

DATE: March 8, 2021

 TO: Mayor and Town Council
FROM: Laurel Prevetti, Town Manager
SUBJECT: Direct the Continued Advancement of the 2016 Measure B Highway 17 Congestion Relief Project

RECOMMENDATION:

Direct the continued advancement of the 2016 Measure B Highway 17 Congestion Relief Project.

BACKGROUND:

In 2016, voters passed the countywide Measure B. This Measure increased the local sales tax to pay for transportation related maintenance and improvements. As the Measure language was being crafted, the Town Council and staff lobbied for inclusion of categories and projects that would allow for the return of sales tax to the Town.

One of the most competitive categories within Measure B is the Highways category. Within this category, potential projects are identified with specific language for Los Gatos that reads:

Highway 17 Corridor Congestion Relief: Upgrade Highway 17/9 interchange to improve pedestrian and bicycle safety, mobility, and roadway operations; deploy advanced transportation technology to reduce freeway cut through traffic in Los Gatos, including traffic signal control system upgrades in Los Gatos, Traveler Information System, advanced ramp metering systems; support Multi-Modal Congestion Relief Solutions, including enhanced Highway 17 Express Bus service, implementing local bus system improvements that reduce auto trips to schools, work, and commercial areas in Los Gatos; and develop park and ride lots to serve as transit hubs for express bus, shuttles, local bus system connections.

PREPARED BY: Matt Morley Parks and Public Works Director

Reviewed by: Town Manager, Assistant Town Manager, Town Attorney, and Finance Director

PAGE **2** OF **4**

SUBJECT: Support the Continued Advancement of the 2016 Measure B Highway 17 Congestion Relief Project

DATE: March 8, 2021

BACKGROUND (continued):

This was an important achievement as the Highway program is significantly oversubscribed (potential projects far exceed the available funds in the Measure B Highway category). The Town has advanced a Highway 17 Congestion Relief project to provide relief from cut through traffic that occurs on weekdays and during summer weekends (known as beach traffic). Although Measure B may not be able to fund all of the project, having it proceed early allows for maximizing the funding that does go towards the project.

For this project, the Valley Transportation Authority (VTA) is acting as the project lead with the Town and Caltrans as major stakeholders. Town staff have been working with VTA on initial stages of the project.

DISCUSSION:

As the project would significantly alter Highway 17 and the Highway 9 interchange, the project must follow specific Caltrans processes. This creates several broad phases that are steps along the way towards completing a project and can be grouped as follows with anticipated timelines:

- Project Study Report Project Development Support (PSR/PDS) This phase identifies the early project scope, including identifying a purpose and need for the project, developing schematic designs, and identifying work for future phases. This phase is in progress and near completion.
- Project Approval and Environmental Document (PAED) This next phase begins moving the project through the design phases and toward environmental approval. At the conclusion of this phase, the design will be at or near 65% complete. Funding for this phase is in place and completion is anticipated in December 2022.
- Project Specifications and Engineering (PS&E) This phase leans heavily on the work completed in the previous phase and brings the project documents along towards a buildable project. The timeline estimates this work would progress through 2023 and early 2024.
- Final Design The establishment of the final design is a major milestone for the project in locking in all of the details. Completion is anticipated in late 2024.
- Bid and Construction To begin this phase, construction funding would need to be in place in order to build the project. Award of contract is anticipated in 2025 with construction lasting through the end of 2027.

These phases can act as separate milestones and often establish decision points for moving forward with the project.

PAGE 3 OF 4

SUBJECT: Support the Continued Advancement of the 2016 Measure B Highway 17 Congestion Relief Project

DATE: March 8, 2021

DISCUSSION (continued):

As noted above, the PSR/PDS phase of the project created the high-level conceptual design. The scope of this project can be separated into two integrated efforts. The first are mainline improvements to Highway 17 beginning at Lark Avenue that aim to enhance vehicle flow and thereby reduce congestion. The existing conditions include a combination of a merge and a lane drop (reducing from three lanes to two) south of Lark Avenue that exacerbate congestion. Studies have shown that short merges and conflicts at onramps caused by large numbers of vehicles entering the mainline increase turbulence on the freeway¹. Relief can be provided through the extension of the merge lanes and through the addition of metering lights. The proposed solution contemplates continuing a third lane or auxiliary lane to Highway 9, where it is envisioned as a forced exit lane in the new design. The extension of the merge requirement from just south of Lark Avenue would help reduce this turbulence. These concepts are provided in Attachment 1.

Similar improvements would occur with the onramps from Highway 9 to Highway 17 in all directions as well as on the mainline from Highway 9 headed northbound. The dangerous short merges associated with the outdated clover leaf design at Highway 9 would be replaced with alternatives that allow for safer merging opportunities. Metering lights would assist with managing the flow of traffic onto Highway 17.

The Highway 9 overpass is the second of the design elements. The first phase (PSR/PDS) of the project explored a number of solutions for the overpass, with two options advancing as viable. This portion of the project envisions reconstructing the overpass to remove conflict zones, focusing on a multi-modal solution. The current concepts provide for bike lanes with buffers, signalized intersections, and potential bike and ped connections to the creek trail and the back of the high school. Onramps would include carpool lanes and metering lights. Signals could be integrated with the Town's adaptive control system and with the Caltrans signals at University and North Santa Cruz Avenues. These concepts are identified as Option 1 and Option 3 (Option 2 was eliminated as undesired) in Attachment 2.

Public input is an important part of this project. The initial phase allowed for work to proceed that identifies feasible conceptual alternatives, while ruling out those that would not serve the need. With these reasonable conceptual ideas identified, future phases (PAED and subsequent phases) of the project will provide opportunities for public engagement to gather reactions and input on the project.

¹ See, for example, Ahn, Soyoung, et al. "Merging and Diverging Effects on Freeway Traffic Oscillations: Theory and Observation." March, 2010.

PAGE 4 OF 4

SUBJECT: Support the Continued Advancement of the 2016 Measure B Highway 17 Congestion Relief Project

DATE: March 8, 2021

CONCLUSION:

This report provides an update to the project with an outlook towards next steps. Staff is continuing to follow Council direction on advancing this project to help reduce impacts from cut through and beach traffic, as identified on the Council Strategic Priorities list. Future reports to Council will occur at major milestones throughout the course of the project.

COORDINATION:

This project is coordinated with VTA and Caltrans.

FISCAL IMPACT:

It is common for larger projects such as these to obtain funding for individual phases, with funding for later phases, such as construction, identified and secured at a later point. This is the idea behind creating shovel ready projects. Often funding opportunities arise that will only consider projects that are at this shovel ready phase so that the funding authority can ensure the projects are constructed. Moving this project forward through the design phases will help increase competitiveness for these alternative sources.

Measure B funding requires a ten percent non-Measure B match. The PAED (next) phase includes the already allocated Town funds of \$600,000 and \$3.4M in Measure B funds. The PS&E phase will require an additional \$9M. Should Measure B funds be available in the VTA funding cycle for 2024, this project could compete. The project team will continue to look for alternative (non-Measure B) funding opportunities to keep the project progressing and to meet match requirements. The Town may need to provide match funding for the 2024/2025 fiscal year, should that be a direction the Council wishes to pursue. The total project cost through construction is estimated at \$80M - \$90M. All costs are estimates and in 2020 dollars.

ENVIRONMENTAL ASSESSMENT:

The project will begin an environmental assessment during the next phase of the project. This report is ministerial and not subject to environmental review.

Attachments:

- 1. Conceptual Highway 17 Mainline Improvements
- 2. Conceptual Highway 9 Interchange Improvements Options 1 and 3