



City of Sunnyvale

Agenda Item

23-0030

Agenda Date: 3/16/2023

REPORT TO BICYCLE AND PEDESTRIAN ADVISORY COMMISSION

SUBJECT

Recommend to the City Council the Selection of a Preferred Alignment for the Bernardo Avenue Undercrossing Project

BACKGROUND

The Bernardo Avenue Undercrossing Project proposes to construct a pedestrian and bicycle tunnel to connect north and south Bernardo Avenue beneath the Caltrain railroad tracks and Central Expressway, at the location shown in Attachment 2 to this report. There is currently no existing connection between the north and south segments of Bernardo Avenue. The project was identified in the Active Transportation Plan as a High Priority crossing improvement in both the Bicycle Plan and Pedestrian Plan.

In 2016, staff applied for a One Bay Area Grant, Cycle 2 (OBAG2) grant. In 2017, the project received an award of \$500,000 from OBAG2 for partial funding of the final design phase of the project (Attachment 3). On July 11, 2017, City Council accepted the grant (RTC No. 17-0573).

In 2017, City Council awarded a contract to WMH Corporation to provide preliminary design and environmental clearance (RTC No. 17-0622). In 2018, the City entered a cost-sharing agreement with the City of Mountain View for the preliminary design and environmental clearance (RTC No. 17-1203). This agreement was authorized by Mountain View City Council on December 12, 2017.

In early 2020, City of Sunnyvale and Santa Clara Valley Transportation Authority (VTA) staff jointly submitted a grant application for the project's final design phase to the 2016 Measure B Bicycle and Pedestrian Program - Capital Project 10-Year Priority List, fiscal year 2020/21 funding cycle. In mid-2020, VTA awarded the project \$2,253,785 for final design with an additional \$746,215 available to be requested in a future funding cycle, for a total of \$3,000,000. (See Attachment 4 for the award letter.) An additional \$15,000,000 was requested for partial construction costs but was not awarded.

On February 6, 2020, Caltrain/Peninsula Corridor Joint Powers Board (Caltrain/JPB) approved the Rail Corridor Use Policy (RCUP). This policy is intended to guide the use of the Caltrain/JPB property and support delivery of Caltrain's long-term service vision. As a non-railroad use, the Bernardo Avenue Undercrossing project is required to be reviewed by Caltrain staff and their board. The project was the first project to be presented to Caltrain after the implementation of the RCUP.

On June 3, 2021, Caltrain/JPB approved a Use Variance (see Attachment 5) for the project, allowing it to move forward through Caltrain's review processes, with the following conditions:

1. The project will be designed and constructed to account for and minimally disrupt all current and future rail infrastructure, assets, and facilities in the area.
2. The proposed project will be designed and constructed so as to minimally disrupt Caltrain

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operations and freight operations during and after construction.

3. The proposed project will be designed to be compatible with the potential future grade separation project at Mary Avenue.
4. The design of the proposed project will comply with all current and future railroad standards, including those for engineering, operations, and maintenance.
5. The proposed project will be designed to not impede the railroad's ability to maintain its infrastructure and right-of-way in the area during and after construction.
6. The JPB will be responsible for delivering the project from the 35% design stage through the final design and the construction of the proposed project.
7. Future agreements will provide clear roles and responsibilities for all parties for all stages of the proposed project.

On December 2, 2020, a joint meeting was held with Sunnyvale's and Mountain View's Bicycle and Pedestrian Advisory Commission/Committee (BPAC). The project team presented one eastern alignment and six variations of a western alignment. These alignments had various features including:

- An intermediate bicycle-only ramp connecting to/from eastbound Central Expressway;
- Stairs in addition to ramps accessing the tunnel;
- Tunnel ceiling openings in landscaped areas such as the median along Central Expressway;
- Direct access to the private property at 280 North Bernardo Avenue; and
- Connecting the North Bernardo Avenue ramp just north of the Central Expressway intersection.

The feedback received included the following:

- Improving directness of nonmotorized travel such as through pedestrian stairs, bike channels along stairways, pedestrian crossings at all approaches and minimizing required distances of travel;
- Improving light and visibility through median openings, open areas, and lighting;
- Designing for wide-access ramps or tunnels, smooth transitions at crossings and ramp-access points, and reducing sharp corners and turns;
- Considering bike access to the eastbound Central Expressway bike shoulder;
- Integrating with a future pedestrian/bike trail on the north side of Evelyn Avenue; and
- Providing protected crossing movements, regular landings to reduce speeds, and no bollards.

Throughout the project, the project team has been coordinating with City of Mountain View, VTA, County of Santa Clara and Caltrain staff. This coordination included reviews of and receiving feedback on the preliminary designs. All the feedback heard to date has been reviewed, evaluated and incorporated into the designs as appropriate.

For purposes of an environmental review leading to final design, a preferred project alignment must be selected by Sunnyvale and Mountain View City Councils.

The City of Mountain View's Council Transportation Committee will be having a public hearing on the project in late March or early April 2023. They will make a recommendation to the full Mountain View City Council. It is anticipated that the Mountain View City Council will take action on their recommendation through a consent item in April 2023. Exact dates of these meetings are not yet

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confirmed.

The Sunnyvale City Council is scheduled to consider this item at their May 23, 2023, meeting. Since the City of Sunnyvale is the project lead City for this phase of work, Sunnyvale City Council will make the final determination on the preferred alternative for environmental clearance.

EXISTING POLICY

General Plan, Chapter 3, *Land Use and Transportation Element*:

- Goal H: Options for Healthy Living - Create a city development pattern and improve the city's infrastructure in order to maximize healthy choices for all ages, including physical activity, use of the outdoors, and access to fresh food.
- Policy LT-1.7: Emphasize efforts to reduce regional vehicle miles traveled by supporting active modes of transportation including walking, biking, and public transit.
- Goal LT-3: An Effective Multimodal Transportation System - Offer the community a variety of transportation modes for local travel that are also integrated with the regional transportation system and land use pattern. Favor accommodation of alternative modes to the automobile as a means to enhance efficient transit use, bicycling, and walking and corresponding benefits to the environment, person-throughput, and qualitative improvements to the transportation system environment.
- Policy LT-3.6: Promote modes of travel and actions that provide safe access to City streets and reduce single-occupant vehicle trips and trip lengths locally and regionally.
- Policy LT-3.8: Prioritize safe accommodation for all transportation users over non-transport uses. As city streets are public spaces dedicated to the movement of vehicles, bicycles, and pedestrians, facilities that meet minimum appropriate safety standards for transport uses shall be considered before non-transport uses are considered.
- Policy LT-3.19: Utilize intelligent transportation systems and other technological applications to improve travel efficiency and safety.
- Policy LT-3.21: Implement best practices, innovative facilities, and technology to enhance complete streets.
- Policy LT-3.24: Ensure effective and safe traffic flows for all modes of transport through physical and operational transportation improvements.

Active Transportation Plan

The 2020 Sunnyvale Active Transportation Plan includes the Bernardo Avenue Undercrossing project as a recommendation within the Bicycle Plan and the Pedestrian Plan.

Complete Streets Policy

The Complete Streets Policy was adopted by City Council on December 6, 2016, through Resolution No. 793-16 (RTC No. 16-0972) and amended on August 28, 2018 through Resolution No. 896-18 (RTC No. 18-0642). Through this policy, the City commits to creating and maintaining Complete Streets that provide safe, sustainable, integrated, efficient and convenient transportation systems that serve all categories of users and maintain sensitivity to local conditions.

ENVIRONMENTAL REVIEW

The selection of a preferred alternative for the project merely defines the "Project" for purposes of the environmental review and does not approve the Project. Therefore, the present action is not itself a project that requires separate environmental review (CEQA Guidelines Section 15061(b)(3).) The

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next stage of the current project will include the required environmental review pursuant to the California Environmental Quality Act (CEQA). The appropriate CEQA document will be prepared and presented to City Council at the appropriate time for approval prior to starting final design.

DISCUSSION

Through coordination with the City of Mountain View, VTA, County of Santa Clara and Caltrain, and with feedback received from the community and the Bicycle and Pedestrian Advisory Commission/Committee members, the options were refined. The alternatives currently under consideration are included as Attachments 6 and 7.

The final alternatives for consideration were developed after evaluating a number of different variations. An intermediate bicycle-only ramp variations for both eastern and western alignments were a desirable feature for confident bicyclists in order to provide a direct connection to eastbound Central Expressway. However, the evaluation of this feature revealed several safety concerns, cost implications and design challenges. These included the following:

- Potential for unintended pedestrian usage where no pedestrian facilities exist on Central Expressway;
- Central Expressway is suitable for advanced and confident bicyclists only, but a ramp could encourage usage by less experienced bicyclists;
- Caltrain did not support the retaining wall structures on both sides of their right-of-way immediately adjacent to electrification poles and overhead wires, for constructability and maintenance purposes;
- The County of Santa Clara did not support having bicyclists and potential pedestrians enter the expressway at a traffic signal without bicycle and pedestrian elements;
- The intermediate ramp would result in a substantial construction cost; and
- For the western alignment, additional trees and landscaping would need to be removed in the County owned property to facilitate the intermediate ramp.

For these reasons, the project team refined the alternatives to remove the intermediate ramp from both eastern and western alignment alternatives.

The public right-of-way available on both sides of the proposed undercrossing is constrained. A ramp would meet connectivity goals while also adhering to the Americans with Disabilities Act requirements for a pedestrian facility. Including a ramp and stairs in the alternatives would require additional vehicle lane shifting and could also potentially require private property acquisition on one or both sides of the undercrossing. This would require additional coordination with private property owners and would incur additional costs to the project. The project team refined the alternatives to remove stairs from the undercrossing alignments.

The western alternative was also refined so the ramps would connect directly to the two signalized intersections by shifting the tunnel westward. This eliminated the need of having the ramp opening occur north of Central Expressway at North Bernardo Avenue and in the center of the northern shoulder of the South Bernardo/Evelyn Avenue intersection.

Additional revisions were made to both alignments to coordinate with the now existing Caltrain electrification poles and equipment at this location.

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The features and challenges related to the western alignment include:

- More utility coordination and potential relocations, which increase construction costs;
- Opportunities for only small natural light skylights or openings;
- Longer, continuous tunnel;
- Straight tunnel which improves visibility and perception of being safer; and
- Space for the City of Mountain View to request stairways or a wider landing plaza if 280 North Bernardo Avenue is substantially developed in the future.

The features and challenges related to the eastern alignment include:

- Fewer utility coordination and relocations;
- Good opportunity for a larger natural light opening within the County-owned property;
- Two shorter tunnel segments with a longer total length;
- Visibility challenges relating to difficulty in seeing the opposite end of tunnel from the other end, which may result in the perception of being less safe; and
- Less potential roadway lane closures during construction due to ability to use the County-owned property for some phases of work.

On February 2, 2023, the refined alternatives were presented to the community via a virtual meeting where both Sunnyvale and Mountain View community members were invited. Outreach for this meeting included website updates, email correspondence to email subscribers (662 Sunnyvale recipients), social media postings, flyer postings within Sunnyvale neighborhoods adjacent to the project, and postcard mailers to all Mountain View tenants, owners, and business operators within 750 feet of the project area (363 recipients).

More than 20 members of the public attended the virtual community meeting. The alternatives as attached to this report (Attachments 6 and 7) were presented along with some potential design features for consideration. The feedback received at the meeting and via email after the meeting included the following:

- General support for moving the project forward;
- General preference for the eastern alignment due to benefits associated with the use of the triangular, County-owned property;
- Preference for more natural light and openings;
- Some individuals desired the eastbound Central Expressway bicycling connection due to the benefit of connecting directly to the eastbound expressway without having to utilize the traffic signal at North Bernardo Avenue at Central Expressway;
- Some individuals opposed the eastbound Central Expressway bicycling connection due to concerns of fast-moving bicycles next to pedestrians;
- Concern about safety and comfort of the undercrossing, desire to be able to see from one end to the other in the tunnel, desire for security cameras within the tunnel;
- Interest in including bollards or some other feature to prevent vehicles from driving onto the ramps;
- Some interest in having separate bicycle and pedestrian space within the tunnel, similar to Homer Avenue Undercrossing in Palo Alto; and
- Desire to see more bicycling network and routes to the north of the project.

On February 22, 2023, the Mountain View Bicycle/Pedestrian Advisory Committee heard an update

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on the project and made a recommendation to their City Council. The action was to recommend to the City Council the selection of the Eastern Alignment as the preferred alignment of the Bernardo Avenue Undercrossing Project. This action passed with 4 yeses, 0 noes, and 1 abstention.

The City of Sunnyvale has secured funding to design and construct a two-way multiuse bicycle and pedestrian facility on the north side of Evelyn Avenue between Mathilda Place and Bernardo Avenue. The City of Mountain View plans to conduct a Feasibility Study on implementing a similar facility between Bernardo Avenue and the Mountain View Caltrain Station. The Bernardo Avenue Undercrossing project team has evaluated the proposed Evelyn Avenue projects and determined that the project does not prevent implementation of the Evelyn Avenue bicycle facilities. Coordination between the project teams will continue as they all move forward.

FISCAL IMPACT

Funding for the design phase of the project is available under Project 832910 - Bernardo Avenue Undercrossing, which includes funding from Mountain View. The current action does not impact the existing budget. As part of the preliminary design and environmental review, a construction cost estimate will be prepared. Additional funding for Caltrain's costs on managing the final design and construction phases will need to be allocated prior to starting final design and advertising for construction.

PUBLIC CONTACT

Public contact was made by posting the Council agenda on the City's official-notice bulletin board outside City Hall, at the Sunnyvale Public Library, Senior Center, Community Center and in the Department of Public Safety Lobby. In addition, the agenda and report are available at the Sunnyvale Public Library, Office of the City Clerk, and on the City's website.

ALTERNATIVES

1. Recommend to City Council the Selection of the Eastern Alignment as the Preferred Alignment of the Bernardo Avenue Undercrossing Project
2. Recommend to City Council the Selection of the Western Alignment as the Preferred Alignment of the Bernardo Avenue Undercrossing Project
3. Do not Recommend to City Council the Selection of any Preferred Alignment of the Bernardo Avenue Undercrossing Project

RECOMMENDATION

Alternative 1: Recommend to City Council the Selection of the Eastern Alignment as the Preferred Alignment of the Bernardo Avenue Undercrossing Project

Based on the feedback heard to date, the eastern alignment is recommended. Both the community and the Mountain View Bicycle/Pedestrian Advisory Committee have stated a preference for the eastern alignment. This alignment is also preferred by Caltrain staff as it allows for more space for multiple construction method options. The additional space within the County-owned triangular property can be used for construction activities, which would decrease the need to close lanes on Central Expressway. This alternative also allows for a larger opening to let in natural lighting. This opening would also create a more open feel for the tunnels. To the east of North and South Bernardo Avenues, there are fewer utilities present that would conflict with the tunnel construction. The eastern alignment requires less utility coordination and relocations. Due to these reasons, the eastern alignment is expected to have a shorter construction duration and lower construction costs.

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Generally, the eastern alignment is expected to have fewer impacts to the community, the commuting public and the utilities during construction, and greater benefits to the active transportation users once built compared to the western alignment.

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Reviewed by: Chip Taylor, Director, Public Works

Reviewed by: Teri Silva, Assistant City Manager

Approved by: Kent Steffens, City Manager

ATTACHMENTS

1. Reserved for Report to Council
2. Bernardo Avenue Project Location Map
3. VTA 2016 Measure B Award Letter
4. VTA Board Memorandum Recommending One Bay Area Grant, Cycle 2 - Program of Projects
5. Caltrain Staff Report Approving Compatibility Finding
6. Bernardo Avenue Undercrossing Eastern Alignment Alternative
7. Bernardo Avenue Undercrossing Western Alignment Alternative