommendations for bicycle and pedestrian integration with the public transit system. The analysis focused on Santa Barbara Municipal Transit District bus routes and stops as well as the Goleta Train Depot. Recommended improvements include removing gaps and barriers in the sidewalk network, bicycle lanes, and bicycle racks and storage.

Chapter 4 also provides a draft list of recommended policies and performance measures. The draft policies are based on input from the state of best practices, other local plans, consultant input based on observations and analysis, community and TAC members, and staff input and direction. Most of the policies are consistent and support the General Plan. A few of the draft policies may recommend revisions to the General Plan Transportation Element during the next update. Staff will present all potential General Plan challenges and recommendations to Council before approval of the final draft.

Phase II – Street Design Standards

The consultant is also working on Phase II of the project, which includes developing design guidelines for the City's streets and roadways. The updated City street design standards will provide direction and consistency specific to the City of Goleta to be used by staff, consultants, and developers when designing/redesigning the City's streets. This portion of the Project is funded primarily through local Measure A grant funds. This is anticipated to be completed by the winter of 2018.

Next Steps

Staff will hold a community workshop on Wednesday, April 4, 2018, from 5:30-7:00 pm at the Goleta Valley Community Center. The purpose of the meeting will be to present the draft BPMP to the community and seek comments and feedback. This workshop will present opportunities for refinement on the proposed draft plan. Staff will also hold a TAC meeting the afternoon of April 4, 2018, to discuss potential changes and refinement to the draft BPMP document prior to the community workshop.

Following the community meeting, staff will review and incorporate where feasible, comments and suggestions from Council, TAC, and the public. Staff will present the revised draft to the Planning Commission on April 9, 2018. Following the Planning Commission meeting, the consultant and staff team will refine the BPMP document and distribute it to the public for final review. Staff is planning to present the final draft BPMP to Council in early June for adoption.

FISCAL IMPACTS:

There are no fiscal impacts associated with the BPMP at this time.

ALTERNATIVES:

The purpose of this report is to update the City Council. There are no alternatives presented.

Reviewed By: Legal Review By: Approved By:

Carmen Nichols Michael Jenkins Michelle Greene
Deputy City Manager City Attorney City Manager

ATTACHMENTS:

- 1. California Streets and Highways Code 891.2 (a) through (k), and Active Transportation Plan Requirements, (a) through (q)
- 2. Table Outlining the History of Council, Technical Advisory Committee (TAC), and Public Meetings and Actions on the Project
- 3. Draft Bicycle and Pedestrian Master Plan Document

ATTACHMENT 1

California Streets and Highways Code 891.2 (a) through (k), and Active Transportation Plan Requirements, (a) through (q)

CALIFORNIA CODES STREETS AND HIGHWAYS CODE 891.2.

A city or county may prepare a bicycle transportation plan, which shall include, but not be limited to, the following elements:

- (a) The estimated number of existing bicycle commuters in the plan area and the estimated increase in the number of bicycle commuters resulting from implementation of the plan.
- (b) A map and description of existing and proposed land use and settlement patterns which shall include, but not be limited to, locations of residential neighborhoods, schools, shopping centers, public buildings, and major employment centers.
- (c) A map and description of existing and proposed bikeways.
- (d) A map and description of existing and proposed end-of-trip bicycle parking facilities. These shall include, but not be limited to, parking at schools, shopping centers, public buildings, and major employment centers.
- (e) A map and description of existing and proposed bicycle transport and parking facilities for connections with and use of other transportation modes. These shall include, but not be limited to, parking facilities at transit stops, rail and transit terminals, ferry docks and landings, park and ride lots, and provisions for transporting bicyclists and bicycles on transit or rail vehicles or ferry vessels.
- (f) A map and description of existing and proposed facilities for changing and storing clothes and equipment. These shall include, but not be limited to, locker, restroom, and shower facilities near bicycle parking facilities.
- (g) A description of bicycle safety and education programs conducted in the area included within the plan, efforts by the law enforcement agency having primary traffic law enforcement responsibility in the area to enforce provisions of the Vehicle Code pertaining to bicycle operation, and the resulting effect on accidents involving bicyclists.
- (h) A description of the extent of citizen and community involvement in development of the plan, including, but not limited to, letters of support.
- (i) A description of how the bicycle transportation plan has been coordinated and is consistent with other local or regional transportation, air quality, or energy conservation plans, including, but not limited to, programs that provide incentives for bicycle commuting.
- (j) A description of the projects proposed in the plan and a listing of their priorities for implementation.
- (k) A description of past expenditures for bicycle facilities and future financial needs for projects that improve safety and convenience for bicycle commuters in the plan area.

Source: California Streets and Highways Code (SHC), Article 3. California Bicycle Transportation Act.

Active Transportation Plan Requirements

An active transportation plan prepared by a city or county may be integrated into the circulation element of its general plan or a separate plan which is compliant or will be brought into compliance with the Complete Streets Act, AB 1358 (Chapter 657, Statutes of 2008). An active transportation plan must include, but not be limited to, the following components or explain why the component is not applicable:

- a) The estimated number of existing bicycle trips and pedestrian trips in the plan area, both in absolute numbers and as a percentage of all trips, and the estimated increase in the number of bicycle trips and pedestrian trips resulting from implementation of the plan.
- b) The number and location of collisions, serious injuries, and fatalities suffered by bicyclists and pedestrians in the plan area, both in absolute numbers and as a percentage of all collisions and injuries, and a goal for collision, serious injury, and fatality reduction after implementation of the plan.
- c) A map and description of existing and proposed land use and settlement patterns which must include, but not be limited to, locations of residential neighborhoods, schools, shopping centers, public buildings, major employment centers, and other destinations.
- d) A map and description of existing and proposed bicycle transportation facilities, including a description of bicycle facilities that serve public and private schools and, if appropriate, a description of how the five Es (Education, Encouragement, Enforcement, Engineering, and Evaluation) will be used to increase rates of bicycling to school.
- e) A map and description of existing and proposed end-of-trip bicycle parking facilities.
- f) A description of existing and proposed policies related to bicycle parking in public locations, private parking garages and parking lots and in new commercial and residential developments.
- g) A map and description of existing and proposed bicycle transport and parking facilities for connections with and use of other transportation modes. These must include, but not be limited to, bicycle parking facilities at transit stops, rail and transit terminals, ferry docks and landings, park and ride lots, and provisions for transporting bicyclists and bicycles on transit or rail vehicles or ferry vessels.
- h) A map and description of existing and proposed pedestrian facilities, including those at major transit hubs and those that serve public and private schools and, if appropriate, a description of how the five Es (Education, Encouragement, Enforcement, Engineering, and Evaluation) will be used to increase rates of walking to school. Major transit hubs must include, but are not limited to, rail and transit terminals, and ferry docks and landings.
- i) A description of proposed signage providing wayfinding along bicycle and pedestrian networks to designated destinations.
- j) A description of the policies and procedures for maintaining existing and proposed bicycle and pedestrian facilities, including, but not limited to, the maintenance of smooth pavement, ADA level surfaces, freedom from encroaching vegetation, maintenance of traffic control devices including striping and other pavement markings, and lighting.
- k) A description of bicycle and pedestrian safety, education, and encouragement programs conducted in the area included within the plan, efforts by the law

- enforcement agency having primary traffic law enforcement responsibility in the area to enforce provisions of the law impacting bicycle and pedestrian safety, and the resulting effect on collisions involving bicyclists and pedestrians.
- I) A description of the extent of community involvement in development of the plan, including disadvantaged and underserved communities.
- m) A description of how the active transportation plan has been coordinated with neighboring jurisdictions, including school districts within the plan area, and is consistent with other local or regional transportation, air quality, or energy conservation plans, including, but not limited to, general plans and a Sustainable Community Strategy in a Regional Transportation Plan.
- n) A description of the projects and programs proposed in the plan and a listing of their priorities for implementation, including the methodology for project prioritization and a proposed timeline for implementation.
- o) A description of past expenditures for bicycle and pedestrian facilities and programs, and future financial needs for projects and programs that improve safety and convenience for bicyclists and pedestrians in the plan area. Include anticipated revenue sources and potential grant funding for bicycle and pedestrian uses.
- p) A description of steps necessary to implement the plan and the reporting process that will be used to keep the adopting agency and community informed of the progress being made in implementing the plan.
- q) A resolution showing adoption of the plan by the city, county or district. If the active transportation plan was prepared by a county transportation commission, regional transportation planning agency, MPO, school district or transit district, the plan should indicate the support via resolution

A city, county, school district, or transit district that has prepared an active transportation plan may submit the plan to the county transportation commission or transportation planning agency for approval. The city, county, school district, or transit district may submit an approved plan to Caltrans in connection with an application for funds active transportation facilities which will implement the plan.

Source: Caltrans Local Assistance Program Guidelines: Chapter 22

ATTACHMENT 2

Table Outlining the History of Council, Technical Advisory Committee (TAC), and Public Meetings and Actions on the Project

List of Council, Technical Advisory Committee (TAC), and Public Meetings and Actions

Date	Action	Entity	Description
February 2005	City adopts Interim Bicycle Transportation Plan (BTP)	Council	Administrative update of the County of Santa Barbara's original 1999 Bikeway Master Plan.
December 2009	City amended the 2005 Interim BTP	Council	Adds the Hollister Avenue Class I Bike Path to the list of proposed priority projects.
June 2015	Execute State Department of Conservation, Sustainable Communities Planning Grant	Staff	Grant amount \$203,415.
December 2015	Applied for Measure A Grant for Supplemental funds	Staff	Grant amount \$73,350; Additional meetings, pop-up events and design standards.
May 17, 2016	Authorize a Professional Design Services Agreement with KTU&A	Council	Contract amount \$220,000.
July 13, 2016	Kick-off and initial Technical Advisory Committee (TAC) meetings (TAC #1)	Team	Project kick-off.
September 25-25, 2016	Pop-up workshops at Lemon Festival and Farmers' Market	Team	Two workshops.
October 3, 2016	Community Outreach Plan	Council	Description of the Community Outreach Plan.
October 2016 - February 2017	Online survey open	Team	Public survey
November/ December 2016	Workshops at Goleta Valley Community Center (GVCC), Univerity of California at Santa Barbara (UCSB), and Encina Royale	Team	Three workshops.
February 2017	TAC Meeting #2	Team	TAC meeting.
February - June, 2017	Data analysis, evaluation, and initial assessment	Team	N/A
May 6, 2017	Walking and Biking Tour of Old Town	Staff	Walking and biking tour and public input.
June 21, 2017	Public Workshop at GVCC	Team	Workshop on the summary of public comments, data analysis, and initial 10 improvements.
June 28, 2017	Parks and Recreation Commission update	Parks & Rec Commission	Update and receive input.
June - November, 2017	Draft documents - maps, potential improvements, policy, plan	Team	Ongoing drafts of potential list of improvements, visionary projects, mapping,

			policy language, and master plan document.
July 27, 2017	TAC Meeting #3	Team	TAC meeting.
August 30, 2017	Joint meeting with Complete Streets and Old Town Sidewalk Improvement Projects	Staff and consultants	Internal team coodination meeting.
August 30, 2017	TAC Meeting #4	Team	TAC meeting.
October 9, 2017	Planning Commission update	Planning Commission	Update and receive input.
November 2, 2017	City Open House	Team	Open House for public comment.
November 16, 2017	TAC Meeting #5 – policies	Team	TAC meeting specific to discussing the draft policies.
November 30, 2017	TAC Meeting #6 – draft plan	Team	TAC meeting on the draft master plan document.
December 5, 2017	Bicycle Capital Improvement Program Project Update	Council	Update on bicycle projects including the BPMP.
March 1, 2018	TAC Meeting #7 – draft policies and vision	Team	TAC meeting on the draft policies and vision.

ATTACHMENT 3

Draft Bicycle and Pedestrian Master Plan Document

INTRODUCTION

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 cycling 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 cycling and walking viable transportation options is also supported by several recent pieces of California legislation.

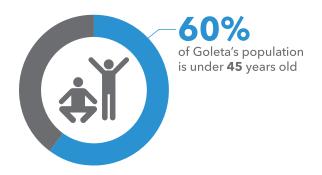
According to the US Public Interest Research Group, the average American drove six percent less in 2011 than 2004, and among young adults (16 to 34 year olds), car use plummeted 23 percent from 2001 to 2009. Diminished driving levels and increased preference for walkable, bikeable and transit-connected 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, biking 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.

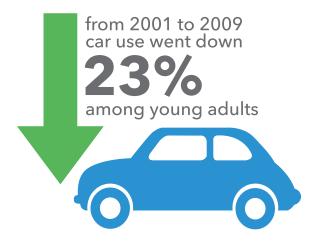
Reasons for this trend likely include a blend of what was until recently a relatively slack job market (i.e. unemployed people drive less), as well as an increased use of technology (i.e. virtual interaction has replaced some face-to-face interaction), and a changing culture (i.e. preference for cities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

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. 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. Decision makers should consider their community's demographic composition when making transportation decisions.

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 facilities. Many cities are addressing system gaps through re-striping streets to reallocate space to bicycle facilities, updating bicycle and trails master planning, and securing grants for facility construction.

There has also been a growing preference for new facility types that enhance bicyclist safety, particularly protected bicycle lanes that are 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 the use of walking and biking as viable modes of transportation.

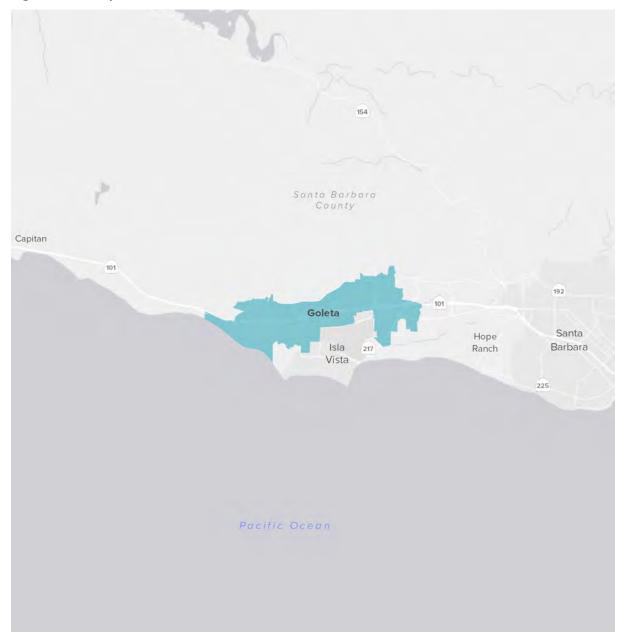


STUDY AREA

The study area is the City of Goleta, located on the Santa Barbara County coast, just west of the City of Santa Barbara, and primarily accessible by motor vehicle via California State Route 101, which bisects the city east to west. Also considered were neighboring communities and unincorporated areas where existing and proposed bicycling or walking connections offered opportunities for increased regional connectivity, particularly the City of Santa Barbara, Santa Barbara County and the University of California Santa Barbara (UCSB). 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 aerospace firms, along with UCSB. Goleta incorporated in 2002.

Figure 1-1: Study Area



VISION, GOALS & OBJECTIVES

VISION STATEMENT

Goleta is committed to walking and bicycling as safe, convenient, comfortable, and healthy transportation choices for people of all ages and abilities to access jobs, schools, and recreation.

PURPOSE AND NEED STATEMENT

The BPMP will provide many benefits to the communities served:

- (1) 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.
- (2) The BPMP will identify barriers, both actual and perceived, to biking and walking and provide opportunities through community outreach and improvement projects to correct the barriers and improve the network.
- (3) 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 meth-

ods are used and as the level of physical activity increases as a result of the system becoming more user friendly.

(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.

A relatively high percentage of Goleta's residents commute by bicycle, but where the climate is so favorable, why don't more people walk or bicycle, or allow their children to do so? The primary barrier to bicycling is widely perceived as the dangers of having to compete with motor vehicle traffic, and for many people, this makes driving simply feel more conve-

nient and safer than walking or bicycling. This BPMP's primary purpose is to help to change these perceptions, reflecting Goleta's desire to reshuffle transportation priorities to encourage more people opting to bicycle and walk instead of drive.

This BPMP forms a long-term vision supported by a variety of implementation measures. While addressing existing conditions and issues within Goleta, it also considers connections with 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.

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.

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

The anticipated result of implementing the recommendations is increased bicycling and walking. It is likely that commuting increases will be primarily via bicycle, and intra-City travel increases will be via both bicycle and walking. Implementation will result in fewer daily vehicle trips within the City and fewer vehicle miles traveled (VMT).

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 facility development.

Recommendations include proposed improvements across a range of project types, as well as associated programs and policies to encourage more bicycling and walking in Goleta. Facility types perceived to be both the safest and most convenient virtually always receive the highest survey approval rates. To reflect this, while the majority of proposed physical improvements reflect established bikeway facility 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" facilities separated from vehicle traffic, particularly with 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 accessing the UCSB campus.

Recommended improvements are described in Chapter 4, but precise alignments and details will be developed during subsequent implementation phases.

POTENTIAL PERFORMANCE MEASURES

Performance monitoring can be used to highlight trends in key indicators and assess progress being made toward a city's goals and objectives. Keeping track of key indicators is also valuable to support future applications for active transportation grant funding.

Specific to transportation, according to the U.S. Environmental Protection Agency (EPA):

"Performance measures allow decision-makers to quickly observe the effects of a proposed transportation plan or project or to monitor trends in transportation system performance over time...Many agencies have found that, once they begin to report sustainable transportation performance measures, stakeholders quickly see their value and come to expect regular reporting of measures and more explicit linkages between the measures and public agency decisions. Agency staff and stake-

holders are then able to engage in a much richer conversation about the trade-offs among policy and investment decisions and the best opportunities for their region or state to reach its sustainability goals."

Unlike driving, bicycle and pedestrian activity has generally not been measured in an accurate and consistent manner over time. This can make it difficult to identify locations for bicycle and pedestrian system improvements, to observe the effects of those improvements and to justify additional investments. Suggested performance measures can include the following:

- Bicycle and pedestrian mode share
- Rate of children walking or bicycling to school
- Rate of collisions, injuries and fatalities by mode
- Total miles of bikeways built or striped
- Linear feet of new pedestrian accommodation
- Number of ADA accommodations built
- Number of transit accessibility accommodations built
- Transit ridership
- Percentage of transit stops accessible via sidewalks and curb ramps
- Vehicle Miles Traveled (VMT)

PLANNING CONTEXT

The online application Walk Score categorizes Goleta as a "Car-Dependent City," earning a 42/100 walkability score. Although a bike score for Goleta is not available, it would probably be significantly higher than its walk score based on 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.

According to 2015 American Community Survey data, more than 70 percent of Goleta's commuters drove alone to work, and only about four percent each rode bicycles or walked to work. 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 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 that were not 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 facilities, places of employment and transit centers. The GP/CLUP also specified the need to develop a Bicycle and Pedestrian Master Plan.

In 2009, 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 replaces the Interim Bicycle Transportation Plan the City adopted from the County and updated in 2009.

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 Draft Regional Bicycle and Pedestrian Master Plan.





Bicycle and Pedestrian Facilities

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.

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 facilities, 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 peakhour 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 facilities 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 offstreet 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 visual-

ly 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."

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 11.4 (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.



Continuous Sidewalk in Residential Neighborhood



Class 1 Multi-Use Path



Public Transit in Santa Barbara County

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."

It 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, 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 (DRAFT)

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 facilities, 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;
- 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;
- 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."

2012 GOLETA VALLEY COMMUNITY PLAN

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
- 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 longrange 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 Hwy 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 northsouth connections between Cathedral Oaks Road and Calle Real to thru-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.

2007 ISLA VISTA MASTER PLAN

Isla Vista is an unincorporated County neighborhood bordering the University of California Santa Barbara campus. Its master plan includes policies that range from broad overall prescriptions to recommendations addressing specific streets:

Streets Policy 1: The Isla Vista circulation network should be modified to reduce automobile travel speed for compatibility with cyclists, pedestrians, and small-wheeled non-motorized modes of transportation (e.g. skateboarders and rollerbladers).

Streets Policy 2 simply states that use of "bicycles as an alternate mode of transportation in Isla Vista shall be encouraged."

Streets Action 2.1 addresses researching Sueno Road, Isla Vista's central east-west roadway, for feasibility as a bike boulevard using appropriate painting, signs, and physical improvements.

Streets DevStd 2.2 provides for commercial development to include "adequate bicycle racks and storage to accommodate both employees and customers," but does not include specific requirements. It also states that "Community parks should also provide sufficient bicycle racks to accommodate park users."

Streets DevStd 2.3 notes that Isla Vista's Form-Based Regulating Code includes the specific requirement that all development projects in residential zone districts must provide two bicycle storage spaces for each bedroom and/or studio apartment.



2015 SBCAG REGIONAL BICYCLE AND PEDESTRIAN MASTER 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 Draft Bicycle and Pedestrian Master 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 TI-GER 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 infrastruc-

ture. 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 that 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.

RELATIONSHIP TO GP AND OTHER CITY PLANNING

The Bicycle and Pedestrian Master Plan provides goals and objectives to create facilities, programs and policies for implementation of bicycle and pedestrian related goals and policies contained within 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 facilities coupled with motor vehicle traffic speeds and volumes. The City recently installed two user-activated mid-bock 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
- Improve the quality of life by making Hollister Avenue an appealing place to walk, cycle, drive, shop and dine

The BPMP process has included ongoing coordination to ensure this important element of Goleta's active transportation network becomes truly a well connected component of it. The conceptual design that results from this plan will be incorporated into the BPMP, including the component facility types that will integrally link it with the adjoining walking and bicycling systems.

BICYCLE AND PEDESTRIAN FACILITY STATE OF PRACTICE

OVERVIEW

Bicycle facility 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 increasingly viewed as a legitimate transportation mode and one that should be actively promoted as a means of achieving environmental, social and economic goals. (Due to a long history of routine accommodation for pedestrians, such as sidewalks, crosswalks, dedicated signals, etc., there are relatively few innovations in pedestrian facilities.)

While connectivity and convenience remain essential bicycle facility quality indicators, recent research indicates the increased acceptance and practice of daily bicycling will require "low-stress" bicycle facilities. Facility types and specific design interventions intended to encourage ridership among the "interested, but concerned" demographic tend to be those that provide separation from high volume and high speed vehicular traffic.

Just as the state of practice has bicycle facilities has evolved, so has technical guidance. While bikeway design guidance in California 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. Pri-



Pedestrian Crosswalk



Class 2 Bicycle Lane

mary organizations include 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 local streets. California cities may also apply for experimental designation from the FHWA for projects not in conformance with the CA MUTCD.

The guidance provided by these manuals support the creation of more Complete Streets. The guidance is also supported by several pieces of important legislation. The following section provides a review of the state of practice for bicycle facilities, 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.

PRIMARY GUIDANCE

Improvement recommendations facility design described later in this BPMP borrow heavily from the American Association of State Highway and Transportation Officials (AASHTO) Guide to Bicycle Facilities and the National Association of City Transportation Officials (NACTO) *Urban Bikeway and Urban Street Design Guides*, particularly for guidance on "innovative" facilities. The Federal Highway

Administration (FHWA) supports using these resources to further develop non-motorized 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 applications.

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

This reference has long the official resource for bikeway planning and design in California, but now largely represents the minimum standards required for specific bikeway facility types. SB-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 the Federal Highway Administration's (FHWA) support for taking a flexible approach to bicycle and pedestrian facility design. The AASHTO bicycle and pedestrian design guides are the primary national resources for planning, designing, and operating bicycle and pedestrian facilities. The NACTO Urban Bikeway Design Guide and the Institute of Transportation Engineers (ITE) Designing Urban Walkable Thoroughfares quide builds upon the flexibilities provided in the AASHTO guides, which can help communities plan and design safe and convenient walking and riding facilities. FHWA supports the use of these resources to further develop non-motorized transportation networks, particularly in urban areas.

NACTO Urban Bikeway and Urban Street Design Guides

The NACTO guides represent the industry standard for innovative bicycle and streetscape facilities and treatments in the United States. In 2014. Caltrans followed AASHTO and officially endorsed the NACTO Urban Bikeway Design Guide. It is important to note that virtually all of its 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.

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 local streets. At the time, Caltrans was only the third State Department of Transportation to officially endorse the Guides.

NACTO Transit Street Design Guide

As transit starts to gain a more prominent role in cities, more people are using buses, street-cars, 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 Guides provide design guidance for the development of transit facilities 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 guidelines on how to create resilient cities that are better prepared for climate change, while creating public spaces that deliver social and economic value to these places. 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 it addresses 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 cyclists and walkers 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

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

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 authorizes a pedestrian facing a flashing "DON'T WALK" or "WAIT" or approved "Upraised 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 WALK" or "WAIT" or approved "Upraised Hand" symbol.





Buffered Bike Lane



Timed Pedestrian Crossing Signal

AB-902 Traffic Violations and Diversion Programs

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 would instead allow 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 would eliminate the requirement that such a program charge no fee. The bill would make other technical, non-substantive changes.

AB-1096 Electric Bicycles as Vehicles

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

This act amends various code sections, all relating to bikeways in general, specifically by recognizing a fourth class of bicycle facility, 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

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 CEOA 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. Additionally, CEQA will also exempt from its requirements 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

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 facilities safely and conveniently accommodate everyone, regardless of their travel mode.

AB-1371 Passing Distance/Three Feet for Safety

This statute, 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

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

This measure 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 facilities. 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

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

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

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 could remove 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 cyclists, 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, state agencies stopped using LOS to measure environmental impacts in lieu of Vehicle Miles Traveled (VMT).

SB-760 Transportation Funding: Active Transportation: Complete Streets

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 facilities. The bill also directs the department to update the Highway Design Manual to incorporate "Complete Streets" design concepts, including guidance for selection of bicycle facilities.

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 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 mention the environmental, health and economic benefits of more Complete Streets.

FEDERAL LEGISLATION

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

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 run on time and make it safe 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 bikeway 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.

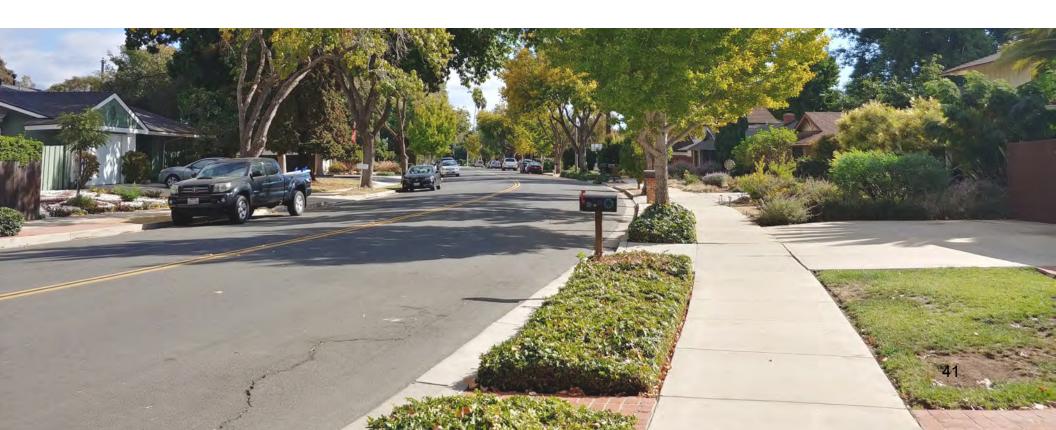
Implementing Complete Streets policy often addresses increased flexibility to allow for the creation of a more balanced transportation system. In the case of a Bicycle and Pedestrian Master Plan, the network identified could become the bicycle and pedestrian layers. Identification in such a plan, reiteration within a Complete Streets policy framework and exemption from traditional traffic analyses can make implementation more likely and much more affordable.



Example Complete Street

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: http://www.smartgrowthamerica.org. (Smart Growth America is developing a new Complete Streets policy framework, slated for completion in late 2017/early 2018.)



BICYCLING AND WALKING BENEFITS

Numerous economic, environmental, and health benefits are attributed to bicycling and walking, especially as a substitute for driving a vehicle. This section summarizes benefits from research by the Pedestrian and Bicycle Information Center (PBIC).

ENVIRONMENTAL BENEFITS

Increased bicycling reduces fossil fuel emissions. 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 the 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, meaning that almost 10 pounds of carbon dioxide emissions could be avoided each day if an individual with a five mile (each way) commute switched from driving to an active transportation mode like bicycling.

HEALTH BENEFITS

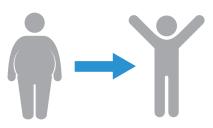
Despite dramatic strides in recent decades through regulations and technological improvements, vehicle emissions still pose a significant threat to air quality and human health. Vehicle-generated air pollution contains harmful greenhouse gas emissions, including carbon dioxide, carbon monoxide, methane, 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 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, bicycling has 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. 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 bicycling qualify as "moderate intensity activity," it can also be seamlessly integrated into daily routine, especially for utilitarian purposes like commuting or running errands.

Other health benefits associated with moderate activity, such as 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.





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



ECONOMIC BENEFITS

Cycling infrastructure and programs have increasingly been shown to deliver economic benefit to both individuals and society at large. The benefits of cycling may, in fact, outweigh its costs. Cycling, and utilitarian cycling in particular, offers somewhat obvious cost savings to individuals. Beyond the upfront cost of operating a vehicle are additional 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.

Converting even a fraction of automobile trips to cycling or walking trips can create significant transportation-related savings as a result of reduced vehicle traffic congestion. Increased cycling also translates to health-related savings, for both individuals and taxpayers, in the form of less need for preventative care. More cycling and walking have also been tied to increases in commercial and residential property values and retail sales. Shoppers who reach their destination by bicycle have been shown to make smaller purchases, but shop more often and 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 do not require a vehicle parking spot.

Perhaps more compelling than reducing GHG emissions or combating the obesity epidemic is the benefits bicycling has to offer in terms of quality of life. Bicycling, and especially utilitarian bicycling, is increasingly seen as a fun, low-cost, healthy and sustainable way of get-

ting around. How then, can we make it easier for any person to choose a bicycle for his or her daily trips?

In an effort to re-position bicycling as a safe and common mode of transportation and increasing the number of people bicycling, attention needs to be shifted away from creating "cyclists" and toward making it easier for any person to choose bicycling for their everyday trips. Research shows a strong latent interest in bicycling among those who identify as "interested, but concerned." These individuals do not identify themselves as "cyclists," 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" segment of the population the greatest gains in mode share will be made. The field of bicycle planning is being redefined toward this end.



Source: American Automobile Association



Houses in areas with above average levels of walkability command a \$4,000 to \$34,000 premium over houses in areas of average walkability

SOCIAL JUSTICE

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 the "Commuting in America 2013" publication by AAS-HTO that shows that people of color living in disadvantaged communities are less likely to own a personal vehicle. They therefore have no option but to walk, bike, or use public transit for work, school, or personal trips. They walk or bike out of necessity, not 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 benefits all.



WALKBIKEGOLETA

EXISTING CONDITIONS & ANALYSIS

EXISTING CONDITIONS

Understanding the existing roadway conditions in Goleta and the adjacent region is imperative to planning for its future. This chapter includes sections on city demographics, various datasets such as bicycle and pedestrian collisions, and existing facilities. This chapter aims to provide meaningful discussions on each of the topics, including how they support or impede bicycle and pedestrian facility development within Goleta.

This chapter also summarizes various analyses models used to understand the City's roadway network and the development of the bicycle and pedestrian projects found in Chapter 4. Each dataset provides valuable information that contributes to the holistic understanding of Goleta's current network and how to improve it.



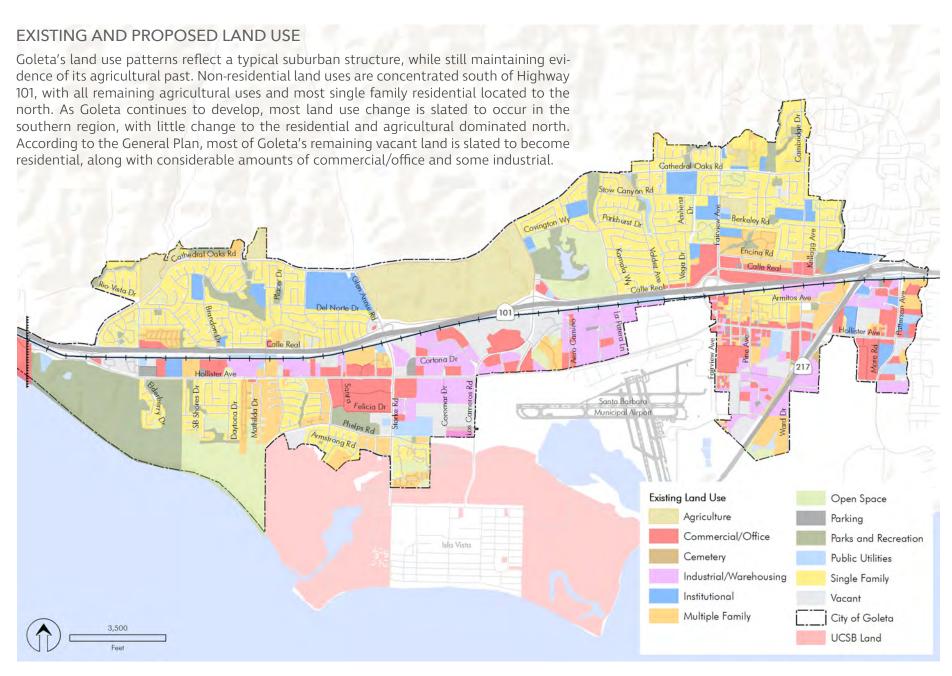


Figure 1-1: Existing Land Use

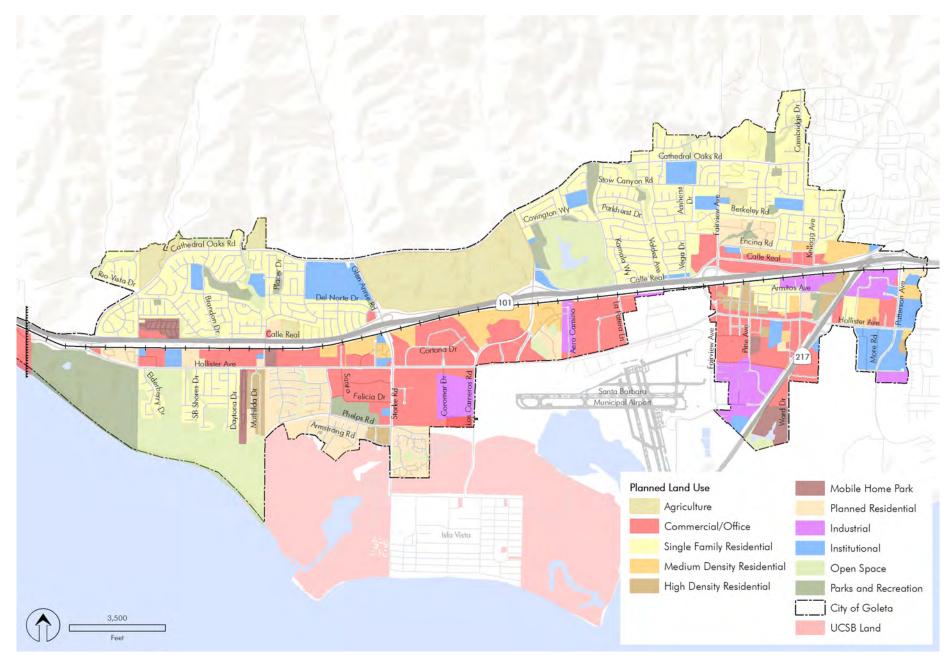


Figure 1-2: Proposed Land Use

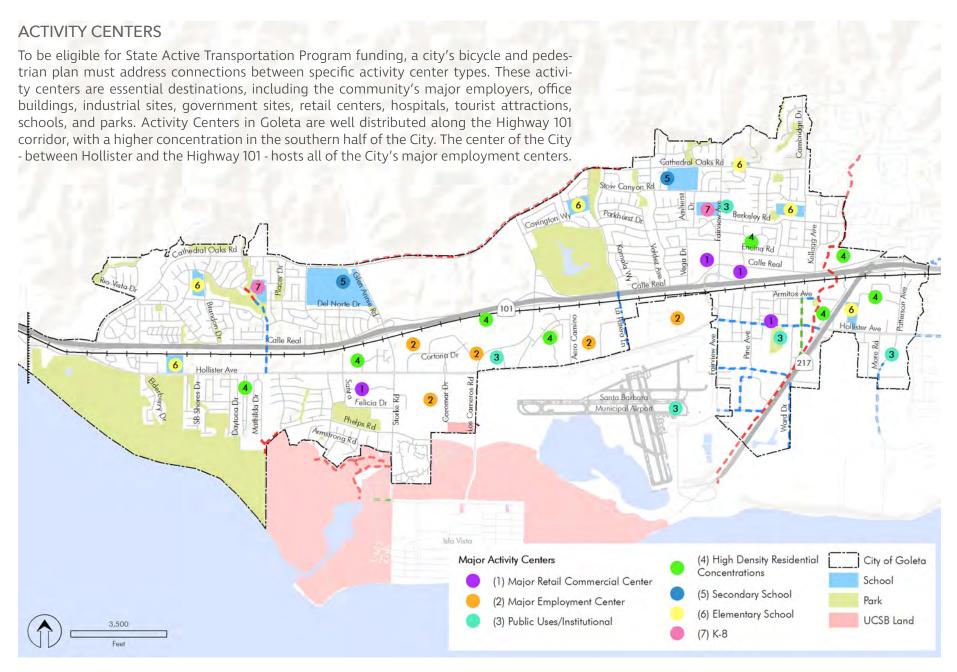


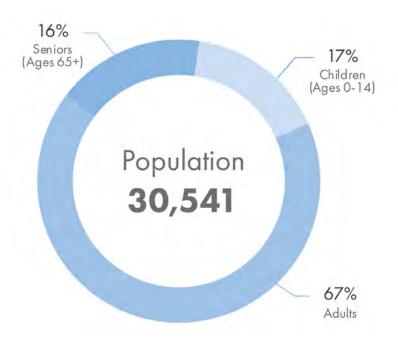
Figure 1-3: Activity Centers 51

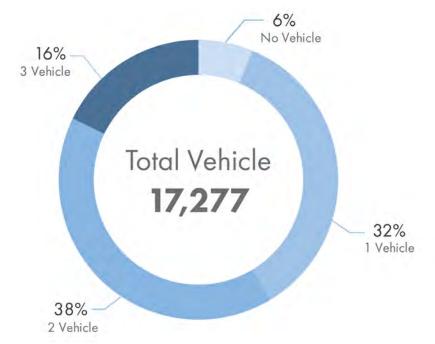
POPULATION, EMPLOYMENT, AND MEDIAN INCOME

According to the U.S. Census 2015 American Community Survey (ACS), Goleta has a population of 30,541 within just under eight square miles, resulting in a population density of 3,865 people per square mile in 11,034 households. Goleta's population has a relatively even age distribution with roughly 16 percent of the population classified as seniors (over the age of 65), and 17 percent as children (under the age of 14), as well as a fairly high household percentage with children under the age of 18 (28 percent). Goleta's ethnic make-up is 69 percent white, eightpercent Asian, two percent African American, with remaining residents identifying as other or more than two races. Almost 38 percent of Goleta's population identifies as Hispanic or Latino.

The ACS also reports a workforce population estimate of 17,347 and an unemployment rate of six percent. Median household income is \$80,438, almost 28 percent of residents reporting incomes below the national poverty level for a family of four. Lastly, of households surveyed in 2015, only six percent reported lacking access to a vehicle, with most households having access to two or more vehicles.







STREET CLASSIFICATION (TO BE UPDATED)

The majority of Goleta's streets (63 percent) are classified as local per the General Plan. These streets are followed in quantity by major arterials (20 percent), collectors (12 percent), and finally by minor arterials (5 percent). Major arterials form a nearly complete loop system throughout the City and are currently the only option for crossing Highway 101.

Major Arterials

Major arterials are continuous routes that carry through traffic between various neighborhoods and communities, frequently providing access to major traffic generators such as shopping areas, employment centers, recreational areas, higher-density residential areas, and places of assembly. Driveway access, especially for residential uses, to a major arterial is generally discouraged or kept to a minimum to facilitate traffic flows.

Minor Arterials

Minor arterials serve as a secondary type of arterial facility carrying local through traffic within communities, frequently providing access to shopping areas, employment centers, recreational areas, residential areas, and places of assembly. A minor arterial may connect different neighborhood areas within the city.

Collector Streets

Collector streets and roads function to collect traffic from local streets and roads and to carry that traffic to major or minor arterials. Collectors may also link two arterials as well as collecting traffic from local streets and abutting driveways. Collector roads are designed to provide access to local streets within residential and commercial areas or to connect streets of higher classifications to permit adequate traffic circulation.

Local Streets and Roads

Local streets provide access to abutting individual properties and links such properties and their uses to a collector street. City street standards shall ensure that local streets provide access to abutting properties and should include a variety of designs and spacing, depending on access needs. Local streets are intended to serve only adjacent uses and are intended to protect residents from the impacts of through traffic.

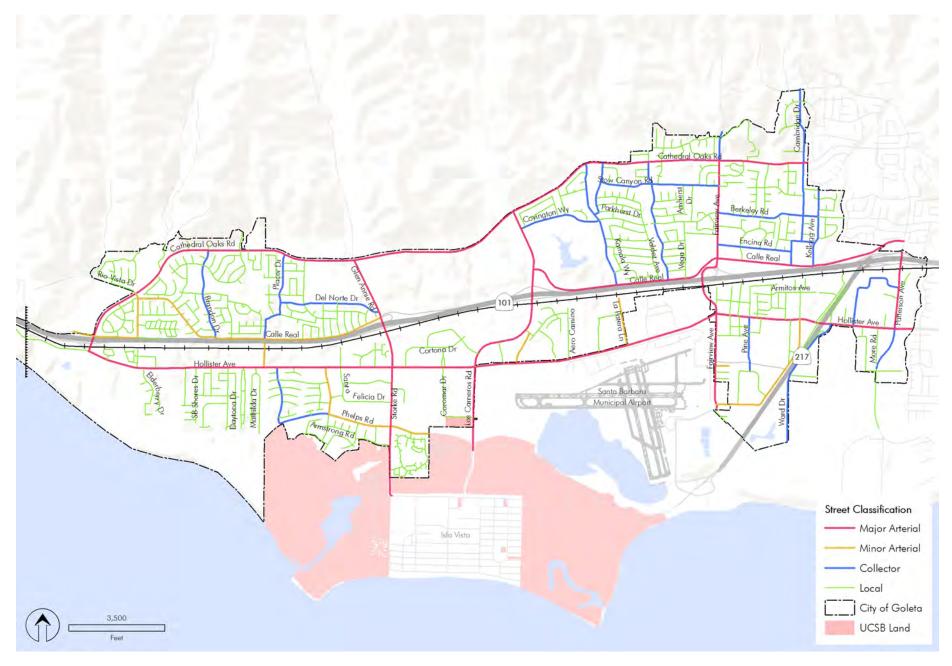


Figure 1-4: Street Classification

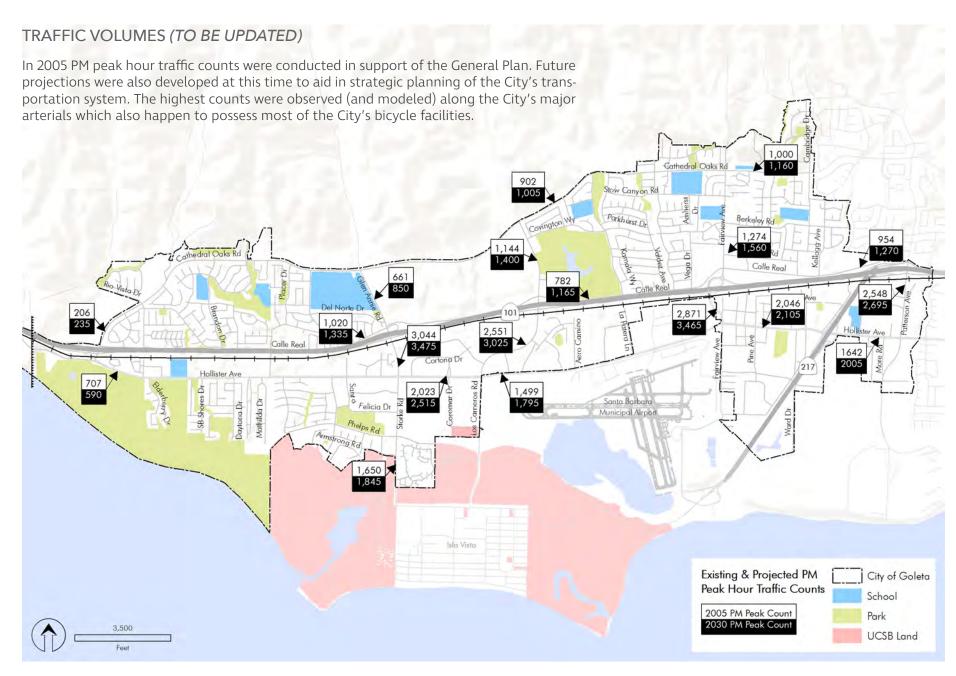


Figure 1-5: Traffic Volumes 55

MOBILITY BARRIERS The major barriers to active transportation in Goleta include Highway 101, UPRR, high volume intersections, high volume roadways, and gaps in bicycle and pedestrian facilities. Areas of major concern exist mostly along the 101 corridor at crossing points. Given limited crossing opportunities, those that do exist experience high traffic volumes and high collision rates. Gaps in existing and previously proposed facilities are addressed in a later section. Felicia Dr Bicycle & Pedestrian ••••• High Volume Segments Collisions City of Goleta High Volume Intersections School (2030 Peak PM Projections) Park Cyclist & Pedestrian Crossing Barrier UCSB Land Pedestrian Travel Barrier (Missing Sidewalk)

Figure 1-6: Mobility Barriers

TRANSPORTATION MODE SHARE

The majority of Goleta's resident commuters (73 percent) rely on personal vehicles to travel to and from work. This mode is followed in prevalence by carpooling (12 percent), biking and walking (four percent), transit and working from home (three percent) and finally by motorcycle (one percent).

Walking Mode Share

The walking mode share measures the percentage of workers aged 16 years and over who commute to work by foot. Mode share reflects how well infrastructure and land-use patterns support travel to work by foot. In the City, walking mode share patterns are connected to the relative proximity of housing to employment centers.

Bicycling Mode Share

Similar to the walking mode share, bicycling mode share measures the percentage of resident workers aged 16 years and over who commute to work by bike. In the City, moderate bicycling mode share levels are evenly distributed, with peaks observed near high residential concentrations and retail commercial centers.

Public Transit Mode Share

Transit mode share measures the percentage of workers aged 16 years and over who commute to work by transit. This mode share reflects how well first mile-last mile infrastructure, transit routes, and land-use patterns support travel to work by transit.

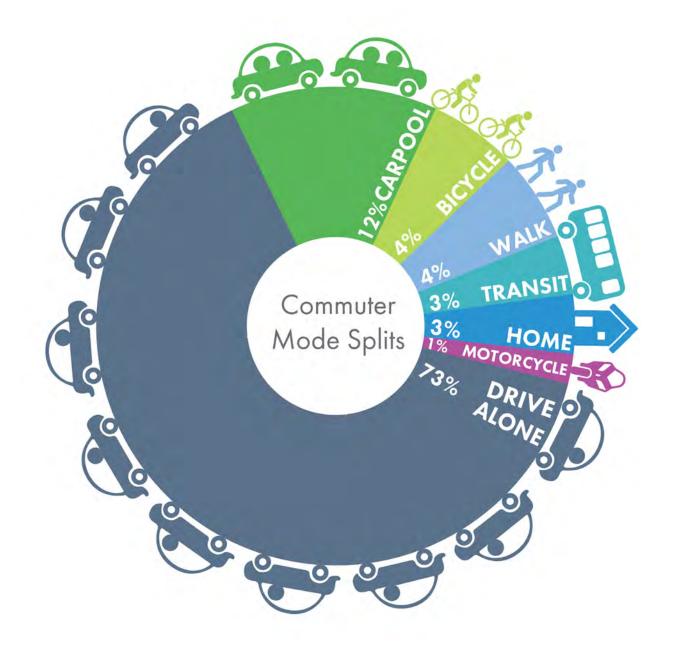


Figure 1-7: Transportation Mode Share

SCHOOL ZONE INFRASTRUCTURE

To assess the safety of walking and biking routes to school in Goleta, pedestrian and bicycle deficiencies were analyzed in the quarter-mile service area around each school property based on aerial imagery and Google Streetview services. The bulk of roadways in Goleta's school zones, 84 percent, are equipped with sidewalks on both sides. The remaining roadways host sidewalks on one side, ten percent, or are completely missing facilities, seven percent. Of the missing facilities, two percent have plans for construction. Additional gaps in existing pedestrian infrastructure include 15 missing curb ramps and 356 curb ramps lacking tactile domes throughout the school zones. Bicycle facilities cover 40 percent of the school zone network, leaving 60 percent of these zones without dedicated bikeways.

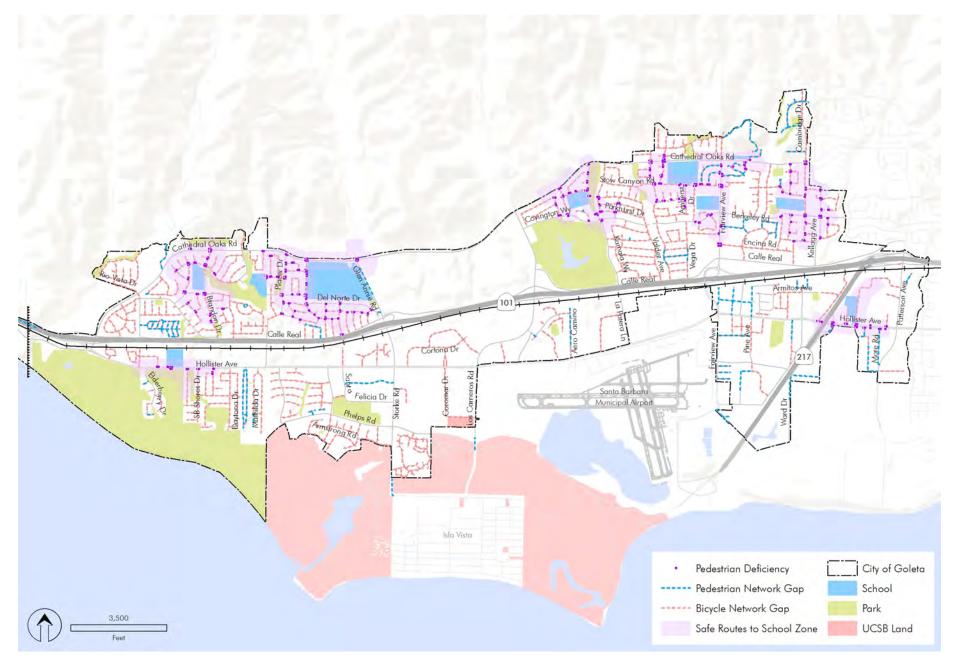


Figure 1-8: School Zone Infrastructure

ANALYSIS

Analysis – of existing and future conditions, as well as latent demand – is an essential step in any transportation project planning process. For this project, analysis included spatial (GIS) analysis, fieldwork, and community and stakeholder input. This multi-pronged approach allowed for maximal data capture and cross-referencing of findings. For example, bicycle and pedestrian safety concerns were analyzed through collision data, including locations, frequencies and causes. Cross-referencing these collision data with public input helped to confirm safety issues and identify areas for new or improved facilities.

This section is primarily concerned with explanations and discussions of the various spatial analyses employed in this project. Brief discussions of the role of fieldwork and community/stakeholder input are provided below, while the remainder is devoted to spatial analysis.

FIELDWORK

The project team conducted fieldwork, using measuring tools and georeferenced photos, on several occasions. Fieldwork was conducted at project kick-off (to better understand existing conditions) and during project development (to verify data obtained from GIS and community/stakeholder input).

COMMUNITY/STAKEHOLDER INPUT

Community and stakeholder input played a very important role in developing facility and program recommendations. A summary of community and stakeholder input obtained and its impact on project recommendations is included in Chapter 3, "Outreach Summary."

SPATIAL (GIS) ANALYSIS

Spatial analysis included simple, data-driven analyses and more complex analyses, requiring evaluations of layered information and multiple inputs. Data-driven topics include existing bicycle facilities, proposed bicycle facilities, average daily trips, activity centers, transit routes, safety analysis and bicycle-pedestrian suitability. Topics requiring more complex analysis (safety/collisions and bicycle-pedestrian routing) are discussed in more detail in their respective sections.



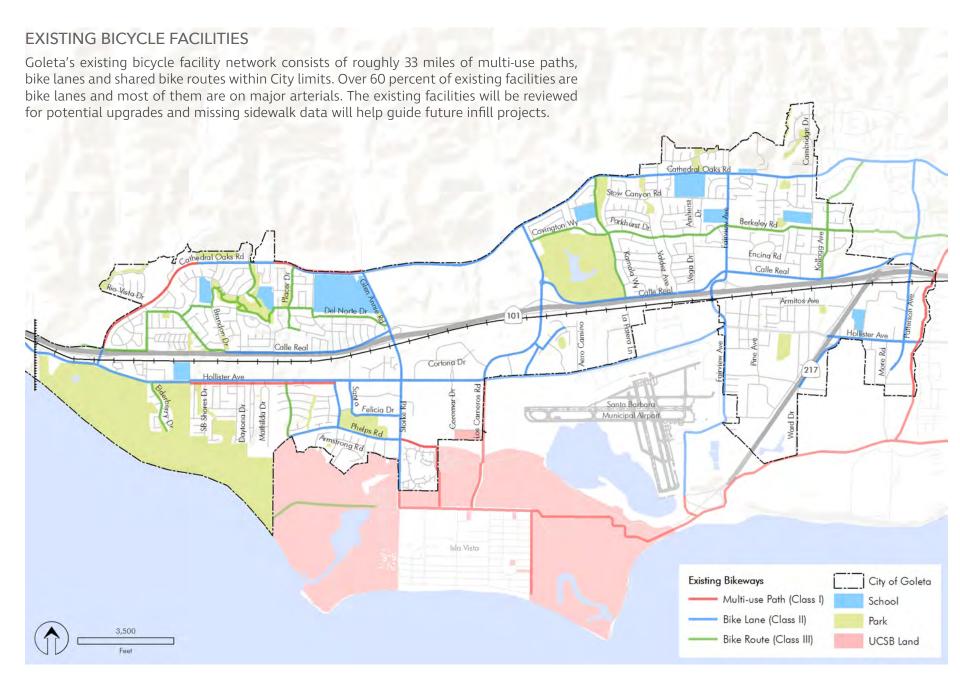


Figure 1-9: Existing Bicycle and Pedestrian Facilities

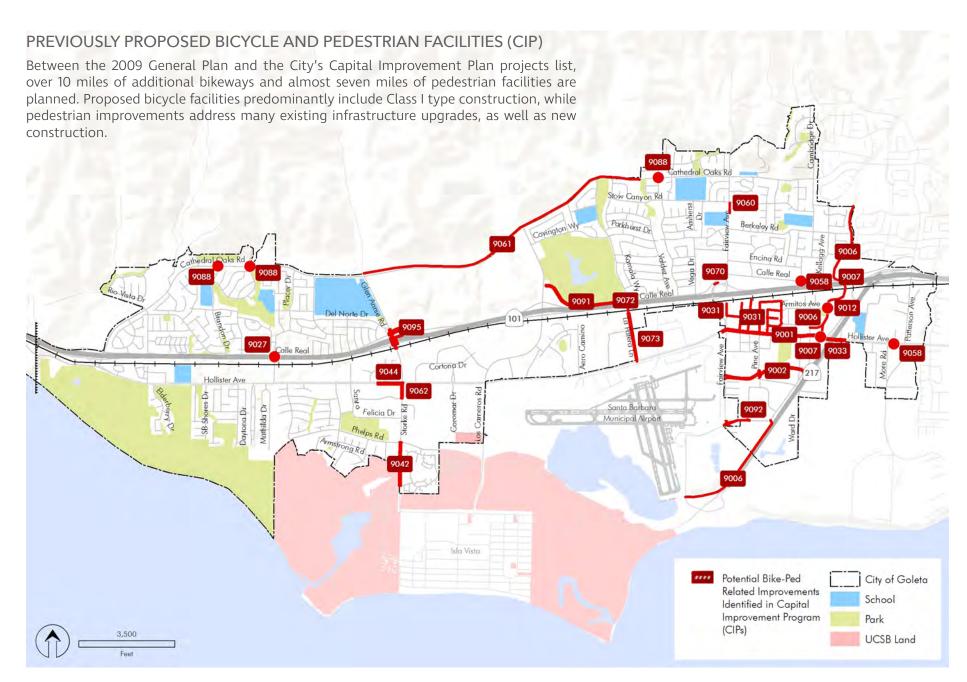


Figure 1-10: Previously Proposed Bicycle and Pedestrian Facilities

FACILITY COMPARISON ANALYSIS

Data from a collection of California cities was analyzed to gain a general understanding of how Goleta's bicycle infrastructure compares to other cities. Cities were chosen based on availability of data, completion of a bicycle plan, and proximity to the coast. Data used to help provide context for the comparison included demographic statistics such as population, household income, and race. In addition, the cities' roadway and most recent bicycle network data was collected using open data portals and individual cities' bicycle plans.

The extent of existing bikeways and proposed bicycle improvements were compared to the overall size of road network to calculate percent coverage. The results offer a unique comparison between cities both similar and different to Goleta in demographics and size. It does reveal though, that if Goleta were to implement all proposed bicycle improvements, 58% of its total roadway network would have a bicycle facility, second only to Davis in this analysis.

The analysis also revealed that in top performing cities, Davis, San Luis Obispo, Burlingame, and Eastvale, median income ranged from \$46K to \$110K showing no discernable relationship. Top performing cities differed in racial diversity, with percentages of 'white alone' citizens spanning from 45% to 85%. Population comparisons revealed that all cities analyzed fell into the same category of under 100K residents. Figures 1-11 through 1-15 illustrate the supporting data used for in the analysis.

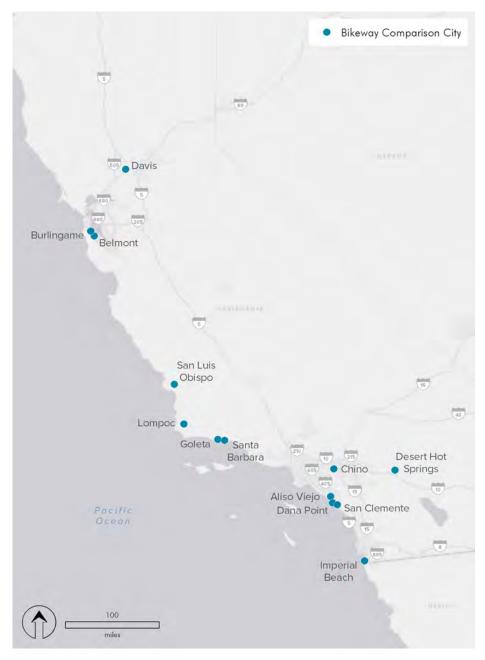


Figure 1-11: Bikeway Comparison Cities

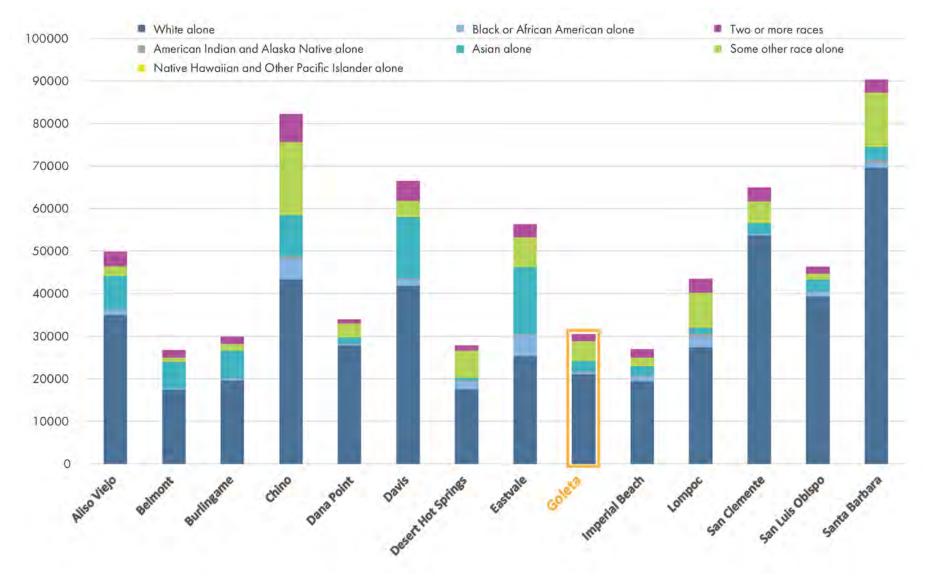


Figure 1-12: Facility Comparison - Race

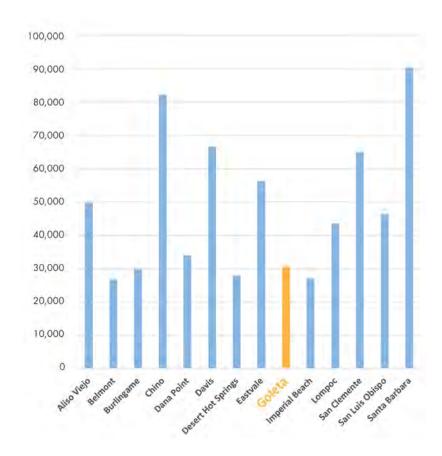


Figure 1-13: Facility Comparison - City Population

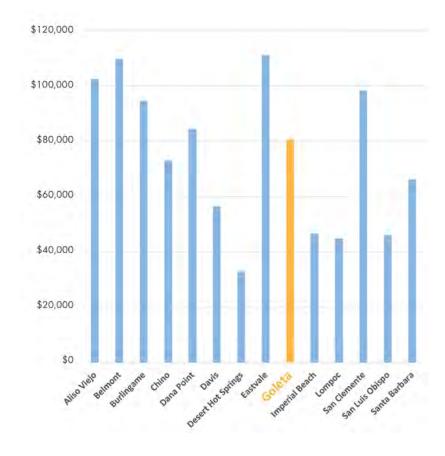


Figure 1-14: Facility Comparison - City Household Income

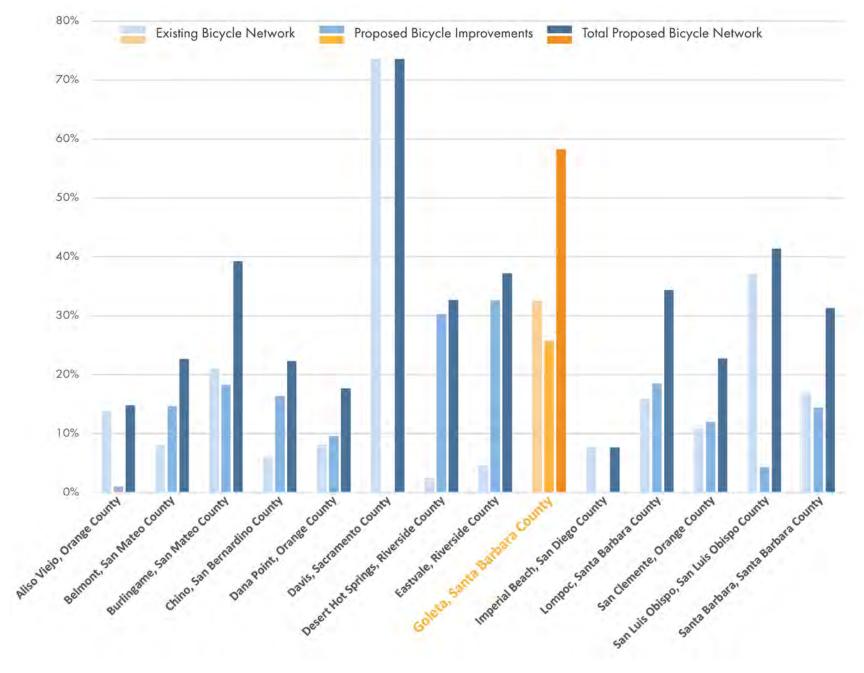


Figure 1-15: Facility Comparison - Bicycle Network Coverage

BICYCLE AND PEDESTRIAN COLLISIONS

Bicycle and pedestrian collision data were obtained from the Statewide Integrated Traffic Records System (SWITRS) collision data set managed by the California Highway Patrol (CHP). This dataset captures all reported bicycle-vehicle, pedestrian-vehicle and bicycle-pedestrian collisions that resulted in injury or property damage in Goleta in the ten-year period of 2007 through 2016. Collisions that occurred on Highway 101 and UPRR are displayed on the map but were not included in the subsequent analysis. Additionally, collisions on off-street paths are not reported in the data. It is important to note that collisions involving bicyclists are known to be under-reported, and therefore bicycle collisions are likely under-represented in this analysis.

During this ten-year period there were a total of 157 bicycle-related collisions and 58 pedestrian-related collisions; four of which resulted in fatalities. Bicycle-related collisions fluctuated throughout this time period with peaks in 2010 and 2014, while pedestrian-related collisions remained relatively steady from year to year. The bulk of both collision types resulted in injury or complaint of pain (82 percent), with 18 percent resulting in severe injury or death. Most collisions (75 percent) occurred in daylight conditions, or in lighted conditions (15 percent), with only ten percent occurring in either unlighted conditions or at dawn/dusk.

Most bicycle collisions (60 percent) were caused by cyclists traveling on the wrong side of the road and both cyclists and drivers making unsafe or improper turns. The remainder of collisions were caused by a variety of driver and cyclists violations; with roughly 50 percent of total collisions being the fault of cyclists and 41 percent the fault of drivers. Remaining bicycle collisions were caused by parked vehicles, at two percent, and unknown causes, at seven percent. Most pedestrian collisions (59 percent) were caused by pedestrians and drivers violating the other party's right of way. Overall, 64 percent of pedestrian collisions were the fault of drivers, and only 29 percent the fault of pedestrians. Remaining pedestrian collisions were caused by cyclists, at two percent, and unknown causes, at five percent.

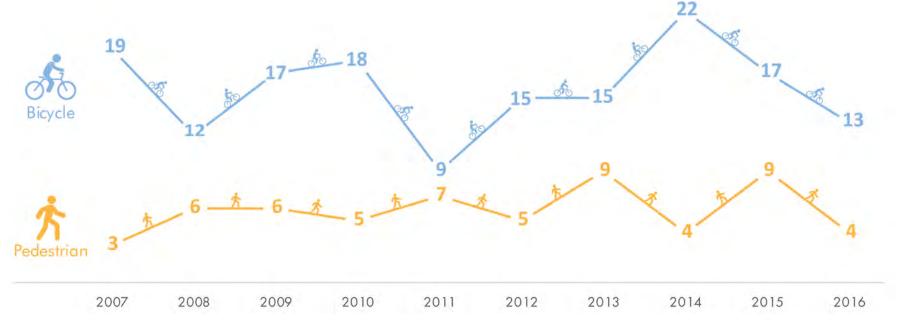


Figure 1-16: Bicycle and Pedestrian Collisions by Year

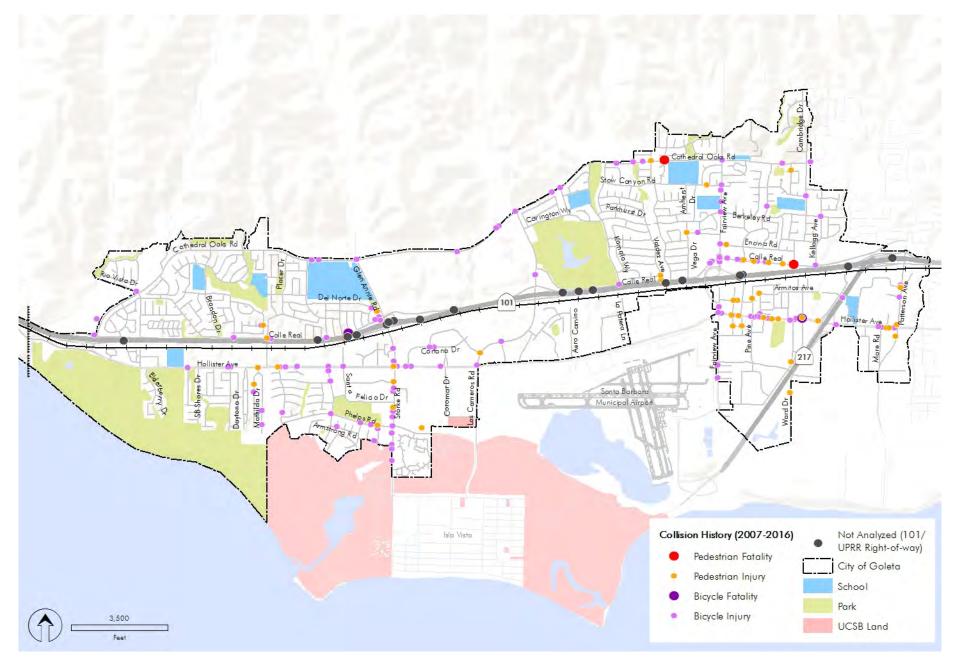


Figure 1-17: Bicycle and Pedestrian Collisions

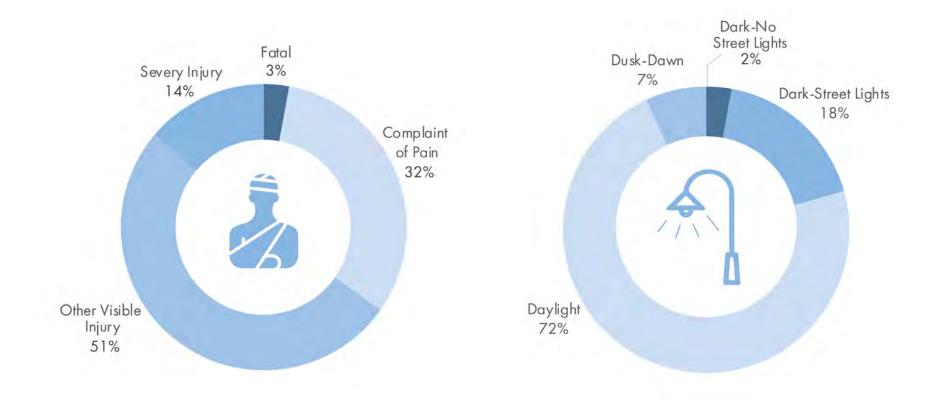


Figure 1-18: Bicycle and Pedestrian Collision Conditions

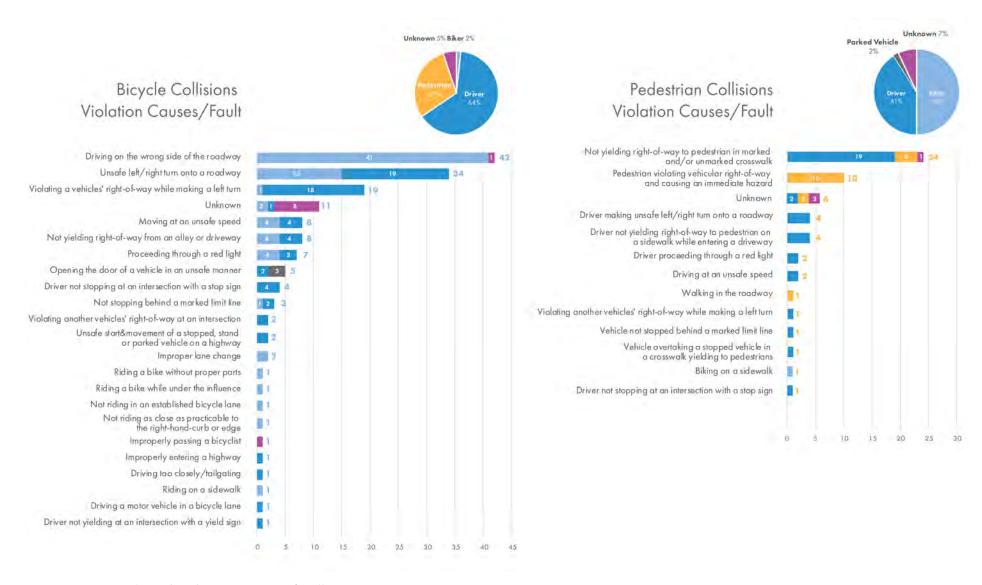


Figure 1-19: Bicycle and Pedestrian Cause of Collision

GAP ANALYSIS A gap analysis was performed to help identify missing links in both bicycle and pedestrian networks. This analysis examined each network as a whole to identify segments that lack existing facilities or previously proposed facilities from the General Plan or Capital Improvement Program list. Remaining segments were then analyzed further for project viability. The bicycle network gap analysis resulted in identification of almost exclusively local streets. This finding indicates that the main connectors throughout Goleta are already slated to become bicycle facilities, if they are not already. The main focus of recommendations on these already developed corridors will be to assess whether existing or proposed facilities need to be upgraded in condition or class. Porkhorst Dr ncina Rd Calle Real Cortona Dr Santa Barbara Felicia Dr Isla Vista Bicycle Network Gap City of Goleta Previously Proposed School Connectivity Park Existing Bicycle UCSB Land Connectivity

Figure 1-20: Bicycle Gap Analysis

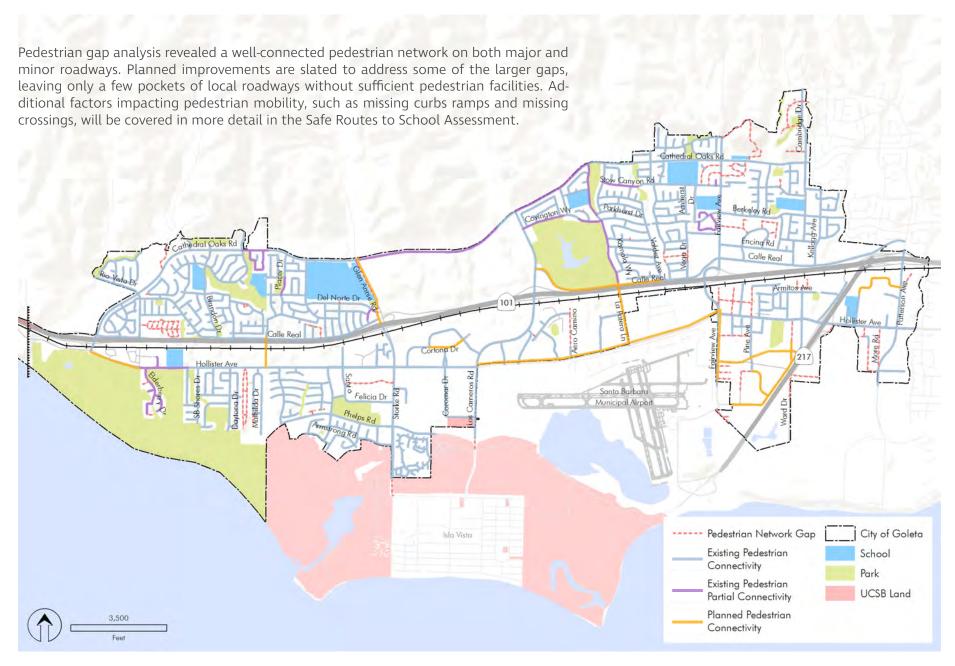


Figure 1-21: Pedestrian Gap Analysis

BICYCLE AND PEDESTRIAN PROPENSITY

To help define study focus areas, a Geographic Information Systems (GIS) model was created to reveal relationships between the many data layers analyzed. A Bicycle-Pedestrian Priority Model (BPPM) was developed, considering all of the previously discussed analysis inputs, to establish where bicyclists and pedestrians are most likely to be, either currently or if improvements were to be made. The BPPM is comprised of three submodels: Attractor, Generator and Barrier Models. These three sub-models are then combined to create the composite Bicycle-Pedestrian Priority Model.

Attractors are essentially activity centers known to attract bicyclists and pedestrians. Examples are schools, transit stops and shopping centers. Generators are developed from demographic data and address potential pedestrian and bicyclist volume based on how many people live and work within the study area. Examples of generators are population density, employment density, primary mode of transportation to work and vehicle ownership. Barriers are features likely to discourage or detract people from bicycling or walking. These are generally physical limitations, such as areas with high numbers of bicycle-related collisions, high vehicle volumes and speeds, and missing sidewalks.

The resulting map was employed to develop general recommendations and to select priority projects described in the following chapter. When comparing input from public workshops, stakeholders, and project surveys, there was correlation between the high propensity areas for bicycling and walking with input provided.

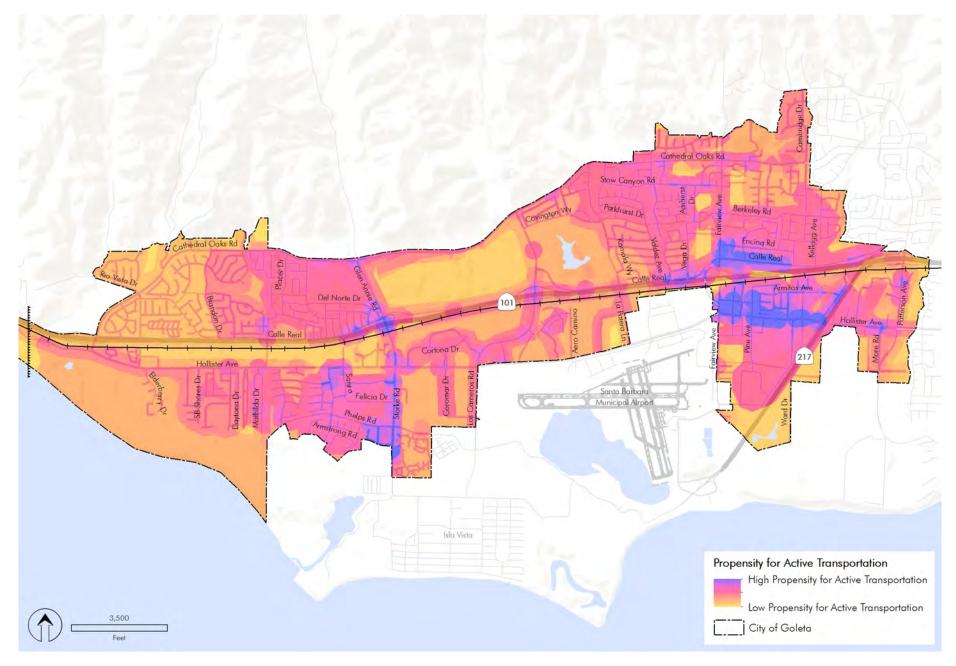


Figure 1-22: Bicycle and Pedestrian Propensity

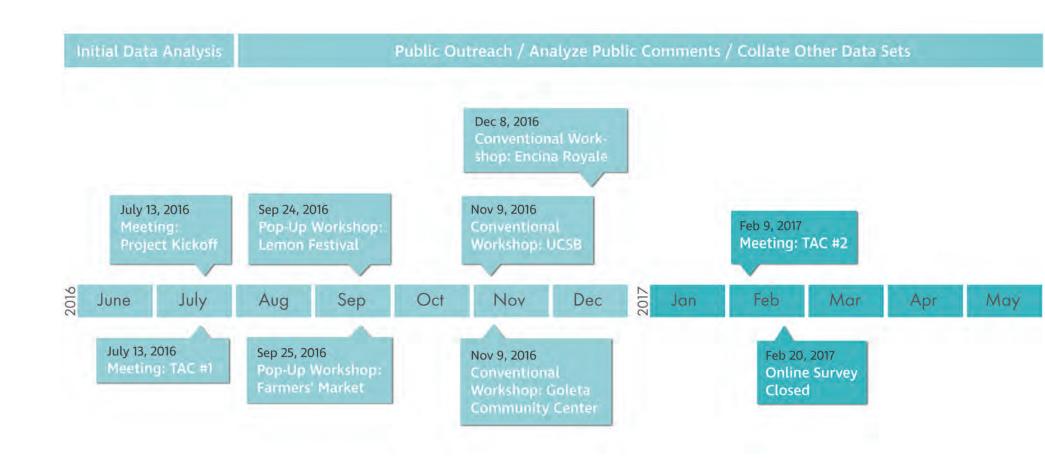
WALKBIKEGOLETA

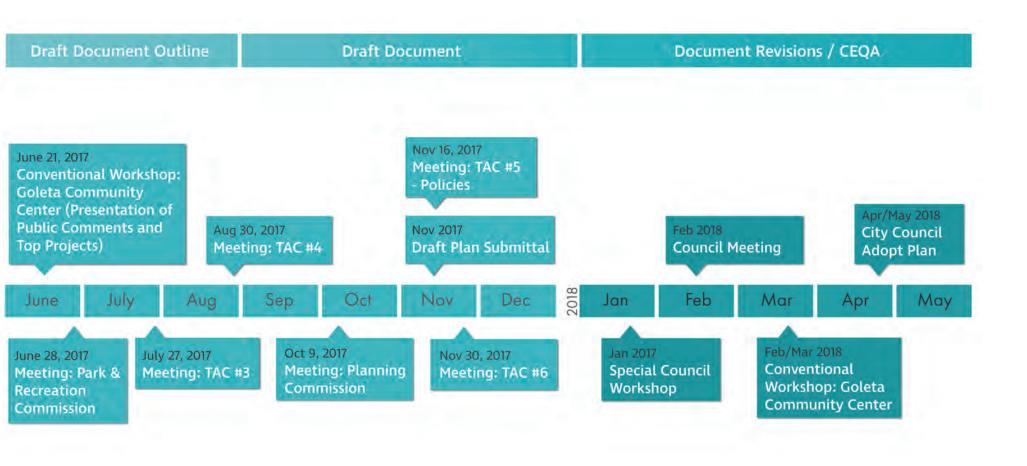


PUBLIC OUTREACH

PUBLIC OUTREACH METHODS AND MATERIALS

The public outreach process was tailored to be thorough, efficient and engaging. The team and City initially agreed that a variety of outreach methods and materials were advisable, beginning with a Stakeholder Outreach Plan (SOP) that outlined outreach goals. Outreach methods and materials included branding, local media announcements, online and paper surveys, an online crowdsourcing map, and the input of a Technical Advisory Committee (TAC).





STAKEHOLDER OUTREACH PLAN

A Stakeholder Outreach Plan (SOP) was developed to establish a set of guidelines to maximize public outreach and engage City stakeholders. The SOP included education and involvement of a broad spectrum of stakeholders including elected officials, neighborhood association members, non-profits, recreational, environmental, community, faith-based and business organizations, property owners, residents, the TAC, and other interested persons.

The SOP included goals, key messages, a list of contacts, and an outline for potential public workshops and committee meetings. The full SOP can be found in the Appendix of the final document.

TECHNICAL ADVISORY COMMITTEE (TAC)

As part of the SOP, a TAC representing a wide range of stakeholders was created. The TAC's role was to provide feedback on project direction and to provide public outreach support by reaching out to their members, allies, and partners.

BRANDING

To generate interest, the team developed a fun and vibrant branding scheme specifically addressing project goals. This branding included a project logo employing the City seal's colors and an easy-to-remember slogan, "WalkBikeGOleta." This branding was used in all outreach materials, including flyers, postcards, surveys, an online map, website, workshop exhibits, and banners.

Outreach Materials

A variety of outreach materials were designed to maximize public engagement. The City of Goleta's population is ethnically and economically diverse, including workers and professionals who commute daily in and out of Goleta, and a large student, faculty, and staff population from the adjacent University of California, Santa Barbara. This diverse background meant the project needed to have a variety of outreach methods including printed media and an online presence, both of which were produced in English and Spanish.



Project Branding and Logo



Workshop Flyers

Survey

A survey was prepared to determine user and non-user satisfaction levels of current pedestrian and bicycle infrastructure. The survey asked a variety of walking and bicycling infrastructure questions and allowed respondents to provide both general and specific comments. The survey also directed people to the online map that allowed them to place comments on specific street corridors and intersections. The survey was available on the City website and as hard copies at public outreach events, the Goleta Library, City Hall, and the Goleta Valley Community Center.

Online Map

An online comment map provided through the ArcInfo Online platform was created as a supplemental input method that respondents could use to highlight location-specific issues. It allowed respondents to input comments about existing issues or to highlight good existing infrastructure. It also provided the option to attach photos and describe whether the highlighted issue had a pedestrian, bicycle, or "other" related focus.

The ArcInfo Online platform also allows anyone to see where others had made comments and automatically geo-references all comment inputs. This valuable feature allowed the team and the City to efficiently document and analyze comments as they related to specific locations and issues identified by respondents.

Flyers, Postcards, and Announcements

Other public outreach materials for workshops and meetings included flyers, post-cards, email/text blasts, and Monarch Press articles. All of these materials were designed using the project branding and most were made available in both English and Spanish.



Online Survey and Map Postcard

PUBLIC WORKSHOPS

Public workshops were designed to be flexible and targeted to best serve Goleta's community and encourage wide participation. Workshops were scheduled throughout the project's planning process to engage the community at important milestones.

POP-UP WORKSHOPS

Pop-up workshops are programmed to coincide with existing regularly scheduled community events. These workshops allow the project team to reach out to large numbers of community members in a setting with documented high attendance. These kinds of workshops work well at the beginning of the planning process because they allowed the team to gather comments, as well as to generate interest in upcoming conventional workshops.

Two pop-up workshops were conducted shortly after the project kick-off meeting. The team set up a booth at the Lemon Festival on Saturday, September 24 and at the Farmers' Market on Sunday, September 25, 2016. Both events were very well attended and allowed the team to introduce the project to a large number of community members. In addition, the team gathered many comments utilizing large table maps and exhibits prepared for the workshops. The team distributed postcards inviting people to take the online survey and to provide additional comments via the online map.

At both of these workshops, people enthusiastically provided comments on the pedestrian and bicycle infrastructure. They shared issues about certain corridors and intersections, but also highlighted areas that were good examples.

Intimidating, and long intersection. Not enough time and confusing signalization.

Comment regarding Fairview Avenue and Hollister Ave intersection

Extend bike path to Cathedral Oaks. 11

Comment regarding multi-use path near Ellwood Elementary

Better signal timing. Dangerous intersection. 11
Comment regarding Storke Road and Hollister Ave intersection

Lots of emphasis here. Awful crossing.

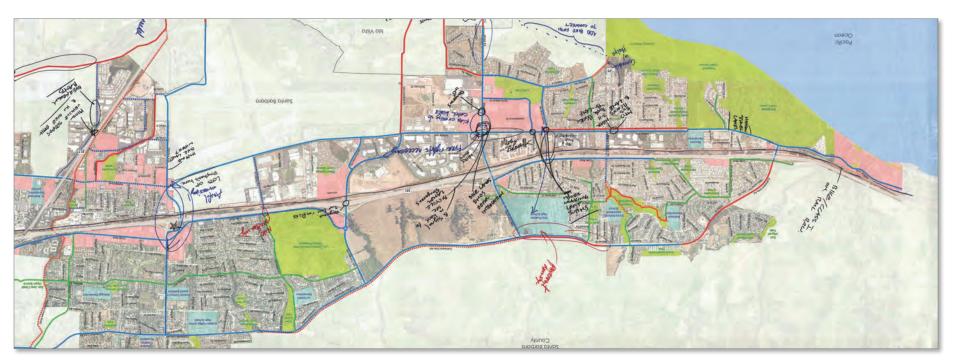
Comment regarding 101 overpass on Fairview Avenue



Lemon Festival Pop-Up Workshop



Farmers' Market Pop-Up Workshop



One of four table maps with comments from the Pop-up Workshops

CONVENTIONAL WORKSHOPS

Conventional workshops typically take place in centrally-located community spaces at important milestones of the planning process.

Workshops 1 and 2

The initial two workshops were scheduled on November 9, 2016, at two locations. The first took place at UCSB in the morning and the second took place at the Goleta Valley Community Center in the evening. Both workshops allowed community members and stakeholders to learn about the project and to provide valuable comments.

A brief formal presentation was scheduled at the beginning of both workshops to introduce the project, review the planning process, and communicate the objectives of the workshop.

The table maps were organized by dividing the City into four quadrants. This allowed the maps to be printed at a larger scale so that attendees could easily identify and highlight constraints and opportunities. Furthermore, the maps were designated with a bicycle-focus or pedestrian-focus to allow people to comment on specific matters. Additional exhibits depicting important information and educational material were posted on easels throughout the room. Surveys and Spanish interpretation was also available.

The workshops were well-attended and the project team documented over 200 comments. Attendees were encouraged to complete the online survey and to provide additional comments using the online map.



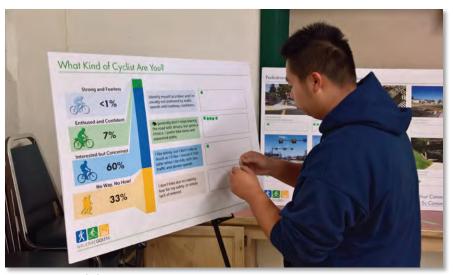
Workshop Instructions

The following comments summarize the major points of discussion:

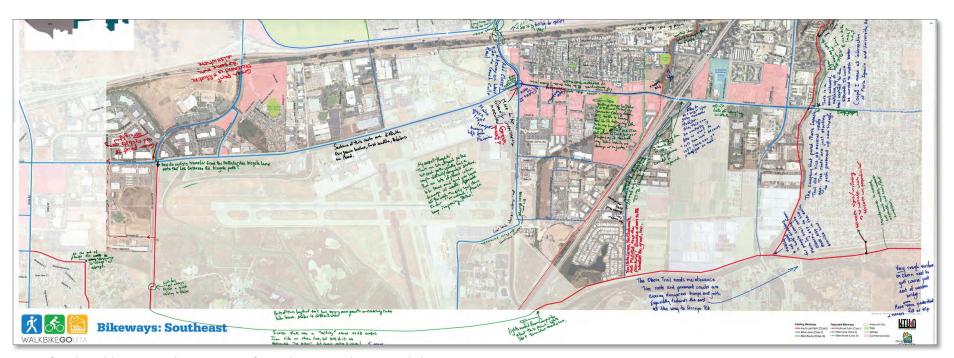
- 1. Fairview Avenue and the 101 overpass is dangerous and needs attention.
- 2. Provide separated bike facilities. Multi-use paths are favored.
- 3. Improve signal timing for pedestrians and install higher visibility crosswalks at major intersections.



Table map discussions



Interactive exhibit participation



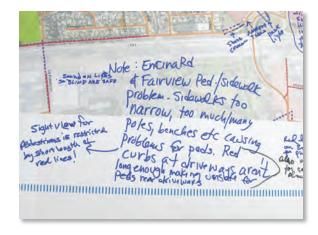
One of eight table map with comments from the November 9 Workshop

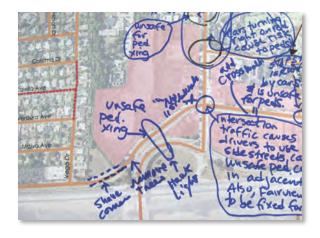
Workshop 3

The City scheduled a third workshop at the Encina Royale clubhouse lounge on December 8, 2016. Taking this workshop to the Encino Royale senior neighborhood allowed the City to gather comments from community members that may not have had the ability to attend previous and future workshops. They provided many valuable comments, particularly regarding the walking environment, and suggestions on how to improve existing infrastructure.

The following comments summarize the major points of discussion:

- 1. Fairview Avenue over the 101 overpass is dangerous and needs attention.
- 2. Replace broken sidewalks, widen narrow sidewalks, remove obstacles such as poles, and improve street infrastructure maintenance.
- 3. Many curbs near driveways are not painted red long enough. Hinders pedestrian visibility and makes crossing difficult.
- 4. Improve signal timing for pedestrians and install higher visibility crosswalks at major intersections.
- 5. Vehicular speeding is dangerous.











Workshop 4

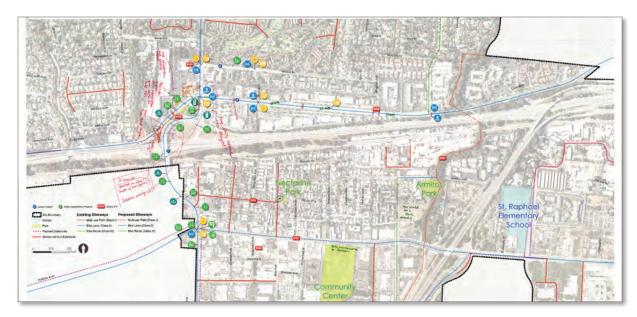
The fourth conventional workshop took place on June 21, 2017 at the Goleta Valley Community Center. Attendees were presented a list of potential projects that had been identified through the previous workshops and online input. Existing conditions photos, key maps, and planning-level recommendations were provided for each of the projects. In addition, a list of all active transportatino-related City projects was presented and made available on all table maps and as a separate exhibit. This list included projects in the City's CIP list, as well as projects identified through this planning process that would involve participation from neighboring jurisdictions, such as the City of Santa Barbara.

The top projects were organized as individual exhibits on easels around the room, as well as identified on the table maps.

The following comments summarize the major points of discussion:

- 1. The area encompassing Fairview Avenue, the 101 overpass, and Calle Real is dangerous and needs attention.
- 2. Provide separated bike facilities and multiuse paths throughout the major corridors.
- 3. Create safe and enjoyable bike loops within the City.
- 4. Improve signal timing for pedestrians and install higher visibility crosswalks at major intersections.
- 5. Include visionary policies to guide future bicycle and pedestrian projects.





June 21 Workshop table map comments

ONLINE SURVEY AND MAP RESULTS

An online survey and crowdsourcing map were created at the beginning of the project's planning process to give people a variety of options to provide feedback. Printed versions of both the survey and map were also available at all community workshops.

The online survey asked a variety of walking and bicycling infrastructure questions and allowed people to provide both general and specific comments. The survey also directed people to the online map that allowed them to place comments about specific locations, such as street corridors and intersections.

The survey was first announced at the pop-up workshops and was publicly available until it closed on February 20, 2017. The City was delighted to hear the survey closed with more than 1,600 participants. This record-setting number for the City was an indication of how important the walking and bicycling environment is for the Goleta community.

The online map generated over 550 comments as of February 20, 2017.

The survey and map data were used for gaining a general understanding of the existing pedestrian and bicycle issues, as factors for several GIS analyses, and guiding project prioritization.

The full list of survey results and online comments can be found in the Appendix of the final document.

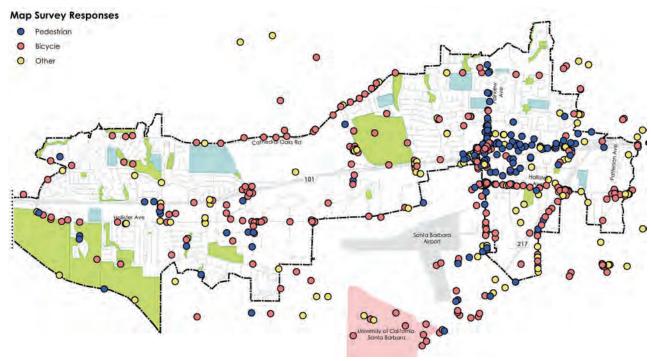


Figure 1-1: Online Map Comment Points

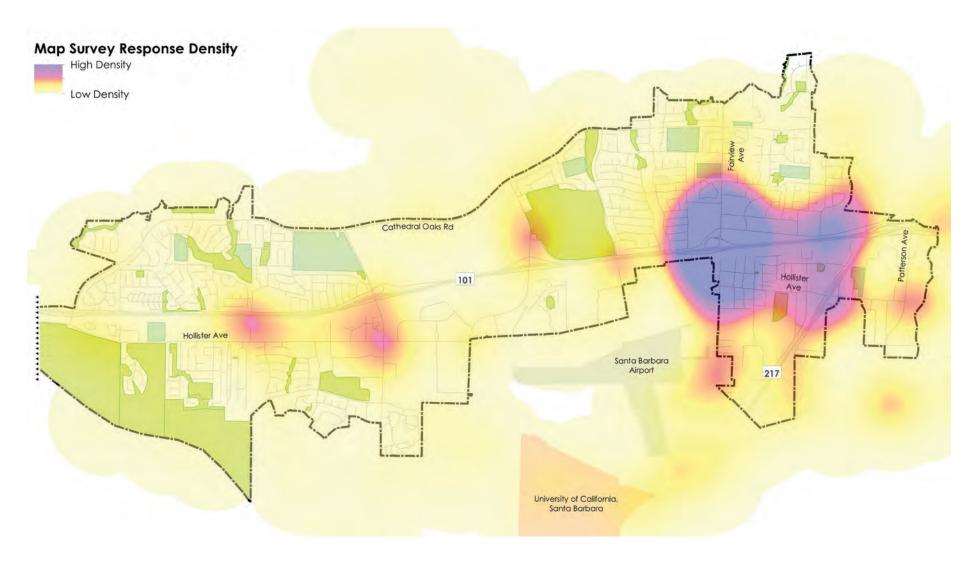


Figure 1-2: Survey Heat Map

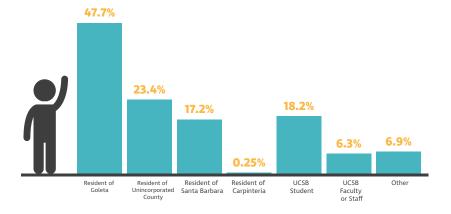
SURVEY RESULTS

The survey questions were designed to develop a general understanding of the community's current and future state of mind regarding active transportation. A total of twelve questions were asked, many of which included the option to provide additional comments related to the question.

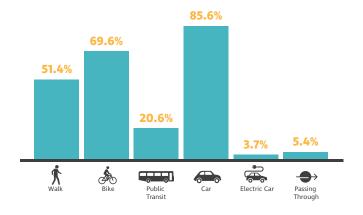
Printed and online surveys were available at local civic spaces and through online platforms. The City and the TAC worked together to distribute surveys using the City's website, stakeholder email listservs, the Monarch Press, and public workshops.

With over 1,600 survey responses, the following robust results helped to highlight the most important issues used later in the prioritization process. The entire survey results summary can be found in **Appendix #**.

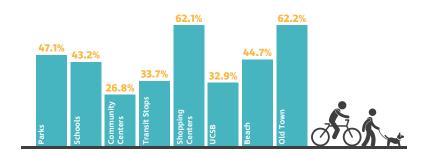
How Would You Best Describe Yourself?



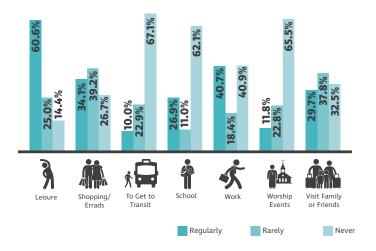
How do you currently travel throughout Goleta?



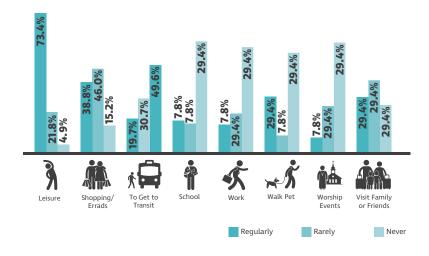
Where would you like to see better bicycle and pedestrian facilities near?



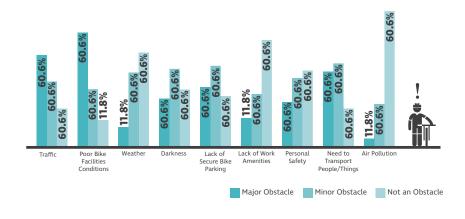
Typical Trip Purposes (Walking)



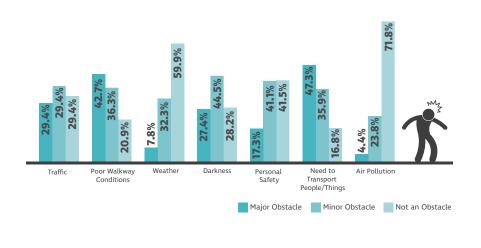
Typical Trip Purposes (Biking)



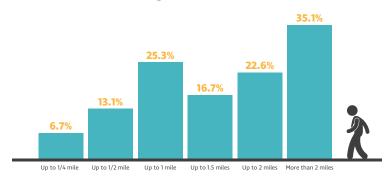
What keeps you from walking more often for short trips?



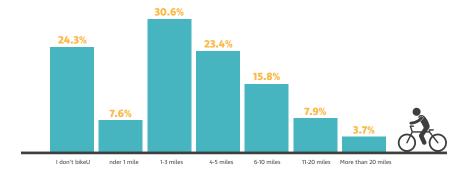
What keeps you from biking more often for short trips?



Comfortable Walking Distances



Comfortable Biking Distances



SUMMARY OF OUTREACH RESULTS

From the initial pop-up workshop at the Lemon Festival to the last TAC meeting, public participation has been extremely insightful and active. Community members took advantage of all ten opportunities to voice their thoughts and make suggestions on how to improve the walking and bicycling environment in the City.

The following is a summary of the major topics and issues discussed at the previous workshops and meetings:

- 1. The City has a good "foundation" of bicycle infrastructure. The City needs to focus on closing gaps and improving specific sections along corridors.
- 2. All of the freeway overpasses and underpasses need to be improved. There are several dangerous conditions for both pedestrians and bicyclists.
- 3. The Fairview Avenue/ 101 overpass received the largest number of comments from people at all workshops, online survey, and online map.
- 4. Install missing sidewalks.
- 5. Major intersections would benefit from:
 - a. Enhanced crosswalk markings
 - b. Improved signal timing
 - c. Pedestrian lighting
 - d. Address flooding issues
- 6. Upgrade existing bicycle infrastructure.
- 7. Upgrade bike lanes to buffered bike lanes or separated bike lanes where possible.
- 8. Continue adding green bicycle markings through intersections and conflict zones.
- 9. People prefer to use protected bicycle facilities, such as multi-use paths or protected bicycle lanes.
- 10. The City would benefit from better wayfinding and traffic signage.

TECHNICAL ADVISORY COMMITTEE (TAC)

TAC meetings were scheduled throughout the planning process at important milestones.

The first TAC meeting took place on July 13, 2016. At this meeting, the TAC discussed topics such as coordination with the City's existing and future land use and transportation plans, making sure pedestrian facilities were given a balanced attention in the study, and robust community outreach.

The second TAC meeting took place on February 9, 2017. The purpose of this meeting was to discuss the project's status, public outreach results to date, and the next steps in the planning process.

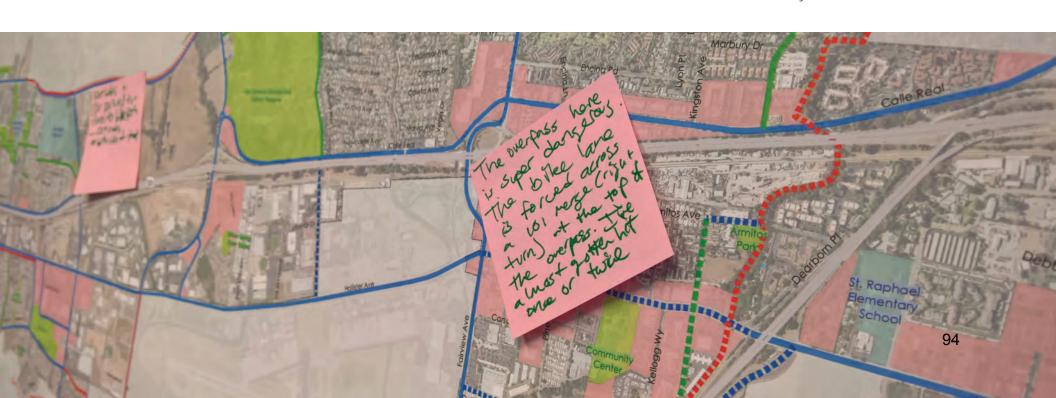
A third TAC meeting took place on July 27, 2017. This meeting focused on reviewing the results of the June 21 workshop and the draft document outline. In addition, the TAC discussed the importance of including visionary goals and projects, and policy changes that would improve the future of Goleta's active transportation network.

The fourth TAC meeting took place on August 30, 2017. The purpose of this meeting was to review the proposed project list and gather feedback on how to best prioritize the projects.

Additional TAC meetings will be scheduled to facilitate on-going coordination between citywide and regional projects.

TAC MEMBER LIST

- 1. Various City of Goleta Departments
- 2. City of Santa Barbara
- 3. County of Santa Barbara
- 4. UCSB
- 5. SBCAG
- 6. MTD
- 7. Goleta Chamber of Commerce
- 8. County Health Department
- 9. SBBike
- 10. COAST
- 11. Community Environmental Council
- 12. Community Associations



WALKBIKEGOLETA

RECOMMENDATIONS

RECOMMENDATIONS OVERVIEW

This chapter presents and discusses the improvements recommended to enhance bicycling and walking in Goleta, beginning with a discussion of the route types in use throughout California and the United States, followed by how projects were developed and assessed for feasibility and priority. The recommended improvements list includes both short-term and long-term improvements and is meant to serve as a guide to help the City in allocating funds as they become available through various sources. The chapter contains maps and tables that communicate details such as location, extent, and type.

It is important to note that the success of recommended projects is closely tied to programs and adopted standards, codes and policies. Though beyond the scope of this plan, Education, Encouragement, Enforcement, and Evaluation programs can be used to leverage investments in these projects. Similarly, the effectiveness of bicycle and pedestrian programs is maximized by actual project implementation. Likewise, changes to City standards, codes, and policies may be needed to implement bicycle and pedestrian improvements, and project implementation may, in turn, facilitate changes to City standards, codes and, policies.

BICYCLE AND PEDESTRIAN TREATMENTS

While not universally applied, in general, pedestrian travel in urban areas has long tended to be accommodated with features like sidewalks, crosswalks, dedicated signals, and curb extensions. Newer innovations like pedestrian scrambles, modified signal timing, and other pedestrians improvements are explained in the following section. A focus on providing for safer, less stressful bicycle travel has occurred much more recently. Especially over the past five years, the state of practice for bicycle travel in the United States has undergone a significant transformation. Much of this may be attributed to bicycling's changing role in the overall transportation system. No longer viewed as an "alternative" mode, it is increasingly considered as legitimate transportation that should be actively promoted as a means of achieving community environmental, social, and economic goals.

While connectivity and convenience remain essential bicycle travel quality indicators, recent research indicates the increased acceptance and practice of daily bicycling will require "low-stress" bicycle routes, which are typically understood to be those that provide bicyclists with separation from high volume and high speed vehicular traffic. The route types recommended by this plan, and described in the following section, are consistent with this evolving state of practice.



CONVENTIONAL BICYCLE TREATMENTS

There are four conventional bicycle route types recognized by the CA Department of Transportation. Details of their design, associated wayfinding, and pavement markings can be found in the CA MUTCD and CA Highway Design Manual.

Class I: Multi-Use Paths

Class I multi-use paths (frequently referred to as "bicycle paths") are physically separated from motor vehicle travel routes, with exclusive rights-of-way for non-motorized users like bicyclists and pedestrians.

Class II: Bicycle Lanes

Bicycle lanes are one-way route types that carry bicycle traffic in the same direction as the adjacent motor vehicle traffic. They are typically located along the right side of the street, between the adjacent travel lane and curb, road edge or parking lane.



Multi-Use Path



Bicycle Lane

Class III: Bicycle Routes

A bicycle route is a suggested bicycle path of travel marked by signs designating a preferred path between destinations. They are recommended where traffic volumes and roadway speeds are fairly low (35 mph or less).

Class IV: Separated Bikeways (Cycle Tracks)

Separated bikeways are bicycle-specific routes that combine the user experience of a multiuse path with the on-street infrastructure of a conventional bicycle lane. Cycletracks are physically separated from motor vehicle traffic and designed to be distinct from any adjoining sidewalk. The variety of physical protection measures can include raised curbs, parkway strips, reflective bollards or parked vehicles. Cycletracks can be either one-way or two-way, depending on the street network, available right-of-way and adjacent land use, but the safety of two-way cycletracks must be carefully evaluated, especially if they must cross motor vehicle routes. This is because few motor vehicle drivers are accustomed to two-way cycletracks and they may tend to look to the left only when deciding whether it is safe to cross.



Bicycle Route



Separated Bikeway

PROJECT SPOTLIGHT - HOLLISTER AVENUE CLASS I BIKE PATH SAFE ROUTES TO SCHOOLS PROJECT

The Hollister Avenue Class I Bike Path Safe Routes to Schools project was completed in late 2017 along the south side of Hollister Avenue between Pacific Oaks Road and Ellwood Elementary School. The project included reconfiguring Hollister Avenue to accommodate the new path within existing City right-of-way and includes a 14 foot wide concrete path with a five foot landscape buffer adjacent to Hollister Avenue. The existing five foot Class II bicycle lanes were retained along both sides of Hollister Avenue.

The path is located in a residential area where school children and families want to bicycle to school safely. Previously, of the 481 kids who attend the school, only 25 rode their bikes while over 300 walked. With the completion of this project, the City and Ellwood Elementary School hope to see many more students and families walking and bicycling to school. The path will also serve commuters, UCSB students, recreational riders and tourists.







ENHANCED BICYCLE TREATMENTS

While the conventional bicycle route types can be found throughout the United States, there has been a distinct shift towards further enhancement. For example, the CA MUTCD has approved the installation of buffered bicycle lanes, while Shared Lane Markings or "Sharrows" have been in use since 2008 throughout the State.

These enhancements are low cost, easy to install, and provide additional awareness about the likely presence of bicyclists. In many instances, installation of these bicycle route enhancements can be coordinated as part of street resurfacing projects. The use of green paint has also become a simple and effective way to communicate the likely presence of bicyclists. It is also used to denote potential conflict zones betwen bicyclists and vehicles.

Buffered Bicycle Lanes

Buffered bicycle lanes provide additional space between the bicycle lane and traffic lane, parking lane, or both, to provide a more protected and comfortable space for bicyclists than a conventional bicycle lane. The buffering also encourages bicyclists to avoid riding too close to parked vehicles, keeping them out of the "door zone" where there is the potential danger of drivers or passengers suddenly opening doors into the bicyclists' path.

Shared Lane Markings ("Sharrows")

The shared lane marking is commonly used where parking is allowed adjacent to the travel lane. It is now common practice to center them within the typical vehicular travel route in the rightmost travel lane to ensure adequate separation between bicyclists and parked vehicles. Many cities install sharrows over a green background to enhance visibility.

Bike Boxes

A bike box is a designated area at the head of a traffic lane at a signalized intersection that provides bicyclists a safe and visible way to wait ahead of queuing traffic during the red signal phase. This positioning helps encourage bicyclists traveling straight through not to wait against the curb for the signal change.



Buffered Bicycle Lane



Shared Lane Marking ("Sharrow")



Bike Box

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LOW STRESS BICYCLE TREATMENTS

There are a number of other non-conventional route types that the City may find useful in specific situations. In many cases, the conventional bicycle route types previously mentioned may not meet the safety perceptions of the bicycling community. Protected, low-stress streets, and bicycle-prioritized routes are an ever-evolving, ever-improving state of practice.

The improvements described in this section have been implemented in other states in the United States as well as other countries with great success and are quickly becoming standard recommendations.

Details of these route types and other treatments can be found in the NACTO Urban Bikeway Design Guide or AASHTO Guide of the Development of Bicycle Facilities.

Bicycle Boulevards

Bicycle boulevards provide a convenient, low-stress cycling environment for people of all ages and abilities. They are installed on streets with low vehicular volumes and speeds and often parallel higher volume, higher speed arterials as an alternative. Bicycle boulevard treatments use a combination of signs, pavement markings and traffic calming measures that help to discourage through trips by motor vehicle drivers and create safe, convenient bicycle crossings of busy arterial streets.

Signage and Wayfinding

Signage and wayfinding on all streets and bicycle routes are intended to identify routes to both bicyclists and drivers, provide destination information and branding, and to inform all users of changes in roadway conditions.



Bicycle Boulevard



Signage and Wayfinding



Colored Bicycle Facilities

Colored Bicycle Lanes

Colored pavement increases the visibility of bicycle routes, identifying potential areas of conflict, and reinforces bicyclists' priority in these areas. Colored pavement can be used as a corridor treatment, along the length of a bicycle lane or within a protected bikeway. Additionally, it can be used as a spot treatment, such as crossing markings at particularly complex intersections where the bicycle path may be unclear. Consistent application of color across a bikeway corridor is important to promote clear understanding for all roadway users.

Green Intersection Conflict Striping

Intersection crossing markings indicate the intended path of bicyclists. Colored striping can be used to highlight conflict areas between bicyclists and vehicles, such as where bicycle lanes merge across motor vehicle turn lanes.

Protected Intersections

Protected intersections maintain integrity (low-stress experience) of their adjoining separated bicycle lanes by fully separating bicyclists from motor vehicles. Hallmark features of these protected intersections include a two-stage crossing supported by an advance queuing space, protective concrete islands, special bike-cross markings (parallel with crosswalks), and special signal phasing.

Two-Stage Turn Queue Box

Two-stage turn queue boxes can provide a more comfortable crossing for many bicyclists since they entail two simple crossings, rather than one complex one. They also provide a degree of separation from vehicular traffic, because they do not require merging with vehicle traffic to make left turns.



Green Conflict Striping at Intersections



Protected Intersection



Two-Stage Turn Queue Box

Bicycle Signals

This category includes all types of traffic signals directed at bicyclists. These can include typical green/yellow/red signals with signage explaining the signal controls, or special bikeway icons displayed within the signage lights themselves. Near-side bicycle signals may incorporate a "countdown to green" display, as well as a "countdown to red."

Bicycle Detection

Bicycle detection is used at intersections with traffic signals to alert the signal controller that a bicycle crossing event has been requested. Bicycle detection occurs either through the use of push buttons or by automated means.

TRAFFIC CALMING

Traffic calming involves changes in street alignment, installation of barriers, and other physical measures to reduce traffic speeds and/or cut-through motor vehicle traffic volumes. The intent of traffic calming is to alter driver behavior and to improve street safety, livability, and other public purposes. Other techniques consist of operational measures such as police enforcement and speed displays.

The following examples are traffic calming measures that may apply to Goleta.

Traffic Circle

A traffic circle is an example of a traffic calming measure commonly applied to bicycle boulevards. They slow traffic on each approach and reduce right-of-way conflicts, but tend not to divert traffic to nearby streets. They are appropriate for usage on low volume local residential streets with alternative access points.



Bicycle Detection, LED Blank Out Sign



Bike Signal



Traffic Circle

Signals and Warning Devices

Pedestrian Hybrid Beacons (PHBs) and Rectangular Rapid Flashing Beacons (RRFBs) are special signals used to warn and control traffic at unsignalized locations to assist pedestrians in crossing a street via a marked crosswalk. Either of these devices should be installed at locations that experience high pedestrian volumes and that connect people to popular destinations such as schools, parks, and retail.

As of December 2017, the Federal Highway Administration (FHWA) has rescinded its approval of new installations of Rectangular Rapid Flashing Beacons (RRFB). As described in FHWA's December 21st Memorandum, "Installed RRFBs may remain in service until the end of useful life of those devices and need not be removed."

Agencies will now need to consider other kinds of MUTCD compliant crossing treatments such as LED Enhanced Crossing Signs (W11-1, W11-2, or W11-15). The City can refer to MUTCD's Frequently Asked Questions page regarding the RRFB rescindment.

Signals and warning devices should be paired with additional pedestrian improvements, where appropriate, such as curb extensions, enhanced crosswalk marking, lighting, median refuge islands, and corresponding signage.



Rectangular Rapid Flashing Beacon



Pedestrian Hybrid Beacon

Speed Tables/Raised Crosswalk

Speed tables are flat-topped road humps, often constructed with textured surfacing on the flat section. Speed tables and raised crosswalks help to reduce vehicle speeds and enhance pedestrian safety.

Speed Displays

Speed displays measure the speed of approaching vehicles by radar and inform drivers of their speeds using a LED display. Speed displays contribute to increased traffic safety because they are particularly effective in reducing the speed of vehicles traveling ten or more miles per hour over the speed limit.

Chicanes

Chicanes are a series of narrowing or curb extensions that alternate from one side of the street to the other forming S-shaped curves.

Traffic Diverters

A traffic diverter is a roadway design feature placed in a roadway to prohibit vehicular traffic from entering into or exiting from the street, or both.

On-Street Edge Friction

Edge friction is a combination of vertical elements such as on-street parking, bicycle routes, chicanes, site furnishings, street trees, and shrubs that reduce the perceived street width, which has been shown to reduce motor vehicle speeds.



Traffic Diverter



Speed Table



Speed Display



Chicanes

PEDESTRIAN TREATMENTS

Many streets in Goleta already have sidewalks, especially within newer neighborhoods. While many intersections are signalized and crosswalks exist, there are some segments with long blocks without convenient crossing places. Providing crossing treatments will help reduce "jaywalking" and unsafe mid-block crossings.

Enhanced Crosswalk Markings

Enhanced crosswalk markings can be installed at existing or proposed crosswalk locations. They are designed to both guide pedestrians and to alert drivers of a crossing location. The bold pattern is intended to enhance visual awareness.

Curb Extensions

Also called bulb-outs or neck-downs, curb extensions extend the curb line outward into the travel way, reducing the width of the street. Typically occurring at intersections, they increase pedestrian visibility, reduce the distance a pedestrian must cross, and reduce vehicular delay. Curb extensions must be installed in locations where they won't interfere with bicycle lanes or separated bikeways. If both treatments are needed, then additional design features such as ramps, or half-sized curb extensions should be considered.

Refuge Island

Refuge islands provide pedestrians and bicyclists a relatively safe place within intersection and midblock crossings to wait if they are unable to complete their crossing in one movement.



Enhanced Crosswalk Markings



Refuge Island



Curb Extensions

Mid-block Crossings

Mid-block crossings provide convenient locations for pedestrians and bicyclists to cross thoroughfares in areas with infrequent intersection crossings or where the nearest intersection creates substantial out-of-direction travel. Mid-block crossings should be paired with additional traffic-control devices such as PHBs, LED enhanced flashing signs, and refuge islands.

Lighting

Pedestrian-scale lighting provides many practical and safety benefits. Lighting can also be designed to be fun, artistic, and interactive.

Pedestrian Scramble

Pedestrian scrambles stop vehicular traffic flow simultaneously in all directions to allow pedestrians to cross the intersection in any direction. They are used at intersections with particularly heavy pedestrian crossing levels.

Transit Stop Amenities

Transit stop amenities such as shelters with overhead protection, seating, trash receptacles, and lighting are essential for encouraging people to make use of public transit.

Modified Traffic Signal Timing

Adjusting the time needed to cross high-volume and wide streets provides additional safety and comfort for pedestrians and bicyclists.



Transit Stop Amenities



Mid-block Crossing



Lighting



Pedestrian Scramble

Senior Zones

An area identified as a senior zone can be enhanced with street signage, increased crossing times at traffic signals, benches, bus stops with shelters, and pedestrian lighting.

PLACEMAKING

The inclusion of urban elements such as parklets and community gardens encourages walking and provides usable space for all ages. In many cities, these urban elements have helped to transform urban villages and downtowns into walkable destinations. Coordinating with local Goleta businesses and organizations may provide collaborative design and funding opportunities between the City, its businesses, and residents.

Parklets

Parklets are small, outdoor seating areas that take over one or two parking spots, reclaiming the space for pedestrians and improving the urban environment's aesthetics and streetscape.

Community Gardens

Community gardens provide fresh produce and plants, and assist in neighborhood improvement through a sense of community and connection to the environment. They are typically managed by local governments or non-profit associations.

Furnishings and Public Art

Transit shelters, bicycle racks, seating, and public art provide important amenities for functionality, design and vitality of the urban environment. They announce that the street is a safe and comfortable place to be and provide visual detail and interest.



Community Gardens



Senior Zone



Parklets



Furnishings and Public Art

CORRIDORS OF IMPORTANCE: LONG-TERM VISION FOR A COMPREHENSIVE LOW-STRESS NETWORK

Developing the list of potential improvements underwent a thorough discussion between multiple groups of people including city staff, the TAC, the community, and stakeholders. Thanks to the iterative planning process, the team developed a list of recommended bicycle and pedestrian improvements that are both specific to the City of Goleta as well as relate to the neighboring region. This section begins with a discussion of the long-term vision of corridors of importance that address the creation of a comprehensive low-stress active transportation network.

A low-stress active transportation network is one that provides ample options for residents, visitors, and anyone in the region to get to and from their destinations in a safe, comfortable, and enjoyable manner by walking, bicycling, or a combination of both. A complete low-stress network can be comprised of multi-use paths, separated bikeways, bicycle boulevards, safe crossings, wide sidewalks (where appropriate), lighting, street trees, trails, bus shelters, and any other feature that contribute to a safer, more comfortable experience.

The following five corridors of importance are critical in creating a comprehensive low-stress network in Goleta. These improvements are supported by 37 additional bicycle and pedestrian improvements. These proposed improvements reflect the corridors that have been identified as critical for improving safety and comfort, as well as connecting major neighborhoods, activity centers, schools, parks and transit stops. Implementing these corridors is critical to the future of balanced mobility in Goleta.

FAIRVIEW AVENUE/101 OVERPASS

The Fairview Avenue/101 Overpass is widely considered to be Goleta's least bicycle and pedestrian-friendly location. This corridor received the highest number of comments about the community's various mobility concerns.

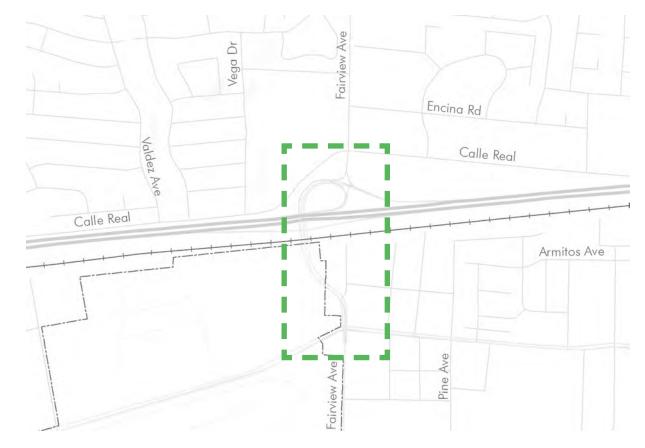
The bridge's existing layout was designed to maximize vehicular throughput, which creates great discomfort for pedestrians and bicyclists that rely on this bridge for traveling to and from their destinations. Pedestrians and bicyclists must use it because crossings of Coast Highway 101 and the rail line are both rare and far apart.

The lack of a sidewalk on the east side of the bridge, the narrow sidewalks on the west side, the lack of high-visibility crosswalks, the high traffic volume and vehicular speeding, the lack of buffered or fully separated bikeways, and intimidating transitions at the ends of the bridge all lead to uncomfortable and unsafe conditions for pedestrians and bicyclists.

A Class I, multi-use path and narrowing of the travel lanes are recommended to improve the walking and bicycling environment. Improving the transition at the beginning and end of the bridges will also aid in improving the negative conditions currently experienced. Although

the recommended Class I multi-use path is an attempt to mitigate how uncomfortable the corridor is, it is only intended to be an interim solution that takes advantage of available bridge and roadway width to create a more comfortable route at a relatively low cost, especially compared to a separate bicycle/pedestrian-only bridge over the freeway.

The City will pursue grant opportunities to complete a study that dives deeper into understanding this corridor's constraints and opportunities. The study will coordinate previous planning efforts completed for the Hollister Avenue Complete Streets Plan, as well as determine the best solution to get people safely and comfortably across the 101 if/when the bridge is replaced.



STORKE ROAD/GLENN ANNIE ROAD

The Stoke Road/Glenn Annie Road corridor is also considered as one of the City's least bicycle and pedestrian-friendly areas. The corridor travels through the City in a north-south direction, with Dos Pueblos High School at the northern terminus and UCSB at the southern terminus. There are several intersections throughout this corridor that received a high number of comments and concerns, such as the intersection of Storke Road and Hollister Avenue, and the 101 overpass.

The recommendations made in this plan address these intersections, but the City, community and the TAC would like to see more. The importance of this future opportunities project lies in the high volume of students, families and employees that rely on this corridor for getting to and from their destinations.

As a future opportunity, this plan recommends a separate study to be completed to analyze the opportunities and constraints of having a fully protected and separated bikeway, as well as pedestrian-friendly intersections. In addition, coordination with UCSB and Santa Barbara County will be critical to successfully implementing such recommendations.



"GOLETA LOOP" The "Goleta Loop" future opportunity project was created from discussions with the community and TAC. This project would be the culmination of a successfully integrated, separated loop around the northern half of Goleta employing Cathedral Oaks Road, Hollister Avenue and the San Jose Creek Path. A loop that families feel safe riding, walking and jogging on and that they can use to get to major destinations is an achievable goal. Parkhurst Dr Berkeley Rd Calle Real Del Norte Dr % Calle Real Cortona Dr Hollister Ave Santa Barbara Municipal Airport Felicia Dr UCSB City of Goleta 3,500 UCSB

GOLETA BEACH/UCSB ACCESS

Throughout the planning process, people shared how wonderful the Coast Route Bike Path is. UCSB students, faculty and staff, as well as residents and visitors of Goleta, have a great appreciation for this Class I multi-use path located along the coast and Atascadero Creek.

People have expressed a desire for an off-street, low-stress path or a separated on-street bikeway on Fairview Avenue that provides a safe and direct connection between Goleta, Goleta Beach Park and UCSB. This project would also provide a great connection to the "Goleta Loop." Coordination with UCSB, City of Santa Barbara, and Santa Barbara County will be critical to successfully implement this recommendation.



CALLE REAL

The Calle Real future opportunity project involves the creation of a low-stress, separated on-street bikeway that connects the community to the multiple destinations accessible from Calle Real. This east-west corridor would also provide a useful connection between Goleta and Santa Barbara. Careful attention is needed at the Calle Real and Patterson Avenue intersection due to the difficulty of getting pedestrians and bicyclists across safely.



BICYCLE AND PEDESTRIAN RECOMMENDATIONS

This section specifically addresses the physical improvements component of a comprehensive suite of recommendations to help improve Goleta's bicycling and walking environment. These built improvements include all of the treatment types referenced in the "BICYCLE AND PEDESTRIAN TREATMENTS" section at the beginning of this chapter, as well as more detailed recommendations for areas around Goleta's schools. To round out this plan's overall recommendations, subsequent sections address associated policies and programs.

Table: 4-1 lists the proposed bicycle and pedestrian projects including information such as location, route type, length, extent, and ranking. Figures 4-1 through 4-5 depict proposed projects and their relationship with adjacent jurisdictions.

The numbering used to identify projects in the following section does not necessarily imply which route should be built first. Implementing the proposed improvements has no specific time line, since the availability of funds for implementation is variable and tied to the priorities of the City's capital projects. If there is desire, recommended projects can be implemented at whatever interval best fits funding cycles or to take into consideration the availability of new information, new funding sources, updated collision statistics, updated CIP lists, etc. Project prioritization combined data-driven analysis with City, TAC and stakeholder input. Some projects that initially scored low were moved up due to knowledge of deficiency and need based on community feedback. Route prioritization and implementation will need to be fine-tuned and adjusted based on future circumstances.

TABLE 4-1: POTENTIAL PROJECT LIST

Rank- ing #	Type	Segment	Between		Facility Type	Notes
1	Bike/ Ped	Fairview Ave	Calle Real	Hollister Ave	Class I	Unsafe for pedestrians and bicyclists. Needs lots of attention. Add Class I path to separate people from vehicle traffic. Conduct feasibility study to closely analyze corridor. Corridor requires complete street improvements
2	Bike/ Ped	Hollister Ave	Cathedral Oaks Rd	Elderberry Dr	Class I or IV	Difficult to cross at Cathedral Oaks and Hollister. Install continuous path. Upgrade bicycle lane to multi-use path. Install curb ramps, high-visibility crosswalks. Long-term vision plan for Hollister Ave
3	Bike/ Ped	Encina Rd	Fairview Ave	Moreton Bay Ln	Class II	Buffer bicycle lanes, narrow lanes, high-visibility crosswalks, decrease curb radii on north side. Corresponds with road resurfacing
4	Bike	Hollister Ave	Pacific Oaks Rs	Eastern City Limit	Class I or IV	Coordinate with Complete Streets Project
5	Bike/ Ped	Glenn Annie Rd	Cathedral Oaks Rd	101 Overpass	Buffered Class II	Lots of students ride/walk through here, unsafe conditions. Buffer bicycle lanes where possible, intersection crossing markings, bike boxes, modify signal timing, high-visibility crosswalks
6	Bike	Kellogg Ave	Armitos Ave	Kellogg Wy	Class II	General Plan TE
7	Bike/ Ped	Storke Rd at Hollis- ter Ave			Crossing Im- provements	Unsafe for pedestrians and bicyclists. Insufficient crossing time. High-visibility crosswalks, modify signal timing
8	Bike	Fairview Ave	Hollister Ave	Sandspit Rd	Class I	Potential joint grant application/project between all three agencies and possibly UCSB
9	Ped	Dos Pueblos High School	Cathedral Oaks Rd		RRFB or PHB	Install RRFB or PHB at road/driveway between Alameda Ave and Glen Annie Rd
10	Bike	Cathedral Oaks Rd	San Pedro Creek	Eastern City Limit	Class I or IV	Class II lanes exist
11	Ped	Berkeley Rd at Kel- logg Ave			Crossing Im- provements	High-visibility crosswalks

Rank- ing #	Туре	Segment	Between		Facility Type	Notes
12	Ped	Calle Real	Fairview Ave	Kellogg Ave	Crossing Improvements	Reduce curb radii, install curb extensions, high-vis- ibility crosswalks, modify signal timing. Corre- sponds with road resurfacing projects
13	Bike	Fairview Ave	Cathedral Oaks Rd	Calle Real	Class I or IV	CIP 9060 to add sidewalk and Class II bicycle lanes through parts of this section
14	Bike/ Ped	Hollister Ave at Palo Alto Dr			Mid-block Crossing	Install mid-block crossing with PHB and high-visibility crosswalk. May have reduced need with new Class I path; Re-evaluate following Class I path installation
15	Bike/ Ped	Los Carneros Rd	Hollister Ave	Coast Route	Class II	Install bicycle lanes on southbound Los Carneros, high-visibility crosswalks, bicycle crossing markings southbound to intersection, reduce curb radii, and modify signal timing. GTIP improvements include bicycle lanes
16	Bike	Patterson Ave	More Rd	Coast Route	Class II	Potential asphalt curb and re-striping - Coordinate with County
17	Ped	Fairview Ave at Cathedral Oaks			Crossing Improvements	Pedestrian crossing improvements for students especially are wanted. Enhanced crosswalks, modify signal timing for pedestrians, re-locate utility poles in sidewalk, trim hedges
18	Bike	Cathedral Oaks Rd	Paseo Del Piñon	King Daniel Ln	Class II	Buffer bicycle lanes, or convert to Class I or IV
19	Bike/ Ped	Mendocino Dr at Hwy 101			Overcrossing	Bike/ped bridge overcrossing. Not a selected alternative in 101 Crossing Project analysis
20	Bike	Carlo Dr	Cathedral Oaks Rd	Calle Real	Class III	Sharrows, add wayfinding signage. Potential for SBBike to add wayfinding signage as part of overall South Coast Wayfinding Program
21	Bike/ Ped	Cathedral Oaks at Alameda Ave			Crossing Improvements	Safer crossing desired. Enhanced crosswalks, curb extensions
22	Bike	Univ Village Park / Flood Control	Hollister Ave	Ellwood Mesa Open Space	Class I	Install Class I path to connect to other Class I paths and trails. PWD identified and public comments to connect Hollister Class I to Open Space and UCSB multipurpose trail system

Rank- ing #	Туре	Segment	Between		Facility Type	Notes
23	Bike/ Ped	Convington Way at San Pedro Creek			Bridge and Signage	Add 4-way stop signs on streets at both ends of bridge. Replace with wider bridge. Add 4-way stop signs on streets at both ends of bridge. Replace with wider bridge
24	Bike/ Ped	Evergreen Acres Park	Brandon Elementa- ry School	Waldorf School	Class I	Install Class I path to connect schools and park. General Plan TE
25	Bike	Ellwood Station Rd	San Blanco Dr	Calle Real	Class II	General Plan TE
26	Bike	San Milano Dr	Evergreen Park Trailhead	San Blanco	Class II	General Plan TE
27	Bike/ Ped	Sperline Preserve - Northeast Edge	Ellwood Beach Dr	Cannon Green Dr	Class I	General Plan TE
28	Bike	Calle Real	Los Carneros Rd	Eastern City Limit	Class I or IV	Existing Class II. City is restriping east of Fairview. Coordinate eastern end with County
29	Bike	Santa Barbara Shores Dr	Hollister Ave	Trailhead to Ell- wood Beach	Class III	Better connection to Ellwood Beach. Install way- finding signage and sharrows. Potential for SBBike to add wayfinding signage as part of overall South Coast Wayfinding Program
30	Bike	Cortona Rd	Hollister Ave	Los Carneros Rd	Class II	Bike connection through business park to Market- place and across to Goleta Amtrak Depot
31	Ped	Marketplace Dr at Storke Rd			Crossing Improvements	Enhance crosswalks, modify signal timing. Partial component of CIP 9062
32	Bike	Barling Terrace	Stow Canyon Rd	Covington Way/ Berkeley Rd Bridge	Class III	Install bicycle route signage and wayfinding to make clear this is a bicycle route for students. Private street within HOA
33	Bike	Mendocino Dr	Dos Pueblos HS	Calle Real	Class II or III	Install Class II or III, install bicycle signal at Calle Real. Already residential area. Evaluate most used routes to schools for students
34	Bike	Lindmar Rd	Robin Hill Rd	La Patera	Class II	Bike connection to Amtrak station. Connection goes through private property (Raytheon)

Rank- ing #	Type	Segment	Between		Facility Type	Notes
35	Bike/ Ped	Los Carneros Rd at Calle Real			Markings / Signage	Add signage to let bicyclists know they can ride on sidewalk. Install yield sharks teeth, signage that lets bicyclists know they can ride on sidewalk around the traffic calming circle, green-backed sharrows through roundabout
36	Bike	Convington Way/ Berkeley Rd	Los Carneros Rd	Eastern City Limit	Class IIIB - Bike Boulevard	Add wayfinding signage to brand as a bicycle boulevard. Potential for SBBike to add wayfinding signage as part of overall South Coast Wayfinding Program
37	Bike/ Ped	Campus Glen Open Space/Butterfly Grove	Santa Barbara Shores Dr	Ellwood Beach Dr	Class I	Multi-use path access through this open space. Class I path through open space or trail project

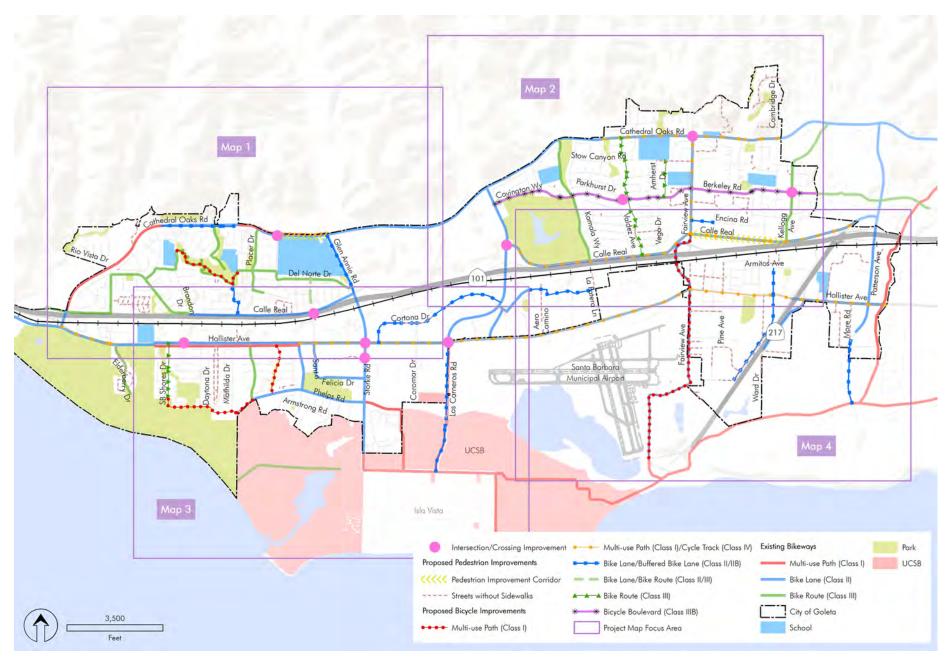


Figure 4-1: City-wide Project List Key Map

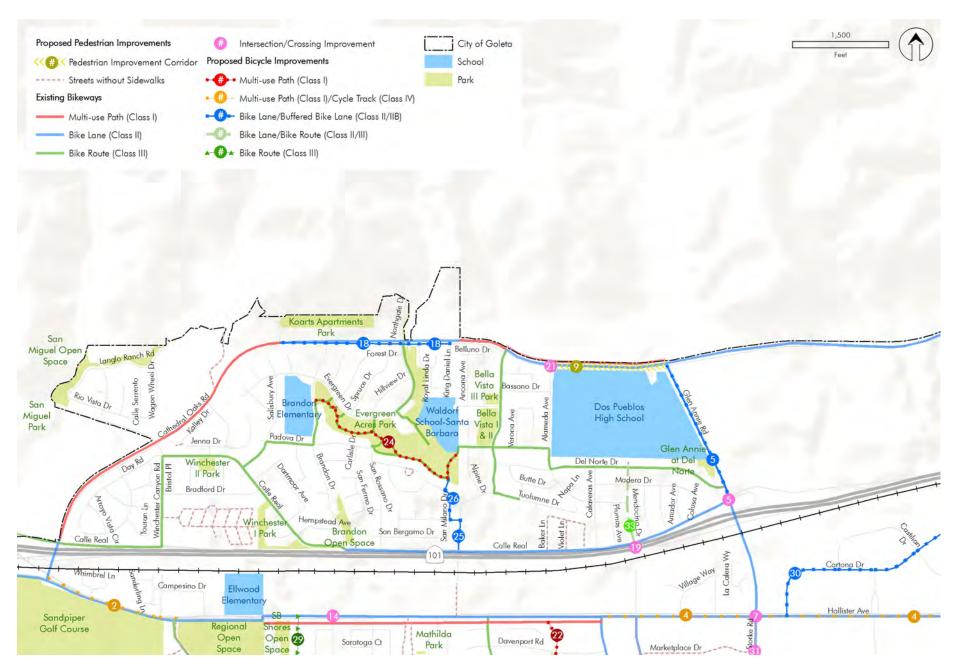


Figure 4-2: Project List Northwest Map

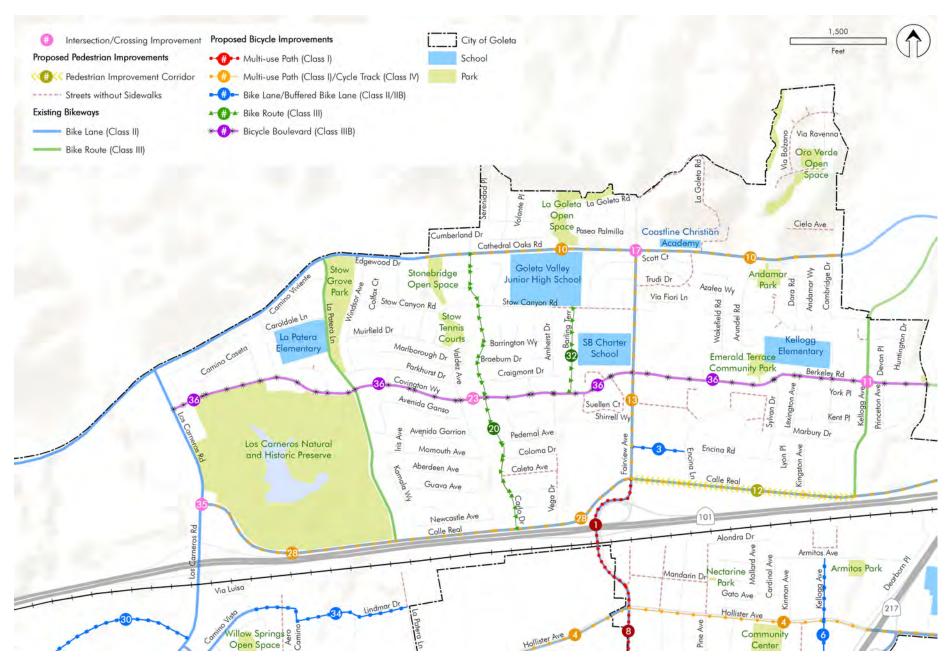


Figure 4-3: Project List Northeast Map

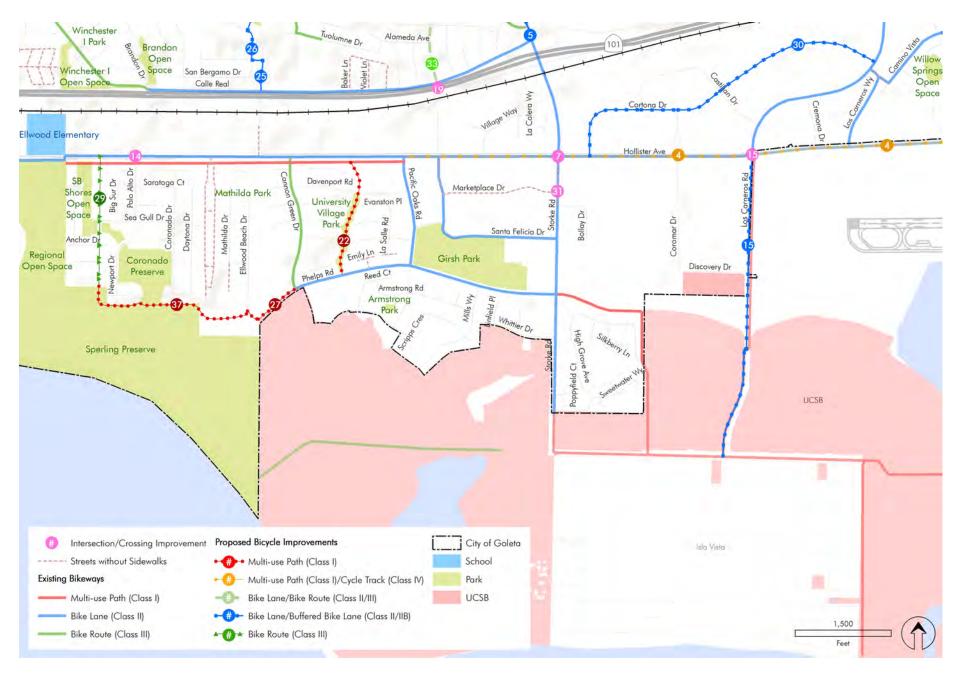


Figure 4-4: Project List Southwest Map

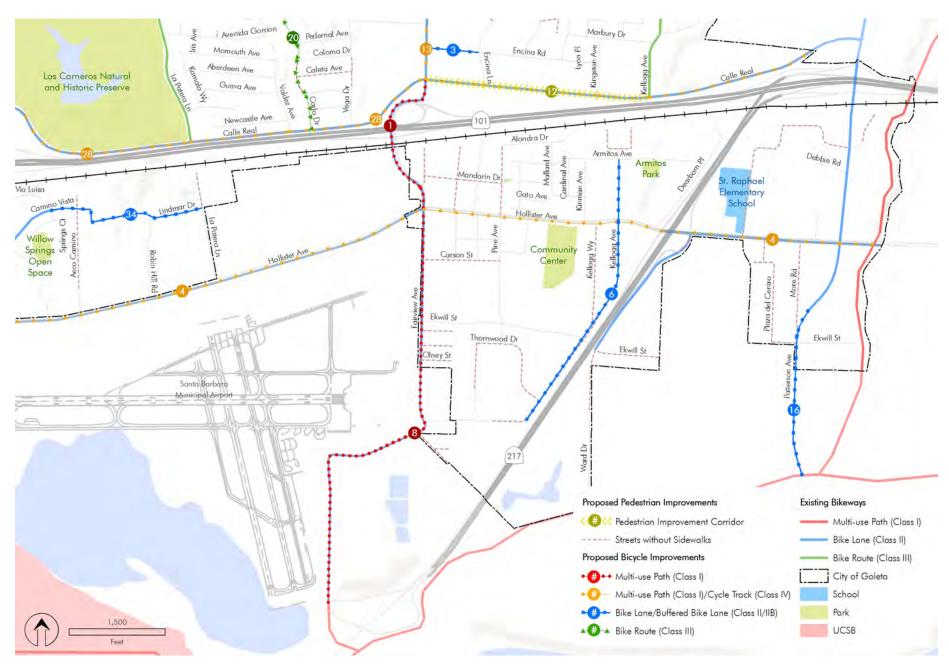


Figure 4-5: Project List Southeast Map

SCHOOL-ZONE PEDESTRIAN IMPROVEMENTS

Safe Routes to School planning was one of the primary factors used for recommending pedestrian improvements in this plan. A GIS analysis of the existing conditions as well as community feedback were used to identify issues regarding the safety and comfort of walking to and from schools. A GIS-based methodology was used to define Safe Routes to School (SRTS) Zones, defined as quarter-mile walkable zones (walksheds), based on the schools' entrances and the street network. These zones are the locations where walking improvements should be prioritized.

Although the City does not officially have a SRTS Task Force or program, these recommendations and the BPMP itself can lead to the creation of such programs.

The following pages communicate the initial recommendations for each of the schools identified in this plan. The recommendations are preliminary and therefore should be used as a starting point for a more in-depth SRTS-specific project. Each school map is supported by a summary of the recommendations, both unique to each school and in general for the zone, as well as a map with the locations of the proposed recommendations. Please note that several maps include more than one school due to their proximity to one another.

BRANDON ELEMENTARY SCHOOL

Brandon Elementary School is located in northwest Goleta in a residential neighborhood with several park and open space amenities nearby.

Recommendations

- 1. Install missing curb ramps and tactile domes
- 2. Install high-visibility crosswalks
- 3. Install missing sidewalks



Figure 4-6: Brandon Elementary SRTS Map

DOS PUEBLOS HIGH SCHOOL

Dos Pueblos High School is located in northwest Goleta in a residential neighborhood with several park and open space amenities nearby. It is the only high school serving the City, so addressing its multi-modal transportation is a high priority.

- 1. Install missing curb ramps and tactile domes
- 2. Install high-visibility crosswalks
- 3. Install missing sidewalks
- 4. Install 4-way stop sign at Del Norte Drive and Mendocino Drive



Figure 4-7: Dos Pueblos High School SRTS Map

ELLWOOD ELEMENTARY SCHOOL

Ellwood Elementary School is located in western Goleta in a low-density residential and commercial neighborhood. The school will benefit greatly from the recently installed multi-use path on the south side of Hollister Ave, connecting families and students throughout the corridor.

Recommendations

- 1. Install missing curb ramps and tactile domes
- 2. Install high-visibility crosswalks
- 3. Install missing sidewalks
- 4. Extend multi-use path to western City boundary



Figure 4-8: Ellwood Elementary SRTS Map

GOLETA VALLEY JR. HIGH SCHOOL, SB CHARTER SCHOOL, MONTESSORI CENTER, AND COASTLINE CHRISTIAN ACADEMY

Goleta Valley Junior High School, SB Charter School, Montessori Center School, and Coastline Christian Academy are located in northeast Goleta in a primarily residential neighborhood. The schools are within walking and bicycling distance of the Berkeley Road-Covington Way Cross-Town Route (bicycle boulevard) and the recent bicycle-pedestrian improvements on Cathedral Oaks Road, all of which provide safe and comfortable options for travel.

Recommendations

- 1. Install missing curb ramps and tactile domes
- 2. Install high-visibility crosswalks
- 3. Install missing sidewalks
- 4. Install RRFB with enhanced crosswalks at Fairview Avenue and Stow Canyon Road



Figure 4-9: Goleta Valley Jr. High, SB Charter School, Montessori Center, and Coastline Christian Academy SRTS Map

KELLOGG ELEMENTARY SCHOOL

Kellogg Elementary School is located in north-central Goleta in a primarily residential neighborhood. Several parks are found nearby such as Berkeley/Emerald Terrace Park and Kellogg Open Space. It is also adjacent to the Berkeley Road-Covington Way Cross-Town Route (bicycle boulevard) which provides the community a safe and comfortable option for travel.

- 1. Install missing curb ramps and tactile domes
- 2. Install high-visibility crosswalks
- 3. Install missing sidewalks

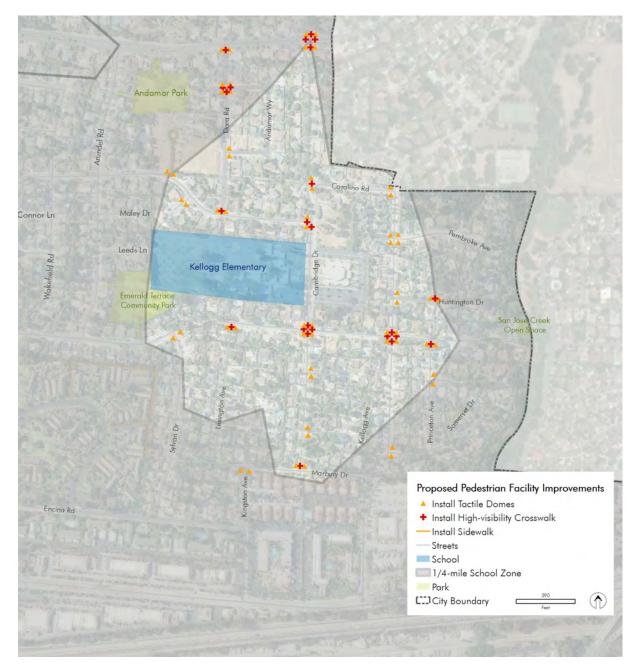


Figure 4-10: Kellogg Elementary SRTS Map

LA PATERA ELEMENTARY SCHOOL

La Patera Elementary School is located in northern Goleta in a residential neighborhood with several park and open space amenities nearby, most notably Lake Los Carneros Park and Stow Grove Park. It is also adjacent to the Berkeley Road-Covington Way Cross-Town Route (bicycle boulevard) which provides the community a safe and comfortable option for travel.

- 1. Install missing curb ramps and tactile domes
- 2. Install high-visibility crosswalks
- 3. Install missing sidewalks



Figure 4-11: La Patera Elementary School SRTS Map

ST RAPHAEL ELEMENTARY SCHOOL

St Raphael Elementary School is located in eastern Goleta. It is adjacent to Hollister Avenue and SR 217 in a neighborhood with mixed land uses that include residential, commercial, and agricultural uses.

- 1. Install missing curb ramps and tactile domes
- 2. Install high-visibility crosswalks
- 3. Install missing sidewalks



Figure 4-12: St. Raphael Elementary SRTS Map

WALDORF SCHOOL-SANTA BARBARA

Waldorf School-Santa Barbara is located in northwest Goleta in a residential neighborhood with several park and open space amenities nearby, most notably Evergreen Park and Bella Vista Park.

- 1. Install missing curb ramps and tactile domes
- 2. Install high-visibility crosswalks
- 3. Install missing sidewalks



Figure 4-13: Waldorf School- Santa Barbara SRTS Map



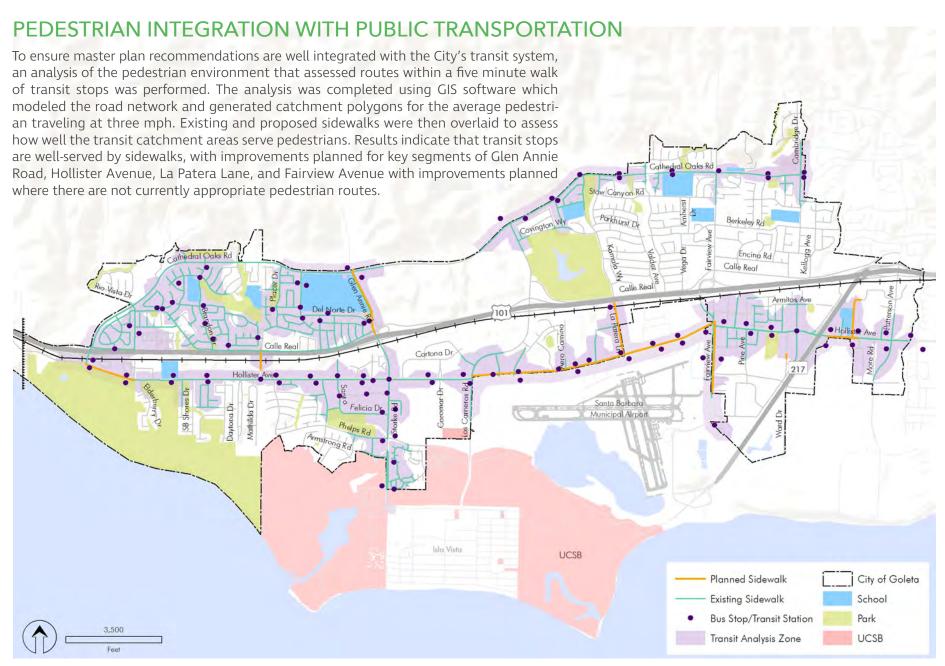


Figure 4-14: Pedestrian Integration with Public Transportation Map

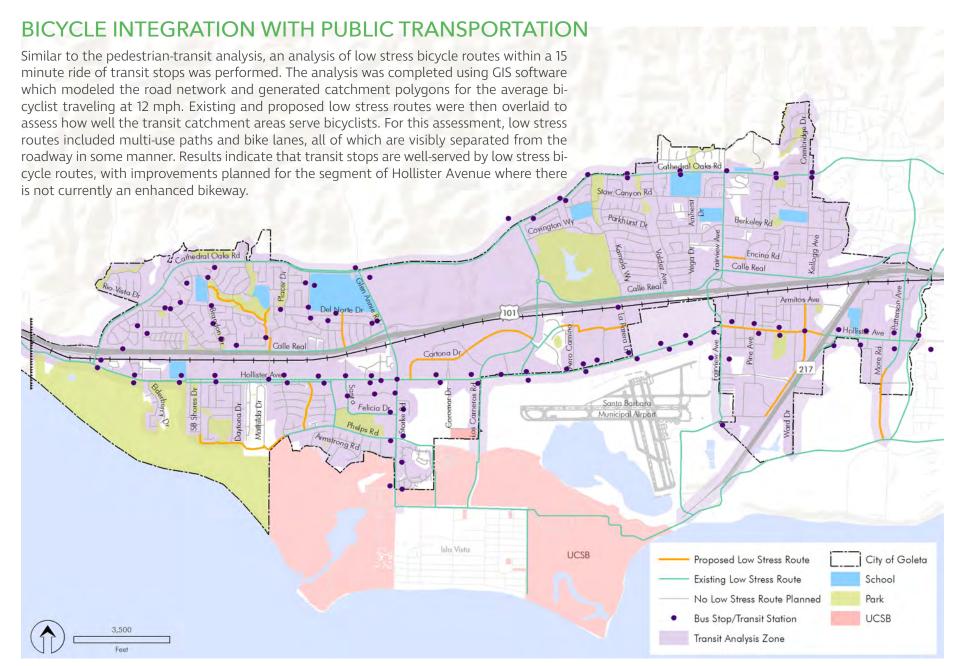


Figure 4-15: Bicycle Integration with Public Transportation Map

PREVIOUSLY PROPOSED PROJECTS- CIP LIST

Table 4-2 and Figure 4-16 describe the City's previously planned efforts to address multi-modal needs. The City identified these as CIPs and under a general City improvement list. The development of the proposed improvements in this plan was supported by the CIP list by ensuring that new connections and corridors were consistent and logical.

TABLE 4-2: CIP LIST

CIP#	Туре	Segment	Between		Facility Type	Notes
9001	Bike	Hollister Ave	Fairview Ave	Hwy 217	Class II	Hollister Complete Streets Corridor Plan, Hollister Avenue Bridge Replacement Project, and Future Hollister Construction Project
9002	Bike	Ekwill St	Fairview Ave	Hwy 217	Class II	Ekwill Street Extension
9006	Bike/ Ped	San Jose Creek Path	Cathedral Oaks	Coast Route	Class I	San Jose Creek Bike Path - South Segment
9007	Bike/ Ped	San Jose Creek Path	Cathedral Oaks	Coast Route	Class I	San Jose Creek Bike Path - Middle Segment
9012	Bike	Armitos Avenue	Kellogg Ave	San Jose Creek Path	Class II	Armitos Avenue Bridge; One traffic lane each direction, and pedestrian and bicycle route types
9027	Bike	Ellwood Station Rd	Hwy 101	Hollister Ave	Class II	101 Overpass Project; vehicular, pedestrian and bicycle overpass
9031	Bike	School Bus Ln/ Technology Dr	Pine Ave	School Bus Ln/ Kellogg Ave	Class II	New road project; partially Old Town Sidewalk Improvements Project and Ekwill Street Extension Project
9033	Bike	Hollister Ave	Fairview Ave	Hwy 217	Class II	Hollister Complete Streets Corridor Plan, Hollister Avenue Bridge Replacement Project, and Future Hollister Construction Project
9042	Bike	Storke Rd	Camino Real Mar- ketplace Entrance	Southern City Limit	Class I or 4	Bigger vision plan for Hollister Corridor. Class II bikes lanes part of Storke Rd Widening, Phelps Road to City Limits, and future Class I or 4 project
9044	Bike	Hollister Ave	Storke Rd	280' west of Glen Annie	Class II and sidewalk	Hollister Widening
9058	Ped	Calle Real	Kingston Ave	Kingston Ave	PHB	PHB on mast arms over travel lanes
9058	Ped	Hollister Ave	Chapel St	Chapel St	RRFB	RRFB on mast arms over travel lanes
9060	Bike/ Ped	Fairview Ave	Goleta Library	Stow Canyon Rd	Class II and sidewalk	Add northbound travel lane, bicycle lane, and new sidewalk
9061	Bike/ Ped	Cathedral Oaks Rd	Glen Annie Rd	San Pedro Creek	Class I	Class I on north side of Cathedral Oaks Road
9062	Ped	Marketplace Dr at Storke Rd			Intersection improvements	Enhance crosswalks, modify signal timing. Partial component of 9062

CIP#	Туре	Segment	Between		Facility Type	Notes
9070	Bike/ Ped	Fairview Ave	Hwy 101	Calle Real	Class II and sidewalk	Reconstruct 160 feet of sidewalk on north side of S. Fairview, close existing bicycle and pedestrian ramp leading to Calle Real
9072	Bike/ Ped	La Patera at Hwy 101	Goleta Amtrak Depot	La Patera	Bridge over/ under UPRR/ Hwy 101	Install bike/ped bridge. La Patera Road Overcrossing/Undercrossing
9073	Bike	La Patera Ln	Hwy 101 (Amtrak Station)	Hollister Ave	Class II and sidewalk	Class II bicycle lanes and sidewalk infill
9088	Bike	Cathedral Oaks Rd	Multiple Intersec- tions		RRFBs	Rectangular Rapid Flashing Beacon (RRFB) Improvements at School Crossings
9092	Bike/ Ped	Fowler Road	Existing Fowler	Technology Dr	Class II and sidewalk	Fowler Road Extension
9091	Bike/ Ped	Calle Real	La Patera	Los Carneros Rd	Sidewalks	Construction approx. 3,190 feet of sidewalk
9095	Bike/ Ped	Storke/Glen Annie	Hwy 101			Storke/Glen Annie Interchange Analysis
Potent	ial City-	wide Improvements				
	c Sig-	Hollister Ave at Pacific Oaks Rd				Install bicycle signal on westbound Hollister Ave
	nd Bike ction	Berkeley Rd at Fair- view Ave				Traffic signal does not respond to bicyclists. Install/replace bicycle detectors
Lighting		Cathedral Oaks Rd	Hollister Ave	Eastern City Limit		Install lighting
Pavement Maintenance		City-wide				Replace and maintain road surface, including Class I path surfaces and sweeping bicycle lanes
Bike P	arking	City-wide				Install more bicycle parking. Future City-wide analysis to determine optimum locations

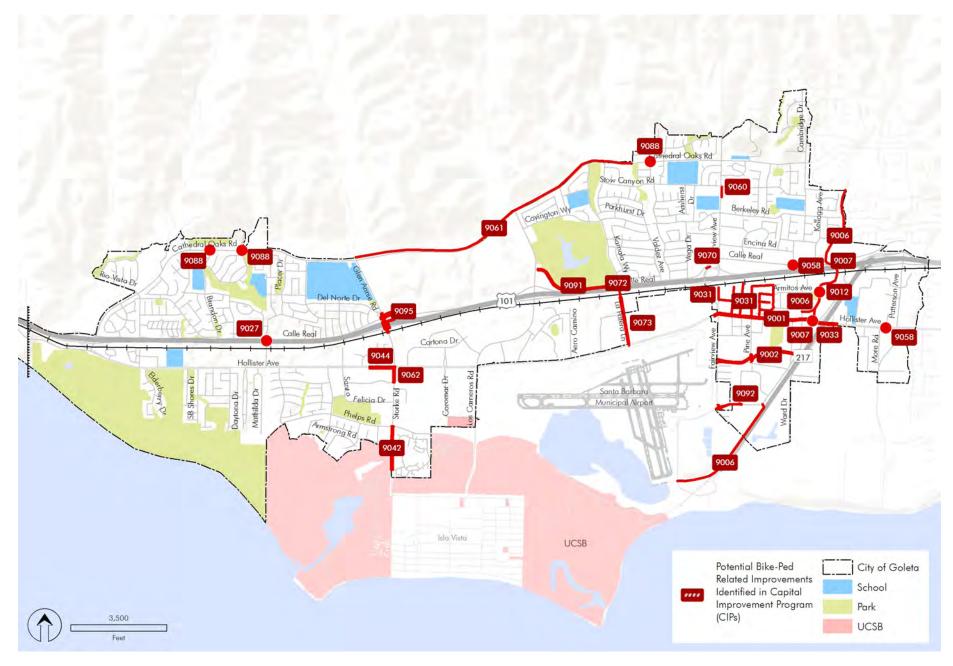


Figure 4-16: Previously Proposed Projects - CIP Map

FUTURE OPPORTUNITIES

To be updated

FUTURE NETWORK

One of the main goals of this Plan was to create a vision for the future of Goleta's active transportation needs. As part of the planning process, everyone involved provided valuable feedback and contributed to trying to accomplish the goal. The following map depicts the future of Goleta's active transportation network if all previously proposed and newly proposed projects were to be implemented. The map depicts how every major corridor contains a bicycle route, that missing pedestrian infrastructure such as sidewalks have been addressed, and that separated and protected bikeways would be installed in some of the most important corridors that connect students, employees and families alike to their destinations. This map depicts achieving the goal of the community, City, and TAC of a fully walkable and bikeable Goleta.

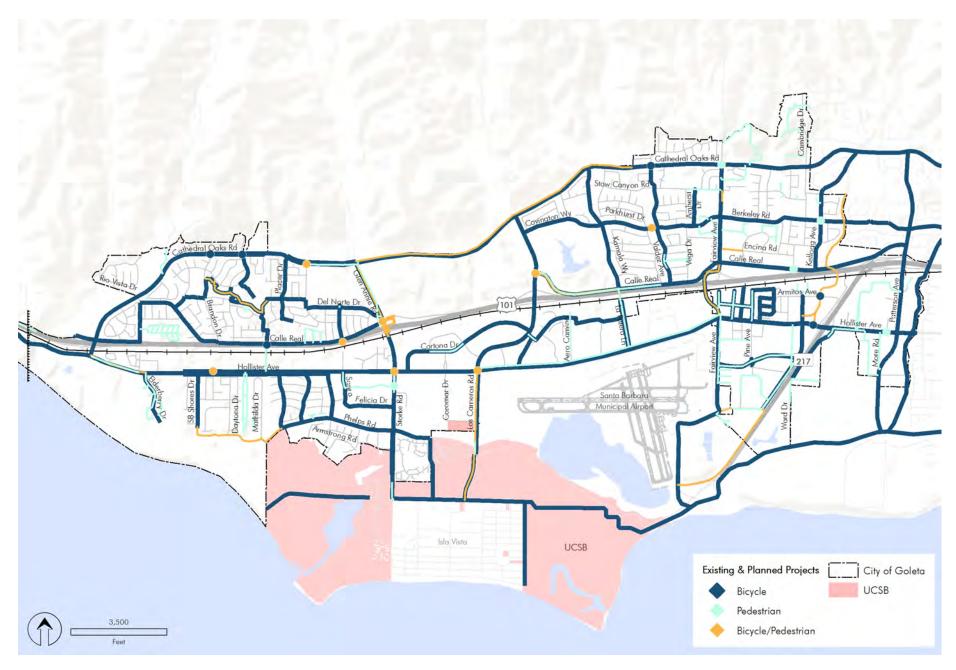


Figure 4-17: Future Active Transportation Network Map

PEDESTRIAN AND BICYCLE POLICIES

To Be Updated

PROGRAMS

This section includes a diverse list of programs intended to support the bicycle and pedestrian projects recommended in this plan. Due to a long history of routine accommodation for pedestrians (i.e. sidewalks, crosswalks, dedicated signals, etc.), programs targeting walking are relatively uncommon. Conversely, the historic lack of routine accommodation for bicyclists has fostered confusion about the role of bicyclists in the overall transportation system and has necessitated a diverse list of bicycle-related programs.

EVOLVING STATE OF PRACTICE IN BICYCLE PROGRAMS

There has been a shift away from the traditionally compartmentalized "Five Es" approach developed by the League of American Bicyclists (Engineering, Education, Encouragement, Enforcement, and Evaluation and Planning), and instead toward a fully integrated and complementary menu of initiatives. By offering such a menu, rather than a prescriptive list, active transportation programming can more accurately address the existing conditions and desired outcomes of a given context.

In addition to changes in the content and organization of active transportation programs, there has also been a shift in implementation strategies. Programs are increasingly targeted at specific project areas, in conjunction with the construction of bicycle and pedestrian projects. The implementation of a capital proj-

ect represents a unique opportunity to promote a city's active transportation system, cvcling, and walking as attractive transportation options. Projects or "Engineering" represent the most visible and perhaps most tangible evidence of a great place for bicycling. The same can be said for walking. A new bicycle route attracts the attention of bicyclists and non-bicyclists alike. As such, it represents a great opportunity to reach out to the "interested, but concerned" within the neighborhood. Impact to this target group will be strongest by directly linking route improvements and supportive programs. In this way, bundling bicycle programs with projects represents a much higher return on investment for both.

The programs recommended for the City of Goleta are organized as a menu of initiatives, each listed under a broad category to the right:

These categories are not definitive. They are merely intended to offer some level of organization to the many program initiatives, most which fall into at least one category.

EXISTING PROGRAMS

The City hosts several bicycle, pedestrian, and transportation-related programs created by the Santa Barbara County Association of Governments (SBCAG), the Santa Barbara Bike Coalition (SBBIKE), and the Coalition for Sustainable Transportation (COAST).



Education, Encouragement, & Marketing



Education & Enforcement



Monitoring & Evaluation

SBCAG PROGRAMS

SBCAG has developed several county-wide programs that offer commuters services through its dedicated transportation division called Traffic Solutions. Their mission is to "reduce traffic congestion, vehicle miles driven, and polluting emissions by offering programs and services that encourage sustainable transportation. We focus on transit use, bicycling, carpooling, vanpooling, telecommuting, compressed workweeks, and flexible schedules." Their objectives include transportation demand management (TDM), providing information about transportation choices through public outreach and education, helping the county develop programs, and promoting cooperative relationships with local business, organizations, and government agencies, and promoting new rail commuter services.

SmartRide

One of Traffic Solutions' main tools is the SmartRide.org website. The website provides resources on commuting options that include carpool, vanpool, telecommute, transit, and active transportation. People can create a personalized trip planner that tracks their commutes, learn about local events and incentives, check real-time traffic status, and create an event rideshare page, all through their personalized dashboard.



Emergency Ride Home

Traffic Solutions provides Santa Barbara County residents reimbursements up to \$55 for emergency rides home on a day the person used a "sustainable transportation" option to work. The emergency ride home program can be used up to four times a calendar year.

PARTNERSHIPS

Traffic Solutions partners with local organizations to leverage shared resources to enhance everyday life for residents. Collaborative programs are scheduled throughout the year with the help of community, corporate, and government sponsors. Programs include Cycle MAYnia, Open Streets events, the Green Business Program of Santa Barbara County, Love Your Ride, Santa Barbara Car Free, and Safe Routes to School. Detailed information regarding these programs can be found in the Traffic Solutions website under the Partnerships section.

Santa Barbara Bicycle Coalition (SBBIKE)

SBBIKE is a 501 (c)-3 nonprofit organization based out of the City of Santa Barbara that strives to make Santa Barbara County a safe and fun place to ride a bike. SBBIKE is comprised of a Board of Directors and staff that work closely with the community, city administrators, local agencies, educators, planners, and businesses. Their advocacy and educational objectives have led to the creation and participation in regional programs such as Vision Zero, CycleMAYnia, and bicycle clubs. Their efforts have been recognized by The League of American Bicyclists, awarding them a Platinum-level Bicycle Friendly Business designation.





Bici Centro-Bike Kitchens

Bike Kitchens are commonly formed as grass roots initiatives by community members to provide bicycles, helmets, maintenance, and safety instructions to people as a means of expanding their transportation options.

Bici Centro is SBBIKE's bike kitchen, a community bicycle workshop and thrift store that residents can use for DIY repairs, educational workshops, and purchases of refurbished bicycle and bicycle parts. Bilingual staff and volunteers are available to help educate and empower bicyclists with their everyday needs. There are three Bici Centros located in the County: City Santa Barbara, City of Santa Maria, and Santa Barbara Community College.

Goleta could support the creation of a Bike Kitchen within its city boundaries and leverage its resources in coordination with the bicycle route types prioritized in this plan. This combination will help encourage an increase in cycling mode share, serve as a missing link in the public transit system, reduce GHG emissions and provide additional "green" jobs related to system management and maintenance.

Connecting Our Community

Connecting Our Community is SBBIKE's campaign to close gaps in the County's bicycle infrastructure network. The campaign includes advocating and helping to develop a variety of local and regional projects in cities and towns such as Goleta, Guadalupe, Santa Maria, Carpinteria, Lompoc, and the Santa Ynez Valley.

Spanish Language Outreach Committee (SLOC)

The SLOC is dedicated to bringing equitable access to bicycling throughout the County. The committee explores new outreach and participation methods with the Spanish-speaking community. Their efforts include having a fully bilingual bicycle shop in Santa Barbara and their annual bicycle light giveaway event called Iluminando La Noche (Light Up the Night).

Safety and Education

SBBIKE has created both youth and adult education campaigns as well as videos and self-quizzes to teach residents how to safely ride their bikes. Topics include "Learn Your Bike," "Confident City Cycling," "Group Rides," bicycle safety courses in elementary schools, summer camps, "Pedal Power," and Bici Familia educational rides.





Bici Centro, Photos Courtesy of SBBIKE



Bicycling Education, Photo Courtesy of SBBIKE

150

Bicycle Valet

SBBIKE offers free bicycle valet services for major events throughout the region. According to their records, they have parked over 7,000 bikes county-wide since 2007. Offering free bicycle valet for events encourages residents to commute by bicycle knowing they have a safe place to store their bicycle during their event.

EDUCATION/ENCOURAGEMENT/ MARKETING

Street Smarts Classes and Bicycle Ambassadors

This initiative promotes safe bicycling through community-based outreach, which helps

bridge the gap between people who want to start riding and the availability of opportunities to help people learn to bicycle safely. Ideally, these classes would be taught by SBBIKE. In addition, city personnel that are certified as League Cycling Instructors (LCIs) can teach these classes.

LCIs are certified to teach Smart Cycling classes to children as well as adults. Their goal is to help people feel more secure about getting on a bike, to create a mindset that bikes are treated as a vehicle, and to ensure that people on bikes know how to ride safely and legally.

Participate in Walk and Bike to School Day

This one-day October event in more than 40 countries celebrates the many benefits of safely walking and cycling to school. Walking and rolling to school embodies the two main goals of First Lady Michelle Obama's Let's Move! Campaign: to increase children's physical activity and to empower parents to make these kinds of healthy choices.

Participate in National Bike Month

Since 1956, communities from all over the country have celebrated National Bike Month as a chance to showcase the many benefits of bicycling as well as to encourage people of all ages and backgrounds to bicycle more often. The biggest event that takes place during National Bike Month is Bike to Work day. Local business, nonprofits, and entire city agencies participate by either hosting pit stops where bicyclists can stop to gather healthy food and drinks, or by simply bicycling to work. Goleta has participated in National Bike Month.



Bike to Work Day 2017, Photo Courtesy of KTUA



CicloSDias 2017, Photo Courtesy of KTUA

Host a Ciclovia, Open Streets, and Other Signature Events

A Ciclovía (also ciclovia or cyclovia in English) is a Spanish word that translates into "bicycle path" and is used to describe a temporary event where a street(s) is closed to vehicles for use by people and non-motorized transportation. Ciclovias and open streets events are celebrations of livable streets and communities, encouraging citizens and businesses to get out in the street and enjoy their city through active participation. Ciclovias have gained considerable popularity in the United States in the past five years.

While all open streets events are alike in their creation of a people-oriented, car-free space, they are otherwise unique. In some cities, the event occurs once or twice a year, while in others it occurs every Saturday or Sunday throughout the entire summer. Some cities reuse routes, while others, like Los Angeles, host the events in different locations around the city. Some routes form a circuitous route, while others are linear. Most include parks or other open public spaces, music, performances, games, and other family-friendly activities. Open streets events often have a theme of health, exercise and active transportation, and include groups promoting free, healthy activities stationed along the route. The routes can incorporate and highlight new bikeways and preferred routes, encouraging their use and maximizing investment.

EDUCATION/ENFORCEMENT

Educate All Police Department Staff Regarding Bicycle and Pedestrian Issues and Concerns

If the aim is to promote cycling as a legitimate form of transportation, all officers should receive some form of bicycle training and should be offered LCI training, if possible. Appropriate training regarding pedestrian issues and solutions should be provided as well.

Designate a Law Enforcement Liaison Responsible for Cycling Issues and Concerns

This liaison would be the main contact for Goleta residents concerning bicycle and pedestrian related incidents. This liaison would perform the important role of communicating between the law enforcement agency and bicyclists and pedestrians. The liaison would oversee the supplemental education of law enforcement officers regarding bicycle and pedestrian rules, etiquette and behavior. The City can consider allocating funding for the training and support of this duty, as well as for necessary bicycle equipment.

Targeted Enforcement

Many law enforcement departments employ targeted enforcement to educate drivers, bicyclists and pedestrians about applicable traffic laws and the need to share the road. These efforts are an effective way to expand mobility education. Targeted enforcement should be expanded to warn and educate drivers, bicyclists and pedestrians about laws, rules of the road and safe procedures. This could be in the form of a brochure or tip card explaining each

user's rights and responsibilities. Targeted enforcement may help mitigate the following traffic safety problems:

- » Speeding in school zones
- » Illegal passing of school buses
- » Parking violations bus zone, crosswalks, residential driveways, time zones
- » Risks to bicyclists during drop-off / pickup times
- » Lack of safety patrol/crossing guard operations
- » Unsafe cycling and pedestrian practices
- » Other school zone traffic law violations
- » Three-foot passing law

This approach has been successful in Los Angeles where four officers, one for each Police Department Traffic Division, have been dedicated solely to bicycle safety and outreach.

Implement a Bicycle Diversion Program

A Bicycle Diversion Program allows for adult bicyclists who commit traffic violations to receive reduced fines in exchange for taking a bicycle education class. On September 21, 2015, California's Governor Jerry Brown signed Assembly Bill 902 to create such a program. This legislation has been touted as a boost for both equity and encouragement in cycling. It is expected to promote equity because, in reducing fines, it effectively makes cycling more affordable. It is expected to encourage cycling by treating violations as opportunities to educate people and impart confidence and skills. AB 902 went into effect on January 1, 2016, but it will be up to each city and its law enforcement department to adopt diversion programs.

Distribute Bicycle Helmets and Lights

If law enforcement officers observe a bicyclist riding at night without the proper reflectors or lights, they may give the bicyclist a light along with a note or friendly reminder about the light requirement and its importance. This provides a positive and educational interaction rather than a punitive one. This program could be funded through a safety-oriented grant. Many cities have targeted the end of daylight savings as an ideal time to perform this function.

Helmet giveaway programs are another opportunity for positive education and interaction. Law enforcement departments have conducted public events to hand out helmets, as well as distributing them in the community during patrol when an officer sees a child riding helmetless.

Law Enforcement Referral Process

Design a communication process that encourages students and parents to notify the school and police of the occurrence of a crash or nearmiss during school commute trips involving auto, bus, pedestrian or bicycle transportation. Include not only the Police Department, but also the Planning Department and SRTS stakeholders in this reporting system to help better use data generated. Enlist the help of law enforcement with many traffic safety duties.

Los Angeles has a successful program called the LA Bike Map that allows bicyclists to submit incidents, see them displayed instantly, and study the overall pattern, dynamically, in one place. A similar program can be created for the region to analyze patterns and determine solutions.



Bicycle Safety Class



Helmet Giveaway



Police Bicycle Patrol in Torrence, CA

Enforcement of Traffic and Parking Laws Through Citations and Warnings

Coordinate targeted enforcement of problem areas – an intensive, focused effort during the first two weeks of school, as well as a strategy for the rest of the year.

Participation in Traffic Safety Programs: Traffic Garden, SRTS Task Force, etc.

The City could support the creation of a traffic garden, also referred to as a traffic park or safety village. A traffic garden is a specially-designed park or schoolyard where children can learn traffic laws and how to safely navigate streets as either pedestrians, bicyclists, or drivers. Children that participate in traffic gardens can use bicycles or pedal-powered cars to navigate the mock streets. Teachers, parents, and instructors alike provide guidance on how to safely cross the street, how to interact with bicyclists and pedestrians, and how to navigate a traffic circle. Goleta can partner with the Parks and Recreation department or the school district to create a traffic garden at one of the parks or in elementary and middle school vards.

Creating a Safe Routes to School (SRTS) Task force would aid in developing programs and projects that foster the want and need for safely and comfortably walking to and from school. The task force can be comprised of parent champions, school members, City staff, or local advocates such as SBBIKE or COAST. Their primary mission would be to work along-side the community, appropriate city officials, and the school district to implement SRTS programs and projects.

TRACKING AND MONITORING PEDESTRIAN AND BICYCLE TRAVEL

Bicycle Friendly Application Update

The Bicycle Friendly Community/Neighborhood Designation is part of an official program offered by the League of American Bicyclists intended to provide communities with guidance on becoming more bicycle friendly and to offer recognition for their achievements. Like the report card described above, applying for Bicycle Friendly Community/Neighborhood Designation provides a standard by which Goleta can measure its progress. From the LAB's own website:

"The Bicycle Friendly Community (BFC) program provides a roadmap to improve conditions for bicycling and the guidance to make your distinct vision for a better, bikeable community a reality. A community recognized by the League as Bicycle Friendly welcomes bicyclists by providing safe accommodation for cycling and encouraging people to bicycle for transportation and recreation."

Create City Staff Mobility Coordinator / Grant Coordinator Position

The creation of an Active Transportation Coordinator position would demonstrate the City's commitment to cycling, walking and creating complete streets. An active transportation coordinator can help coordinate between City departments to ensure projects planning consistency and cooperation. A coordinator would manage programs and implement projects listed in the bicycle and pedestrian master plan, and would be responsible for updating the plan in a timely manner. This includes maintaining a prioritized list of improvements, updating cost estimates and identifying appropriate funding sources. This investment in staff is often returned since this position usually is responsible for securing State and federal funding for bicycle projects.

Active Transportation Advisory Committee

An Active Transportation Advisory Committee (ATAC) assists the City with implementation of plan projects, policies and programs. The ATAC allows City staff, volunteers and advocates to



continue efforts to improve cycling throughout the City. This group acts as a community liaison and addresses issues concerning local cycling and walking. The ATAC can review the implementation and regularly evaluate the progress of improvements in the Bicycle and Pedestrian Master Plan. City support is imperative for creating the committee, budgeting time and resources for City staff and elected officials to attend and to support these meetings. Some cities have developed bicycle and pedestrian or active transportation advisory committees.

Conduct Bicycle and Pedestrian Counts and Review Collision Data

Conduct regular bicyclist and pedestrian counts throughout the City to determine baseline mode share and subsequent changes. Conducting counts would allow the City to collect information on where the most cycling and walking occur. This assists in prioritizing and justifying projects when funding is solicited and received. Counts can also be used to study cycling and walking trends throughout the City. Analysis that could be conducted includes:

- » Changes in volumes before and after projects have been implemented
- » Prioritization of local and regional projects
- » Research on clean air change with increased bicycle use
- » Direction of travel

Counts should be conducted at the same locations and at the same times every year. Conducting counts during different seasons within the year may be beneficial to understanding

the differences in bicycle and pedestrian traffic volumes based on weather. In addition, bicycle and pedestrian counts should be collected as part of any existing traffic counts. Results should be regularly recorded for inclusion in the bicycle and pedestrian report card.

The Goleta Police Department does collect and track collision data. Regular reports of traffic collisions should be presented at the Bicycle Pedestrian Advisory Committee. Traffic collisions involving bicyclists and pedestrians should be reviewed and analyzed regularly to develop plans to reduce their frequency and severity. Any such plans should include Police Department involvement and should be monitored to determine their effectiveness. Results of the number of collisions should be recorded in the bicycle and pedestrian report card.

Develop a Bicycle Report Card

The City could develop a bicycle and pedestrian report card, a checklist used to measure the success of plan implementation, as well as effort made, within the City. The report card could be used to identify the magnitude of accomplishments in the previous year and general trends. The report card could include, but not be limited to, keeping track of system completion, travel by bicycle or on foot (counts) and safety.

The City can use the report card to track trends, placing more value on relative than absolute gains (in system completion, mode share and safety). For example, an upward trend in travel by bicycle or on foot would be viewed as a success, regardless of the specific increase in the number of bicyclists or walk-

ers. Safety should be considered relative to the increase in bicyclists and walkers. Sometimes crash numbers go up simply because cycling and walking increases, at least initially. Instead, measure crashes as a percentage of an estimated overall mode share count.

A major portion of the report card would be an evaluation of system completion. An upward trend would indicate that the City is progressing in its efforts to complete the bicycle and pedestrian network identified in this document. The report card could be developed to use information collected as part of annual and ongoing evaluations, as discussed in the previous sections. The report card is not intended to be an additional task for City staff, but rather a means of documenting and publicizing the City's efforts related to bicycle and pedestrian planning. If a Bicycle Pedestrian Advisory Committee is appointed, it can be a task of the committee to review the report cards and adjust future plans and goals accordingly.

In addition to quantifying accomplishments related to the bicycle plan, the City should strive to quantify its efforts. These may be quantified as money spent, staff hours devoted or other in-kind contributions. The quantified effort should be submitted as a component of the bicycle and pedestrian report card. Some cities publish their report cards online.