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Executive Summary

As originally envisioned in the 2013 City of San Luis Obispo Bicycle Transportation Plan, the Anholm Bikeway Plan (the "Plan") provides a blueprint to develop a low-stress, priority route for bicyclists and pedestrians between the City’s downtown core and Foothill Boulevard. These improvements will help create a vital multimodal link that not only accommodates bicyclists and pedestrians, but prioritizes safety and mobility for users of all ages and ability levels. This plan supports several key City programs, plans and policies, including the Multimodal Transportation Major City Goal, the General Plan objective to achieve 20 percent bicycle mode share citywide, the Climate Action Plan recommendation to increase use of active transportation modes, and Vision Zero initiative to eliminate traffic-related deaths and severe injuries for all the city’s road users by 2030.

Project Description

The Anholm Bikeway Plan provides recommended bicycle and pedestrian infrastructure improvements to improve the link between Downtown San Luis Obispo and Foothill Boulevard. The proposed route consists of the following primary features, starting from Monterey Street in the downtown:

- Chorro Street (Monterey to Palm): Class III shared lane markings and route signage
- Chorro Street (Palm to Lincoln): Buffered bike lanes on each side of the street with potential for future installation of physical separation between bicyclists and motor vehicle traffic
- Chorro Street (Lincoln to Mission): Two-way protected bikeway on the west side of Chorro with removal of on-street parking on the west side of the street
- Mission Street (Chorro to Broad): Class III shared lane markings and route signage
- Broad Street (Mission to Ramona): One-way southbound buffered/protected bikeway with removal of on-street parking on the west side of the street. Northbound to remain as Class III shared lane with enhanced markings and route signage.
- Ramona Drive (Broad to Latter-Day-Saints Church property): A two-way protected bikeway in place of on-street parking on the north side of Ramona along frontage of the existing shopping center
- Multi-Use Path (Ramona to Foothill): Class I bicycle/pedestrian path connecting the two-way protected bikeway on Ramona to the planned Pedestrian Hybrid Beacon crossing at Foothill Boulevard

A summary map of the proposed project improvements is shown in Figure ES-1.

Technical Analysis

Technical analysis of the Plan includes a traffic analysis, assessment of parking conditions, review of potential benefits to the bicycling and pedestrian environments, and discussion of potential effects on neighborhood quality. Implementation of the Anholm Bikeway Plan will require removal of 17 on-street parking spaces along north side of Ramona, 41 spaces on the west side of Chorro, and 15 spaces on the west side of Broad to accommodate dedicated bike lanes. While analysis of parking conditions indicates that on-street parking will generally be available within a block of the Chorro Street segments where parking removal is proposed as part of the project, on-street parking along affected segments of Broad and Ramona will likely be scarce during periods of peak occupancy, requiring some users to travel multiple blocks (approximately a 1- to 3-minute walk) to find available street parking opportunities. Implementation of the project will create a more comfortable bicycling environment than currently exists and would make significant progress towards establishing a low-stress bicycling corridor with the potential to attract more "interested but concerned riders".

Project Development

Development of this plan included an extensive community-based public engagement effort, focused on understanding the key needs and priorities of residents and stakeholders. Outreach components included public meetings, a project website, and two community surveys. Multiple iterations of the design components were considered before reaching the ultimate design for the Anholm Bikeway.
Anholm Bikeway Plan

Executive Summary

September 2018

Figure ES-1: Project Summary Map
Plan Implementation

The Anholm Bikeway Plan will be implemented in three primary phases with the highest-priority features being those at the north end of the corridor—improvements that will support safe routes for families walking and biking to Bishop’s Peak and Pacheco Elementary Schools. As the plan is implemented, construction documents will be brought before the Active Transportation Committee (previously Bicycle Advisory Committee) and City Council for Review. Recommended phasing of project improvements is summarized below and illustrated in Figure ES-2, Figure ES-3 and Figure ES-4:

**Phase 1** – Implementation of the highest-priority features at the north end of the corridor—improvements that will support safe routes for families walking and biking to Bishop’s Peak and Pacheco Elementary Schools. Phase 1 includes the following features:

- Bicycle/Pedestrian Crossing (Pedestrian Hybrid Beacon) at Foothill & Ferrini
- Class I Pedestrian/Bicycle Path between Foothill & Ramona
- Removal of street parking on Ramona and installation of two-way Protected Bikeway
- Initiation of a Residential Parking District (if approved by the neighborhood)

![Figure ES-2: Phase 1 Project Improvements](image-url)
**Executive Summary**

**Phase 2** – Installation of the essential bikeway features between Downtown and Ramona Drive:

- Install two-way protected bikeway on Chorro Street between Lincoln and Mission*
- Install southbound buffered/protected bike lane on Broad between Mission and Ramona. Improved bikeway pavement markings and guide signage within Class III shared lane in northbound direction*
- Streetscape, lighting & artwork improvements at Chorro & Highway 101 Undercrossing
- Extend buffered bike lanes on Chorro between Lincoln and Palm
- Class III shared street on Chorro from Palm to Monterey
- Bikeway route signage and markings
- Performance Monitoring Report to Council at 12 and 24 months after implementation

*Bike lane separation may utilize lower-cost temporary materials during initial installation, depending on available funds

---

*Figure ES-3: Phase 2 Project Improvements*
Phase 3 – Installation of physical separation within Chorro bike lane buffers between Palm and Lincoln and incremental installation of remaining higher-cost project improvements.

- Installation of physical separation within Chorro bike lane buffers between Palm and Lincoln.
- Incremental installation of ancillary spot improvements that cannot be funded in Phase 2, such as:
  - Continuous sidewalks on west side of Broad Street
  - Additional street lighting
  - Higher-cost pedestrian improvements at remaining locations along bikeway route, such as permanent bulbouts and pedestrian refuge at Broad/Ramona/Meinecke, raised crossing at Broad/Murray, bulbouts at Chorro/Walnut and Chorro/Peach, and ADA curb ramps at remaining intersections along bikeway route as funding allows

Figure ES-4: Phase 3 Project Improvements
I. Introduction

About the Plan

In early 2016, the City of San Luis Obispo Transportation Public Works Department began working with the community to develop plans for the Broad Street Bicycle Boulevard project. Identified as a “First Priority” project in the 2013 City of San Luis Obispo Bicycle Transportation Plan, the goal of the Broad Street Bicycle Boulevard was to provide a safe, convenient, low-stress through route for bicyclists and pedestrians connecting the City’s downtown core through the historic Anholm Neighborhood to Foothill Boulevard. The intent of this project is to take a major step towards achieving the City’s goal of 20% bicycle mode share by not only improving conditions for pedestrians and experienced bicyclists who are already comfortable frequenting the streets within this area, but to also provide high-quality facilities that can attract new users of all ages and ability levels—such as families with small children and less-experienced cyclists who are interested in using a bicycle for transportation, but are uncomfortable sharing the existing streets with busy motor vehicle traffic. After nearly two years of community outreach, detailed technical analysis and refinement of design alternatives, staff is pleased to present the end-product of these efforts—the Anholm Bikeway Plan. The Plan is organized into the following sections:

- **Introduction – Page 1**
  What is the purpose of this project, why are improvements needed and how does this project relate to other city plans, programs and policies?

- **Project Description – Page 11**
  This section describes the proposed project, including the proposed route alignment, example street layouts and design elements.

- **Analysis of the Project – Page 25**
  How does the project support the goal and objectives of this planning effort, and what are the key benefits and trade-offs? This section summarizes the technical analysis conducted for the project, considering potential impacts to traffic and parking, benefits to the bicycling and pedestrian environment, influence on neighborhood quality, and overall ability to support the project goal and objectives.

- **Project Development Process – Page 37**
  How did we get here? This section documents the community outreach activities conducted to develop this plan and summarizes the alternatives development process leading to refinement of the project.

- **Cost Estimates, Phasing Plan and Performance Monitoring Strategies – Page 40**
  This section presents planning-level cost estimates and summarizes proposed project phasing and performance monitoring strategies.

This plan provides a blueprint to guide transportation improvements to create the low-stress route originally envisioned in the Bicycle Transportation Plan and will help create a vital multimodal link that not only accommodates bicyclists and pedestrians, but prioritizes safety and mobility for users of all ages and ability levels.
Purpose and Need

Broad and Chorro Street are key links to the northern area of the city, serving as primary routes for commuters, students, employees and visitors, connecting Foothill Boulevard to Highway 101 and Downtown San Luis Obispo. With few other north-south route options in this area, these streets carry a greater volume of vehicular through-traffic than typically desired for a residential collector street. Traffic volumes on Chorro currently exceed established maximum neighborhood traffic thresholds and traffic speeds along both Chorro and Broad Street exceed the posted 25 mph speed limit by 20 percent or more. Traffic conditions within this neighborhood have been an ongoing concern for residents, leading to one of the City’s first traffic calming projects in the 1990’s. While many of the traffic calming features installed along Broad and Chorro Streets in the 1990’s were ultimately rejected for various reasons, there remains strong interest for streets that better balance motor vehicle throughput with neighborhood safety and mobility of other street users.

High traffic volumes and speeds on Broad and Chorro not only affect neighborhood quality within the Anholm District, but also limit the viability of these streets as attractive routes for bicyclists and pedestrians off all ages and ability levels. While these streets are designated bike routes in the City’s bicycle network and include shared lane markings (“sharrows”) and signage indicating a cyclist’s right to share the road, current traffic conditions create an intimidating environment for many users—particularly families with school-age children, seniors, and less-experienced cyclists who are not comfortable sharing the lane with autos. As Figure 2 shows, existing traffic volumes/speeds exceed the ranges recommended for streets where cyclists and motor vehicles share travel lanes. Similarly, the pedestrian infrastructure within this neighborhood requires improvements to meet the needs of users with disabilities and other mobility challenges. sidewalks are incomplete in several locations, particularly along the west side of Broad Street, accessible curb ramps are missing at several intersections, street lighting is limited, and the desire for intersection crossing enhancements has been expressed by many residents. To meet the City’s goals for increased walk and bike mode share (as discussed later in this section), street modifications are needed to provide an environment that is safe and viable for users who are interested in walking or bicycling more frequently, but are intimidated by the current street environment.

1 The City of San Luis Obispo General Plan Circulation Element designates Broad and Chorro Streets north of Highway 101 as Residential Collector Streets. For the purposes of maintaining neighborhood quality along residential streets, the City establishes maximum Average Daily Traffic (ADT) threshold of 3,000 veh/day for most residential collector streets, with an increased threshold of 5,000 veh/day for Broad and Chorro Streets north of Highway 101. Existing traffic levels on Chorro exceed 6,000 veh/day.

2 Prevailing vehicular traffic speed refers to the 85th percentile speed, or the speed at which 85 percent of observed drivers are traveling at or below. Thus, 15 percent of observed drivers are traveling above the 85th percentile speed. In 2016, prevailing speeds on Broad Street north of Lincoln Street were measured at 26-30 mph and at 31 mph along Chorro Street.

3 Source of Recommended Traffic Speed and Volume Thresholds: Federal Highway Administration (FHWA) and National Association of City Transportation Officials (NACTO).
**Project Goal and Objectives**

At the start of the planning process for this project, City staff worked with the community to clearly define the overarching project goal and design objectives required to support that goal. While the proposed project does not include development of a continuous bicycle boulevard, as originally envisioned, the initial goal and design objectives remain relevant to the final project.

**Project Goal:**
- Develop a safe, low-stress through route serving bicyclists and pedestrians of all ages and skill levels connecting the City’s downtown core north to Foothill Boulevard.

**Design Objectives:**
- **Identity/Branding** – Utilize signage, markings and other elements to provide a bicycle route with a look and feel that is unique from surrounding streets to communicate that bicycle travel has a priority on the roadway. These design features should encourage people to walk and bike along this route, while alerting drivers to expect to encounter people walking and bicycling.
- **Traffic Calming** – Incorporate design features that bring motor vehicle speeds closer to those of bicyclists, improving the safety and comfort of the bicycle and pedestrian environment, and livability of the neighborhood.
- **Volume Management** – Consider measures to separate bicyclists from motor vehicles, and/or explore strategies to reduce/discourage motor vehicle through traffic along a designated route by physically or operationally reconfiguring access along street segments and intersections. Such treatments should consider potential impacts to emergency vehicles and neighborhood access.
- **Pedestrian Safety & Comfort** – Incorporate design features along the boulevard that provide a continuous, accessible, low-stress environment for pedestrians of varying ability levels. Where feasible, identify opportunities for streetscape enhancements and green street features to enhance the existing beauty of the neighborhood and improve stormwater management.
- **Crossing Enhancement** – Improve accessibility, safety and comfort for bicyclists and pedestrians crossing at intersections.

**Relationship to Other Plans, Projects and Programs**

The Anholm Bikeway Plan supports several key City plans, programs and policies:

**General Plan Land Use and Circulation Elements (2014)** – The City of San Luis Obispo General Plan (adopted 2014) provides the overarching vision, goals, policies, and programs for the city and is implemented through city ordinances, regulations, and guidance documents. The General Plan Land Use and Circulation Elements (LUCE) call for investment in a safe, multimodal transportation network that provides viable transportation alternatives to help reduce dependence on single-occupant use of motor vehicles. As summarized in Table 1, the Circulation Element establishes modal split objectives to increase the use of alternate forms of transportation, including a goal to achieve 20% mode share for bicycles and 18% mode share for walking, car pools, and other forms of non-single occupancy vehicular use.

<table>
<thead>
<tr>
<th>Type of Transportation</th>
<th>% of City Resident Trips</th>
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<tbody>
<tr>
<td>Motor Vehicles</td>
<td>50%</td>
</tr>
<tr>
<td>Transit</td>
<td>12%</td>
</tr>
<tr>
<td>Bicycles</td>
<td>20%</td>
</tr>
<tr>
<td>Walking, Carpools, and other Forms</td>
<td>18%</td>
</tr>
</tbody>
</table>

Table 1: General Plan Circulation Element Modal Split Objectives
Bicycle Transportation Plan (2013) – The City of San Luis Obispo Bicycle Transportation Plan (BTP) provides for the planning, development, and maintenance of facilities and activities within the city that are safe and convenient for bicyclists of all ability levels, laying out a network of proposed bikeways to connect the city for travel by bike with special emphasis on travel to schools. The BTP includes the Broad Street Bicycle Boulevard as a “First Priority” project, and identifies this as the City Bicycle Advisory Committee’s highest ranked bicycle route project in the plan. The BTP includes the overall project in two components:

- **Broad Street Bicycle Boulevard – Ramona to Highway 101 & Highway 101 to Monterey:** Create a bicycle boulevard to serve as the primary low traffic impact north/south through route for bicyclists and pedestrians connecting the downtown core to neighborhoods north of the downtown core. The alignment follows Broad Street throughout, from Monterey Street north to Ramona and the plan notes that traffic calming may be required.

- **Broad Street Bicycle Boulevard – Grade-Separated Crossing at Highway 101:** Provide a lower traffic route bypassing downtown core congestion with the addition of a pedestrian/bicycle grade-separated crossing of Highway 101 connecting north and south segments of Broad Street. Implementation of the grade-separated crossing will require removal of the Highway 101 ramps at Broad Street by Caltrans.

The BTP proposes several other bicycle facility improvements within the vicinity of the Broad Street Bicycle Boulevard, including another planned bicycle boulevard on Cerro Romauldo from Patricia to Ferrini, bike lanes on Highland, and intersection enhancements on Foothill at Patricia, La Entrada, and Ferrini.

**City of San Luis Obispo Major City Goals (2017-19)** – As part of each two-year financial plan, the City Council identifies Major City Goals. These represent the most important, highest priority goals for the City to accomplish over the next two years, and as such, the resources to accomplish them are prioritized in the financial plan components. One of the four Major City Goals established in conjunction with the 2017-19 Financial Plan focuses on improving Multi-modal Transportation—specifically, to prioritize implementation of the Bicycle Transportation Plan, pedestrian safety improvements, and the Short-Range Transit Plan.

**Vision Zero –** The message of Vision Zero—adopted as policy by the San Luis Obispo City Council in 2016—is simple: one death on our city streets is too many. Rather than accepting traffic-related deaths as “accidents” and singularly faulting road users, the Vision Zero initiative places the core responsibility for traffic safety on proper street system design, enforcement and public education. The premise is that humans are fallible and will make mistakes—properly designed transportation systems can help minimize the consequences and severity of these mistakes when they do occur. Through data-driven analysis, innovative street improvements, strategic traffic enforcement and education, the City of San Luis Obispo is committed towards a goal of zero traffic-related deaths or severe injuries by 2030. A key focus of the City’s Vision Zero initiative is to prioritize safety improvements for locations with higher potential for collisions involving vulnerable road users, such as bicyclists, pedestrians, small children, the elderly and those with disabilities.
Safe Routes to School Plan for Bishop’s Peak & Pacheco Elementary Schools – In August of 2017, City Council adopted a Safe Routes to School (SRTS) Improvements Plan for Bishop’s Peak and Pacheco Elementary, two schools located in the northern portion of the City. The purpose of the SRTS Plan was to identify specific transportation improvements, education, outreach and enforcement strategies to make walking and bicycling to Bishop’s Peak and Pacheco Elementary Schools safe, accessible, and attractive options for children and their families. While the SRTS Plan is separate from this effort, what it envisions is complementary to this plan to improve conditions for pedestrians and cyclists of all ages and ability levels from the downtown to the Anholm District and other neighborhoods to the north. Two of the highest priority projects included in the SRTS Plan provide significant benefits to pedestrian and bicycle mobility by continuing the connection between the route developed in this plan (Anholm Bikeway Plan) and the neighborhoods north of Foothill Boulevard:

- **Foothill Boulevard & Ferrini Road Crossing Enhancement** – Addition of a controlled pedestrian/bicycle crossing on Foothill Boulevard at Ferrini. Improvements feature addition of a high visibility crossing markings, warning signage, and installation of a Pedestrian Hybrid Beacon (a.k.a. “HAWK”) at this intersection to provide a dedicated crossing phase for cyclists and pedestrians. Where warrants prevent the installation of standard traffic signals, the pedestrian hybrid beacon provides an alternative that provides a controlled crossing phase for pedestrians and bicyclists, but stops road traffic only as needed.

- **Ramona Drive to Foothill Boulevard Class I Path** – This project is aimed at addressing the difficult walking and bicycling environment along Ramona and Foothill due to high traffic volumes and speeds. Limited bicycle accommodations at the Foothill/Broad intersection and lack of other controlled crossings along Foothill further impact connectivity between the neighborhoods north and south of Foothill. The proposed improvements include construction of a Class I Bicycle/Pedestrian Path along the eastern edge of the Church of Jesus Christ of Latter-Day Saints (LDS) property between Ramona and Foothill. This will provide a low-volume/low-stress alternative to Broad and Foothill. At the north end, this path will align with the enhanced crossing proposed at Foothill & Ferrini. Implementation of this project would require an agreement between the City and LDS Church for an access easement or right-of-way acquisition.
II. Project Description

A variety of route alignments and design features were considered in developing the final concept for the Anholm Bikeway. The final recommended project includes the following primary features:

- **Route Alignment:** Starting from Monterey Street (Mission Plaza) at the south end, the designated route follows Chorro Street north to Mission Street; Mission Street west from Chorro to Broad Street; Broad Street from Mission north to Ramona Drive; Ramona Drive west to a proposed SRTS Class I Pedestrian/Bicycle Path, then north to connect with a planned enhanced bicycle/pedestrian crossing at the Foothill Boulevard/Ferrini Drive intersection. The alignment of the designated route is intended to maintain a convenient, direct path for bicyclists and pedestrians, while avoiding the steeper uphill grades on Broad (south of Mission) and Chorro (north of Mission).

- **Bicycle Facilities:** The Recommended Project includes addition of protected or buffered bike lanes along 80+ percent of the route between Downtown and Ramona Drive, and a dedicated SRTS Class I Bicycle/Pedestrian Path from Ramona to Foothill Boulevard to complete the continuous low-stress bicycle and pedestrian corridor. Protected bike lanes place a physical barrier between drivers and bike riders to improve safety and comfort for cyclists—particularly for less experienced riders and for the many people who are interested in biking more, but have concerns about the safety of sharing the road with busy motor vehicle traffic. For the short segments of the route where protected bike lanes are not feasible, elements such as traffic calming, enhanced pavement markings and signage are proposed to clearly communicate that these street segments are prioritized for lower-speed bicycle travel.

- **Traffic Calming:** Traffic calming measures, such as speed humps/raised crossings and corner bulbouts are proposed along the bikeway corridor to address speeding issues that currently exist. The intent of these measures is to reduce motor vehicle speeds to a range consistent with the posted speed limits of these streets (25 mph or less) and to a level more conducive to a walkable, bikeable and livable residential neighborhood.

- **Crossing Enhancements:** Intersection crossing enhancements are proposed at several intersections to improve access, safety and comfort for pedestrians, bicyclists and drivers. Crossing enhancements include installation of accessible curb ramps, raised crossings, enhanced crosswalk markings and corner bulbouts.

- **Other Features:** Other important features of the proposed project include street lighting enhancements, sidewalk improvements, streetscape enhancements and green street elements, where feasible, to improve stormwater management within the study area.

Figure 3 summarizes the project route alignment and key features, while Figure 4 shows the typical street cross sections along the route. Specific design elements are discussed in further detail below and analysis of the project’s advantages and trade-offs is included in Section III of this document.

For detailed concept drawings of full Anholm Bikeway Alignment, see Appendix A.
Anholm Bikeway Plan

III. Analysis of the Project

September 2018

Figure 3: Project Summary Map
Figure 4: Recommended Typical Street Cross Sections

NOTE: Street cross section widths represent typical dimensions along designated segments. Details may vary in final designs.
III. Analysis of the Project
Figure 4: Recommended Typical Street Cross Sections (cont.)

NOTE: Street cross section widths represent typical dimensions along designated segments. Details may vary in final designs.

III. Analysis of the Project
III. Analysis of the Project

Figure 4: Recommended Typical Street Cross Sections (cont.)

NOTE: Street cross section widths represent typical dimensions along designated segments. Details may vary in final designs.
Design Elements

The project includes a suite of mobility and safety tools that benefit various road users. Key elements of the project are summarized in Table 2 below, while detailed design features are shown on the plan sheets in Appendix A.

### Table 2: Project Design Elements

<table>
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<th>Design Element</th>
<th>Description</th>
<th>Benefits</th>
<th>Mode Affected</th>
<th>Location</th>
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<tbody>
<tr>
<td><strong>SIGNAGE</strong></td>
<td>• Signs create the basic elements of a priority bikeway. Types of signage often include standard lane/route signs, branded gateway or trailblazer signs, and wayfinding signage to guide users to key destinations and other bicycle routes.</td>
<td>• Helps brand street segment to differentiate from other streets and reinforce the message of priority for bicycles along a given route.</td>
<td>• Bicyclists&lt;br&gt;• Pedestrians</td>
<td>• Applied at major street crossings, entry points to the bikeway and at key junctions with other bicycle routes</td>
</tr>
<tr>
<td><strong>HIGH-VISIBILITY CROSSING STRIPING &amp; SIGNS</strong></td>
<td>• &quot;Ladder&quot; crosswalk striping, dashed bike lanes or shared lane markings through intersections, and other forms of high-visibility striping and signage.</td>
<td>• Improves visibility of crossings to all roadway users. Can improve driver yield rates compared to standard crossing markings.</td>
<td>• Bicyclists&lt;br&gt;• Pedestrians&lt;br&gt;• Motor Vehicles</td>
<td>• Applied at major street crossings along the designated project corridor, such as Broad/Ramona, Chorro/Mission, Chorro/Lincoln.</td>
</tr>
<tr>
<td><strong>GREEN PAINT</strong></td>
<td>• Green roadway surface coloring to mark merging zones and potential conflict areas between bicycles and other roadway users. • Can also be used as backing for sharrows and within intersection crossing markings for bicyclists.</td>
<td>• Increases visibility of bicycle facilities. • Alerts drivers and bicyclists to potential conflict areas. • Provides branding and wayfinding for cyclists along priority bicycle routes.</td>
<td>• Bicyclists&lt;br&gt;• Motor Vehicles</td>
<td>• Applied within bicycle-vehicle conflict areas through key intersections. • Green backed sharrows provided along shared street segments to indicate priority for bicyclists. • Installed at entry points to protected bikeways to prevent accidental motor vehicle entry.</td>
</tr>
</tbody>
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### Table 2: Project Design Elements

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<tr>
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<th>Description</th>
<th>Benefits</th>
<th>Mode Affected</th>
<th>Location</th>
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</table>
| **PROTECTED BIKE LANES**       | • On-street bikeway with physical separation from motor vehicle traffic and distinct from the sidewalk. May be one-way or two-way, and may be at street level or sidewalk level.  
                                  | • Physical separation can be provided through a variety of design features, including raised curbs, on-street parking, delineator posts, bollards or planters. | • Creates a physical barrier between bicycles and motor vehicle traffic lanes.  
                                  |                                  | • Provides the safety and comfort of off-street bicycle path with the on-street infrastructure and connectivity of a bike lane.  
                                  |                                  | • Removes slower-moving cyclists from auto travel lanes, simplifying conditions for drivers. | Bicyclists          | Proposed along street segments where high vehicle speeds/volumes create a high-stress environment for bicyclists.  
                                  |                                  |                                                                                                      | Motor Vehicles      | Proposed Segments:  
                                  |                                  |                                                                                                      |                     | • Chorro – Palm to Mission  
                                  |                                  |                                                                                                      |                     | • Broad (SB) – Mission to Ramona  
                                  |                                  |                                                                                                      |                     | • Ramona – Broad to Class I Path  

| **BUFFERED BIKE LANES**        | • Conventional bike lanes with the addition of a designated buffer space separating the bicycle lane from the adjacent motor vehicle travel and/or parking lane. | • Provides greater separation between motor vehicles and bicyclists. | Bicyclists          | Existing bike lane buffers on Chorro extended between Palm and Lincoln.  
                                  |                                  |                                                                                                      |                     | • SB Broad – Mission to Ramona (near-term may include striped buffers only w/ potential for physical separation in later phase)  

| **CURB EXTENSIONS (BULB-OUTS)** | • Extension of the sidewalk or curb face into the parking lane at an intersection or mid-block location. | • Reduces crossing distance and exposure area for pedestrians crossing at intersections.  
                                  |                                  | • Provides better visibility between pedestrians and motorists.  
                                  |                                  | • Potential to calm traffic and reduce vehicle turning speeds.  
                                  |                                  | • Provides area for potential streetscape and/or green street enhancements. | Pedestrians          | Proposed at Broad/Ramona, Broad/Meinecke, Chorro/Walnut, Chorro/Peach  
                                  |                                  |                                                                                                      | Motor vehicles      | Considered at additional locations in long-term as funding allows  
                                  |                                  |                                                                                                      |                     |
### Table 2: Project Design Elements

<table>
<thead>
<tr>
<th>Design Element</th>
<th>Description</th>
<th>Benefits</th>
<th>Mode Affected</th>
<th>Location</th>
</tr>
</thead>
<tbody>
<tr>
<td>STREET LIGHTING</td>
<td>• Well-designed street lighting provides a continuous, sufficiently lit pathway for motorists, bicyclists and pedestrians.</td>
<td>• Improves nighttime visibility for all road users and provides perceived safety benefits for neighbors.</td>
<td>• Bicyclists</td>
<td>• Proposed along Chorro, Broad and Ramona where existing street light spacing does not meet City Engineering Standards.</td>
</tr>
<tr>
<td>SPEED HUMPS / CUSHIONS</td>
<td>• Speed humps are traffic calming devices that use vertical deflection (typically 2-4 inches high) to slow motor vehicle traffic. • Variations include speed cushions, which include cutouts specifically designed to allow wide-axle emergency vehicles to pass through unimpeded.</td>
<td>• Provides traffic calming benefits, which enhances neighborhood quality and improves safety for all users. • Speed cushions reduces motor vehicle speeds with little impact to emergency vehicles or bicyclists.</td>
<td>• Bicyclists</td>
<td>• Existing low-deflection speed humps on Broad between Mission and Meinecke proposed to be retained with potential for future replacement with more effective speed humps/cushions.</td>
</tr>
<tr>
<td>SIDEWALK IMPROVEMENTS &amp; ACCESSIBLE CURB RAMPS</td>
<td>• Safe, accessible, continuous, and well-maintained sidewalks and curb ramps are necessary to provide an environment that encourages walking for people of all ages and abilities.</td>
<td>• Improves accessibility and connectivity for pedestrians of all ages and ability levels.</td>
<td>• Pedestrians</td>
<td>• ADA-compliant curb ramps proposed at several intersections along Broad and Chorro Streets where currently missing. • Sidewalk installation proposed along west side of Broad Street where currently missing.</td>
</tr>
<tr>
<td>GREEN STREET ELEMENTS</td>
<td>• Green streets incorporate a variety of design elements, such as street trees, permeable pavements, bioswales or other landscaping and plantings that improve stormwater management.</td>
<td>• Provides benefits such as improved drainage, filtering of stormwater runoff, reduced heat island effect and a more pleasant and visually appealing environment for walking and biking.</td>
<td>• Pedestrians</td>
<td>• Within widened sidewalks, corner bulbouts and within raised median as part of long-term protected bikeway separation.</td>
</tr>
</tbody>
</table>
Chorro Undercrossing Safety & Placemaking Enhancements

As part of the community outreach process for this project, staff received several requests from residents for safety improvements along the Chorro Street undercrossing of Highway 101. Although this location serves as a key gateway into Downtown San Luis Obispo, the underpass currently lacks lighting or other amenities needed to provide a comfortable, attractive environment for pedestrians and cyclists at night. This plan recommends installation of safety lighting and potential streetscape improvements to enhance the pedestrian environment under the highway. If construction of these improvements is not feasible as part of Anholm Bikeway Plan implementation—which is possible considering the required costs, design challenges, and need for Caltrans approval/participation for work within the State right-of-way—these improvements could potentially be designed and constructed as part of another City program, such as the newly-created New Streetlight Installation Program, or as a stand-alone capital improvement project.
Bicycle and Pedestrian Intersection Crossing Enhancements

The proposed project includes focused improvements at several intersections to provide wayfinding guidance for cyclists, and to improve crossing safety for pedestrians and bicyclists. Recommended treatments include green pavement markings within potential vehicle-bicycle conflict areas, directional pavement markings to convey the path for bicyclists to follow when entering/exiting two-way protected bikeways, corner bulbouts to shorten crossing exposure for pedestrians, and high-visibility crosswalk markings to improve driver awareness of pedestrians at key crossing locations.

Improvements are recommended at Chorro/Walnut to improve crossing safety for bicyclists and pedestrians.

Bulbouts, widened sidewalks, high-vis crosswalk markings and other pedestrian improvements at Broad/Meinecke/Ramona

Green paint and enhanced pavement markings at intersections such as Chorro/Lincoln highlight potential vehicle-bicycle conflict areas, help with bicycle wayfinding and convey proper positioning for bicyclists entering dedicated bike lanes.
Designing for Bicyclists of All Ages and Ability Levels

As mentioned previously, the City has established goals to increase mode share for alternative forms of transportation, including goals to increase bicycle mode share from current levels (6-8%) to 20%. Many community benefits are achieved by increasing mode share for active forms of transportation (walking and biking), from benefits to community health with increased physical activity, to contributions towards reducing parking demand, traffic congestion, fuel consumption and greenhouse gas emissions. To achieve these mode shift goals, it is important to first understand existing travel behavior within the community and the primary barriers that prevent residents, employees and visitors from bicycling more often. Even in the absence of actual collision trends or safety deficiencies on a given street, surveys show that the perception of risk or unsafe facilities is often the most significant barrier to bicycling for the majority of community members.

For the purposes of bicycle system planning, the general population of a community can be classified into four types of transportation bicyclists. These four types of users and the corresponding percent of City of San Luis Obispo residents who identify with each classification, as estimated based on local travel survey data, are summarized in Figure 5.4

As shown in Figure 5, 18% of San Luis Obispo residents fall within the “No Way No How” category—they do not currently bicycle and have little interest in doing so. Similarly, 18% fit the “Strong and Fearless” description, and will likely bike regardless of what facilities are provided. The remaining population (64% of all residents) fall into the “Enthusiastic and Confident” or “Interested but Concerned” categories—less experienced riders who are interested in bicycling for transportation, but do not feel comfortable riding in mixed traffic on most streets, or even within striped bike lanes on busier streets. Not all bicycle facilities are created equal—a painted line dividing cyclists from busy motor vehicle lanes, or sharrows placed within a travel lane on a high-traffic/speed street might be acceptable for “Strong and Fearless” riders, and perhaps some “Enthusiastic and Confident” cyclists. However, the remaining people interested in cycling—somewhere between 31% and 64% of city residents—will generally choose to drive if the type of low-stress bike facilities that they feel safe using—separated and protected bikeways—are not available.

If the City is to meet its goal to reach 20% bicycle mode share, it stands to reason that strategic investments should be made in the types of bicycle infrastructure that have been proven to attract users of all ages and ability levels.

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Figure 5: Types of Transportation Bicyclists in San Luis Obispo

Facilities with physical separation from vehicles, or shared streets with low traffic volumes and speeds, like bicycle boulevards, provide the potential to not only benefit the existing rider population, but expand it significantly by attracting the “Enthusiastic and Confident” and “Interested but Concerned” riders.

Why Protected Bike Lanes

While protected bike lanes—also commonly referred to as “cycle tracks” or Class IV Bikeways (per Caltrans standard bikeway classification)—are a new type of facility for the City of San Luis Obispo, their benefits in terms of safety and potential to increase bicycle ridership are well-documented. Protected bike lanes have been a best practice in street planning for decades in many European cities, such as Amsterdam and Copenhagen, where nearly 40 percent of citywide trips are made by bicycle. Over the past decade, more and more North American cities have been building these types of facilities, with over 400 protected bike lane installations in over 100 U.S. cities as of 2017. Why are more and more cities building protected bike lanes? The following statistics provide some explanation.5

- Increased Bicycle Ridership – New protected bike lanes have been found to boost bike volumes by an average of 75 percent in the first year alone. Following the City of Calgary’s recent rollout of a four-mile network of protected bike lanes as a pilot project, bicycle ridership along these routes doubled in the first three months, including a 30 percent increase in female riders. Throughout the downtown, bicycle ridership increased by 40 percent during the pilot project.

- Attractive to Less Experienced Riders – Surveys find that 80% or more of “Interested but Concerned” bicyclists would be comfortable riding in protected bike lanes—a significantly higher percent compared to those who would be comfortable riding in standard bike lanes (39%) or streets with no bicycle facilities (8%).

- They Can Make Biking Safer – Installing a protected bike lane on a street cuts the injury risk per bike trip by 30 percent (two-way bikeway) to 50 percent (one-way bikeway).

- Reduces Some Types Unsafe Behavior – Adding a protected bike lane cuts sidewalk riding by 56 percent on average (sidewalk and wrong-way riding accounts for 16 percent of San Luis Obispo bicycle collisions).

- Pedestrian Safety – Protected bike lanes can calm traffic and reduce crossing distances for pedestrians. With the installation of protected bike lanes along several streets, New York City reported a reduction in traffic injury rates—mostly reflective of pedestrian injuries—of 12 to 52 percent.

This Plan proposes installation of protected or separated bikeways along 70 percent of the proposed Anholm Bikeway Route.

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5 Statistics referenced from People For Bikes (www.peopleforbikes.org) and The Green Lane Project (www.greenlaneproject.org).
Future Components

There are several improvements that have been requested by the community, presented in other plans, or recommended by staff that relate to the Anholm Bikeway Plan, but due to costs or other constraints, are not recommended at this time. These improvements may be studied further and potentially implemented in the future as part of other City programs or as stand-alone projects. These include the following:

- **Closure of Highway 101/Broad Street Ramps & Grade-Separated Pedestrian/Bicycle Crossing of Highway 101** – As discussed previously, the project description for the Broad Street Bicycle Boulevard in the 2013 BTP identifies a future grade-separated bicycle/pedestrian crossing of Highway 101 at Broad Street. Implementation of this crossing will require the ultimate closure of the Broad Street ramps by Caltrans, which according to recent studies by the City and Caltrans will not be feasible for the foreseeable future due to resulting impacts to the adjacent interchange at Santa Rosa (Highway 1) and nearby city streets. Major improvements would be needed to address the anticipated impacts at the Santa Rosa (Highway 1) interchange—due to the significant costs associated with these improvements, this is not feasible at this time. In addition, construction of a new grade-separated crossing of Highway 101 at Broad Street—most likely a bridge over the highway—would involve significant costs (estimated at several million dollars in the 2013 BTP), which further limits the feasibility of these improvements at this time. Since the southern portion of the Anholm Bikeway alignment follows Chorro Street into Downtown, including installation of protected bike lanes along this stretch, the ultimate utility and need for a new crossing at Broad Street and Highway 101 is likely reduced. This improvement is not included as part of the Anholm Bikeway Plan at this time, but the City will continue to work with Caltrans to pursue closure of the Broad Street ramps, and will reevaluate the potential for a pedestrian/bicycle crossing at this location in future years if closure of the ramps becomes feasible.

- **Safety Improvements at Chorro & Peach Intersection** – The intersection of Chorro and Peach has been identified as a high collision-rate intersection in the City’s annual Traffic Safety Report in several recent years, with a propensity for auto vs. auto broadside collisions due to unsafe east/west turning and through movements from Peach Street onto Broad Street. Several potential safety improvements have been evaluated for this location, such as relocation of a utility pole that impacts sight distance for drivers, installation of a neighborhood traffic circle, or turn restrictions, but due to the challenging constraints at this intersection, improvements have yet to be implemented. While the Anholm Bikeway Plan proposes striping improvements and accessible curb ramps to enhance bicycle and pedestrian crossing safety this intersection, more substantial improvements will need to be implemented as part another program—likely through the City’s Traffic Safety (Vision Zero) program.

- **Gateway Treatments** – Ideally, the Anholm Bikeway will serve as a key bicycle and pedestrian gateway into Downtown San Luis Obispo—for residents, students, workers and visitors. With the many proposed downtown revitalization strategies envisioned in the recently-approved Downtown Concept Plan and Mission Plaza Concept Plan, there will likely be additional interest and support for enhancing this northern gateway into Downtown. While not evaluated in detail or included in the project designs or cost estimates as part of the Anholm Bikeway Plan, it is recommended that additional gateway landmarks, such as attractive entry signage and artwork, or a bicycle/pedestrian count display be considered as part of future improvements to further formalize the Anholm Bikeway corridor and visually communicate the importance of this route as a priority street for multimodal travel.

Count Totems display real-time bicycle and pedestrian volumes along gateway points to key routes. Displays can be customized and configured to show cumulative totals over the course of a year towards a year-end target.
III. Analysis of the Project

Traffic Access & Circulation

The City evaluates vehicular traffic impacts based on roadway segment and intersection congestion/delays as measured using auto Levels of Service (LOS)6, as well as using established maximum daily traffic volume thresholds for residential streets to assess traffic impacts to neighborhood quality of life. For the purposes of assessing potential traffic impacts in conjunction with the Anholm Bikeway project, convenience of property access, collision trends, and potential impacts to emergency services are also considered. To guide this analysis, traffic data was collected in 2016 and 2017, including intersection and roadway volumes (autos, pedestrians and bicycles), speed survey data and collision reports for the most readily available five-year period. Existing traffic data and detailed traffic analysis findings are summarized in Appendix B.

Roadway Segment and Intersection Levels of Service

The Recommended Project does not include any features that modify traffic circulation, access or emergency vehicle operations, and is expected to have a negligible impact on vehicular traffic capacity/throughput. For these reasons, roadway segment and intersection operations are anticipated to remain similar to existing conditions. The City has adopted an automobile level of service performance target of LOS D or better for streets affected by the proposed project. For reference purposes, AM and PM peak hour traffic operations were reviewed at intersections and roadway segments along the proposed bikeway route—all study facilities currently operate at acceptable LOS.

Neighborhood Traffic

The City evaluates potential neighborhood traffic impacts by comparing Average Daily Traffic (ADT) volumes and speeds along residential streets with the corresponding maximum ADT and speed targets established in the City General Plan Circulation Element.7 A proposed project would potentially trigger a neighborhood traffic impact if it would cause residential street traffic volumes or speeds to exceed these established thresholds, or if the project further increases traffic volumes on a street that already exceeds the maximum thresholds under existing conditions. As shown in Table 3, existing traffic levels on Chorro and Lincoln Streets exceed established neighborhood traffic volume thresholds. Prevailing speeds on Broad, Chorro and Lincoln Street exceed established maximum neighborhood traffic speed thresholds. The proposed project is not expected to trigger any new neighborhood traffic impacts, but has potential to reduce speeds below max thresholds along Broad Street with the traffic calming measures proposed in this plan.

<table>
<thead>
<tr>
<th>Segment</th>
<th>Street Type</th>
<th>Average Daily Traffic</th>
<th>Vehicle Speeds (mph)</th>
<th>Notes</th>
</tr>
</thead>
<tbody>
<tr>
<td></td>
<td></td>
<td>Max Threshold</td>
<td>Existing/Project Conditions</td>
<td>Desired Max</td>
</tr>
<tr>
<td>Broad Street (Meinecke - Mission)</td>
<td>Res. Collector</td>
<td>5,000</td>
<td>4,211</td>
<td>25</td>
</tr>
<tr>
<td>Broad Street (Mission - Lincoln)</td>
<td>Res. Collector</td>
<td>5,000</td>
<td>3,428</td>
<td>25</td>
</tr>
<tr>
<td>Chorro Street (Meinecke - Center)</td>
<td>Res. Collector</td>
<td>5,000</td>
<td>5,816</td>
<td>25</td>
</tr>
<tr>
<td>Chorro Street (Center - Lincoln)</td>
<td>Res. Collector</td>
<td>5,000</td>
<td>6,315</td>
<td>25</td>
</tr>
<tr>
<td>Meinecke Street (Broad - Chorro)</td>
<td>Local Res.</td>
<td>1,500</td>
<td>1,277</td>
<td>25</td>
</tr>
<tr>
<td>Mission Street (Broad - Chorro)</td>
<td>Local Res.</td>
<td>1,500</td>
<td>477</td>
<td>25</td>
</tr>
<tr>
<td>Center Street (Broad - Chorro)</td>
<td>Local Res.</td>
<td>1,500</td>
<td>217</td>
<td>25</td>
</tr>
<tr>
<td>Mountain View Street (Broad - Chorro)</td>
<td>Local Res.</td>
<td>1,500</td>
<td>170</td>
<td>25</td>
</tr>
<tr>
<td>Ramona Drive (Broad to Palomar)</td>
<td>Res. Collector</td>
<td>5,000</td>
<td>4,107</td>
<td>25</td>
</tr>
<tr>
<td>Lincoln Street (Broad - Chorro)</td>
<td>Res. Collector</td>
<td>3,000</td>
<td>4,589</td>
<td>25</td>
</tr>
<tr>
<td>Lincoln Street (Chorro to West)</td>
<td>Local Res.</td>
<td>1,500</td>
<td>417</td>
<td>25</td>
</tr>
<tr>
<td>Notes:</td>
<td></td>
<td></td>
<td></td>
<td></td>
</tr>
<tr>
<td>Speeds reported as 85th percentile speeds. Locations that exceed the City’s Maximum ADT and Speed Thresholds are highlighted.</td>
<td></td>
<td></td>
<td></td>
<td></td>
</tr>
<tr>
<td>Proposed Project traffic calming measures on Broad north of Mission anticipated to reduce prevailing speeds by 10-20%.</td>
<td></td>
<td></td>
<td></td>
<td></td>
</tr>
</tbody>
</table>

6 Level of Service (LOS) is a standard qualitative measure used to describe traffic conditions in terms of speed, travel time, delays and driver convenience. LOS is defined using letter grades “A” through “F”, with LOS A representing free-flow conditions, and LOS F representing heavy congestion with traffic demands exceeding capacity.

7 City General Plan Maximum ADT Targets: Local Streets (1,500 veh/day); Residential Collectors (3,000 veh/day), except Broad/Chorro north of Lincoln and Margarita (5,000 veh/day). Desired maximum speeds for residential streets are 25 mph.
**Driveway Access**

The proposed project is not expected to affect traffic circulation or change the ability of drivers to ingress or egress private driveways along the proposed bikeway route. However, there will likely be a learning curve for some bicyclists and drivers with the addition of protected bike lanes, which are established in many other cities, but may be unfamiliar to San Luis Obispo residents. This is particularly true along Chorro and Ramona where two-way bikeways are proposed on one side of the street and cross the path of several low-volume residential driveways. The City plans to conduct focused outreach and education prior to implementation of the proposed bikeway to address potential questions (i.e. where to place waste bins for trash collection, etc.) and provide helpful safety tips for all users. As an example, Figure 6 below illustrates how driveway ingress/egress works now, and after implementation of the proposed two-way bikeway.

<table>
<thead>
<tr>
<th>1) When exiting driveway, motorist first looks for, and yields to pedestrians walking along sidewalk from either direction.</th>
<th>2) After looking for pedestrians, motorist carefully edges into parking lane to achieve a clear line of sight for oncoming vehicles and bicyclists within the travel lanes. When all clear, motorist enters the roadway.</th>
</tr>
</thead>
<tbody>
<tr>
<td><strong>EXISTING STREET CONFIGURATION (MIXED-FLOW LANES, STREET PARKING)</strong></td>
<td><strong>PROPOSED STREET CONFIGURATION FOR CHORRO &amp; RAMONA (PARKING REMOVED FOR TWO-WAY PROTECTED BIKEWAY)</strong></td>
</tr>
</tbody>
</table>

Openings in protected bikeway physical separation will be provided at driveways and intersections to allow sufficient space for drivers to enter and exit. Proposed bikeway buffer (2.5'-3' wide) provides protected space for placing waste bins for curbside collection without obstructing bikeway or auto travel lanes.
Parking Considerations

Potential parking concerns related to the Recommended Project are evaluated by analyzing on-street parking supply and demand with and without the parking removal proposed by the project within the northern project bounded by Lincoln Street and Ramona Drive. Although the final number of on-street parking spaces impacted by the project may change slightly with final design, based on review of preliminary concepts, on-street parking loss is estimated as follows:

- **Chorro Street** – 41 spaces removed on west side from Mission to Ramona to provide two-way protected bikeway;
- **Broad Street** – 15 spaces removed on west side from Mission to Ramona to provide southbound buffered/protected bike lanes; and
- **Ramona Drive** – 17 spaces removed on north side from Broad to proposed SRTS Class I Path to provide two-way protected bikeway.

To better understand existing on-street parking conditions near these street segments, parking surveys were conducted in fall of 2017 for various days of the week and times of day during a period when local schools and Cal Poly were in session. Parking surveys included inventory of existing on-street parking supply and occupancy during various times of day throughout the vicinity of the proposed Anholm Bikeway. Parking surveys found late evening on a weeknight (12-2 AM) to be the period where on-street parking demand is typically highest—both along Chorro, Broad and Ramona, as well as within the surrounding neighborhood. This peak period was used as a baseline for evaluating project-related parking impacts.

Table 4 summarizes on-street parking conditions along the proposed bikeway route with and without the project. Parking conditions are also mapped visually in Figure 7. Street segments are highlighted red where peak occupancy exceeds 85%. A parking occupancy rate of 85%-90% is typically considered the “practical capacity” of a street, meaning that there could be a few on-street parking spaces available, but drivers may have a difficult time finding them. When parking demand exceeds the practical capacity, this can lead to drivers “cruising” around the block and increases temptation to park ilegally, which could impact neighborhood quality for residents. It should be noted that the “Available Parking within 2-Minute Walk” shown in Table 4 excludes spaces located within existing parking districts and accounts for any parking deficits/spillover from nearby street segments. See Appendix B for detailed parking analysis data.

### Summary of Parking Analysis

- With the project-proposed conversion of on-street parking lanes to dedicated bike lanes along segments of Chorro Street, Broad Street and Ramona Drive, on-street parking is anticipated to be scarce during peak periods along the following street segments:
  - **Chorro Street (Center to Venable)** – While parking is generally available under project conditions along Chorro between Lincoln and Mission (70% peak occupancy), between Center and Venable, peak occupancy increases from 62% to >100% (deficit of 3 spaces).
  - **Broad Street (Mission to Murray)** – Peak occupancy increases from 63% to 100% (0 spaces available).
  - **Broad Street (Murray to Ramona)** – Peak occupancy increases from 65% to 93% (1 space available).
  - **Ramona Drive (Broad to Palomar)** – Peak occupancy increases from 91% to >100% (deficit of 13 spaces).

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**Table 4: Peak Period On-Street Parking Conditions with and without Project**

<table>
<thead>
<tr>
<th>Street Segment</th>
<th>Existing Conditions</th>
<th>Project Conditions</th>
</tr>
</thead>
<tbody>
<tr>
<td></td>
<td>Parking Supply</td>
<td>Peak % Occupancy</td>
</tr>
<tr>
<td>Chorro St. (Lincoln to Mission)</td>
<td>81</td>
<td>35%</td>
</tr>
<tr>
<td>Broad St. (Mission to Murray)</td>
<td>28</td>
<td>68%</td>
</tr>
<tr>
<td>Broad St. (Murray to Ramona)</td>
<td>20</td>
<td>65%</td>
</tr>
<tr>
<td>Ramona Dr. (Broad to Palomar)</td>
<td>47</td>
<td>91%</td>
</tr>
</tbody>
</table>

**Notes:**
B. Street segments highlighted red represent locations where parking demand exceeds practical capacity (85-90% occupancy). When demand exceeds practical capacity, there is technically parking available, but it may be difficult to find.
C. Available on-street parking tallied within a 2-min walk (1-2 blocks). Excludes parking located within established parking districts.
D. Available parking within vicinity of Broad Street reflects reduced supply due to deficit/spillover from Ramona parking removal.

III. Analysis of the Project
III. Analysis of the Project

Figure 7: Map of On-Street Parking Conditions with and without Project
- Of the impacted street segments listed above where projected peak parking demand nears or exceeds available supply, there is generally available street parking within one to two blocks (a 1- to 3-minute walk). For the impacted segment of Ramona Drive (Palomar to Broad)—where fronting land uses include a retail shopping center and retirement community with sufficient off-street parking—much of the existing on-street parking demand appears to be related to spillover from a nearby student housing community to the west. The proposed loss of on-street parking along this segment of Ramona is estimated to displace demand for approximately 13 spaces during peak periods, shifting this demand to other streets nearby—likely east to Meinecke Street and/or further west on Ramona.

- For some residents living along street segments where parking removal is proposed, lack of readily-available on-street parking fronting their home may be perceived as an unacceptable hardship in exchange for improved bicycle facilities. Some residents who favor on-street parking currently out of convenience or due to lack of garage space\(^8\) may simply park in their garage or driveway more frequently if parking on street becomes more difficult. Informal observations made during parking data collection efforts found that on average, 30-40% of residential driveways were vacant along Chorro and Broad Streets during peak periods. Further, many occupied driveways had available capacity for one or more additional parked vehicles. That said, others living in homes with high auto ownership and/or with limited off-street garage/driveway parking will likely continue to rely on street parking and may need to walk 1-2 blocks to available parking nearby, depending time of day.

**Potential Strategies to Address Parking Concerns**

- **Residential Parking District** – If there is sufficient interest amongst Anholm residents, the City will support establishment a residential parking district to cover high parking demand areas within the neighborhood. Residential Parking Districts help manage excess on-street parking demand by requiring a city-issued parking permit to park on-street during designated hours. A limit of two permits are made available to the property owners or residents of each home within the established district. Vehicles parked on street without a permit in these areas are subject to citation. While Residential Districts are often effective at incentivizing more efficient use of off-street garage/driveway parking, they also have potential to shift excess parking demand to nearby areas outside of the district boundary. This potential shift in spillover parking will be an important consideration in establishing any new parking district. The City Parking Services Division considers requests to establish parking districts on a case-by-case basis and follows a formal process requiring public outreach opportunities, neighborhood ballots and City Council approval prior to creating new a new district or modifying boundaries or policies of an existing district\(^9\).

- **Phasing/Monitoring Strategies** – This plan includes detailed recommendations for project implementation and monitoring (see Section V). By phasing implementation of project improvements over time, considering use of low-cost temporary treatments where appropriate during initial rollout, the City will be able to monitor performance and identify potential design refinements needed prior to final construction. The monitoring plan proposes before and after parking studies to identify potential shifts in parking demand, concerns with spillover, and locations with inadequate parking supply within the neighborhood. If desired by the City Council, some parking removal could be implemented in phases to allow for additional monitoring and time for residents to adjust to parking conditions and potentially pursue formation of a Residential Parking District. For example, removal of parking along Chorro Street, where demand is lower, could be implemented in an earlier project phase, with removal of parking along higher-demand segments on Broad Street to be implemented in later phases pending results of additional monitoring studies and approval by Council.

- **Accessible On-Street Parking** – The City is not required to provide neighborhood street parking for residential uses\(^10\); however, it is important to acknowledge that there are some older residential homes along the Anholm Bikeway that were built to standards that do not meet current City requirements for number or design on-site driveway/garage parking. Loss of on-street parking could be particularly inconvenient for residents with disabilities or mobility challenges that rely on street parking due to lack of accessible off-street parking within their property. While it is ultimately the responsibility of the homeowner to comply with applicable parking and accessibility standards within their own property, the City is willing to consider limited installation of designated ADA accessible on-street parking stalls along the segments of Anholm Bikeway where parking removal is proposed as part of the project. Provision of ADA accessible on-street parking spaces for residents will be considered by request on a case-by-case basis.

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\(^8\) Studies indicate that on average, 1 in 4 (25%) Americans do not use their garage for parking, instead choosing to use this space for excess storage, personal gyms and recreational area. A 2007 UCLA research study found that percentage to be as high as 75% among surveyed middle-class homeowners in Southern California. These choices often result in more cars parked on street. [Source: http://www.latimes.com/style/la-hm-parking20mar20‐story.html](http://www.latimes.com/style/la-hm-parking20mar20‐story.html)

\(^9\) More information regarding the City of San Luis Obispo Residential Parking District Program is available here: [http://www.slocity.org/government/department-directory/public‐works/parking‐services/residential‐parking‐districts](http://www.slocity.org/government/department-directory/public‐works/parking‐services/residential‐parking‐districts)

\(^10\) Per City General Plan Policy 14.1.1 (Residential Parking Spaces): Each residential property owner is responsible for complying with the City’s standards that specify the number, design and location of off-street residential parking spaces.
Benefits to Bicycling

As mentioned in the Purpose and Need section, and as illustrated in Figure 2, existing traffic volumes and speeds along Broad and Chorro Streets exceed the levels recommended for mixed-flow conditions, where bicyclists and motor vehicles share travel lanes. While some bicyclists are comfortable riding under these conditions—over 300 bicyclists per day travel Broad, Chorro or Lincoln Streets between downtown and Foothill Boulevard—these conditions do not provide the type of bicycling environment conducive to attracting new riders of all ages and ability levels, which is needed to achieve the City’s bicycle mode share objectives.

Specific features of the Recommended Project that are expected to contribute to a high-quality, low-stress bicycling environment include:

- **Protected Bike Lanes** – Protected bike lanes are proposed along Chorro from Palm to Lincoln by extending existing bike lane buffers and installing physical separation within the buffers. North of Lincoln, a two-way protected bike way is proposed along Chorro by removing on-street parking on the west side of the street from Lincoln to Mission. A one-way protected bikeway is proposed for Broad Street southbound, climbing the slight uphill grade between Mission and Ramona. A two-way protected bikeway is proposed on Ramona from Broad to the planned SRTS Class I Bicycle/Pedestrian Path by removing on-street parking on the north side of Ramona. Protected bike lanes have been found to offer the greatest potential to attract new ridership.

- **Safe Routes to School Class I Path** – A Class I Bicycle/Pedestrian Path is proposed between Ramona and Foothill, completing the continuous low-stress bicycle connection between downtown and Foothill Boulevard. The new path will align with the planned SRTS bicycle/pedestrian crossing at Foothill & Ferrini, linking the Anholm Bikeway with the neighborhoods and destinations north of Foothill, including Bishop’s Peak and Pacheco Elementary Schools and Cal Poly. It should be noted that completion of this path is contingent on the City establishing an easement or right-of-way agreement with the LDS Church.

- **Route Signage & Pavement Markings** – Bicycle route signs are proposed at several points along the route to provide wayfinding for cyclists and to brand the route as a priority bicycle street. Dashed roadway centerlines are proposed along Broad Street to allow drivers to safely (and legally) pass cyclists.

- **Enhanced Crossing Markings & Green Paint** – Enhanced crossing markings and green paint are proposed through key intersection crossings to help bicyclists navigate the designated Anholm Bikeway route and to increase visibility of bicycle-vehicle conflict areas.

- **Traffic Calming Elements** – Traffic calming elements are included along Broad Street between Mission and Ramona to reduce speeding and improve conditions for bicyclists, pedestrians and residents along this street. Traffic calming elements include a raised crossing at Broad/Murray, potential replacement of the existing speed humps/cushions, corner bulbouts at the intersections of Broad/Meinecke/Ramona and Chorro/Walnut.

To evaluate the bicycling environment along the Anholm Bikeway, a bicycle Level of Traffic Stress (LTS) analysis was conducted for street segments along the proposed corridor. “Traffic stress” is the perceived sense of danger associated with riding in or adjacent to vehicular traffic and is one of the greatest deterrents to bicycling. A bicycle LTS analysis is an objective, data-driven approach to evaluating bikeways that correlates measurable factors such as roadway design, traffic volumes and motor vehicle speeds to typical bicyclist perceptions of comfort and willingness to use a given facility. LTS scoring is designed to correspond with the “Four types of Bicyclists” categories (referenced previously in Figure 5), with a range of LTS 1 to LTS 4 representing conditions from lowest stress (LTS 1) to highest stress (LTS 4). In general, bikeways are considered low stress where there is little interaction between cyclists and motor vehicles (i.e. a shared low-volume/speed local street), or where greater degrees of

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11 LTS analysis applied using methodology developed by the Mineta Transportation Institute Report II-19: Low-Stress Bicycling and Network Connectivity (2012).
physical separation are provided between a bikeway and motor vehicle traffic (i.e. protected bike lanes or off-street path). LTS scores are defined in Table 5 below, while LTS scores are mapped for the proposed Anholm Bikeway route in Figure 8 for conditions with and without the proposed project.

Table 5: Level of Traffic Stress (LTS) Definitions and Types of Bicyclists

<table>
<thead>
<tr>
<th>LTS Level</th>
<th>Description</th>
<th>Will This Type of Bicyclist Ride on This Facility?</th>
</tr>
</thead>
<tbody>
<tr>
<td>LTS 1</td>
<td>Comfortable for All Ages and Abilities</td>
<td>Strong and Fearless: Yes</td>
</tr>
<tr>
<td></td>
<td>Presenting little traffic stress and suitable for almost all people riding bicycles, including children trained to ride in the street. Bicyclists are either physically separated from motor-vehicle traffic, in a dedicated bike lane on a two-lane street next to a slow traffic stream, or on a shared street where they interact only occasionally with motor vehicles with a low speed differential. Intersections are easy to approach and cross.</td>
<td></td>
</tr>
<tr>
<td>LTS 2</td>
<td>Comfortable for Some Adults</td>
<td>Strong and Fearless: Yes</td>
</tr>
<tr>
<td></td>
<td>Presenting moderate traffic stress. Suitable for most adults, but demanding more attention than might be expected from children. Bicyclists are typically either physically separated from traffic or are in a dedicated bike lane next to a well-confined traffic stream with adequate clearance from moving traffic and on-street parking, or on a shared street where they interact only occasionally with motor vehicles with a low speed differential. Intersections are easy to approach and cross for most adults.</td>
<td></td>
</tr>
<tr>
<td>LTS 3</td>
<td>Comfortable for Confident Cyclists</td>
<td>Strong and Fearless: Yes</td>
</tr>
<tr>
<td></td>
<td>More traffic stress than LTS 2, yet markedly less than the stress of integrating with multilane or high-speed/volume traffic. Offering bicyclists either a dedicated bike lane next to moderate-speed traffic or shared lanes on streets that are not multilane and have moderately low speed. Crossings may be longer or across higher-speed roads than allowed by LTS 2, but are still considered reasonably safe for many adult pedestrians.</td>
<td></td>
</tr>
<tr>
<td>LTS 4</td>
<td>Uncomfortable for Most</td>
<td>Strong and Fearless: Yes</td>
</tr>
<tr>
<td></td>
<td>A level of stress beyond LTS 3. Includes roads that have no dedicated bicycle facilities and moderate to high vehicle speeds and volumes, as well as those with dedicated bicycle lanes but on high-speed/volume roads where there is a significant speed differential. Crossings are challenging and involve multiple lanes of traffic at higher speeds and volumes where gaps may be infrequent, and motorists may not readily yield. Suitable for the “strong and fearless” only.</td>
<td></td>
</tr>
</tbody>
</table>


*See Section II of this plan for definition of four types of bicyclists.
Figure 8: Level of Traffic Stress Map with and without Project

As shown above, under existing (“No Build”) conditions, most of the proposed bikeway route scores as LTS 3 or LTS 4—the higher levels of traffic stress. These streets will likely be comfortable advanced and experienced adult cyclists, but may present an intimidating environment for children and less-experienced adult cyclists. With implementation of the proposed project improvements, nearly all of the Anholm Bikeway route scores as LTS 1 or LTS 2, proving a low-stress bicycling environment that should appeal to users of all ages and ability levels. South of Palm Street, Chorro Street will continue to score as LTS 4 where the dedicated bike lanes end and cyclists are required to operate in a shared street environment with heavier traffic volumes. While bicyclists traveling northbound on Broad between Mission and Ramona will operate in mixed traffic, similar to current conditions, project-proposed traffic calming improvements and addition of a dashed center line to allow drivers to more comfortably pass cyclists will improve conditions for cyclists and improve the level of stress score to LTS 2 along this segment.
Benefits to Pedestrian & Streetscape Environment

Connectivity, accessibility, safety and comfort are all important components of a quality pedestrian environment. While many of the primary features of the Anholm Bikeway project focus on improving conditions for bicyclists, the recommended project designs also include substantial elements to improve the quality of the pedestrian environment between downtown and Foothill Boulevard. The project includes the following features to improve the pedestrian environment:

- **Elimination of Sidewalk Gaps** – The project recommends installation of sidewalks along Broad Street where gaps currently exist in the pedestrian network, particularly on the west side of Broad Street.

- **Accessible Curb Ramps** – ADA-compliant curb ramps are currently lacking at several intersections along Broad and Chorro Streets. The project includes the ultimate construction of new ADA curb ramps at each intersection along the designated route where they are currently lacking.

- **Intersection Crossing Enhancements** – The project includes elements intended to improve pedestrian crossing safety and comfort at intersections. Enhanced crosswalk markings are recommended at key crossing locations, such as Chorro & Lincoln and Broad & Ramona. Corner bulbouts are proposed at several intersections along the Anholm Bikeway route, including at Chorro & Walnut, Broad & Meinecke, and Broad & Ramona. Bulbouts provide several benefits to pedestrian safety and comfort, including potential to slow motor vehicle turning speeds, shorten pedestrian crossing distances and increase visibility of pedestrians waiting to cross. A raised crossing is recommended at Broad & Murray to reduce speeds and encourage motorists to yield to pedestrians crossing the intersection.

- **Potential for Streetscape Enhancements and Green Street Elements** – The project includes potential to improve the streetscape aesthetics and incorporate green street elements at several locations. Locations where corner bulbouts are proposed, such as at Broad & Ramona and Broad & Meinecke, there will be additional sidewalk area available to incorporate landscaping and/or drainage improvements to reduce demand on the stormwater system during rain events, which is particularly important considering the proximity of Brizzolara and Old Garden Creeks. Depending on funding constraints during the initial installation, locations where protected bike lanes are proposed can include interim features like planter boxes that not only provide physical separation from motor vehicle traffic, but provide opportunities to further beautify the Anholm Neighborhood, where attractive landscaping and lush, well-maintained gardens are commonplace. Ultimately, a raised concrete median is proposed to separate bike facilities from motor vehicle traffic and will have potential for permanent landscaping and stormwater management features.
• **Buffer from Motor Vehicle Traffic** – The protected bike lanes proposed for Chorro, Broad and Ramona have potential to improve not only the bicycling environment, but the pedestrian environment as well. Protected bike lanes create a continuous buffer between sidewalks and motor vehicle travel lanes—a buffer that improves pedestrian comfort that can be lacking along streets where on-street parking lanes do not exist, or have low utilization. Protected bike lanes can also visually narrow the perceived roadway width for drivers, which can help reduce motor vehicle speeds. Because the potential risk for severe injury or death in pedestrian vs. motor vehicle collisions increases exponentially as vehicle speeds increase, it is important to endeavor to achieve speeds within the project study area conducive to a walkable, residential district (25 mph or less).

• **Street Lighting** – The project recommends installation of new streetlighting at the Highway 101/Chorro undercrossing, and at several locations along Broad, Chorro and Ramona where existing lighting does not meet City standards. Pedestrian-scaled street light poles are proposed for the Highway 101/Chorro undercrossing, while an additional six (6) cobra-head LED street lights are proposed to be mounted to existing power poles throughout the neighborhood so that the corridor lighting is consistent with City standards. Existing and proposed street lighting are shown in Figure 9.
Neighborhood Quality Considerations

When evaluating the potential benefits and trade-offs of the Anholm Bikeway project, it is important to not only assess the effects of the project on users traveling through the planned route, but to also consider the specific effects—both positive and negative—on the neighborhood that the proposed bikeway travels through. Potential positive and negative impacts on neighborhood quality associated with the Anholm Bikeway are summarized as follows:

**Potential Benefits to Neighborhood Quality**

- **Traffic Volumes and Circulation Unchanged** – The project includes design elements that retain existing traffic circulation and access within the Anholm neighborhood, creating little-to-no impact on vehicular traffic, property access or emergency service response.

- **Improved Safety Lighting** – To address concerns with lack of night lighting within the Anholm neighborhood, the Recommended Project includes addition of pedestrian-scaled street lighting at the Highway 101/Chorro undercrossing, as well as addition of several energy efficient LED street lights on Chorro, Broad and Ramona to fill in the gaps in the lighting network and provide a continuously lit path that bicyclists, pedestrians and drivers can feel safe navigating at night. The new street lights will be spaced consistent with City standards for residential streets and will provide a level of illumination consistent other streetlights within the existing neighborhood.

- **Traffic Calming** – High motor vehicle traffic volumes and speeds can negatively impact the neighborhood quality along a residential street. As shown previously in the Neighborhood Traffic Assessment section, the proposed project includes traffic calming features to reduce speeding along Broad Street. The addition of physically protected bikeways on Chorro and Ramona is also likely to reduce the perceived width of the roadway, which can provide traffic calming benefits. In addition, a monitoring plan will be implemented after installation of the initial project elements to observe traffic volumes and speeds within the study area to identify if additional traffic calming measures are warranted in the future.

- **Improved Walkability** – The Recommended Project includes addition of accessible curb ramps, enhanced intersection crossings, reduced sidewalk gaps and other amenities to contribute to a quality walkable neighborhood environment.

- **Bicycle vs. Motor Vehicle Conflicts** – Both motorists and bicyclists have expressed frustration with current conditions along Broad and Chorro Streets north of Lincoln, where drivers and bicyclists are required to share the travel lanes. Motorists are inconvenienced when following slower-moving bicyclists, and bicyclists are uncomfortable getting tail gated or passed frequently by fast-moving traffic. The project provides dedicated bicycle lanes along the majority of the proposed bikeway route, removing slower moving bicyclists from the motor vehicle lanes and providing physical separation for bicyclists from motor vehicle traffic. Where shared street conditions remain along northbound Broad Street, a dashed centerline will be added to promote safe (and legal) passing of bicyclists.

- **Benefits of a Walkable, Bikeable Neighborhood** – The benefits of high-quality pedestrian and bicycle infrastructure are well-documented, from community health benefits associated with increased opportunity for physical activity, to reduced traffic congestion and improved safety for all road users. Investment in pedestrian and bicycle infrastructure has also been found to provide economic benefits for properties located within proximity of these facilities. Current studies on the economic impacts of active transportation infrastructure have found that homes in walkable neighborhoods and within close proximity to high-quality separated bicycle facilities have higher sale prices on average than homes located in areas without these features. Further, corridors where protected bike lanes have been installed have seen either no change or increases in retail sales.12

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Aesthetics – The residents of the historic Anholm District clearly take pride in their neighborhood, with attractive street trees, landscaping and beautiful gardens lining each street. The design of the proposed project will include elements that are intended to compliment the unique aesthetics of the existing neighborhood. Sidewalk improvements and corner bulbouts will provide potential to install additional landscaping and/or green street treatments and the City will consider the aesthetic context of the neighborhood when considering new guide signage and treatments/materials for both the interim and long-term physical separation along the protected bikeways. For the initial protected bike lane installation, planter boxes may be considered within the bike lane buffers, with potential for an “adopt a planter” program where residents can apply to install and maintain their own unique plantings, including flowers or vegetables. For the long-term installation, the City plans to install a raised median within the bike lane buffers, providing the opportunity for permanent planter beds, bioswales or other green street features if sufficient funds are available.

Potential Neighborhood Quality Concerns

Loss of On-Street Parking – While on-street areas are part of the public street right-of-way, this parking can often be viewed as a valuable amenity for private property owners and residents. Some residents prefer to park on-street out of convenience—to provide additional garage space for storage, to avoid backing out of their private driveway, or to park closer to their front door. For others, parking on-street is a necessity due to lack of adequate parking area within their property. To provide width for dedicated bicycle facilities and to improve safety at intersections, the project includes partial removal of on-street parking on segments of Broad Street, Chorro Street and Ramona Drive. While conversion of a portion of the public street width from parking to dedicated bicycle facilities was determined by the City Council to be a worthy trade-off, some residents will certainly see this as a significant inconvenience and impact to their neighborhood quality. A detailed discussion of parking impacts and mitigation strategies is included in the “Parking Considerations” section above, and in Appendix B.

Learning Curve with New Types of Bike Facilities – In other places where protected bike lanes have been installed, bicycle activity has increased—often significantly. Some residents of the Anholm neighborhood have expressed concern that the proposed two-way bikeway will be unfamiliar to drivers and the potential increase in bicycling activity will lead to increased collisions or accidental use of the bike lanes by motor vehicles, affecting overall neighborhood quality. While current studies have found that safety for all road users typically improves with installation of protected bike lanes and bicycle vs. motor vehicle collision rates most often decrease when more bicyclists are present on a given route, this will likely remain a concern from some residents of the Anholm neighborhood until residents become accustomed to the proposed street changes. Still, the design of the bikeway will carefully consider best practices for two-way protected bikeway design—ensuring that adequate sight lines are provided at intersection and driveway conflict areas, and providing enhanced markings and signage to improve the visibility of areas with higher potential for conflicts between drivers and bicyclists. In addition, the City plans to mail out “fact sheets” to residents of properties fronting the bikeway to provide guidance regarding potential areas for confusion (i.e. where to place waste receptacles on collection day, where not to park, safety tips for bicyclists and drivers).

Overall Ability to Support Project Goals & Objectives

The Anholm Bikeway Plan diverges from the concept originally envisioned for this route in the 2013 BTP, as the final project does not propose a traditional bicycle boulevard or follow Broad Street exclusively. Still, the Recommended Project strongly supports the project goal to create a safe, low-stress route that serves bicyclists and pedestrians of all ages and skill levels connecting the City’s downtown core north to Foothill Boulevard. The proposed project includes real trade-offs, such as the removal of some on-street parking to provide width for dedicated bicycle facilities. However, the proposed addition of protected bike lanes along the majority of this route provides substantial potential to attract new bicycle trips and support the City’s mode share and sustainability goals. The specific design elements identified in this plan are consistent with the design objectives initially established for this project, with unique features/markings/signage that brand the Anholm Bikeway as a priority bicycle corridor, traffic calming measures to reduce motor vehicle speeds, features that separate bicyclists from motor vehicle traffic, and elements that improve the accessibility, safety and aesthetic quality of the pedestrian environment.

IV. Project Development Process

Community Outreach and Engagement

Development of this plan included an extensive community-based public engagement effort, focused on understanding the key needs and priorities of residents and stakeholders. Major components of this community outreach effort include:

Public Meetings
- **Community Meetings** – Five (5) community meetings were held at the City/County Library over the course of the two-year long project planning process. This process included an initial project kick-off meeting, an interactive design charrette to allow attendees to draw up their desired plans for the street improvements, a meeting to present preliminary project alternatives, a neighborhood meeting to present plans and invite feedback on the final recommendations for the Anholm Bikeway Plan, then a supplementary interactive design charrette to gather feedback for refinement of the “middle segment” between Lincoln and Ramona.
- **Informal Field Visits** – In addition to formal public meetings, City Transportation Staff also conducted several in-person site visits to tour the study area and answer questions from residents, business owners and other stakeholders who may not have been able to attend prior community meetings. Staff also joined a group of Bishop’s Peak and Pacheco Elementary School parents and students for a bicycle tour following their typical routes to/from school along Broad and Chorro Streets.
- **Bicycle Advisory Committee Meetings** – The Active Transportation Committee (ATC), formally the Bicycle Advisory Committee, consists of seven members who must be residents of the City, and provides oversight and policy decisions on matters related to bicycle transportation. The ATC received multiple presentations from staff throughout development of the Anholm Bikeway Plan. The committee solicited public comments from meeting attendees and ultimately provided staff with feedback and recommendations to carry forward to the City Council.
- **City Council Hearings** – During the alternatives development stage, a City Council Study Session was held to present several design options considered for the proposed bikeway. The Study Session was well-attended and provided an opportunity for the Council and the public to learn more about the project and provide input on the benefits and trade-offs associated with various project alternatives. A City Council hearing was held in April 2018 to adopt Plan recommendations for the “northern” and “southern” segments of the bikeway corridor, with a final hearing in September of 2018 to adopt final recommendations for the “middle segment” between Lincoln and Ramona.

Project Website

A project website (www.peakdemocracy.com/3444) was created at the onset of this planning process and has been used throughout development of the plan to provide updates, access to project materials, and to serve as an open forum for community members to leave feedback. As of August 2018, the project website has received over 1,600 unique visitors and has 190+ comments in the online forum.

In developing this plan, public outreach efforts included community meetings, in-person site tours, bike to school ride-a-longs, an interactive design charrette, and an online comment forum via the project website.
Alternatives Development

The road to the final concept plan for the Anholm Bikeway project is long and involved development and analysis of many potential project alternatives and variants. During the spring and summer of 2017, three preliminary project alternatives were presented to the community, ATC and City Council for consideration. The alternatives provided three distinct options for the most challenging portion of the bikeway between Lincoln Street and Ramona Drive, each with its own unique benefits, challenges and trade-offs. Alternatives included (Alt 1) a traditional bicycle boulevard with traffic diverters and a continuous route along Broad Street, (Alt 2) conversion of Broad and Chorro Streets to single-lane, one-way couplets to provide width for protected bike facilities, and (Alt 3) a “low-impact” alternative that included only minor route markings, signage and traffic calming elements. Each alternative was defined and analyzed in detail and the findings were shared in an Alternatives Screening Report (available on the project website).

To supplement the input provided at previous community meetings and via the project’s web forum during the alternatives development process, Transportation Staff conducted the first round of surveys of residents to gauge support for any of the three proposed project alternatives and to better understand the specific features that the community liked or disliked. An online survey was made available for citywide participation via the project webpage, while a mail-in survey was distributed to approximately 1,200 residents in the Broad and Chorro neighborhood. In total, nearly 500 survey responses were received for the preliminary alternatives survey. The results of this survey, which are shown below, were presented during the City Council Study Session referenced above.

Based on the preliminary alternatives analysis survey responses, Alternative 1 (traditional bicycle boulevard with traffic diversion) received the least support both citywide and within the Broad/Chorro neighborhood. Per the online citywide survey, Alternative 2 (two-way conversion with protected bikeways) was the most popular option, receiving 44% of the total votes—nearly double that of the second ranking option. Within the neighborhood, there was not a clear consensus for a preferred option, with 37% of participants indicating that “No Project Alternative is Acceptable”, 30% of participants indicating support for Alternative 3 (markings, signage and traffic calming only), and 27% supporting Alternative 2.

Upon review of the preliminary alternatives, the Alternative 2 was identified as the ATC’s preferred alternative—primarily because this alternative included protected bicycle facilities, which the group believed would provide the greatest potential to improve bicycling within the city. After reviewing the various project options and receiving input from the community at a well-attended Council Study Session, the City Council ultimately recommended that staff carry forward two variants of the preliminary alternatives for refinement. Public comments received from Anholm Neighborhood residents during the Council Study Session reflected a general theme of opposition to any project features that would impact vehicular traffic access or circulation within their neighborhood; thus, the two alternatives to be carried forward did not include features that would significantly change traffic circulation or access:

- **Preferred Alternative** – An option that includes partial removal of on-street parking on segments of Chorro and Broad Streets to provide dedicated/protected bike lanes without removing vehicular travel lanes or impacting traffic circulation.

- **Secondary Alternative** – A “low-impact” option that utilizes Lincoln Street east of Chorro and establishes a bicycle route with features such as enhanced markings, signage and minor traffic calming that can be easily implemented and does not impact street parking or traffic circulation.

The “Preferred Alternative” carried forward from the Council Study Session represents the final concept represented in this plan. A second community survey was conducted to gauge support for either of these final alternatives. The results of this second survey are summarized below.
Based on review of the second community survey, the majority of citywide residents (63%) supported the project alternative that featured protected bike lanes. As with the previous alternatives analysis survey, within the neighborhood, there was less support for protected bike lanes, with 55% of participants supporting the shared street concept using Lincoln Street, and 19% supporting ‘other’ options or no improvements at all.
V. Cost Estimates, Phasing and Performance Monitoring Strategies

Phasing Plan and Cost Estimates

Project improvements are expected to be implemented in phases, with each series of improvements prioritized based on several factors, including overall benefit to bicycle and pedestrian safety and mobility, desire for each improvement based on community input, and costs. Planning-level cost estimates were developed for the improvements identified in each phase and are summarized in Table 6 below.

Table 6: Project Phasing and Planning-Level Cost Estimates

<table>
<thead>
<tr>
<th>Phase</th>
<th>Improvements</th>
<th>Cost</th>
<th>Construction Year</th>
</tr>
</thead>
<tbody>
<tr>
<td>PHASE 1</td>
<td>• SRTS Class I Path (Ramona to Foothill) -- ROW &amp; Construction&lt;br&gt;• SRTS Crossing at Foothill/Ferrini&lt;br&gt;• Ramona Drive Protected Bike Lanes (Broad to SRTS Path)&lt;br&gt;• Establish Residential Parking District (if approved by neighborhood)</td>
<td>$996,000</td>
<td>2018-19</td>
</tr>
<tr>
<td>- Safe Routes to School Linkage</td>
<td></td>
<td></td>
<td></td>
</tr>
<tr>
<td>PHASE 2</td>
<td>• US 101/Chorro Undercrossing Lighting &amp; Gateway Enhancements&lt;br&gt;• Chorro Protected Bike Lanes (Downtown to Lincoln) - Interim Installation&lt;br&gt;• Chorro Protected Bike Lanes (Lincoln to Mission) - Interim Installations&lt;br&gt;• Broad SB Buffered/Protected Bike Lane (Mission to Ramona)&lt;br&gt;• Bikeway Route Signage &amp; Markings</td>
<td>$475,000</td>
<td>2019-22</td>
</tr>
<tr>
<td>- Protected Bikeways&lt;br&gt; - US 101/Chorro Undercrossing Enhancements</td>
<td></td>
<td></td>
<td></td>
</tr>
<tr>
<td>Subtotal (Phase 1-2)</td>
<td></td>
<td>$1,471,000</td>
<td></td>
</tr>
<tr>
<td>PHASE 3</td>
<td>• Broad/Meinecke/Ramona Bulbouts&lt;br&gt;• Broad/Murray Raised Crossing&lt;br&gt;• Additional Street Lighting&lt;br&gt;• New Sidewalk Installations (west side of Broad)&lt;br&gt;• Chorro/Walnut &amp; Chorro/Peach Pedestrian Crossing Improvements&lt;br&gt;• ADA Curb Ramps (Remaining Locations)&lt;br&gt;• Speed Humps/Cushions (Replace Existing Speed Humps Mission to Ramona)</td>
<td>TBD</td>
<td>2020 and Beyond</td>
</tr>
<tr>
<td>- Protected Bikeways (Permanent Installation)&lt;br&gt; - Incremental installation of Remaining Pedestrian Features &amp; High-Cost Civil Improvements</td>
<td></td>
<td></td>
<td></td>
</tr>
</tbody>
</table>

Notes:
1. Costs and phasing are preliminary and represent planning-level estimates. Final project costs and timing of improvements subject to refinement in design stage.
2. Phase 1 includes improvements planned as part of the Bishop’s Peak/Pacheco Elementary Safe Routes to Schools (SRTS) Plan. Phase 2 improvements funded through combination of Anholm Bikeway and Safe Routes to School CIP Project funds.
3. City of SLO 2017-19 Financial Plan includes $558,000 allocated for Anholm Bikeway (Broad St. Bike Boulevard) and $343,000 allocated for Safe Routes to School project implementation through FY2019-20. A suplemental budget request will be required to fully fund all Phase 1-2 improvements.
4. Phase 3 improvements are anticipated to remain unfunded within the current 5-year funding horizon. Remaining components will be implemented based on availability of future grant and CIP funds.
Phase 1 will include implementation of the highest-priority features at the north end of the corridor—improvements that will support safe routes for families walking and biking to Bishop’s Peak and Pacheco Elementary Schools. This includes construction of the planned bicycle/pedestrian crossing of Foothill Boulevard at Ferrini, right-of-way acquisition and construction of the Class I Bicycle/Pedestrian Path between Ramona and Foothill, and construction of the proposed two-way protected bikeway along Ramona between the Safe Routes to School Path and Broad Street. Improvements for this phase are expected to be funded through a combination of SRTS and Anholm Bikeway project funds. In conjunction with Phase 1, and prior to the proposed removal of on-street parking along Broad and Chorro Streets in Phase 2, it is recommended that the City work with residents of the Anholm Neighborhood to pursue formation of a Residential Parking District if sufficient support exists within the neighborhood.

Phase 2 will include installation of safety lighting and streetscape enhancements at the Highway 101/Chorro Street undercrossing, and implementation of essential features required to establish the Anholm Bikeway between Downtown and Ramona Drive as pilot project. Depending on funding, for this initial rollout, protected bikeway separation and other features may be constructed using lower-cost, temporary materials where appropriate, to allow for monitoring, testing and refinement prior to installation of higher-cost permanent features. If funding is limited during initial installation, protected bikeway separation may be provided with flex posts and rubber curbing, while the permanent installation is proposed to include raised concrete islands. Similarly, corner bulbouts may be installed using colored pavement markings and flex posts for an interim period before construction of permanent bulbouts with concrete and landscaping. Example images of interim and permanent treatments are shown below.

Phase 3 includes permanent installation of protected bikeway elements and remaining higher-cost civil improvements, such as concrete sidewalks and curb ramps, concrete bulbouts at Broad/Ramona/Meinecke, and the raised crossing at Broad/Murray. Ultimately, it won’t be feasible to implement many of these features within the budget currently available to this project. The City may seek additional funds for remaining project features through grant opportunities or as individual capital improvement projects based on available funding over time.

While not included as a component of this project, it is important to note that the City will continue to work with Caltrans to pursue the closure of the Highway 101/Broad Street ramps.
Performance Monitoring Program

This plan recommends initial implementation of the Anholm Bikeway between Downtown and Ramona Drive as a pilot phase, allowing the opportunity for staff to monitor, evaluate, and refine designs as needed prior to investment in permanent features. This section outlines the recommended components of a Performance Monitoring Program to be conducted in conjunction with Phase 2, the pilot phase for the Downtown-to-Ramona portion of the bikeway route:

*Table 7: Performance Monitoring Program*

<table>
<thead>
<tr>
<th>Monitoring Program Component</th>
<th>Description &amp; Purpose</th>
<th>Timing/Frequency</th>
</tr>
</thead>
</table>
| TRAFFIC VOLUME & SPEED DATA           | • Collect roadway segment Average Daily Traffic (ADT) counts in order to identify potential shifts in traffic patterns associated with the project.  
  • Conduct vehicle speed surveys to identify potential changes in motor vehicle speeds associated with the project.  
  • Traffic counts and speed surveys will be conducted along Broad and Chorro Streets between Lincoln and Mission, as well as along nearby streets where potential shifts in traffic may occur. | • Before Construction  
  • After Construction  
  o 12 & 24 months after Phase 2 Improvements |
| BICYCLE RIDERSHIP & PEDESTRIAN ACTIVITY| • Collect bicycle and pedestrian counts to evaluate potential increases/shifts in bicycle ridership and pedestrian activity in conjunction with the project. Where feasible, counts will include distribution of cyclists by age (adult vs. children) and gender to study potential shifts in user demographics.  
  • Daily bicycle and pedestrian volumes to be collected for roadway segments along Anholm Bikeway route and along parallel bicycling routes. | • Before Construction  
  • After Construction  
  o 12 & 24 months after Phase 2 Improvements |
| SAFETY                                | • Analyze reported collision data (autos, bikes, pedestrians) to identify potential safety concerns and/or trends in conjunction with the project.  
  • Collision totals and rates will be tallied for segments along the Anholm Bikeway route and compared for conditions before and after project implementation. | • Before Construction (summarize data for most recent 3-year average)  
  • After Construction  
  o 12 & 24 months after Phase 2 Improvements |
| PARKING IMPACTS                      | • Collect on-street parking occupancy data to evaluate changes in parking demand within the vicinity of the proposed bikeway. Analysis will identify impacted street segments (where peak period parking demand exceeds available supply) and available on-street parking within reasonable walking distance of impacted segments.  
  • Peak period parking counts to be conducted along the Anholm Bikeway route and along streets within a ¼-mile walkshed of the bikeway corridor. | • Before Construction  
  • After Construction  
  o 12 & 24 months after Phase 2 Improvements  
  *Additional parking data collection may be required if other events that affect parking conditions occur concurrently with project implementation. Potential events of this type include formation of new Residential Parking Districts and/or completion of new multifamily residential or commercial development within the study area.*
### USER SURVEYS

**Monitoring Program Component:** User Surveys  
**Description & Purpose:**  
- **Survey Types**  
  - Online Survey – available to all residents  
  - Intercept Surveys – in-person survey of bicyclists and pedestrians traveling along bikeway  
  - Resident Surveys – surveys mailed directly to residents living within vicinity of bikeway  
- **Survey Topics**  
  - Bicyclist perceived comfort/safety, route preference, changes to cycling frequency, observed issues and suggestions for improvement  
  - Pedestrian perceived comfort/safety, route preference, changes to walking frequency, challenges and suggestions for improvement  
  - Driver experience and perception navigating route after project implementation  
  - Resident perception of project features, parking impacts, benefits/impacts to neighborhood quality  
- **Purpose of surveys is to study user perception of project features and identify areas for potential design refinement and needs for additional focused education/outreach.**  

**Timing/Frequency:**  
- After Construction  
  - 12 & 24 months after Phase 2 Improvements

### PERFORMANCE MONITORING REPORTING

**Monitoring Program Component:** Performance Monitoring Reporting  
**Description & Purpose:**  
- Submit staff report to City Council summarizing findings of the project Performance Monitoring Program  

**Timing/Frequency:**  
- After Construction  
  - 12 & 24 months after Phase 2 Improvements

*Additional performance reporting can be conducted in conjunction with Phase 1 and/or Phase 3 improvements, if requested by the City Council.*
Appendix A: Concept Design Plan Sheets
PREFERRED ALTERNATIVE

- Restrict parking on west side of Broad between Mission and Ramona to provide buffered/protected bike lane in SB direction. Enhanced markings and traffic calming in NB direction.
- Install safety lighting, street trees & public art enhancements to improve environment at Charro/Highway 101 undercrossing.
- Restrict parking on north side of Ramona from Broad to planned Class I Bike Path to provide two-way protected bikeway.
- Proposed Class I Bike/Pedestrian Path through LDS Church Property.
- Planned enhanced bicycle and pedestrian crossing at Foothill & Ferrini.
- Proposed raised crossing at Broad & Murray.
- Pedestrian improvements such as ADA curb ramps, corner bulbouts and new street lighting proposed along bikeway route, as future funding allows.

ANHOLM BIKEWAY PLAN
PREFERRED ALTERNATIVE SUMMARY MAP

JANUARY 2018
High-Vis Crosswalks, ADA Curb Ramps & Sidewalk Bulbouts with Potential for Green Street Treatments

NEW MEDIAN ISLAND IMPROVES PEDESTRIAN CROSSING

Watch for Bicycles
ADD "Watch for Bicycles" supplementary sign to all side-street stop signs along bicycle corridors

New ADA Curb Ramp

NEW MEDIAN ISLAND IMPROVES PEDESTRIAN CROSSING

Sidewalk Bulbout

New ADA Curb Ramp

Bulbouts Shorten Crossing Distance for Pedestrians near Villages Senior Community

Bulb Out to Tighten Corner Radius to Reduce Turning Speeds and Improve Crossing

Stripe New Crosswalk Markings

Bike Lane Begin

Anholm Bikeway Plan

January 2018

City of San Luis Obispo Bikeway

Not for construction. Final plans will be prepared at time of construction

Please walk, bike, and drive safely
EXISTING SPEED HUMP TO REMAIN, POTENTIAL TO INSTALL SPEED CUSHION IN THE FUTURE

GREEN BACKED SHARRROWS TO REPLACE EXISTING SHARRROWS FOR NORTHBOUND DIRECTION

REMOVE PARKING ON WEST SIDE TO ADD SOUTHBOUND BUFFERED BIKE LANE POTENTIAL FOR PHYSICAL SEPARATION IN THE FUTURE

SINGLE DASHED CENTERLINE TO REPLACE EXISTING DOUBLE YELLOW. ALLOWS DRIVERS TO SAFELY AND LEGALLY PASS CYCLISTS

EXISTING SPEED HUMP TO REMAIN, POTENTIAL TO INSTALL SPEED CUSHION IN THE FUTURE, TYP

SIDEWALK BULBOUTS WITH POTENTIAL FOR GREEN STREET TREATMENTS

BOLLARDS

RAISED INTERSECTION (OR RAISED CROSSING DEPENDING ON FUNDS) SLOWS TRAFFIC AND IMPROVES PEDESTRIAN CROSSING
NEW ADA CURB RAMP

GREEN BACKED SHARROWS TO REPLACE EXISTING SHARROWS FOR NORTHBOUND DIRECTION

EXISTING SPEED HUMP TO REMAIN, POTENTIAL TO INSTALL SPEED CUSHION IN THE FUTURE

REMOVE PARKING ON WEST SIDE TO ADD SOUTHBOUND BUFFERED BIKE LANE POTENTIAL FOR PHYSICAL SEPARATION IN THE FUTURE

ON-STREET PARKING

COMPLETE SIDEWALK

SINGLE DASHED CENTERLINE TO REPLACE EXISTING DOUBLE YELLOW

NOT FOR CONSTRUCTION. FINAL PLANS WILL BE PREPARED AT TIME OF CONSTRUCTION
GREEN BACKED SHARROWS FOR WEST AND EAST DIRECTIONS ALONG MISSION
Green pavement markings enhance visibility of bikeway at intersections.

Install physical separation:
- Near term: Flex posts and rubber curbing
- Ultimate: Raised concrete curbs

Gaps provided for driveway access.

For bikeway on-street parking:
- Install physical separation near term: Flex posts and rubber curbing
- Ultimate: Raised concrete curbs

Gaps provided for driveway access.

Anholm City of San Luis Obispo bikeway

Two-way protected bikeway

Green backed sharrows

Chevron directional markings

For bikeway

Green backed sharrows

Mission Street

Chorro Street

Match Line 10

Match Line 11

Not for construction. Final plans will be prepared at time of construction.
ON-STREET PARKING RETAINED ON EAST SIDE OF CHORRO STREET

NEW ADA CURB RAMPS

TWO-WAY PROTECTED BIKEWAY

VENEER

INSTALL PHYSICAL SEPARATION
- NEAR TERM: FLEX POSTS AND RUBBER CURBING
- ULTIMATE: RAISED CONCRETE CURBS

GAPS PROVIDED FOR DRIVEWAY ACCESS

CHEVRON MARKINGS THROUGH INTERSECTION TO HIGHLIGHT CONFLICT AREA

PRIVATE DRIVEWAY ACCESS RETAINED BY PROVIDING APPROPRIATE GAPS IN PHYSICAL SEPARATION WITHIN BIKEWAY

WATCH FOR BICYCLES

ANHOLM BIKEWAY PLAN

PREFERRED ALTERNATIVE

MATCH LINE 11

MATCH LINE 12

MATCH LINE 13

MATCH LINE 14

JANUARY 2018

NOT FOR CONSTRUCTION. FINAL PLANS WILL BE PREPARED AT TIME OF CONSTRUCTION.
ON-STREET PARKING RETAINED ON EAST SIDE OF CHORRO STREET

INSTALL PHYSICAL SEPARATION
- NEAR TERM: FLEX POSTS AND RUBBER CURBING
- ULTIMATE: RAISED CONCRETE CURBS
GAPS PROVIDED FOR DRIVEWAY ACCESS

TURNING VEHICLES YIELD TO BIKES SIGN

CHEVRON MARKINGS THROUGH INTERSECTION TO HIGHLIGHT CONFLICT AREA

CHEVRON MARKINGS THROUGH INTERSECTION TO HIGHLIGHT CONFLICT AREA

HI-VIS CROSSWALK

GREEN BIKE CHANNELIZATION

SHORTEN LEFT TURN POCKET TO 75' TO PROVIDE WIDTH FOR BUFFERED BIKE LAKES

REMOVE STRIPED MEDIAN AND SHORT TURN POCKET TO PROVIDE WIDTH FOR BIKE LANE BUFFERS

ON-STREET PARKING
1" = 20' N

EXTEND BACK OF SIDEWALK TO ACCOMMODATE PEDESTRIAN-SCALE LIGHTING ON BOTH SIDES OF CHORRO AT HIGHWAY 101 UNDERCROSSING

MATCH LINE 16

MATCH LINE 15

CHORRO

SHORTEN LEFT TURN POCKET TO 50' TO PROVIDE WIDTH FOR BUFFERED BIKE LANES

TIGHTEN CORNER RADIUS TO REDUCE TURNING SPEEDS AND IMPROVE CROSSING

HI-VIS CROSSWALK

GREEN THROUGH INTERSECTION

TIGHTEN CORNER RADIUS TO REDUCE TURNING SPEEDS AND IMPROVE CROSSING

INSTALL PHYSICAL SEPARATION
- NEAR TERM: FLEX POSTS AND RUBBER CURBING
- ULTIMATE: RAISED CONCRETE CURBS

GAPS PROVIDED FOR DRIVEWAY ACCESS

SHORTEN LEFT TURN POCKET TO 50' TO PROVIDE WIDTH FOR BUFFERED BIKE LANES

WALNUT

STOP

WATCH FOR BICYCLES

STOP

ANHOLM BIKEWAY PLAN

JANUARY 2018

NOT FOR CONSTRUCTION. FINAL PLANS WILL BE PREPARED AT TIME OF CONSTRUCTION

MATCH LINE 17

MATCH LINE 16
FUTURE SAFETY IMPROVEMENTS TO CHORRO/PEACH INTERSECTION WILL BE DONE UNDER THE CITY'S TRAFFIC SAFETY PROGRAM.

INSTALL PHYSICAL SEPARATION
- NEAR TERM: FLEX POSTS AND RUBBER CURBING
- ULTIMATE: RAISED CONCRETE CURBS

GAPS PROVIDED FOR DRIVEWAY ACCESS

NEW CURB RAMP

MATCH LINE 17

MATCH LINE 18

MATCH LINE 19

NOT FOR CONSTRUCTION. FINAL PLANS WILL BE PREPARED AT TIME OF CONSTRUCTION

NEW CURB RAMP

HI-VIS CROSSWALK

GREEN PAINT THROUGH INTERSECTION

MATCH LINE 18

MATCH LINE 19

MATCH LINE 17

MATCH LINE 18

MATCH LINE 19
MATCH LINE 19

BEGIN

STRIPED BUFFER

MATCH LINE 20

CHORRO

SHARROWS UP TO INTERSECTION

PREFERRED ALTERNATIVE

ANHOLM BIKEWAY PLAN

JANUARY 2018

NOT FOR CONSTRUCTION. FINAL PLANS WILL BE PREPARED AT TIME OF CONSTRUCTION

MATCH LINE 19

MATCH LINE 20

CHORRO

MAY USE FULL LANE

BIKE LANE BEGIN

PROJECT LIMITS

MAY USE FULL LANE

BIKE LANE END

SHARROWS BETWEEN PALM AND MONTEREY
Appendix B: Traffic & Parking Analysis
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Traffic Data

Volume Data

Existing (2016) roadway segment and intersection traffic data (auto, bike and pedestrian volumes) were collected for streets within the vicinity of the Anholm Bikeway. Average Daily Traffic (ADT) volumes were collected for roadway segments, while AM and PM peak hour traffic volumes were collected for intersections. All traffic data was collected during typical weekdays, avoiding school holidays, construction impacts, inclement weather or other unusual events. Existing traffic volume data is summarized in Figure B1 and Figure B2.

Vehicle Speed Data

City Transportation Staff collects traffic speed data regularly for the purposes of setting speed limits, investigating neighborhood traffic concerns and for studying traffic safety issues at various locations throughout the city. A typical speed survey involves the use of Lidar or Radar equipment to measure vehicle speeds along a selected corridor. Speeds are recorded for vehicles in free-flow conditions (avoiding congested locations or platoons of vehicles grouped tougher) and a sample of at least 100 vehicles is recorded in each survey. Speed data is most often used to determine the prevailing (85th percentile) speeds for a given street. Early in the project planning process, speed data was collected along streets that has potential to be considered for the Anholm Bikeway route alignment. For the purposes of this project, existing vehicle speed data was used evaluate whether conditions are appropriate for mixed-flow traffic, where bicyclists and drivers share travel lanes, and where traffic calming may be warranted to reduce vehicle speeds to a level conducive to a quality neighborhood environment.

Collision History

As part of the City’s Vision Zero/Traffic Safety Program, collision reports are collected from the San Luis Obispo Police Department and analyzed on an annual basis to identify collision trends throughout the City. The City’s Annual Traffic Safety Report documents citywide trends by collision type (total collisions, fatal/injury collisions, pedestrian & bicycle collisions) and identifies mitigation strategies for high-collision rate locations, with a focus on locations with high rates of collisions involving pedestrians, bicyclists and injuries. Potential mitigation recommendations may include physical improvements, as well as targeted education and enforcement strategies. As part of the analysis for the Anholm Bikeway Plan, collision data from the most recent five-year period was reviewed for intersections and streets within the project study area. This assessment included a focused investigation of locations with a documented history of pedestrian or bicycle collisions to identify potential trends that could be addressed through improvement strategies as part of this plan.

A summary of pedestrian and bicycle collisions reported within the most recent five-year period (2012-2016) available is provided in Table B1.

<table>
<thead>
<tr>
<th>Street</th>
<th>Nearest Cross Street</th>
<th>At Intersection</th>
<th>Total</th>
<th>Bike</th>
<th>Ped vs. Veh</th>
<th>Solo vs. Veh</th>
<th>Severe Inj</th>
</tr>
</thead>
<tbody>
<tr>
<td>Chorro</td>
<td>Monterey</td>
<td>4</td>
<td>4</td>
<td>2</td>
<td>2</td>
<td>1</td>
<td></td>
</tr>
<tr>
<td>Chorro</td>
<td>Mill</td>
<td>2</td>
<td>2</td>
<td>1</td>
<td></td>
<td></td>
<td></td>
</tr>
<tr>
<td>Chorro</td>
<td>West</td>
<td>1</td>
<td>1</td>
<td></td>
<td></td>
<td></td>
<td></td>
</tr>
<tr>
<td>Chorro</td>
<td>Murray</td>
<td>3</td>
<td>3</td>
<td>1</td>
<td>1</td>
<td></td>
<td></td>
</tr>
<tr>
<td>Chorro</td>
<td>Foothill</td>
<td>1</td>
<td>1</td>
<td></td>
<td></td>
<td></td>
<td></td>
</tr>
<tr>
<td>Broad</td>
<td>Mill</td>
<td>2</td>
<td>2</td>
<td>1</td>
<td></td>
<td></td>
<td></td>
</tr>
<tr>
<td>Broad</td>
<td>Peach</td>
<td>2</td>
<td>2</td>
<td></td>
<td></td>
<td></td>
<td></td>
</tr>
<tr>
<td>Broad</td>
<td>Center</td>
<td>1</td>
<td>1</td>
<td></td>
<td></td>
<td></td>
<td></td>
</tr>
<tr>
<td>Broad</td>
<td>Serrano</td>
<td>1</td>
<td>1</td>
<td></td>
<td></td>
<td></td>
<td></td>
</tr>
<tr>
<td>Broad</td>
<td>Ramona</td>
<td>2</td>
<td>2</td>
<td></td>
<td></td>
<td></td>
<td></td>
</tr>
<tr>
<td>Broad</td>
<td>Foothill</td>
<td>2</td>
<td>2</td>
<td></td>
<td></td>
<td></td>
<td></td>
</tr>
<tr>
<td>Ramona</td>
<td>Broad to Palomar</td>
<td>3</td>
<td>1</td>
<td>2</td>
<td>1</td>
<td></td>
<td></td>
</tr>
<tr>
<td>Foothill</td>
<td>Ferrini*</td>
<td>1</td>
<td>1</td>
<td></td>
<td></td>
<td></td>
<td></td>
</tr>
<tr>
<td>Lincoln</td>
<td>Mountain View</td>
<td>1</td>
<td>1</td>
<td></td>
<td></td>
<td></td>
<td></td>
</tr>
<tr>
<td>TOTAL</td>
<td></td>
<td>16</td>
<td>26</td>
<td>9</td>
<td>10</td>
<td>7</td>
<td>2</td>
</tr>
</tbody>
</table>

*Data represents 5-year total (2012-2016). A fatal vehicle vs. bicycle collision occurred at Foothill/Ferrini in 2017, outside of the range of this dataset.
**Existing Traffic Volumes - North Segment**

### Broad Street Bicycle Boulevard Plan

**Note:** Traffic count data collected during a typical weekday (Tues, Wed, Thurs) with schools in session during 2016 and 2017. Peak hour volumes reflect the highest hourly volume during the AM (7-9 AM) and PM (3:30-6:00 PM) periods.

#### Daily (AM Peak Hour) Auto Segment Volumes

<table>
<thead>
<tr>
<th>Intersection</th>
<th>AM Volumes</th>
</tr>
</thead>
<tbody>
<tr>
<td>BROAD ST</td>
<td>1650(160)</td>
</tr>
<tr>
<td>CHORRO ST</td>
<td>1530(145)</td>
</tr>
<tr>
<td>MURRAY AVE</td>
<td>1450(140)</td>
</tr>
<tr>
<td>MISSION ST</td>
<td>1320(125)</td>
</tr>
<tr>
<td>CENTER ST</td>
<td>1000(100)</td>
</tr>
<tr>
<td>LINCOLN ST</td>
<td>950(90)</td>
</tr>
<tr>
<td>MOUNTAIN</td>
<td>800(80)</td>
</tr>
<tr>
<td>LINCOLN ST</td>
<td>750(70)</td>
</tr>
<tr>
<td>VIEW ST</td>
<td>600(60)</td>
</tr>
<tr>
<td>RAMONA DR</td>
<td>550(55)</td>
</tr>
<tr>
<td>BROAD ST</td>
<td>500(50)</td>
</tr>
<tr>
<td>MURRAY AVE</td>
<td>450(45)</td>
</tr>
<tr>
<td>CHORRO ST</td>
<td>400(40)</td>
</tr>
<tr>
<td>MISSION ST</td>
<td>350(35)</td>
</tr>
<tr>
<td>CENTER ST</td>
<td>300(30)</td>
</tr>
<tr>
<td>LINCOLN ST</td>
<td>250(25)</td>
</tr>
<tr>
<td>VIEW ST</td>
<td>200(20)</td>
</tr>
<tr>
<td>RAMONA DR</td>
<td>150(15)</td>
</tr>
<tr>
<td>BROAD ST</td>
<td>100(10)</td>
</tr>
<tr>
<td>CHORRO ST</td>
<td>50(5)</td>
</tr>
<tr>
<td>MURRAY AVE</td>
<td>0(0)</td>
</tr>
</tbody>
</table>

#### Daily (PM Peak Hour) Auto Segment Volumes

<table>
<thead>
<tr>
<th>Intersection</th>
<th>PM Volumes</th>
</tr>
</thead>
<tbody>
<tr>
<td>BROAD ST</td>
<td>1500(150)</td>
</tr>
<tr>
<td>CHORRO ST</td>
<td>1400(135)</td>
</tr>
<tr>
<td>MURRAY AVE</td>
<td>1300(125)</td>
</tr>
<tr>
<td>MISSION ST</td>
<td>1150(110)</td>
</tr>
<tr>
<td>CENTER ST</td>
<td>900(90)</td>
</tr>
<tr>
<td>LINCOLN ST</td>
<td>850(80)</td>
</tr>
<tr>
<td>MOUNTAIN</td>
<td>700(70)</td>
</tr>
<tr>
<td>LINCOLN ST</td>
<td>650(60)</td>
</tr>
<tr>
<td>VIEW ST</td>
<td>500(50)</td>
</tr>
<tr>
<td>RAMONA DR</td>
<td>450(45)</td>
</tr>
<tr>
<td>BROAD ST</td>
<td>400(40)</td>
</tr>
<tr>
<td>CHORRO ST</td>
<td>350(35)</td>
</tr>
<tr>
<td>MURRAY AVE</td>
<td>300(30)</td>
</tr>
<tr>
<td>MISSION ST</td>
<td>250(25)</td>
</tr>
<tr>
<td>CENTER ST</td>
<td>200(20)</td>
</tr>
<tr>
<td>LINCOLN ST</td>
<td>150(15)</td>
</tr>
<tr>
<td>VIEW ST</td>
<td>100(10)</td>
</tr>
<tr>
<td>RAMONA DR</td>
<td>50(5)</td>
</tr>
<tr>
<td>BROAD ST</td>
<td>0(0)</td>
</tr>
</tbody>
</table>

#### 85th Percentile Vehicle Speeds

- Broad St: 30 mph
- Mission St: 30 mph
- Center St: 27 mph
- Lincoln St: 26 mph
- Ramona Dr: 30 mph
- Benton Wy: 27 mph

#### LEGEND

- Signalized Intersection
- Stop Controlled Intersection
- AM(YY) [ZZZ]: Daily AM Peak Hour Auto Segment Volumes
- PM(YY) [ZZZ]: Daily PM Peak Hour Auto Segment Volumes
- XXX: Bike Segment Volumes
- 31 mph

Note: Additional details and data from the map and diagrams can be found in the text and annotations.
Existing Traffic Volumes - South Segment

Note: Traffic count data collected during a typical weekday (Tues, Wed, Thurs) with schools in session during 2014 and 2016. Peak hour volumes reflect the highest hourly volume during the AM (7-9 AM) and PM (3:30-6:00 PM) periods.
Traffic Analysis

The City of San Luis Obispo evaluates vehicular traffic impacts based on roadway segment and intersection congestion/delay, as measured using auto Levels of Service (LOS)\(^{13}\), as well as using established maximum daily traffic volume thresholds for residential streets to assess traffic impacts to neighborhood quality of life. For the purposes of assessing potential traffic impacts related to the Anholm Bikeway project, convenience of property access and potential impacts to emergency services were also considered.

Roadway Segment Levels of Service

For the purposes of this plan, roadway segment levels of service were calculated for AM and PM peak hour conditions along Broad Street and Chorro Street based on Florida Department of Transportation (FDOT) 2012 Generalized Service Volume Thresholds. FDOT service volume thresholds are developed based on planning applications of the Highway Capacity Manual (HCM) and provide a convenient planning-level tool for assessing roadway segment operations. This methodology is consistent with the segment analysis included in the City’s 2014 General Plan Circulation Element EIR. The City has adopted performance target of LOS D or better for streets outside of the Downtown Core. Because the Recommended Project proposes no reductions in vehicle travel lanes, modifications to traffic circulation, or significant changes to auto capacity, roadway levels of service are anticipated to remain consistent with existing conditions. As shown in Table B2, all study segments currently operate at acceptable levels of service and are anticipated to remain at this level with the proposed project.

Intersection Levels of Service

Intersection levels of service were calculated for AM and PM peak hour conditions at key intersections along and within the vicinity of the Anholm Bikeway corridor. Levels of service were calculated based on 2010 HCM methodologies using Synchro 9 traffic analysis software. This methodology is consistent with the methods recommended in the City’s Traffic Impact Study Guidelines. Impacts for study intersections are evaluated based on the City’s adopted performance target of LOS D or better for streets outside

\(^{13}\) Level of Service (LOS) is a standard qualitative measure used to describe traffic conditions in terms of speed, travel time, delays and driver convenience. LOS is defined using letter grades “A” through “F”, with LOS A representing free-flow conditions, and LOS F representing heavy congestion with traffic demands exceeding capacity.
of the downtown core. As with the roadway segment analysis, intersection levels of service with the proposed project are anticipated to remain consistent with existing conditions. As shown in Table B3, all study intersections currently operate at acceptable levels of service and are anticipated to remain at this level with the proposed project.

**Neighborhood Traffic Concerns**

The City evaluates potential neighborhood traffic impacts by comparing Average Daily Traffic (ADT) volumes and speeds along residential streets with the corresponding maximum ADT and speed targets established in the City General Plan Circulation Element. A proposed project would potentially trigger a neighborhood traffic impact if it would cause residential street traffic volumes or speeds to exceed these established thresholds, or if the project further increases traffic volumes on a street that already exceeds the maximum thresholds under existing conditions. As shown in Table B4, the Recommended Project does not trigger any neighborhood traffic impacts, but has potential to reduce speeds below max thresholds along Broad and Lincoln Streets.

### Table B4: Neighborhood Traffic Assessment

<table>
<thead>
<tr>
<th>Segment</th>
<th>Street Type</th>
<th>Average Daily Traffic</th>
<th>Vehicle Speeds (mph)</th>
</tr>
</thead>
<tbody>
<tr>
<td></td>
<td></td>
<td>Max Threshold</td>
<td>Existing / Project Conditions</td>
</tr>
<tr>
<td>Broad Street</td>
<td>Res. Collector</td>
<td>5,000</td>
<td>4,211</td>
</tr>
<tr>
<td>(Meinecke - Mission)</td>
<td></td>
<td></td>
<td></td>
</tr>
<tr>
<td>Broad Street</td>
<td>Res. Collector</td>
<td>5,000</td>
<td>3,428</td>
</tr>
<tr>
<td>(Mission - Lincoln)</td>
<td></td>
<td></td>
<td></td>
</tr>
<tr>
<td>Chorro Street</td>
<td>Res. Collector</td>
<td>5,000</td>
<td>5,816</td>
</tr>
<tr>
<td>(Meinecke - Center)</td>
<td></td>
<td></td>
<td></td>
</tr>
<tr>
<td>Chorro Street</td>
<td>Res. Collector</td>
<td>5,000</td>
<td>6,315</td>
</tr>
<tr>
<td>(Center - Lincoln)</td>
<td></td>
<td></td>
<td></td>
</tr>
<tr>
<td>Meinecke Street</td>
<td>Local Res.</td>
<td>1,500</td>
<td>1,277</td>
</tr>
<tr>
<td>(Broad - Chorro)</td>
<td></td>
<td></td>
<td></td>
</tr>
<tr>
<td>Mission Street</td>
<td>Local Res.</td>
<td>1,500</td>
<td>477</td>
</tr>
<tr>
<td>(Broad - Chorro)</td>
<td></td>
<td></td>
<td></td>
</tr>
<tr>
<td>Center Street</td>
<td>Local Res.</td>
<td>1,500</td>
<td>217</td>
</tr>
<tr>
<td>(Broad - Chorro)</td>
<td></td>
<td></td>
<td></td>
</tr>
<tr>
<td>Mountain View Street</td>
<td>Local Res.</td>
<td>1,500</td>
<td>170</td>
</tr>
<tr>
<td>(Broad - Chorro)</td>
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<td></td>
<td></td>
</tr>
<tr>
<td>Ramona Drive</td>
<td>Res. Collector</td>
<td>5,000</td>
<td>4,107</td>
</tr>
<tr>
<td>(Broad to Palomar)</td>
<td></td>
<td></td>
<td></td>
</tr>
<tr>
<td>Lincoln Street</td>
<td>Res. Collector</td>
<td>3,000</td>
<td>4,589</td>
</tr>
<tr>
<td>(Broad - Chorro)</td>
<td></td>
<td></td>
<td></td>
</tr>
<tr>
<td>Lincoln Street</td>
<td>Local Res.</td>
<td>1,500</td>
<td>417</td>
</tr>
<tr>
<td>(Chorro to West)</td>
<td></td>
<td></td>
<td></td>
</tr>
</tbody>
</table>

**Notes:**
- Speeds reported as 85th percentile speeds. Locations that exceed the City’s Maximum ADT and Speed Thresholds are highlighted.
- Proposed Project traffic calming measures anticipated to reduce prevailing speeds by 10-15%.

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14 City General Plan Maximum ADT Targets: Local Streets (1,500 veh/day); Residential Collectors (3,000 veh/day), except Broad/Chorro north of Lincoln and Margarita (5,000 veh/day). Desired maximum speeds for residential streets are 25 mph.
Parking Analysis

Potential parking impacts related to the Recommended Project are evaluated by analyzing on-street parking supply and demand with and without the parking removal proposed by the project within the segments between Lincoln Street and Ramona Drive. Although the final number of on-street parking spaces impacted by the project may change slightly with final design, based on review of existing on-street parking supply and preliminary project designs, on-street parking at the following locations is proposed for removal to provide width for dedicated bike lanes and crossing improvements at intersections:

- **Chorro Street** – 41 spaces eliminated on west side from Mission to Ramona;
- **Broad Street** – 15 spaces eliminated on west side from Mission to Ramona; and
- **Ramona Drive** – 17 spaces eliminated on north side from Broad to proposed SRTS Class I Path.

To better understand existing on-street parking conditions near these street segments, parking surveys were conducted in fall of 2017 for both weekday and weekend conditions during a period when local schools and Cal Poly were in session. Parking surveys included inventory of existing on-street parking supply and occupancy during various times of day along Chorro and Broad Streets, as well as along other streets within the vicinity of the proposed Anholm Bikeway. Figure B3 shows the parking study area and summarizes the existing on-street parking occupancy by time of day. As shown below, of the various periods observed, late evening on a weeknight was found to be the period where on-street parking demand is typically highest—both along Chorro and Broad Streets, as well as within the surrounding neighborhood. This peak period is used in the following analysis as a baseline for evaluating project-related parking impacts.

![Figure B3: On-Street Parking Occupancy by Time of Day](image_url)
A summary of existing on-street parking supply, spaces expected to be lost due to the project, and peak on-street demand is provided in Table B5. Parking occupancy with and without the project is also mapped visually in Figure B4.

### Table B5: On-Street Parking Conditions with and without Project

<table>
<thead>
<tr>
<th>STREET SEGMENT</th>
<th>EXISTING CONDITIONS</th>
<th>PROJECT CONDITIONS</th>
<th>Reason for Parking Loss</th>
</tr>
</thead>
<tbody>
<tr>
<td></td>
<td>Parking Supply</td>
<td>Peak Period</td>
<td>Surplus/Deficit</td>
</tr>
<tr>
<td>Lincoln to Mountain View</td>
<td>16</td>
<td>15</td>
<td>6%</td>
</tr>
<tr>
<td>Mountain View to Center</td>
<td>21</td>
<td>14</td>
<td>33%</td>
</tr>
<tr>
<td>Center to Mission St</td>
<td>60</td>
<td>17</td>
<td>43%</td>
</tr>
<tr>
<td>Mission to Murray</td>
<td>28</td>
<td>19</td>
<td>68%</td>
</tr>
<tr>
<td>Murray to Ramona</td>
<td>20</td>
<td>13</td>
<td>65%</td>
</tr>
<tr>
<td>Ramona to Foothill</td>
<td>6</td>
<td>5</td>
<td>83%</td>
</tr>
<tr>
<td><strong>Subtotal Broad Street</strong></td>
<td><strong>152</strong></td>
<td><strong>62</strong></td>
<td><strong>89</strong></td>
</tr>
<tr>
<td>Lincoln to Mountain View</td>
<td>16</td>
<td>11</td>
<td>33%</td>
</tr>
<tr>
<td>Mountain View to Center</td>
<td>23</td>
<td>10</td>
<td>43%</td>
</tr>
<tr>
<td>Center to Venable</td>
<td>21</td>
<td>8</td>
<td>62%</td>
</tr>
<tr>
<td>Venable to Mission</td>
<td>21</td>
<td>0</td>
<td>0%</td>
</tr>
<tr>
<td>Mission to West</td>
<td>25</td>
<td>13</td>
<td>52%</td>
</tr>
<tr>
<td>West to Murray</td>
<td>19</td>
<td>14</td>
<td>26%</td>
</tr>
<tr>
<td>Murray to Meinecke</td>
<td>26</td>
<td>31</td>
<td>-5</td>
</tr>
<tr>
<td>Meinecke to Foothill</td>
<td>11</td>
<td>9</td>
<td>82%</td>
</tr>
<tr>
<td><strong>Subtotal Chorro Street</strong></td>
<td><strong>162</strong></td>
<td><strong>85</strong></td>
<td><strong>76</strong></td>
</tr>
<tr>
<td>Broad to Chorro</td>
<td>33</td>
<td>10</td>
<td>23%</td>
</tr>
<tr>
<td>Mission</td>
<td>33</td>
<td>10</td>
<td>23%</td>
</tr>
<tr>
<td><strong>Subtotal Mission Street</strong></td>
<td><strong>66</strong></td>
<td><strong>20</strong></td>
<td><strong>46</strong></td>
</tr>
<tr>
<td>Broad to Palomar</td>
<td>47</td>
<td>43</td>
<td>91%</td>
</tr>
<tr>
<td>Ramona Drive</td>
<td>47</td>
<td>43</td>
<td>91%</td>
</tr>
<tr>
<td><strong>Subtotal Ramona Drive</strong></td>
<td><strong>94</strong></td>
<td><strong>86</strong></td>
<td><strong>91%</strong></td>
</tr>
<tr>
<td>Notes:</td>
<td></td>
<td></td>
<td></td>
</tr>
<tr>
<td>1. Parking data collection conducted September-October 2017. Period of peak observed parking demand was a weekday (Wednesday) 1-2 AM.</td>
<td></td>
<td></td>
<td></td>
</tr>
<tr>
<td>2. Above table only includes Broad Street, Chorro Street, Mission Street, and the segment of Ramona Street where parking removal is proposed as part of recommended project. Detailed parking occupancy data for other streets available upon request.</td>
<td></td>
<td></td>
<td></td>
</tr>
<tr>
<td>3. Street segments highlighted red represent locations where parking demand exceeds practical capacity (85-90% occupancy). When demand exceeds practical capacity, there is technically parking available, but it may be difficult to find.</td>
<td></td>
<td></td>
<td></td>
</tr>
<tr>
<td>4. At segments marked with an asterisk (*), existing parking occupancy exceeds number of available standard parking spaces (i.e. vehicles parked closely together or illegally parked).</td>
<td></td>
<td></td>
<td></td>
</tr>
</tbody>
</table>
Figure B4: Map of On-Street Parking Conditions with and without Project
As shown in Table B5 and Figure B4, during the peak demand period, on-street parking occupancy is highest in the northern portion of the study area closest to Foothill Boulevard. This is likely related to a higher concentration of commercial uses and high student-oriented housing within these neighborhoods. With the parking reductions resulting from the Recommended Project, peak on-street parking occupancy along the Anholm Bikeway is affected as follows:

- **Chorro Street (Lincoln to Mission)** – Peak parking occupancy increases from 35% to 70% (surplus of 12 spaces).
- **Mission Street (Chorro to Broad)** – No change, peak occupancy at 30%.
- **Broad Street (Mission to Ramona)** – Peak parking occupancy increases from 67% to 97% (surplus of 1 space).
- **Ramona Drive (Broad to Palomar)** – Peak parking occupancy increases from 91% to >100% (deficit of 13 spaces).

A parking occupancy rate of 85%-90% is typically considered the “practical capacity”, meaning that there could be a few on-street parking spaces available, but drivers may have a difficult time finding them. When parking demand exceeds the practical capacity, this can lead to drivers “cruising” around the block and increases temptation to park illegally, which could impact neighborhood quality for residents.

For street segments where peak parking demand exceeds the practical capacity, drivers may have trouble finding available parking directly in front of their desired destination. This is already a common experience during peak-demand periods along some street segments in the Anholm Neighborhood (and within other neighborhoods in San Luis Obispo). If on-street parking is scarce during peak periods on certain blocks, it is important to ask—is there available parking within a short walk? While scarcity of readily available on-street parking on a specific block will likely be considered an unacceptable inconvenience for some residents, overall, it is important to understand if there remains available parking within reasonable walking distance.

To study this further, available parking spaces were tallied within reasonable walking distance of street segments along the Anholm Bikeway where parking demand is projected to near or potentially exceed the practical capacity—specifically, segments where peak parking occupancy is at 75% or greater with addition of the project (see red and orange segments in Figure B4). For the purposes of this study, it is assumed that the maximum walking distance that an average person will tolerate traveling to/from available parking is approximately 1-2 blocks (300-600 feet), or about a 1- to 3-minute walk. Figure B5 shows the available parking spaces within reasonable walking distance of high-occupancy street segments along the proposed bikeway corridor.
It should be noted that the available parking totals summarized in Figure B5 exclude spaces located within existing parking districts and accounts for parking deficits/spillover from adjacent segments.

**Summary of Potential Parking Concerns**

- With the project-proposed conversion of on-street parking lanes to dedicated bike lanes along segments of Chorro Street, Broad Street and Ramona Drive, on-street parking is anticipated to be scarce during peak periods along the following specific street segments:
  - **Chorro Street (Mountain View to Venable)** – Between Mountain View and Center, peak occupancy increases from 43% to 83% (1 available space); Between Center and Venable, peak occupancy increases from 62% to >100% (deficit of 3 spaces).
  - **Broad Street (Mission to Murray)** – Peak occupancy increases from 63% to 100% (0 spaces available).
  - **Broad Street (Murray to Ramona)** – Peak occupancy increases from 65% to 93% (1 space available).
  - **Ramona Drive (Broad to Palomar)** – Peak occupancy increases from 91% to >100% (deficit of 13 spaces).
- For some residents living along street segments where parking removal is proposed, lack of readily-available on-street parking fronting their home may be perceived as an unacceptable trade-off for improved bicycle facilities. Some residents who favor on-street parking currently out of convenience or due to lack of garage space may simply park in their garage or driveway more frequently if parking on street becomes more difficult. Informal observations made during on-street parking data collection efforts found that on average, 30-40% of residential driveways were vacant along Chorro and Broad Streets between Lincoln and Ramona. Further, many occupied driveways had available capacity for one or more additional parked vehicles. That said, others living in homes with high auto ownership and/or with limited off-street garage/driveway parking will continue to rely on street parking and may need to walk to available parking nearby, depending time of day.
- Of the impacted street segments listed above where projected peak parking demand nears or exceeds available supply, there is generally available street parking within one to two blocks (a 1- to 3-minute walk). For the impacted segment of Ramona Drive (Palomar to Broad)—where fronting land uses include a retail shopping center and retirement community with sufficient off-street parking—much of the existing on-street parking demand appears to be related to spillover from a nearby student housing community to the west. The proposed loss of on-street parking along this segment of Ramona is estimated to displace approximately 13 parked cars during peak periods, shifting this demand to other streets nearby—likely east to Meineke Street and/or farther west on Ramona Drive beyond Tassajara.

**Potential Strategies to Address Parking Concerns**

- **Residential Parking District** – If there is sufficient interest amongst Anholm residents, the City is able to assist with establishing a residential parking district to cover high parking demand areas within the neighborhood. Residential Parking Districts help manage excess on-street parking demand by requiring a city-issued parking permit to park on-street during designated hours. A limit of two permits are made available to the property owners or residents of each home within the established district. Vehicles parked on street without a permit in these areas are subject to citation. While Residential Districts are often effective at incentivizing more efficient use of off-street garage/driveway parking, they also have potential to shift excess parking demand to nearby areas outside of the district boundary. This potential shift in spillover parking will be an important consideration in establishing any new parking district. The City Parking Services Division considers requests to establish parking districts on a case-by-case basis and follows a formal process requiring public outreach opportunities, neighborhood ballots and City Council approval prior to creating new a new district or modifying boundaries or policies of an existing district.

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15 Studies indicate that on average, 1 in 4 (25%) Americans do not use their garage for parking, instead choosing to use this space for excess storage, personal gyms and recreational area. A 2007 UCLA research study found that percentage to be as high as 75% among surveyed middle-class homeowners in Southern California. These choices often result in more cars parked on street. (Source: [http://www.latimes.com/style/la-hm-parking20mar20-story.html](http://www.latimes.com/style/la-hm-parking20mar20-story.html))
- **Phasing/Monitoring Strategies** – This plan includes detailed recommendations for project implementation and monitoring (see Section V). By phasing implementation of project improvements over time, including use of low-cost temporary treatments during initial rollout, the City will be able to monitor performance and identify potential design refinements needed prior to final construction. The monitoring plan proposes before and after parking studies to identify potential shifts in parking demand, concerns with spillover, and locations with inadequate parking supply within the neighborhood. If desired by the City Council, some parking removal could be implemented in phases to allow for additional monitoring and time for residents to adjust to parking conditions and potentially pursue formation of a Residential Parking District. For example, removal of parking along Chorro Street, where demand is lower, could be implemented first, with removal of parking along higher-demand segments on Broad Street to be implemented in later phases pending results of additional monitoring studies and approval by Council.

- **Accessible On-Street Parking** – The City is not required to provide neighborhood street parking for residential uses\(^\text{17}\): however, it is important to acknowledge that there are residential homes along the Anholm Bikeway that were built several years ago and do not meet current City requirements for number or dimensions of on-site driveway/garage parking. Loss of on-street parking could be particularly inconvenient for residents with disabilities or mobility challenges that rely on street parking due to lack of accessible off-street parking within their property. While it is ultimately the responsibility of the homeowner to comply with applicable parking and accessibility standards within their own property, the City is willing to consider limited installation of designated ADA accessible on-street parking stalls along the segments of Anholm Bikeway where parking removal is proposed as part of the project. Provision of ADA accessible on-street parking spaces for residents will be considered by request on a case-by-case basis.

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\(^{17}\) Per City General Plan Policy 14.1.1 (Residential Parking Spaces): Each residential property owner is responsible for complying with the City's standards that specify the number, design and location of off-street residential parking spaces.
Appendix C. Adopting Resolution
RESOLUTION NO. 10937 (2018 SERIES)

A RESOLUTION OF THE CITY COUNCIL OF THE CITY OF SAN LUIS OBIOSO, CALIFORNIA, TO APPROVE AN AMENDMENT TO THE ANHOLM BIKEWAY PLAN

WHEREAS, the Bicycle Transportation Plan and the Land Use and Circulation Elements to the General Plan support reducing use of single-occupant motor vehicles by supporting alternatives, such as walking and bicycling; and

WHEREAS, the Circulation Element to the General Plan has modal split objectives of 20 percent for bicycles and 18 percent for walking, carpooling, and other forms of transportation; and

WHEREAS, the Anholm Bikeway Plan calls for implementation of bicycle facilities that have been shown in other communities to provide substantial benefits to bicycle safety and increase bicycle mode share; and

WHEREAS, the City has identified Multi-Modal Transportation as a Major City Goal, with the purpose of prioritizing implementation of the Bicycle Transportation Plan, pedestrian safety, and the Short-Range Transit Plan; and

WHEREAS, the Bicycle Transportation Plan recommends development of a low-traffic route for bicyclists and pedestrians connecting the downtown core to Foothill Boulevard as a “first priority” project; and

WHEREAS, the City has adopted a Vision Zero policy to eliminate all fatal traffic deaths and severe injuries by 2030, with a focus on improving pedestrian and bicyclist safety; and

WHEREAS, the City coordinated with neighbors and other community members on outreach and public input through community meetings and other methods; and

WHEREAS, during the April 10, 2018 City Council meeting, the City Council adopted Resolution 10881 (2018 series) adopting the Anholm Bikeway Plan, which called to further evaluate Broad, Mission, Chorro and Lincoln Streets to determine if a Class III Shared Street with traffic calming and diversion on Broad, coupled with measures to mitigate impacts on Lincoln and other streets is acceptable to the community; and

WHEREAS, the City performed additional outreach to the community after April 10, 2018 on the “middle section” of the Anholm Bikeway Plan including a design charrette, meetings with community members, and public hearings before the Active Transportation Committee and Planning Commission; and
WHEREAS, the City Council of the City of San Luis Obispo conducted a public hearing in the Council Chamber of City Hall, 990 Palm Street, San Luis Obispo, California, on September 4, 2018 for the purpose of considering amendments to the Anholm Bikeway Plan; and

WHEREAS, notices of said public hearing were made at the time and in the manner required by law; and

WHEREAS, the City Council has duly considered all evidence, including the testimony of interested parties, and the evaluation and recommendations by staff, presented at said hearing; and

NOW, THEREFORE, BE IT RESOLVED by the Council of the City of San Luis Obispo as follows:

SECTION 1. Action. Based upon all the evidence, consideration of staff recommendations, input from interested parties, and public testimony, the City Council does hereby adopt an amendment, in the form attached hereto as Exhibit A, to the Anholm Bikeway Plan (previously adopted on April 10, 2018) to include the following:

- Installation of two-way protected bikeway on Chorro Street between Lincoln and Mission
- Installation of southbound buffered/protected bike lane on Broad between Mission and Ramona.
- Improved bikeway pavement markings and guide signage within Class III shared lane in northbound direction
SECTION 2. Environmental Review. Per Section 15304 of the State California Environmental Quality Act (CEQA) Guidelines, the project is categorically exempt from CEQA under Class 1, Existing Facilities; Section 15301 and Class 4, Minor Alterations to Land, because the project would be constructed on existing city streets within the public right of way. The project will be constructed in an area that has no value as habitat for biological resources and would not be located in agricultural areas. The proposed street lights would be located in an urban area and would not significantly increase light or glare beyond existing conditions. The project has no potentially significant traffic impacts. The project is consistent with General Plan policies that promote an integrated system of bikeways, walkways, and traffic calming measures that promote a safe, multimodal transportation network.

Upon motion of Council Member Rivoire, seconded by Council Member Gomez, and on the following roll call vote:

AYES: Council Members Gomez and Rivoire, and Mayor Harmon
NOES: Council Member Pease and Vice Mayor Christianson
ABSENT: None

The foregoing resolution was adopted this 4th day of September 2018.

Mayor Heidi Harmon

ATTEST:

Teresa Purrington, City Clerk

APPROVED AS TO FORM:

J. Christine Dietrick, City Attorney

IN WITNESS WHEREOF, I have hereunto set my hand and affixed the official seal of the City of San Luis Obispo, California, this 17th day of September, 2018.

Teresa Purrington, City Clerk