Council Agenda Report

Item 6b

Department: Public Works
Cost Center: 5009
For Agenda of: 11/4/2025
Placement: Business
Estimated Time: 90 minutes

FROM: Scott Collins, Assistant City Manager
Prepared By: Matt Horn, Major City Projects Manager

SUBJECT: PRADO INTERCHANGE AND BRIDGE VALUE ENGINEERING

RECOMMENDATION

1. Receive an update on the Prado Road Interchange Project Value Analysis phase; and,
2. Direct staff to implement the Prado Road Interchange Project Value Analysis project changes that will reduce construction costs by approximately $8,000,000; and
3. Direct staff to implement the Prado Road Interchange Project travel lane reduction cost components that will reduce construction costs by approximately $12,000,000; and
4. Direct staff to implement a shared use path along the south side of Prado Road through the Prado Road Interchange Project and to Higuera Street.

REPORT-IN-BRIEF

The Prado Road Interchange Project (Interchange Project) is a long-planned regional mobility improvement that will extend Prado Road over US 101 to Dalidio Drive, realign Elks Lane, and add a northbound auxiliary lane to Madonna Road. Together with the adjacent Prado Creek Bridge Replacement Project (Bridge Project) and future Prado Road Extension Project (Road Extension Project), will complete a critical multimodal east–west connection across the City, improving congestion, safety, and access for all travel modes.

In 2023, the City Council approved the Preferred Alternative (Attachment A) for the Interchange Project and awarded the Plans, Specifications, and Estimate (PS&E) design phase to Consor Engineering in February 2025. During the discussion on the design phase contract with Consor, Council expressed concern over escalating project costs, now estimated at $147 million, with roughly $110 million still unfunded, and directed staff to pursue additional cost-reduction strategies and regional funding opportunities.

Consor Engineering's Value Analysis work determined that several refinements to the Interchange Project are feasible that collectively reduce estimated construction costs by about $8 million while maintaining multimodal functionality. These include using cast-in-drilled-hole (CIDH) columns instead of driven piles, long-span precast girders to avoid falsework over US 101, reducing bridge design speed and deck width, and increasing use of recycled materials. Further evaluation of traffic lane width reductions and traffic lane

reductions and a consolidated shared-use path on the south side of Prado Road could yield an additional $12 million in savings (Attachment B).

To implement these refinements, Consor divided Prado Road into three segments, tailoring cross-sections to context. The segments are visual shown in this report in Figure 7 and described below:

- Segment 1 connects to the San Luis Ranch area at Dalidio Drive and goes over US 101 and ends at the US 101 northbound on and off ramps. This segment is planned to reduce the overpass width from over 103 feet to 63 feet;
- Segment 2 connects to Segment 1 at the US 101 northbound on and off ramps and ends at the new location of the Elks at Prado Road intersection. This segment widens to 85 feet to accommodate the northbound on and off ramps for US 101; and
- Segment 3 connects to Segment 2 at the new location of the Elks at Prado Road intersection. This segment transitions Prado Road and its multimodal design to the upcoming Bridge Project improvements. Extending the proposed shared-use-path design through the Bridge Project and to Higuera Street could reduce costs for the Bridge Project and provide corridor-wide consistency.

Staff, in coordination with San Luis Obispo Council of Governments (SLOCOG), Caltrans, and Consor, are preparing the project for competitive grant cycles such as the Federal Rebuilding American Infrastructure with Sustainability and Equity (RAISE) and State SB 1 Solutions for Congested Corridors (SCCP) programs and exploring "bundling" the Interchange Project with adjacent corridor projects to improve funding competitiveness.

The Active Transportation Committee (ATC) reviewed this item on October 23, 2025, and that input is included with this report.

Staff is seeking direction from Council on whether to implement:

- The Value Analysis recommendation to reduce cost of the Interchange Project by approximately $8,000,000; and
- The travel lane reductions to reduce the costs of the Interchange Project by approximately $12,000,000; and
- The proposed shared use path on the southerly side of Prado Road until Higuera that could reduce construction cost of the Bridge Project.

Staff is recommending this project alternative, which is referred to later within this report as the Preferred Alternative Value Analysis with Lane Reduction (PA VA + Lane Reduction).

POLICY CONTEXT

The Interchange Project and the Bridge Project support the Major City Goals for Infrastructure and Sustainable Transportation. The Land Use and Circulation Element (LUCE) of the General Plan and the 2021 Active Transportation Plan identifies a lack of multi-modal east-west connections across the City, which these projects propose to construct.

Additionally, the General Plan also identifies the Interchange Project as essential in facilitating recent and future growth in the southern portion of the city. Many of the trips generated from existing uses, as well as proposed and previously approved development projects will use the Interchange Project as a primary east-west link. Approved environmental documents for numerous private housing development projects in this area of the city, including San Luis Ranch, Avila Ranch, Froom Ranch Specific Plan, and the Margarita Area Specific Plan, identify construction of the Interchange Project as essential infrastructure necessary to address current and future traffic congestion and circulation deficiencies.

Funding for the Interchange Project has been significantly supported through contributions required under the San Luis Ranch Development Agreement (DA). As part of the DA, San Luis Ranch was obligated to provide bond proceeds to the City specifically for the Interchange Project. The Prado Interchange is identified as a reimbursable facility within the City's Transportation Impact Fee (TIF) Program, which collects proportional contributions from new development to fund transportation infrastructure.

DISCUSSION

Background

The Interchange Project is a long-planned regional mobility improvement that will extend Prado Road over US 101 to Dalidio Drive, realign Elks Lane, and add a northbound auxiliary lane to Madonna Road. Together, these improvements will relieve congestion, strengthen multimodal connectivity, and improve emergency access across the southern portion of the City.

On September 5, 2023, the City Council reviewed several different alternatives for the Interchange Project and selected the Preferred Alternative and approved the Project Report. The total current and future cost to implement the Preferred Alternative is anticipated to be $147 million of which $110 million has yet to be secured and is anticipated to be funded by both grants and debt financing.

On February 18, 2025, the City Council awarded the Plans, Specifications & Estimate phase of the project to Consor Engineering and expressed significant concern regarding the total cost of the project, the anticipated amount of debt financing the City would be required to take on, and expressed a strong desire to obtain additional regional funding for the project. At that same time, the City Council approved of the planned value analysis work to identify potential project cost savings through alternative designs.

Project Background

The Interchange Project has been identified in City and Regional Transportation Plans to address east–west connectivity constraints created by the US 101 and how the City has developed around the US 101. Current crossings at Los Osos Valley Road (LOVR) and Madonna Road are at capacity, and regional growth is projected to degrade operations on both US 101 and local streets. Completed housing projects, such as San Luis Ranch and future planned housing development in the Margarita Area and adjacent to Tank Farm Road are dependent upon completion of this project.

Both the Preferred Alternative and the Value Analysis alternative for the Prado Interchange Project will:

- Extend Prado Road over US 101 to Dalidio Drive, creating a continuous east–west arterial connection.
- Reconstruct the northbound on/off-ramps and add a northbound auxiliary lane between Prado and Madonna.
- Realign Elks Lane behind the RTA facility and 40 Prado Homeless Services Center to connect with Prado Road at a new signalized intersection.
- Widen Prado Road between Elks Lane and South Higuera Street with sidewalks and bikeways.

These improvements will reduce citywide vehicle miles traveled (VMT) by approximately 0.5% (≈ 2,700 miles per day), relieve congestion at neighboring interchanges, and complete a critical multimodal corridor identified as a Tier 1 priority in the 2021 Active Transportation Plan.

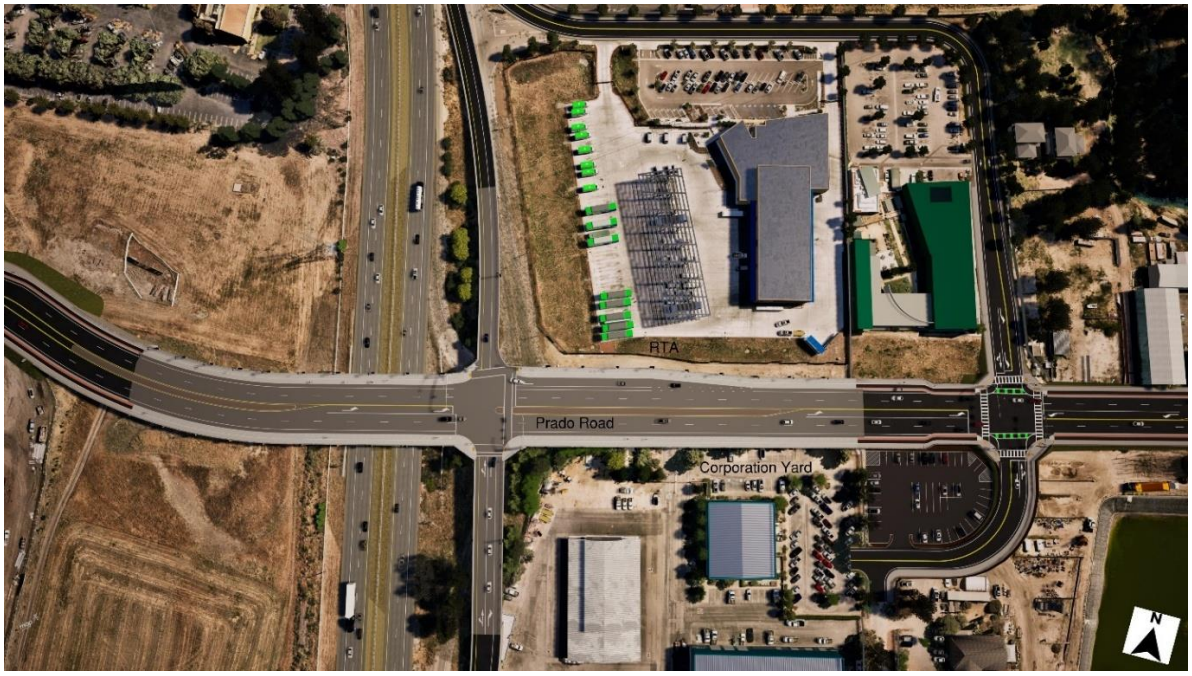

Figure 1 – Plan View of the Preferred Alternative

Figure 2 – Interchange Renderings (US 101 Northbound)

Figure 3 – Interchange Renderings (US 101 Southbound)

Related Projects – Prado Corridor Connectivity Projects

The Interchange Project is one of three coordinated projects that together will create a critical east–west connection linking Broad Street to Madonna Road. This continuous multimodal corridor will provide improved access for vehicles, bicycles, pedestrians, and transit, relieving congestion on existing interchanges and enhancing connectivity between key employment, residential, and commercial areas in the southern portion of the City. The three related projects are shown below in Figure 4 and include:

Bridge Project

Located west of South Higuera Street, this separate bridge replacement is required due to structural deficiencies of the bridge and will proceed before the Interchange Project. This project will reconstruct the Prado Road and Higuera Street intersection, replace the existing Prado Road Bridge at San Luis Creek, improve Prado Road from Higuera Street westerly to the beginning of the City's Water Resource Recovery Facility, and provide bicycle facilities on Prado Road east of Higuera Street to the Serra Meadows Roundabout. Coordination between both projects is ongoing to ensure design consistency and minimize disruption.

Road Extension Project

The City has a long-range plan to extend Prado Road east to Broad Street to complete the corridor connecting Broad to Madonna. Timing of this future project will depend on private development participation and right-of-way dedication.

It is the intent of both the Interchange Project and the Bridge Project to size and construct the planned improvements to facilitate a future connection to Broad Street.

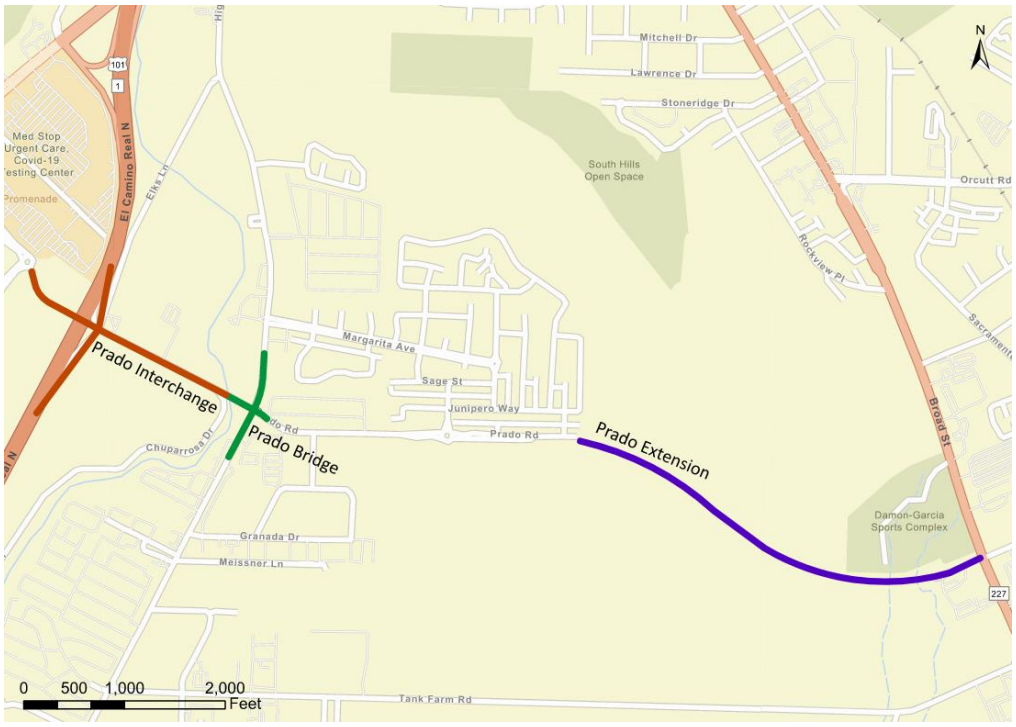

Figure 4 – Related Project Vicinity Map

Interchange Project Delivery Process – Caltrans Delivery Process

The Interchange Project is a partnership between the City and Caltrans. Caltrans is assisting the City with project delivery and will eventually assume maintenance of portions of this facility (as Caltrans current does with the LOVR and Madonna Road interchanges). Throughout the process (from planning to construction), Caltrans staff review and approve major deliverables to ensure compliance with Caltrans standards. Once the Interchange Project is constructed, Caltrans will assume maintenance for the bridge structure, ramps, and operation of the Prado Road/US 101 Northbound Ramps traffic signal. All improvements within Caltrans Right-of-Way must be designed to Caltrans Standards.

The Caltrans interchange delivery process is divided into four phases which are as follows:

1. Project Study Report – Project Development Support (PSR-PDS): This is the project initiation phase which outlines the transportation problem and potential solutions. This phase for the Interchange Project was completed in 2018.
2. Project Approval & Environmental Document (PA/ED): This phase of work develops several alternatives, completes the necessary environmental review and clearance, and upon completion the selection of the Preferred Alternative for further design in the next phase. Due to the anticipated project cost, a value analysis was completed in order to reduce costs where appropriate. The PAED phase of work was completed in 2024.
3. Plans, Specifications & Estimate (PS&E): This phase of work will complete the value analysis work that was started in the PAED phase and complete the plans for the Interchange Project to a state in which the City will be able to publicly bid the project for a contractor to construct the Interchange Project. This is the current phase of the project which is anticipated to be complete in 2029.
4. Construction: This phase of work will construct the design improvements. Construction is anticipated to start in 2029 dependant upon project funding.

Value Analysis and Alternatives to Reduce Project Cost

A formal five-day Value Analysis workshop was completed in March 2023. Through this process, staff and consultants evaluated opportunities to reduce project costs and improve constructability while maintaining multimodal goals. Recommendations from this work included:

1. Use cast-in-drilled-hole columns instead of driven piles.
2. Use long-span precast girders to increase the speed of construction.
3. Reduce the bridge design speed from 45 mph to 35 mph, which will reduce structure size and cost.
4. Reduce lane and shoulder widths to reduce deck area.
5. Increase recycled content (aggregate, steel, fly ash) in the concrete design to lower cost and emissions.

Both City and Caltrans staff agreed that these recommendations warranted additional analysis and decided to conduct that evaluation as one of the first tasks in the next phase of the project (PS&E phase). This information was included in the staff report that was presented to Council on September 5, 2023.

On September 5, 2023, City Council reviewed several different alternatives for the Prado Interchange Project and selected the Preferred Alternative. The Preferred Alternative for the Interchange Project is shown in Figure 1 of this report and includes the following improvements:

- Tight-diamond partial interchange with northbound ramps.
- Two travel lanes each direction on Prado Road with median/turn lane.
- Protected sidewalks and bikeways on both sides of the bridge.
- Elevated roadway segments supported by columns to avoid floodplain impacts.
- Elks Lane realignment and new signalized intersection.
- Space reserved for potential future southbound ramps.

Since that time, however, the costs for construction of the project have escalated by approximately $34.2 million. The total current and future cost to implement the Preferred Alternative is anticipated to be $147 million of which $110 million has yet to be secured and is anticipated to be funded by both grants and debt financing.

On February 18, 2025, City Council awarded the Plans, Specifications & Estimate (PS & E) phase of the project to Consor Engineering and expressed concern regarding the total cost of the project and approved the planned value analysis work to fully evaluate the possible cost reductions from the potential design changes identified in the above referenced March 2023 value analysis workshop. Given this concern, Consor Engineering's first action was to evaluate how these cost reduction-strategies could be integrated into the final design for Council's consideration.

Consor Engineering's Value Analysis Work

Following award of the PS&E contract, Consor Engineering evaluated the 2023 value analysis recommendations to confirm which recommendations could be integrated into final design to improve constructability, reduce cost, and maintain multimodal functionality consistent with Caltrans standards and the City's design objectives.

Consor Engineering's review confirmed that the following key recommendations from the 2023 workshop are technically sound and should be incorporated into the project:

1. **Cast-in-Drilled-Hole (CIDH) Columns:** Replacing driven piles with large-diameter CIDH shafts reduces construction noise, minimizes vibration impacts to nearby facilities such as 40 Prado and the Regional Transit Authority (RTA) campus, and reduces the need for large underground pile caps. This approach also shortens construction time and simplifies foundation work within constrained utility and floodplain areas.
2. **Long-Span Precast Bridge Girders:** Utilizing longer precast girders eliminates the need for falsework over U.S. 101, which reduces traffic impacts, improves safety, and lowers required bridge elevation. The reduced profile shortens overall bridge length and results in substantial material and cost savings.

3. **Reduced Design Speed and Roadway Width:** Lowering the bridge design speed from 45 to 35 miles per hour allows for tighter horizontal and vertical geometry and, in combination with slightly narrower lane and shoulder widths, reduces the bridge deck area. This smaller footprint supports the City's target speed objectives and lowers construction and right-of-way costs while maintaining acceptable traffic operations.
4. **Increased Use of Recycled and Reclaimed Materials:** The design will maximize the reuse of existing pavement and base materials from Elks Lane, Prado Road, and the freeway ramps. These materials can be incorporated into new asphalt and concrete, reducing greenhouse gas emissions and material costs.

The combination of these refinements is estimated to reduce total project construction costs by approximately $8 million. In addition to cost savings, these changes provide environmental and community benefits by reducing noise, lowering construction duration, and maintaining access for nearby facilities.

The same value analysis also highlighted that traffic lane and shoulder widths could be reduced to further reduce project costs. In addition to these reductions, Consor Engineering looked at the context of the corridor. The project is essentially abutting two existing but separate shared use bike and pedestrian paths that are not currently planned to be connected. See Figure 5 below:

Figure 5 – Location of San Luis Ranch and Bob Jones path terminuses

Consor Engineering is recommending implementation of the traffic lane width reductions identified in the 2023 Value Analysis to reduce overall construction costs while maintaining multimodal connectivity. In addition, Consor Engineering proposes consolidating bicycle and pedestrian facilities into a single shared-use path along the southerly side of Prado Road, rather than providing separate on-street striped bike lanes and sidewalk-level one-way protected bike lanes on both sides of Prado Road. This approach reduces the total bridge width and is anticipated to reduce project costs by approximately $12 million while still meeting the City's multimodal objectives (in addition to the other $8 million in cost savings identified by Consor). Consor Engineering's design philosophy emphasizes providing on-street bicycle facilities for strong and confident riders, while also incorporating a protected shared-use path on one side of the street for users who prefer greater separation from vehicle traffic. These proposed modifications are discussed in the next section.

Consor Engineering's Value Analysis Lane Reductions

Along Prado Road, the Preferred Alternative design provides two travel lanes in each direction, a center lane used for turning movements or median, and paved shoulders on both sides of the roadway. The design also includes one-way sidewalk-level protected bicycle lanes and sidewalks on both sides to accommodate multimodal travel. To support this cross section, the bridge portion of the project spanning US 101 would have to be constructed with a width exceeding 103 feet. Based on current market conditions, each additional foot of bridge width adds approximately $500,000 to the total construction cost. Figure 6 below illustrates a typical cross section of the Preferred Alternative proposed roadway.

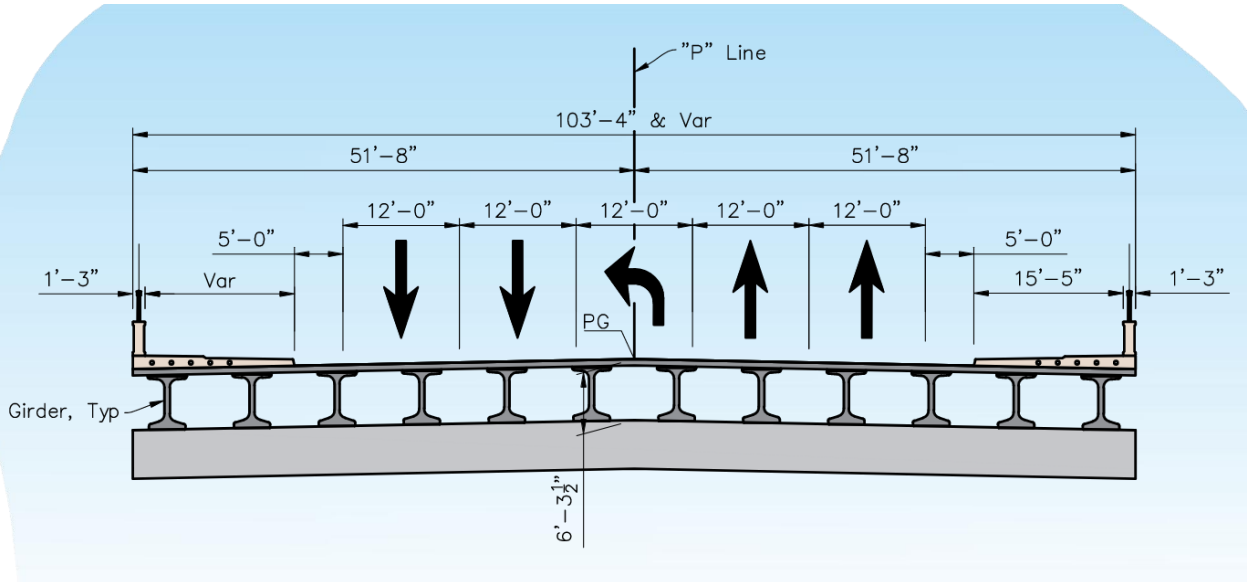

Figure 6 – Typical Roadway Section for the Preferred Alternative along Prado Road

Given the significant cost associated with bridge construction, Consor Engineering focused on strategies to reduce the overall bridge width while still meeting the project's transportation and multimodal goals. To achieve this, the design team divided Prado Road into three functional segments, as illustrated in Figure 7.

- Segment 1 connects to the San Luis Ranch area at Dalidio Drive and goes over US 101 and ends at the US 101 northbound on and off ramps. This segment is planned to reduce the overpass width from over 103 feet to 63 feet;
- Segment 2 connects to Segment 1 at the US 101 northbound on and off ramps and ends at the new location of the Elks at Prado Road intersection. This segment widens to 85 feet to accommodate the northbound on and off ramps for US 101; and
- Segment 3 connects to Segment 2 at the new location of the Elks at Prado Road intersection. This segment transitions Prado Road and its multimodal design to the upcoming Bridge Project improvements. Extending the shared-use-path design through Bridge Project and to Higuera Street could further reduce costs on the Bridge Project and provide corridor-wide consistency.

By separating the roadway into these segments, Consor was able to tailor the cross section and structural design for each segment—narrowing travel lanes, adjusting median widths, and varying structural support types where appropriate—to minimize bridge width and associated construction costs while maintaining safety, access, and multimodal continuity across the corridor.

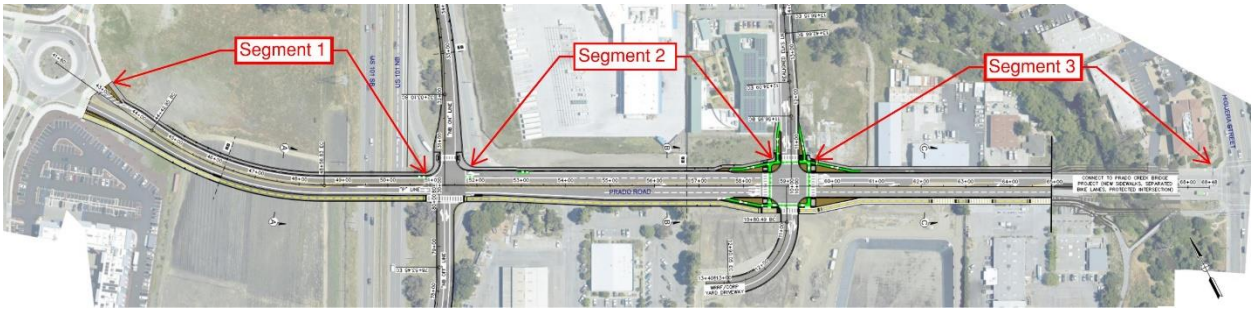

Figure 7 – Prado Road Segments

Segment 1 value engineering reduces the overpass bridge width from more than 103 feet down to approximately 63 feet by providing a more efficient cross section consisting of one vehicle travel lane in each direction, a center lane used for turning movements or as a median and space for emergency vehicles to bypass traffic, on-street bike lanes, a sidewalk on the north side of the bridge, and a shared-use path on the south side. This configuration maintains multimodal access while significantly reducing bridge width and overall Interchange Project construction cost.

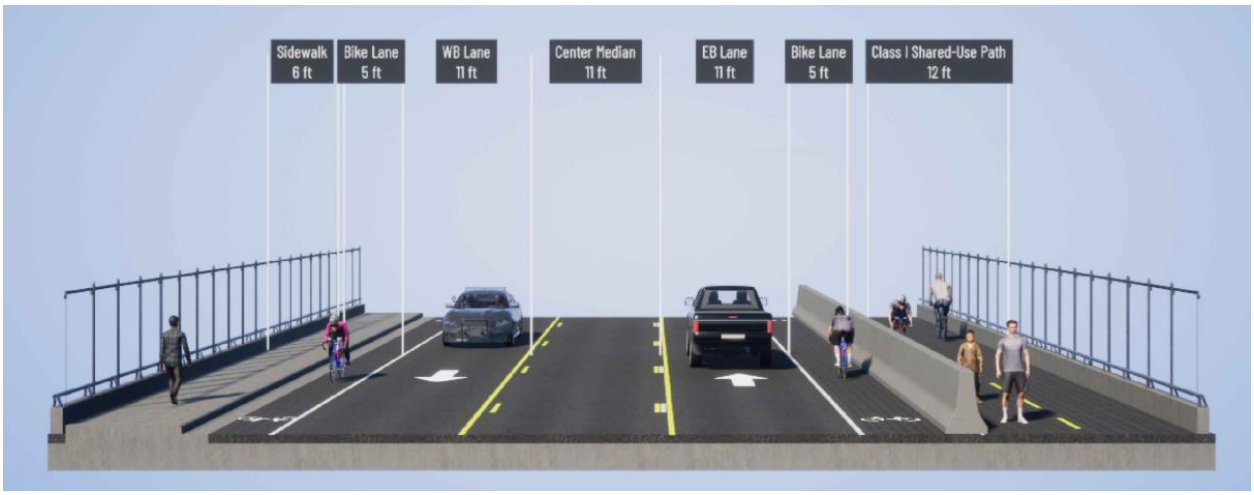

Figure 8 – Segment 1 – Limits Completely with Interchange Project

Segment 2 widens the bridge from approximately 63 feet in Segment 1 to about 85 feet to accommodate the northbound on- and off-ramps connecting Prado Road to US 101. Although this represents an increase over Segment 1, it remains approximately 18 feet narrower than the bridge width included in the Preferred Alternative. The added width provides two additional travel lanes to improve ramp operations and traffic flow through the interchange area. This segment also extends the shared-use path along the south side of Prado Road and includes two travel lanes in each direction with a center turn lane or median. The configuration enhances safety and accessibility for all users while providing direct access to the realigned Elks Lane and the City's Water Resource Recovery Facility (WRRF).

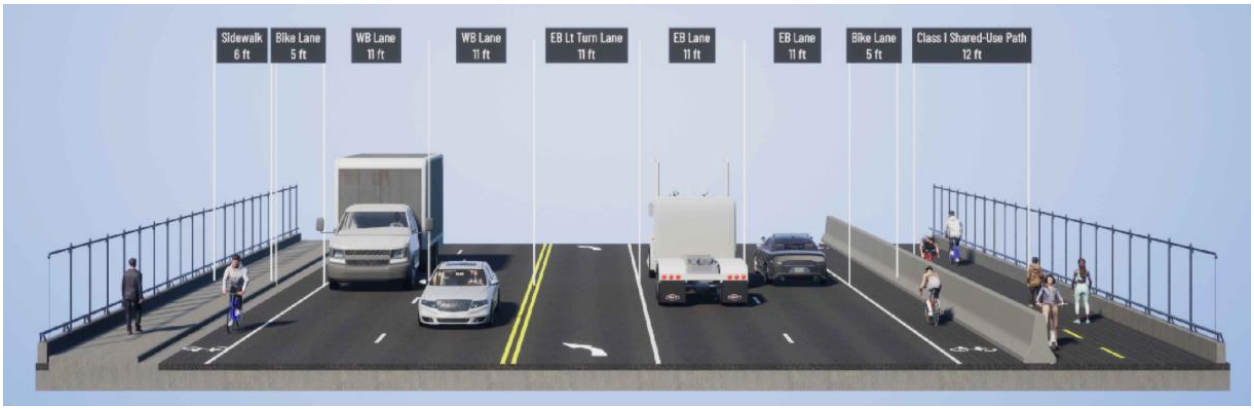

Figure 9 – Segment 2 - Limits Completely with Interchange Project

Segment 3 provides the transition between the Segment 2 improvements and the planned Bridge Project improvements. Approximately half of this segment is included in the Interchange Project and the other half in the Bridge Project. The design includes two travel lanes in each direction, a center turn lane or median, a sidewalk and protected bike path on the north side of the roadway, and a shared-use path on the south side. This segment connects to the future improvements at the Prado Road/South Higuera Street intersection and advances the City's long-term goal of creating a continuous east–west multimodal corridor from Broad Street to Madonna Road.

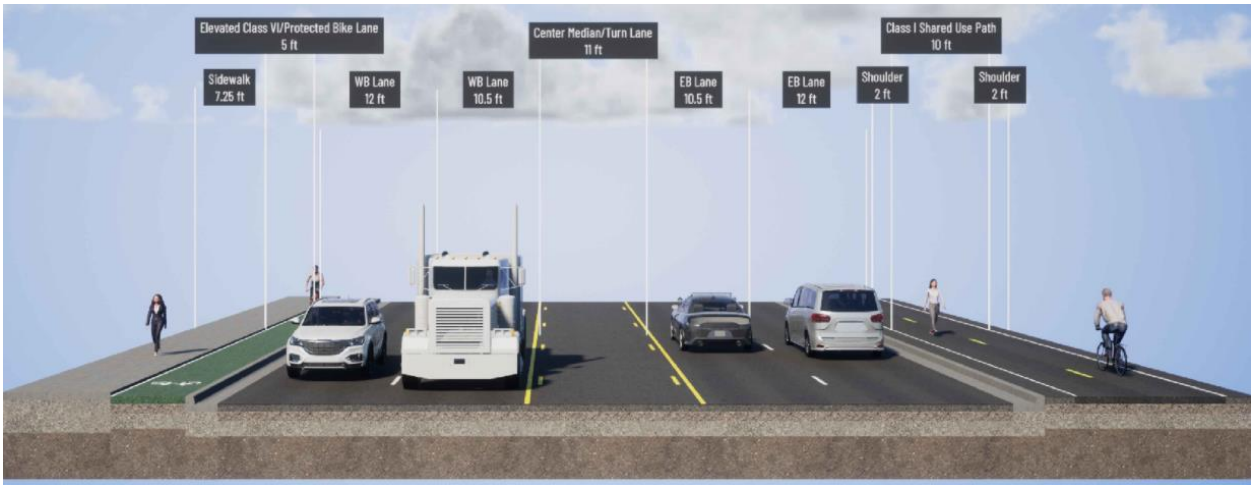

Figure 10 – Segment 3 – Shared Improvements between Interchange & Bridge projects

Bridge Project Value Engineering

Figures 11 and 12 below illustrate the planned improvements for the Bridge Project. This project is currently designed to provide six travel lanes, on-street shoulders/bike lanes, one-way sidewalk-level protected bike lanes on each side of the street, sidewalks, for the intersection of Prado and Higuera, and includes relocation of the existing Bob Jones Trail bridge to accommodate the widened roadway. The current estimated cost of the Bridge Project is approximately $45.5 million.

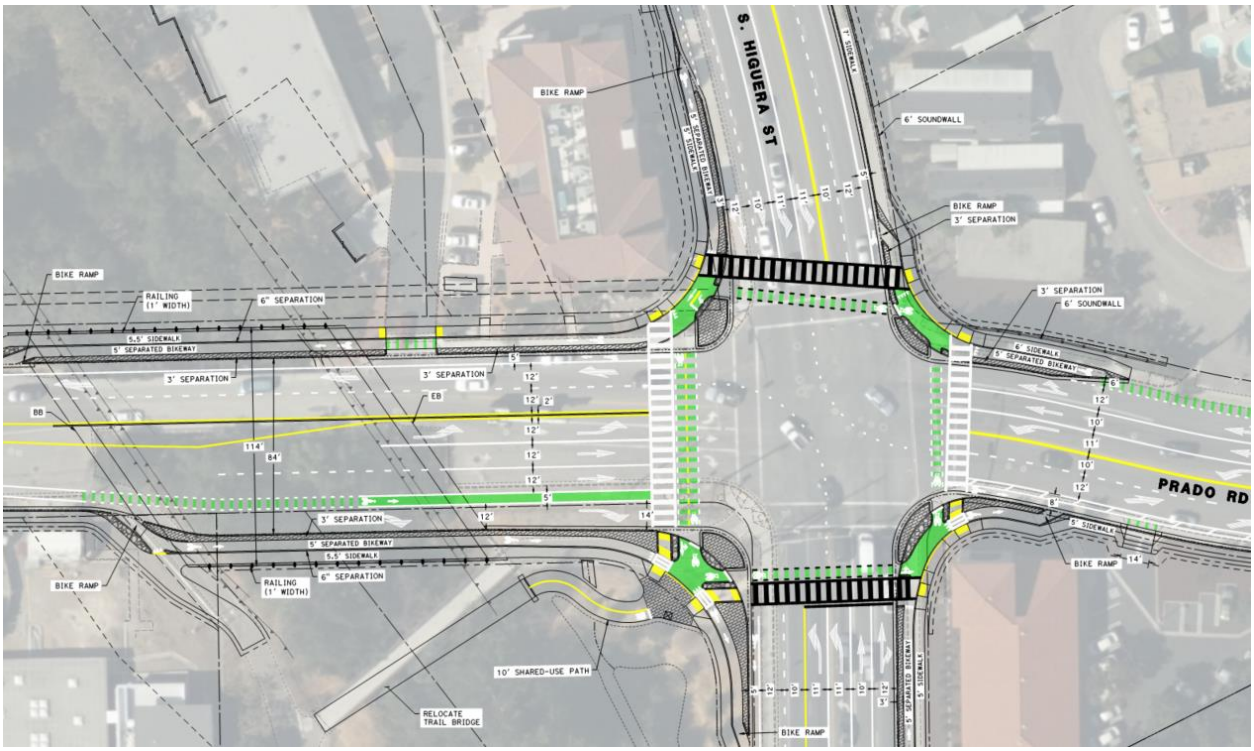

Figure 11 – Plan View of Bridge Project

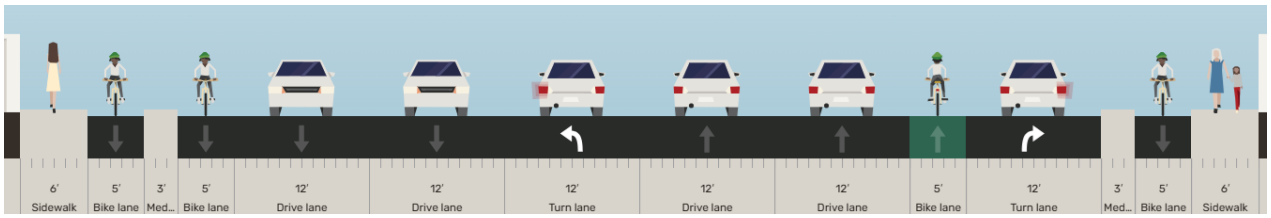

Figure 12 – Prado Road Section for the Bridge Project

If the previously discussed bicycle and pedestrian configuration from Segments 1 and 2 featuring a shared-use path on the south side and consolidated multimodal facilities were extended through the Bridge Project, there is an opportunity to achieve consistency across the corridor and may reduce overall costs for this project. Additionally, with this change there may be more opportunities to reduce costs of this Bridge Project by connecting to the existing Bob Jones Trail and negating the need to remove and replace the existing bridge that services this trail exclusively. There also could be other cost saving opportunities if Council wishes to proceed with a value analysis for Bridge Project.

Safety of Shared Use Paths

Shared-use paths provide complete separation between bicyclists, pedestrians, and motor vehicles, greatly reducing exposure to serious conflicts. The City of San Luis Obispo designs these facilities in accordance with both Caltrans and National Association of City Transportation Officials (NACTO) standards. National research shows that shared-use paths reduce bicycle crash rates compared to on-street conditions (FHWA, 2019). These design and operational practices make shared-use paths among the safest and most comfortable multimodal facilities for users of all ages and abilities.

Beyond safety, maintaining a consistent shared-use path along Prado Road, matching the adjacent facilities on Madonna Road and Froom Ranch Way, simplifies navigation for users, reduces potential conflict points at the Elks Lane and northbound on-ramp intersections, and lowers costs by minimizing roadway width and streamlining intersection design and operations.

Cost Comparison

Table 1 presents a comparison of Interchange Project costs by phase. The column labeled PA represents the cost of implementing the Preferred Alternative selected by City Council in 2023. The column labeled PA VA reflects the same Preferred Alternative that incorporates the Value Analysis recommendations (use of cast-in-drilled-hole columns, long-span precast girders, reduced bridge design speed, and increased use of recycled materials). The column labeled PA + Lane Reduction includes the Value Analysis recommendations **and** additional cost savings associated with narrower travel lane and lane reductions (which is staff's recommended alternative).

It is assumed that costs for other project phases, including design, right of way acquisition, utility relocation, construction administration, and construction management, will remain largely unchanged regardless of which construction cost reductions are implemented. Because a large portion of the project cost is anticipated to be debt financed, the table

also identifies the corresponding annual debt service savings that would be realized over a 30-year repayment period under each reduced cost alternative.

Table 1 – Cost Comparison

Phase	PA	PA VA	PA VA + Lane Reduction
Design	$10,045,780	$10,045,780	$10,045,780
Right of Way	$2,000,000	$2,000,000	$2,000,000
Utilities Relocation	$2,000,000	$2,000,000	$2,000,000
Construction Admin	$2,000,000	$2,000,000	$2,000,000
Construction Management	$11,000,000	$11,000,000	$11,000,000
Construction	$119,000,000	$111,000,000	$99,000,000
Project Total[1]	**$147,545,780**	**$139,545,780**	**$127,545,780**
Annual Debt Payment Savings (for 30 years)[2]	**-**	**$490,664**	**$1,222,660**

Debt service payments for projects included in the City's Capital Improvement Plan are funded through future allocations from the 10-Year Capital Improvement Plan budget. As a result, any reduction in the total project cost directly increases the City's future capacity to deliver other capital improvements. Conversely, higher project costs would reduce the amount of funding available over the next 30 years for other public improvements such as roadway rehabilitation, sidewalk replacement, ADA improvements, park development, large City facility construction such as a new Public Safety Center, City fleet purchases, and active transportation projects.

Future Grant Possibilities

Staff, in coordination with SLOCOG and Consor Engineering, are actively monitoring several federal and state funding programs that align with the Interchange Project. The most competitive opportunities are anticipated to include the Federal Rebuilding American Infrastructure with Sustainability and Equity (RAISE) program and the State SB 1 Solutions for Congested Corridors (SCCP) program, both of which prioritize multimodal connectivity, safety, and climate-resilient infrastructure.

In addition, there may be opportunities to enhance overall grant competitiveness by bundling the Interchange Project with complementary corridor improvements, such as the Bridge Project and future active transportation connections. This bundling approach has been successfully utilized within the region to secure SB 1 funds for the US 101 South County Mobility Improvement Project. Lastly, the City is also exploring the Affordable Housing and Sustainable Communities (AHSC) potential grant opportunity with Community Action Partnership of San Luis Obispo County (CAPSLO) to fund supportive housing and transportation needs that could fund a portion of this project.

[1] Inflationary cost is estimated to be 5% per year and matches what was presented to Council on February 18, 2025.

[2] Debt service savings assumes the interest rate of funds received is 4.6% which is consistent with the debt service calculation presented in the 2025-27 Financial Plan. Any project savings realized through value analysis work was assumed to reduce the amount of funding borrowed.

Staff will continue coordination with SLOCOG, Caltrans, CAPSLO and Consor to position the project for upcoming funding cycles and to maximize external grant contributions, thereby reducing the City's future debt obligations associated with the Interchange Project construction.

Consistency with the Active Transportation Plan

The City's Active Transportation Plan (ATP), adopted by City Council on February 2, 2021, is a 20-year blueprint to make walking, bicycling, and other human-powered travel safe, connected, and accessible for people of all ages and abilities. Replacing the 2013 Bicycle Transportation Plan, it supports the City's Climate Action Plan and General Plan Circulation Element goals to reduce vehicle use and carbon emissions. The ATP includes a prioritized network of new and improved bikeways, sidewalks, and crossings; design guidelines aligned with state and national best practices; and programs to encourage and educate residents about active travel.

In the vicinity of US 101, the ATP's Figure 18 on Page 99 proposes bike and pedestrian improvements shown in Table 2 below.

Table 2 – Related ATP Areas

Roadway	**ATP Identified Improvements**
Prado Road	Protected Bike Lanes
Los Osos Valley Road	Protected Bike Lanes
Madonna Road	Shared Use Path & Protected Bike Lanes
California	Shared Use Path

Ultimately, the tangible changes from an active transportation perspective proposed with the Value Analysis (VA) + Lane Reduction Alternative are relatively limited but meaningful. The changes include:

1. Eliminating a one-way protected bike lane on the north side of Prado Road for a portion of the corridor,
2. Consolidating pedestrian and bicycle facilities on the south side of the street as a shared-use path, and
3. Allowing two-way bicycle travel on the south side of the street.

Pros: The proposed modification would lower overall project cost, improving the likelihood that the interchange can be built. It would also create a more intuitive and convenient two-way bicycle connection between the San Luis Ranch shared-use paths and the Bob Jones Trail, reducing the likelihood of wrong-way cycling behavior.

Cons: Pedestrians would need to share space with bicycles along the south side of the corridor, which can increase potential conflicts at intersections and driveways compared to the previously proposed one-way bikeway configuration.

Impacts to Vehicle Travel from Lane Reduction

The consultant team prepared a Traffic Sensitivity Analysis (Attachment C) to compare traffic operations and emissions for the Interchange Project's design alternatives. The purpose of the analysis was to ensure that the City, Caltrans, and the community could compare whether the four-lane Preferred Alternative provides operational benefits that justify its higher cost relative to the two-lane Value Analysis alternative.

The analysis determined that both the four-lane and two-lane configurations would operate at Level of Service (LOS) D or better at all intersections, indicating comparable overall performance. Average vehicle delay for the two-lane alternatives was only one to three seconds higher, well within acceptable LOS D thresholds, and queueing was generally contained within available storage for both options. Under the two-lane configuration, westbound queues may approach Elks Lane due to signal control, though this could be mitigated through a free-flow turn movement.

Greenhouse gas (GHG) emissions modeling found slightly lower peak-hour CO_2 emissions for the two-lane alternatives (approximately 19.9–20.7 tons) compared to the four-lane design (20.2–21.3 tons), with the narrower two-lane configuration producing a smaller carbon footprint due to reduced idling and shorter travel distances.

Overall, the four-lane alternative offers only marginal operational advantages at a significantly higher cost. The two-lane alternative achieves equivalent LOS, lowers GHG emissions, maintains multimodal connectivity, and minimizes construction and environmental impacts.

Next Steps

Following Council direction, the consultant team will prepare a Supplemental Project Report (SPR) for Caltrans review and approval. All value analysis modifications located within Caltrans right-of-way will require formal Caltrans approval through this SPR process. City and Caltrans staff continue to work collaboratively on the project and remain supportive of implementing cost-saving measures identified through the value analysis process.

If the Council's selected direction differs from the improvements identified in the City's adopted Active Transportation Plan (ATP), staff will return to Council with a resolution amending the ATP to ensure consistency with the updated project scope along Prado Road.

The Council's next anticipated action on this project will be to review and approve the Supplemental Project Report, following Caltrans' review, in early 2026. Construction is currently projected to begin in 2029. Prior to that time, Council will consider several related actions, including Bridge Type Selection, grant applications, right-of-way acquisitions, maintenance agreements with Caltrans, and authorization to advertise the Interchange Project for construction bids.

Active Transportation Committee Feeback

On October 23, 2025, the Active Transportation Committee (ATC) reviewed this item. The ATC was specifically asked to provide input on:

A. Does the proposed Value Analysis Alternative provide the appropriate level of service for bicycle and pedestrian travel?

B. Should the same multimodal design standard be extended east to South Higuera Street and integrated into the Prado Creek Project to ensure corridor continuity and reduce project costs?

By unanimous vote of all members present, the ATC provided the following recommendations:

1. ATC supports an elevated shared use path on south side of Prado through entire length of project.
2. ATC supports a one-way bike lane on each side of the roadway throughout the entire length of the project.
3. ATC supports the use of Class 4 bike lanes throughout the project.
4. ATC supports the value analysis alternative with the added additions of the previous motions.

Based on the ATC's input, Consor Engineering developed updated cross sections and preliminary cost estimates for the proposed design refinements.

Figure 13 below illustrates the ATC's preferred configuration, which includes protected one-way bike lanes on both sides of the roadway while maintaining a shared-use path on the south side of Prado Road. Implementing this configuration across the Interchange Project segments is estimated to increase total project costs by approximately $4 million and may require additional right-of-way acquisition along Prado Road at an additional cost to the overall project (more information to be presented to City Council at the November 4, 2025 City Council meeting).

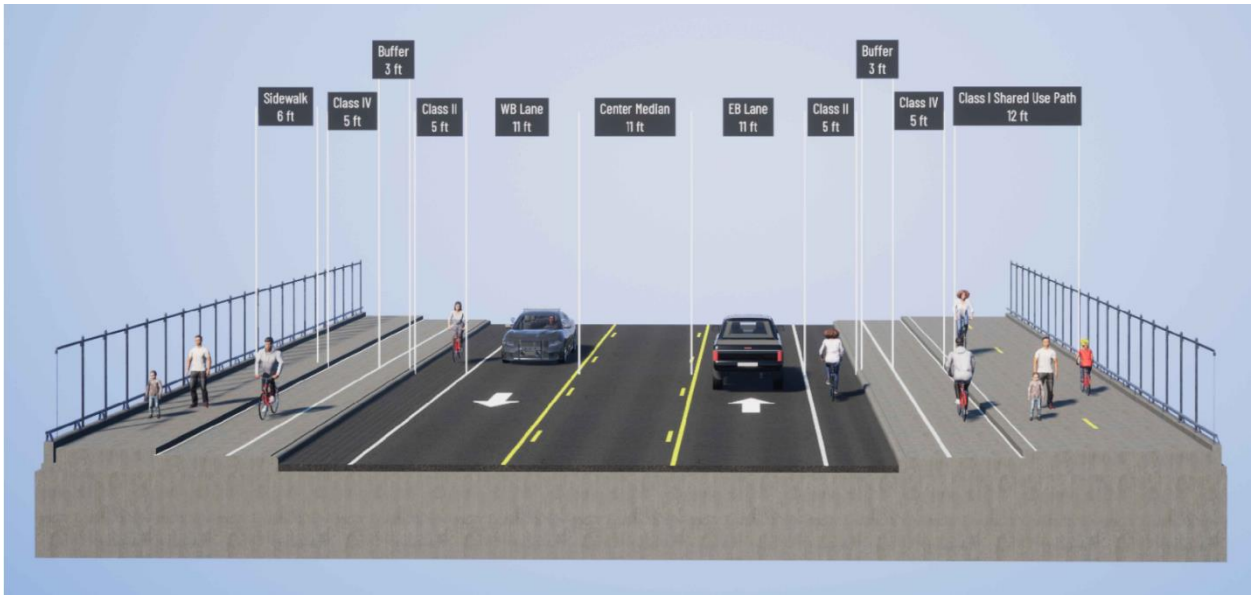

Figure 13 – Protected one-way bike lanes and shared-use path

Figure 14 illustrates an alternate configuration preferred by some ATC members, which includes protected one-way bike lanes on both sides of the roadway but removes the shared-use path on the south side. Implementing this configuration is not anticipated to increase or decrease total project costs.

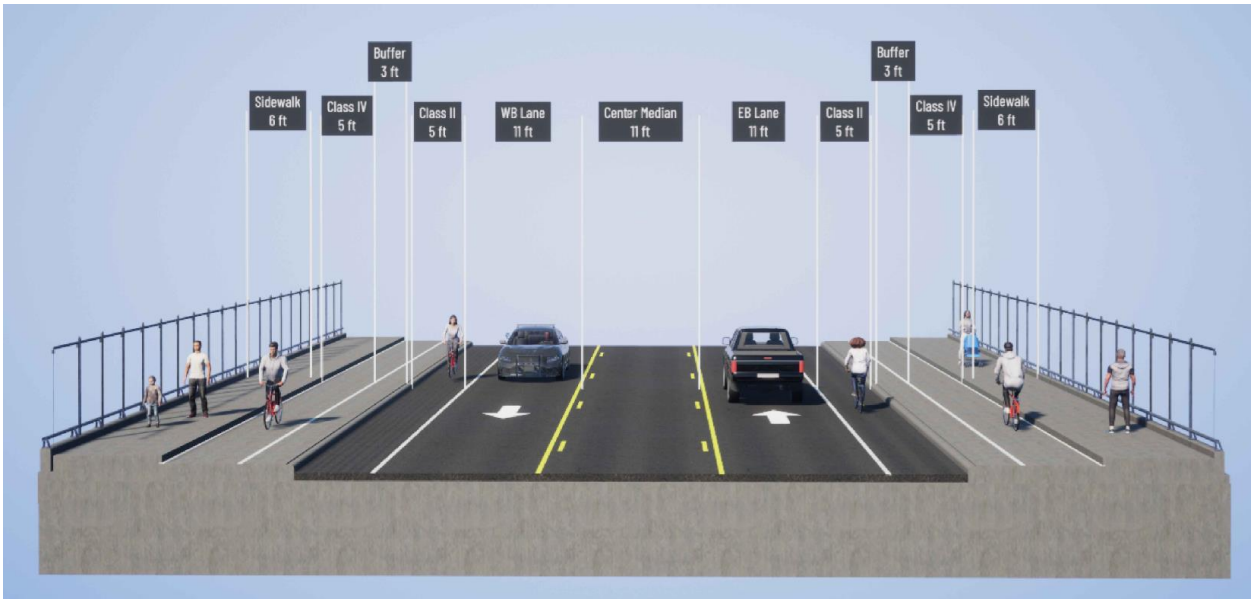

Figure 14 – Protected one-way bike lanes and sidewalks – no shared-use path

It should be noted that ATC's recommendations were noted by staff but the formal approved minutes of this meeting will not be available until November 20, 2025.

Previous Council or Advisory Body Action

Interchange Project
The Interchange Project is included in the City's 1992 Circulation Element of the City's General Plan.

On July 17, 2018, City Council approved the Supplemental Environmental Impact Report (SEIR) for the San Luis Ranch Development (Staff Report, Minutes). The SEIR detailed the impacts of the development and need for the Interchange Project, but did not cover the project itself, necessitating separate CEQA and NEPA documents.

The Active Transportation Plan was adopted by Council on February 2, 2021.

On August 16, 2022, Council Authorized Staff to seek VA services and PS&E services (Staff Report, Minutes).

On September 5, 2023, Council recommended approval of the Initial Study – Mitigated Negative Declaration (IS-MND) to Caltrans, declared Alt 3 as the City's preferred interchange type, and recommended that Caltrans Administration approve the Project Report. (Staff Report, Minutes)

On February 18, 2025, Council awarded the PS&E design contract to Consor Engineering (Staff Report, Minutes).

On October 23, 2025, the Active Transportation Committee reviewed this item and the results of that meeting are included in above.

Bridge Project
On August 20, 2013, Council authorized the advertisement an RFP for advanced technical studies for the Bridge Project. (Staff Report, Minutes)

On October 21, 2014, Council reviewed several bridge types and selected the bridge type to replace the existing Prado Creek Bridge. (Staff Report, Minutes)

On October 4, 2022, and October 18, 2022, an undergrounding ordinance was introduced, and a second reading of that ordinance occurred to place existing overhead utilities underground in connection with the project. (Staff Report, Minutes, Staff Report, Minutes)

Public Engagement

Interchange Project
There were extensive opportunities for public engagement on the project through previous planning efforts, including the 2014 General Plan Land Use and Circulation Element (LUCE) update, during review of the San Luis Ranch development proposal and Environmental Impact Report, approved in 2018, and through public input on the City's capital project prioritization during the past several budget cycles.

On February 15, 2023, a focused workshop was held to solicit input on the latest Interchange Project's details and draft environmental document. This meeting included a presentation on project background, overview of design alternatives considered, discussion of traffic impacts, summary of environmental analysis and mitigation recommendations, latest project cost estimates and schedule. The meeting was advertised via legal ads, via City email and social media notifications, and via direct mailers sent to businesses and residents located within one half mile of the project limits. Caltrans representatives were in attendance to help field questions from the public.

The IS/MND was circulated for public review February 2 through March 6, 2023. The Notice of Availability/Notice of Intent to Adopt the IS/MND was advertised in the local newspaper and included information about and invitation to the February 15, 2023 public meeting. Following the public review period, Caltrans and City staff recorded and jointly responded to 10 comment letters from members of the public and 1 from a local agency. These responses have been reviewed by staff and approved by Caltrans and are included at the end of the IS-MND.

Bridge Project
A public meeting was held at the City's Corporation Yard (25 Prado, San Luis Obispo) on July 26, 2022. Prior to the public meeting, postcards were distributed to affected property owners inviting the public to the meeting. No comments or concerns were received.

CONCURRENCE

The Fire Department expressed support for the Interchange Project and the proposed Value Analysis modifications, emphasizing that improved east–west connectivity will significantly enhance emergency access to the southern portion of the City. The new overcrossing will improve response capability from Station 4 and help the department move closer to achieving its four-minute travel time goal identified in the City's Climate Adaptation and Safety Element. Current response times have declined in recent years due to increasing call volumes and continued growth in the southern area of the City; therefore, the Prado overpass is anticipated to enhance emergency response, strengthen the Effective Firefighting Force (EFF) through faster multi-unit arrivals, and improve overall safety for pedestrians and cyclists.

The Fire Department also expressed support for the proposed shared-use path on the south side of Prado Road connecting the Bob Jones Trail to San Luis Ranch, noting that this linkage could reduce the need for other types of protected bicycle facilities that may otherwise impact emergency response times.

The Police Department expressed support for the proposed modifications as well, recognizing the immediate benefit of an additional crossing over U.S. 101 while noting potential long-term concerns regarding vehicle capacity over the life of the project. The Department considers the reduced design speed acceptable given the improved east–west connectivity and supports the proposed shared-use path on the south side of Prado Road.

Both departments emphasized the importance of maintaining emergency-vehicle signal preemption throughout the project area and at adjacent intersections to ensure efficient emergency response, particularly where only a single through lane is provided.

ENVIRONMENTAL REVIEW

Both the Interchange Project and Bridge Project have completed and approved environmental documents in compliance with the California Environmental Quality Act (CEQA) and the National Environmental Policy Act (NEPA). Under CEQA, the City of San Luis Obispo served as the lead agency and prepared Initial Study/Mitigated Negative Declarations (IS/MNDs) for both projects. Under NEPA, Caltrans served as the lead agency and determined that both projects qualified for Categorical Exclusions.

For the Bridge Project, Council approved the IS/MND on October 4, 2022 by Resolution Number 11368 (2022). Caltrans approved the NEPA document on January 11, 2023.

For the Interchange Project, Council approved the IS/MND on September 5, 2023 by Resolution Number 11447 (2023). Caltrans approved the NEPA document on October 8, 2024.

FISCAL IMPACT

Budgeted: Yes
Funding Identified: Yes

Budget Year: 2025-30

Table 3 – Standard Financial Table

Funding Sources	Total Budget Available	Current Funding Request	Remaining Balance	Annual Ongoing Cost
General Fund	$ 0	$ 0	$ 0	$ 0
State	$ 0	$ 0	$ 0	$ 0
Federal	$ 0	$ 0	$ 0	$ 0
Total	**$ 0**	**$ 0**	**$ 0**	**$ 0**

Fiscal Analysis:

Both the Interchange Project and the Bridge Project are included in the City's 2025-27 Financial Plan. The Interchange Project appears on page 384 of the plan. The Bridge Project appears on page 379 of the plan.

Below is a breakdown of both projects anticipated costs and funding plan.

Interchange Project

Table 4 –Interchange Project's Anticipated Costs (Current Preferred Alternative)

Phase	Current	2027-28	2028-29	2029-30
Design	**$11,545,780**			
Phase1	$3,049,853			
Phase 2	$5,901,488			
Phase 3	$94,439			
Contingencies	$1,000,000			
Third Party Review	$1,500,000			
Right of Way		**$2,000,000**		
Utilities Relocation			**$2,000,000**	
Construction Admin				**$2,000,000**
Construction Management				**$11,000,000**
Contract				$10,000,000
Contingency				$1,000,000
Construction				**$119,000,000**
Contract				$99,166,667
Contingency				$19,833,333
Total	**$11,545,780**	**$2,000,000**	**$2,000,000**	**$132,000,000**
Grand Total				**$147,545,780**

Table 5 –Interchange Project's Funding Plan from the 2025-27 Financial Plan

Funding Source	Current	2027-28	2028-29	2029-30
Local Funds:	**$15,261**			**$75,000,000**
Capital Outlay (LRM)	$15,261			
Debt Finance				$75,000,000
Regional Funds:	**$1,435,260**			
Regional Grant (County)	$1,435,260			
Developer Funds:	**$10,483,063**	**$2,000,000**	**$2,000,000**	**$11,000,000**
Capital Outlay (SLR)	$9,967,681	$2,000,000	$2,000,000	$11,000,000
Airport Area Impact Fee	$79,205			
Transportation Impact Fee	$436,177			
Grants:				**$35,000,000**
Grant (SLOCOG)				$10,000,000
Grant (Future)				$25,000,000
Total	**$11,933,584**	**$2,000,000**	**$2,000,000**	**$121,000,000**
Grand Total				**$136,933,584**

Securing debt financing for the Interchange Project would likely require the City to pledge City-owned properties as collateral. However, most of the City's high-value assets are already pledged to existing debt issuances, limiting the availability of unencumbered properties. Preliminary estimates indicate the City could assemble enough collateral to support a bond of up to approximately $75 million, though this would likely require leveraging a broad portfolio of properties.

To better define available collateral and overall bonding capacity, staff will begin obtaining broker opinions of value for key City facilities. In addition, the City has retained Kosmont Companies, a financial advisory firm, to evaluate alternative funding strategies and financing instruments for the project.

It should be noted that the anticipated project costs shown in Table 4 exceed the current funding plan presented in Table 5. The funding plan in Table 5 was developed as part of the 2025–27 Financial Plan and assumes that Council would implement some portion of the Value Analysis recommendations. If Council elects to proceed with the Value Analysis option identified in Table 1 as "PA VA + Lane Reduction," (which is staff's recommendation) the total project cost would be reduced to approximately $127,545,780. Table 6 below presents a potential funding plan to meet this revised funding need.

Table 6 –Interchange Project's Funding Plan for the PA VA + Lane Reduction

Funding Source	Current	2027-28	2028-29	2029-30
Local Funds:	**$15,261**			**$65,612,196**
Capital Outlay (LRM)	$15,261			
Debt Finance				$65,612,196
Regional Funds:	**$1,435,260**			
Regional Grant (County)	$1,435,260			
Developer Funds:	**$10,483,063**	**$2,000,000**	**$2,000,000**	**$11,000,000**
Capital Outlay (SLR)	$9,967,681	$2,000,000	$2,000,000	$11,000,000
Airport Area Impact Fee	$79,205			
Transportation Impact Fee	$436,177			
Grants:				**$35,000,000**
Grant (SLOCOG)				$10,000,000
Grant (Future)				$25,000,000
Total	**$11,933,584**	**$2,000,000**	**$2,000,000**	**$111,612,196**
Grand Total				**$127,545,780**

Bridge Project

Table 7 – Bridge Project's Anticipated Costs

Phase	Current	2026-27	2027-28
Design	$250,000		
Right of Way	$1,000,000		
Utilities Relocation			$1,750,000
Construction Admin			$400,000
Construction Management			$4,500,000
Construction			$33,100,000
Construction Contingency			$4,500,000
Total	**$1,250,000**		**$44,250,000**
Grand Total			**$45,500,000**

Table 8 – Bridge Project's Funding Plan

Funding Source	Current	2026-27	2027-28
Local Funds:	**$7,636,760**	**$3,500,000**	**$15,358,406**
Capital Outlay (IIF)	$ 4,749,972	$3,500,000	$11,158,406
Capital Outlay (LRM)	$ 2,277,019		$ 3,000,000
Capital Outlay	$ 609,768		
Developer Funds:	**$2,224,173**	**$0.00**	**$0.00**
Airport Area Impact Fee	$ 135,490		
Transportation Impact Fee	$ 2,088,683		
Grant Funds:	**$2,065,000**	**$0.00**	**$15,915,661**
Earmark	$ 2,065,000		$58,676.00
Highway Bridge Program			$15,856,985[3]
Total	**$11,925,933**	**$3,500,000**	**$30,074,067**
Grand Total			**$45,500,000**

[3] Pending Highway Bridge Program programming request to address cost escalation and reimbursable portions of project. Current funding amount is $13,861,673.

The Highway Bridge Program (HBP) is a federally funded safety program administered by Caltrans and financed through the Federal Highway Administration (FHWA). The program provides financial assistance to local agencies for the replacement or rehabilitation of publicly owned highway bridges that are structurally deficient or functionally obsolete.

Caltrans evaluates bridge conditions and determines eligibility based on structural inspections and sufficiency ratings. Once a bridge is accepted into the HBP inventory, federal funds may be used to cover eligible bridge-related construction costs such as deck replacement, widening to meet standards, or seismic retrofits. Federal participation typically covers up to 88% of eligible costs, with the remaining 12% funded by the local agency.

The City is requesting an increase in HBP funding to address both construction cost escalation and expansion of the participating bridge width to support multimodal improvements. This request is consistent with the City's Active Transportation Plan (ATP), which provides strong justification for these added facilities. It should be noted that HBP funding levels fluctuate based on the eligible scope—if project elements are reduced or deemed ineligible, the corresponding federal participation amount will also decrease.

ALTERNATIVES

1. **Implement Value Analysis Recommendations (Estimated $8M Savings).** Council could direct staff to proceed with the Interchange Project's Preferred Alternative incorporating the Value Analysis recommendations, including use of cast-in-drilled-hole columns, long-span precast girders, a reduced bridge design speed, and increased use of recycled materials. This option would reduce the project's estimated construction cost by approximately $8 million while maintaining all planned transportation, flood protection, and multimodal infrastructure benefits of the Preferred Alternative. No changes to the Bridge Project would be evaluated under this option.
2. **Implement Value Analysis plus Lane Reduction Modifications (Estimated $20M Savings).** Council could direct staff to proceed with the Interchange Project's Preferred Alternative incorporating all Value Analysis recommendations as well as additional modifications to reduce travel lane widths and the number of lanes on the Prado Road overpass. This option would reduce the project's estimated construction cost by approximately $20 million (which incorporates the $8 million savings identified in the above alternative). This represents staff's recommended alternative for the Prado Interchange Project. This alternative would also provide Council with the choice of whether to extend the shared-use path on the southerly side of Prado Road to Higuera Street or to terminate it at the Elks / Prado intersection.
3. **Conduct a Value Analysis for the Bridge Project.** Council could direct staff to complete a value analysis for the Bridge Project to identify potential opportunities for cost reduction. Staff anticipate this effort could be completed relatively quickly but may cost up to $100,000. If Council chooses to proceed, it may also wish to delegate authority to the City Manager to execute the necessary contract amendments and budget adjustments to complete the work.

4. **Council could provide alternate direction to staff.** This could the alternative recommended by the ATC at their October 25, 2025 ATC meeting. This alternative would provide more pedestrian and bicycle facilities, at a cost of at least $4 million more than the alternative recommended by staff (plus additional unknown right of way purchase costs). Staff will provide more information on this alternative at the November 4, 2025 Council meeting.

ATTACHMENTS

A - Preferred Alternative
B - Proposed VA Refined Design
C - Traffic Analysis