







CITY OF SAN LUIS OBISPO

## Active Transportation Plan

Roll and stroll towards a safe, equitable, and sustainable community



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## Acknowledgments

Thank you to the many community members who contributed to the Active Transportation Plan.

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## A Message from the City Manager

## Whether you rolled, strolled, bused, or drove here, welcome!

You join us at a pivotal moment in our community's history. In the year 2020, we experienced a global pandemic, economic downturn, the front edge impacts of climate change, a national racial justice reckoning, an ongoing housing crisis, and lingering concerns about affordability and accessibility. In the year 2020, we also saw the incredible strength of our community. We saw neighbors helping neighbors, small businesses finding ways to adapt, and the community coming together to create new ways to find joy in the place we love. At the City, we adopted important housing policy, the most ambitious local climate plan in the U.S., and a budget that reoriented our major goals to recovering from the economic impact of COVID-19. We also recommitted and doubled down on making sure our entire community has been heard and served.

You might be asking, "what does this have to do with active transportation?". The simple answer is, "everything!" The ability to move through our community safely, conveniently, sustainably and affordably is central to our vision for the future. Active transportation, along with transit, will unlock the ability to build more affordable housing without sprawl and traffic gridlock, will allow more foot traffic to pass by our local storefronts, and will provide access to healthy, affordable, and safe mobility options for the entire community, regardless of age, physical ability or economic position.

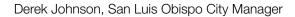
This Active Transportation Plan provides a key foundation towards achieving our community's most important objectives. For this reason, the City has committed to a community-driven process and has arrived at a plan that looks a lot different than our previous Bicycle Transportation Plan. In addition to important programs and projects, you will find the following key innovations in this document—the City's first plan focused on both bicycling and walking:

- An emphasis on prioritizing and rapidly constructing the types of projects that provide the greatest potential to quickly increase the share of trips made by walking and biking—acting with the level of urgency required to meet our City's ambitious climate action goals.
- 2. A focus on infrastructure design that physically minimizes conflicts between motor vehicles and active transportation users on high-traffic corridors, creating a system of low-stress routes for walking and bicycling that work for users of all abilities and comfort levels.
- 3. A cross-cutting emphasis on equity, sustainability and economic resilience, so that in everything we do, we are asking how the benefits are equitably planned and distributed and supportive of long-term sustainability and success of our community.

From adopting one of the earliest bans on indoor smoking, to setting some of the most ambitious climate action goals in the country, San Luis Obispo has a well-documented history of leading by example on issues of sustainability, public health and quality of life. Through the actions, projects and programs identified in this plan, San Luis Obispo will continue to lead by example, striving to create one of the best active transportation environments in the country. The future is uncertain, but it is also full of opportunity. The Active Transportation Plan is one of the ways we ensure that we capitalize on those opportunities.

See you around town!

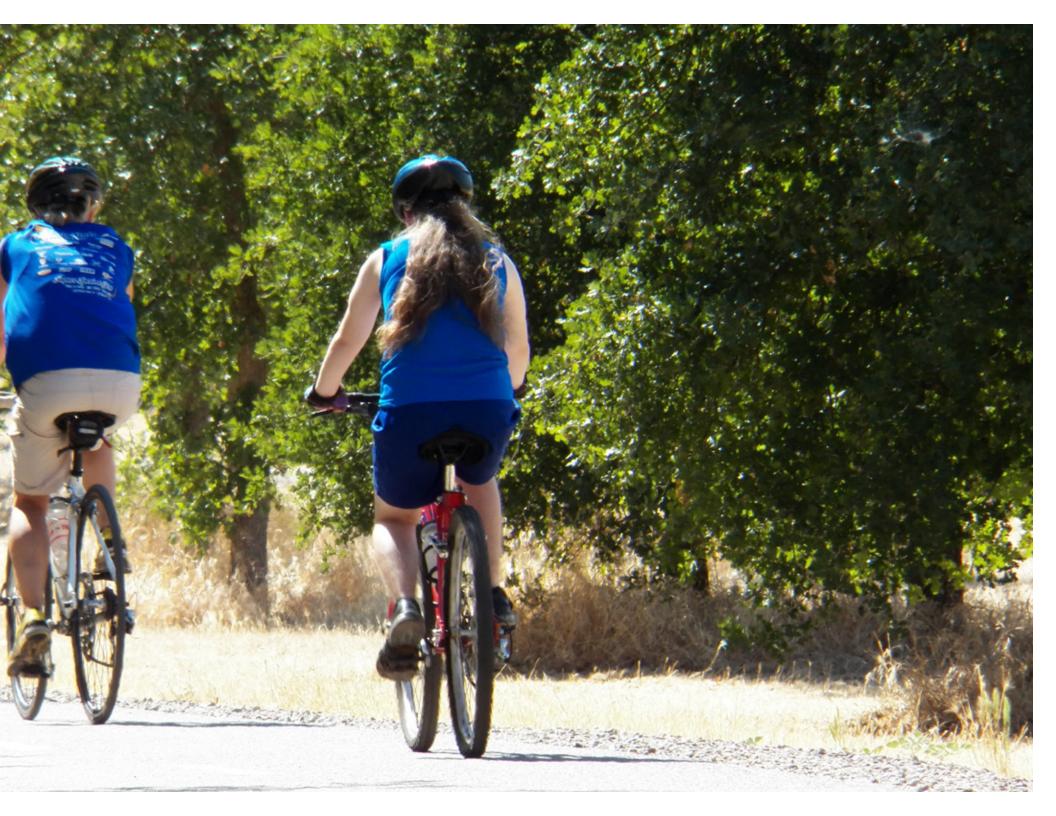
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Introduction





# What is an Active Transportation Plan?

#### THIS PLAN'S OBJECTIVES



Safety, Health & Sustainability



Access & Mode Shift



Community-Based Collaboration & Equity While the primary focus of this Plan is on walking and bicycling, "active transportation" refers to all human-powered modes of transportation, from walking and bicycling, to scootering, skateboarding, traveling by wheelchair and use other rolling mobility devices. Active transportation requires a balanced, equitable transportation system that provides community members the freedom to choose other modes of transportation without having to completely depend on the automobile. These active modes of transportation are not only fun, affordable, and environmentally friendly, they also support public health by incorporating physical activity into daily life. An Active Transportation Plan provides a blueprint for creating a safe, connected, and efficient citywide active transportation network. It lays out policies, funding strategies, supporting programs, infrastructure projects, and implementation priorities to improve active transportation options and access for all community members.

The State of California established its Active
Transportation Program by Senate Bill 99 (Chapter
359, Statutes of 2013) and Assembly Bill 101
(Chapter 354, Statutes of 2013) to encourage the
increased use of active modes of transportation,
such as walking and biking. The state Active
Transportation Program consolidates existing
federal and state transportation programs, including
the Transportation Alternatives Program, Bicycle
Transportation Account, and State Safe Routes to
School, into a single program with a focus on making
California a national leader in active transportation.

The California Active Transportation Program provides the largest source of grant funding for bicycling and walking projects for California cities. The last allocated cycle (2018) designated \$440 million dollars for projects statewide. Past iterations of this grant source have contributed over \$10 million toward bicycling and walking projects in the city of San Luis Obispo including the Railroad Safety Trail and Safe Routes to School projects. Cities that have an Active Transportation Plan increase their chances for success in securing these highly competitive grant funds.

The City of San Luis Obispo has a legacy of promoting walking and biking, resulting in the City being a great place to walk and bike.

#### Why is the City creating an Active Transportation Plan?

The City of San Luis Obispo has a legacy of promoting active transportation, taking pride in retaining a human-scale city that is a great place to walk, bike, live and visit. While the City's existing 2013 Bicycle Transportation Plan (BTP) and previous bicycle planning documents have helped guide many improvements to the citywide bicycle circulation system, national best practices in bicycle infrastructure planning and design have evolved considerably in recent years since adoption of the 2013 BTP. With a growing shift towards providing lower-stress facilities - notably, physically-protected bike lanes and intersection crossings—which make bicycling a more viable transportation option for a wider range of community members, the City's plans and design strategies must also evolve. By updating and replacing the 2013 Bicycle Transportation Plan with this 2020 Active Transportation Plan, the City has created its first comprehensive document on both bicycle and pedestrian transportation circulation. The 2020 ATP expands the City's programs, policies and design toolbox to incorporate current industry best practices to make active transportation an enjoyable transportation option, better connected to community destinations, and more accessible to a diverse range of San Luis Obispo community members, including residents, students, workers, and visitors of all ages and physical ability levels.

To reflect a greater commitment to the needs of all non-motorized transportation users, the City's Bicycle Transportation Committee was restructured into an Active Transportation Committee—a volunteer group of local residents that provides oversight and policy guidance on all matters related to pedestrian and bicycle transportation in the City of San Luis Obispo—in 2018. The Active Transportation Committee has served a critical role in guiding development of this Plan.



## What will the Active Transportation Plan help accomplish?

- 1. Increase the number of trips completed by active transportation modes, supporting the City's General Plan and Climate Action Plan Modal Split Objectives to reach 20 percent of citywide trips by bicycle and 18 percent by walking, carpool and other sustainable transportation options.
- **2.** Provide a network of safe, efficient, and enjoyable facilities to support walking and bicycling.
- **3.** Provide active transportation connections to community destinations such as employment centers, schools, grocery and shopping centers, senior facilities, recreation centers, and transit stops.
- 4. Reduce air pollution, asthma rates, and greenhouse gas emissions.
- **5.** Ensure that disadvantaged communities are actively engaged in the planning process and help shape the projects.

## THE PLAN PROVIDES A PATHWAY TO IMPROVE OUR QUALITY OF LIFE THROUGH:



The Built Environment: Evolving and diversifying the built environment to accommodate people traveling outside of cars safely, conveniently, sustainably and affordably.



**Public Health:** Increasing opportunities for better public health outcomes through personal activity, increased social connections, and improved air quality.



**Housing:** Increasing infill housing desirability through walkable downtowns, connected neighborhoods, reduced commute times, and reduced transportation cost.



**Climate Action:** Reducing vehicle miles traveled though increasing active transportation options and reducing GHG emissions.

#### **Policy Context**

The Active Transportation Plan implements the 2014 Land Use and Circulation Element of the General Plan while also responding to current community and City Council priorities focused on housing, climate action, sustainable transportation, downtown vitality, and economic recovery from the impacts of COVID-19. The Active Transportation Plan directly and indirectly supports a wide range of adopted City plans and policies, most notably:

## LAND USE (LU) AND CIRCULATION (CIRC) ELEMENTS OF THE GENERAL PLAN (2014)

**LU Goal #10 (Environment)** – Support statewide and regional efforts to create more sustainable communities, reduce greenhouse gas emissions, and develop transportation systems that support all modes of circulation.

**LU Goal #41 (City Form)** – Provide a safe and pleasant place to walk and ride a bicycle, for recreation and other daily activities.

#### LU Policy 2.2.3 (Neighborhood Traffic) -

[...] All neighborhood street and circulation improvements should favor pedestrians, bicyclists, and local traffic. [...]

#### CIRC Objective 1.6.1.2 (Transportation

**Goals)** – Reduce people's use of their cars by supporting and promoting alternatives such as walking, riding buses and bicycles, and using car pools.

CIRC Objective 1.7.1 (Encourage Better Transportation Habits) - San Luis Obispo should [...] increase the use of alternative forms of transportation and depend less on the single-occupant use of vehicles. This General Plan Policy includes reference to a table identifying the following mode split objectives:

Motor Vehicles: 50%

• Transit: 12%

• Bicvcles: 20%

Walking, Car Pools, and other Forms: 18%

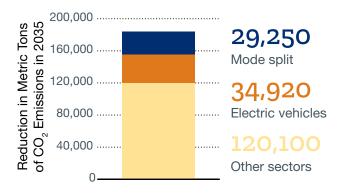
#### CIRC Objective 7.1.4 (Transportation

**Funding)** - In order to increase support for non-automobile travel, the City shall strive to allocate transportation funding across various modes approximately proportional to the modal split objectives for 2035 [...]

#### SAN LUIS OBISPO CLIMATE ACTION PLAN FOR COMMUNITY RECOVERY (2020)

A Council adopted goal of communitywide carbon neutrality by 2035, including a transportation related goal of achieving the City's mode split objectives by 2030. This goal alone accounts for approximately 16 percent of proposed citywide greenhouse gas emissions reductions as identified in Figure 1.

**Figure 1.** Climate Action Plan Greenhouse Gas Emissions Reductions, by Sector (MTCO<sub>2</sub>e in 2035)



## Key Foundations of the Plan

Three cross-cutting themes and foundations run throughout this Active Transportation Plan: Sustainability, Equity and Economic Resiliency

## Foundation 1: Sustainability and Climate Action

In 2020, the City adopted one of the most ambitious climate action plans in the U.S., which includes a goal of carbon neutrality by 2035 and accelerated implementation of the City's mode share objectives from 2035 to 2030. A typical bicycle plan might include a few goals or actions focused on climate change, greenhouse gas emissions, and sustainability. As the reader, you may ask: Why this chapter does not include specific goals discussing sustainability? The answer is because the Active Transportation Plan is so central to the City's overarching climate action and sustainability objectives, the entirety of this plan incorporates foundational themes of sustainability and climate action.

#### Foundation 2: Equity

The City has a strong commitment to ensuring that the benefits of active transportation are equitably distributed throughout the community. Because of this, nearly every chapter of this plan includes a focused discussion of equity and inclusion. Additionally, consistent with a commitment made in the City's Climate Action Plan, staff commits to evaluating every action it takes through an equity lens, including issues related to representation, distribution of benefits, and structural equity. From identifying existing inequity in our community (see Chapter 3), to planning equitable investment in infrastructure projects and programs (see Chapter 5 and 6), to ensuring equitable implementation of the recommendations of this plan (Chapter 7), the foundational principles of an equitable community are reflected throughout this document.



## Foundation 3: Community Resilience and Economic Vitality

The community and its economy are experiencing substantial impacts from COVID-19 and are increasingly exposed to unprecedented disruptions caused by a rapidly changing climate. This plan supports a thriving local economy that is resilient to these disruptions by increasing efficient access to local businesses, reducing the burden of household transportation costs, allowing for more sustainable land use patterns, and focusing city resources on more cost-effective infrastructure. This foundational commitment means ongoing innovation, flexibility, and collaboration to be sure that active transportation supports local businesses and neighborhoods. This foundational commitment also means incorporating findings from the City's climate change vulnerability assessment (currently under development) as the Active Transportation Plan is implemented.

## ACTIVE TRANSPORTATION IS A KEY INGREDIENT FOR A THRIVING AND RESILIENT ECONOMY

San Luis Obispo consistently ranks as one of the least affordable areas in the country. Study after study shows that there are significant economic benefits to building a transportation system that provides safe, efficient, and affordable mobility options to all community members, particularly for communities that invest in quality bicycle, pedestrian and transit systems. By making transportation more affordable, we can help make San Luis Obispo a more affordable place to live.

The Plan is organized as follows:

02

#### **Vision & Goals**

From high-level goals to detailed action items, Chapter 2 captures the vision and goals for San Luis Obispo's Active Transportation Plan. Chapter 2 also includes performance measures to ensure that the City will make the ATP vision a reality.

03

## Bicycling & Walking in San Luis Obispo Today

An inventory of present-day bicycle and pedestrian conditions.

04

#### Community Engagement

Provides a summary of the community outreach activities organized and facilitated by City staff as part of the ATP. Outreach activities focused on the barriers to walking and biking in the City and the types of active transportation infrastructure and policies that would support the City's mode share goals.

05

## Recommended Bicycle & Pedestrian Projects

Identifies recommended bicycle and pedestrian projects that will enhance the biking and walking experience for San Luis Obispo residents. Each recommendation will reflect the City's vision and goals by eliminating barriers, decreasing the number of collisions, and encouraging residents to bike and walk as a daily mode of transportation.

06

## Bicycle & Pedestrian Programs

Provides a description of bicycle and pedestrian education, encouragement, enforcement, and evaluations programs that will be implemented as part of the ATP.

07

#### **Implementation**

Details a practical roadmap for implementing the proposals within this plan including project details, cost estimates, and grant funding opportunities.

Vision & Goals



## Active Transportation Goals and Actions

The goals in this Chapter are organized into four categories: **Build It, Safety, Accessibility, and Equity,** and are further supported by priority actions and other important actions. The actions in this chapter include call outs to infrastructure projects and programs, which are described in greater detail in Chapter 5 (Recommended Bicycle and Pedestrian Projects) and Chapter 6 (Bicycle and Pedestrian Programs).

#### Building the Core Bicycle and Pedestrian Network

This Plan organizes proposed improvements to the citywide bicycle and pedestrian network into three tiers:

- **Tier 1:** The highest priority projects with the greatest potential to increase bicycle and pedestrian mode share.
- Tier 2: Moderate priority projects that play and important role in the future bicycle and pedestrian network, but with less potential than Tier 1 improvements to increase bicycling and walking.
- Tier 3: Lower priority projects that help complete the bicycling and wlaking entwork, but are not likely to generate measurable increases in bicycle and pedestrian trips.

See Chapter 7 (Implementation) for more information on prioritization of the improvements identified in the Plan.

#### Goal 1: Build It

## The City has the physical infrastructure necessary to achieve this Plan's goals.

The City's Active Transportation Plan prioritizes physical changes first and programs that support behavioral change (e.g., outreach and education programs) second. While traditional outreach and educational programs are still included (Chapter 6), best practices and leading research suggests that physical improvements are the most effective way to increase safety, accessibility, and lead to transformational mode share shifts.

#### **Priority Actions**

- **1.1 Build Priority Infrastructure First.** Complete the highest-priority (Tier 1) bicycle and pedestrian projects recommended in this Plan by 2030. Complete lower-priority (Tier 2 and 3) projects as opportunities arise based on funding, potential to combine with other capital projects, and as part of private-public partnerships.
- **1.2 Design for All Ages & Abilities.** Guided by the bicycle facility selection tools provided in the Plan Design Guidelines (Appendix B), and the proposed future network illustrated in Chapter 5, develop low speed/volume neighborhood greenways, physically-separated bikeways on higher-speed thoroughfares, and intersection crossings that prioritize pedestrian and bicycling safety for users of all comfort and ability levels.

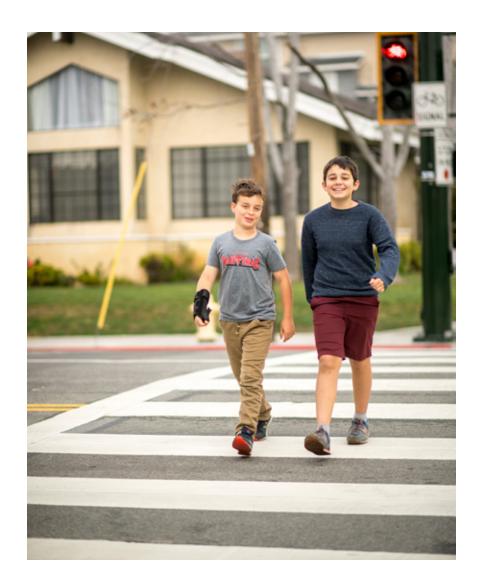
#### 1.3 Leverage Opportunities to Construct Infrastructure

- 1.3a Coordinate the implementation and maintenance of active transportation facilities in conjunction with larger capital improvement projects to deliver bicycling and pedestrian enhancements in a cost-effective manner while maintaining pavement and sidewalk systems in a good state of repair.
- 1.3b Continue to evaluate all streets during pavement resurfacing projects to determine if pedestrian or bicycling facilities can be provided and/or improved. While continuing to maintain sufficient pavement condition, look for opportunities to prioritize routes with Tier 1 and Tier 2 bicycle and pedestrian improvement projects when scheduling pavement management projects.
- **1.4 Install Priority Crossings.** Install additional controlled bicycling and pedestrian crossings across major arterial and collector streets to connect neighborhoods to major destinations.
- 1.5 Quick Builds. Utilize quick-build strategies to rapidly implement priority bicycle and pedestrian improvements using lower-cost, interim designs until more costly permanent improvements can be funded. Where consistent with the City's General Plan mobility goals, prioritize public safety and active transportation mobility over motor vehicle throughput and street parking when considering tradeoffs of transportation safety improvements.

- **1.6 Decrease Reliance on Single-Occupant Autos.** With input from the City Council and community, prioritize mobility, connectivity, and comfort for active transportation users and transit services over motor vehicle throughput and street parking when considering tradeoffs of transportation improvement projects, particularly on high speed/volume arterial streets.
- **1.7 Create a Connected Community.** Ensure that existing bikeway/ pedestrian access connections are retained and seek opportunities to create more when properties are developed or redeveloped.

#### **Other Important Actions**

- **1.8 Maintenance.** Continue to improve a maintenance program for pedestrian and bicycling facilities to provide continued safe and comfortable use of the network including procurement of a low-profile street/sidewalk sweeper to maintain pedestrian pathways and physically separated bikeways. Be resourceful with funding opportunities including community partnerships and volunteer programs to assist with bikeway/sidewalk sweeping and other minor maintenance activities.
- 1.9 Collaborate with Regional Partners. Cooperate with the County, State, San Luis Obispo Council of Governments, Cuesta College and Cal Poly in the planning and design of regional bicycle and pedestrian facilities (e.g. Bob Jones City to Sea Bike Trail, Chorro Valley Trail, Edna-Price Canyon Trail) to expand regional active transportation and recreation opportunities.



### Goal 2: Safety

#### Active transportation is safe.

Even in the absence of actual collision history, just the perception of an unsafe or stressful journey is often enough justification for many San Luis Obispo residents to travel by car, even for short trips. The City's Active Transportation Plan identifies globally-proven policies, programs, and physical improvements to make active transportation modes safer and more viable for all community members.

#### **Priority Actions**

- **2.1 Vision Zero.** Continue implementation of the City's Vision Zero policies and traffic safety programs to develop a transportation system that will reduce, and ultimately eliminate, fatal and severe injury crashes within the City of San Luis Obispo.
- **2.2 Streetlights.** Continue the implementation of the City's new streetlight installation program, prioritizing new lighting installations at locations with higher pedestrian and bicycle activity or where known safety concerns exist.
- **2.3 Use Innovative Designs.** Apply bicycling and pedestrian design policies and guidance as presented in this Plan, as well as applicable state and federal design guidelines, innovative guidance from organizations such as National Association of City Transportation Officials (NACTO) and Institute of Transportation Engineers (ITE), and the Dutch CROW Manual.

#### 2.4 Look for Opportunities to Reduce Traffic Speeds.

- 2.4a Support design strategies that encourage traffic speeds
  of 20 mph on residential and local streets and 15-20 mph
  along neighborhood greenways and within school zones.
   Explore development of a city ordinance to authorize posting
  speed limits as low as 15 mph in designated school zones
  consistent with California Vehicle Code procedures.
- 2.4b Within the legal framework of the California Vehicle Code, apply best practices for setting posted speed limits on collector and arterial streets that improve safety for all users, using guidelines such as Caltrans' California Manual for Setting Speed Limits, and NACTO's City Limits: Setting Safe Speed Limits on Urban Streets. Apply strategies and innovative best practices to reduce speeds on arterial and collector streets where collision patterns exist.
- **2.5 Safe Routes to School.** Develop a focused Safe Routes to School Improvement Plan for all K-12 schools in San Luis Obispo to reduce safety and mobility barriers to walking and biking to school.
- **2.6. Construction Zones.** Improve enforcement of City's traffic control requirements around construction zones to minimize impacts to pedestrian and bicycle accessibility and safety during construction activities.

#### **Other Important Actions**

- **2.7 Safety Education**. Continue funding safety education programs that encourage safe behaviors for all roadway users
- **2.8 Community Health Partnerships.** Partner with community health groups to address safety concerns as expressed by citizen input related to walking and biking.

### Goal 3 – Accessibility

#### Active transportation is easy.

The City's Active Transportation Plan prioritizes structural changes that make active transportation connected, convenient, and accessible. Outreach survey results indicated that for San Luis Obispo to replace more automobile trips with active transportation trips, there needs to be the same level of infrastructure to make active transportation desirable.

#### **Priority Actions**

**3.1 Bicycle Parking.** Provide secure bicycle parking at neighborhood destinations like schools, medical centers, grocery stores, and government offices through a combination of city-funded installations in public spaces, and privately- funded installations as a requirement of new development and redevelopment of existing properties.

#### 3.2 Improve Connections to Transit.

3.2a - Design bikeways and pedestrian facilities that safely and
efficiently facilitate first and last mile connections to transit as well
as amenities at transit locations such as bike parking and bus
kiosks. Explore opportunities to provide secure long-term bicycle
parking at transit stops including cargo and electric bike charging
to allow for more convenient multi-modal connections to transit.

 3.2b - Work with SLO Transit and the Regional Transit Authority to improve transit stations by providing more seating, shade and lighting to increase comfort for users. Explore options to expand onboard bicycle carrying capacity on SLO Transit vehicles.

#### 3.3 Make the Pedestrian Experience Enjoyable and Interesting.

- 3.3a Work with local businesses to provide additional opportunities for sidewalk dining, parklets and other forms outdoor seating to encourage a vibrant, human-scale pedestrian environment.
- 3.3b Support streetscape enhancements, public art and other placemaking strategies that promote a more interesting, enjoyable walking experience. Incorporate urban design strategies into all transportation capital improvement projects where practical.
- 3.3c Incorporate landscaping, stormwater treatments and other "green street" infrastructure as part of active transportation projects where feasible. Expand the City's urban forest, encouraging installation of new street trees to provide shade, physical separation from auto traffic, and a more inviting pedestrian realm.
- **3.4 Open Streets.** Support open streets and pilot active transportation projects, such as creation of temporary pedestrianized, car-free streets to expand public space for visitors and community members.

#### Lead by Example

Like many buisnesses in the community, the City operates a fleet and has employees who commute to work, go to meetings, and run errands throughout the day. Through its "Lead by Example" philosophy the City is constantly exploring how it can help employees use active transportation and transit more often and serve as an example to the rest of the community.

#### 3.5 Land Use and Zoning Code.

- 3.5a Support land use and community design policies that allow residents to live closer to places of employment, schools, and neighborhood retail services--such as grocery stores, drug stores and restaurants—to improve the convenience of active transportation modes for daily trips. Promote development strategies that create a "15-minute City", where most residents can access their day-to-day destinations within a 15-minute walk, bike or transit trip.
- 3.5b Bike Parking in the Zoning Code. Continue to refine the
   City's Zoning Code to ensure that free, safe, and secure bicycle
   parking is provided with new development projects to meet growing
   demand including cargo bikes and electric bike charging.

#### Other Important Accessibility Actions

- **3.6 Wayfinding.** Develop tools such as a web-based map or app to promote the use of the bicycle and pedestrian network and distribute them as part of a wayfinding strategy.
- **3.7 Bikeshare and Micromobility.** Implement a bikeshare program in partnership with Cal Poly to maximize convenient access to bicycling as a form of transportation. If supported by the City Council, explore additional micromobility transportation options to increase sustainable transportation choices in San Luis Obispo. Explore allowing expanded use for personally owned skateboards, scooters, and other personal mobility devices in the Municipal Code as well as increase education on what devices are permitted and where they are allowed to be used.

### Goal 4 – Equity

#### Active transportation is for everyone.

The City's Active Transportation Plan is for everyone and includes actions to make these modes more inclusive. These actions prioritize structural changes and programs that support behavioral change as well as outreach methods to engage more of the community. By improving access to lower-cost transportation options, such as walking, bicycling and transit, San Luis Obispo can be a more affordable and inclusive community.

#### **Priority Actions**

#### 4.1 Accommodate Diverse Mobility Needs.

- 4.1a Ensure that bikeway designs do not create additional barriers for people with varying mobility demands, including individuals using bicycles with trailers, recumbent bicycles or other devices adapted for those with diverse mobility needs.
- 4.1b Explore bikeshare opportunities such as trikes, cargo bikes, and recumbent bicycles for people with physical mobility challenges.

#### 4.2 ADA Amenities.

 4.2a - Install or upgrade curb ramps, sidewalks, and traffic control devices to improve access for pedestrians with mobility challenges and visual impairments per current Americans with Disabilities Act (ADA) Standards.  4.2b - Provide ample crossing time at signalized crossings at or near major destinations that are heavily used by pedestrians.
 Provide additional clearance time at crossings frequented by seniors and users with mobility challenges. At crossings of high volume/speed collector and arterial streets, provide pedestrian refuge treatments where feasible. Discourage unnecessary roadway widening, which increases crossing distance for pedestrians.

## 4.3 Use Outreach Strategies That Are Innovative, Inclusive, and Collaborative.

- 4.3a Target outreach efforts to reach community members who are often unable to participate in traditional, evening townhall meetings. Strategies may include increased electronic/online outreach, popup workshops at popular community destinations, and less-formal, children-friendly community workshops where participants may feel more comfortable engaging with staff and other community members.
- **4.3b** Follow inclusive public engagement practices for project-level planning efforts of active transportation projects.
- 4.3c Work with community-based organizations to host outreach events and interact with more people as part of future planning processes. Leverage existing relationships and cultivate new relationships with community-based organizations to distribute information and encourage public participation with planning efforts.

- **4.4 Collaborate with Community-based Organizations on Implementation Projects.** Implement short-term, high-visibility projects in collaboration with community-based organizations that can be applied throughout the city.
- **4.5 Neighborhood Vitality and Livability.** Incorporate opportunities to enhance neighborhood vitality and livability as part of active transportation projects, such as incorporating public art, traffic calming, landscaping and other elements. Encourage neighborhood residents to participate in selecting design elements that best fit the unique character of their neighborhood.
- **4.6 Build Projects for All to Use.** Implement bicycle and pedestrian projects that address disparities in access to sustainable and low-cost transportation options in neighborhoods with higher concentrations of economically-disadvantaged or historically unrepresented populations.

#### Other Important Equity Actions

- **4.7 Support Promotional Programs and Events.** Support programs and events that promote a bicycle- and pedestrian-friendly San Luis Obispo, such as Bike to Work Day, Open Streets events, and the Bike Rodeo for school-age children.
- **4.8 Bikeshare and Mobility as a Service.** Locate future bikeshare and other micromobility service stations/docks at popular transit stops and explore mobility as a service system to incentivize the seamless integration of transit, bikeshare and sustainable transportation services.
- **4.9 Addressing the Cost Barrier to Bikeshare and Transit.**Evaluate the feasibility of low- or no-cost bikeshare and transit memberships to economically-disadvantaged individuals.
- **4.10 Promoting the Economic Benefits.** Promote bicycling and walking as cost-effective ways to reduce transportation costs. Include educational information on the comprehensive costs to the community and individual of using different transportation modes.
- **4.11** Addressing the Cost Barrier to Maintenance and Bike Ownership. Continue working with partners on programs that promote low-cost bicycle maintenance. Explore opportunities to provide grants, discounts, or credits for low-income individuals towards the purchase of bicycles from local businesses, with particular focus on increasing access to cargo bicycles, which provide increased flexibility for transporting children, groceries and other goods.

### How Do We Measure Progress?

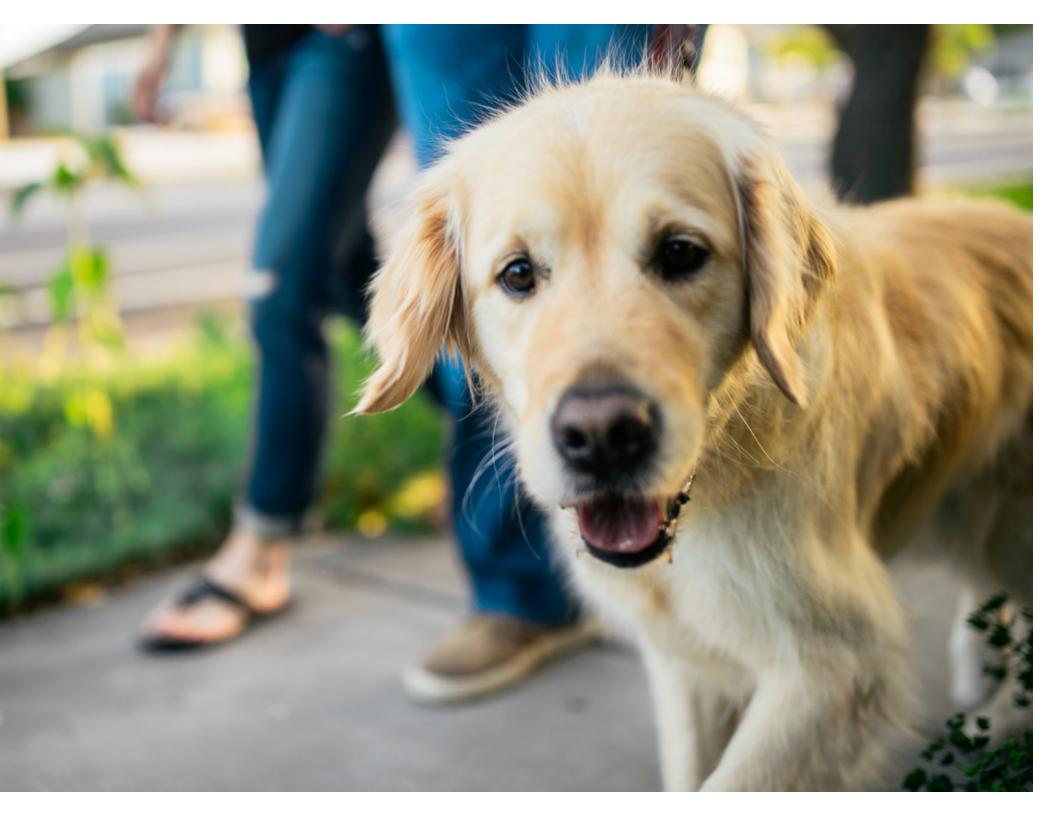
The following matrix summarizes the ways that the City will measure progress towards implementing the Active Transportation Plan. Staff will report on these performance measures every other year, with a summary report to be presented to the Active Transportation Committee and made available to elected officials and the general public on the City website.

PE	RFORMANCE MEASURE	BASELINE	TRACKING MECHANISM
1	Increase the share of citywide commute trips made by bicycling to 20% and 12% by walking by 2030	Current Mode Share: • Bicycle - 8.3%	Summarize biennially (every other years) based on data from U.S. Census Bureau, American Community Survey (latest 5-year average), Citywide Household Transportation Survey
		• Walk - 7.2%	
		• Drive Alone - 67.7%	
2	Consistent with the City's Climate Action Plan and General Plan Mode Share Objectives, decrease the share of total citywide trips made by single-occupant auto to 50% or less by 2030	Current Mode Share:	Summarize biennially (every other years) based on data from U.S. Census Bureau, American Community Survey (latest 5-year average)
		Drive Alone - 67.7%	
3	Achieve Platinum Level status as Bicycle Friendly Community by the League of American Bicyclists	Gold Status	League of American Bicyclists Bicycle Friendly Community Rankings (renewed every 4 years)
4	Continue progress towards the City's Vision Zero goal of eliminating traffic fatalities and severe injuries, endeavoring towards a 75% reduction by 2030	Three-Year Total (2015-2017):	City of San Luis Obispo Annual Traffic Safety Report
		3 fatal collisions	
		43 severe injury collisions	
5	Complete installation of the Active Transportation Plan's Tier 1 bicycle and pedestrian network by 2030	6.5% of the ultimate Tier 1	Summarize at outset of each 2-year
		network currently in place:	Capital Improvement Plan
		<ul> <li>0% of new low-stress bikeway mileage</li> </ul>	
		0% of new enhanced pedestrian/bicycle crossings	
6	Consistent with the General Plan Circulation Element policies, strive to allocate transportation funding across various transportation modes approximately proportional to the General Plan Modal Split Objectives	Baseline to be set with FY2021-23 Financial Plan	Summarize transportation expenditures as running 4-6-year average at outset of each 2-year Capital Improvement Plan
7	Double the mode share for all bicycle and pedestrian trips for public K-12 schools in the city	Baseline to be set via school surveys in 2021	In collaboration with SLO Rideshare, conduct survey of local K-12 schools biennially (every other year)

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Bicycling & Walking in San Luis Obispo Today





# Bicycling & Walking in San Luis Obispo Today

In order to increase the share of trips made by active transportation modes in San Luis Obispo, it is important to first understand the current transportation system, land use planning, location of key destinations, and how people are currently using active transportation to move around the city. This chapter describes the active transportation landscape in San Luis Obispo, including the existing bicycling and pedestrian environment, primary barriers to walking and bicycling, and who is biking and walking now.

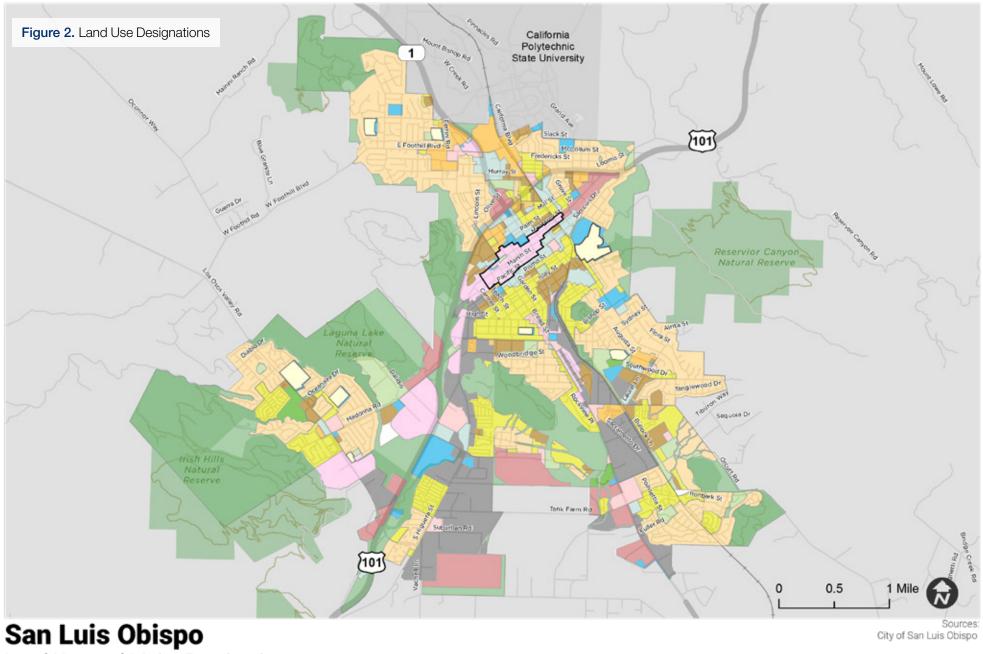
#### **Demographics**

The City of San Luis Obispo is home to approximately 47,000 residents, with roughly 8,000 additional people living on-campus at California Polytechnic University (Cal Poly), located just outside of the City Limits. With a jobs-to-housing ratio of 2.5:1, many San Luis Obispo workers commute into town from outside areas, increasing the City's weekday population to nearly 56,000 persons. Most employed San Luis Obispo residents work within the City, with nearly 60% reporting a daily commute time of less than 15 minutes. Major employers within the city include Cal Poly, San Luis Obispo County, Tenet Healthcare and the City of San Luis Obispo. The median age of

San Luis Obispo residents is 26, much younger than the County (40) and State (37). Children and young adults under the age of 24 account for 48% of the city population, while 12% are aged 65 and over. Average household income is \$49,600, roughly 25% below the County average, and roughly 32% of San Luis Obispo households own one or fewer automobiles.

#### Land Use and Major Destinations

Figure 2 displays the current land use designations and key destinations within San Luis Obispo. The City is primarily compromised of low and medium density residential and open space, with retail uses concentrated at the heart of the City's downtown core and the corridors along Los Osos Valley Road and Madonna Road. Key destinations include the downtown core and Mission Plaza, Cal Poly, the Damon-Garcia Sports Fields, large retail centers along the Madonna and Los Osos Valley Road corridors, the San Luis Obispo Airport & adjacent business parks, hospitals, rail station, and numerous parks & open spaces, such as Bishop Peak and Laguna Lake Park. Local public K-12 schools within the City Limits include seven elementary schools, Laguna Middle School, and San Luis Obispo High School.



Land Use and Major Destinations

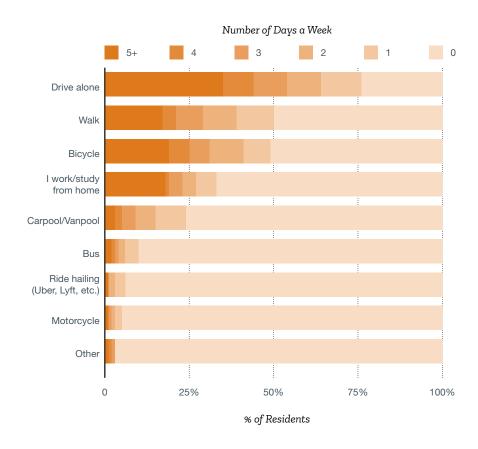


## Who Bikes and Walks in San Luis Obispo?

During the fall of 2019, the City of San Luis Obispo distributed a Citywide Household Transportation Survey to residents in order to learn more about their behaviors and perceptions of bicycling and walking around their communities. Postcards were distributed to a randomly generated list of 4,500 residents, inviting them to participate in the survey. A total of 709 residents completed the survey (16% response rate), providing a statistically valid sample. The survey results offer invaluable insight into the perceptions of walking and biking in San Luis Obispo.

The Citywide Transportation survey shows that 16% of residents reported using a bicycle for most trips, while 11% reported that they walk for most trips. Comparatively, U.S Census Data (2017 American Community Survey 5-Year Estimates) tells us that approximately 8% of San Luis Obispo residents bike to work regularly and 7% walk to work regularly. People often over-estimate how often they use sustainable transportation modes when asked to give their own estimates, so the actual mode share rates are likely somewhere in between the Citywide Survey and Census figures.

1 U.S. Census Beueau; 2017 American Community Survey Journey to Work 5-year Estimates 2 City of San Luis Obispo 2035 General Plan Circulation Element (2014)



EXISTING <sup>1</sup>	2035 GENERAL PLAN OBJECTIVES <sup>2</sup>
67.7%	50%
8.3%	20%
7.8%	18%
7.2%	18%
6.3%	18%
2.8%	12%
	67.7% 8.3% 7.8% 7.2% 6.3%

#### What do residents say about biking?

- 49% of residents noted that they ride a bike for work and school trips at least once per week.
- The majority of residents (83%) own a bicycle.
- The vast majority of residents (90%) felt they were in good enough health to ride a bicycle.
- 60% of residents say there are not enough bike lanes, while 65% say they would bike more regularly if there were more off-street trails and physically-protected bike lanes.

#### What do residents say about walking?

- 50% of residents walk for work and school trips at least once per week.
- 45% of residents don't feel safe walking at night vs. 6% who don't feel safe walking during the daytime.
- The vast majority of residents (96%) felt they were in good enough health to walk a reasonable distance.
- 78% of residents think the sidewalks are in good condition.

#### Types of Bicyclists in San Luis Obispo

Surveys show that the perception of risk with using stressful or unsafe facilities is often the most significant barrier to bicycling for most people. Even those interested in cycling will often choose to drive if the available facilities don't meet their comfort level. In order to develop a bicycling environment that will encourage more people to ride, it is important to first understand the existing level of interest, ability and comfort of bicycling within the community. While there are many diverse types of cyclists, including people who have no other means of transportation, for the purposes of bicycle system planning, the population can generally be classified into four types of transportation bicyclists.

Based on responses to the Citywide Transportation Survey, San Luis Obispo residents were categorized into one of these four rider types:



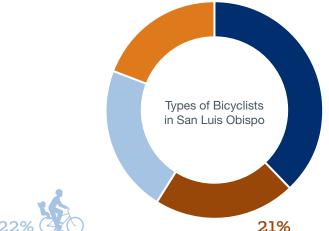
#### Strong + Fearless

Willing to ride a bicycle on any roadway regardless of traffic conditions. Comfortable taking the lane and riding in a vehicular manner on major streets without designated bicycle facilities.



#### **Enthusiastic + Confident**

Bicyclists who are comfortable sharing the roadway with automotive traffic in some instances, but prefer to ride in their own designated bike lane or off-street facility.



#### Interested, but Concerned

Infrequent bicyclists with some inclination towards bicycling more regularly if they felt safer on the roadways. Not very comfortable sharing the road with cars, or riding on major streets, even with a bike lane. Prefer separated pathways or low-traffic neighborhood streets.

#### No Way No How

Residents who simply are not interested in bicycling for reasons of topography, inability, or simply complete and utter lack of interest. Unlikely to adopt bicycling in any way.

As shown above, 19% of residents will bike in practically any conditions and 21% are not interested in riding at all. If increasing bicycle mode share is the goal, the City should strive to provide facilities that meet the comfort level of the remaining 60% of the population.

## Existing Bicycle Network

Existing bikeways in San Luis Obispo can provide a base from which the City can propose a low stress bikeway network. It is important to note that some facilities promote both bicycle and pedestrian safety.

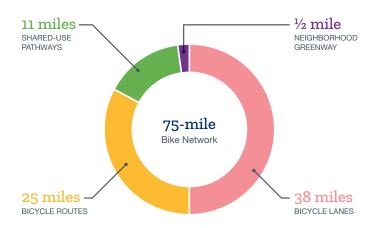
#### **Bicycle Facility Mileage by Type**

The City of San Luis Obispo's current bicycle network includes approximately 75 miles of designated paths, lanes, and routes. There are approximately 11 miles of shared-use pathways, 38 miles of bicycle lanes, 25 miles of bicycle routes, and a half mile of neighborhood greenway. See the descriptions below to understand the definition of each bicycle facility type, as these terms will be used throughout this plan. Figure 3 shows the existing bicycle facilities throughout San Luis Obispo, as well as areas immediately outside of the city boundary.

Note: The California Department of Transportation (Caltrans) uses the following naming convention for bicycle facility classifications: Class I Bikeway (Shared-Use Path), Class II Bikeway (Bike Lanes), Class III Bikeway (Bike Route), Class IV Bikeway (Cycle Track/Protected Bike Lane). Since this naming convention can often be confusing for the general public, the more intuitive terms listed above are used throughout this plan.



Bicycle Route (Class III)





Shared-Use Path (Class I)



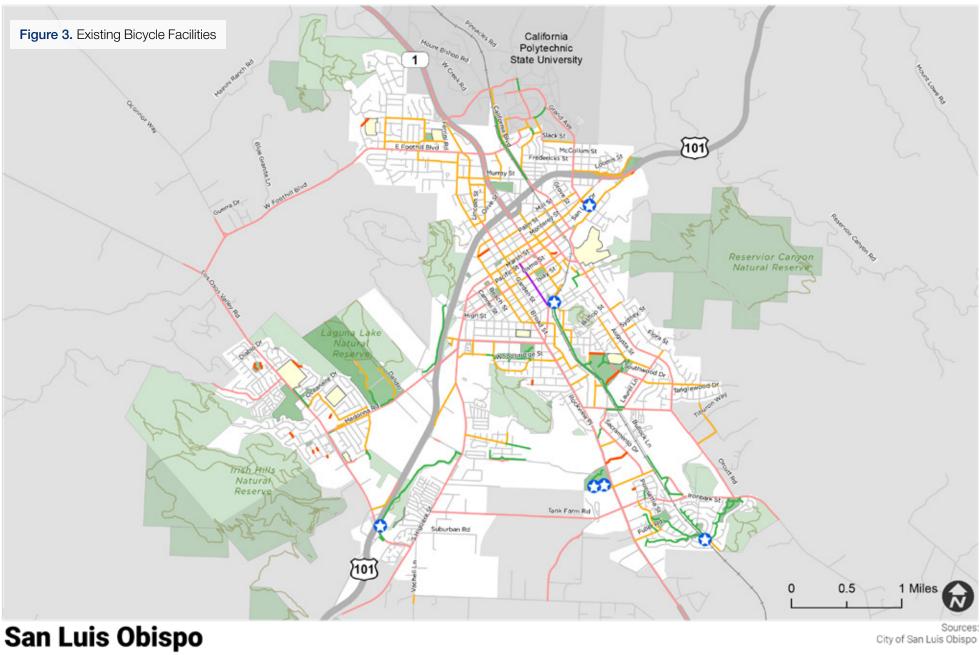
Protected Bikeway (Class IV)
Coming Soon



Bicycle Lane (Class II)



Neighborhood Greenway



**Existing Bicycle Facilities** 





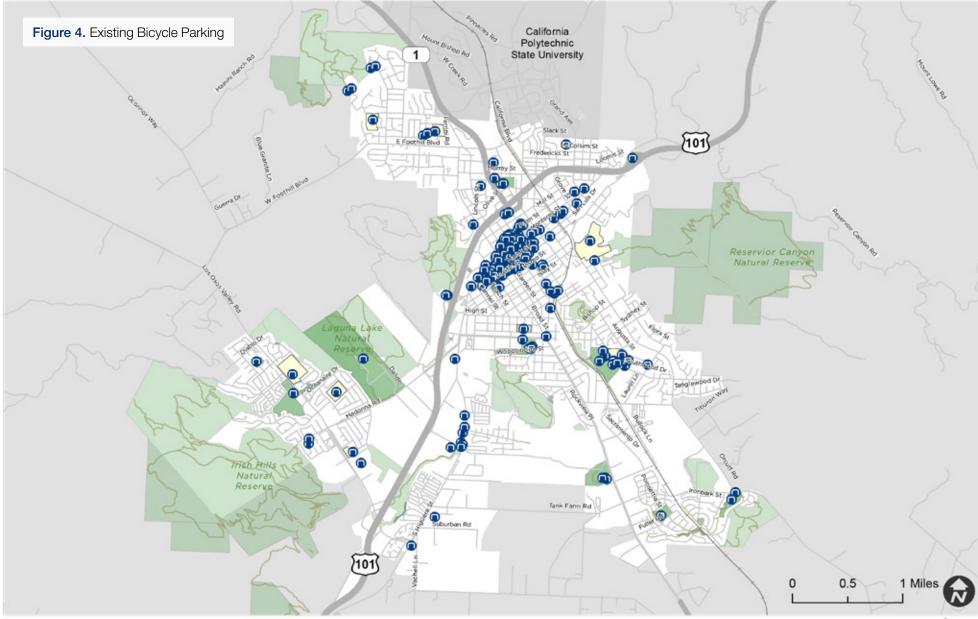
#### **Bicycle Parking**

The City of San Luis Obispo has many bicycle parking locations, both within the public right-of-way with racks installed along sidewalks and within on-street parking lanes, and on private property at entrances to office buildings, retail centers, and multifamily housing developments. The City understands the importance of providing a secure place to store your bicycle at key destinations and understands that bike parking is an important part of making a bike trip feasible. Residents have expressed support for bicycle parking through the City's Racks with Plaques Donation Program, a program in which a donor purchases a bike rack for the City and a dedication plaque is personalized with a message from the donor.

Figure 4 shows where bicycle parking is currently located throughout the city. The majority of bicycle parking is in the central part of downtown.







Existing Public Bike Parking Locations





\*Additional bike parking is located on private property



### Existing Pedestrian Facilities

The City of San Luis Obispo's pedestrian infrastructure includes sidewalks and paseos, shared-use paths, curb ramps, crosswalks, median refuges, and hiking trails.

The City has a robust sidewalk network but there are still gaps. In Chapter 5 we highlight those gaps to ensure we can complete our sidewalk network.



Pedestrian Signal



**Bulb-Out** 



**High-Visibility Crosswalk** 



Rectangular Rapid Flashing Beacon



Refuge Island



**Curb Ramp** 



Sidewalks & Paseos

# Other Bicycle & Pedestrian Design Elements

Other infrastructure and design elements that make up the existing pedestrian and bicycle environment within San Luis Obispo include pedestrian and bicycle signals, grade-separated crossings (bridges and tunnels), flashing beacons, street lighting and wayfinding signage. Providing intersection improvements that promote bicycle and pedestrian safety can encourage residents to bike and walk more frequently.



Bike + Pedestrian Bridge



Pedestrian-Scale Street Lights



Wayfinding/Guide Signage



Bike Signal



Green Bike Lane Markings



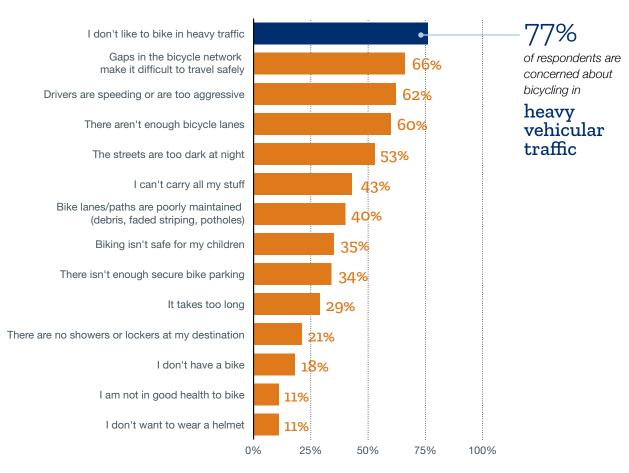
**Bike Box** 



### Why are People Not Biking More Today?

Residents who participated in the Citywide Transportation Survey were asked, "Why is it difficult to bike in town more often?" Heavy traffic, bicycle network gaps, and aggressive drivers were the top concerns about biking today in San Luis Obispo.

### IT IS DIFFICULT FOR ME TO BIKE IN TOWN MORE OFTEN BECAUSE...



### What Other Barriers do Residents in San Luis Obispo Face When Bicycling?

As part of the ATP public outreach process, an Interactive Online Mapping tool was provided to community members to give them the opportunity to highlight locations that they felt created significant barriers to walking or bicycling, such as intersections and roadway segments they felt unsafe riding along. There were a total of 64 comments that referenced barriers to biking, with the following key themes:

- 55% of comments identified intersections that felt unsafe or where users had difficulty finding gaps in traffic to cross major thoroughfares;
- 42% of the comments cited general safety concerns, with the majority of these locations located along high traffic volume/speed arterial streets;
- 31% of comments expressed desire for physicallyseparated bike facilities; and
- 22% of comments expressed concerns with high motor vehicle speeds.



55%
of comments mentioned
difficult
intersections
as a barrier to biking.

42% of comments cited safety as a major concern.

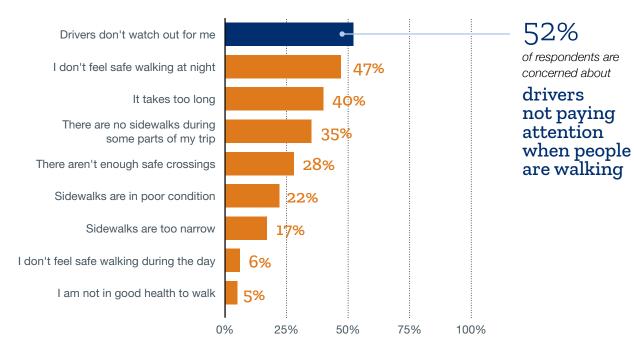
22% of comments mentioned vehicle speeding as a barrier to biking.



### Why are People Not Walking More Today?

Residents who took the Citywide Transportation Survey were asked, "Why is it difficult to walk in town more often?" Drivers not paying attention, safety, and time were the top concerns about walking today in San Luis Obispo.

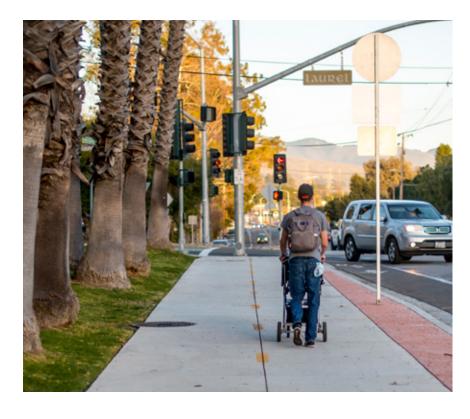
### IT IS DIFFICULT FOR ME TO WALK IN TOWN MORE OFTEN BECAUSE...



### What other barriers do residents in San Luis Obispo face when walking?

There was a total of 44 comments provided in the Online Mapping Tool that referenced barriers to walking. Lack of safe crossings, traffic speeds, and lack of sidewalks were the top walking barriers noted on the interactive online mapping tool.

- 50% of comments cited lack of crosswalks and the need for new or improved crossings;
- 20% of comments noted concerns with high vehicle speeds;
- 20% of comments comments cited lack of sidewalks/sidewalk construction;
- 18% of comments identified lack of curb ramps as a major barrier; and
- 16% of comments comments expressed a desire for better/more street lighting.



50%

of comments mentioned the

lack of crosswalks

as being a barrier to walking.

20%

of comments cited

safety & vehicle speeding

as major concerns.

16%

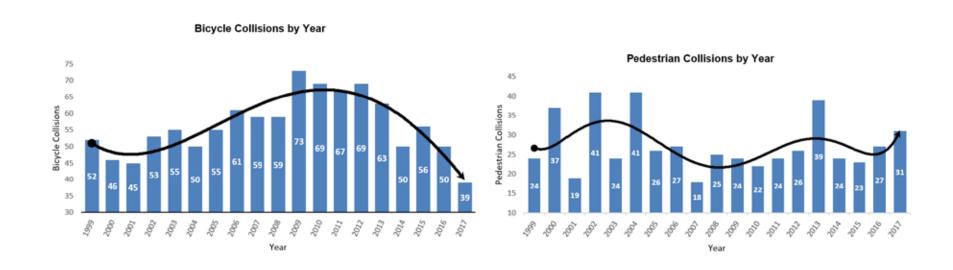
of comments mentioned wanting

improved lighting

for pedestrians.

### Prioritizing Safety Using Data

The City of San Luis Obispo takes pride in its commitment to improving safety for all road users. Through its award-winning Traffic Safety Program, the City has employed a data-driven process to systematically reduce traffic collisions, with a focus on collisions involving bicyclists and pedestrians, who are more likely to be seriously injured or killed in a crash. As reported City's 2017 Traffic Safety Report, citywide traffic collisions have been reduced by 60% and injury collisions have decreased by 35% since inception of the Traffic Safety Program in 2002, with bicycle collisions down 47% from peak levels in 2009 and pedestrian collisions down 15-21% from a peak in 2004. While the number of pedestrian collision are down from their peak, there has been a recent rise in pedestrian collisions in 2016 and 2017.



#### Vision Zero

Vision Zero is a multi-national traffic safety initiative with a straightforward message: No loss of life is acceptable. At its core, Vision Zero seeks the elimination of deaths and serious injuries from our roadways. By focusing on not only reducing overall traffic collisions, but preventing severe collisions, particularly to vulnerable users such as pedestrians, bicyclists and people with disabilities, communities can achieve real live benefits and save lives.

The City of San Luis Obispo formally adopted its Vision Zero policy in 2016 to eliminate traffic-related fatalities and serious injuries by 2030. Through the data-driven analysis performed in the annual Traffic Safety Report, regular collaboration between City Public Works and Police Departments to identify priorities for focused traffic safety enforcement and ongoing community education and outreach campaigns, the City continually strives to improve the safety and efficiency of transportation facilities for all modes and users.





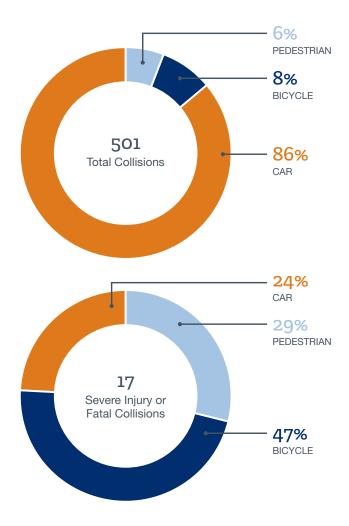
#### Where are Most of the Collisions Happening Today?

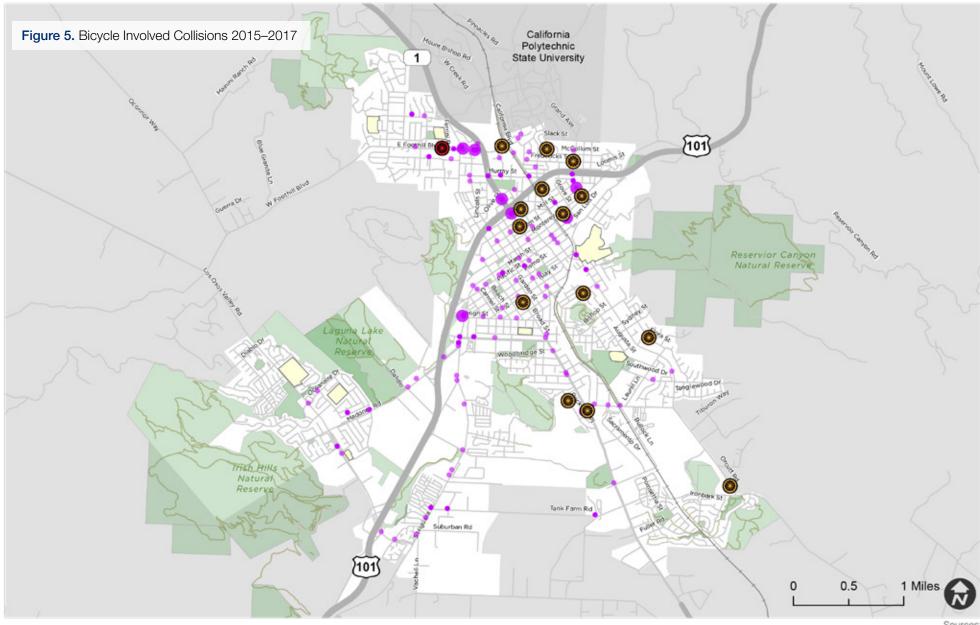
Overall, there have been 145 bicycle-involved collisions and 81 pedestrian-involved collisions from 2015-2017 on city streets. One of those bicycle collisions was fatal and 29 caused severe injuries. One of those pedestrian collisions was fatal and 24 caused severe injuries.

Bicycle collisions have primarily occurred along high speed, major arterial streets, such as Santa Rosa Street, California Boulevard, South Higuera Street and Foothill Boulevard. However, most of the pedestrian collisions have primarily occurred within the downtown region and Foothill Boulevard where there is higher pedestrian crossing volumes combined with higher automobile speed and volume.

Figure 5 and Figure 6 show the locations of all bicycle and pedestrian involved collisions.

#### 2017 Collisions by Type





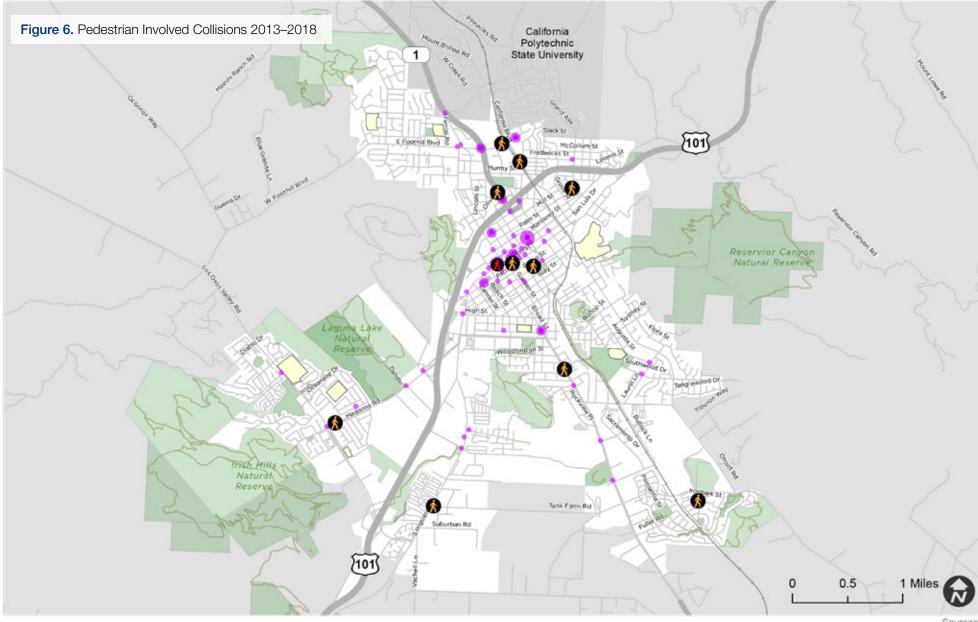
**San Luis Obispo**Bicycle Involved Collisions 2015-2017

Fatal 1 Collision School Rail Park or Open Space Trails Severe Injury 2-3 Collisions

4-6 Collisions



City of San Luis Obispo



4-6 Collisions

**San Luis Obispo** Pedestrian Involved Collisions 2015-2017

1 Collision Fatal School – Rail Park or Open Space ---- Trails 2-3 Collisions Severe Injury



City of San Luis Obispo

#### Most Common Bike Crash Types in San Luis Obispo

Figure 7 summarizes bicycle-involved collisions by primary collision factor. The majority of collisions were caused by motorists making an improper turning movement, with 26% resulting from unsafe right-turns. The majority of these right-turn collisions occurred on streets with curbside unprotected bike lanes with no enhanced crossing treatments, such as dedicated bike signals, green pavement markings, or protected corners, indicating value in exploring intersection improvement strategies that reduce conflicts between right-turns and cyclists.

#### Figure 7.

BICYCLIST COLLISION TYPE	%	#
Motorist Right-Turn	26%	10
Motorist Left-Turn	15%	6
Cyclist Lost Control	10%	4
Motorist Failed to Yield	8%	3
Wrong-Way Cyclist	8%	3
Cyclist No Light	5%	2
Motorist Failed to Drive at Safe Distance	5%	2
Cyclist Failed to Stop	5%	2
Cyclist Under the Influence	5%	2
Cyclist Lane Change	5%	2
Motorist Under the Influence	3%	1
Cyclist Failed to Yield	3%	1
Motorist Overtaking or Sideswipe	3%	1
Total	• • • • • • • • • • • • • • • • • • • •	39

#### Most Common Pedestrian Crash Types in San Luis Obispo

Figure 8 breaks down pedestrian-involved collisions by type. The majority of the collisions were caused by a party failing to yield proper right-of-way, with 32% involving motor vehicle drivers failing to yield to pedestrians when making left turns, particularly at signalized intersections with permitted left turn movements. This suggests that improvements could be explored to reduce conflicts between left-turns and pedestrians, such as eliminating permitted left turn signal phases, providing pedestrian lead crossing intervals, or addition of high-visibility crosswalk markings.

Figure 8.

PEDESTRIAN COLLISION TYPE	%	#
Motorist Left-Turn	32%	10
Pedestrian Failed to Yield	16%	5
Jaywalking	13%	4
Scooter/Skateboarder in Roadway	13%	4
Motorist Failed to Yield	13%	4
Pedestrian Crossing Against Signal	6%	2
Motorist Right-Turn	6%	2
Total		31

### Level of Traffic Stress

As mentioned earlier in this section, the perception of a stressful or unsafe journey is often the greatest barrier to bicycling for most San Luis Obispo residents. For this reason, it is important to understand how stressful different routes and roadway conditions are likely to be perceived by the average rider. In order to increase bicycle ridership, the routes that provide access to the most prominent destinations need to feel safe for all cyclists, not just the strong and fearless.

Bicycle Level of Traffic Stress (LTS) is an objective, data-driven analysis system used for this vary purpose—to indicate how comfortable or stressful a given roadway segment or crossing is for a typical bicyclist. Levels of traffic stress quantifies perceived stress using a ranking system from 1 to 4, with LTS 1 representing a very low stress experience comfortable for all users, such as a physically-separated shared-use path, while LTS 4 represents a very stressful experience suitable for only the most experienced riders, such as a high speed/volume arterial street with no dedicated bike facilities. Level of traffic stress analysis calculations utilize roadway and bikeway characteristics, speed and volume data to assign an LTS ranking to a given facility.

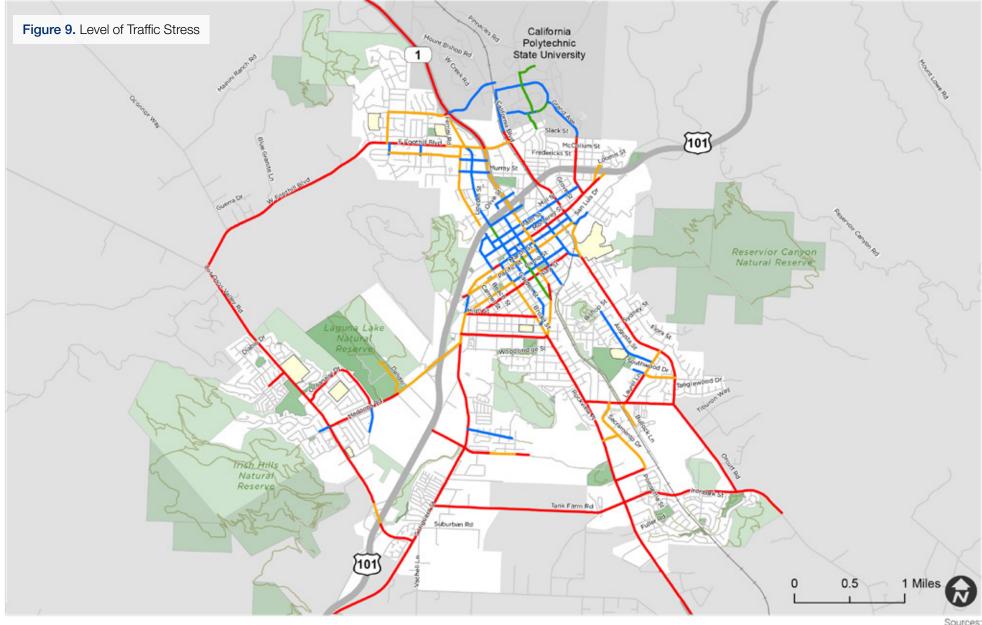
With roughly two thirds of San Luis Obispo residents indicating that they would travel by bicycle more frequently if they had access to more low-stress facilities, such as shared-use paths and physically protected bike lanes, understanding the level of traffic stress of the existing bicycle network is critical in order to guide improvements that are needed to achieve the City's mode share goals.



#### Existing Bicycle Level of Traffic Stress in San Luis Obispo

Level of traffic stress scores were mapped to illustrate the low-stress connections and gaps throughout San Luis Obispo. Figure 9 shows the LTS results of the major roadways and collector roadways within San Luis Obispo. Shared-use paths and roadways located in the downtown core, where most streets are narrow with lower vehicle speeds and traffic is distributed more evenly throughout the historic street grid, generally provide lower-stress travel for bicycling as compared to the higher-speed multi-lane arterial streets leading out from the center of the city. Even when striped bike lanes are provided, multi-lane roadways with high traffic speeds are often uncomfortable for all but the most experienced riders. These high-stress roadways, which are often the only direct routes to key destinations within the city, effectively create barriers for bicycling among neighborhoods. Examples of these high-stress roadways include: Foothill Boulevard, Madonna Road, Los Osos Valley Road, and Broad Street.

Neighborhood greenways and bike routes with low traffic volumes and speeds, shared-use paths and protected bike laness—facilities that physically separate cyclists from motor vehicles—generally provide a low-stress environment needed to serve cyclists of all ages and ability levels.



Existing Bikeway Level of Traffic Stress

\*LTS is not shown for all streets but for major corridors that connect one part of the city to another





City of San Luis Obispo

#### Low-Stress Connectivity Islands Analysis

Figure 10 analyzes the connectivity of existing low-stress areas of the city based on the Level of Traffic Stress Analysis mentioned in the previous section. This exercise helps highlight the barriers that high-speed roadways, freeways, and railroad tracks create between neighborhoods.

A low-stress connection requires both segments and intersections to accommodate low-stress travel. For example, if a corridor is considered a stressful roadway, enhanced crossings may be needed to provide a comfortable crossing experience for cyclists traveling between neighborhoods. Elements that promote low-stress connectivity between areas of the city could include:

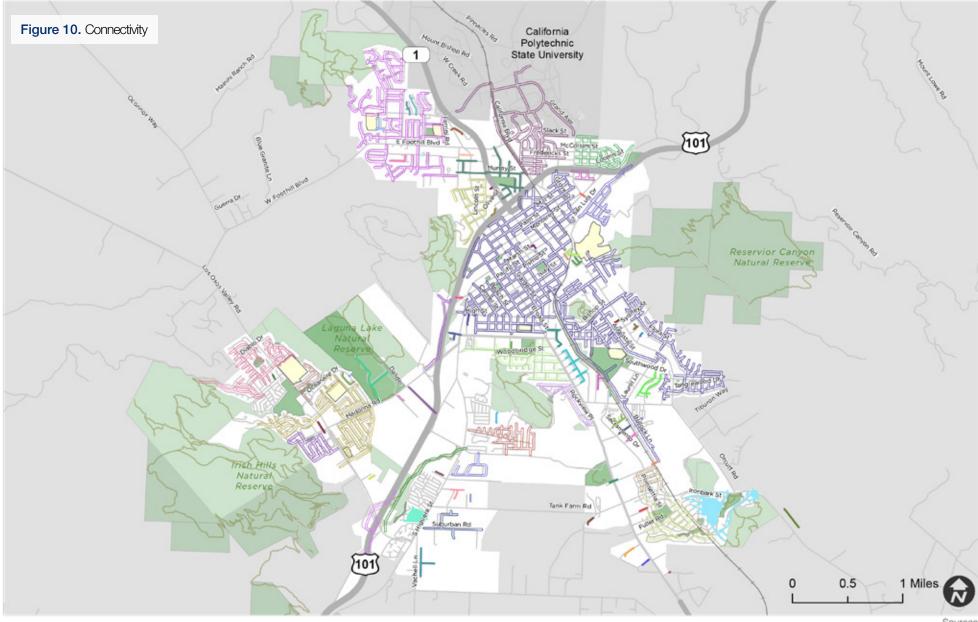
- Signalized Intersection
- High-Visibility Crosswalks with flashing beacons
- Low-speed roadways, bridges or tunnels bypassing high-speed streets

The complete connections are displayed in the same color and create "low stress islands". When the color of a collection of roadways changes, or the color is broken, this indicates that a high-stress roadway is creating a barrier for someone trying to cross. This could include a lack of signalized crossings at the intersection. Colors do not correspond to a level of traffic stress but rather that each different color represents a part of the City where it is more stressful to cross from one island to the next.

Although the downtown area does include some stressful roadways based on the LTS analysis, signalized crossings provide opportunities for bicycling comfortably across stressful corridors and limit out-of-direction travel.

These crossings make the majority of the downtown area more connected.

For neighborhoods along high-speed arterial streets like Foothill Boulevard and south Broad Streets, where few signalized crossings exist, low-stress bicycle travel is not possible.



Low Stress Connectivity Islands



Sources: City of San Luis Obispo

\*Each color represents a different "island." The goal is to have all one color indicating that all areas of the City are connected.



### Equity Review

Equity is an important part of any successful public planning process and is a key tenet on which this Plan is founded. To understand equity in the community of San Luis Obispo it is important to understand how it is defined and how community demographics look when viewed through an equity lens. This information helps us create an active transportation network that serves all of San Luis Obispo, regardless of background or economic status.

#### **Defining Equity**

The San Luis Obispo Council of Governments (SLOCOG) provides a regional definition for identifying disadvantaged communities within the County by examining the socio-economic indicators that define underserved populations, including:

- Median Household Income
- Minority Status
- Free or reduced-price meals under the National School Lunch Program
- Population of persons aged 65 and up
- Housing Affordability
- Educational Attainment Language Proficiency
- Households with no vehicles available
- Access to regular local transit service
- Sidewalk completeness
- Proximity to a grocery store

The above variables were analyzed for the San Luis Obispo County region at the traffic analysis zone (TAZ) level, and areas were evaluated relative to state and county averages. Points were assigned accordingly for each variable, and a composite score was derived for each zone in the region. The top 20th percentile of zones were deemed to have met SLOCOG's regional definition of disadvantaged communities. Figure 12 highlights areas of San Luis Obispo that meet the regional definition of a disadvantaged community.

California Senate Bill (SB) 535 and Assembly Bill (AB) 1550, which prioritize disadvantaged and low-income communities in California for increased investment from proceeds from the State's Greenhouse Gas Cap-and-Trade program, provide another method for defining inequity within our communities. Under SB 535, the California Environmental Protection Agency (Cal EPA) has developed a screening criterion for defining disadvantaged communities, which considers factors such as environmental pollution (drinking water quality, air quality, pesticide use, etc.), rates of public health issues (asthma, cardiovascular disease, obesity), and socioeconomic factors (educational attainment, poverty, unemployment, housing burdened low-income households). No census tracts within the City of San Luis Obispo currently meet the SB 535 definition of disadvantaged communities.

Under AB 1550, Cal EPA also provides a specific definition for low-income communities-based prevalence of census tracts with household at or below 80% of the statewide median household income, where household income is at or below the threshold designated as low-income by the Department of Housing and Community Development's list of State income limits. Figure 11 shows the areas of San Luis Obispo that meet the AB 1550 definition of low-income communities. In addition, Figure 13 shows the median household income by census tract in San Luis Obispo. As shown in the map, the highest concentration of low-income households is generally located in the northern part of the city near Cal Poly, which is largely driven by concentrations of college students.

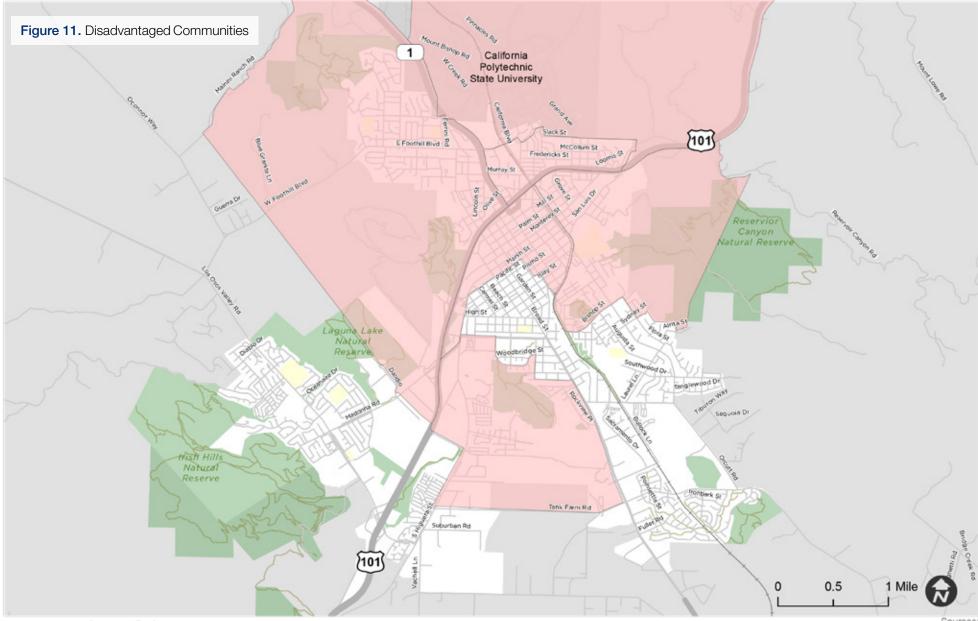
#### Housing and Transportation Costs in San Luis Obispo

San Luis Obispo County has consistently been ranked as one of the least affordable places to live in the United States, coming in at #5 on USA Today's 2019 list of least affordable housing markets. The annual income required to buy a house in San Luis Obispo County is about \$158,000—more than three times the annual income of an average household in the City of San Luis Obispo. Transportation can represent a significant portion household expenses, with the average California resident spending roughly 10% of their income on transportation-related expenses, and the cost of owning and maintaining a car ranging from \$5,000-\$12,000 annually. Comparatively, studies show the annual cost of using a bicycle or transit as a primary mode of travel ranges from \$300-\$500 per year. It is important to also note that driving a motor vehicle is simply not an option for some community members, including students, seniors, unsheltered persons and those with medical conditions. For reference, Figure 14 shows the percentage of people without access to a vehicle by San Luis Obispo neighborhood. All things considered, improving access to safe, efficient, and low-cost transportation options, like walking, biking and transit, not only makes San Luis Obispo a more healthy, sustainable city, but a more affordable and inclusive city as well.

### Equity and Inclusivity in Active Transportation Planning

Within the framework of this Plan, equity means that your identity as a San Luis Obispo resident has no detrimental effect on the distribution of public resources, access to information, ability to have your voice heard in local planning efforts, or access to affordable, efficient and safe transportation options. By implementing the projects and programs of this Plan, San Luis Obispo will have greater potential to be a more diverse, affordable, and inclusive community.



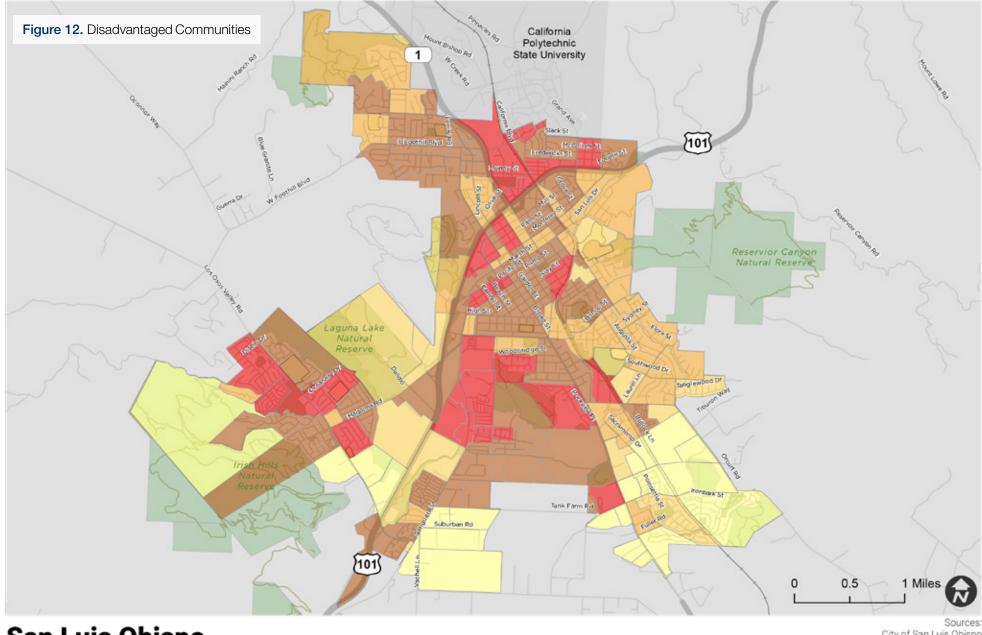


AB 1550 Designated Disadvantaged Community Areas





California Air Resources Board City of San Luis Obispo



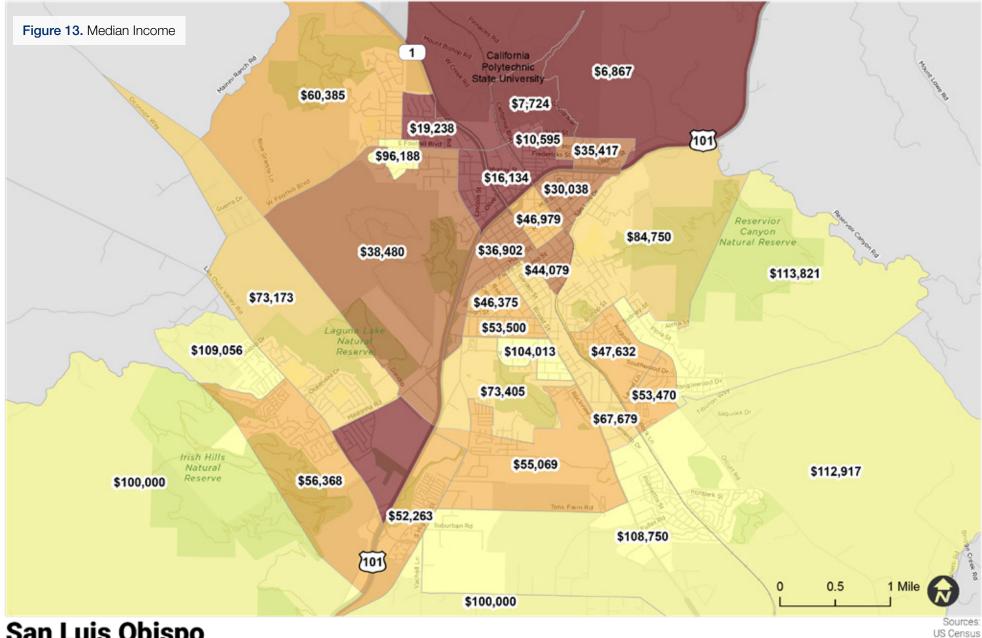
Regional Definition of Disadvantaged Communities



City of San Luis Obispo

\*Point ratings based on SLOCOG method for identifying disadvantaged communities. Zones ranking in the highest 20th percentile qualify as disadvantaged communities.



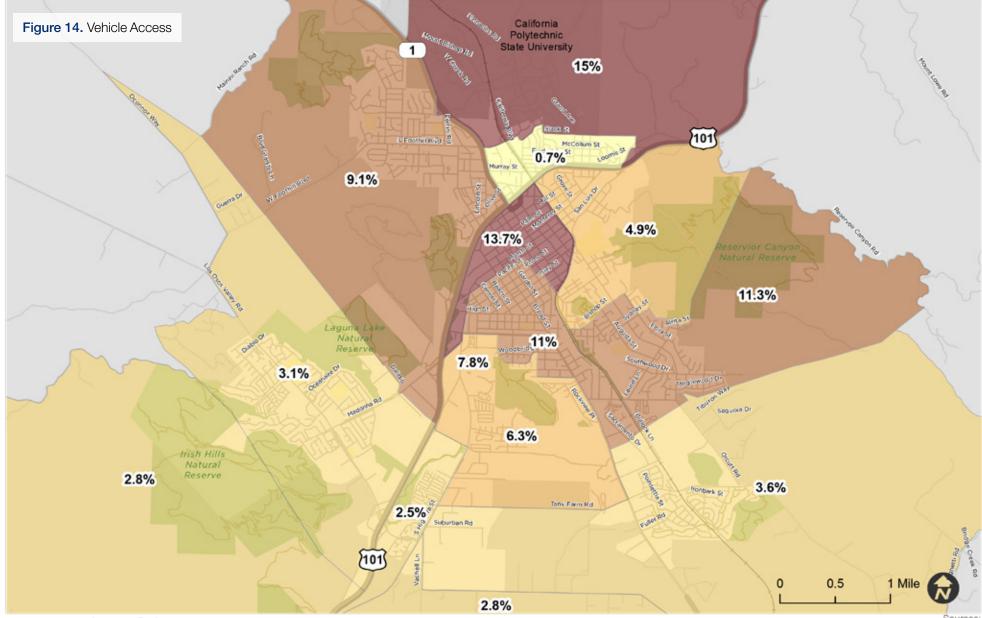


Median Household Income

\$85,000 and Greater \$45,000 - \$60,000 \$20,000 or Less School Rail \$60,000 - \$85,000 \$20,000 - \$45,000 Park or Open Space Trails



City of San Luis Obispo



Percentage of Households Without Access to a Vehicle

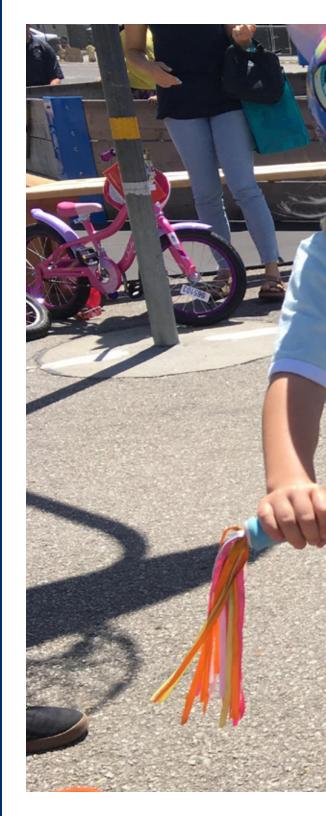




City of San Luis Obispo

US Census

Community Engagement







### Overview

In October 2019 San Luis Obispo City staff held community outreach events for the "Roll and Stroll" Active Transportation Plan (ATP). The public engagement strategy consisted of online, public workshop, and less formal pop-up outreach activities to maximize feedback opportunities and to reflect the diverse voices of the San Luis Obispo community.

### The purpose of the engagement effort was to obtain community input on:

- Vision for the ATP
- Types of active transportation infrastructure and policies to support the City's mode share goals
- Barriers to walking and bicycling in the City
- What type of bicyclist they considered themselves
- The diverse types of active transportation users in our community

#### Recommendations focused on:

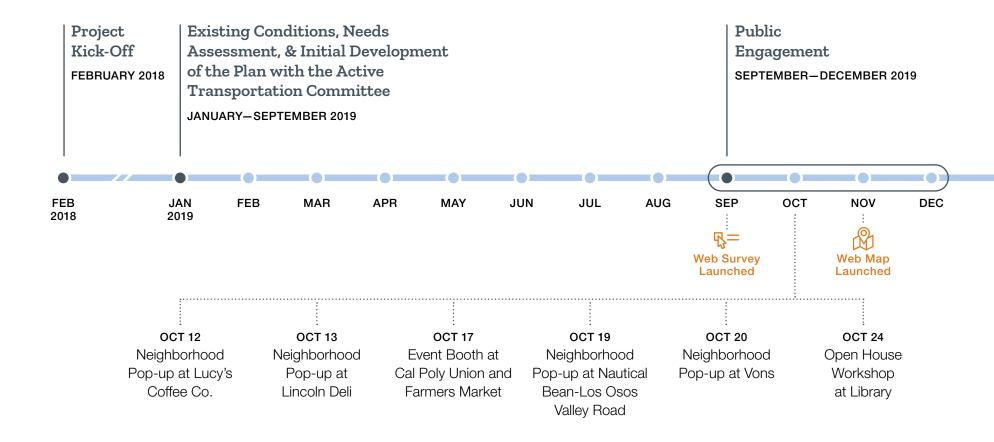
- Types of bicycle facilities needed
- Types of pedestrian facilities needed
- Desired locations for pedestrian crossing improvements and curb ramps
- Desired routes to prioritize first for investment
- Policies/Programs the public support

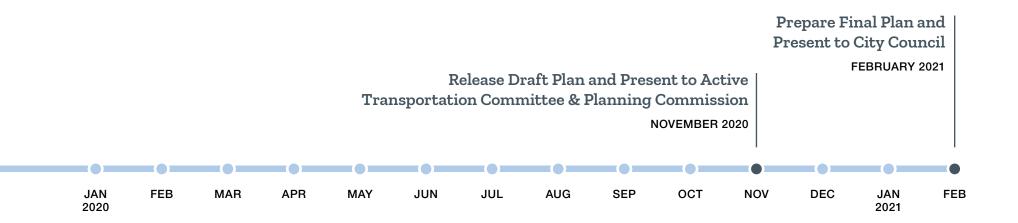
### Role of the Active Transportation Committee

The City of San Luis Obispo has a long history of involving its citizens in the business of city government. The Active Transportation Committee (ATC) is an advisory body serving the City Council and is a way for citizens to participate in the governing of their community by providing policy and oversight recommendations on issues regarding bicycle and pedestrian transportation. Originally established in 1991 as the Bicycle Advisory Committee, in 2018 the City Council expanded the committee's purview to include both bicycle and pedestrian transportation. Consisting of seven members appointed by the City Council, the ATC has played an important role in providing citizen input to the Active Transportation Plan. In regular meetings spanning over 2 years, the committee has provided careful input on the Plan's policies, projects, and prioritization.



### Project Timeline





### Face-to-Face Activities

#### WHAT WE HEARD

- Improve Bike Infrastructure
- More Protected Bike Lanes
- More Street Lights
- Implement a Quick Build Policy
- Protected Intersections
- Connectivity



#### Neighborhood Pop-ups

A series of lunch time events on weekends at local coffee shops, eating, or shopping locations distributed throughout the city provided an opportunity for informal participation. Residents were able to highlight areas that needed improvement by placing dots on City Map Boards. Community members were also able to share their vision for a more walkable and bikeable San Luis Obispo through a Postit exercise. Neighborhood pop-up events allow community members who often are not able to participate in formal, weeknight public hearings, to provide their input in a casual, convenient location.

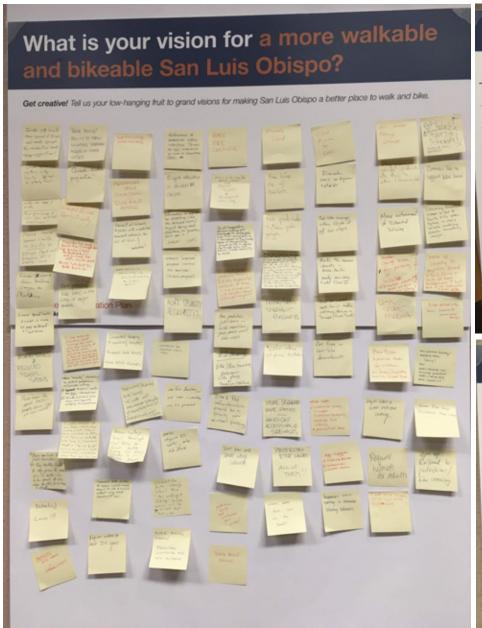
#### Open House Workshop

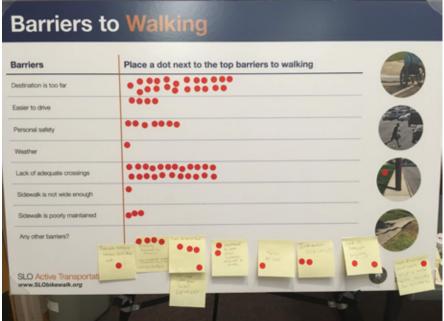
The workshop was held at the City/County library during the evening of Thursday, October 24. The event featured learning stations where residents could learn about the ATP, activity boards to provide input through Post-its and dots exercises, selfie stations for photos, kids coloring book stations, and the opportunity to participate in the online survey on laptops provided by the city.

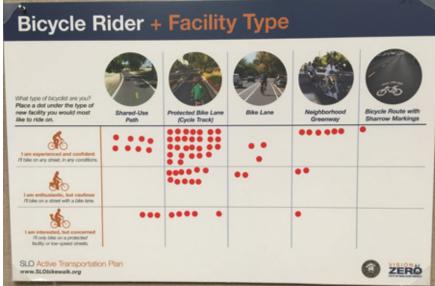
#### **Event Booths**

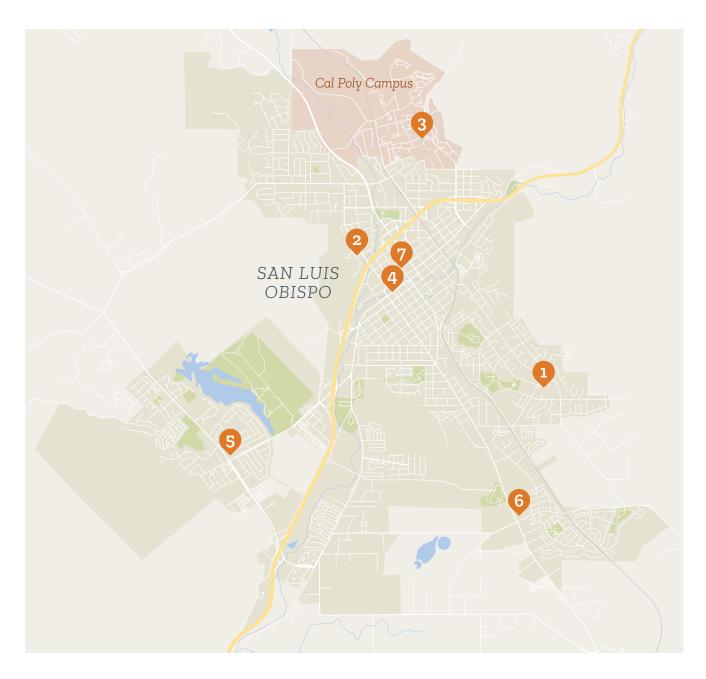
City Staff hosted booths at the Downtown Farmers Market and during lunch time at the Cal Poly University Union on Thursday, October 17.











#### **EVENT LOCATIONS (2019):**

- Neighborhood Pop-up at Lucy's Coffee Co. (Saturday 10/12)
- 2 Neighborhood Pop-up at Lincoln Deli (Sunday 10/13)
- 3 Event booth at Cal Poly Union (10/17)
- **4** Event booth at the Downtown Farmers Market (10/17)
- Neighborhood Pop-up at Nautical Bean-Los Osos Valley Road (Saturday 10/19)
- 6 Neighborhood Pop-up at Vons (Sunday 10/20)
- 7 Open House Workshop at the library (10/24)







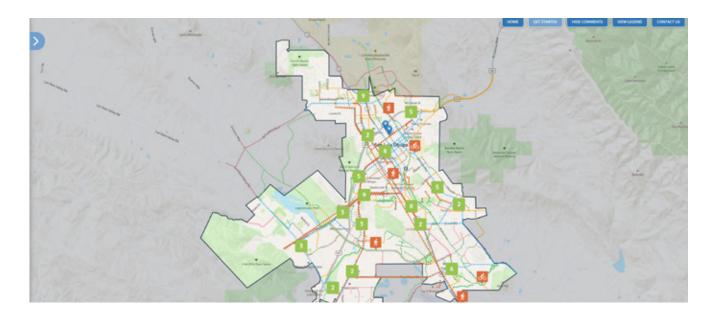








#### Online Activities



#### **Project Website**

The Project website provided San Luis Obispo residents with updates on the ATP, access to documents, and opportunities to provide input at www.slobikewalk.org.

#### Online Active Transportation Survey

The survey provided information on existing travel behavior and active transportation barriers. The surveys were conducted in parallel with other public outreach events. A randomly generated list of city residents received postcards asking for participation in the survey, to create a statistically valid sample. A separate version of the survey was available for citywide participation online. The survey was also available via telephone interview or hard copy.

## ▲ Interactive Online Mapping Tool

The Interactive Online Mapping
Tool provided the community an
opportunity to provide feedback
on the Roll and Stroll San Luis
Obispo Active Transportation
Plan. The online mapping tool
allowed community members
to highlight locations of desired
intersection crossings as well as
sites for bicycle and pedestrian
infrastructure improvements.

Users were given the option to use a point-marker to highlight a specific location on the map or a line segment to highlight a section of road or sidewalk that needs improvement.

### All Comment Analysis

All total there were 74-point markers that were inputted into the interactive online mapping tool:

- 42 entries for bicycling; and
- 32 entries for walking.

A total of 37-line segments were added to the online map:

- 22 segments referencing barriers to bicycling;
- 12 segments referencing barriers to walking; and
- Three (3) segments referencing both barriers to bicycling and walking.



### **Bicycle Comments**

There were 64 comments referencing barriers to biking. The most common barriers were the following:

55%

of comments mentioned

difficult intersections

as a barrier to biking.

42%

of comments cited

safety

as a major concern.

22%

of comments mentioned

vehicle speeding

as a barrier to biking.

### Walking Comments

A total of 44 comments were submitted that highlighted the barriers to walking in San Luis Obispo, the most common barriers were the following:

50%

of comments mentioned the

lack of crosswalks

as being a barrier to walking.

20%

of comments cited

safety & vehicle speeding

as major concerns.

16%

of comments mentioned wanting improved lighting

for pedestrians.



### Difficult Intersections

**Higuera Street and Madonna Road** is a difficult intersection for biking as it was mentioned in 10 comments, which focused on the need for a bike lane, increased safety, improved crossings, and the construction of a curb and median.

**Broad Street** between South Street and Orcutt Road was mentioned in 9 comments as a barrier to both biking and walking. Concerns focused on the need for a protected bike lane, difficulty crossing the street, lack of signalized crossings, high traffic volumes and speeding.

**Sydney Street and Johnson Avenue** intersection was mentioned in 5 comments, focusing on the need for a more comfortable school crossing, improved lighting, and the reduction of vehicle speed.

**Higuera Street and Marsh Street** intersection was mentioned in 5 comments, focusing on the need for a protected bike lane, increased safety, and the reduction of vehicle speed.

Broad is too dangerous to cross without traveling to the only two cross walks at South and Orcutt.

- INTERACTIVE MAPPING TOOL COMMENT

People drive fast and you cannot see them coming.
And there is no stop sign to make them pause. Feels dangerous even when I drive.

- INTERACTIVE MAPPING TOOL COMMENT

I like the idea of shared transportation, but for me it is more about safety of biking. I own a bike, but I have never ridden it in SLO because I don't feel safe doing so.

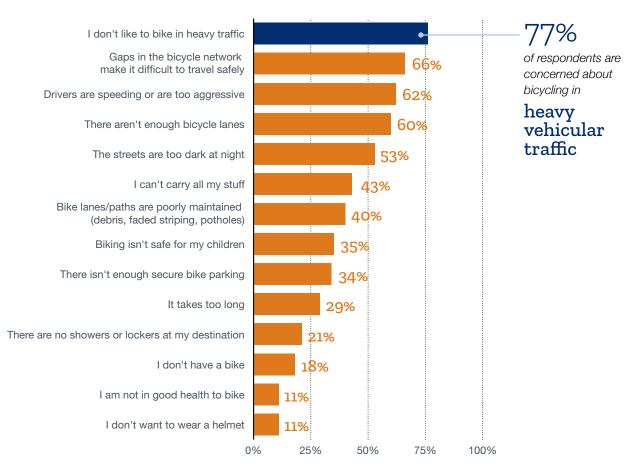
- HOUSEHOLD TRANSPORTATION SURVEY RESPONSE

## Community Input

### Barriers to Bicycling

- 66% concerned with distracted driving and vehicular speeding
- 63% concerned with drivers speeding or being too aggressive
- 60% addressed the need for protected bike lanes
- Other important concerns for bicycling with children and riding at night

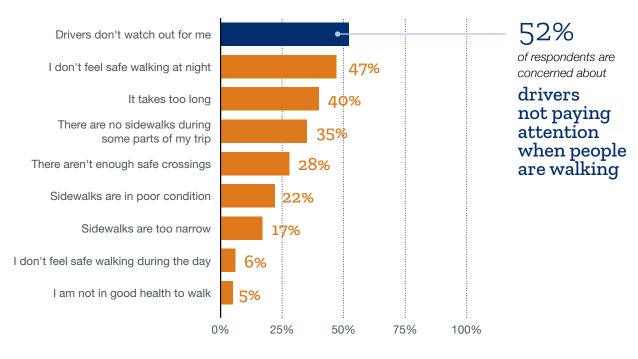
## IT IS DIFFICULT FOR ME TO BIKE IN TOWN MORE OFTEN BECAUSE...



## IT IS DIFFICULT FOR ME TO WALK IN TOWN MORE OFTEN BECAUSE...

### Barriers to Walking

- Gaps in sidewalk infrastructure, wider and better maintained sidewalks
- Destinations too far to reach on foot
- Lack of adequate crossings at major intersections
  - Broad Street
  - S. Higuera
- Lack of street lighting especially around Cal Poly University



## Types of Infrastructure and Policies Desired by the Community

- Protected bike lanes on major arterials are the most desired types of bicycle infrastructure
  - Broad, South Higuera, Tank Farm Road, Madonna, Foothill, Santa Rosa, and Los Osos Valley Road
- Crossing of major streets for both pedestrian and bicycle infrastructure
  - S. Higuera, Broad Street, Tank Farm, Los Osos Valley Road, Madonna, Santa Rosa, and Foothill Blvd
- Curb ramps and completing sidewalk gaps around schools and downtown
- Streetlights around Cal Poly University and downtown area
- Quick build policy introducing projects quickly with temporary materials and pilot installations
- Enforcement and lowering speeds
- Motorist, pedestrian, and bicycle education





## People Profiles

To better understand the community and to personalize bicycling and walking in San Luis Obispo; we asked residents to tell us about the challenges they face walking and biking for transportation, the types of improvements that would make them feel more comfortable doing it more often and what they enjoyed most about walking and biking in San Luis Obispo. The following profiles provide just a small sample of the many unique users who use the City's active transportation system.



Name: Melanie Mills

Lives in: Sinsheimer

"People smile, ring their bells, and say "hi" to each other much more often when they are riding bikes and walking."



Name: Andy Richardson

Lives in: French Park

"SLO is a beautiful and progressive area where outdoor activities are the norm."



Name: Zach Noyes

Lives in: Railroad District

"Every morning I bike about 20 minutes to Cal Poly's campus. It's a great way to wake up for 8am classes!"



Name: Jamie Woolf

Lives in: Sinsheimer

"I like walking here because there are lots of quiet routes away from traffic to enjoy a nice day."



Name: Allan Cooper

Lives in: Downtown SLO

"I enjoy the canopy of trees, the views of the surrounding hills, views of the creek and the peace and quiet along the creek walk and within the paseos."



Name: Michael Huggins

Lives near: Cal Poly

"I can get anywhere quickly, but streets are too wide and have too many cars."





Lives near: Cal Poly

"SLO has such beautiful weather so I love enjoying the sunshine while making my way to school or downtown."



Name: Rob Moore

Lives in: Laguna Lake

"[I enjoy] being outside in the beautiful scenery, seeing my neighbors, being part of the solution to combat climate change and a vehicle reliant infrastructure."



Name: Wesley Bisheff

Lives in: Anholm

"When walking, I get to communicate with other people. You never run into any friends while you're driving, and that makes it a lot more boring."



Name: Jack Wanner

Lives in: Downtown SLO

"I just like the joy and freedom of pointing my handlebars wherever I want to go, and my own two feet getting me there."

Recommended Bicycle & Pedestrian Projects





## The Bicycle and Pedestrian Network

This chapter introduces the different types of bicycle and pedestrian projects as well as supporting amenities that the City of San Luis Obispo will build. This chapter also includes the overall strategy in deciding where and what kind of facilities should be recommended based on input from the community.

#### WHAT WE HEARD

Bicycling and walking are uncomfortable and stressful due to heavy traffic and because cars drive too fast.

#### WHAT WE'VE PROPOSED

### Make it Comfortable

- Design for speeds as low as 15-20 mph on residential and local streets and construct physically-separated bikeways and pedestrian pathways on higher-speed thoroughfares. Explore a City Council Resolution authorizing speed limits as low as 15 mph in designated school zones per the California Vehicle Code. Apply strategies and innovative best practices to reduce speeds on arterial and collector streets where collision patterns exist.
- Continue implementation of the City's Vision Zero policies and traffic safety programs to develop a transportation system that will reduce fatal and severe crashes around San Luis Obispo.

Bikeways are only useful if they are connected. Bicycle and pedestrian gaps as short as crossing an intersection or as long as several miles can keep people from biking and walking more often.

### Make it Connected

- Build low-stress bicycle and pedestrian facilities that provide access to local destinations in every neighborhood in San Luis Obispo.
- Install additional controlled crossings across major arterial and collector streets to connect neighborhoods to major destinations. Utilize best-practice designs to improve bicycle and pedestrian crossing safety and connectivity.

Biking and walking at night creates safety concerns for residents who wish to travel during evening times.

### Make it Visible

 Continue the implementation of the City's new streetlight installation program, prioritizing new lighting installations at locations where known bicycle and pedestrian safety concerns exist. How will Bicycle and Pedestrian Recommendations Achieve our Goals?

### Goal 1: Build It

Bicycle and pedestrian project recommendations should improve connectivity, efficiency, and comfort of the bicycle and pedestrian transportation system, focusing improvements along corridors and at crossing locations that offer the greatest potential to increase active transportation mode share.

### Goal 2: Safety

Bicycle and pedestrian recommendations should support the City's ongoing Traffic Safety Program and Vision Zero initiatives, addressing the most critical safety issues by prioritizing improvements at high-injury corridors and intersections.

### Goal 3: Accessibility

The Plan guides development of an active transportation environment that provides access and mobility options for users of all ages and physical ability levels, including those with physical disabilities and unique mobility challenges. Recommendations should also empower residents to live a more active lifestyle.

### Goal 4: Equity

Bicycling and pedestrian recommendations address disparities in access to sustainable and low-cost transportation options in neighborhoods with higher concentrations of economically disadvantaged or historically underrepresented populations.

### Progress Update Since Last Plan

The City of San Luis Obispo has made progress in developing a more bicycle and pedestrian friendly city since adoption of the 2013 Bicycle Transportation Plan. A few accomplishments include:

- Recognition as the top City for Bikes in 2020 by People for Bikes and a Bicycle Friendly Community (BFC) designation at the Gold Level by the League of American Bicyclists
- Approval of the Anholm Neighborhood Greenway Plan and Safe Routes to School Plan for Bishop Peak and Pacheco Elementary Schools including the City's first protected bike lanes and Pedestrian Hybrid Beacon
- Over 30 parklets and a new buffered bike lane installed in the downtown as part of the 2020 COVID-19 pandemic response
- Groundbreaking of a critical section of the Railroad Safety Trail from Pepper Street across Hwy 101 to Taft Street

## Developing the Proposed Network

What steps did the City take to develop the proposed bike and pedestrian improvements that support a comfortable, connected, and safe network?

### **Public Input**

Demand for new and improved bicycle and pedestrian facilities were recorded through neighborhood pop-ups, event booths, and workshops. Additional information was recorded through online input maps and surveys. Roadways and areas that were mentioned across different outreach methods were examined for inclusion in the proposed bikeway network.

### **Local Destination Connectivity**

The project team identified bicycle and pedestrian improvements to better connect users to parks, community centers, senior centers, the downtown area, employment destinations, local schools and universities.

### **Gap Closure and Ridership Projections**

The project team looked at where new facilities were needed to close the gap in the existing network. This could include intersection improvements to connect a bikeway or pedestrian pathway or connecting two longer corridors together. The project team also utilized the City's Travel Demand Forecasting Model to review citywide origindestination data to identify corridors with the highest potential to serve increased bicycle ridership.

### **Collision History**

The project team reviewed collision history and improvement recommendations from the past several publications of the City's annual Traffic Safety Report, which includes data-driven evaluation of high collision intersections and segments throughout San Luis Obispo. Roadway segments and intersections with collision trends involving bicyclists and pedestrians were targeted for improvements to address these safety concerns.

## Upgrading Existing Bicycle and Pedestrian Facilities

The project team looked at which existing bicycle and pedestrian facilities could be upgraded to provide an even more comfortable connection for users. For pedestrian facilities, this included looking at areas that could benefit from additional crossing improvements and sidewalk amenities. For bicycle facility types, it involved looking at the speed and vehicular volume of a particular corridor. Following guidance from the FWHA and NACTO, corridors with higher speeds and vehicular volumes require more separation from traffic in order to facility bicycling comfort for all ages and abilities. See Figure 15 for a graph of how speed and volume influence the selection of bikeway types.

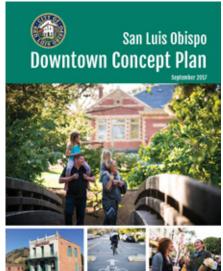
### Downtown Concept Plan

Downtown is a vital and diverse mixed-use district where people work, live, shop, dine, and enjoy entertainment. Downtown is the heart of San Luis Obispo. In 2017 the City Council adopted the Downtown Concept Plan. The Active Transportation Plan recommends implementation of focused elements from the Downtown Concept Plan, which includes protected bike lanes, a series of pedestrian paseos, shared streets known as woonerfs, crossing improvements, sidewalk widening, and overarching strategies for downtown streetscape enhancements.

### Connectivity to Transit

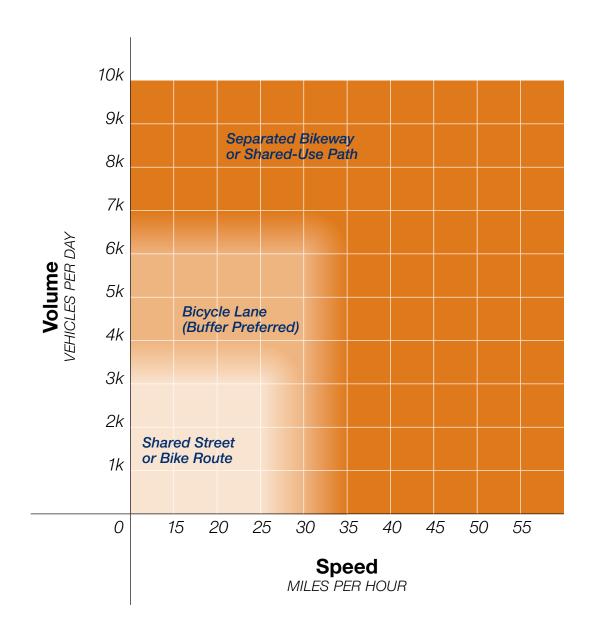
An important part of increasing bicycling and walking is providing a seamless connection to transit services. The network was developed with connections to transit centers and transit stops in mind in order to provide first and last mile connectivity between transit and active transportation options as well as related amenities such as bus kiosks, bike parking, mobility as a service, and bikeshare.







**Figure 15.** All Ages and Abilities Bikeway Selection Matrix



## **Project Strategies**

In the beginning of this chapter, three strategies were introduced based on what was heard from the community in order to make the proposed bike and pedestrian network more comfortable, connected, and visible.

### Make it Comfortable

The majority of Citywide Household Travel Survey respondents said that the main barriers to walking and biking in their community are speeding and aggressive driving and drivers are not yielding to pedestrians. The most-desired pedestrian improvements included improving crossings at busy intersections and maintaining a well-connected network of sidewalks. The most-desired bicycle improvements were more physically protected/separated bikeways. The proposed projects identified in this chapter address these requests by providing a cross-town network of protected bike lanes, multi-use trails, and sidewalks, as well as enhanced crossings along busy thoroughfares. These improvements should provide low-stress routes that allow for families and the "interested but concerned" demographic (described in Chapter 3) to reach their destinations by walking or biking. To do that, low-stress bikeways and pedestrian improvements were designated wherever possible, to provide cyclists and pedestrians with more protection from moving vehicles.

### Make it Connected

The proposed network of improvements closes gaps in the existing bicycle and pedestrian infrastructure and provides convenient crossing opportunities where significant barriers, such as high-traffic roadways, railroad tracks, or creeks, currently exist. This will help residents reach their destinations across San Luis Obispo. The strategy to make San Luis Obispo connected will look to add bike and pedestrian facilities where there are existing gaps and focus on connecting neighborhoods to major destinations like downtown, schools, retail locations, parks, and senior centers.

### Make it Visible

Another barrier to bicycling and walking, as gathered in the public outreach, was travelling at night.

Many residents feel unsafe riding or walking around their community where there is poor lighting. The proposed bicycle and pedestrian improvements will continue implementation of the City's New Streetlight Program, installing new streetlighting throughout the city to ensure that residents feel seen and safe while traveling at night.

## Bicycling and Shared-Use Facility Types

Different types of bikeways are better suited for different roadways, based on considerations such as how fast and how frequently motor vehicles use the road, the roadway width, and other types of transportation using the space. The following bikeways and bike amenities are part of the City of San Luis Obispo's toolbox. It is important to note that some bicycling facilities noted in the toolbox promote both bicycle and pedestrian use like the Shared Use Path and Neighborhood Greenway.



### Shared-Use Path

A completely separated rightof-way for the exclusive use of bicycles and pedestrians with few intersections with motor vehicle traffics.

Shared-Use Paths are most helpful on routes with continuous right-of-way and few conflicting intersections or driveways, such as parallel to a railroad corridor or creek. Where parallel to a street, shared-use paths are helpful along streets with high traffic volume, and/or with a posted speed limit greater than 35 mph.



**Bicycle Lane** 

A striped lane for one-way bike travel on a street.

Bike Lanes are most helpful on streets with average daily motor vehicle traffic greater than 3,000 vehicles per day and a posted speed of 30 mph or less.



### **Bicycle Route**

Provides for shared use with motor vehicle traffic. Treatments include signs and pavement markings

Bicycle Routes are most helpful on street with low daily traffic and with a posted speed of 25 mph or less.



### **Protected Bike Lane**

An on-street bikeway that is separated from traffic by a vertical barrier, such as a curb, median, or bollards. Also called a "cycle track" or "separated bikeway".

May be one- or two-way.

Protected Bike Lanes are most helpful on streets with high traffic volume, regular truck traffic, high parking turnover, or with a posted speed limit greater than 30 mph.



### **Neighborhood Greenway**

Streets with low traffic volumes and speeds, designated and designed to give priority to both bicycle and pedestrian travel

Neighborhood Greenways are most helpful on streets with low traffic, typically in a neighborhood, and with a posted speed less than 25 mph. Neighborhood Greenways generally function best when traffic speeds remain between 15-20 mph, with maximum traffic volumes of 3,000 vehicles per day, and ideally less than 1,500 vehicles per day.



### **Advisory Bike Lane**

An Advisory Bike Lane defines a preferred space for bicyclists and motorists to operate on narrow streets that would otherwise be a shared roadway environment. Roads with advisory bike lanes accommodate low to moderate volumes of two-way motor vehicle traffic and provide a prioritized space for bicyclists with little or no widening of the paved roadway surface.

Most appropriate on streets with low to moderate volumes and moderate speed motor vehicles and roadways in built-up areas with constrained connections.

## Bikeway Amenities



### **BIKE PARKING**

- Includes curbside and sidewalk racks, corrals, bike lockers or bike stations
- Racks provide short-term dedicated parking outdoors
- Lockers provide long-term secure parking at high demand locations
- Stations provide long-term indoor parking typically near transit and can be staffed or self-serve



### **BICYCLE-FRIENDLY INTERSECTIONS**

- Intersections designed to provide additional separation, comfort, and safety for people biking and walking
- May include bike boxes, signal priority, curb extensions, or islands to separate bicyclists from turning motorists
- Ideal for locations with conflicts between people driving, walking, and biking



### **BIKE SHARE**

- Self-serve bike pickup, either at designated stations or dockless
- Ideal for short point-to-point trips and connections to and from transit stations
- Provides access to bikes for peole who may not own a personal bicycle or not have storage space for a bike



## GREEN BIKE LANE THROUGH INTERSECTIONS

- Provides additional comfort for bicyclists
- Creates bicycle visibility for drivers
- Ideal for locations with conflicts between people driving, walking, and biking



### **BIKE SIGNALS**

- Bike signals can create even more separation between bicyclists and vehicles
- Allows for better intersection movements for all users

## Pedestrian Facility Types

Different types of crossing improvements can greatly enhance the experience of walking throughout the City. It is important to note that some of the facilities listed below in the toolbox promote both pedestrian and bicycle safety. The crossing improvements below are part of the City's toolbox.



PEDESTRIAN SIGNAL & PEDESTRIAN HYBRID BEACON



PEDESTRIAN SCRAMBLE



**BULB-OUT** 



**REFUGE ISLAND** 



**SIDEWALKS & PASEOS** 



HIGH-VISIBILITY CROSSWALK



**CURB RAMP** 



RECTANGULAR RAPID FLASHING BEACON

# Other Bicycle & Pedestrian Facility Types

Additional bicycle and pedestrian improvements can provide even more comfort for both bicycling and walking.



**BIKE + PEDESTRIAN BRIDGE** 



### PROTECTED INTERSECTION

A protected intersection uses a variety of design elements to maximize comfort for bicycling and walking within the intersection and promote a high rate of motorists yielding as well as reduce the crossing distance for pedestrians. The design maintains a physical separation within the intersection to define the turning paths of motor vehicles, slow vehicle turning speed, and offer a comfortable place for people bicycling to wait at a red signal.



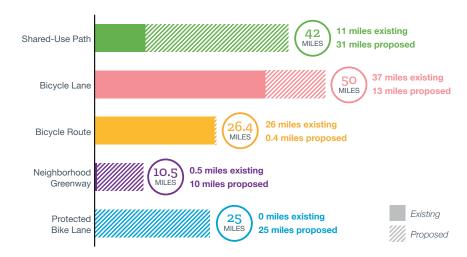
### SHARED STREET / WOONERF

A roadway where pedestrians are prioritized but still allows for slow automobiles. It minimizes the segregation of pedestrians and vehicles in its design. This is done by removing features such as curbs, road surface markings, traffic signs, and traffic lights. A Shared Street/ Woonerf is designed to feel carfree in appearance, with unique paving patterns that diverge from vehicular streets and that encourage outdoor seating, public events, and festivals. Cars are not prohibited but are not encouraged.

## Citywide Bicycle Recommendations

The City of San Luis Obispo is proposing almost 100 miles worth of upgraded and new bikeways. There are approximately 31 miles of proposed shared-use pathways, 13 miles of proposed bicycle lanes, 0.4 miles of proposed bicycle routes, 25 miles of proposed protected bike lanes, and 10 miles of neighborhood greenways. Figure 17 breaks down the bike network today, the proposed new bikeways, and the complete network by facility type. Figure 18 as previously presented in Chapter 3, illustrates the existing bike network, while Figure 18 through Figure 22 illustrate the proposed bicycle facilities within the City of San Luis Obispo as well as areas immediately outside of the city boundary.

Figure 16. Complete Bicycle Network

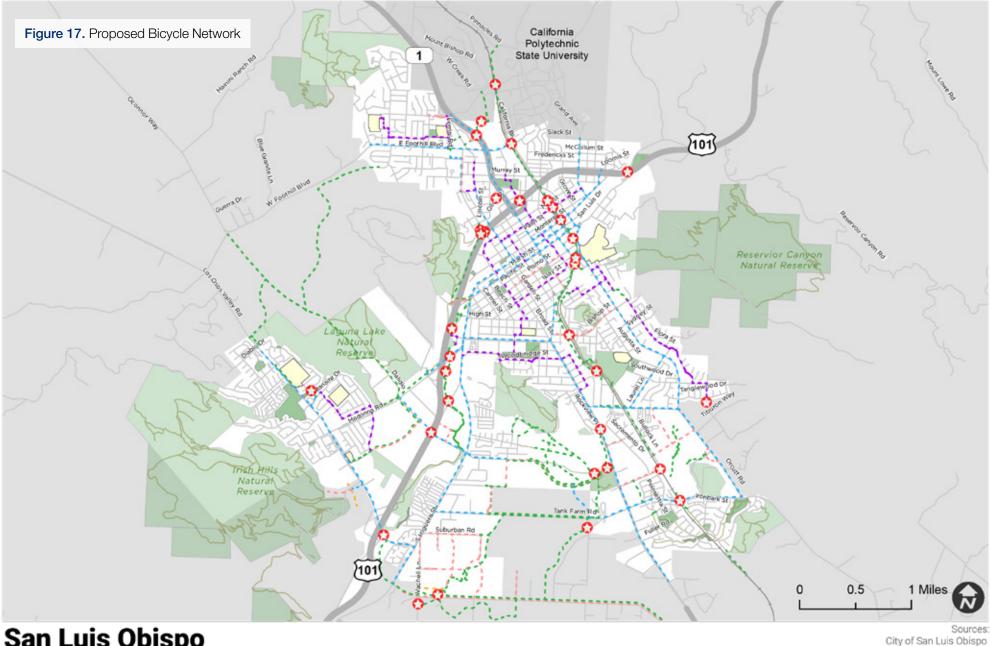


### Feasibility of Improvement Recommendations

This Plan is a programmatic planning document, providing an ambitious high-level blueprint to guide future bicycle and pedestrian improvements throughout San Luis Obispo.

Each of the projects recommended in this Plan will require more detailed project-level analysis, community engagement, and engineering study, which may reveal constructability constraints, neighborhood incompatibility concerns, or other challenges that ultimately make it infeasible or undesireable to implement specific projects as originally intended.

As the City proceeds with more detailed project-level planning, some projects identified in this plan may require refinement or postponement.

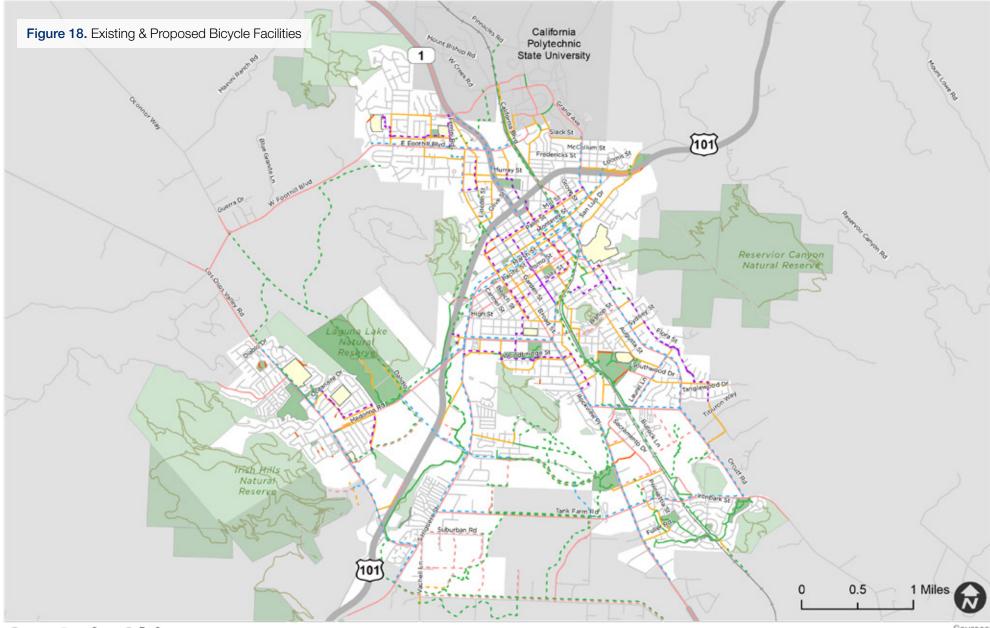


## San Luis Obispo

Proposed Bicycle Network

Shared-Use Path ----Bicycle Route Protected Bicycle Lane School Rail Bicycle Lane ---- Neighborhood Greenway Bicycle/Pedestrian Grade-Park or Open Space Trails Separated Crossing





San Luis Obispo

Existing & Proposed Bicycle Network

Existing | Proposed

--- Shared-Use Path --- Bicycle Route --- Protected Bicycle Lane School --- Rail
--- Bicycle Lane --- Neighborhood Greenway --- Bicycle/Pedestrian Access Park or Open Space --- Trails



City of San Luis Obispo



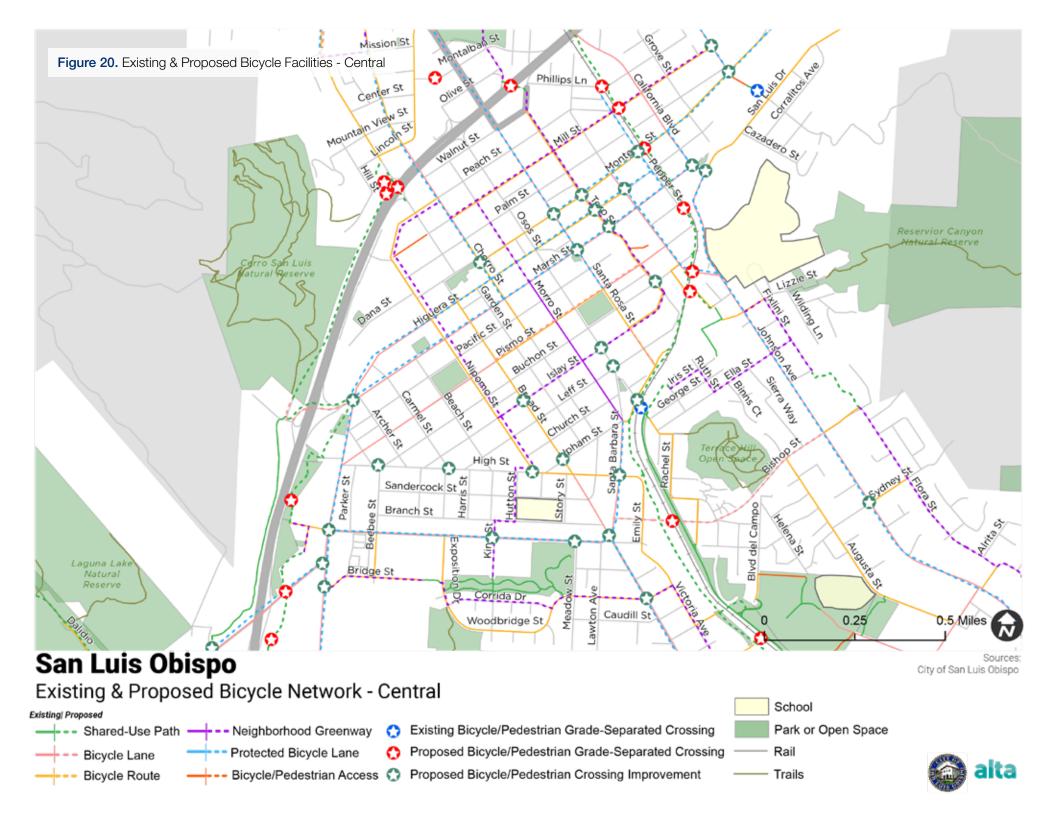
Existing & Proposed Bicycle Network - North

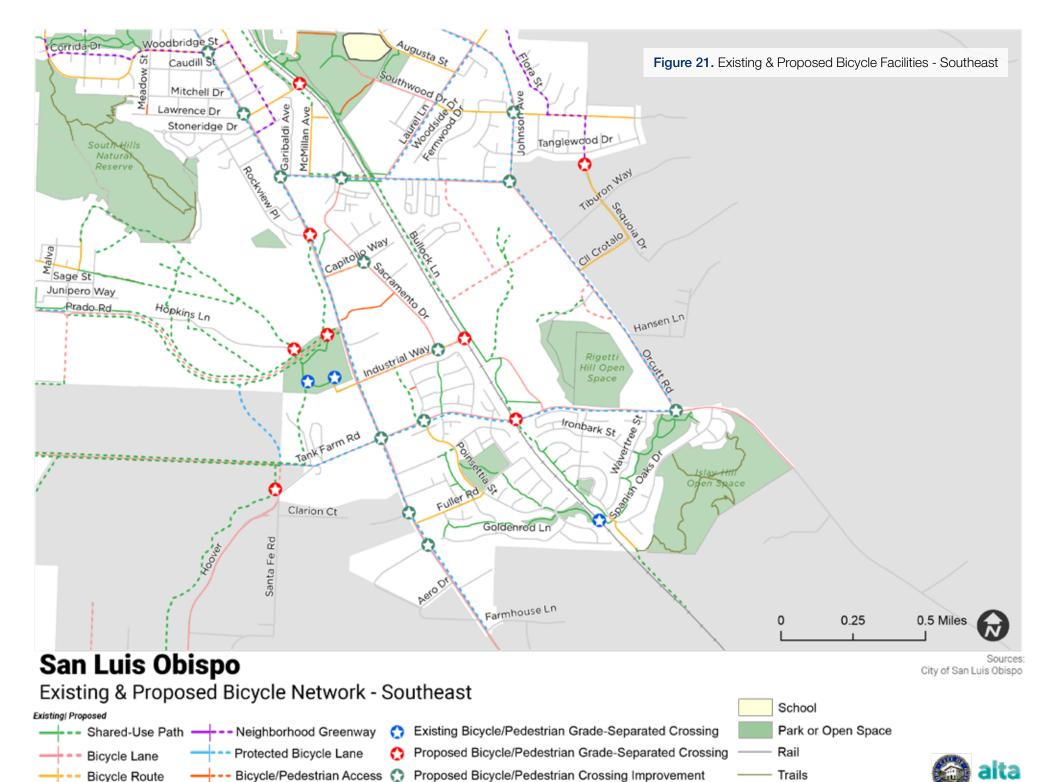
Existing/ Proposed

School
School
Shared-Use Path
Shared-Use Path
Protected Bicycle Lane
Bicycle Route
School
Park or Open Space
Proposed Bicycle/Pedestrian Grade-Separated Crossing
Rail

Froposed Bicycle/Pedestrian Crossing Improvement
Trails









Existing & Proposed Bicycle Network - Southwest

Existing & Proposed Bicycle Network - Southwest

Existing | Proposed | School |

--- Shared-Use Path | Neighborhood Greenway | Existing Bicycle/Pedestrian Grade-Separated Crossing | Park or Open Space |

--- Bicycle Lane | Proposed Bicycle/Pedestrian Grade-Separated Crossing | Rail |

--- Bicycle Route | Proposed Bicycle/Pedestrian Crossing Improvement | Trails



## Citywide Crossing Improvements for Walking and Bicycling

The City of San Luis Obispo is proposing a multitude of walking and bicycling infrastructure improvements, with a primary focus on the facilities most desired by the community to improve comfort levels: improving crossings at high-traffic intersections and where significant barriers exist, installing new sidewalks where gaps currently exist, repairing and maintaining existing sidewalks, bicycle signals, bike boxes and other improvements. These recommendations provide a safe and enjoyable experience for bicycling and walking across busy intersections in order to reach destinations. Figure 23 shows the locations proposed for priority crossing improvements—many of which benefit both walking and bicycling. Specific projects will be determined based on project-level analysis considering factors such as street width, crossing demand, traffic volumes and speeds.

Crossing improvement locations have also been categorized into major and minor to show the scale of proposed improvements. On one hand, some locations may only need minor crossing improvements such as adding a high-visibility crosswalk marking or green bike lane marking. On the other hand, some locations may require major improvements to improve comfort levels such as a bicycle traffic signal, median refuge island, or protected intersection. See page 102 for examples of major and minor crossing improvements.

Figure 24 below shows existing sidewalks within San Luis Obispo, as well as locations where gaps in the sidewalk network currently exist. The City is proposing to install new sidewalks where gaps currently exist, repair and maintain existing sidewalks, and continue to upgrade pedestrian facilities per current Americans with Disabilities Act (ADA) standards, which includes constructing accessible curb ramps, removing sidewalk pinch points and obstructions, and correcting overly-steep grades where feasible. See Chapter 7 (Implementation) for details on how the City will prioritize installation of pedestrian infrastructure throughout San Luis Obispo.

### Major Crossing Improvements



PEDESTRIAN SIGNAL



**REFUGE ISLAND** 





PEDESTRIAN HYBRID **BEACON (HAWK)** 



PROTECTED INTERSECTION



**BICYCLE TRAFFIC SIGNAL** 



**ROUNDABOUT** 

### **Minor Crossing Improvements**



**BULB-OUT** 



**RECTANGULAR RAPID** FLASHING BEACON (RRFB)



**GREEN BIKE LANE MARKINGS** 







**BIKE/PEDESTRIAN BRIDGE** 



HIGH-VISIBILITY CROSSWALK



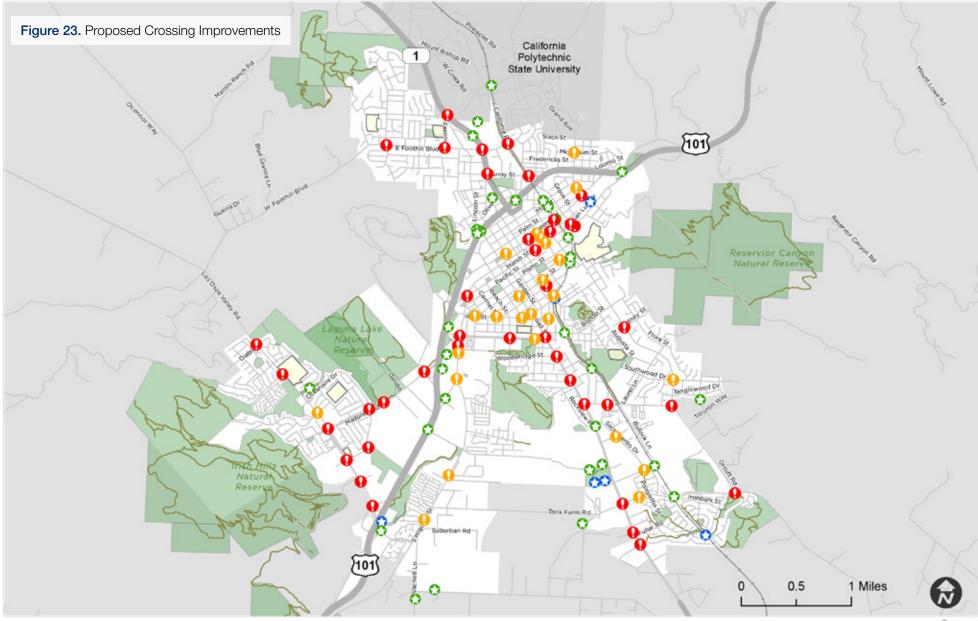
**BIKE BOX + TWO-STAGE LEFT TURN BOX** 



**NEIGHBORHOOD** TRAFFIC CIRCLE



**BIKE/PEDESTRIAN** UNDERCROSSING/TUNNEL



## San Luis Obispo

## **Existing & Proposed Crossing Improvements**

Proposed Bicycle/Pedestrian Major Crossing Improvement

Proposed Bicycle/Pedestrian

Minor Crossing Improvement

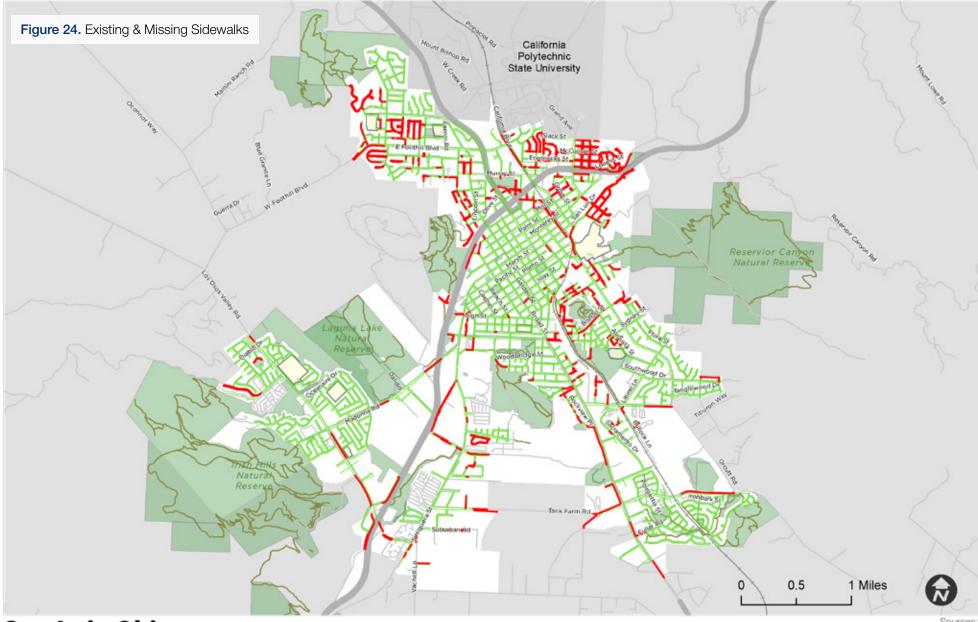
Existing Bicycle/Pedestrian
 Grade-Separated Crossing

Proposed Bicycle/Pedestrian Grade-Separated Crossing





City of San Luis Obispo



## San Luis Obispo Existing & Missing Sidewalks



City of San Luis Obispo

\*This map shows the primary existing sidewalk gaps, but there may be other short gaps within the city not shown.



# Proposed Bikeway Level of Traffic Stress

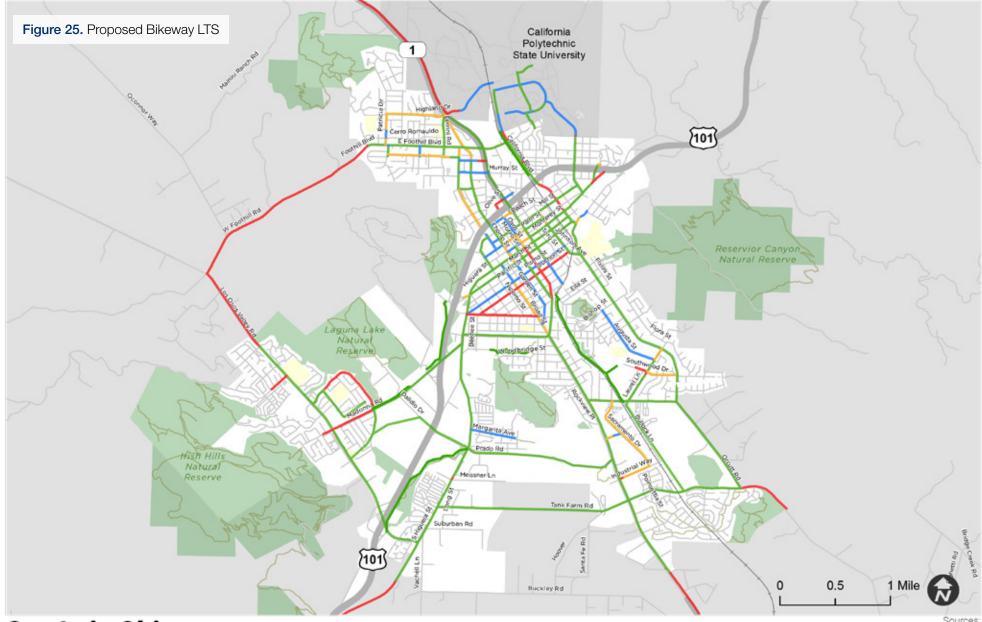
Back in Chapter 3, a street's Level of Traffic Stress (LTS) was introduced in order to better understand the needs of the different types of bicyclists in San Luis Obispo. The level of traffic stress scores were mapped to reflect the existing low stress connections and gaps throughout San Luis Obispo.

Figure 25 returns to this methodology to map a future in which the proposed bicycle network for San Luis Obispo has been implemented. This map illustrates the bikeway level of traffic stress after each project has been implemented. The results of this analysis demonstrate the benefit for low-stress connectivity associated with completion of the proposed bicycle network.

## Proposed Bikeway Level of Traffic Stress Findings

The project recommendations support a complete, connected low-stress bicycle network for San Luis Obispo. The addition of protected bike lanes, particularly along roadways in the central and southern areas of the City, support more comfortable travel that connects to new or existing shared- use paths, other low stress routes, and destinations across the city.

When compared to the existing LTS scores, more than 25 miles of roadway are improved from high stress (LTS 3 or LTS 4) to low stress (LTS 1 or LTS 2). In fact, nearly 30 miles of roadways in the proposed network will score as LTS 1 as compared to fewer than 3 miles in the existing conditions network. Over 10% of the City's roadways will be updated to be LTS 1. As one example, in the existing LTS scores, almost all of Higuera Street is scored as and LTS 3 and LTS 4. The proposed network will improve Higuera Street to a low stress roadway scoring at LTS 1.



## San Luis Obispo

Proposed Bikeway Level of Traffic Stress





City of San Luis Obispo

## Supporting Infrastructure

In order to ensure an enjoyable trip from beginning to end, supporting infrastructure is needed at intersections to make crossing easier, wayfinding signs along the way to help reach your destination, and secure parking once you reach your destination to store your bicycle.

For more information on how these project recommendations will be built, see Chapter 7 on Implementation and the Design Appendix (Appendix B).

#### **Intersection Enhancements**

A bicycle and pedestrian network is not complete without looking at how people cross challenging intersections and reduce conflicts between people driving, walking, and biking. New treatments can be added to retrofit intersections to better serve bicycling and walking moving across or through busy intersections. The City proposes to improve crossings at the priority locations shown in Figure 23 on page 104, and incorporate pedestrian- and bicycle-friendly design enhancements at other crossings throughout the city as opportunities allow.

#### **Street Lighting**

Street lighting provides illumination for drivers, cyclists, and pedestrians traveling at night. The City maintains and installs a variety of night lighting types along transportation facilities, including standard street lights along public roadways, decorative pedestrian-scale street lighting within the downtown core, and path lighting designed specifically for bicycle and pedestrian travel along shared-use pathways. While current City Engineering Standards call for installation of these various types of street lighting at specific intervals to provide a continuous level of illumination along each type of facility, some streets in San Luis Obispo were built many years ago—some more than a century ago—and include infrequent street lighting compared to current City Standards. This plan recommends that the City continue to install new street lighting per current City Standards, particularly along routes with high pedestrian and bicycle activity, to increase visibility to drivers, increase pedestrian comfort and perceived sense of safety, and help to create an inviting and vibrant streetscape for those walking and biking throughout the city. See Chapter 7 (Implementation) for details on how the City will prioritize installation of new streetlighting throughout San Luis Obispo.

#### **Bike Parking**

Knowing you have a secure place to store your bike at your destination is an important part of making a bike trip feasible. The City has many bike parking facilities but more are needed, especially to accommodate cargo and other large bicycles. The City will continue to require installation of long-term and short-term bike parking as part of new development/ redevelopment projects, and as City-initiated installations within the public right-of-way where demand warrants additional bike parking capacity.

#### **Streetscape Amenities**

Sidewalk amenities like benches, shade structures, parklets, water fountains, public art, street trees and other landscaping can contribute to a more comfortable, inviting, and human-scale community. These elements can greatly activate the City's sidewalks at popular destinations. The City's Community Design Guidelines provide guidance for city planners and engineers for incorporating streetscape amenities into public improvement projects. See Appendix B (Design Guidelines) of this plan for additional policies and design strategies on streetscape enhancements to support vibrant, inviting and interesting active transportation environments.

#### Wayfinding

Providing wayfinding signs for bicyclists and pedestrians that directs them to nearby destinations on the most efficient, least stressful routes is an important element to any bicycle and pedestrian network. The City supports effective wayfinding for bicyclists and pedestrians, specifically along neighborhood greenway routes.





Bicycle & Pedestrian Programs





Programs help support walking and bicycling by sharing information, providing education on rules of the road, promoting safe travel behaviors for all street users, and creating a vibrant active transportation culture.

Communities that have high rates of walking and bicycling consistently use a "6Es" approach, which include Education, Encouragement, Enforcement, Engineering, Equity and Evaluation with all Es working together. This chapter focuses on the "Es" other than Engineering. While programs are less costly than infrastructure improvements, they can be labor intensive and must be ongoing in order to be effective.

#### Education **E**



Providing safety education for people walking, riding bicycles, and driving, as well as education about the environmental health, and financial benefits of active transportation, and the facilities available in the community.

#### Encouragement [5]



Promoting bicycling and walking as fun and efficient modes of transportation and recreation.

#### Enforcement



Enforcing laws and good behavior for people walking, biking, and driving.

#### Engineering [B]



Building the physical infrastructure that supports safe and comfortable active transportation mobility.

#### **Evaluation**



Monitoring the success of the City's efforts by conducting surveys, reviewing relevant data, and traffic volumes by mode.

#### Equity **E**



Ensuring that community members from all backgrounds, income levels and ranges of physical ability--particularly those from historically disadvantaged or underrepresented communities have an equal seat at the table during project planning, budget-setting, design, and implementation of active transportation improvements and programs. All community members should have equitable access and opportunity to walk, bike and travel throughout their community in a safe, efficient and cost-effective way.

How will Bicycle and Pedestrian Programs Achieve our Goals?

#### **Build It**

Active Transportation bicycle and pedestrian programs should complement network improvements that increase comfort levels and encourage physical activity for residents. Programs should educate users on new types of infrastructure, as well as how to legally, and safely navigate the City roadways.

#### Safety

Bicycle and pedestrian programs should both support safe bicycling and walking behaviors and address unsafe driving behaviors

#### **Accessibility**

Bicycle and pedestrian programs should expand the reach of the bicycle network with information and support facilities that make biking and walking the preferred travel option for more trips.

#### **Equity**

Bicycle and pedestrian programs should be rooted in best practices and community needs, build and maintain trust in the City and encourage meaningful participation within the community.

## Existing Programs







#### Annual Bicycle Rodeo

The annual bike rodeo for elementary school-aged children is led by the City of San Luis Obispo's Parks and Recreation, Police, and Public Works Departments in collaboration with County Public Health, SLO Rideshare, local schools, non-profit groups, and local businesses. The Bike Rodeo promotes bicycle safety and defensive riding. Bike tune-ups are also available, and helmets are checked for a proper fit.

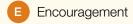


Annual Bike Rodeo

#### THE 6Es



















#### Bike Light "Pop-Up" Checkpoint

The City of San Luis Obispo's Public Works Department and Police Department conduct a bike light checkpoint in the fall when the sun sets earlier in the day. Before giving bicyclists violations, the City offers bike lights and education to commuters, stressing the importance of being seen at night while riding.



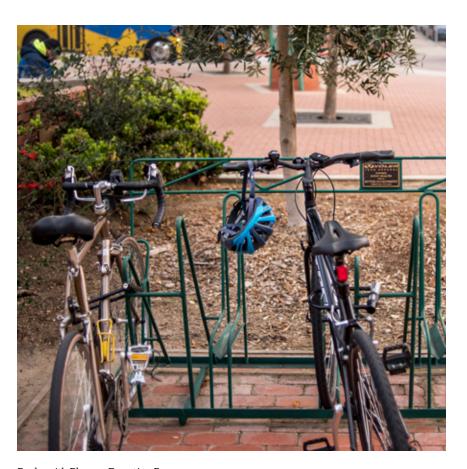
#### Pedestrian Halloween Safety Campaign

In the weeks leading up to Halloween, the City of San Luis Obispo launches a media campaign to remind drivers to watch out for pedestrians. Additionally, as part of the City's Vision Zero Initiative to eliminate all traffic related fatalities and severe injuries, the City distributes thousands of reflective "Trick or Treat" bags to local schools, which promote pedestrian safety and visibility.



#### Racks with Plaques Donation Program

To help meet the demand for short-term bicycle parking, the City of San Luis Obispo, with the assistance of a local bike rack designer, developed the Rack with Plaques donation program; where a donor purchases a bike rack for the City and a dedication plaque is personalized with a message from the donor. The location of the bicycle rack is agreed upon by the donor and the city. In addition to the cost of the bicycle rack and dedication plaque, the donor pays for the associated installation and maintenance costs.



Racks with Plaques Donation Program





#### **Bicycle Education** Workshops

The City of San Luis Obispo works with Bike SLO County to provide bicycling education workshops and pop-ups to provide information and skills on defensive riding, rules of the road, and tips on how to commute and shop by bike comfortably. Workshops are taught by certified instructors and are presented at community centers, businesses, and educational institutions including Cal Poly and Cuesta College.





#### Kidical Mass

The City of San Luis Obispo works with Bike SLO County to provide bicycling safety education to families through an event called Kidical Mass. At Kidical Mass, children and parents participate in group rides with a fun atmosphere including themed costumes. The rides are an opportunity to learn important bicycling safety skills, increase the visibility of families on bicycles and encourage more families to ride.



Kidical Mass

#### THE 6Es



















#### Bike Kitchen

Bike SLO County's Bike Kitchen provides a maintenance education space to teach people how to repair and maintain bicycles. The Bike Kitchen has the space, tools and guidance for both small and large repairs empowering individuals to make their own repairs. The Bike Kitchen is a great resource for those who cannot afford to have their bike repaired at a shop and also promotes skills of personal empowerment.







#### RideWell Program

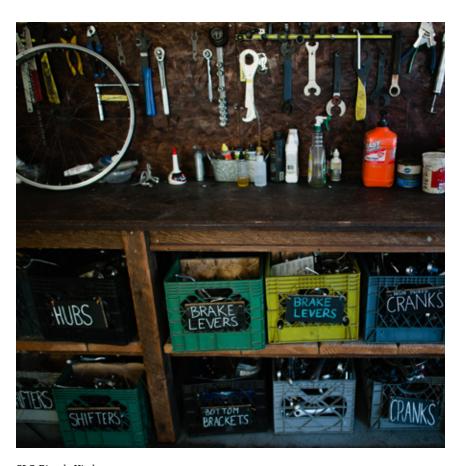
In partnership with SLO County Public Health, Bike SLO County's Bike Kitchen staff and volunteers refurbish gently used bikes and provide them at no cost to disadvantaged children, families, and people with mobility related challenges. Ride Well participants also receive a free bike helmet, lights, a lock, and a bicycling safety education course.





#### **Fall Prevention** for Seniors

Led by San Luis Obispo County Public Health, this program works to promote fall preventing behaviors among the senior population including a fall prevention class series that supports behavior change related to fall risk factors. The classes increase participant knowledge of fall risk factors, develop their skills in following an exercise program, and promote participant self-efficacy. This program encourages activity and helps prevent pedestrian injuries.



SLO Bicycle Kitchen



#### Back 'N' Forth Club

The Back 'N' Forth Club is a free program from SLO Regional Rideshare that assists commuters and employers in SLO County through education and empowerment tools that alleviate traffic congestion, helps commuters save money on gas and makes it easier to get to work. The program helps residents make smart alternative commute choices including carpool, vanpool, bus, bike, and walking.



#### Rideshare Week

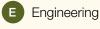
Led by SLO Regional Rideshare, the City is a partner in Rideshare Week to promote trying a mode of transportation other than the single occupancy vehicle and includes incentives, discounts, prizes, and promotions to bike, walk, carpool, and take the bus.

#### THE 6Es

















#### Bike Month

Each May features activities and events all throughout the month promoting bicycling with a strong grassroots focus. Events range from Bike to School Day to the bike fashion show, SLO Tweed Ride, Pizza Ride and other high camaraderie events. The centerpiece event is Bike to Work Day, led by SLO Regional Rideshare with the City as an active partner. This event fosters friendly competition among businesses as well as incentives and prizes to encourage people to try bicycle commuting for the first time.



SLO Tweed Ride





#### National Walk and Bike to School Days

Nearly every school in the City has some kind of participation for this event usually consisting of a group walk or walking school bus with prizes for those who participate as well as tips on how to bike and walk to school safely.





#### Bicycle/Skateboard **Ticket Diversion Program**

For those who qualify, individuals who receive a ticket for bicycle and skateboard violations may take a diversion class led by the Cal Poly University Police Dept. The class provides an incentive to learn about legal bicycle and skateboard riding as well as reducing the cost burdens on those for whom a ticket may be a heavy financial burden.



#### **Transit Driver Education**

SLO Transit drivers receive education about common conflict points to be aware of when encountering bicycles and pedestrians on the roadway.



National Walk to School Day

## Recommended Programs











#### Safe Routes to School Program

Safe Routes to School is a national program dedicated to promoting walking, biking, and taking transit to get to school. The City should support existing regional Safe Routes to School programs to further advance their goals. A Safe Routes to School Program offers many opportunities including:

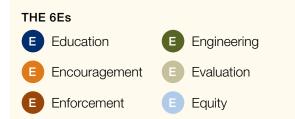
- Teaching students the rules of the road, so they are more prepared to navigate their community using active transportation.
- Encouraging active modes of getting to school.
- Decreasing the prevalence of child obesity though increased physical activity
- Reducing traffic congestion around schools.

In addition, this program provides an opportunity to dovetail planning efforts to bring a Safe Routes to School Plan to each K-12 school in the City.



#### Safe Routes for Seniors

A program providing active opportunities for seniors could foster healthy aging and longer years of independent living. A Safe Routes for Senior program will provide tools and services to help seniors find ways to meet their transportation needs through trips that primarily including walking and transit. The program includes group walks geared towards seniors that encourage social bonding. The program can also include key awareness topics such as education for drivers to pay attention to senior pedestrians and street improvements such as an increased crossing times in areas with a high number of seniors walking. Feedback received from the program can inform future infrastructure improvements that can further address needs of seniors.





#### Parklet Program

As part of the COVID-19 response, the City launched a pilot program known as Open SLO, which installed over 30 parklets in the downtown area as well as across the city. Parklets act as an extension of the sidewalk over an on-street parking space that serves as a small public park or seating area. Parklets help activate more pedestrian spaces and create areas for people gather or relax in a space that is open and accessible to all.



#### Mobility as a Service

Consistent with the Climate Action Plan, this program would explore options for establishing (or leveraging an existing) an online platform where users are able to access information about each type of mobility offered in the City. The platform, known as a Mobility as a Service (MAAS) would include specific access locations and routes on an interactive map, and a centralized payment hub for transit, ridesharing, ride hailing services like Lyft or Uber, or bikeshare. In addition to lowering barriers of entry to transit, the forthcoming bicycle share program, and other emerging mobility options, a centralized platform would also allow the City to incorporate equity considerations such as providing no cost or reduced cost access for income qualified residents. Similarly, a centralized platform could be used to support alternative mobility options for employees or residents in a new development as a condition of development approval or could be used by hotels and downtown businesses to help visitors access alternative forms of transportation.









#### Bicycle and Pedestrian Safety Campaign

Bicycling and pedestrian safety campaigns encourage all road users to abide by local laws and to be courteous to other users. These campaigns can be targeted at just one or multiple user types. To maximize the effectiveness of these public awareness campaigns, stakeholder groups can be utilized to help define the safety campaign goals to ensure that local concerns and issues are addressed. These stakeholder groups can become champions of the message, and usually include local experts, law enforcement officers, business owners, civic leaders, school districts and community volunteers.







#### **Open Streets Events**

Open Streets events, often known as Ciclavia in other communities. temporarily close streets to vehicular traffic allowing people to use the streets for activities like walking, biking, skating, and other social and physical activities. These events are great for bringing the community together and promoting active transportation and public health. Open Streets events can also serve as a tool to engage with the public about how their roadways can better serve their needs. The City should look to partnerships with community groups to organize Open Streets type events and activities.

#### THE 6Es



Education



Engineering



Encouragement



Evaluation



Enforcement



Equity





#### **Demonstration Projects**

Demonstration Projects provide an opportunity to temporarily implement new infrastructure ideas such as traffic circles, separated bicycle facilities, slow streets, parklets or pedestrian refugee islands. This can provide an opportunity for the city to directly engage with residents and local business and get their feedback on new ideas. Demonstration projects can be done in live traffic or in conjunction with a street closure event like an Open Streets event. Demonstration projects can vary in types of materials and duration installed.



#### Bike Share and Other Micromobility Programs

The City is currently partnering with Cal Poly University to bring a bikeshare program to our community. The program will provide more transportation options to get to campus and other destinations as well as furnish first and last mile connections to transit. In addition, the program may provide discounted mobility options for low income residents and help offset high costs of living. Depending on future funding and community support, other forms of micromobility such as scooters may be a possibility in the future.

## Recommended Program Policies

- **6.1** Maintain funding for a full-time active transportation manager as well as sufficient support staff to manage capital projects, seek grant funding, review development projects, ensure consistency with active transportation policies, and coordinate City-sponsored active transportation promotion and education activities.
- **6.2** Continue to sponsor and provide funding for active transportation promotion and education as well as safe behaviors for all modes that make bicycling and walking challenging.
- **6.3** The City shall work with the San Luis Coastal Unified School District to create and support Safe Routes to School Plans and programs for all schools in San Luis Obispo.
- **6.4** Work with partners on programs that reduce transportation costs and provide active transportation education and opportunities to underserved populations.

- **6.5** Develop tools such as a web-based map or app to promote the use of the bicycle and pedestrian network and distribute them as part of a wayfinding strategy. Coordinate with online map and navigation companies where feasible to ensure that bicycle and pedestrian navigation services accurately route users to lowstress bicycle and pedestrian routes within the city.
- **6.6** Enforce traffic laws regarding active transportation rights and responsibilities while also emphasizing that facility design efforts may be more effective in making bicycling and walking more safe and attractive.
- **6.7** The City should continue providing incentives for employees to commute to work by walking and bicycling and encourage local businesses to do the same.

Implementation





# Implementing the Active Transportation Plan

This chapter outlines the City's strategy to invest in bicycle and pedestrian infrastructure projects. While pedestrian and bicycle projects are generally much less costly compared to projects that expand motor vehicle capacity, such as widening and extending multi-lane roadways and bridges, all infrastructure improvements involve significant costs. Given that this Plan identifies over 240 projects, and acknowledging that there are limited financial resources to spread between all city infrastructure projects, it is imperative that the bicycle and pedestrian projects identified in this Plan are prioritized based on their greatest potential to increase bicycling and walking safety, access and connectivity. Therefore, the bicycle and pedestrian recommendations identified in Chapter 5 were evaluated against a set of criteria and scored.

#### Project Prioritization: Tier One, Two, and Three Projects

The following criteria were used to prioritize the proposed bicycle and pedestrian projects:

- Ridership/Usage Potential
- Safety/Collisions
- Equity Ability to improve access for Disadvantaged and Low-Income Communities
- Community Input
- Existing Level of Traffic Stress (LTS)
- Proximity to Key Destinations
  - Schools (K-12 and Cal Poly)
  - Parks and Open Space
- Retail and Employment Centers
- Downtown
- Senior Housing & Supportive Facilities

The projects have been categorized into the following categories:

**Tier 1:** The highest-priority projects with the greatest potential to increase the number of people bicycling and walking. The City will actively pursue funding for these projects first.

**Tier 2:** Moderate-priority projects that play an important role in the future bicycle and pedestrian network, but with less potential than Tier 1 projects to increase bicycling and walking. These projects will be pursued as funding opportunities arise, but not at the expense of delaying Tier 1 projects.

**Tier 3:** Lower-priority projects that help complete the bicycling and walking network, but are not likely to generate measurable increases in bicycle and pedestrian trips. These projects will be funded primarily through grants and where required as a condition of approval for new development projects.

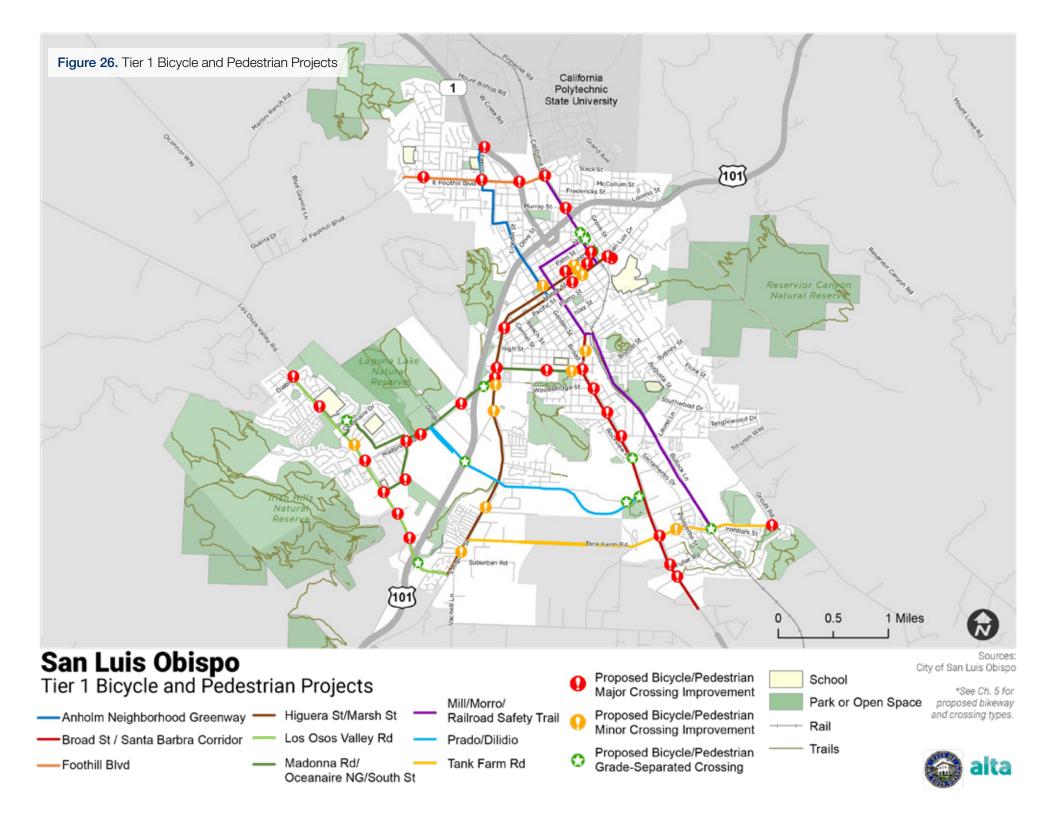
Individual bikeway and pedestrian projects were reviewed, evaluated, and prioritized by City staff and the City's Active Transportation Committee based on the prioritization criteria listed above, and organized into one of three tiers, ranking projects from highest-priority (Tier 1) to lowest-priority (Tier 3). In selecting the Tier 1 network, staff and the Active Transportation Committee focused on creating a cross-town network of interconnected routes that present the greatest potential to generate increased bicycle and pedestrian mode share and reduce existing collision trends. Using data extracted from the City's Travel Demand Forecasting Model, various route combinations were evaluated until a refined network of nine priority

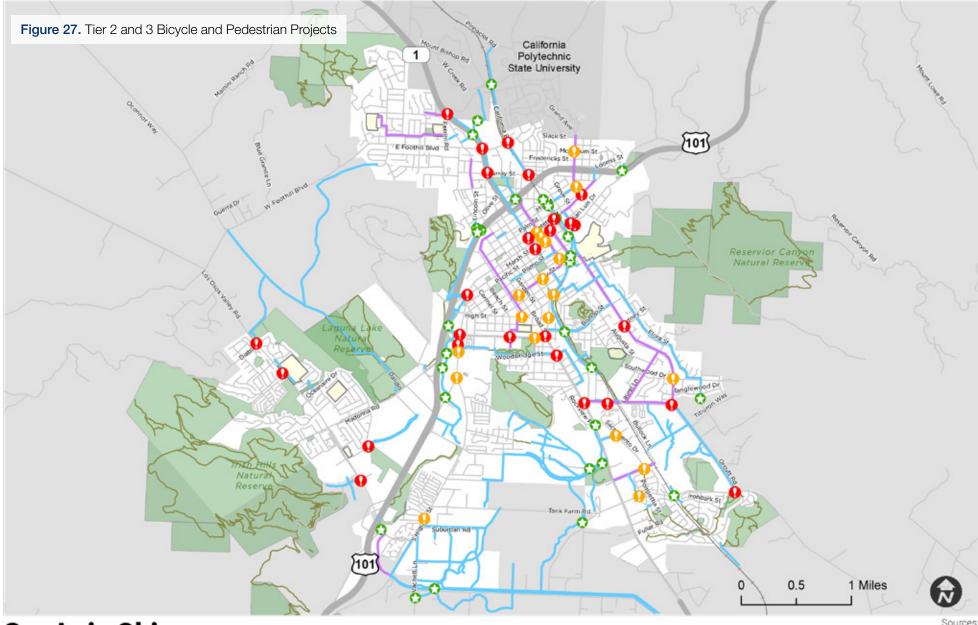
corridors was selected. These priority Tier 1 corridors, which are shown in Figure 26, have potential to serve roughly 70% of citywide trips, at least for a majority of the trip length. The remaining Tier 2 and Tier 3 projects, which are shown in Figure 27, certainly improve bicycle and pedestrian circulation, but to a lesser extent than the Tier 1 network.

It should be noted that Figure 26 and Figure 27 also highlight bikeway projects that represent good candidates for potential quickbuild installation—see the "Implementation Strategies" section later in this chapter for additional details on quick-build projects.

The table beginning on page 130 summarizes the Tier 1 and Tier 2 projects. A more detailed project list can be found in Appendix A.

It is important to note that while the Plan does identify the vast majority of potential active transportation projects envisioned for the City of San Luis Obispo, it certainly will not identify all of the useful pedestrian and bicycle improvements that may ultimately be recommended as part of future transportation and land use/development planning efforts. Both projects included in this Plan and potential new project recommendations not originally considered in this Plan will still need to go through a project-level planning process, including focused community engagement, more detailed engineering review and feasibility analysis, and in some cases, multi-agency coordination. The prioritization tiers in this chapter are intended to serve as general guidelines; however, ultimate implementation priorities may change as a result of a variety of factors including funding opportunities or integration with other planning efforts, pavement projects, or development.





## San Luis Obispo

Tier 3 Projects

Tier 2 and 3 Bicycle and Pedestrian Projects

Tier 2 Projects

Proposed Bicycle/Pedestrian Major Crossing Improvement

Proposed Bicycle/Pedestrian Minor Crossing Improvement  Proposed Bicycle/Pedestrian Grade-Separated Crossing



Sources: City of San Luis Obispo

\*See Ch. 5 for proposed bikeway and crossing types.



## Tier 1 Projects

A more detailed project list can be found in Appendix A.

CORRIDOR	USER	PROJECT COMPONENTS	MILES
Anholm Neighborhood Greenway	Bike/Ped	<ul><li>Neighborhood Greenway</li><li>Protected Bike Lane</li><li>Shared-Use Path</li><li>Crossing Improvement (Minor)</li></ul>	1.83
Broad Street/Santa Barbara Corridor	Bike/Ped	<ul><li> Crossing Improvement (Major)</li><li> Protected Bike Lane</li><li> Crossing Improvement (Minor)</li></ul>	2.74
Foothill Blvd	Bike/Ped	<ul> <li>Protected Bike Lane</li> <li>Crossing Improvement (Major)</li> <li>Crossing Improvement (Major)</li> <li>Crossing Improvement (Major)</li> <li>Crossing Improvement (Major)</li> <li>Grade-Separated Crossing</li> </ul>	1.28
Higuera Street	Bike/Ped	<ul><li> Protected Bike Lane</li><li> Crossing Improvement (Minor)</li><li> Crossing Improvement (Major)</li></ul>	3.82

## Tier 1 Projects (cont.)

CORRIDOR	USER	PROJECT COMPONENTS	MILES
Marsh Street	Bike/Ped	<ul> <li>Shared-Use Path</li> </ul>	1.43
		<ul> <li>Protected Bike Lane</li> </ul>	
		<ul> <li>Crossing Improvement (Major)</li> </ul>	
		<ul> <li>Crossing Improvement (Minor)</li> </ul>	
Los Osos Valley Road	Bike/Ped	<ul> <li>◆ Protected Bike Lane</li> </ul>	2.63
		<ul> <li>Shared-Use Path</li> </ul>	
		<ul> <li>Crossing Improvement (Major)</li> </ul>	
		<ul> <li>Crossing Improvement (Minor)</li> </ul>	
		<ul> <li>Grade-Separated Crossing</li> </ul>	
Madonna Road	Bike/Ped	<ul> <li>◆ Shared-Use Path</li> </ul>	1.02
		<ul> <li>Protected Bike Lane</li> </ul>	
		<ul> <li>Crossing Improvement (Major)</li> </ul>	
		<ul> <li>Crossing Improvement (Major)</li> </ul>	
Oceanaire Neighborhood Greenway	Bike/Ped	◆ Shared-Use Path	1.39
		<ul> <li>Neighborhood Greenway</li> </ul>	
		<ul> <li>Protected Bike Lane</li> </ul>	
		<ul> <li>Crossing Improvement (Major)</li> </ul>	
		<ul> <li>Crossing Improvement (Major)</li> </ul>	
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## Tier 1 Projects (cont.)

CORRIDOR	USER	PROJECT COMPONENTS	MILES
South Street	Bike/Ped	<ul><li>Protected Bike Lane</li><li>Crossing Improvement (Major)</li><li>Crossing Improvement (Minor)</li></ul>	0.78
Mill Street	Bike/Ped	Neighborhood Greenway	0.45
Morro Street	Bike/Ped	Neighborhood Greenway	0.27
Railroad Safety Trail	Bike/Ped	<ul> <li>Protected Bike Lane</li> <li>Shared-Use Path</li> <li>Grade-Separated Crossing</li> <li>Crossing Improvement (Major)</li> <li>Crossing Improvement (Major)</li> </ul>	1.09
Prado/Dalidio	Bike/Ped	<ul> <li>Protected Bike Lane</li> <li>Bike Lane</li> <li>Shared-Use Path</li> <li>Crossing Improvement (Major)</li> </ul>	4.45
Tank Farm Road	Bike/Ped	<ul> <li>Protected Bike Lane</li> <li>Shared-Use Path</li> <li>Crossing Improvement (Minor)</li> <li>Crossing Improvement (Major)</li> </ul>	2.73

## Tier 2 Projects

A more detailed project list can be found in Appendix A.

CORRIDOR	USER	PROJECT COMPONENT	MILES
Broad Street	Bike/Ped	<ul> <li>◆ Bike Lane</li> </ul>	0.3
		Crossing Improvement (Minor)	
Nipomo Neighborhood Greenway	Bike/Ped	Neighborhood Greenway	0.83
Orcutt Road	Bike	Protected Bike Lane	0.81
Grand Avenue	Bike/Ped	<ul> <li>Protected Bike Lane</li> </ul>	0.54
	. <b>.</b>	Crossing Improvement (Minor)	
Johnson Avenue	Bike/Ped	<ul> <li>Protected Bike Lane</li> </ul>	2.13
		<ul> <li>Intersection Improvement (Major)</li> </ul>	
Monterey Street	Bike/Ped	<ul> <li>◆ Protected Bike Lane</li> </ul>	0.79
		<ul> <li>Crossing Improvement (Major)</li> </ul>	
		Crossing Improvement (Minor)	
Chorro Street	Bike	Bike Lane	0.25
Laurel Lane	Bike	Protected Bike Lane	0.54
Industrial Way	Bike	◆ Bike Lane	0.39

## Tier 2 Projects (cont.)

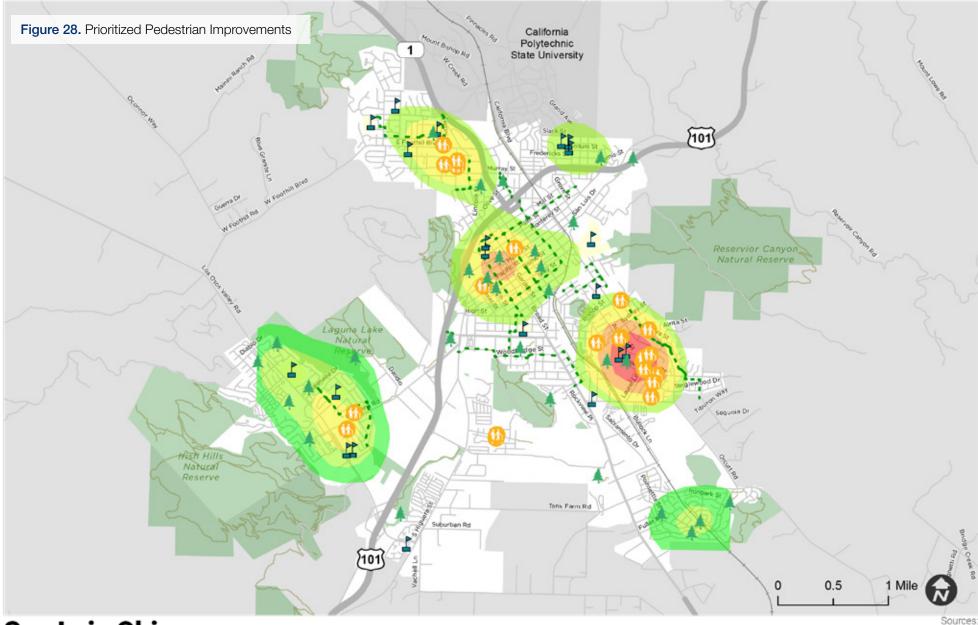
CORRIDOR	USER	PROJECT COMPONENT	MILES
Santa Rosa Street	Ped	Crossing Improvement (Major)	N/A
Cerro Romauldo Neighborhood Greenway	Bike/Ped	<ul> <li>Neighborhood Greenway</li> </ul>	0.81
Highland Drive	Bike	Bike Lane	0.2
Buena Vista Street	Bike/Ped	Protected Bike Lane	0.13
Toro Neighborhood Greenway	Bike/Ped	<ul> <li>Neighborhood Greenway</li> </ul>	0.69
Elks Lane Bike Lane	Bike	◆ Bike Lane	0.12
Bob Jones Trail (Octagon Barn to LOVR)	Bike/Ped	◆ Shared-Use Path	0.19
Islay Street	Bike/Ped	<ul> <li>Neighborhood Greenway</li> </ul>	0.59

## Prioritizing Pedestrian Improvements

In addition to the shared-use paths and crossing improvement projects identified as part of the Tier 1-3 networks, the City will also actively pursue opportunities to construct other pedestrian-specific improvements, such as sidewalk repairs and construction of new sidewalks, upgrades to curb ramps to bring them up to current ADA standards. and installation of additional street lighting. As shown previously in Chapter 5, approximately 27 miles of new sidewalk would need to be constructed to fill in all the existing sidewalk gaps throughout the city. In addition, the City has thousands of intersection corners that would need to be reconstructed to meet current ADA standards, and several hundred new street lights would need to be installed for each street and offstreet path to meet the City's current Engineering Standards. Many of these improvements will ultimately be installed as a requirement of future land use development/redevelopment projects, while others will be installed as City-initiated capital improvement projects. In lieu of mapping every location where the City would construct these facilities, this Plan outlines methodology for prioritizing City-initiated installation of sidewalk, curb ramp and streetlight projects.

New City-initiated installations of sidewalk repairs or new sidewalk construction, curb ramp upgrades, and installation of street lighting would be installed as funding resources allow, and generally prioritized based on the following factors:

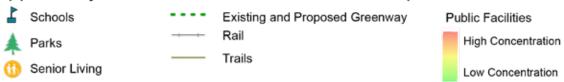
- Existing site conditions present a public safety concern based on community input, field investigations and/or based on data presented in the City's Traffic Safety Reports.
- Facility is located along one of the Tier
   1, 2 or 3 routes identified in the maps shown previously in this chapter.
- Facility is located in an area with high pedestrian demand, particularly with higher concentration of seniors, children, or users with mobility challenges. Figure 28 below highlights the areas within the city that would currently meet these criteria, including locations within 500 feet of schools, parks, senior living facilities, and the downtown commercial district.



San Luis Obispo

City of San Luis Obispo

## Opportunity Areas Prioritized for Pedestrian Improvements





## Community Collaboration

Communities work best when residents, workers, community groups and institutions are engaged and working together for the good of all. San Luis Obispo is no exception. The City of San Luis Obispo is committed to engaging the local community as individual bicycle and pedestrian projects move from high-level concepts, to more detailed designs, and eventually built infrastructure. The City has published a Public Engagement and Noticing Manual (PEN Manual), which establishes the general process and tools used by staff to conduct an effective and inclusive public outreach effort.

Consistent with the City's PEN Manual, depending on the project, various tools and outreach methods are utilized to identify and engage with groups and individuals having a stake in the project, including traditional in-person town hall style forums, and notices in local newspapers, as well as more innovative and informal outreach strategies, such as online engagement tools, social media posts, and casual family-friendly pop-up workshops during weekends, lunch hours, farmer's markets, and other times and locations that may work better for community members who typically are not able or comfortable attending traditional weeknight town hall type meetings.

## **Equity Principles**

Planning and implementing this Plan through an "Equity Lens" is critical in pursuing the kind of transformational mode shift envisioned in the Active Transportation Plan. Community engagement that effectively considers equity in its implementation through diverse stakeholder consultation leads to a more balanced distribution of burdens and benefits, increases transparency and accountability to stakeholders, and begins to address some of the core challenges in achieving significant increases in bicycling and walking for all, especially for our City's most vulnerable populations. In implementing the Active Transportation Plan, the City of San Luis Obispo is committed to the following actions across four areas of equity:

**Procedural equity** – Implementation strategies for the Plan will be informed by a cognizance of diverse stakeholders from community organizations, individuals, and academia to ensure equity considerations are fully integrated into how the ATP is implemented.

**Distributional equity** – Upon assessing all feasible options for a project, the City will identify solutions that distribute financial benefits and burdens equitably across stakeholders while prioritizing those that are low-cost, high-impact.

**Structural equity** – The City will maintain transparency through regular reporting to the public and the Active Transportation Committee on program progress throughout implementation, including feedback from those participating in the program.

**Transgenerational equity** – The City will focus on utilizing strategies that effectively increase bicycling and walking that have benefit across generations.

## Costs

Planning level, construction cost estimates for each project are provided in Appendix B (Project Costs). Since this a planning level assessment, project unknowns exist, and therefore a high- and low-cost range is provided. The broad range of potential costs is appropriate given the level of uncertainty in the design at this point in the planning process. The following table provides greater detail on some of the associated costs estimates:

FACILITY TYPE	PER	COST ESTIMATE (LOW)	COST ESTIMATE (HIGH)
Shared Use Path	Mile	\$787,500	\$3,900,000
Bicycle Lane	Mile	\$100,000	\$406,350
Bicycle Route	Mile	\$24,150	\$36,750
Protected Bike Lane	Mile	\$326,550	\$2,000,000
Neighborhood Greenway	Mile	\$304,500	\$1,071,000
Rectangular Rapid Flashing Beacon (RRFB)	Each	\$20,000	\$63,000
Pedestrian Refuge Island	Each	\$10,500	\$52,500
Protected Intersection	Each	\$787,500	\$1,575,000
Roundabout	Each	\$1,500,000	\$3,500,000
Grade-Separated Ped/Bike Crossing (Bridge or Tunnel)	Each	\$750,000	\$5,000,000
High Visibility Crosswalk	Each	\$2,625	\$5,250
ADA Curb Ramps	Each	\$10,000	\$20,000
Sidewalk Construction	Square Foot	\$20	\$75
Streetlights	Each	\$500	\$20,000
Curb Extensions	Each	\$15,750	\$131,250
Pedestrian/Bike Signals	Each	\$5,250	\$525,000

The low and high range of potential costs associated with buildout of the full Tier 1, 2 and 3 bike and pedestrian networks are summarized in the table below.

Figure 29. Total ATP Build-Out Cost Estimate Table

PRIORITY LEVEL	COST ESTIMATE (LOW)	COST ESTIMATE (HIGH)
Tier 1 Projects	\$16,841,761.00	\$195,377,730.50
Tier 2 Projects	\$3,119,215.50	\$27,532,964.00
Tier 3 Projects	\$30,888,243.50	\$181,431,176.00

The annualized maintenance cost of each type of infrastructure project varies based on the improvement type, design life, and whether these assets are maintained by City maintenance staff, or by outside contractors. For planning purposes, the annualized maintenance costs for the types of projects contemplated in this Plan can be estimated as follows:

- 5-10% of the total installation cost for standard bike lanes and other minor signing and striping elements that have a typical design life of 8-12 years
- 1–4% of the total installation cost for traffic signals, streetlights, asphalt shared-use paths, and other facilities that have a useful life of roughly 25-30 years
- 0.5–1% of the total installation cost for concrete sidewalks and curb ramps, grade-separated crossings, roundabouts and other infrastructure types that have a useful life of 50 years or more

## Implementation Strategies

The City of San Luis Obispo will continue to build a strong, connected active transportation network using a variety of implementation strategies. The Plan will be built over a number of years depending on funding and staffing resources, focusing first on the Tier 1 projects that have the highest potential to increase walking and biking. Throughout the implementation process, staff will continue to work with critical partners and the community to gather input. Implementation of the Plan will be incremental but is guided by established policy to continue to prioritize funding toward meeting the City's goals for increasing bicycling and walking. On the following pages are a number of implementation strategies that the City will use to build the active transportation network.

#### **Building the Network by Tiers**

A number of these projects in Tier 1 will require additional study due to their complexity and the need for focused outreach.

While the tier structure provides a path forward and a long-term guide, SLO will remain flexible and innovative to ensure that the City implements the plan quickly and takes advantage of opportunities when they arise.

#### **Quick-Build Projects**

As implementation of the active transportation network begins, the City will be smart, innovative, and take advantage of opportunities to efficiently deliver projects. Quick-build projects are semi-permanent improvements that can be designed and implemented quickly, often utilizing lower-cost interim materials, such as flex posts, curb stops or paint, in lieu of more costly permanent materials. Examples of quick-build active transportation projects include:

- Bike routes and neighborhood greenways that require only striping, signage, and low-cost traffic calming measures
- Bike lanes that require striping only
- Protected bike lanes that can be installed using striping and low-cost materials, like flex posts, and do not require significant reconfiguration of the roadway
- Short sidewalk gap closures that provide better connectivity
- Painted corner bulbouts
- Crossing improvements to join pathway/ trail segments that require only lowercost materials, such as high-visibility crosswalk markings and signage

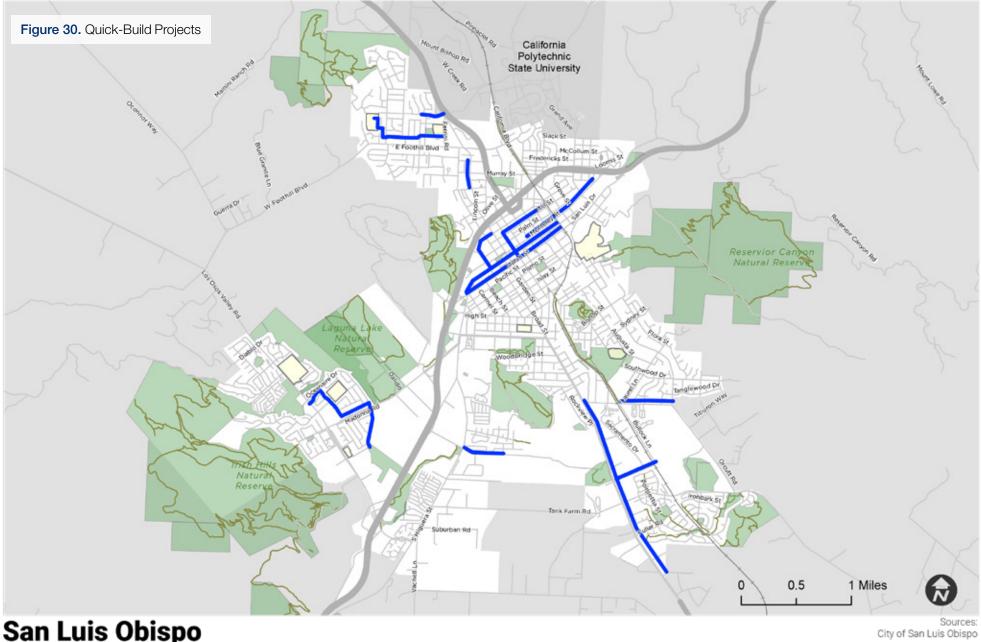
Quick-build installations also provide the flexibility to test and refine designs before committing to more substantial infrastructure investments. As shown previously in Figure 26 and Figure 27, several potential quick-build project candidates have been identified within the Tier 1 and 2 networks based on having minimal challenges and positive community support.

The City will continue to review the projects recommended in this Plan to determine which ones can be accelerated to be constructed rapidly as "quick-build" installations. In some cases, quick-build projects are implemented by repurposing motor vehicle lanes where excess capacity exists, or by removing onstreet parking. When implementing quick-build projects that require reconfiguring roadway lanes or on-street parking configurations, installations should remain installed for enough time to allow for behavioral adjustments to new traffic control or facility features and for the City to incorporate minor design refinements, assuming no safety issues or other unforeseen concerns arise.



#### **CASE STUDY**

In August of 2020, the City of San Luis Obispo converted one of the three motor vehicle lanes of downtown Higuera Street into a buffered bike lane with two-stage turn boxes, as part of Open SLO, the City's pilot program to expand the use of public spaces (with parklets and bike/ped spaces) during the COVID-19 pandemic response. The project was installed with paint, took only weeks to plan and install, and cost a mere \$15k. By doing this, the City is able to test the effectiveness of the bike lane before installing more permanent materials which would cost more than \$150k.



## San Luis Obispo Quickbuild Potential





#### Neighborhood Traffic Management Program

The City should update the Neighborhood Traffic Management Program to provide more flexibility for rapid deployment of lower-cost improvements where supported by individual neighborhoods. The City shall develop a toolbox of pre-approved, low cost, temporary residential traffic calming designs/elements that can be installed rapidly, such as traffic circles, painted intersections, mid-road flex posts, chicanes, medians and roadway planters that can be installed by the city or by local residents, businesses or community groups with the City's oversight and approval. The intent is to increase the comfort level for walking, running, biking, playing, and socializing especially for our youngest and most vulnerable residents. Pre-approved design and potential for community-led implementation will reduce the time and cost it takes the City to typically implement these features. The City may decide to make these permanent or upgrade them during road repaving efforts.

#### **Leveraged Projects**

Often times, the costs associated with individual active transportation projects can be reduced significantly by incorporating them into larger infrastructure projects, particularly roadway resurfacing projects. These projects require coordination and planning and focus on leveraging on-going or planned projects to build active transportation projects with an economy of scale. Examples of these opportunities include:

- Striping bike lanes in conjunction with roadway resurfacing projects.
- Installing higher-visibility crosswalk markings and signage to improve visibility following roadway resurfacing.
- Coordinating and combining projects to leverage economies of scale for sidewalk and curb ramp improvement projects.



# **Projects with New Development**

An additional opportunity is to ensure that the City works with developers to pay for or implement active transportation projects that are necessary for their new developments. The City has been successful in doing this through the construction of new projects by a developer or through the Citywide Transportation Impact Fee program, which collects a fair share fee from development throughout the city to help fund significant roadway, bicycle and pedestrian improvement projects. These opportunities create a "win-win" scenario for the community and the developer as it provides a necessary treatment to improve the community while providing transportation options for the residents, workers and visitors of the development and potentially reduces vehicle miles traveled and greenhouse gases.

# Pilot Projects ▶

"Pilot" or "Demonstration" Projects are a way to test the impacts of changes to the transportation network by temporarily constructing improvements using removable materials, that can be adjusted or removed entirely as experience is gained. These projects enable the City to study the real-world efficacy of such changes, often at a relatively modest cost. Utilizing before and after data, project prioritization can be monitored to understand benefits and tradeoffs, with the goal of adjusting the final design before committing to a more expensive permanent capital project.

Short-term demonstration projects, sometimes called tactical urbanism or temporary installations, are installed for short periods of time in order to quickly evaluate a project and to gather feedback from the public. These projects usually use cones, temporary marking tape, moveable planters, and other non-permanent materials that can be easily be installed, modified, and removed, as needed.

Longer-term pilot projects may be intended to eventually become permanent. This allows for extensive data collection and public input, especially for potentially contentious projects. Materials could range from temporary to more durable materials like paint and bolted in features.



# Funding Strategies

The City of SLO provides significant funding to bicycle and pedestrian projects. Consistent with the City's adopted General Plan Circulation Element, Policy 7.1.4, the City will continue to strive to allocate transportation funding across various transportation modes approximately proportional to the City's modal split objectives, spending roughly 20% of all transportation funds on bicycling projects, 12% on transit, and 18% on walking, car pools, and other forms of transportation besides single occupancy motor vehicle use. As presented in Chapter 2 (Vision and Goals), this Plan establishes the ambitious goal of implementing all Tier 1 projects by 2030. This objective echoes the ambitious goals established in the City's Climate Action Plan, which call for the City to implement active transportation and transit projects and programs as necessary to achieve the City's mode split targets by 2030.

As shown previously in Figure 29 on page 139, the funding commitments needed to complete all Tier 1 projects in this timeframe (\$16,841,761–\$195,377,730.50 total) are significant. While some projects are good candidates for quickbuild installation, which reduces the initial cost

To provide some perspective, to fully construct the Tier 1 bicycle and pedestrian network by the end of 2030, the City would need to average completion of the following infrastructure improvements annually:

- 0.63 miles of shared-use pathways per year
- 1.7 miles of protected bike lanes per year
- 0.37 miles of bike routes and neighborhood greenways per year
- 5.1 priority crossing improvements per year

of implementation, as a whole the Tier 1 project obligations likely far exceed the City's local funding capacity over the next decade. Thus, the City would need to leverage as many outside funding opportunities as feasible in order to support delivery of these projects within a 10-year timeframe. There are a variety of outside funding sources that exist to supplement local funding for bicycle and pedestrian infrastructure projects, programs, and studies, which are summarized below.

## **Local Grants**

# SLOCOG SAFE ROUTES TO SCHOOL CAPITAL GRANT PROGRAM

This small grant program is administered by SLOCOG which allows cities within its jurisdiction to apply for funds to implement Safe Routes to School infrastructure to support walking and biking.

#### REGIONAL SURFACE TRANSPORTATION PROGRAM

These state funds administered by SLOCOG provide dollars on a wide variety of projects including bicycle and pedestrian projects, local roads, and transit.

# ROAD MAINTENANCE AND REHABILITATION ACCOUNT (RMRA SB-1)

Funds made available by this program can be used to satisfy match requirements of a state or federal program, or for projects that include, road maintenance and rehabilitation, safety projects, railroad grade separations, traffic control devices, and complete streets components.

## THE TRANSPORTATION DEVELOPMENT ACT (TDA)

The TDA provides two major sources of funding for public transportation: The Local Transportation Fund (LTF) and State Transit Assistance (STA). LTF is distributed to the region by the State and allocated by SLOCOG to each of the seven cities.



## State and Federal Grants

State and federal competitive grants provide another opportunity to support the study, design and construction of large bikeway projects and programs.

### CALIFORNIA'S ACTIVE TRANSPORTATION PROGRAM (ATP)

Funds infrastructure and programmatic projects that support the program goals of shifting trips to walking and biking, reducing greenhouse gas emissions, and improving public health.

#### CALTRANS SUSTAINABLE TRANSPORTATION PLANNING GRANT

This grant is available to communities for planning, study, and design work to identify and evaluate projects, including conducting outreach or implementing pilot projects.

## CALTRANS HIGHWAY SAFETY IMPROVEMENT PROGRAM (HSIP)

Funds projects on any publicly owned road or active transportation facility, including bicycle and pedestrian improvements.

#### COMMUNITY BLOCK DEVELOPMENT GRANT

Awarded by the US Department of Housing and Urban Development (HUD) and provide funds for projects and programs that benefit low- and moderate-income households, businesses and community-based organizations and can be used for certain pedestrian improvements through a subrecipient.

#### **URBAN GREENING PROGRAM**

The program funds the development of green infrastructure projects that reduce greenhouse gas emissions.

#### DEVELOPMENT IMPACT FUNDS

Developer fees will also contribute to the construction of bicycle and pedestrian projects. The City shall require that development contribute its share toward the cost of active transportation facilities and programs.

Following adoption of the Active Transportation Plan, the City shall update the Citywide Traffic Impact Fee Program to include the highest-priority bicycling and pedestrian projects included in the plan.

The City shall explore available funding options beyond local funds to expedite implementation of the highest priority active transportation projects, including state and federal grant programs, development impact fees, public/private partnerships and debt financing for high-cost projects that offer significant benefits to pedestrian and bicycle safety and mobility.

As part of the update of the Parking and Access Management Plan, the City should evaluate the potential opportunities to leverage revenues from parking fees to fund active transportation improvements that can help reduce parking demand within the downtown and throughout the city.

As part of the City's two-year financial planning process, the Active Transportation Committee shall provide recommendations for prioritization of funding for active transportation projects.

# Maintenance

The City of San Luis Obispo maintains its street infrastructure in an effort to keep bicycle and pedestrian facilities comfortable and free of hazards. This includes making sure traffic control devices, streetlights, signs, and pavement surfaces are in good working order. Facilities with cracked pavement, vegetation, broken glass and other debris are a hazard and a barrier to walking and biking.

The City has a number of systems in place to ensure proactive maintenance of bicycle and pedestrian facilities in the City's right of way.

- Street, bicycling, and pedestrian facility maintenance issues can be reported to the Public Works department for response. The City's Streets Maintenance Crew and Traffic Signal/Streetlight Technicians receive these requests daily, and actively address reported issues, including replacing street signs, sealing cracks in pavement and sidewalks, sweeping bike lanes and sidewalks of debris, and correcting malfunctions with traffic signal and street light equipment.
- The City Public Works Department maintains a regular Pavement Management Program, which establishes a schedule for sealing and repairing roadways throughout the city. The pavement management program provides an opportunity to both maintain existing facilities in a good state of repair, and upgrade bicycling and pedestrian facilities where feasible.

The addition of protected bike lanes to the bicycling network creates new challenges with keeping bike lanes free and clear of debris. The City's Streets Maintenance Crew currently sweeps roadways throughout the city; however, the full-sized street sweeper used by the City is too large to maintain most protected bikeways. Further, in some installations, landscaped planters are used to provide physical separation between cyclists and motor vehicles—in these instances, landscaping will also need to be watered and maintained. Strategies to address the maintenance of protected bike lanes include:

- Exploring the purchase and use of a sweeper designed for narrow facilities such as protected bike lanes.
- Partnering with neighborhoods, volunteers, and community groups to coordinate volunteer groups to maintain landscaping and/or sweep debris from bike lanes.
- Using contractors to provide the work when it makes fiscal sense.

This plan also proposes strategies to incorporate maintenance concerns as part of the planning and design process, and to collaborate across different departments at the City of San Luis Obispo:

- Incorporate maintenance needs into the design and planning of bicycling and pedestrian facilities to ensure proper maintenance after construction.
- Identify, regularly update, and request funding for annual maintenance costs for bicycling and pedestrian facilities to ensure adequate funding levels for routine maintenance are available.
- Include other operational issues such as parking, traffic enforcement, and traffic operations addressed during the design of bicycle and pedestrian facilities.

# Monitoring and Evaluation

Ongoing monitoring and evaluation are critical in achieving the goals of this Plan. As introduced in Chapter 2 regarding the Goals and Actions, the following matrix summarizes the ways the City will measure progress towards implementing the Active Transportation Plan. Staff will report on these performance measures every other year, with a summary report to be presented to the Active Transportation Committee and made available to elected officials and the general public on the City website.

PERFORMANCE MEASURE	BASELINE	TRACKING MECHANISM
Increase the share of citywide commute trips made by bicycling to 20% and 12% by walking by 2030	Current Mode Share:  * Bicycle - 8.3%  * Walk - 7.2%  * Drive Alone - 67.7%	Summarize biennially (every other years) based on data from U.S. Census Bureau, American Community Survey (latest 5-year average)
2 Consistent with the City's Climate Action Plan and General Plan Mode Share Objectives, decrease the share of total citywide trips made by single-occupant auto to 50% or less by 2030	Current Mode Share:  • Drive Alone - 67.7%	Summarize biennially (every other years) based on data from U.S. Census Bureau, American Community Survey (latest 5-year average)
Achieve Platinum Level status as Bicycle Friendly Community by the League of American Bicyclists	Gold Status	League of American Bicyclists Bicycle Friendly Community Rankings (renewed every 4 years)
4 Continue progress towards the City's Vision Zero goal of eliminating traffic fatalities and severe injuries, endeavoring towards a 75% reduction by 2030	Three-Year Total (2015-2017):  • 3 fatal collisions  • 43 severe injury collisions	City of San Luis Obispo Annual Traffic Safety Repor
5 Complete installation of the Active Transportation Plan's Tier 1 bicycle and pedestrian network by 2030	<ul> <li>6.5% of the ultimate Tier 1</li> <li>network currently in place:</li> <li>0% of low-stress bikeway mileage</li> <li>0% of enhanced pedestrian/bicycle crossings</li> </ul>	Summarize at outset of each 2-year Capital Improvement Plan
6 Consistent with the General Plan Circulation Element policies, strive to allocate transportation funding across various transportation modes approximately proportional to the General Plan Modal Split Objectives	Baseline to be set with FY2021-23 Financial Plan	Summarize transportation expenditures as running 4-6-year average at outset of each 2-year Capital Improvement Plan
7 Double the mode share for all bicycle and pedestrian trips for public K-12 schools in the city	Baseline to be set via school surveys in 2021	In collaboration with SLO Rideshare, conduct surve of local K-12 schools biennially (every other year)

# Summary of Implementation Policies

- 7.1 Build Priority Infrastructure First. Complete the highest-priority (Tier 1) bicycle and pedestrian projects recommended in this Plan by 2030. Complete lower-priority (Tier 2 and 3) projects as opportunities arise based on funding, potential to combine with other capital projects, and as part of private-public partnerships.
- **7.2 Equity.** The City of San Luis Obispo is committed to provide community engagement as bicycle and pedestrian projects move from ideas into designs and eventually built infrastructure. The City engagement process will use a number of tools to ensure outreach is inclusive based on a set of equity principles.
- **7.3 Quick-Build.** As implementation of the active transportation network begins, the City will be strategic, innovative, and opportunistic to efficiently deliver projects.
- 7.3.1 The City shall review the project list to determine which ones can be accelerated to be implemented rapidly. These "quick-build" projects are typically inexpensive "low-hanging fruit" projects that achieve a more connected network.
- 7.3.2 When evaluating effectiveness, quickbuild projects should remain installed for enough time to allow for behavioral adjustments to new traffic control or facility features provided if no

safety concerns or other unforeseen concerns arise. Results will be provided at the conclusion of the evaluation period with findings and future recommendations, depending on the project.

# 7.4 Neighborhood Traffic Management Program.

- 7.4.1 The City shall update the Neighborhood
   Traffic Management Program to provide additional
   flexibility for community-driven traffic calming
   projects and for more rapid deployment of
   temporary quick-build treatments to address
   traffic safety concerns related to high vehicle
   speeds and/or unsafe driving patterns.
- 7.4.2 The City shall consider developing a toolbox of pre-approved, low cost, temporary residential traffic calming designs/elements that can be installed rapidly, such as traffic circles, painted intersections, mid-road flex posts, chicanes, medians and roadway planters that can be installed by the City or by local residents, businesses or community groups with the City's oversight and approval.
- **7.5 Projects of Opportunity.** The City shall look for opportunities to incorporate active transportation projects with larger infrastructure projects in order to maximize expenditures and gain economy of scale.

- **7.6 Projects with New Development.** The City shall require that development contribute its share toward the cost of active transportation facilities and programs.
- **7.7 Pilot or Demonstration Projects.** The City shall look for opportunities to test the impacts of changes to the transportation network by temporarily constructing improvements using removable materials, that can be adjusted or removed entirely as experience is gained.
- **7.8** Opportunities for Curb Ramps, Street Lighting, and Other Pedestrian Amenities. In addition to the pedestrian projects included as part of Tiers 1-3, the City will actively pursue opportunities to construct pedestrian-specific improvements such as curb ramps and street lighting in the downtown, areas around schools, parks, and senior living facilities.
- **7.9 Spending According to Mode Share Goals.** In accordance with the General Plan mode share budget goals, the City shall endeavor to allocate transportation funding consistent with adopted mode share targets, including 20% of all transportation funds on bicycle projects, 12% on transit, and 18% on walking, car pools, and other forms of transportation.
- **7.9 Fund the Tier 1 Network.** The City shall endeavor to secure and earmark sufficient funds to implement Tier 1 projects by 2030 as called for in this Plan's Objectives.
- **7.10 Development Contribution.** The City shall require that development contribute its share toward the cost of active transportation facilities and programs.

- **7.11 Traffic Impact Fee Program.** Following adoption of the Active Transportation Plan, the City shall update the Citywide Traffic Impact Fee Program to include the highest-priority bicycle and pedestrian projects included in the plan.
- **7.12** Explore Funding Options Beyond Local Funds. The City shall explore available funding options beyond local funds to expedite highest priority active transportation projects, including state and federal grant programs, development impact fees, public/private partnerships and debt financing for high-cost projects that offer significant benefits to pedestrian and bicycle safety and mobility.

#### 7.13 Maintenance

- 7.13.1 The City should incorporate maintenance needs into the design and planning of bicycle and pedestrian facilities to ensure proper maintenance after construction.
- 7.13.2 The City should identify and regularly update annual maintenance costs for bicycle and pedestrian facilities to ensure adequate funding levels for routine maintenance costs.
- 7.13.3 The City should include other operational issues such as parking, traffic enforcement, and traffic operations during the design of bicycle and pedestrian facilities to ensure the proper operation and maintenance.
- **7.14 Monitoring.** As shown in the performance measures table in this Chapter, the City will measure progress towards implementing the Active Transportation Plan using seven factors. Staff will report on these performance measures every other year, with a summary report to be presented to the Active Transportation Committee and made available to elected officials and the general public on the City website.

# Glossary of Terms

# ADA (Americans with Disabilities Act):

Sets forth guidelines to make transportation infrastructure accessible to people of all abilities.

**ADT** (Average Daily Traffic): The volume of traffic passing a certain point of a road or highway, in both directions in a single day.

Arterial Streets: Streets designed to provide a high capacity of mobility and generally serve longer vehicle trips to, from, and within urban areas.

## **Active Transportation Committee:**

Provides oversight and policy direction on matters related to bicycle and pedestrian transportation in San Luis Obispo and its relationship to bicycling outside the City.

Bicycle Central (or Station): Is a consolidated sheltered storage area for employee bicycles, integrated into the design of job sites, and may be combined with showers and bicycle repair and support facilities.

Bicycle Friendly Community: A community that provides accommodation for cycling with policies and practices which encourage people to bike for transportation and recreation.

**Bicycle-only Signal:** A traffic signal head for regulating bicycle movement at intersections, providing a phase where only bicycles may proceed.

**Bike Box:** A designated area at the front of a traffic lane at a signalized intersection that places the bicyclist ahead of queuing motor vehicle traffic during the red signal phase.

**Bike Kitchen:** A do-it-yourself bicycle maintenance and repair facility, usually run by volunteers of a non-profit organization. Facilities often offer classes in maintenance, supply tools, and may sell or trade used parts.

**Bike Valet:** A bicycle parking service, usually set up for large events, offering convenient and secure bicycle parking at locations where a large number of bicyclists are expected.

**Bikeways:** A general term that includes bike lanes, paths, and designated streets or routes that provide for bicycle travel.

#### **BIKEWAY FACILITY TYPES**

**Bike Lane:** Provides a striped lane for one-way bicycle travel on a street or highway.

Bike Lane (Buffered): A buffered bike lane is an on-street bike lane that has a painted buffer either between the bike lane and parked cars, between the bike lane and the standard motor vehicle lane, or both. Typically, the buffer will be striped with diagonal lines and serves to keep bicyclists from riding in the "door zone" and/or to add separation between bicyclists and motor vehicle traffic.

**Bike Route:** A bike route provides connectivity within the overall bicycle transportation system, by filling in gaps between other identified bicycling facilities. Bike routes are generally designated on lower volume streets where motorists and bicyclists share the lane.

Protected Bike Lane (also known as cycle track): A bikeway for the exclusive use of bicycles and includes a separation beyond striping required between the separated bikeway and the through vehicular traffic. The separation may include, but is not limited to, grade separation, flexible posts, inflexible physical barriers, or on-street parking.

Shared Use Path: Provides a completely separated right-of-way for the exclusive use of bicycles and pedestrians with crossflow by motorists minimized.

CA MUTCD (California Manual on Uniform Traffic Control Devices): A compilation of standards for traffic control devices.

Channelization: The use of pavement markings, raised islands, or other suitable means, to regulate and separate intersection turning movements from through movements, for the safe and orderly conduct of motor vehicles, bicycles, and pedestrians.

Collector Roads: Are designed to connect traffic from small local roads to arterial streets, while providing a balance between mobility and land access within residential, commercial, and industrial areas.

**Colored Pavement:** Color applied to pavement to alert motorists to the presence of bicyclists or pedestrians in known high conflict zones.

Commercial Core: Includes the Downtown Commercial Zoning District (CD) in downtown San Luis Obispo. (See "Downtown Area".)

Complete Streets: (Also known as livable streets) are roadways designed and operated to enable safe access and travel for all users, including pedestrians, bicyclists, motorists, and public transportation users of all ages and abilities.

**Curb Extension:** Curb extensions, also known as bulbouts, minimize pedestrian exposure during crossing by shortening crossing distance and giving pedestrians a better chance to see and be seen before committing to crossing.

**Door Zone:** The lateral space next to onstreet parallel parked cars within which car doors may open into the roadway and pose a potential risk to adjacent bicycles.

**Downtown Area:** The City of San Luis Obispo's "General Plan, Land Use Element" defines an area that includes the commercial core and surrounding neighborhoods, as the "Downtown Planning Area". (See Figure 4 of that plan.)

Facilities (For Bicycling and Walking): Are any physical feature that serves the needs of bicycling and walking, including bike lanes and paths, bicycle racks and lockers, sidewalks, curb ramps, crosswalks, signs, pavement markings and symbols, places to post information, lighting, and traffic controls.

**Grade Separated Crossing:** Provides continuity of a facility over or under a roadway, railroad, or creek.

**Intersection:** An area where two or more pathways or roadways join together.

**Kidical Mass:** A fun bike ride for kids and families stressing legal and safe riding habits, with a dual educational goal of not only teaching kids how to ride safely but to let the overall community know that "kids are traffic too".

Leading Bicycle Interval: When the bicycle signal at an intersection changes before the motor vehicle signal, allowing the bicyclist to enter the intersection before motor vehicles. This can make a bicyclist more visible when crossing an intersection.

Leading Pedestrian Interval: When the pedestrian signal at an intersection changes before the motor vehicle signal, allowing the pedestrian to enter the crosswalk before the light turns green. This typically makes a pedestrian more visible when crossing an intersection.

**Level of Traffic Stress:** A method of measuring the quality of pedestrian and bicycle infrastructure based on the perceived level of stress of its users.

Long-Term Bike Parking: Bicycle parking meant to accommodate employees, students, residents, commuters, and others expected to park on a regular basis for more than four hours. This parking is to be provided in a secure, weather-protected manner and location. Long-term parking type will be a bicycle locker, a locked room with standard racks and access limited to bicyclists only, or standard racks in a monitored location.

**Loop Detector:** A type of vehicle detection system for triggering traffic signals that uses an induction "loop" buried in the street pavement.

**Major City Goals:** Represent the City's priorities for the two-year financial plan.

**Median Refuge Island:** A small section of pavement or sidewalk where pedestrians or bicyclists can stop before finishing crossing a road.

Neighborhood Greenways: A shared roadway (bicycles and motor vehicles share the space without marked bike lanes) where the through movement for bicycling and walking are given priority over motor vehicle travel on a local street. Neighborhood Greenways are designated on low speed, low volume local streets that usually parallel higher traffic streets and may use treatments to address cut through vehicle traffic and vehicle speed.

NACTO (National Association of City Transportation Officials): An association of 86 major North American cities and transit agencies formed to exchange transportation ideas, insights, and practices and cooperatively approach national transportation issues.

**Parklet:** public seating platforms that convert curbside parking spaces into vibrant community spaces.

Pedestrian Hybrid Beacon (PHB): A traffic control device, also known as a HAWK (High Intensity Activated Crosswalk) used to stop road traffic and allow pedestrians and bicyclists to cross safely. They are often used to improve crossings of major streets in locations where conditions do not warrant installation of a full traffic signal. For pedestrians and bicyclists, a PHB provides a similar crossing experience to a conventional traffic signal, with less disruption to vehicle traffic flows on the major street.

Pedestrian Scramble Intersection: A pedestrian crossing phase where all motor vehicle traffic is stopped at an intersection for pedestrians to cross in any direction.

Planning Areas: Lands surrounding or within San Luis Obispo where the City has adopted, or intends to adopt, a specific plan, district plan, enhancement plan, area plan, route plan, or alignment plan to guide its use.

**Prevailing Speed:** The speed at which 85 percent of motorists are traveling at or below the posted speed limit. This is used according to State law to set posted speed limits that can be legally enforced.

Protected Intersection: An intersection which maintains a physical separation within the intersection to define the turning paths of motor vehicles, slow vehicle turning speed, and offer a comfortable place for people bicycling to wait at a red signal

**Quickbuild:** A strategy used to build pedestrian and bicycle facility projects quickly often with temporary materials in order to test the effectiveness of the facility before completion with more permanent and costly materials.

# Rapid Rectangular Flashing Beacon

(RRFB): An enhanced crosswalk with pedestrian-actuated rapid flashing beacons that warn oncoming traffic of pedestrians in the crosswalk. They are typically used to improve safety at uncontrolled, marked crosswalks.

Roundabout: A circular intersections designed to eliminate left turns by requiring traffic to exit to the right of the circle. Roundabouts are installed to reduce vehicular speeds; improve safety at intersections through eliminating angle collisions.

Shared-Lane Markings: (Also known as Sharrows.) Pavement legends used to assist bicyclists with lateral positioning in narrow lanes or lanes with on-street parking, to remind motorists to expect to share the roadway with bicyclists, to encourage safe passing of bicyclists, to help guide bicyclist to ride outside the parked car "door zone" and to reduce the incidence of wrong-way bicycling.

**Short-Term Bike Parking:** Is parking provided to accommodate visitors and customers, who are parking for less than four hours. Bicycle racks meeting City standards satisfy this need.



# Appendices

Appendix A: Project List

**Appendix B: Project Costs** 

Appendix C: Design Guidelines