TOWN OF LOS GATOS

COUNCIL AGENDA REPORT

MEETING DATE: 09/01/2020

ITEM NO: 10

DATE: August 27, 2020

TO: Mayor and Town Council

FROM: Laurel Prevetti, Town Manager

SUBJECT: Highway 17 Bicycle and Pedestrian Overcrossing Recommendations (Project 818-0803):

a. Approve the Feasibility Study for the Highway 17 Bicycle and Pedestrian Overcrossing (Project 818-0803);
b. Proceed with the final design of a separate bridge structure between 16 and 20 feet wide located immediately south of the Blossom Hill Road Bridge
c. Authorize staff to proceed with analyzing three bridge type options: concrete, steel truss, and steel arch, and solicit community input in the final design phase;
d. Authorize the Town Manager to submit a grant application to Caltrans in the Active Transportation Program, seeking grant funds for project construction; and
e. Commit up to $1 million in future budget (FY 2023/24) as match funding for the ATP grant.

RECOMMENDATION:

Highway 17 Bicycle and Pedestrian Overcrossing Recommendations (Project 818-0803):

a. Approve the Feasibility Study for the Highway 17 Bicycle and Pedestrian Overcrossing (Project 818-0803);
b. Proceed with the final design of a separate bridge structure between 16 and 20 feet wide located immediately south of the Blossom Hill Road Bridge
c. Authorize staff to proceed with analyzing three bridge type options: concrete, steel truss, and steel arch, and solicit community input in the final design phase;
d. Authorize the Town Manager to submit a grant application to Caltrans in the Active Transportation Program, seeking grant funds for project construction; and
e. Commit up to $1 million in future budget (FY 2023/24) as match funding for the ATP grant.

PREPARED BY: Ying Smith
Transportation and Mobility Manager

Reviewed by: Town Manager, Assistant Town Manager, Town Attorney, Finance Director, and Parks and Public Works Director

BACKGROUND:

The Town began a Feasibility Study for the Highway 17 Bicycle and Pedestrian Overcrossing (BPOC) in late 2019. The project is included in the Fiscal Year 2020/21 – 2024/25 Capital Improvement Program Budget. The Feasibility Analysis examined three alignment alternatives and identified the pros and cons of each, including environmental impacts, right-of-way availability, cost, public input, and overall feasibility. The three alternatives include:

Alternative 1: A separate bicycle and pedestrian bridge connecting to Nino Avenue
Alternative 2: A separate bicycle and pedestrian bridge along Blossom Hill Road (BHR)
Alternative 3: Widening the existing BHR bridge for bicyclists and pedestrians

At the March 3, 2020 meeting, the Town Council approved the project purpose and need, and authorized staff to proceed with design alternatives for a separate bicycle and pedestrian overcrossing. Establishing the purpose and need at the onset of the project development phase helps to ensure the project reflects the Council's and community's vision and priorities. The approved project purpose and need are:

> Purpose: The project would improve bicycle and pedestrian mobility across Highway 17 in the vicinity of the Blossom Hill Road overcrossing. The project includes a focus on improving safety for all modes of travel and creating a safe route to schools while promoting active transportation. Additionally, the project would result in reduced traffic congestion and greenhouse gas emissions by providing comfortable mobility alternatives.
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> Need: With two travel lanes in each direction, carrying upwards of 63,000 vehicles per day, Highway 17 creates both a physical and psychological barrier for both pedestrians and bicyclists as it divides the Town in two. Blossom Hill Road is one of only a few roadways that provide east-west connectivity across the highway.

In April, staff submitted a grant application to the Santa Clara Valley Transportation Authority (VTA) for the Measure B Bicycle and Pedestrian Competitive Grant Program. In June, the VTA Board approved the Measure B program, including the $2.75 million award to fund the final design phase of this project.

DISCUSSION:

This is one of the Connect Los Gatos projects and has received strong support from the community. The project team, made of Town staff and BKF Engineers and its sub-consultants, evaluated the key design elements and prepared recommendations for consideration. The *Draft Highway 17 Bicycle and Pedestrian Overcrossing Feasibility Study* includes details of the evaluation and technical reports. The project team also conducted extensive community

DISCUSSION (continued):

engagement, which is documented in the *Community Engagement Activities Report*. Due to their length, both documents are posted on the project website: https://www.losgatosca.gov/2556/Hwy-17-Bicycle-Pedestrian-Overcrossing. This staff report provides the highlights of the findings and recommendations:

Evaluation Criteria and Preferred Alignment Alternative

The project team has evaluated the three alignment alternatives using a set of criteria to guide the evaluation:

- Community Feedback
- Caltrans Coordination
- Travel Demand and Patterns
- User Experience
- Potential Environmental Impacts: utilities, Right of Way constraints, geotechnical considerations, trees, and visual impacts
- Cost: construction and maintenance

Alternative 3, widening the existing bridge, would present the most engineering and cost challenges and was removed from further consideration, as presented to the Town Council at the March 3, 2020 meeting.

Alternative 1, a new bridge connecting at Nino Ave, includes several variations, one of which could provide a direct connection to the Los Gatos Creek Trail. There are benefits of providing a new connection to Nino Avenue, however, during the early engagement process from both the February community meeting and a community survey, residents on Nino Avenue expressed that the access would be an intrusion to the neighborhood.

After further evaluation, the project team concluded that Alternative 2, a separate bridge structure just south of Blossom Hill Road Bridge, is the preferred alignment. The recommended alternative presents several benefits: consistency with the existing desired travel line, shortest distance between key origins and destinations, no interference with the existing bridge, enhanced user experience, and neighborhood acceptance. The cost of this alternative is potentially lower than Alternative 1 because it would have a shorter bridge span.

User Experience and Cross Section

The bicycle and pedestrian counts collected at the project location show a very high level of existing usage. In addition, the location serves bicyclists and pedestrians of all ages and abilities, including large numbers of youth and elderly. These factors add strengths to this project and are important considerations in deciding the width of the structure.

DISCUSSION (continued):

Many of the existing BPOCs in the Bay Area constructed in the last two decades are between 10 and 12 feet wide. Although they are considered sufficient to accommodate moderate bicycle and pedestrian volumes, those at busy locations, such as those along the Steven's Creek Trail, experience reported user conflicts. Several BPOCs that are under design, including the US 101/Shoreline Boulevard BPOC (Mountain View) and I-880/Pacific Commons BPOC (Fremont), are being designed with cross sections between 18 and 20 feet wide.

The project team is recommending a cross section between 16 and 20 feet wide, with the final width determined during final design. This width would allow for two-way bike traffic and proper separation of bicyclists and pedestrians.

Staff also recommends adjusting the alignment on the existing bridge. The westbound bike lane west of the bridge can be enhanced with protected barriers, essentially extending the Class IV bike lane to the Vasona Park entrance and providing a comfortable bike lane for more experienced cyclists who may not want to cross BHR twice to divert to the new bridge.

Right of Way and Utilities Constraints

Generally speaking, there is sufficient public right of way to accommodate a new bicycle and pedestrian bridge structure south of the existing Blossom Hill Road bridge. It is possible that the existing bridge is replaced in the future, therefore it will be important to design the new bridge with as much separation as possible from the existing structure. Doing so will be important as Caltrans will require the Town to demonstrate the new bridge will not preclude future widening of this structure and that adequate clearance exists for the current and future maintenance of each.

A maintenance agreement between Caltrans and the Town will be required during final design since the main span crossing is located within Caltrans right of way. Caltrans will require the Town to maintain this crossing or include language in the agreement outlining reimbursement for Caltrans to maintain the crossing.

The preferred alternative attempts to avoid the relocation of existing utilities within the limits of the project. Detailed utility studies and coordination with utility owners will also be required to determine if existing utility structures within public right of way will need to be adjusted to grade and/or relocated to accommodate the proposed improvements.

Bridge Structure Types and Architecture

Given the project's location and utilization, the project team has identified three bridge structure types: concrete, steel truss, and steel arch that would be most appropriate for the

DISCUSSION (continued):

location. Each structure type has strength in architectural style and its own advantages and disadvantages in terms of structural support, anchoring to Highway 17, construction impact, and visual appearance. Table 1 shows a comparison of the costs for all three structural types. Staff recommends keeping all three types in consideration and waiting on the decision on bridge type until the final design phase, allowing for additional evaluation and extensive community engagement.

Table 1 - Estimated Cost per Bridge Structure Type

	Concrete Box-Girder (2-Span)	Steel Arch-Shaped Truss (Single Span)	Steel Tied Arch (Single Span)
Construction Cost	$21,168,000	$24,060,000	$24,932,000
Total Cost	$25,103,700	$27,995,700	$28,867,700

Preliminary Evaluation of Environmental Impacts

The proposed bridge profile is roughly six feet higher than existing Blossom Hill Road towards the east end of bridge. It is anticipated that a number of trees to the southeast of the existing bridge will be removed, with a wider bridge having a somewhat greater impact to existing trees. The project team also evaluated potential utility, visual, and right of way impacts. Further evaluation and analysis would be required during final design to complete the California Environmental Protection Act (CEQA) analysis for the project. If federal funding is used in the construction phase, environmental review in accordance with the National Environmental Policy Act (NEPA) would be required.

Project Cost, Funding and Schedule

For budgeting purpose, the highest cost structure type, steel arch, was used in this estimate. The construction cost is estimated to be $24,932,000 and the total cost with all project phases combined would be $28,867,700. Table 2 shows the project costs by phase and funding sources. The Town has been very strategic in investing in the early stage of the project development using the Town's General Fund Reserve and its share of the Transportation Development Act Article 3 (TDA 3) funds for the current phase. The progress has positioned the project to be competitive in grant programs, including the Santa Clara County 2016 Measure B program. The project was awarded $2.75 million in Measure B funds for the final design phase, which will require $946,200 from the Town's contribution as local match. The local match is included in the proposed Fiscal Year 2021/22 Capital Improvement Program Budget.

DISCUSSION (continued):

Table 2 – Project Funding

Phase	Grant	Town	Total
Feasibility Study	$ 87,500	$ 147,000	$ 234,500
Final Design	$ 2,755,000	$ 946,200	$ 3,701,200
Construction	$ 21,168,000	$ 1,000,000	$ 24,932,000
Total	**$ 26,774,500**	**$ 2,093,200**	**$ 28,867,700**

Notes to Table 2:

Feasibility Study and Final Design costs are in 2020 dollars. Construction costs are in 2024/25 dollars (midpoint of construction). All costs rounded to nearest $100.
Total project costs include all phases.
Construction costs are based on the most expensive structure type, steel arch.
The Town's contributions in the Final Design and Construction phases are pending Town Council's budget decisions.

The Town has yet to secure funding for the project construction. The first opportunity to compete for grant funding is the upcoming Active Transportation Program (ATP). Staff is requesting the Town Council's authorization to submit the ATP application to Caltrans and to commit up to $1 million in a future budget (FY2023/24) as a non-ATP match should the ATP application is awarded.

The project schedule is shown in Table 3. The final design work will begin in early 2021 and is expected to be completed in 2023. Construction may start as early as 2024 and be completed by the end of 2025, if construction funding is available.

Table 3 – Project Schedule

Milestone	Schedule
Feasibility Study Began	September 2019
Outreach Round 1 – Initial Screening	February 2020
Town Council confirmed two alternatives	March 3, 2020
Community Meeting via Zoom	August 25, 2020
Outreach Round 2	August 2020
Town Council considers preferred alternative	September 1, 2020
ATP Application for Construction Dollars	September 15, 2020
Final design	Early 2021 - August 2023
Advertise Construction	November 2023
Award Contract	January 2024
Construction (pending funding availability)	February 2024 – December 2025

DISCUSSION (continued):

Community Engagement

Community engagement for this project follows the framework identified in the *Connect Los Gatos Community Engagement Plan*, adopted by Town Council in March 2020. The Town began the outreach effort starting in the fall of 2019. The latest project information, a project video, and staff recommendations are provided on the project website. A virtual community meeting was held on August 25, 2020. Approximately 40 people attended the meeting, including residents near the project area, parents of school-aged children, Safe Route to School representatives, and Complete Streets and Transportation Commissioners. Attendees were supportive of the bridge. Some attendees from the Ohlone Court neighborhood expressed concerns over the visibility from their yards of the pathway along Blossom Hill Road leading to the bridge. Staff believes the pathway would be at a low elevation that would not be evident. The consultant team is being asked to prepare elevation drawings in the next phase of design so that the residents can better visualize the project area. Additional highlights of the comments received during all phases of outreach include the following:

Project Cost, Purpose and Need

Many people recognized the needs of improving access and safety at this location for bicyclists and pedestrians of all ages. Parents with school-age children expressed their support for a safer facility. Some people believed this would not be a good investment because the need was not significant, or the cost would be high.

Neighborhood Impacts

Residents living within the project area shared their concerns about the increased foot traffic in the neighborhood associated with the alternatives connecting to Nino Avenue. Many were opposed to option(s) impacting Ohlone Court and/or Nino Court and Avenue due to privacy and noise pollution concerns. They were open to either the Blossom Hill Road widening and the Blossom Hill Road BPOC alternatives.

Caltrans Coordination

Some people preferred to see the existing Blossom Hill Road bridge widened or rebuilt.

Travel Demand and Patterns

Many commented that they or their families would bike and walk more often for various trips if the facility was improved. In general people agreed that Alternatives 2 and 3 matched up with the existing travel patterns. People also showed preference to a direct connection to the Los Gatos Creek Trail.

DISCUSSION (continued):

User Experience

The Complete Streets and Transportation Commission expressed support for a separate BPOC that is sufficient to accommodate two-way bicycle traffic with separation between bicyclists and pedestrians. Many commenters emphasized safety as their first concern.

Potential Environmental Impacts

Staff received several questions on the potential tree removal and visual impacts from the neighborhood.

CONCLUSION:

Approval of the staff recommendations would enable this project to continue through the design phases and would facilitate staff pursuing additional grant funding.

COORDINATION:

The former Bicycle and Pedestrian Advisory Commission and the Complete Streets and Transportation Commission have been actively engaged since the beginning of this project, including conducting a field meeting, leading a Silicon Valley Bicycle Coalition - Town infrastructure bike ride, conducting bicycle and pedestrian counts, and providing input at public and Commission meetings. At its August 13, 2020 meeting, the CST Commission recommended approving the staff recommendations.

FISCAL IMPACT:

There is no immediate fiscal impact associated with the recommendations and the project is funded through the final design phase. Staff has asked for an initial commitment of matching funds for the ATP grant. Upon the Town Council's authorization, staff will submit the ATP grant application for construction funds before the September 15 deadline. If the ATP grant is awarded, staff will return to the Town Council to accept the grant and make a budget recommendation for the non-ATP match fund.

As part of this grant application, the Town Council would commit to identifying a future budget source of funding either through the use of Town funds or other grant funding resources. Staff will continue to pursue additional grant funding opportunities in addition to the ATP program. One potential source for the match fund is the VTA's Vehicle Emissions Reductions Based at Schools grant program, which can provide up to $1 million in federal dollars. The next funding cycle is anticipated in 2021.

ENVIRONMENTAL ASSESSMENT:

This is a project as defined under CEQA and an environmental analysis will be prepared in the Final Design phase and after preliminary engineering is completed.