



TECHNICAL ADVISORY COMMITTEE

Wednesday, November 10, 2021

1:30 PM

TELECONFERENCE AND VIDEO CONFERENCE MEETING ONLY

Until further notice and pursuant to Assembly Bill 361 (Rivas), the VTA Technical Advisory Committee will convene a teleconference and video conference meeting only.

Zoom meeting link: <https://us02web.zoom.us/j/82418181097>

Call in (one-tap): US +16699009128,,82418181097# or +12133388477,,82418181097#

Call in (telephone): US +1 669 900 9128 or +1 213 338 8477 Webinar ID: 824 1818 1097

Technology limitations may limit the ability to receive verbal public comments during the meeting. We encourage the public to submit their comments by 5:00 p.m. on November 9, 2021, to board.secretary@vta.org. Instructions for participating in the teleconference will be posted on VTA's website: <https://bit.ly/vta-tac-agendas>

REVISED AGENDA

COMMITTEE MISSION STATEMENT:

The VTA Technical Advisory Committee (TAC) provides in-depth analysis, technical expertise and timely recommendations to the VTA Board of Directors regarding projects, programs, funding and other policy matters while giving voice to and reconciling local and regional perspectives.

CALL TO ORDER

- 1. ROLL CALL**
- 2. ORDERS OF THE DAY**
- 3. PUBLIC COMMENT:**

This portion of the agenda is reserved for persons desiring to address the Committee on any matter not on the agenda. Speakers are **limited to 2 minutes**. The law does not permit Committee action or extended discussion on any item not on the agenda except under special circumstances. If Committee action is requested, the matter can be placed on a subsequent agenda. All statements that require a response will be referred to staff for reply in writing.

- 4. Receive Committee Staff Report. (Verbal Report) (Haywood)**

**Agenda was revised to update staff recommendation for Item #10 & 11*

5. Receive Chairperson's Report. (Verbal Report) (Cameron)
6. Receive Reports from TAC Working Groups. (Verbal Report)
 - Capital Improvement Program (CIP)
 - Systems Operations & Management (SOM)

CONSENT AGENDA

7. ACTION ITEM - Approve the Regular Meeting Minutes of October 13, 2021.
8. ACTION ITEM -Recommend that the VTA Board of Directors direct staff to pursue the five-year battery-electric bus strategy in support of the California Air Resources Board-required zero-emission bus fleet transition.
9. ACTION ITEM -Recommend that the VTA Board of Directors adopt the 2021 Santa Clara Valley Transportation Authority (VTA) Congestion Management Program (CMP) Document.
10. INFORMATION ITEM -Receive the Programmed Projects Quarterly Monitoring Report for July - September 2021.

REGULAR AGENDA

11. ACTION ITEM - Recommend that the VTA Board of Directors: 1) Approve the recommended prioritized project list and funding strategy for the 2016 Measure B Highway Interchange Competitive Grant Program; 2) [Approve \\$196.81 million and the funding plan to advance various phases of twelve projects on the prioritized project list](#); and 3) Authorize the General Manager to execute the necessary agreements for the 2016 Measure B Highway Interchanges Competitive Grant Program funds.
12. ACTION ITEM - Recommend that the VTA Board of Directors: 1) Augment the 2016 Measure B Program in the Adopted Fiscal Years 2022 and 2023 Biennial Budget [by \\$190.89 million with](#) allocation for the following 2016 Measure B Need/Capacity-based program categories: a) Caltrain Grade Separations and b) Highway Interchanges; and 2) Approve the 2016 Measure B 10-year Program (FY2022 to FY2031).
13. INFORMATION ITEM - Receive the TAC Nomination Subcommittee's Report on members expressing interest in serving as either Chairperson or Vice Chairperson for 2022. (Verbal Report)

OTHER

14. Receive an update on Regional Partner Activities and Initiatives. (Verbal Report)
15. Review the TAC Committee Work Plan. (Haywood)
16. ANNOUNCEMENTS

17. ADJOURN

In accordance with the Americans with Disabilities Act (ADA) and Title VI of the Civil Rights Act of 1964, VTA will make reasonable arrangements to ensure meaningful access to its meetings for persons who have disabilities and for persons with limited English proficiency who need translation and interpretation services. Individuals requiring ADA accommodations should notify the Board Secretary's Office at least 48-hours prior to the meeting. Individuals requiring language assistance should notify the Board Secretary's Office at least 72-hours prior to the meeting. The Board Secretary may be contacted at ☎ (408) 321-5680 or ✉ board.secretary@vta.org or ☎ (408) 321-2330 (TTY only). VTA's home page is www.vta.org or visit us on  www.facebook.com/scvta. ☎ (408) 321-2300: 中文 / Español / 日本語 / 한국어 / tiếng Việt / Tagalog.

There will be no physical location for the November 10, 2021, Technical Advisory Committee Meeting. All reports for items on the open meeting agenda are available on VTA's Website.

Zoom meeting link: <https://us02web.zoom.us/j/82418181097>



LOCAL STREETS & ROADS

- Receiving and reviewing annual documentation, due October 1st.
- Allocation through FY23: \$270.7M
- Expenditure through September 2021: \$98.9M



BART PHASE II

- No 2016 Measure B activities in September 2021.
- Allocation through FY23: \$150M



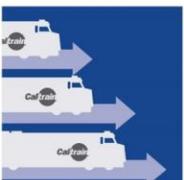
BICYCLE & PEDESTRIAN

- Capital Projects: Reviewing required project documentation.
- Education & Encouragement: Receiving and reviewing annual documentation, due October 1st.
- Planning Studies: Continued developing funding agreements.
- Allocation through FY23: \$56.4M
- Expenditure through September 2021: \$945K



CALTRAIN GRADE SEPARATION

- Received fund allocation agreement from Sunnyvale, Mountain View, and Palo Alto. VTA has responded to the Cities and will be meeting with each city in early October.
- Allocation through FY21: \$38M
- Expenditure through September 2021: \$405K



CALTRAIN CORRIDOR CAPACITY IMPROVEMENTS

- No 2016 Measure B activities in September 2021.
- Allocation through FY23: \$42.5M
- Expenditure through September 2021: \$2.9M



HIGHWAY INTERCHANGES

- Call-for-projects window still open -- applications are due on October 12.
- US 101 SB to SR 87 SB Connector Ramp & US 101 SB On-Ramp from Story Rd: Contract awarded.
- US 101/Trimble-De La Cruz Blvd Interchange Improvement: Construction to begin October 2021.
- Allocation through FY21: \$206.9M
- Expenditure through September 2021: \$57.4M



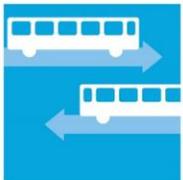
COUNTY EXPRESSWAYS

- Reviewing project quarterly reports and ongoing reimbursement requests.
- Allocation through FY23: \$50M
- Expenditure through September 2021: \$9.2M



SR 85 CORRIDOR

- No 2016 Measure B activities in September 2021.
- Allocation through FY23: \$14.5M
- Expenditure through September 2021: \$1.4M



TRANSIT OPERATIONS

- Innovative Transit Service Models: Finalizing individual funding agreements with Santa Clara County, Milpitas and Mountain View.
- Allocation through FY23: \$112.8M
- Expenditure through September 2021: \$69.6M



PROGRAM ADMINISTRATION

- Continued updates to the 2016 Measure B transparency website and the VTA.org page.
- Awarded the on-call Complete Streets technical assistance contract to HMM Engineers.
- Allocation through FY23: \$15.2M
- Expenditure through September 2021: \$6.3M



Technical Advisory Committee

Wednesday, October 13, 2021

MINUTES

CALL TO ORDER

The Regular Meeting of the Technical Advisory Committee (TAC) was called to order at 1:30 p.m. by Chairperson Cameron by video and teleconference.

1. ROLL CALL

Attendee Name	Title	Status
Oscar Antillon	Member (Los Altos Hills)	Present
John Chau	Alternate Member (Los Altos Hills)	N/A
Dawn Cameron	Chairperson (Mountain View)	Present
Ria Hutabarat Lo	Alternate Member (Mountain View)	N/A
Todd Capurso	Member (Campbell)	Present
Amy Olay	Alternate Member (Campbell)	N/A
Steve Erickson	Member (Milpitas)	Present
Steve Chan	Alternate Member (Milpitas)	N/A
John Cherbone	Member (Saratoga)	Present
Macedonio Nunez	Alternate Member (Saratoga)	N/A
Chris Ghione	Member (Morgan Hill)	Present
David Gittleson	Alternate Member (Morgan Hill)	N/A
Zahir Gulzadah	Member (San Jose)	Present
Jessica Zenk	Alternate Member (San Jose)	N/A
Daryl Jordan	Member (Gilroy)	Present
Gary Heap	Alternate Member (Gilroy)	N/A
Jessica Kahn	Member (Monte Sereno)	Present
Philip Kamhi	Member (Palo Alto)	Present
Sylvia Star-Lack	Alternate Member (Palo Alto)	N/A
Roger Lee	Member (Cupertino)	Present
David Stillman	Alternate Member (Cupertino)	N/A
Michael Liw	Member (Santa Clara)	Present
Jonathan Yee	Alternate Member (Santa Clara)	N/A
Matt Morley	Member (Los Gatos)	Present
WooJae Kim	Alternate Member (Los Gatos)	N/A
Barry Ng	Vice Chairperson (Santa Clara County)	Present
Harry Freitas	Alternate Member (Santa Clara County)	N/A
Dennis Ng	Member (Sunnyvale)	Present
Lillian Tsang	Alternate Member (Sunnyvale)	N/A
Jim Sandoval	Member (Los Altos)	Absent

Marissa Lee	Alternate (Los Altos)	Present
Nick Saleh	Ex-Officio Member (Caltrans)	Present
Fariba Zohoury	Alternate Ex-Officio Member	N/A
VACANT	Ex-Officio (MTC)	-
Therese Trivedi	Alternate Ex-Officio Member (MTC)	Absent
Heath McMahon	Ex-Officio Member (Valley Water)	Absent
Rechelle Blank	Alternate Ex-Officio (Valley Water)	Absent

A quorum was present.

2. **ORDERS OF THE DAY**

There were no Orders of the Day.

3. **PUBLIC COMMENT:**

Blair Beekman, Interested Citizen, commented about the following: 1) biometric cameras; 2) COVID-19 vaccination mandate; 3) Accessible Autonomous Vehicle (AAV) being tested at the Veterans Affairs Hospital in Palo Alto; and 4) good public dialogue policy.

4. **Committee Staff Report**

Scott Haywood, Deputy Director, Transit Planning & Capital Development, and Staff Liaison, provided a report, highlighting the following: 1) summary of actions the VTA Board of Directors and Governance & Audit Committee took at their October 7, 2021, meetings; 2) US101 De La Cruz/Trimble Interchange Project launch; 3) Rapid 568 Ribbon Cutting in South County; 4) October 2021 Transit Service Update; and 5) 2016 Measure B Update.

Public Comment

Mr. Beekman commented on extending the public speaking time to 90 seconds.

Roland Lebrun, Interested Citizen, referenced the 2016 Measure B placemat and commented on VTA's agreement with Caltrain for Diridon Station Technical Support services.

On order of Chairperson Cameron and there being no objection, the Committee received the Committee Staff Report.

5. **Chairperson's Report**

There was no Chairperson's Report.

6. **Reports from TAC Working Groups**

- **Capital Improvement Program (CIP)**

Celeste Fiore, Transportation Planner III-Program, provided a brief report on the following: 1) update on FY 2020 Pavement Condition Index (PCI); 2) Priority Development Areas (PDAs) Investment & Growth Strategies (IGS) 2021 Update;

3) new process for the Highway Interchange Noise Abatement Program; 4) required annual documentation for Local Streets & Roads and Bicycle and Pedestrian Education and Encouragement Programs was due October 1, 2021. Ms. Fiore noted the next CIP meeting is on October 26, 2021.

Systems Operations & Management (SOM)

Eugene Maeda, Sr. Transportation Planner, provided a brief report, highlighting the following: 1) annual CMP Monitoring data collection efforts; and 2) Keep Santa Clara Valley Beautiful Highway Litter Abatement efforts that includes Education, Enforcement, and Prevention. Mr. Maeda noted that the next SOM meeting is scheduled for October 27, 2021.

Public Comment

Mr. Beekman commented on the 40 plus ShotSpotters installed in the new North San Jose Berryessa BART station.

Chairperson Cameron reiterated clarification on expressing public comments explicitly to items verbally presented on this item, referencing the Brown Act requirements. She suggested the Office of the Board Secretary provide Mr. Beekman guidelines pertaining to providing public comments on agenda items.

On order of Chairperson Cameron and there being no objection, the Committee received the Reports from TAC Working Groups.

CONSENT AGENDA

Public Comment

Reyne Jimeno, Board Assistant, noted Mr. Lebrun's written public comment on **Item #10.**, 2000 Measure A Semi-Annual Report Ending June 30, 2021, was received and posted on the agenda portal.

Mr. Beekman commented on the following: 1) surveillance technology and electronic data collection; 2) 40 plus ShotSpotters at the Berryessa BART station; and 3) public comment protocol.

Mr. Lebrun commented on the BART financial report.

7. Regular Meeting Minutes of September 8, 2021

M/S/C (Morley/Capurso) to approve the Regular Meeting Minutes of September 8, 2021.

NOTE: M/S/C MEANS MOTION SECONDED AND CARRIED AND, UNLESS OTHERWISE INDICATED, THE MOTION PASSED UNANIMOUSLY.

8. One Bay Area Grant Cycle 2 Funds Reprogramming

M/S/C (Morley/Capurso) to recommend that the VTA Board of Directors approve reprogramming approximately \$4.6 million One Bay Area Grant Cycle 2 Surface Transportation Block Grant Program funds to the following projects: a) Campbell - Pedestrian and bicycle safety improvements along Campbell Ave, Civic Center Drive and Orchard City Drive; b) San Jose - convert East Julian Street and East Saint James Street from one-way to two-way streets, reducing vehicle speeds and calming traffic; and c) Mountain View - improvements for the neighborhood connection to the Transit Center and downtown.

9. FY2021/22 TFCA Program Manager Fund

M/S/C (Morley/Capurso) to recommend that the VTA Board of Directors approve the programming of FY 2021/22 Transportation Fund for Clean Air (TFCA) County Program Manager (CPM) funds to projects.

10. 2000 Measure A Semi-Annual Report Ending June 30, 2021

M/S/C (Morley/Capurso) to receive the 2000 Measure A Transit Improvement Program Semi-Annual Report Ending June 30, 2021.

11. VTP Transportation Program Semi-Annual Report Ending June 30, 2021

M/S/C (Morley/Capurso) to receive the Valley Transportation Plan (VTP) Transportation Program Semi-Annual Report Ending June 30, 2020

12. FY2021 Transit Operations Performance- Annual Report

M/S/C (Morley/Capurso) to receive the FY2021 Annual Transit Operations Performance Report.

RESULT:	APPROVED – Agenda Items #7-12
MOVER:	Matt Morley, Member
SECONDER:	Todd Capurso, Member
AYES:	Antillon, Capurso, Cherbone, Cameron, Erickson, Ghione, Gulzadah, Jordan, Kahn, Kamhi, Lee, M. Lee, Liw, Morley, B. Ng, D. Ng
NOES:	None
ABSENT:	None

REGULAR AGENDA

13. Election Process for 2022 Advisory Committee Leadership: Appoint Nomination Subcommittee

Michelle Oblena, Associate Management Analyst and Advisory Committee Coordinator, provided an overview of the election process.

M/S/C (Cameron/Kamhi) to appoint Members Antillon, Jordan, and Morley as the nomination subcommittee to identify Committee members interested in serving as the chairperson or vice chairperson for 2022.

RESULT:	APPROVED – Agenda Items #13
MOVER:	Dawn Cameron, Chairperson
SECONDER:	Philip Kamhi, Member
AYES:	Antillon, Capurso, Cherbone, Cameron, Erickson, Ghione, Gulzadah, Jordan, Kahn, Kamhi, R. Lee, M. Lee, Liw, Morley, B. Ng, D. Ng
NOES:	None
ABSENT:	None

14. 2022 State Transportation Improvement Program

Amin Surani, Principal Transportation Planner – Programming, provided a brief presentation on the 2022 State Transportation Improvement Program.

M/S/C (R. Lee/Capurso) to recommend that the VTA Board of Directors: 1) Program \$64.253 million of 2022 State Transportation Improvement Program (STIP) funds to the U.S. 101 Express Lanes Phase 5 project and \$1.268 million to Planning, Programming and Monitoring; 2) Adopt a resolution to program 2022 STIP funding to these projects; and 3) Authorize the General Manager to execute appropriate funding agreements to receive STIP funds.

15. 2016 Measure B Highway Interchanges Category - Noise Abatement Competitive Grant Program

Triana Crighton, Transportation Planner II, and Jane Shinn, Sr. Transportation Planner-Grants & FA, provided a presentation on the 2016 Measure B Highway Interchanges Category - Noise Abatement Competitive Grant Program.

Members of the Committee discussed and provided suggestions on the following: 1) allocate funding for planning phase; 2) provide an extensive list of eligible and new potential project sites; 3) possible inclusion of highway and community/private soundwalls to the list; 4) support staff recommendation of \$50 million fund allocation for the program.

On order of Chairperson Cameron and there being no objection, the Committee discussed the potential Noise Abatement Competitive Grant Program framework with Technical Advisory Committee members.

Chairperson Cameron left the video and teleconference meeting at 2:54 p.m. and relinquished her seat to Vice Chairperson Barry Ng.

16. Bicycle Parking Chapter Update – Bicycle Technical Guidelines

Lola Torney, Transportation Planner III B&P, provided a presentation entitled “Bicycle Parking Chapter Update – Bicycle Technical Guidelines.”

Members of the Committee discussed and provided suggestions, including the following: 1) bike lockers in libraries and other agencies facilities; 2) parking facilities for charging needs for bikes, scooters, and micromobility devices; 3) coordinated shared parking spaces for bicycles, scooters on student campus, skateboard docks; 4) parking spaces in public areas, residential areas, and right of way (ROW); 5) number of parking spaces; and 6) provide summary tables for comparison.

Ms. Torney noted comments on the guidelines will be accepted until the end of October.

On order of Vice Chairperson B. Ng and there being no objection, the Committee reviewed and discuss proposed updates to Bicycle Technical Guidelines Chapter 10, "Bike Parking."

OTHER

17. Update on Regional Partner Activities and Initiatives

Ex-Officio Saleh announced a Cleanup Event on October 21, 2021, 9:30 am – 12:00 p.m. at southbound I-680/Montague Expressway. Caltrans will provide the fact sheet and flyer.

On order of Vice Chairperson B. Ng and there being no objection, the Committee received the update on Regional Partner Activities and Initiatives.

18. TAC Committee Work Plan

Mr. Haywood noted that the TAC Work Plan was included in the online agenda packet adding that the Highway Interchange Program will be agendized at the next meeting.

Public Comment

Mr. Lebrun queried what the letter “D” on the Work Plan means. Mr. Haywood addressed the query.

On order of Vice Chairperson B. Ng and there being no objection, the Committee reviewed the TAC Committee Work Plan.

19. ANNOUNCEMENTS

There were no Announcements.

20. ADJOURNMENT

On order of Vice Chairperson B. Ng and there being no objection, the meeting was adjourned at 3:21 p.m.

Respectfully submitted,

Reyne Jimeno, Board Assistant
VTA Office of the Board Secretary



Date: October 29, 2021
 Current Meeting: November 10, 2021
 Board Meeting: December 2, 2021

BOARD MEMORANDUM

TO: Santa Clara Valley Transportation Authority
 Technical Advisory Committee

THROUGH: General Manager/CEO, Carolyn M. Gonot

FROM: Chief Planning and Programming Officer, Deborah Dagang

SUBJECT: Five-Year Battery-Electric Bus Strategy

Policy-Related Action: Yes

Government Code Section 84308 Applies: No

ACTION ITEM

RECOMMENDATION:

Recommend that the VTA Board of Directors direct staff to pursue the five-year battery-electric bus strategy in support of the California Air Resources Board-required zero-emission bus fleet transition.

EXECUTIVE SUMMARY:

- This action item would codify direction provided by the Santa Clara Valley Transportation Authority (VTA) Board of Directors at their September 17 Board Workshop to direct staff to pursue a five-year battery-electric bus plan strategy for its zero-emission bus transition.
- The staff recommendation balances risk, minimizes new costs and provides VTA the flexibility to adjust its strategy as the agency gains battery-electric bus operating experience, monitors technology advancements and learns from peer agency experiences.
- Multiple near-term tasks are identified for staff to complete including identifying infrastructure needs, developing a high-level funding plan and analyzing the environmental impacts of zero-emission buses and batteries.
- The direction and near-term tasks will help VTA meet the California Air Resources Board requirement to transition to a 100 percent zero-emission bus fleet by 2040.

STRATEGIC PLAN/GOALS:

VTA's Strategic Plan prioritizes delivering fast, frequent and reliable transit service as well as transitioning toward more environmentally sustainable operations. This five-year strategy helps VTA reach the energy consumption reduction and green energy usage goals of its 2020 Sustainability Plan. It also minimizes the risk of reductions in service frequency or worsening reliability with a new bus technology.

FISCAL IMPACT:

Directing staff to pursue a five-year battery-electric bus strategy does not, in itself, have a financial impact. Staff work over the coming months will identify specific projects and bus purchases that will carry funding impacts. Future zero-emission bus-related expenditures will be brought to the Board for approval when ready.

BACKGROUND:

The California Air Resources Board requires VTA to transition to a fully zero-emission bus fleet by 2040 and sets minimum requirements for purchasing zero-emission buses that begin in 2023. Transit operators must select a zero-emission bus technology (battery-electric bus or hydrogen fuel cell bus) and begin planning bus purchases and installation of supporting charging/fueling infrastructure.

At the September 17, 2021, Board Workshop, staff presented a proposal to pursue a five-year strategy to pursue battery-electric buses as VTA's zero-emission bus technology. After five years, VTA will assess whether to continue using battery-electric buses, augment the service with on-route charging or pursue hydrogen fuel-cell technology. The Board memo detailing this information is included in Attachment A.

At the Board Workshop, the Board indicated support for the five-year plan and requested that an action item be brought to them that would codify their direction and authorize staff to begin transition planning.

DISCUSSION:

By approving the five-year plan, the Board of Directors will direct staff to begin work on the following near-term efforts in support of the agency's zero-emission bus transition:

Plan Zero-Emission Bus Purchases and Commensurate Infrastructure Needs

VTA will create a high-level roadmap for the timing and scale of bus purchases as well as the timing, scale and location of charging infrastructure, energy production infrastructure and backup energy storage infrastructure. This roadmap will inform fleet planning, service planning, capital planning, coordination with PG&E and long-term facility planning. The identification of specific projects will give VTA a sense for the scale of external grant funding to pursue as well as the ability to compete for those funds.

Financial Plan for Zero-Emission Bus Transition

VTA will develop a plan for funding the zero-emission bus transition that utilizes external funding to the extent possible. Aligning receipt of formula funds, funding eligibilities, grant application timelines and matching funds to planned future bus purchases and infrastructure upgrades will give VTA the ability to minimize costs and maximize flexibility.

Analysis of Impacts of Bus and Battery Production, Recycling and VTA Green Energy Use

In their discussion of the five-year zero-emission bus transition proposal, VTA committee and Board members underscored the importance of considering zero-emission bus transition within the context of VTA's contribution toward climate change as well as the environmental impacts of bus and battery production and recycling. Further analysis of how zero-emission bus transition impacts these issues will be prepared by staff.

ALTERNATIVES:

The Board of Directors could direct staff to pursue a different strategy.

CLIMATE IMPACT:

The five-year battery-electric bus transition plan will not, in itself, have a climate impact. However, the projects it identifies will pave the way for VTA to operate transit service that produces less greenhouse gas emissions, will allow VTA to produce more of its own green energy through projects like solar panels and allow VTA to reduce its demands of the electrical grid through electrical storage and smart charging management.

Prepared by: Adam Burger
Memo No. 7955

ATTACHMENTS:

- Attachment_A_091721_Board_Workshop_Memo (PDF)



Date: September 9, 2021
 Current Meeting: September 17, 2021
 Board Meeting: N/A

BOARD MEMORANDUM

TO: Santa Clara Valley Transportation Authority
 Board of Directors

THROUGH: General Manager/CEO, Carolyn M. Gonot

FROM: Chief Planning and Programming Officer, Deborah Dagang

SUBJECT: Zero-Emission Bus Strategy

FOR INFORMATION ONLY

EXECUTIVE SUMMARY:

- Per California Air Resources Board regulation, the Santa Clara Valley Transportation Authority (VTA) must transition to a fully zero-emission bus fleet by 2040 and the transition must begin in 2023.
- All zero-emission technologies present new costs, risks and service impacts to VTA.
- Staff has developed six zero-emission bus scenarios with projected impacts to transit service, capital costs and operating costs.
- Staff is seeking input to develop a consensus around a specific zero-emission technology strategy.
- Staff has outlined an approach to purchase battery-electric buses in the near term for shorter service blocks while a decision on which technology is best for long service blocks would be made in the mid/late 2020s when more information will be known.

STRATEGIC PLAN/GOALS:

VTA's Strategic Plan prioritizes delivering fast, frequent and reliable transit service as well as transitioning toward more environmentally sustainable operations. In order to achieve these goals, VTA will need to develop a zero-emission bus strategy that maintains or improves our service operations while ensuring VTA's source energy reduces pollution.

BACKGROUND:

In 2018, the California Air Resources Board (CARB) passed the Innovative Clean Transit Regulation requiring transit operators in the state to transition to fully zero-emission bus fleets by 2040. The regulation has two goals: (1) to improve air quality and (2) to spur investment in zero-

emission technologies by heavy vehicle manufacturers that can spread to other industries, like commercial trucking.

The regulation sets escalating purchasing targets for buses that begin in 2023. In 2023, twenty-five percent of any buses purchased that year must be zero-emission. That target grows to one hundred percent in 2029, making 2028 the last year a transit operator could purchase a non-zero-emission bus. Buses purchased in 2028 are expected to have reached the end of their useful life and be retired by 2040.

Two technologies (battery-electric bus and hydrogen fuel cell bus) have been approved by CARB. Both technologies carry new costs, new risks and new impacts to VTA's service delivery model.

Below is a brief primer on the two approved technologies and their challenges.

Zero-Emission Bus Background

Battery-Electric Bus Basics

Battery-electric buses store their energy in onboard batteries and are charged over several hours at bus depots, a process known as depot-charging. Depot-charging has its limitations, as standard battery-electric buses can only store enough energy to travel approximately 150 miles per charge. Some VTA hybrid-diesel buses currently travel more than 300 miles in a day. Depot-charging can be augmented by on-route charging, a strategy where the bus visits in-the-field fast chargers, partially replenishing the battery throughout the day.

Battery technology has improved in recent years, but it is unclear how much room for technology advancement remains. Improvements in the energy density (electrical charge held per pound of battery) appear to have plateaued while opportunities for small efficiency improvements in temperature management and battery architecture may be possible.

The cost of battery production has decreased, and manufacturers are now achieving range increases by putting more batteries onboard buses, but that strategy has limitations. Battery-laden buses are pushing up against vehicle weight limits, resulting in decreased passenger capacities and less efficient energy use since they must carry a heavy battery on board the bus.

As a pilot program to test battery-electric technology, VTA currently operates a fleet of five depot-charged battery-electric buses that will grow to 10 soon.

Hydrogen Fuel Cell Bus Basics

Hydrogen fuel cell buses are electric buses, but instead of storing their energy in a battery, it is stored in the form of compressed hydrogen in onboard tanks. The hydrogen is converted to electricity as the bus travels, powering the bus. Fueling for hydrogen is quick, like diesel fueling, and hydrogen buses can travel about 300 miles per fueling. Hydrogen fueling stations are run on electrical power.

VTA operated a hydrogen fuel-cell bus pilot project in the mid-2000s that identified many issues. Shortcomings of the pilot included high costs, short travel ranges, fueling inefficiency and low durability of hydrogen fuel-cell components. Since then, hydrogen fuel-cell technology has improved considerably, and hydrogen fuel-cell buses are growing in use.

Zero-Emission Bus Challenges

Neither technology can match the low-cost, operational convenience, or mileage range of diesel bus operations. Both technologies will introduce new costs, complexities, and risks to VTA's transit service delivery, potentially resulting in a less reliable service or fewer hours of service offered to the public. However, these technologies are evolving and the market for vehicles, infrastructure and energy are likely to change as manufacturers realize economies of scale, markets for zero-emission technology grow and the nation's transition to greener energy continues.

Transit agencies across California and the nation are doing their best to navigate this shifting and uncertain terrain. Some transit agencies are employing pilots of different technologies to find the right fit while other transit agencies warn of committing to new technologies too early, which could result in an agency finding itself saddled with obsolete technology and an inability to order replacement parts. The industry consensus favors taking a cautious approach and making decisions based on the most current information while accepting some sunken costs.

To date, VTA has pledged to meet the 2040 goal and has explored how the two technologies could be implemented but has not committed to a specific strategy. Both technologies are new and evolving and it is uncertain where travel ranges, capital costs and operating costs will eventually land. However, with 2023 nearing, VTA will soon need to choose a course of action, at least for near-term implementation.

DISCUSSION:

In December 2020, VTA's Board of Directors adopted the Zero-Emission Bus Rollout Plan. The plan, which was required by CARB, stated VTA's commitment to meet the 2040 goal, identified how each technology could be applied to reach that goal and provided partial capital cost estimates. It did not commit VTA to any specific technology strategy or expense, but it set the stage for making those decisions.

Since the adoption of the Bus Rollout Plan, staff has undertaken a more detailed evaluation on potential service impacts and cost analysis of each technology. The goal of this work is to develop a handful of specific technology/infrastructure scenarios.

In May and June, staff sought input from VTA committees regarding how to prioritize the potential impacts of transitioning to zero-emission buses. Three scenarios were presented: (1) depot-charged battery-electric bus, (2) on-route-charged battery-electric bus and (3) hydrogen fuel cell bus. Committees were asked how to prioritize (a) minimizing costs, (b) risks and service impacts, (c) whether VTA should prefer higher near-term costs for overall cost savings and (d)

how much resiliency infrastructure to incorporate in the scenarios.

VTA committees did not express a collective preference regarding prioritization of the issues, cost-savings versus cost-deferral nor resiliency. However, they provided two valuable insights that informed the development of future scenarios:

- Rather than trying to determine a plan for 2023 through 2040, can VTA approach this decision in smaller blocks of time and develop just a near-term strategy?
- Can VTA evaluate blended technology strategies instead of applying just one technology?

Following committee input, staff simplified the approach to developing scenarios, focusing only on the technologies and setting infrastructure scale and implementation considerations aside for later discussion.

Zero-Emission Bus Scenarios

Staff has developed six zero-emission bus scenarios. Additionally, a scenario that envisions continued hybrid-diesel operation has been developed to be used as a point of comparison. The scenarios are described below.

- 1) Hybrid-Diesel Scenario - VTA continues operating hybrid-diesel service. This is not a viable scenario but serves as a point of comparison.
- 2) 150-Mile Depot-Charged Battery-Electric Bus Scenario - Presently, VTA's battery-electric bus fleet can reliably achieve around 150 miles per charging. This scenario assumes that the range does not improve over time.
- 3) 220-Mile Depot-Charged Battery-Electric Bus Scenario - Assumes that battery technology advances to make 220-mile ranges realistic.
- 4) 270-Mile Depot-Charged Battery-Electric Bus Scenario - This range is achieved by storing more batteries onboard the bus. It features several drawbacks such as heavy vehicle weight, limited passenger capacity and inefficient energy use.
- 5) Battery-Electric Bus with On-Route Charging Scenario - This scenario envisions augmenting depot-charged battery-electric buses with on-route charging to support longer service blocks.
- 6) Combination Battery-Electric Bus and Hydrogen Fuel Cell Bus Scenario - This scenario assumes depot-charged battery-electric buses would operate VTA's shorter service blocks and hydrogen fuel cell buses operate the longer service blocks.
- 7) Hydrogen Fuel Cell Bus Scenario - This scenario assumes a 100% hydrogen fuel-cell bus fleet.

Service Impact Considerations

Below is VTA's initial analysis on the impact each scenario would have on VTA's service.

Travel Ranges and Fleet Size

VTA's service delivery model employs many long service blocks, which makes travel range a leading concern with zero-emission bus technologies. A service block is the distance a bus travels between leaving the bus depot and returning to the bus depot. About 50 percent of VTA service blocks (accounting for about 75 percent of the miles VTA buses operate) are longer than the 150-mile limit that VTA's depot-charged battery-electric buses currently achieve. Some VTA service blocks exceed 300 miles.

These range limitations have implications for the size of VTA's bus fleet. For example, if VTA pursues a fleetwide depot-charged battery-electric bus strategy and travel ranges do not improve above 150 miles, VTA will need to buy two battery-electric buses for each hybrid-diesel bus it retires for long service blocks. That would increase the fleet size from around 400 buses to around 600 buses, resulting in increased vehicle costs and requiring new bus storage. It would also introduce a complexity to operations as buses would need to swap in and out of service throughout the day to recharge. Missteps in managing bus charging could result in missed or delayed pullouts, hurting service reliability. Time spent traveling to/from the bus depot to retrieve a fully-charged bus would come at the expense of revenue service, effectively a small service cut to riders.

To assess the impacts of travel ranges on the size of the fleet needed, VTA scheduled its pre-pandemic service within the range constraints of each technology. The outcomes are shown in the table below. In some cases, scheduling adjustments were able to bring longer service blocks under 270 miles, allowing for 1 to 1 bus replacement ratios.

Table: Travel Ranges, Fleet Sizes and Service Quantity

Scenario	Range Limit	Bus Replacement Ratio	Fleet Size	Revenue Hours (% of Current)
1) Hybrid-Diesel	400 miles	1 to 1	400	100%
2) 150-Mile DC BEB	150 miles	1.5 to 1	600	98%
3) 220-Mile DC BEB	220 miles	1.12 to 1	450	99%
4) 270-Mile DC BEB	270 miles	1 to 1	400	100%
5) DC BEB + On-Route Charging	No limit	1 to 1	400	100%
6) DC BEB + Hydrogen Fuel Cell	300 miles	1 to 1	400	100%
7) Hydrogen Fuel Cell	300 miles	1 to 1	400	100%

Operating Complexity and Service Impacts

Simple operations are preferred to complex operations because there are fewer variables that can go wrong and result in negative service impacts. Hybrid-diesel bus operation is relatively simple because it uses a proven technology, the buses have no travel range concerns, several days of fuel are in reserve and the buses can be fueled quickly inside the bus depot. None of the zero-emission bus technologies are as proven as diesel and many carry new complexities like swapping buses in and out of service, requiring real-time fleetwide charging management, being dependent on in-the-field charging infrastructure and having no backup energy storage.

The table below provides a high-level assessment of the operating complexity and risk to service reliability of each scenario.

Table: Operational Impacts

Scenario	Operating Complexity	Service Reliability Risk
1) Hybrid-Diesel	very low	very low
2) 150-Mile DC BEB	high	high
3) 220-Mile DC BEB	medium	medium
4) 270-Mile DC BEB	low	low
5) DC BEB + On-Route Charging	medium	medium
6) DC BEB + Hydrogen Fuel Cell	medium	low
7) Hydrogen Fuel Cell	low	medium

Cost Considerations

17-Year Cost Estimates

Staff developed 17-year cost estimates for each of the scenarios, which are shown in the table below. Capital cost inputs are based on CARB-recommended cost estimates for vehicles and infrastructure as well as costs extrapolated from VTA's initial battery-electric bus efforts. Operational cost inputs are based on a recent report from AC Transit that compared the costs of their different zero-emission bus technology pilots. The estimates should be viewed as high-level estimates as the cost of vehicles, infrastructure, fuel and fuel delivery are subject to change over the next two decades.

Table: 2023 - 2040 Cost Estimates (\$2021)

Scenario	Buses	Infrastructure	Fuel	Total Cost
1) Hybrid-Diesel	\$490 M	-	\$120 M	\$610 M
2) 150-Mile DC BEB	\$910 M	\$190 M	\$110 M	\$1,210 M
3) 220-Mile DC BEB	\$690 M	\$90 M	\$110 M	\$880 M
4) 270-Mile DC BEB	\$610 M	\$80 M	\$110 M	\$790 M
5) DC BEB + On-Route Charging	\$610 M	\$100 M	\$110 M	\$810 M
6) DC BEB + Hydrogen Fuel Cell	\$650 M	\$60 M	\$140 M	\$860 M
7) Hydrogen Fuel Cell	\$720 M	\$30 M	\$200 M	\$940 M

Funding Outlook

The six zero-emission bus scenarios represent increases in cost of \$200 million to \$600 million compared to continuing hybrid-diesel bus operation over the 17-year estimate period. Presently, state grants and credits earned through CARB's low carbon fuel standards program (VTA receives revenue from carbon offset purchased by polluters) are envisioned as primary sources of funding for these new costs but may not cover them entirely. The availability of future grants is difficult to project, and the low carbon fuel standards credits are not intended to be a permanent source of revenue.

Several additional considerations that are relevant to zero-emission bus transition such as source energy, utility support, battery production and recycling, on-site energy generation, resiliency

and disaster response are discussed in Attachment A.

Staff's Suggested Approach for Zero-Emission Bus Transition

Staff favors developing a near-term implementation plan covering approximately five years to grow the depot-charged battery-electric bus fleet and install charging infrastructure at each of VTA's bus depots. Those buses would be deployed on VTA's shorter service blocks where travel range limits are not a concern. VTA would also pursue grant opportunities to fund on-site energy generation and backup energy storage solutions as they become available.

During this time, VTA will monitor and analyze the progress of zero-emission buses technology and the experience of other operators. In the mid/late 2020s, VTA would make a subsequent decision for which technology is best for longer service blocks. This approach has several benefits:

Flexibility

Except for the hydrogen fuel cell bus scenario (#7), the first few years of the zero-emission bus scenarios presented in this memo are identical. In scenarios #2, #3, #4, #5 and #6, VTA would purchase battery-electric buses that use a depot-charging strategy and deploy them on shorter service blocks in the near-term. This gives VTA time to become more familiar with battery-electric bus operations while retaining the option to adjust our strategy should technological advancement, changes in cost or operating experience dictate so.

Lower Costs and Risks

Battery-electric buses are less expensive than hydrogen fuel cell buses and the supporting charging infrastructure can be added incrementally so there is no risk of installing infrastructure that will not be fully used. In comparison, hydrogen fueling stations come in 50 or 100-bus scales. The cost per mile of electricity is about half that of hydrogen and the market for electricity is much larger and more stable than hydrogen. That provides a degree of price certainty, especially if VTA can lock into an agreement with an electrical utility. Lastly, VTA staff is already familiar with battery-electric bus operations and can build on its existing knowledge base rather than invest time and resources in learning a new technology.

Table: 5-Year Cost Estimates (\$2021)

Scenario	Buses	Infrastructure	Fuel	Total Cost
1) Hybrid-Diesel	\$170 M	-	\$35 M	\$205 M
2) 150-Mile DC BEB	\$170 M	\$35 M	\$30 M	\$235 M
3) 220-Mile DC BEB	\$170 M	\$35 M	\$30 M	\$235 M
4) 270-Mile DC BEB	\$170 M	\$35 M	\$30 M	\$235 M
5) DC BEB + On-Route Charging	\$170 M	\$35 M	\$30 M	\$235 M
6) DC BEB + Hydrogen Fuel Cell	\$170 M	\$35 M	\$30 M	\$235 M
7) Hydrogen Fuel Cell	\$205 M	\$15 M	\$60 M	\$280 M

Table: 5-Year Operational Impacts

Scenario	Operating Complexity	Service Reliability Risk
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1) Hybrid-Diesel	Very Low	Very Low
2) 150-Mile DC BEB	Low	Low
3) 220-Mile DC BEB	Low	Low
4) 270-Mile DC BEB	Low	Low
5) DC BEB + On-Route Charging	Low	Low
6) DC BEB + Hydrogen Fuel Cell	Low	Low
7) Hydrogen Fuel Cell	Low	Medium

No Change to Transit Service Quantity

Deploying depot-charged battery-electric buses on VTA's shorter service blocks will not require any additional deadheading (time spent traveling to/from the bus depot while not serving the public) and will therefore not result in any reduction in service to the riding public.

Table: 5-Year Fleet Size and Service Impact Estimates

Scenario	Range Limit	Bus Replacement Ratio	Fleet Size	Revenue Hours (% of Current)
1) Hybrid-Diesel	400 Miles	1 to 1	400	100%
2) 150-Mile DC BEB	150 Miles	1 to 1	400	100%
3) 220-Mile DC BEB	220 Miles	1 to 1	400	100%
4) 270-Mile DC BEB	270 Miles	1 to 1	400	100%
5) DC BEB + On-Route Charging	No limit	1 to 1	400	100%
6) DC BEB + Hydrogen Fuel Cell	300 Miles	1 to 1	400	100%
7) Hydrogen Fuel Cell	300 Miles	1 to 1	400	100%

CLIMATE IMPACT:

The transition to a zero-emission bus fleet has the potential to improve air quality by removing diesel vehicles from the road. However, the climate impact of transitioning to a zero-emission bus fleet should be evaluated within the context of the entire energy supply chain. Ultimately, to assess the climate impact, VTA will need to determine if the electricity and/or hydrogen used to power the fleet derives from renewable sources like wind, water and solar or non-renewable sources like oil, gas and coal. The decision about the cleanliness of VTA's source energy is independent to the decision about which zero-emission technology strategy is best for VTA.

COMMITTEE COMMENTS:

The Technical Advisory Committee received this presentation on September 8, 2021 and asked clarifying questions about the lifespan of buses and cost projections. The Committee offered general statements of support for the strategic approach draft proposal to pursue a 5-year depot-charged battery-electric bus plan.

The Citizens Advisory Committee received this presentation on September 8, 2021 and asked clarifying questions about bus lifespans, the margin of error in the cost projections, the relationship between zero-emission technologies and service planning and the potential for

sharing access to hydrogen facilities with other entities. The Committee supported the strategic approach draft proposal and encouraged VTA to move toward using greener sources of energy, noting the mutual connection with improving air quality and decreasing environmental harm.

The Committee for Transit Mobility and Accessibility received this presentation on September 9, 2021 and asked clarifying questions about battery lifespans, hydrogen safety, bus storage capacity at bus depots, electrical infrastructure upgrades, funding opportunities for zero-emission transition (grants) and battery-electric bus designs and onboard battery storage. In addition, the Committee requested that staff prepare a list of zero-emission bus manufacturers and photos of battery-electric batteries and provide it to the Committee. The Committee was supportive of the strategic approach draft proposal and encouraged staff to report back on zero-emission bus transition progress in the future.

The Policy Advisory Committee received this presentation on September 9, 2021 and asked clarifying questions about opportunities to partner with municipalities or private entities that operate private bus fleets, the greenness of hydrogen, where on-route chargers might be located in the future and the lifespan and disposal of batteries. The Committee strongly emphasized the importance of thinking beyond just meeting the zero-emission goal and of making sure the energy that VTA consumes becomes greener. The greenness of VTA's energy is independent of the zero-emission bus transition planning effort but is a relevant concern that the Board may address through separate policy decisions. The Committee also requested that future analysis evaluate the cradle-to-grave environmental impact of the bus and bus components.

Prepared By: Adam Burger
Memo No. 7899



Date: October 25, 2021
 Current Meeting: November 10, 2021
 Board Meeting: December 2, 2021

BOARD MEMORANDUM

TO: Santa Clara Valley Transportation Authority
 Technical Advisory Committee

THROUGH: General Manager/CEO, Carolyn M. Gonot

FROM: Chief Planning and Programming Officer, Deborah Dagang

SUBJECT: 2021 CMP Document

Policy-Related Action: No

Government Code Section 84308 Applies: No

ACTION ITEM

RECOMMENDATION:

Recommend that the VTA Board of Directors adopt the 2021 Santa Clara Valley Transportation Authority (VTA) Congestion Management Program (CMP) Document.

EXECUTIVE SUMMARY:

- Every other year, the Board of Directors adopts the CMP Document.
- The CMP Document details VTA's work plan to develop a transportation improvement program to improve multimodal transportation system performance, land use decision-making and air quality among local jurisdictions.
- VTA and its Member Agencies together implement the strategies in the CMP Document.

STRATEGIC PLAN/GOALS:

The CMP Document supports business line number three of the Strategic Plan - transportation system management. By outlining a set of strategies to manage congestion, VTA in collaboration with its Member Agencies, is setting an agenda to better manage and utilize our transportation infrastructure.

FISCAL IMPACT:

There is no fiscal impact as a result of this action.

BACKGROUND:

State law requires that urbanized counties biennially adopt a CMP Document containing specified elements. The intent of the CMP Document is to develop a comprehensive transportation improvement program among local jurisdictions that will improve multimodal transportation system performance, land use decision-making and air quality.

VTA, as the Congestion Transportation Agency (CTA) for Santa Clara County, is responsible for updating the CMP Document every two years. The CMP Document is submitted to the Metropolitan Transportation Commission (MTC) where it is evaluated for consistency with MTC's Regional Transportation Plan (RTP). Following MTC's evaluation, the responsibility to implement the CMP rests with VTA and its Member Agencies.

DISCUSSION:

The 2021 CMP is comprised of nine program elements: 1) transportation system definition; 2) transportation analysis standards; 3) multimodal performance measures; 4) transportation demand management (TDM) and trip reduction strategies; 5) countywide transportation model and database; 6) land use impact analysis; 7) capital improvement program; 8) monitoring and conformance requirements; and 9) multimodal improvement plan requirements.

The CMP Document provides practical options for improving the performance of the county's multimodal transportation system today and a framework for developing proactive and innovative planning options for the future. The 2021 update includes the following new sections:

- A discussion on the designation of Infill Opportunity Zones (IOZs).
- A discussion of VTA's existing TDM practices and explores ways to formalize its role in advancing TDM practices throughout the County.
- An updated discussion of regional planning efforts led by the Association of Bay Area Governments (ABAG) and the Metropolitan Transportation Commission (MTC).
- The potential of future updates to Multimodal Improvement Plan (MIP) requirements.

The 2021 CMP Document is included as Attachment A.

ALTERNATIVES:

VTA must adopt the plan per state CMP legislation; however, the Board may request staff to make changes to the 2021 Congestion Management Program prior to its adoption.

CLIMATE IMPACT:

The CMP Document outlines many multimodal strategies that have the potential to decrease single-occupant vehicles and therefore lessen the impacts that transportation has on the environment.

Prepared by: John Sighamony
Memo No. 7835

ATTACHMENTS:

- 2021 CMP Document (PDF)



[CLICK HERE TO VIEW THE 2021 CONGESTION MANAGEMENT PROGRAM DOCUMENT](#)

From: Bill Hough

Sent: Saturday, November 6, 2021 10:00 AM

To: VTA Board Secretary

Subject: [EXTERNAL] public comment on TAC item #9, Wednesday, November 10, 2021

I am submitting this public comment in my capacity as a resident and taxpayer in Santa Clara County.

There is a fundamental disconnect between CMP document Chapter 5 and the Board's Climate Emergency Resolution 2020.02.04. Chapter 5 discusses Transportation Demand Management including its definition, VTA's Guidelines and programs, legislation, and funding.

On page 56, in the discussion of "employment flexibility," is a section on telecommuting which says: *Telecommuting allows employees to work from home. Software such as VPN let employees access files remotely, while Zoom and Microsoft Teams allow employees to instant message and hold video meetings. The COVID-19 pandemic demonstrated that many office-employees can complete all their work from home and many have grown to prefer telecommuting. Many companies are planning to continue to allow employees to telecommute at least a few days per week.*

The disconnect is between this paragraph and VTA's Climate Emergency Resolution 2020.02.04. VTA should be out front and center with encouragement of telecommuting for both environmental and quality of life reasons. The only good thing about COVID is how wonderful it was when traffic congestion went away after people began working from home.

VTA "talks the talk" but does not "walk the walk." VTA is one of the organizations requiring staff to return to the office in contradiction to Resolution 2020.02.04, Government Code 65088, and the instructions given to staff to fight global warming. Why require office workers to contribute to the region's traffic congestion when alternatives like remote work are available? Were congestion or climate change impacts considered when drafting the CMP Document, as required by Resolution 2020.02.04 and Government Code 65088?

Why is VTA not encouraging remote work wherever feasible?



Date: October 29, 2021
 Current Meeting: November 10, 2021
 Board Meeting: December 2, 2021

BOARD MEMORANDUM

TO: Santa Clara Valley Transportation Authority
 Technical Advisory Committee

THROUGH: General Manager/CEO, Carolyn M. Gonot

FROM: Chief Planning and Programming Officer, Deborah Dagang

SUBJECT: Programmed Project Monitoring - Quarterly Report

FOR INFORMATION ONLY

EXECUTIVE SUMMARY:

- Each quarter, staff reports to the Technical Advisory, Policy Advisory, Congestion Management Program & Planning Committees and the Board of Directors on the status of federal, state, and regionally funded projects programmed by the Santa Clara Valley Transportation Authority (VTA),
- For this quarter most projects are progressing smoothly. However, three projects are experiencing delays as discussed below.

STRATEGIC PLAN/GOALS:

This item supports VTA's second Business Line, "Delivering Projects and Programs" by ensuring Member Agencies' projects meet all federal, state and regional funding requirements and deadlines.

BACKGROUND:

The Programmed Projects Quarterly Monitoring Report is presented each quarter to the Technical Advisory Committee, Policy Advisory Committee, Congestion Management Program & Planning Committee and the VTA Board of Directors. The purpose of this report is to assist the VTA Board, committees, staff, and project sponsors in tracking the progress of federal or state-funded projects that are sponsored by Member Agencies and programmed through VTA. Additionally, the report helps ensure implementing agencies comply with the Metropolitan Transportation Commission's (MTC) Regional Project Funding Delivery Policy, and do not lose any funds by missing a federal, state or regional funding deadline.

DISCUSSION:

The Programmed Projects Quarterly Monitoring Report for July-September 2021 is attached. The report consists of a project summary sheet highlighting the status of projects with funds expiring in FY2020/21 (Attachment A), a detailed listing for each active project (Attachment B) and a list of commonly used abbreviations (Attachment C).

The project summary sheet identifies projects in three categories:

- Red: Projects that are at risk of losing funds due to delivery difficulties.
- Yellow: Projects that need extra attention and are at risk of running into difficulties.
- Green: Projects that are progressing smoothly.

Staff notes that MTC announced that they are under-programmed in STP/CMAQ this year. As a result, they allowed project sponsors with projects programmed in FY2020/21 to extend the January obligation deadline until end of this Federal Fiscal Year. However, MTC is also searching for projects to advance. Therefore, the longer a sponsor waits, the greater the risk that the funds will no longer be available.

This quarter, most projects are labeled “green” because they are progressing smoothly and are obligated. However, the following two projects are behind schedule and are labeled "yellow":

- San Jose's McKee Road Safety Improvements Project will move forward after Caltrans's concerns about the right-of-way certification are resolved.
- For the Java Dr Road Diet and Bike Lanes project, Sunnyvale will submit a Transportation Improvement Program (TIP) revision to move the preliminary engineering funds to construction when TIP amendments resume.

CLIMATE IMPACT:

Many of the projects contained in this report have the potential to reduce greenhouse gas emissions by providing new and/or improved bicycle and pedestrian facilities.

Prepared By: Bill Hough
Memo No. 7870

Red = Project at risk of losing funds due to delivery difficulties.

Yellow = Project may need extra attention or will risk running into difficulties.

Green = Project is progressing smoothly.

Sponsor	Project Title	Project #	Phase	Federal/State Funds	Status			Comments
					Green	Yellow	Red	
Los Altos	Fremont Ave Pavement	SCL170038	CON	\$336,000	●			Under construction.
Milpitas	Street Resurfacing 2020 & 2021	SCL170039	CON	\$578,358	●			Under construction.
San Jose	Tully Road Safety Improvements	SCL170029	CON	\$6,975,360	●			Obligated 6/10/2021.
San Jose	McKee Road Safety Improvements	SCL170030	CON	\$6,994,933		●		Project will move forward after Caltrans' concerns about the ROW certification are resolved.
San Jose	San Jose Pavement Maintenance	SCL170044	CON	\$14,159,062	●			Under construction.
San Jose	West San Carlos Urban Village Streets	SCL170061	PE	\$2,618,000	●			PE Obligated 02/24/2021. Construction to be rescheduled to 2022/23.
Sunnyvale	Java Dr Road Diet and Bike Lanes	SCL170022	PE	\$157,212		●		City to submit a TIP revision to move the PE funds to CON when TIP amendments resume.
Sunnyvale	Fair Oaks Avenue Bikeway - Phase 2	SCL170025	CON	\$447,000	●			Under construction.
Sunnyvale	Sunnyvale Traffic Signal	SCL170027	CON	\$2,366,000	●			Obligated 10/28/2021.
Sunnyvale	Homestead Rd at Homestead High	SCL170043	CON	\$1,000,000	●			Under construction.



Programmed Projects Quarterly Monitoring Report

July - September 2021

Sponsor:		City of Campbell	Project Title:		Harriet Avenue Sidewalk Improvements					
1 of 1	Project No	Project Description	Project Milestone	Funds (\$000)	Schedule			Comments		
	SCL190042	Install sidewalk, curb, gutter, ADA compliant curb ramps, and bicycle shared lane markings (sharrows) on Harriet Avenue between Westmont Avenue and Van Dusen Lane.			Programmed Year	Start mm/yyyy	End mm/yyyy			
Fund Source			CMAQ \$1000 Local \$396	Field Review					City is currently working on plans, specifications, and estimates. Received NEPA clearance on July 1, 2021. City has been working with Caltrans to obtain right-of-way clearance.	
				ENV	\$5	2020		complete		
				Design	\$200	2021	9/2020	10/2021		
Manager Name				Fred Ho	ROW	\$0				
Phone/Fax		(408) 866-2156		Construction	\$1,150	2022	6/2022	12/2023		
E-Mail		fredh@cityofcampbell.com	Total	\$1,355	E-76 Const (sub/app)	3/2022		Last Updated	9/13/2021	
					Last Invoice (sub/app)					



Programmed Projects Quarterly Monitoring Report July - September 2021

Sponsor:		City of Cupertino	Project Title:		Homestead/ De Anza TS Safety Improvement Project					
1 of 2	Project No	Project Description	Project Milestone	Funds (\$000)	Schedule			Comments		
	SCL190019	Upgrade existing pedestal mounted signal on mast arm			Programmed Year	Start mm/yyyy	End mm/yyyy			
Fund Source			HSIP \$213	Field Review			complete	Environmental process is completed. Design in process .		
				ENV	\$0	2019	6/2019			6/2021
				Design	\$31					
Manager Name		David Stillman		ROW	\$0					
Phone/Fax		(408) 777-3245	Construction	\$182	2021	11/2021	8/2022	MTC Obligation Deadline	obligated	
E-Mail		dauids@cupertino.org	Total	\$213	E-76 Const (sub/app)			Last Updated	9/28/2021	
					Last Invoice (sub/app)					

Sponsor:		City of Cupertino	Project Title:		McClellan Road Separated Bike Lanes (Phase 3)					
2 of 2	Project No	Project Description	Project Milestone	Funds (\$000)	Schedule			Comments		
	SCL190036	McClellan Rd from De Anza Blvd to Byrne Ave and Pacifica Drive from De Anza Blvd to Torre Ave: Implement separated bike lane improvements and traffic signal modifications.			Programmed Year	Start mm/yyyy	End mm/yyyy			
Fund Source			CMAQ \$1,000 Local \$1,500	Field Review				Design and Environmental are in process. PES + Field Investigation with CalTrans completed followed by Preparing Environmental docs through Jan 2022.		
				ENV	\$300	2021	1/2021			1/2022
				Design	\$0					
Manager Name		Prashanth Dullu		ROW	\$0					
Phone/Fax		408-777-3190	Construction	\$2,204	2022	6/2022	2/2023	MTC Obligation Deadline	1/31/2022	
E-Mail		prashanthd@cupertino.org	Total	\$2,504	E-76 Const (sub/app)			Last Updated	9/7/2021	
					Last Invoice (sub/app)					



Programmed Projects Quarterly Monitoring Report July - September 2021

Sponsor:		City of Los Altos	Project Title:		Fremont Avenue Preservation				
1 of 1	Project No	Project Description	Project Milestone	Funds (\$000)	Schedule			Comments	
	SCL170038	Rehabilitate roadway along Fremont Avenue, between Grant Road and Stevens Creek (City Limit).			Programmed Year	Start mm/yyyy	End mm/yyyy		
Fund Source	General Fund CON \$1,365 Local PSE \$170 STP \$336		Field Review				complete		
			ENV	\$0	2018		complete		
			Design	\$170	2019		complete		
			Manager Name	Jaime Rodriguez	ROW	\$0		complete	
	Phone/Fax	650-947-2626	Construction	\$1,701	2021	9/2021	6/2022	MTC Obligation Deadline	awarded
	E-Mail	jrodriguez@losaltosca.gov	Total	\$1,871	E-76 Const (sub/app)		02/24/2021	Last Updated	9/13/2021
					Last Invoice (sub/app)				



Programmed Projects Quarterly Monitoring Report
July - September 2021

Sponsor:		City of Milpitas	Project Title:		Street Resurfacing 2020 & 2021								
1 of 1	Project No	Project Description	Project Milestone	Funds (\$000)	Schedule			Comments					
	SCL170039	In Milpitas, rehabilitation of roadways and upgrade ADA facilities on various city streets.			Programmed Year	Start mm/yyyy	End mm/yyyy	Under construction. All phases obligated.					
Fund Source			Local \$4,767 STP \$1,609	Field Review						complete			
				ENV	\$0								
				Design	\$386	2019					complete		
Manager Name				Fanny Yu	ROW	\$0					complete		
Phone/Fax		(408) 583-3318		Construction	\$5,990	2020/1	9/2020	12/2021	MTC Obligation Deadline	obligated			
E-Mail		fyu@ci.milpitas.ca.gov	Total	\$6,376	E-76 Const (sub/app)	11/2019	2/2021	Last Updated	9/29/2021				
					Last Invoice (sub/app)								



Programmed Projects Quarterly Monitoring Report
July - September 2021

Sponsor:		City of Morgan Hill		Project Title:		Dunne Avenue Pavement Rehabilitation Project				
1 of 1	Project No	Project Description		Project Milestone	Funds (\$000)	Schedule			Comments	
	SCL170063	Pavement Rehabilitation on Dunne Avenue.				Programmed Year	Start mm/yyyy	End mm/yyyy		
Fund Source									End ENV 9/2021.	
Local \$395 STP \$857				Field Review						1/2021
				ENV	\$30	2020	01/2021	9/2021		
				Design	\$65	2020	01/2021	10/2021		
Manager Name		David Gittleson		ROW	\$0					
Phone/Fax		(408) 776-4642		Construction	\$1,157	2022	04/2022	09/2022	MTC Obligation Deadline 1/31/2022	
E-Mail		david.gittleson@morganhill.ca.gov		Total	\$1,252	E-76 Const (sub/app)			Last Updated 6/8/2021	
						Last Invoice (sub/app)				



Programmed Projects Quarterly Monitoring Report July - September 2021

Sponsor:		City of Mountain View	Project Title:		Intersection improvements to Shoreline and Villa				
1 of 1	Project No	Project Description	Project Milestone	Funds (\$000)	Schedule			Comments	
	SCL170016	Upgrade existing traffic signal; add protected left turn phase on minor street approaches; install new pedestrian crosswalk; remove existing channelized free right turn and "pork chop" island; construct curb, gutter, sidewalk.			Programmed Year	Start mm/yyyy	End mm/yyyy		
Fund Source	Field Review						complete		
HSIP \$400 Local \$208	ENV		\$208	2017			complete		
	Design		\$0	2019			complete		
Manager Name		Darwin Galang	ROW	\$0					
Phone/Fax		650-903-6005	Construction	\$400	2020	10/2021	12/2021	MTC Obligation Deadline	awarded
E-Mail		Darwin.Galang@mountainview.gov	Total	\$608	E-76 Const (sub/app)		11/2019	Last Updated	9/16/2021
					Last Invoice (sub/app)				



Programmed Projects Quarterly Monitoring Report

July - September 2021

Sponsor:		City of Palo Alto	Project Title:		South Palo Alto Bikeways						
1 of 1	Project No	Project Description	Project Milestone	Funds (\$000)	Schedule			Comments			
	SCL170053	Waverley Multi-Use Path: Widen and upgrade; E Meadow from Alma to Fabian: Protected bike facility where feasible; Fabian from E Meadow to E Charleston: Potential roadway reconfiguration to add protected bicycle facilities where feasible.			Programmed Year	Start mm/yyyy	End mm/yyyy	Begin ENV in October.			
Fund Source			CMAQ \$919 Local \$480	Field Review							
	ENV			\$0	2022	10/2021	5/2022				
	Design			\$406	2022	12/2021	01/2022				
Manager Name	Sylvia Star-Lack			ROW	\$0						
Phone/Fax	650-329-2546	Construction		\$919	2023	6/2023	12/2024	MTC Obligation Deadline	1/31/2023		
E-Mail	sylvia.star-lack@cityofpaloalto.org	Total	\$1,325	E-76 Const (sub/app)			Last Updated	9/13/2021			
				Last Invoice (sub/app)							



Programmed Projects Quarterly Monitoring Report

July - September 2021

Sponsor:		City of San Jose	Project Title:		Willow-Keyes Complete Streets Improvement Project			
1 of 11	Project No	Project Description	Project Milestone	Funds (\$000)	Schedule			Comments
	SCL190028	On Willow-Keyes streets; construct bicycle and pedestrian safety improvements.			Programmed Year	Start mm/yyyy	End mm/yyyy	
Fund Source			ATP \$12,926 Local \$6,723	Field Review				Currently working with VTA in executing the Measure B agreement.
	ENV			\$1,063	2021	11/2021	8/2022	
	Design			\$3,472	2022	3/2022	4/2023	
Manager Name	Carla Suryamega	ROW		\$400	2022	1/2023	3/2023	
Phone/Fax	408-535-8395	Construction	\$15,038	2023	9/2023	12/2024	MTC Obligation Deadline	
E-Mail	carla.suryamega@sanjoseca.gov	Total	\$19,973	E-76 Const (sub/app)			Last Updated	
				Last Invoice (sub/app)			10/18/2021	

Sponsor:		City of San Jose	Project Title:		Bay Trail Reach 9 & 9B			
2 of 11	Project No	Project Description	Project Milestone	Funds (\$000)	Schedule			Comments
	SCL050082	San Jose: From the existing San Francisco Bay Trail/HWY 237 Bikeway Trail to the Bay Trail designated parking spaces (adjacent to the publicly accessible Marriott property): Construct 1.1 miles of commuter/transportation trail.			Programmed Year	Start mm/yyyy	End mm/yyyy	
Fund Source			Earmark \$675 Local \$3,870	Field Review				CEQA & NEPA complete. NEPA revalidated Dec. 2020. Reach 9 (1.1-mile paved trail) completed PSE to 95%. City ROW funding approved in Adopted FY 21/22 budget, effective July '21. City submitted Form 3-A to Caltrans to receive ROW E-76. Once ROW E-76 is approved, City Real Estate will start reimbursable ROW phase work.
	ENV			\$0	06/07		complete	
	Design			\$815	08/09		complete	
Manager Name	Elizabeth Sewell	ROW		\$298	2021			
Phone/Fax	use email	Construction	\$3,600	phased			MTC Obligation Deadline	
E-Mail	elizabeth.sewell@sanjoseca.gov	Total	\$4,713	E-76 Const (sub/app)			Last Updated	
				Last Invoice (sub/app)			no expiration	
							10/19/2021	



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Sponsor:		City of San Jose	Project Title:		Coyote Creek Trail (Hwy 237-Story Rd)				
3 of 11	Project No	Project Description	Project Milestone	Funds (\$000)	Schedule			Comments	
	SCL050083	Master Plan, design of 9.8 miles transportation trail, including safety and improvements between SR 237 and Story Rd.			Programmed Year	Start mm/yyyy	End mm/yyyy		
	Fund Source		ATP \$5,256 Earmark \$3,674 Local \$11,039 RTP-LRP \$20,900 STP \$713	Field Review					
	ENV		\$572	2006			complete		
	Design	\$3,305	2008/09	9/2018	12/2020				
Manager Name	Elizabeth Sewell		ROW	\$0					
Phone/Fax	use email		Construction	\$37,705	phased	6/2020		MTC Obligation Deadline	No expiration
E-Mail	elizabeth.sewell@sanjoseca.gov		Total	\$41,582	E-76 Const (sub/app)			Last Updated	10/19/2021
					Last Invoice (sub/app)				

Sponsor:		City of San Jose	Project Title:		Los Gatos Creek Reach 5 Underpass				
4 of 11	Project No	Project Description	Project Milestone	Funds (\$000)	Schedule			Comments	
	SCL110029	Develop construction drawings for trail improvements			Programmed Year	Start mm/yyyy	End mm/yyyy		
	Fund Source		CMAQ \$1,200 Local \$1,350 RTP-LRP \$2,500	Field Review					
	ENV		\$0	2011			complete		
	Design	\$2,450	2011			12/2021			
Manager Name	Elizabeth Sewell		ROW	\$100	2021		TBD		
Phone/Fax	use email		Construction	\$2,500	TBD		TBD	MTC Obligation Deadline	CMAQ Pre-awarded
E-Mail	elizabeth.sewell@sanjoseca.gov		Total	\$5,050	E-76 Const (sub/app)		2/23/2012	Last Updated	10/19/2021
					Last Invoice (sub/app)				



Programmed Projects Quarterly Monitoring Report July - September 2021

Sponsor:		City of San Jose	Project Title:		Tully Road Safety Improvements					
5 of 11	Project No	Project Description	Project Milestone	Funds (\$000)	Schedule			Comments		
	SCL170029	Implement safety elements on Tully Road between Monterey Road and Capital Expressway.			Programmed Year	Start mm/yyyy	End mm/yyyy			
Fund Source			CMAQ \$7,599 Local \$8,112 STP \$1,000	Field Review			complete	Obligated 6/10/2021.		
				ENV	\$0	2019				complete
				Design	\$2,399					complete
Manager Name		Beza Kedida		ROW	\$0					
Phone/Fax		408-535-3534	Construction	\$8,550	2021	5/2022	12/2023	MTC Obligation Deadline	obligated	
E-Mail		beza.kedida@sanjoseca.gov	Total	\$10,949	E-76 Const (sub/app)			Last Updated	10/18/2021	
					Last Invoice (sub/app)		9/3/2021			

Sponsor:		City of San Jose	Project Title:		McKee Road Safety Improvements					
6 of 11	Project No	Project Description	Project Milestone	Funds (\$000)	Schedule			Comments		
	SCL170030	Implement safety elements On McKee Road between Route 101 and Toyon Ave.			Programmed Year	Start mm/yyyy	End mm/yyyy			
Fund Source			Local \$8,134 STP \$8,623	Field Review			complete	Project will move forward after Caltrans' concerns about the ROW certification are resolved.		
				ENV	\$0					complete
				Design	\$2,406	2019	8/2018			4/2021
Manager Name		Carla Suryamega		ROW	\$0					11/2021
Phone/Fax		408-535-8395	Construction	\$8,574	2021	5/2022	12/2023	MTC Obligation Deadline	6/30/2021	
E-Mail		Carla.Suryamega@sanjoseca.gov	Total	\$10,980	E-76 Const (sub/app)			Last Updated	10/19/2021	
					Last Invoice (sub/app)		10/21/2021			



Programmed Projects Quarterly Monitoring Report July - September 2021

Sponsor:		City of San Jose	Project Title:		Mt Pleasant Ped & Bike Traffic Safety Improvements						
7 of 11	Project No	Project Description	Project Milestone	Funds (\$000)	Schedule			Comments			
	SCL170031	On Mount Pleasant Area, traffic safety improvements to serve students population of seven schools.			Programmed Year	Start mm/yyyy	End mm/yyyy			•City is in process of addressing ROW and plan to submit RFA by December 2021, advertise in late spring 2022 and award Con in summer 2022.	
					Field Review			complete			
					ENV	\$0			complete		
					Design	\$268	2019		complete		
	Fund Source										
	CMAQ \$1,000 Local \$260										
Manager Name		Beza Keddida	ROW	\$0				in progress			
Phone/Fax		408-535-3534	Construction	\$992	2022	06/2022	05/2023	MTC Obligation Deadline	9/30/2021		
E-Mail		beza.keddida@sanjoseca.gov	Total	\$1,260	E-76 Const (sub/app)			Last Updated	10/19/2021		
					Last Invoice (sub/app)		8/9/2021				

Sponsor:		City of San Jose	Project Title:		San Jose Pavement Maintenance						
8 of 11	Project No	Project Description	Project Milestone	Funds (\$000)	Schedule			Comments			
	SCL170044	Pavement maintenance and rehabilitation for various streets in City of San Jose.			Programmed Year	Start mm/yyyy	End mm/yyyy			Under construction.	
					Field Review			complete			
					ENV	\$1,648	2018		complete		
					Design	\$0					
	Fund Source										
	Local \$3,804 STP \$16,642,138										
Manager Name		Octavio Duran	ROW	\$0				complete			
Phone/Fax		408-794-1986	Construction	\$18,797	2021	8/2020	12/2021	MTC Obligation Deadline	obligated		
E-Mail		octavio.duran@sanjoseca.gov	Total	\$20,445	E-76 Const (sub/app)	5/2020		Last Updated	10/19/2021		
					Last Invoice (sub/app)						



Programmed Projects Quarterly Monitoring Report

July - September 2021

Sponsor:		City of San Jose	Project Title:		West San Carlos Urban Village Streets Improvements			
9 of 11	Project No	Project Description	Project Milestone	Funds (\$000)	Schedule			Comments
	SCL170061	Implement safety elements on West San Carlos Street between I-880 and McEvoy Street.			Programmed Year	Start mm/yyyy	End mm/yyyy	
Fund Source	Field Review							PE obligated. Project currently requires a 12 month extension from CTC due to the need for environmental consultant to work on the NEPA Clearance.
CMAQ \$3,582 Local \$2,168 STIP \$4,350	ENV		\$3,333	2021	11/2020	05/2021		
	Design		\$0					
Manager Name	Beza Kedida	ROW	\$0					
Phone/Fax	(408) 535-3534	Construction	\$6,767	2022	06/2023	06/2024	MTC Obligation Deadline	PE obligated
E-Mail	beza.kedida@sanjoseca.gov	Total	\$10,100	E-76 Const (sub/app)			Last Updated	10/18/2021
				Last Invoice (sub/app)		10/1/2021		

Sponsor:		City of San Jose	Project Title:		Monterey Road - HSIP Guardrail Upgrade			
10 of 11	Project No	Project Description	Project Milestone	Funds (\$000)	Schedule			Comments
	SCL190020	Upgrade guard rails on Monterey Road			Programmed Year	Start mm/yyyy	End mm/yyyy	
Fund Source	Field Review						11/2020	currently in design/ROW.
HSIP \$1,000	ENV		\$0			11/2020	6/2021	
	Design		\$0			1/2021	11/2021	
Manager Name	Beza Kedida	ROW	\$0					
Phone/Fax	408-535-3534	Construction	\$1,000	2021	5/2022	5/2023	MTC Obligation Deadline	
E-Mail	beza.kedida@sanjoseca.gov	Total	\$1,000	E-76 Const (sub/app)			Last Updated	10/19/2021
				Last Invoice (sub/app)				



Programmed Projects Quarterly Monitoring Report
July - September 2021

Sponsor:		City of San Jose	Project Title:		Better Bikeway San Jose - San Fernando Street				
11 of 11	Project No	Project Description	Project Milestone	Funds (\$000)	Schedule			Comments	
	SCL190029	On San Fernando Street; Construct bicycle and pedestrian safety improvements.			Programmed Year	Start mm/yyyy	End mm/yyyy		
Fund Source	Field Review								
ATP \$9,992 Local \$1,927	ENV		\$658	2020	8/2019	8/2022			
	Design		\$1,989	2021	1/2022	10/2022			
Manager Name	Carla Suryamega	ROW	\$0						
Phone/Fax	408-535-8935	Construction	\$9,272	2022	1/2023	12/2023	MTC Obligation Deadline	2/1/2023	
E-Mail	carla.suryamega@sanjoseca.gov	Total	\$11,919	E-76 Const (sub/app)	10/17/2019		Last Updated	10/19/2021	
				Last Invoice (sub/app)		6/01/2021			



Programmed Projects Quarterly Monitoring Report

July - September 2021

Sponsor:		City of Santa Clara		Project Title:		Saratoga Creek Trail Phase 1			
1 of 4	Project No	Project Description	Project Milestone	Funds (\$000)	Schedule			Comments	
	SCL170045	Build class I bicycle and pedestrian trail between Homeridge Park and Central Park.			Programmed Year	Start mm/yyyy	End mm/yyyy		
	Fund Source		Field Review					Request submitted to move funding to FFY 2022/23 as part of DRAFT FFY 2021-22 Annual Obligation Plan due to delays in resource agency permitting.	
	CMAQ \$3,735 Local \$1,591		ENV	\$120	2018	11/2015	08/2021		
	Design		\$450	2018	11/2015	10/2021			
Manager Name	Vincent Luchessi		ROW	\$0					
Phone/Fax	408-615-3048		Construction	\$4,756	2022	1/2022	12/2022	MTC Obligation Deadline	1/31/2022
E-Mail	vluchessi@santaclaraca.gov		Total	\$5,326	E-76 Const (sub/app)			Last Updated	10/19/2021
					Last Invoice (sub/app)				

Sponsor:		City of Santa Clara		Project Title:		San Tomas Aquino Creek Trail Underpass			
2 of 4	Project No	Project Description	Project Milestone	Funds (\$000)	Schedule			Comments	
	SCL170052	San Tomas Aquino Creek Trail underpass between Tasman Drive and 1/4 mile south of Tasman Drive.			Programmed Year	Start mm/yyyy	End mm/yyyy		
	Fund Source		Field Review					City plans to apply for permits at the end of the year.	
	CMAQ \$2,449 Local \$1,271		ENV	\$155	2020		complete		
	Design		\$465	2021	2/2021	9/2021			
Manager Name	Carol Shariat		ROW	\$0					
Phone/Fax	408-615-3024		Construction	\$3,100	2023	2/2023	9/2023	MTC Obligation Deadline	1/31/2023
E-Mail	cshariat@santaclaraca.gov		Total	\$3,720	E-76 Const (sub/app)			Last Updated	6/23/2021
					Last Invoice (sub/app)				



Programmed Projects Quarterly Monitoring Report

July - September 2021

Sponsor:		City of Santa Clara	Project Title:		Hetch-Hetchy Trail Phase 1					
3 of 4	Project No	Project Description	Project Milestone	Funds (\$000)	Schedule			Comments		
	SCL170055	Build Class I bicycle and pedestrian facility along 1/3 miles of Hetch-Hetchy right-of-way and along .6 miles of east bank of San Tomas Aquino Creek Trail.			Programmed Year	Start mm/yyyy	End mm/yyyy			
Fund Source			Local \$460 TFCA	Field Review				Project hasn't moved forward due to staffing issues. City plans to apply for permits at the end of the year.		
				ENV	\$100	2021	TBD			TBD
				Design	\$150	2021	TBD			TBD
Manager Name		Carol Shariat		ROW	\$0					
Phone/Fax		408-615-3024	Construction	\$1,000	2023	TBD	TBD	MTC Obligation Deadline	1/31/2023	
E-Mail		cshariat@santaclaraca.gov	Total	\$1,250	E-76 Const (sub/app)			Last Updated	6/23/2021	
					Last Invoice (sub/app)					

Sponsor:		City of Santa Clara	Project Title:		Santa Clara School Access Improvements					
4 of 4	Project No	Project Description	Project Milestone	Funds (\$000)	Schedule			Comments		
	SCL170056	Improve bicycle and pedestrian access to multiple Santa Clara Schools.			Programmed Year	Start mm/yyyy	End mm/yyyy			
Fund Source			CMAQ \$1,146 Local \$504	Field Review				Design at 100% submittal. Field Review and NEPA completed. Currently performing R/W Certification with Caltrans.		
				ENV	\$0					
				Design	\$200	2020	6/2020			6/2021
Manager Name		Carol Shariat		ROW	\$0					
Phone/Fax		408-615-3024	Construction	\$1,450	2022	3/2022	12/2022	MTC Obligation Deadline	1/31/2022	
E-Mail		cshariat@santaclaraca.gov	Total	\$1,650	E-76 Const (sub/app)			Last Updated	10/19/2021	
					Last Invoice (sub/app)					



Programmed Projects Quarterly Monitoring Report July - September 2021

Sponsor:		City of Saratoga	Project Title:		Prospect Road Complete Streets					
1 of 2	Project No	Project Description	Project Milestone	Funds (\$000)	Schedule			Comments		
	SCL130026	Traffic calming on Prospect Road between Saratoga/Sunnyvale Rd and Lawrence Expressway and on Saratoga Ave between Highway 85 to the City Limits to the north.			Programmed Year	Start mm/yyyy	End mm/yyyy			
Fund Source			CMAQ \$5,725 Local \$699	Field Review			complete	Working with Caltrans on public interest finding.		
				ENV	\$260	2014				complete
				Design	\$0					complete
Manager Name				Macedonio Nunez	ROW	\$5	2014			
Phone/Fax		408-868-1218		Construction	\$5,709	2017/20	12/2021			12/2022
E-Mail		mnunez@saratoga.ca.us	Total	\$5,974	E-76 Const (sub/app)	2/2016	4/2016	Last Updated	10/1/2021	
					Last Invoice (sub/app)	10/2021	10/2021			

Sponsor:		City of Saratoga	Project Title:		Saratoga Village Crosswalks and Sidewalk Rehab					
2 of 2	Project No	Project Description	Project Milestone	Funds (\$000)	Schedule			Comments		
	SCL170054	Along Big Basin Way between 6th street and Hwy 9: Install curb bulbouts and crosswalk and rehabilitate sidewalk.			Programmed Year	Start mm/yyyy	End mm/yyyy			
Fund Source			Local \$84 STP \$338	Field Review			10/2021	Field review scheduled for 10/12/2021.		
				ENV	\$10	2019	5/2021			11/2021
				Design	\$30	2019				complete
Manager Name				Macedonio Nunez	ROW	\$0				
Phone/Fax		(408) 868-1218		Construction	\$382	2022	05/2022			04/2023
E-Mail		mnunez@saratoga.ca.us	Total	\$422	E-76 Const (sub/app)			Last Updated	10/1/2021	
					Last Invoice (sub/app)					



Programmed Projects Quarterly Monitoring Report July - September 2021

Sponsor:		City of Sunnyvale	Project Title:		Sunnyvale SNAIL Neighborhood Improvements				
1 of 11	Project No	Project Description	Project Milestone	Funds (\$000)	Schedule			Comments	
	SC170017	Implement bike/ped improvements, close slip lanes, add bulbouts, install detection systems, ADA compliant ped signals, enhance existing bike lanes to include green bike lanes, create new bike lanes and bike boulevards.			Programmed Year	Start mm/yyyy	End mm/yyyy		
Fund Source			ATP: 4,834 Local 1,212	Field Review					Design contract awarded.
				ENV	\$90	2020	7/2019	4/2022	
				Design	\$975	2020	6/2022	1/2023	
Manager Name		Dennis Ng		ROW	\$0				
Phone/Fax		(408) 730-7591	Construction	\$4,994	2022	10/2023	11/2024	MTC Obligation Deadline	
E-Mail		DNg@sunnyvale.ca.gov	Total	\$6,059	E-76 Const (sub/app)			Last Updated	9/28/2021
					Last Invoice (sub/app)				

Sponsor:		City of Sunnyvale	Project Title:		Bernardo Avenue Bicycle Underpass				
2 of 11	Project No	Project Description	Project Milestone	Funds (\$000)	Schedule			Comments	
	SCL170020	In Sunnyvale: The project will fund the Bernardo Avenue Bicycle Underpass environmental analysis and preparation of the Environmental Impact Report (EIR).			Programmed Year	Start mm/yyyy	End mm/yyyy		
Fund Source			CMAQ \$500 Local local \$633 RTP-LRP \$8,700	Field Review					Coordination with Caltrain and County for review of conceptual designs in progress.
				ENV	\$1,133	2022	7/2021	4/2022	
				Design	\$0	2023	10/2022	6/2024	
Manager Name		Angela Obeso		ROW	\$0				
Phone/Fax		408-730-7557	Construction	\$8,700	2025	10/2024	4/2027	MTC Obligation Deadline	1/31/2023 [PE]
E-Mail		aobeso@sunnyvale.ca.gov	Total	\$9,833	E-76 Const (sub/app)			Last Updated	9/28/2021
					Last Invoice (sub/app)				



Programmed Projects Quarterly Monitoring Report July - September 2021

Sponsor:		City of Sunnyvale	Project Title:		Java Drive Road Diet and Bike Lanes				
3 of 11	Project No	Project Description	Project Milestone	Funds (\$000)	Schedule			Comments	
	SCL170022	Construct approximately 5,000 linear feet of Class II bike lanes each side via a road diet on Java Dr.			Programmed Year	Start mm/yyyy	End mm/yyyy		
Fund Source			CMAQ 500 Local \$332	Field Review				City to submit a TIP revision to move the PE funds to CON when TIP amendments resume.	
	ENV			\$470	2018	9/2020	10/2021		
	Design			\$0	2021	4/2020	12/2021		
	Manager Name	Angela Obeso		ROW	\$0				
	Phone/Fax	408-730-7557	Construction	\$362	2022	5/2022	10/2023	MTC Obligation Deadline	1/31/2022
	E-Mail	aobeso@sunnyvale.ca.gov	Total	\$832	E-76 Const (sub/app)			Last Updated	10/19/2021
					Last Invoice (sub/app)				

Sponsor:		City of Sunnyvale	Project Title:		Peery Park "Sense of Place" Improvements				
4 of 11	Project No	Project Description	Project Milestone	Funds (\$000)	Schedule			Comments	
	SCL170023	The project will include bike, pedestrian, and transit improvements throughout in Peery Park are in the City of Sunnyvale.			Programmed Year	Start mm/yyyy	End mm/yyyy		
Fund Source			CMAQ \$2,686 Local \$714	Field Review				RFP advertised on 09/15/2021. Proposals due 10/07/2021.	
	ENV			\$1,457	2018	2/2022	5/2022		
	Design			\$0		1/2022	1/1023		
	Manager Name	Dennis Ng		ROW	\$0				
	Phone/Fax	408-730-7591	Construction	\$1,943	2023	4/2023	10/2023	MTC Obligation Deadline	1/31/2023
	E-Mail	DNg@sunnyvale.ca.gov	Total	\$3,400	E-76 Const (sub/app)			Last Updated	9/28/2021
					Last Invoice (sub/app)				



Programmed Projects Quarterly Monitoring Report July - September 2021

Sponsor:		City of Sunnyvale	Project Title:		East Sunnyvale Area "Sense of Place"				
5 of 11	Project No	Project Description	Project Milestone	Funds (\$000)	Schedule			Comments	
	SCL170024	The East Sunnyvale Area "Sense of Place" Plan was developed through a collaboration of the community and the City. This project will provide improved bike, pedestrians and transit facilities identified in the plan..			Programmed Year	Start mm/yyyy	End mm/yyyy		
Fund Source			CMAQ \$3,047 Local \$810	Field Review				100% design under City review. Targeting Oct. 2021 for E76 Con submittal.	
	ENV			\$1,653	2018		complete		
	Design			\$0		6/2019	1/2022		
	Manager Name	Dennis Ng		ROW	\$0				
	Phone/Fax	408-730-7591	Construction	\$2,203	2022	4/2022	4/2023	MTC Obligation Deadline	1/31/2022
	E-Mail	DNg@sunnyvale.ca.gov	Total	\$3,856	E-76 Const (sub/app)			Last Updated	9/28/2021
					Last Invoice (sub/app)				

Sponsor:		City of Sunnyvale	Project Title:		Fair Oaks Avenue Bikeway - Phase 2				
6 of 11	Project No	Project Description	Project Milestone	Funds (\$000)	Schedule			Comments	
	SCL170025	The project will reconfigure Fair Oaks Avenue to install Bikeway/routes enhancements and will close the bike way gaps throughout along Fair Oaks Avenue.			Programmed Year	Start mm/yyyy	End mm/yyyy		
Fund Source			CMAQ \$783 Local \$208	Field Review				Draft Award Package sent to Caltrans LA on 9/2. Contractor submittals under review.	
	ENV			\$425	2018		complete		
	Design			\$0	2018		complete		
	Manager Name	Dennis Ng		ROW	\$0		complete		
	Phone/Fax	408-730-7591	Construction	\$566	2021	8/2021	6/2022	MTC Obligation Deadline	awarded
	E-Mail	DNg@sunnyvale.ca.gov	Total	\$991	E-76 Const (sub/app)			Last Updated	9/28/2021
					Last Invoice (sub/app)				



Programmed Projects Quarterly Monitoring Report July - September 2021

Sponsor:		City of Sunnyvale	Project Title:		Lawrence Station Area Sidewalks & Bike Facilities				
7 of 11	Project No	Project Description	Project Milestone	Funds (\$000)	Schedule			Comments	
	SCL170026	In Sunnyvale at Lawrence Caltrain Station. The project incorporates multiple complete street design elements. Sidewalks and Bike lanes with buffers and colored pavements at conflict areas will be installed.			Programmed Year	Start mm/yyyy	End mm/yyyy		
Fund Source			CMAQ \$500 Local \$133	Field Review				ROW Cert and 100% design underway.	
				ENV	2018		complete		
				Design	\$271	2019	4/2020		
Manager Name		Dennis Ng		ROW	\$0				
Phone/Fax		408-730-7591	Construction	\$362	2022	5/2022	9/2022	MTC Obligation Deadline	1/31/2022
E-Mail		DNg@sunnyvale.ca.gov	Total	\$633	E-76 Const (sub/app)			Last Updated	9/28/2021
					Last Invoice (sub/app)				

Sponsor:		City of Sunnyvale	Project Title:		Sunnyvale Traffic Signal Upgrades/Replacements					
8 of 11	Project No	Project Description	Project Milestone	Funds (\$000)	Schedule			Comments		
	SCL170027	The traffic signals and intersections will be upgraded to have pedestrian-friendly designs and improved bicycle detection for the traffic signals.			Programmed Year	Start mm/yyyy	End mm/yyyy			
Fund Source			CMAQ \$2,566 Local \$333	Field Review				MTC approved project scope modifications., Awaiting Caltrans approval of E76 CON.		
				ENV	\$533	2018				complete
				Design	\$0		11/2018			11/2021
Manager Name		Dennis Ng		ROW	\$0					
Phone/Fax		408-730-7591	Construction	\$2,366	2021	2/2022	12/2022	MTC Obligation Deadline	9/30/2021	
E-Mail		DNg@sunnyvale.ca.gov	Total	\$2,899	E-76 Const (sub/app)			Last Updated	10/19/2021	
					Last Invoice (sub/app)					



Programmed Projects Quarterly Monitoring Report July - September 2021

Sponsor:		City of Sunnyvale	Project Title:		Pedestrian and Bike Infrastructure Improvements					
9 of 11	Project No	Project Description	Project Milestone	Funds (\$000)	Schedule			Comments		
	SCL170057	Enhance and/or install signs, striping, and ADA compliant curb ramps at 34 locations. The project will also install Rectangular Rapid Flashing Beacons at five locations.			Programmed Year	Start mm/yyyy	End mm/yyyy			
Fund Source			CMAQ \$919 Local \$244	Field Review			complete	30% design under City review.		
				ENV	\$244	2020				complete
				Design	\$0	2020	6/2021			1/2022
Manager Name		Dennis Ng		ROW	\$0					
Phone/Fax		408-730-7591	Construction	\$919	2022	6/2022	6/2023	MTC Obligation Deadline	1/31/2022	
E-Mail		DNg@sunnyvale.ca.gov	Total	\$1,163	E-76 Const (sub/app)			Last Updated	9/28/2021	
					Last Invoice (sub/app)					

Sponsor:		City of Sunnyvale	Project Title:		Safe Routes to School Improvements					
10 of 11	Project No	Project Description	Project Milestone	Funds (\$000)	Schedule			Comments		
	SCL170059	In the vicinity of Bishop Elementary School: Install bike lanes, high visibility crosswalks, raised crosswalks, and curb extensions; provide bicycle and pedestrian education and encouragement programs.			Programmed Year	Start mm/yyyy	End mm/yyyy			
Fund Source			ATP \$1,889 Local \$473	Field Review				Project design consultant has been selected and in process of awarding design contract. Design to begin October 2021.		
				ENV	\$70	2019				Complete
				Design	\$398	2020	4/2021			4/2022
Manager Name		Dennis Ng		ROW	\$0					
Phone/Fax		(408) 730-7591	Construction	\$1,894	2020	7/2022	7/2023	MTC Obligation Deadline		
E-Mail		DNg@sunnyvale.ca.gov	Total	\$2,362	E-76 Const (sub/app)			Last Updated	9/28/2021	
					Last Invoice (sub/app)					



Programmed Projects Quarterly Monitoring Report
July - September 2021

Sponsor:		City of Sunnyvale		Project Title:		Advanced Dilemma Zone Detection Phase 2					
11 of 11	Project No	Project Description	Project Milestone	Funds (\$000)	Schedule			Comments			
	SCL190022	Provide advanced dilemma-zone detection at 16 signalized intersections identified in a citywide collision analysis.			Programmed Year	Start mm/yyyy	End mm/yyyy			ROW Cert was submitted to Caltrans and will request E76 Con funding in November 2021.	
					Field Review						
					ENV	\$186	2019		complete		
					Design	\$0	2020	7/2020	10/2021		
Manager Name	Dennis Ng	ROW	\$0		8/2021	9/2021					
Phone/Fax	(408) 730-7591	Construction	\$1,112	2021	1/2022	12/2022	MTC Obligation Deadline				
E-Mail	DNg@sunnyvale.ca.gov	Total	\$1,298	E-76 Const (sub/app)			Last Updated	9/28/2021			
				Last Invoice (sub/app)							



Programmed Projects Quarterly Monitoring Report
July - September 2021

Sponsor:		MTC/VTA	Project Title:		Regional Planning Activities and PPM - Santa Clara						
1 of 1	Project No	Project Description	Project Milestone	Funds (\$000)	Schedule			Comments			
	SCL170001	Santa Clara: Regional Planning Activities and Planning, Programming and Monitoring			Programmed Year	Start mm/yyyy	End mm/yyyy	Ongoing.			
Fund Source			Field Review								
Local \$787 STIP \$5,025 STP \$10,900			ENV	\$17,331	2017-25						
			Design	\$0							
Manager Name		Amin Surani	ROW	\$0							
Phone/Fax		408-546-7989	Construction	\$0				MTC Obligation Deadline			
E-Mail		amin.surani@vta.org	Total	\$17,331	E-76 Const (sub/app)			Last Updated	7/14/2021		
					Last Invoice (sub/app)						



Programmed Projects Quarterly Monitoring Report July - September 2021

Sponsor:		Town of Los Gatos		Project Title:		Los Gatos Creek Trail to Hwy 9 Trailhead Connector				
1 of 2	Project No	Project Description	Project Milestone	Funds (\$000)	Schedule			Comments		
	SCL170028	This will fund the design of a bike and pedestrian connector to the Los Gatos Creek Trail at Highway 9.			Programmed Year	Start mm/yyyy	End mm/yyyy			
Fund Source			CMAQ \$343 Local \$44 RTP-LRP \$4,000	Field Review			complete	65% PS&E complete.		
				ENV	\$0	2019				complete
				Design	\$387	2019	12/2018			1/2022
		Manager Name		Michelle Quinney		ROW	\$0			2019
Phone/Fax		408-827-3552/408-354-8529		Construction	\$4,000	2023	4/2023	11/2023	MTC Obligation Deadline	PE obligated
E-Mail		MQuinney@losgatosca.gov		Total	\$4,387	E-76 Const (sub/app)			Last Updated	6/2/2021
						Last Invoice (sub/app)	7/28/2021			

Sponsor:		Town of Los Gatos		Project Title:		Shannon Road Complete Streets				
2 of 2	Project No	Project Description	Project Milestone	Funds (\$000)	Schedule			Comments		
	SCL190033	Construct a Class I multi-use path on the north side of Shannon Road between Los Gatos Blvd and Cherry Blossom Lane.			Programmed Year	Start mm/yyyy	End mm/yyyy			
Fund Source			CMAQ \$940 Local \$350	Field Review				Contract for design work was awarded in May 2021 with anticipated construction by 2022. The design contract is locally funded.		
				ENV	\$100	2020	6/2021			8/2021
				Design	\$0		6/2021			12/2021
		Manager Name		Suyesh Shrestha		ROW	\$0			8/2021
Phone/Fax		use email		Construction	\$1,190	2022	1/2022	11/2022	MTC Obligation Deadline	1/31/2022
E-Mail		SShrestha@losgatosca.gov		Total	\$1,290	E-76 Const (sub/app)			Last Updated	6/2/2021
						Last Invoice (sub/app)				



Programmed Projects Quarterly Monitoring Report

July - September 2021

Sponsor:		VTA	Project Title:		Route 152 New Alignment Study				
1 of 3	Project No	Project Description	Project Milestone	Funds (\$000)	Schedule			Comments	
	SCL090016	Route 152 new alignment from Route 101 to Route 156. Realign highway and evaluate route management strategies, including potential roadway pricing. Also includes SR152 "trade corridor" study from 101 to I-5.			Programmed Year	Start mm/yyyy	End mm/yyyy		
	Fund Source		IIP \$5000 Local \$5000 STP \$2.862	Field Review					
Manager Name	Gene Gonzalo		ENV	\$13	2008/09	2008	6/2024	VTA issued a check of \$83,109 on 5/20/21 to Caltrans, returning the expended Federal STP fund to State. E76 close-out is in progress. Request for re-allocation of the federal funds will be submitted for approval at a later date.	
Phone/Fax	408-952-4236	Design	\$0						
E-Mail	gene.gonzalo@vta.org	ROW	\$0						
		Construction	\$0					MTC Obligation Deadline	
		Total	\$13		E-76 Const (sub/app)			Last Updated	
					Last Invoice (sub/app)			6/4/2021	

Sponsor:		VTA	Project Title:		I-680 Soundwalls - Capitol Expwy to Mueller Ave				
2 of 3	Project No	Project Description	Project Milestone	Funds (\$000)	Schedule			Comments	
	SCL150001	Construct sound walls on I-680 between Capitol Expressway and Mueller Avenue.			Programmed Year	Start mm/yyyy	End mm/yyyy		
	Fund Source		Local \$1002 STIP \$4,456	Field Review					
Manager Name	Jason Nesdahl		ENV	\$724	2016	8/2016	1/2019		
Phone/Fax	408-952-4275	Design	\$829	2018	1/2019	12/2020			
E-Mail	jason.nesdahl@vta.org	ROW	\$630	2020	1/2019	12/2021			
		Construction	\$3,275	2021	3/2022	3/2023		MTC Obligation Deadline	
		Total	\$5,458		E-76 Const (sub/app)			Last Updated	
					Last Invoice (sub/app)			6/30/2021	
								6/4/2021	



Programmed Projects Quarterly Monitoring Report

July - September 2021

Sponsor:		VTA		Project Title:		I-280 Soundwalls - SR-87 to Los Gatos Creek Bridge			
3 of 3	Project No	Project Description	Project Milestone	Funds (\$000)	Schedule			Comments	
	SCL170064	Construct new soundwalls along I-280 on both sides between SR87 and Los Gatos Creek Bridge.			Programmed Year	Start mm/yyyy	End mm/yyyy		
	Fund Source		STIP \$7,000	Field Review					Noise study completed and Environmental technical studies will be starting. VTA received extension of STIP funds for PS&E phase.
			ENV	\$833	2020	10/2019	12/2021		
		Design	\$929	2021	1/2022	12/2022			
		Manager Name	Jason Nesdahl	ROW	\$456	2022	6/2021	3/2023	
		Phone/Fax	408-952-4275	Construction	\$4,782	2023	4/2023	4/2025	
		E-Mail	jason.nesdahl@vta.org	Total	\$7,000	E-76 Const (sub/app)			Last Updated 6/4/2021
						Last Invoice (sub/app)			

Programmed Projects Quarterly Monitoring Report

Attachment C

List of Acronyms

ABAG-Association of Bay Area Governments	NOI-Notice of Intent
ABC-Across Barrier Connections	NOP-Notice of Preparation
AC-Asphalt Concrete	NPDES-National Pollution Discharge Elimination System
ACE-Altamont Commuter Express	PCC-Portland Concrete Cement
ADA-Americans with Disabilities Act	PDR-Planned Development Rezoning
ARRA-American Recovery and Reinvestment Act	PE-Preliminary Engineering
BART-Bay Area Rapid Transit	PES- Preliminary Environmental Study
BEP-Bicycle Expenditure Program	PTG-VTA Pedestrian Technical Guidelines
BRT-Bus Rapid Transit	PUC-Public Utilities Commission
BTG-VTA Bicycle Technical Guidelines	PUD-Planned Urban Development
CDT-Community Design & Transportation	R&D-Research & Development
CEQA-California Environmental Quality Act	RFA-Request for Authorization
CIP-Capital Improvement Program	RFP-Request for Proposals
CMAQ-Congestion Mitigation and Air Quality Improvement Program	ROW-Right-Of-Way
CMIA-Corridor Mobility Improvement Account	RTP/LRP-Long Range Undefined Funds
CMP-Congestion Management Program	SCVWD-Santa Clara Valley Water District
CON-Construction	SF-Square Foot
CTC-California Transportation Commission	SHOPP-State Highway Operation and Protection Program
CUP-Conditional Use Permit	SPA-Specific Plan Amendment
CWC-Citizen Watchdog Committee	STIP-State Transportation Improvement Program
DEIR-Draft Environmental Impact Report	STP-Surface Transportation Program
DU/AC-Dwelling Units per Acre	SVRT-Silicon Valley Rapid Transit (BART extension to San Jose)
E76-Formally called "Authorization to Proceed"	SWPPP-Storm Water Pollution Prevention Program
EIR-Environmental Impact Report	TDM-Transportation Demand Management
EIS-Environmental Impact Statement	TE-Transportation Enhancements
ENV-Environmental	TFCA-Transportation Fund for Clean Air
ER-Environmental Review	TIA-Transportation Impact Analysis
ETS-Electronic Toll System	TOD-Transit-Oriented Development
FAR-Floor Area Ratio	UPRR-Union Pacific Railroad
FEIR-Final Environmental Impact Report	VPPP-Value Pricing Pilot Program
GPA-General Plan Amendment	
HBRR-Highway Bridge Replacement and Rehabilitation	
HOV-High-Occupancy Vehicle	
HPP-High Priority Project	
HSR-High-Speed Rail	
IS-Initial Study	
ITS-Intelligent Transportation System	
LPR-Local Program Reserve	
LRT-Light Rail Transit	
LU/TD-Land Use/Transportation Diagram	
MND-Mitigated Negative Declaration	
MTC-Metropolitan Transportation Commission	
ND-Negative Declaration	
NEPA-National Environmental Policy Act	



Date: November 9, 2021
Current Meeting: November 10 & 12, 2021
Board Meeting: December 2, 2021

BOARD MEMORANDUM

TO: Santa Clara Valley Transportation Authority
Citizens Advisory, Policy Advisory & Technical Advisory Committees

THROUGH: General Manager/CEO, Carolyn M. Gonot

FROM: Interim Chief Financial Officer, Kathleen Kelly

SUBJECT: 2016 Measure B Highway Interchanges Program: Prioritized Project List

Policy-Related Action: Yes

Government Code Section 84308 Applies: No

ACTION ITEM

RECOMMENDATION:

Recommend that the VTA Board of Directors: 1) Approve the recommended prioritized project list for the 2016 Measure B Highway Interchange Competitive Grant Program; 2) Approve \$196.81 million and the funding plan to advance various phases of twelve projects on the prioritized project list; and 3) Authorize the General Manager to execute the necessary agreements for the 2016 Measure B Highway Interchanges Competitive Grant Program funds.

EXECUTIVE SUMMARY:

- A call-for-projects for the 2016 Measure B Highway Interchanges Competitive Grant Program was released on August 16th and closed on October 12th, 2021. The 2016 Measure B Program Office received 13 applications from six primary project sponsors requesting a total of approximately \$1.04 billion in Year of Expenditure dollars.
- Fully funding the projects in ranked order will only allow a few projects to be delivered. Therefore, staff recommends funding all Project Approval/Environmental Document (PA&ED) and Plan, Specifications and Estimates (PSE) phases to prepare projects to be more competitive in external funding opportunities, as well as funding the Right of Way (ROW) phase for two projects that requested funding beginning with ROW. In addition, staff recommends funding projects that requested only construction funds in ranked order until available funds are depleted.
- This strategy will provide funding for 12 of the 13 projects, with four projects receiving funding for construction.

- The recommended actions will approve a ranked and prioritized project list to further develop the 2016 Measure B FY2022/FY2023 Biennial Budget and 10-year Program (FY2022 to FY2031) by proposing allocations for the 2016 Measure B Highway Interchanges Program.
- Staff will also use the prioritized project list to help project sponsors seek other non-2016 Measure B funding opportunities.

STRATEGIC PLAN/GOALS:

The 2016 Measure B Program aligns directly with the goals of VTA’s Strategic Plan Business Line 2: Delivering Projects and Programs. 2016 Measure B provides funding for nine transportation categories that assist in addressing “the current and evolving multimodal needs of Silicon Valley” as stated in the Strategic Plan.

FISCAL IMPACT:

While the recommended actions do not have a direct fiscal impact, the action of adopting the prioritized project list will guide the development of 2016 Measure B FY2022 and FY2023 Biennial Budget and 10-year Program recommendations in the Highway Interchanges program.

BACKGROUND:

On May 6, 2021, the VTA Board of Directors approved three Project Readiness criteria for all 2016 Measure B Need/Capacity-based programs, including the Highway Interchanges program, to determine whether project allocations will be recommended in a Biennial Budget cycle and/or the 10-year Program (FY2022 to FY2031).

All projects in the Highway Interchanges program are subject to the following three Project Readiness Criteria:

1. Criterion #1: Project delivery status

Allocations for projects in the 10-year Program will be based on project delivery phases and completion of each phase. Projects must complete prior delivery phase(s) as a prerequisite for allocation of funds in a Biennial Budget for the next phase.

2. Criterion #2: Funding status

Project must have non-2016 Measure B match funds identified for inclusion in the 10-year Program and secured for a Biennial Budget allocation.

3. Criterion #3: Partner agency/community support

Partner agencies must be identified for inclusion in the 10-year Program. Community, permitting agency, and partner agency support must be demonstrated for a Biennial Budget allocation.

On August 5, 2021, the VTA Board of Directors approved the prioritization and project selection process for the 2016 Measure B Highway Interchanges program and directed staff to use approved prioritization criteria and release a call for projects using the criteria to develop a

ranked priority list of Highway Interchange projects.

The approved prioritization process states that 1) Projects with previously approved allocations keep their allocations; 2) Projects that are currently funded for design or construction be funded through completion of the project; 3) Projects that have received allocations for phases earlier than design be subject to the proposed Prioritization and Project Selection Criteria contained in this memo; and, 4) Projects funded through the Noise Abatement Program not be subject to the Prioritization and Project Selection criteria, as this program is intended to be a separate competitive grant program.

Attachment A presents the adopted program criteria with details of project scoring logic. The approved prioritization criteria and corresponding point values are as follows:

Table 1: Highway Interchanges Competitive Grant Program Criteria

Criteria	Maximum Point Value
1. Congestion Management	35
2. Safety	25
3. Equity Considerations	10
4. Geographic Balance	10
5. Climate Considerations	10
6. Non-2016 Measure B Contribution	10
TOTAL	100

The 2016 Measure B Program office released the call for projects on August 16, 2021. The application deadline was October 12, 2021. The scoring committee consisted of one VTA staff and four staff from the Cities of Campbell, Gilroy, Mountain View, and San Jose. Project applications were ranked in order of score and compared to the funding available for the Highway Interchange program to develop the funding recommendation.

DISCUSSION:

On October 12, 2021, the 2016 Measure B Program office received 13 project applications requesting funding from six member agencies. Overall, the applications requested a total of \$1,039,218,500 in Year of Expenditure dollars. The scoring committee met virtually on October 18th and October 25th to review the prioritization criteria and discuss application scores. The scoring committee members are not allowed to score applications submitted by their agencies.

Attachment B presents the prioritized project list in ranked order with staff recommendation of funding.

Most of the project applications scored in a narrow range. If the 2016 Measure B Program fully funds each project request in the ranked order, only the first three, potentially four, projects can be delivered. The remaining highway improvements are most likely left without other means to advance. As many of the external grants prefer funding later stages of projects (e.g. Construction), these remaining projects, with limited means to advance, also lose the ability to compete for these funds.

Therefore, staff recommends the following:

- Project Approval/Environmental Document (PA/ED) and Plan, Specifications and Estimates (PS&E) phase requests - \$62.41 million
 - Fund all PA/ED and PS&E phases.
 - This will prepare as many projects as possible to pursue more effectively non-2016 Measure B funding opportunities.
- Right of Way (ROW) phase - \$102.30 million
 - Fund the ROW phases for the two projects requesting only ROW and construction funding.
 - Staff recommends waiting until more precise ROW costs are determined prior to committing to funding ROW requests for the remaining projects.
- Construction - \$32.10 million
 - Fund all four projects that only requested funding for construction in the ranked order until available program funding is depleted.

Table 2 presents a summary of funding recommendations by project phase. With this strategy, the Program will provide funding to 12 of 13 projects at the onset. In subsequent biennial budget cycles, as ROW allocations needs are better defined, projects may be awarded the ROW funds requested. In addition to providing funds for essentially all the projects, the Highway Program can potentially be able to provide required match funding for those projects that successfully compete for external construction funds. The recommended awards also give the Highway Interchanges Program the ability to maintain its Program Tax Revenue percentage of 11.90% over the life of the measure.

Table 2: Highway Interchanges Funding Recommendation by Phase (\$YOE)

PA/ED	Design	ROW	Construction
\$ 8,917,500	\$ 53,493,000	\$ 102,300,000	\$ 32,100,000
Total Competitive Grant Recommendation			\$ 196,810,500

The prioritized project list with funding recommendations will guide the funding allocations of the Highway Interchanges program in the FY2022/FY2023 Biennial Budget and 10-year Program (FY2022 to FY2031). Staff will also use the prioritized project list to help project sponsors seek other non-2016 Measure B funding opportunities.

The FY2022/FY2023 Biennial Budget and 10-year Program (FY2022 to FY2031) allocation requests, subject of a subsequent memo, will be based on 1) Requested allocations from projects grandfathered into the program; 2) Requested allocation for the Noise Abatement Competitive Program and 3) Requested allocations of projects based on the prioritized project list. All allocation requests must meet the three Project Readiness Criteria.

NEXT STEPS:

Based on the project ranking on the prioritized list and Project Readiness, staff will develop and recommend funding allocations for the 2016 Measure B Highway Interchanges Program in the FY2022/FY2023 Biennial Budget and the 10-year Program, subject of a subsequent memo. Staff will also develop cooperative agreements, as needed, for individual projects that are ready to move forward.

ALTERNATIVES:

The VTA Board of Directors may choose not to approve this prioritized project list and select alternative programming strategies, however, this will require program staff to revisit the Highway Interchanges program criteria and delay the development of biennial budget allocation and 10-year program.

The VTA Board of Directors may choose not to authorize the General Manager to execute the necessary agreements for the 2016 Measure B Highway Interchanges Program funds at this time. This will delay the ability of the project sponsors to receive funds and potentially delay the delivery of the projects.

CLIMATE IMPACT:

‘Climate Considerations’ is a criterion in the Highway Interchange program criteria and will have varying degrees of impact depending on the project itself. All project applications indicated a potential reduction of vehicle miles traveled and greenhouse gas emissions through congestion management and Complete Streets improvements.

Prepared by: Nicole He
Memo No. 7897

ATTACHMENTS:

- Attachment A: 2016MB Highway Interchanges Board-Approved Program Criteria (PDF)
- Attachment B_2016MB Highway Interchanges Prioritized Project List (PDF)
- 2016MB_Highway_PriorityList_AdvComm_Nov2021_v4 (PDF)

Highway IC Project Prioritization Criteria

Criterion	Objective	Evaluation Question	Max. Value
Congestion Management	<ul style="list-style-type: none"> • Remove an existing or future bottleneck • Significantly improve travel time or speed • Significantly increase person-throughput • Address impacts to local street system 	<ul style="list-style-type: none"> • Removal of bottleneck without impacts elsewhere (Y/N) • Peak period travel time/speed/delay • Person-throughput • Provision of High Occupancy Vehicle Facility (Y/N) • Address impacts to local street system (Y/N) 	35
Safety	<ul style="list-style-type: none"> • Reduce risk of fatalities • Reduce merge and weave conflicts • Reduce potential mainline queuing • Improve bicycle or pedestrian movement and safety • Improve safety of truck and bus operations 	Demonstrates improvement to address: <ul style="list-style-type: none"> • Rate of collisions (Y/N) • Weave/merge conflicts (Y/N) • Mainline queuing (Y/N) • Bicycle or pedestrian movements (Y/N) • Improves safety of truck and bus ops (Y/N) 	25
Equity Considerations	<ul style="list-style-type: none"> • Does not adversely impact vulnerable communities or Equity Priority Communities • Improve mobility and accessibility for low-income travel markets • Address existing needs of vulnerable communities or Equity Priority Communities 	<ul style="list-style-type: none"> • No adverse impacts to vulnerable communities or Equity Priority Communities • Document how project improves mobility and accessibility for low-income travel markets and vulnerable communities or Equity Priority Communities • Document engagement with or future engagement plans with community 	10
Geographic Balance	<ul style="list-style-type: none"> • Provide a balance in terms of distribution of highway investment throughout Santa Clara County • Consider local agency priority 	<ul style="list-style-type: none"> • Located near other 2016 Measure B-funded Highway Interchange Program Category projects (Y/N) • High priority local project (Y/N) 	10
Climate Considerations	<ul style="list-style-type: none"> • Potential to decrease greenhouse gas emissions (GHG) • Potential to decrease Vehicle Miles Traveled (VMT) • Improve Complete Streets or Active Transportation infrastructure 	<ul style="list-style-type: none"> • Demonstrate how project will decrease GHG • Demonstrate how project will decrease VMT • Demonstrate how the project provides improved Complete Streets/Active Transportation infrastructure 	10
Non-2016 Measure B funding Contribution	<ul style="list-style-type: none"> • Leverage non-2016 Measure B funds 	<ul style="list-style-type: none"> • Level of non-2016 Measure B funding contribution greater than the required 10% minimum 	10
TOTAL			100

Highway IC Project Prioritization Criteria

Project Scoring Logic

Evaluation Criteria	Category (pts)	Logic
Congestion Management Max = 35 points	High = 25 to 35	<ul style="list-style-type: none"> • Removal of bottleneck with NO adverse effects • Positive change in peak period travel time/speed/delay AND person-throughput • Has and improves existing High Occupancy Vehicle Facility • Significantly improves local street system performance OR significantly improves regional mobility and network performance
	Medium = 11 to 24	<ul style="list-style-type: none"> • Removal of bottleneck with SOME adverse effects <ul style="list-style-type: none"> ○ Example of effect: Moderate increase in travel delay/queue extension on adjacent highway interchanges • Positive change in peak period travel time/speed/delay OR person-throughput • Within ≤ 2 miles of a High Occupancy Vehicle Facility • SOME improvements to local street system performance • SOME improvements to regional mobility and network performance
	Low = 0 to 10	<ul style="list-style-type: none"> • Removal of bottleneck with SIGNIFICANT adverse effects <ul style="list-style-type: none"> ○ Example of effect: Great increase in travel delay/queue extension on adjacent highway interchanges • Minimal positive change in peak period travel time/speed/delay AND person-throughput • Within 2+ miles of a High Occupancy Vehicle Facility • Minimal improvements to local street system performance • Minimal improvements to regional mobility and network performance

Highway IC Project Prioritization Criteria

<p>Safety</p> <p>Max = 25 points</p>	<p>Up to 5 points for each safety concern, for a max of 25 points</p>	<p>Degree to which each of the following safety concerns are addressed:</p> <ul style="list-style-type: none"> • Weave/merge conflicts • Mainline queuing • Rate of collisions • Bicycle or pedestrian movements • Truck and bus operations
<p>Equity</p> <p>Max = 10 points</p>	<p>High = 8 to 10</p>	<ul style="list-style-type: none"> • NO adverse effects on vulnerable communities or Equity Priority Communities: • Ability to demonstrate SIGNIFICANT improvements to mobility and accessibility to low-income travel markets and vulnerable communities or Equity Priority Communities • SIGNIFICANT engagement or future engagement plans with community
	<p>Medium = 4 to 7</p>	<ul style="list-style-type: none"> • NO adverse effects on vulnerable communities or Equity Priority Communities • Ability to demonstrate SOME improvements to mobility and accessibility to low-income travel markets and vulnerable communities or Equity Priority Communities • More than REQUIRED level of engagement or future engagement plans with community
	<p>Low = 0 to 3</p>	<ul style="list-style-type: none"> • NO adverse effects on vulnerable communities or Equity Priority Communities • LOW to NO ability to demonstrate improvements to mobility and accessibility to low-income travel markets and vulnerable communities or Equity Priority Communities • REQUIRED engagement or future engagement plans with community
<p>Geographic Balance</p> <p>Max = 10 points</p>	<p>Up to 4 points</p>	<ul style="list-style-type: none"> • 3 points: Project is identified as the TOP priority local project OR project is the only project submitted by local jurisdiction • 2 points: Project is identified as the SECOND priority local project • 1 point: Project is identified as the THIRD priority local project • Additional 1 point: Multijurisdictional project with identified support of all jurisdictions

Highway IC Project Prioritization Criteria

		<p>Project can receive up to 6 points based on proximity to other completed 2016 Measure B-funded Highway Interchange Program Category projects or 2016 Measure B-funded Highway Interchange Program Category projects currently in design or construction phases, not including Noise Abatement Competitive Grant Program projects.</p> <p>Project distances will be measured from center point to center point, measured in a straight line:</p> <ul style="list-style-type: none"> • 6 points: NOT located within 8.0 miles • 5 points: Located within 6.50 miles • 4 points: Located within 5.25 miles • 3 points: Located within 4.00 miles • 2 point: Located within 2.75 miles • 1 point: Located within 1.50 mile • 0 points: Located within .25 mile
Climate Considerations	Up to 2 points	<ul style="list-style-type: none"> • Provides quantitative backup for improvements to greenhouse gases, vehicle miles traveled and Complete Streets/Active Transportation Infrastructure elements

Highway IC Project Prioritization Criteria

Max = 10 points	High = 5 to 8	<ul style="list-style-type: none"> ● SIGNIFICANT reduction in greenhouse gas emissions and vehicle miles traveled (compared to no-build) ● SIGNIFICANT improvement in Complete Streets/Active Transportation infrastructure by incorporating improvements to 3 to 5 of the following Complete Streets elements: <ul style="list-style-type: none"> ○ Pedestrian Infrastructure ○ Bicycle accommodations ○ Traffic calming measures ○ Public transit accommodations ○ Green infrastructure & stormwater management (landscaping, greenery, etc.) ○ Examples of SIGNIFICANT improvements: <ul style="list-style-type: none"> ▪ New mode and access accommodation ▪ Remove pedestrian/bicycle/transit operation barrier ▪ New Complete Streets/Active Transportation infrastructure throughout the project limits (as opposed to portions of project limits)
	Medium = 1 to 4	<ul style="list-style-type: none"> ● Level of potential (i.e. good/excellent/etc.) reduction in greenhouse gas emissions and vehicle miles traveled (compared to no-build) ● Level of improvement in Complete Streets/Active Transportation infrastructure incorporating improvements to 1 to 2 of the Complete Streets elements
	Low = 0	<ul style="list-style-type: none"> ● NO reduction in greenhouse gas emissions or vehicle miles traveled (compared to no-build) ● NO improvement in Complete Streets/Active Transportation infrastructure
Non-2016 Measure B funding Contribution Max = 10 points	Max = 10	<p>The project can receive a maximum of 10 points.</p> <ul style="list-style-type: none"> ● 10 points: Provides ≥ 25% non-2016 Measure B contribution ● 6 points: Provides 20% to 24% non-2016 Measure B contribution ● 3 points: Provides 15% to 19% non-2016 Measure B contribution ● 2 points: Provides 12.5% to 14% non-2016 Measure B contribution ● 1 point: Provides 11% to 12.49% non-2016 Measure B contribution ● 0 points: Provides the minimum 10% non-2016 Measure B contribution.

2016 Measure B Highway Interchanges Program - Prioritized Project List & Funding Recommendation

Rank	Score	Project	Primary Sponsor	2016 Measure B Requests (\$YOE)				Staff Recommendation
				PA/ED	Design (PSE)	ROW	Construction	
1	68.13	US 101/Shoreline Boulevard Northbound Off-Ramp Realignment and Bus Lane	Mountain View	Funded			\$ 5,000,000	\$ 5,000,000
2	59.25	US 101/Mabury Interchange	San Jose	Funded		\$ 101,000,000	\$ 65,957,000	\$ 101,000,000
3	56.84	US 101/Zanker Road/Skyport Drive/Fourth Street Improvement	San Jose	Funded	\$ 9,470,000	\$ 103,500,000	\$ 59,380,000	\$ 9,470,000
4	56.50	I-280/Winchester Blvd. Interchange Improvements	San Jose	Funded	\$ 11,570,000	\$ 15,480,000	\$ 135,475,000	\$ 11,570,000
5	54.63	US 101/SR 152/10th Street Interchange Improvement	Gilroy	\$ 3,600,000	\$ 4,050,000	\$ 900,000	\$ 33,150,000	\$ 7,650,000
6	53.63	State Route 17 Corridor Congestion Relief	Los Gatos	Funded	\$ 7,803,000	\$ 675,000	\$ 85,860,000	\$ 7,803,000
7	53.45	Calaveras Boulevard Widening	Milpitas	Funded	\$ 9,600,000	\$ 20,000,000	\$ 99,505,000	\$ 9,600,000
8	52.03	US 101 Interchanges Improvements: San Antonio Road to Charleston Road/Rengstorff Avenue	Mountain View	\$ 5,317,500	\$ 11,000,000	\$ 25,000,000	\$ 129,576,000	\$ 16,317,500
9	50.50	SR17 Southbound/Hamilton Ave. Off-ramp	Campbell	Funded			\$ 1,400,000	\$ 1,400,000
10	46.00	Charcot Avenue Extension	San Jose	Funded			\$ 9,500,000	\$ 9,500,000
11	43.20	US 101/SR 25 Santa Teresa Boulevard Extension	Santa Clara County	Funded		\$ 1,300,000	\$ 23,700,000	\$ 1,300,000
12	38.59	SR 237/Middlefield Interchange Improvement	Mountain View	Funded			\$ 16,200,000	\$ 16,200,000
13	38.00	US 101/Old Oakland Road Improvements*	San Jose	\$ 2,000,000	\$ 3,000,000	\$ 3,000,000	\$ 36,250,000	\$ -
Total Competitive Recommendation							\$ 196,810,500	

*Is a subset of the US 101/Mabury Intechange Project

YOE: Year of Expenditure

PA/ED: Project Approval/Environmental Document

PSE: Plan, Specifications and Estimates

ROW: Right of way

2016 Measure B Highway Funding Recommendation by Phase (YOE)

ENV	Design	ROW	Construction
\$ 8,917,500	\$ 53,493,000	\$ 102,300,000	\$ 32,100,000

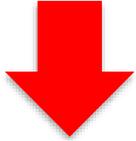
Total Competitive Recommendation	\$ 196,810,500
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2016 Measure B Highway Interchanges Program Priority Project List

Advisory Committees

November 2021

2016 Measure B November Committees/December BOD Actions



Highway IC Prioritized Project List

- Approve project list
- Approve funding strategy
- Authorize General Manager to execute agreements
- TAC/CAC/PAC/CMPP

2016 Measure B FY22/FY23 Biennial Budget & 10-year Program Augmentation

- Approve augmentation to 2016 MB Program Budget for Highway & Caltrain Grade Sep allocations
- TAC/CAC/PAC/CMPP/A&F

VTA FY22/FY23 Biennial Budget Amendment

- Approve VTA Augmentation for a) 2016 Measure B and b) Funds for Guadalupe attack
- Approve appropriations for VTP Highway Projects
- A&F only

Program Background



Project Eligibility:

- Only projects listed on Attachment B of 2016 Measure B are eligible.
- Excludes highway noise abatement projects.

Purpose:

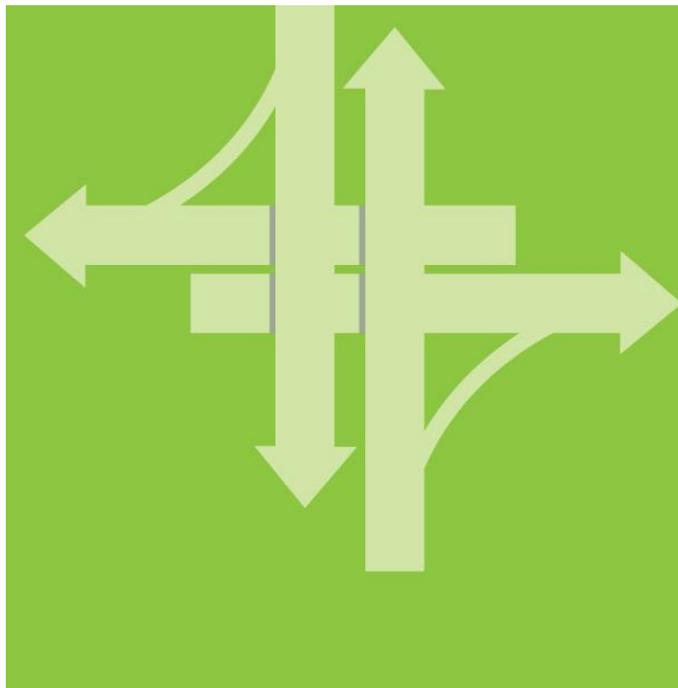
- Use this ranked list with identified project readiness to develop 2016 Measure B FY2022/FY2023 budget and 10-year Program (concurrent).



Previously approved 2016 Measure B Highway Interchanges Program Allocations

Project	Jurisdiction	Implementing Agency	2016 Measure B FY18 - FY21 Allocations
SR 17 SB/Hamilton Ave. Off-Ramp Widening	Campbell	Campbell	\$1.00
SR 17/San Tomas Expressway Interim Improvements	Campbell	Campbell	\$1.00
Hwy. Transportation Operations System/Freeway Performance Initiative Phase 1 & 2	Countywide	VTA	\$3.00
Noise Abatement Program (Countywide)	Countywide	VTA	\$4.00
I-280/Wolfe Rd. Interchange Improvements	Cupertino	VTA	\$7.50
I-280 Northbound: Second Exit Lane to Foothill Expressway	Cupertino, Los Altos	VTA	\$4.80
Highway 17 Corridor Congestion Relief including SR 17/SR 9 Interchange	Los Gatos	VTA	\$5.40
US 101/SR 25 Interchange	Gilroy	VTA	\$10.00
Calaveras Boulevard Widening - Near-term Improvements	Milpitas	VTA	\$2.30
SR 237 WB On-Ramp at Middlefield Road	Mt View	VTA	\$6.30
US 101 Interchanges Improvements: San Antonio Rd. to Charleston Rd./Rengstorff Ave.	Palo Alto, Mt View	VTA	\$2.00
US 101 Southbound/Trimble Rd./De La Cruz Blvd./Central Exwy Interchange Improvements	San Jose	VTA	\$47.00
Double Lane SB US 101 off-ramp to SB SR 87	San Jose	VTA	\$3.00
US 101/Mabury Rd./Taylor St. Interchange	San Jose	San Jose	\$3.00
I-280/Winchester Blvd. Interchange Improvements	San Jose	VTA	\$9.00
SR 87 Technology-based Corridor Improvements - (SR 87 Charcot On-ramp HOV Bypass)	San Jose	VTA	\$2.70
US 101/Zanker Rd./Skyport Dr./Fourth St. Interchange Improvements	San Jose	VTA	\$9.00
US 101/Blossom Hill Rd. Interchange Improvements	San Jose	San Jose	\$35.00
Charcot Overcrossing	San Jose	San Jose	\$27.50
SR 237/Mathilda Ave. and US 101/Mathilda Ave. IC Improvement + follow-up Landscaping	Sunnyvale	VTA	\$22.00
US 101/SR 152/10th Street Interchange Improvement	Gilroy	VTA	\$1.00
Highway Program Management/Oversight		VTA	\$0.40
Totals			\$206.90

Highway Interchanges Competitive Grant Program Criteria



Scoring Criteria	Max Point Value
1. Congestion Management	35
2. Safety	25
3. Equity Considerations	10
4. Geographic Balance	10
5. Climate Considerations	10
6. Non-2016 Measure B Contribution	10
TOTAL	100

Eligible projects are also subject to “Project Readiness” criteria:

1. Project delivery status
2. Funding status
3. Partner agency/community support

Applications & Scoring Committee

Project Phase	Grant Request (\$ Year of Expenditure)
Project Approval/Environmental Document (PA/ED)	\$ 10,917,500
Design	\$ 56,493,000
Right of Way (ROW)	\$270,855,000
Construction	\$700,953,000
Total	\$1,039,218,500

- Reviewed 13 project applications
- Staff from:
 - VTA
 - Campbell
 - Gilroy
 - Mountain View
 - San Jose



Highway Interchanges Program Priority Project List

Rank	Score	Project	Primary Sponsor	2016 Measure B Requests (\$YOE)				Total Request
				PA/ED	Design	ROW	Construction	
1	68.13	US 101/Shoreline Boulevard NB Off-Ramp Realignment and Bus Lane	Mountain View				\$ 5,000,000	\$ 5,000,000
2	59.25	US 101/Mabury Interchange	San Jose			\$ 101,000,000	\$ 65,957,000	\$ 166,957,000
3	56.84	US 101/Zanker Road/Skyport Drive/4th Street	San Jose		\$ 9,470,000	\$ 103,500,000	\$ 59,380,000	\$ 172,350,000
4	56.50	I-280/Winchester Blvd. Interchange	San Jose		\$ 11,570,000	\$ 15,480,000	\$ 135,475,000	\$ 162,525,000
5	54.63	US 101/SR 152/10th Street Interchange	Gilroy	\$ 3,600,000	\$ 4,050,000	\$ 900,000	\$ 33,150,000	\$ 41,700,000
6	53.63	State Route 17 Corridor Congestion Relief	Los Gatos		\$ 7,803,000	\$ 675,000	\$ 85,860,000	\$ 94,338,000
7	53.45	Calaveras Boulevard Widening	Milpitas		\$ 9,600,000	\$ 20,000,000	\$ 99,505,000	\$ 129,105,000
8	52.03	US 101/San Antonio Rd to Charleston Rd/Rengstorff Ave	Mountain View	\$ 5,317,500	\$ 11,000,000	\$ 25,000,000	\$ 129,576,000	\$ 170,893,500
9	50.50	SR17 Southbound/Hamilton Ave. Off-ramp	Campbell				\$ 1,400,000	\$ 1,400,000
10	46.00	Charcot Avenue Extension	San Jose				\$ 9,500,000	\$ 9,500,000
11	43.20	US 101/SR 25 Santa Teresa Blvd. Extension	Santa Clara County			\$ 1,300,000	\$ 23,700,000	\$ 25,000,000
12	38.59	SR 237/Middlefield Interchange	Mountain View				\$ 16,200,000	\$ 16,200,000
13	38.00	US 101/Old Oakland Road*	San Jose	\$ 2,000,000	\$ 3,000,000	\$ 3,000,000	\$ 36,250,000	\$ 44,250,000
							Total (\$YOE)	\$ 1,039,218,500

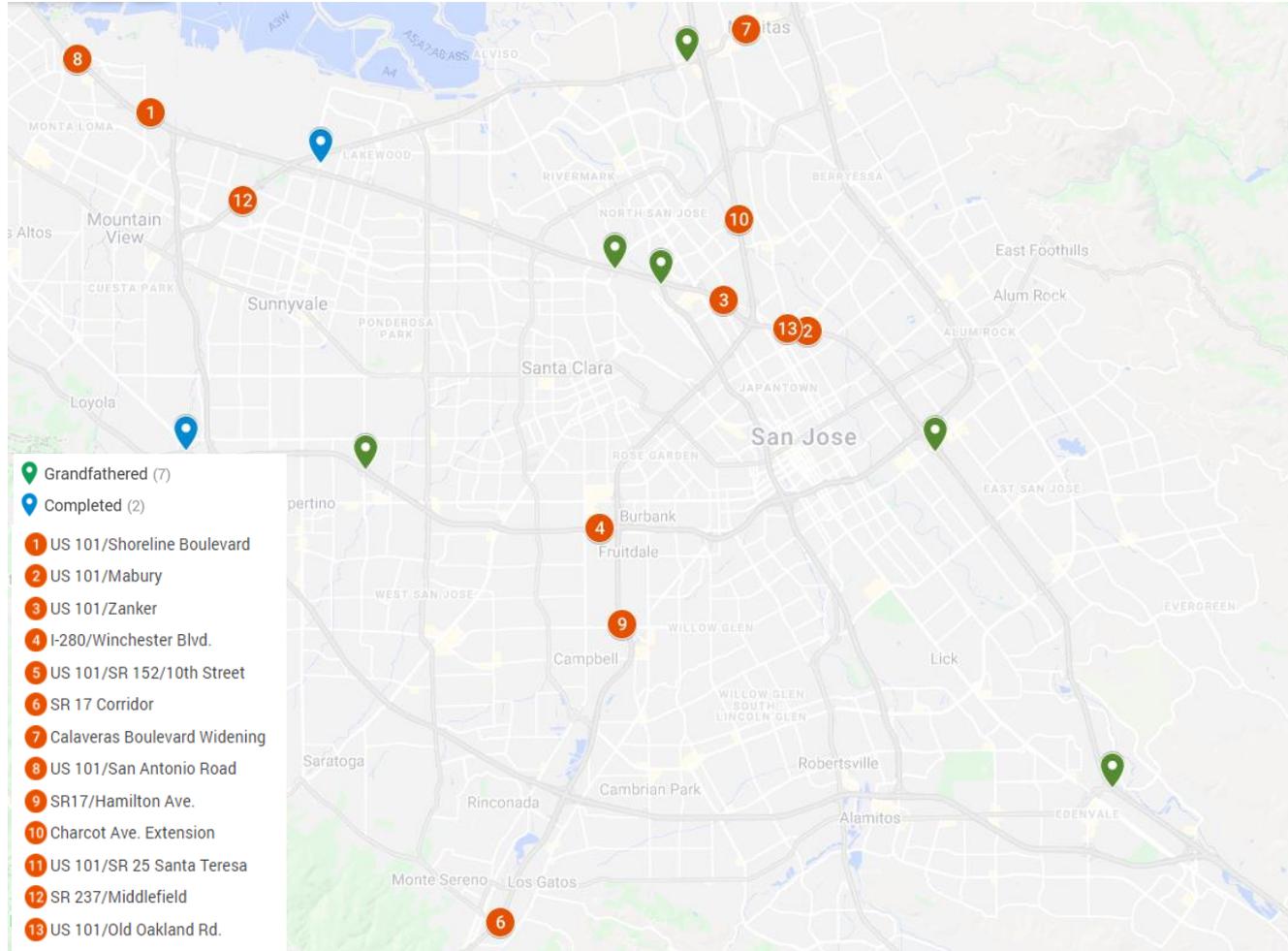
* Is a subset of the larger 101/Mabury IC project

Highway Interchanges Program Priority Project List – Requests by Fiscal Year (\$ millions)

Rank	Score	Project	Primary Sponsor	FY2022	FY2023	FY2024	FY2025	FY2026	FY2027	FY2028	FY2029	FY2030	FY2031	Total request
1	68.13	US 101/Shoreline Blvd NB Off-Ramp Realignment and Bus Lane	MV		\$5.00									\$5.00
2	59.25	US 101/Mabury IC	SJ			\$101.00			\$65.96					\$166.96
3	56.84	US 101/Zanker Rd/Skyport Dr/Fourth St Improvement	SJ			\$112.97		\$59.38						\$172.35
4	56.50	I-280/Winchester Blvd IC Improvements	SJ		\$11.57	\$ 15.48		\$135.48						\$162.53
5	54.63	US 101/SR 152/10th St IC Improvement	Gil			\$3.60		\$4.95	\$33.15					\$41.70
6	53.63	State Route 17 Corridor Congestion Relief	LG		\$7.80	\$.68	\$85.86							\$94.34
7	53.45	Calaveras Boulevard Widening	Mil			\$29.60		\$99.51						\$129.11
8	52.03	US 101 IC Improvements: San Antonio Rd to Charleston Rd/Rengstorff Ave	MV	\$ 5.32		\$36.00		\$129.58						\$170.89
9	50.50	Hamilton Ave/SR 17 SB Off-ramp Widening	Camp					\$1.40						\$1.40
10	46.00	Charcot Ave Extension	SJ				\$9.50							\$ 9.50
11	43.20	US 101/SR 25 Santa Teresa Blvd Extension	SCCo			\$1.30		\$ 23.70						\$25.000
12	38.59	SR 237/Middlefield IC Improvement	MV				\$16.20							\$16.20
13	38.00	US 101/Old Oakland Rd Improvements*	SJ					\$2.00		\$6.00		\$36.25		\$44.25
		Total Request (YOE)		\$5.32	\$ 24.37	\$ 300.63	\$ 111.56	\$ 455.99	\$ 99.11	\$6.00	\$ -	\$ 36.25	\$ -	\$1,039.22

* Is a subset of the larger 101/Mabury IC project

Highway Interchanges Program Priority List and Grandfathered Projects



Highway Interchanges Priority Projects – Strategic Funding Recommendation

- Projects scored in narrow range.
- Many projects in early stage, still selecting alternatives.
- Funding all phases in score order limits program to four projects additional projects.
- Balance are left with little opportunity to progress for years as grants rarely fund anything but construction.
- Staff recommends advancing projects through next phase:
 - PA/ED & PS&E for six projects
 - ROW for two projects as ROW was first ask
 - Construction for four projects
- Prepares projects to compete for State and Federal dollars.
- Projects will be considered for next phase funding in 2024 Budget & Plan update cycle, based on ranking and progress.

Highway Interchanges Program Priority Project List – Staff Recommendation

Rank	Score	Project	Primary Sponsor	2016 Measure B Requests (\$YOE)				Recommendation
				PA/ED	Design	ROW	Construction	
1	68.13	US 101/Shoreline Boulevard NB Off-Ramp Realignment and Bus Lane	Mountain View	Funded			\$ 5,000,000	\$5,000,000
2	59.25	US 101/Mabury Interchange	San Jose	Funded		\$ 101,000,000	\$ 65,957,000	\$101,000,000
3	56.84	US 101/Zanker Road/Skyport Drive/4th Street	San Jose	Funded	\$ 9,470,000	\$ 103,500,000	\$ 59,380,000	\$9,470,000
4	56.50	I-280/Winchester Blvd. Interchange	San Jose	Funded	\$ 11,570,000	\$ 15,480,000	\$ 135,475,000	\$11,570,000
5	54.63	US 101/SR 152/10th Street Interchange	Gilroy	\$ 3,600,000	\$ 4,050,000	\$ 900,000	\$ 33,150,000	\$7,650,000
6	53.63	State Route 17 Corridor Congestion Relief	Los Gatos	Funded	\$ 7,803,000	\$ 675,000	\$ 85,860,000	\$7,803,000
7	53.45	Calaveras Boulevard Widening	Milpitas	Funded	\$ 9,600,000	\$ 20,000,000	\$ 99,505,000	\$9,600,000
8	52.03	US 101/San Antonio Rd to Charleston Rd/Rengstorff Ave	Mountain View	\$ 5,317,500	\$ 11,000,000	\$ 25,000,000	\$ 129,576,000	\$16,317,500
9	50.50	SR17 Southbound/Hamilton Ave. Off-ramp	Campbell	Funded			\$ 1,400,000	\$1,400,000
10	46.00	Charcot Avenue Extension	San Jose	Funded			\$ 9,500,000	\$9,500,000
11	43.20	US 101/SR 25 Santa Teresa Blvd. Extension	Santa Clara County	Funded		\$ 1,300,000	\$ 23,700,000	\$1,300,000
12	38.59	SR 237/Middlefield Interchange	Mountain View	Funded			\$ 16,200,000	\$16,200,000
13	38.00	US 101/Old Oakland Road*	San Jose	\$ 2,000,000	\$ 3,000,000	\$ 3,000,000	\$ 36,250,000	-
Total Competitive Recommendation (\$YOE)							\$196,810,500	

* Is a subset of the larger 101/Mabury IC project

Next Steps

November 2021

Staff also proposes Recommended 2016 Measure B FY2022/FY2023 Biennial Budget and 10-year Program amendments.



December 2021

Board considers both Highway Priority Project List & FY2022/FY2023 Biennial Budget and 10-year Program



Winter 2022

Develop funding agreements with project sponsors as needed



Summary

- Approve the 2016 Measure B Highway Interchanges Prioritized Project list.
- Approve \$196.81 million and the funding plan to advance various phases of twelve projects on the prioritized project list.
- Authorize the General Manager to execute the necessary agreements for the 2016 Measure B Highway Interchanges Competitive Grant Program funds.



Date: November 9, 2021
Current Meeting: November 10 & 12, 2021
Board Meeting: December 2, 2021

BOARD MEMORANDUM

TO: Santa Clara Valley Transportation Authority Citizens Advisory,
Policy Advisory & Technical Advisory Committees

THROUGH: General Manager/CEO, Carolyn M. Gonot

FROM: Interim Chief Financial Officer, Kathleen Kelly

SUBJECT: 2016 Measure B FY2022/FY2023 Biennial Budget and 10-Year Program
Amendments

Policy-Related Action: Yes **Government Code Section 84308 Applies: No**

ACTION ITEM

RECOMMENDATION:

Recommend that the VTA Board of Directors:

3+ Augment the 2016 Measure B Program in the Adopted Fiscal Years 2022 and 2023 Biennial Budget and 2023 Highway Interchanges and Caltrain Grade Separations Programs, based on the Board-approved prioritization processes.

4+ Approve the 2016 Measure B 10-year Program (FY2022 to FY2031).

EXECUTIVE SUMMARY:

- Board action on this item will complete the year-long process to approve Fiscal Year (FY) 2022 and 2023 Biennial Budget allocations for all nine program categories of the 2016 Measure B Program, and to approve the first Ten-Year Program of Projects for the measure.
- The recommended actions implement Board direction to develop 2016 Measure B Biennial Budget and 10-year Program recommendations specifically for the Highway Interchanges and Caltrain Grade Separations Programs, based on the Board-approved prioritization processes.
- The Highway Interchanges call for projects closed on October 12, 2021. Thirteen (13) applications were received and scored, and a ranked, prioritized list of projects developed.

The requested Highway Interchanges allocations for the 2016 Measure B Program in the Adopted Biennial Budget and 10-year Program are based on the ranking, needs and timing of the prioritized projects, the requests of grandfathered projects and the requested allocation for the Noise Abatement Program. All allocation requests meet the three Board-adopted Project Readiness Criteria.

- The Highway Interchange Program allocation recommendations include a zero-sum budget transfer from two projects currently closing out their respective construction phases: SR 237/Mathilda Ave. & US 101/Mathilda Ave. Interchange Improvements Project and the I-280 Northbound: Second Exit Lane to Foothill Expressway Project.
- The cities of Sunnyvale, Mountain View and Palo Alto jointly submitted a proposal for allocation of Caltrain Grade Separation funding. The proposal allocates program funds by city (Sunnyvale: 25%, Mountain View: 25%, and Palo Alto: 50%) instead of by project, and each City will determine how to distribute the allocations to the projects in their jurisdiction.

STRATEGIC PLAN/GOALS:

The 2016 Measure B Program aligns directly with the goals of VTA's Strategic Plan Business Line 2: Delivering Projects and Programs. 2016 Measure B provides funding for nine transportation categories that assist in addressing "the current and evolving multimodal needs of Silicon Valley" as stated in the Strategic Plan.

FISCAL IMPACT:

This action will augment the 2016 Measure B Program in the Adopted FY 2022 and FY 2023 Biennial Budget by \$190.89 million, resulting in a revised 2016 Measure B Program budget of \$392.19 million. There is no fiscal impact from adopting the 2016 Measure B 10-year Program, which is a planning tool. All future allocations must be approved by the VTA Board in future biennial budgetary processes.

BACKGROUND:

In spring 2021, the Board of Directors approved principles for the 2016 Measure B Program. One principle stated that the ballot-established funding ratios would be applied annually to the three Formula-based programs (Local Streets & Roads, Bicycle & Pedestrian, and Transit Operations). Another principle required that Board-approved project readiness selection criteria and specific project prioritization processes be applied to the six Need/Capacity-based programs (BART Phase II, Caltrain Grade Separations, Caltrain Corridor Capacity Improvements, Highway Interchanges, County Expressways and SR85 Corridor).

Based on these principles, the Board approved two-year allocations for the three 2016 Measure B Formula-based Programs as part of the FY 2022 and FY 2023 Budget in June 2021.

Because evaluation of the Need/Capacity-based programs required more time, staff proposed

to forward recommendations on four of the six categories in August, with the remaining two categories proposed for consideration in December.

At the August Board meeting, the Board augmented the FY 2022 and FY 2023 Budget to reflect allocations for: a) BART Phase 2; b) Caltrain Corridor Capacity Improvement; c) County Expressways, and d) SR 85 Corridor. The Board also approved a 10-Year Program of Projects for those four Need/Capacity-based programs, as well as the three Formula-based programs. At the same August 2021 meeting, the Board approved a prioritization and project selection process for the Highway Interchanges Program and directed staff to develop the allocation requests for that program category.

The prioritization processes for the final two Need/Capacity-based programs, Highway Interchanges and Caltrain Grade Separations, are now complete and the FY 2022 and FY 2023 Biennial Budget allocation and 10-year Program allocations are the subject of this memo.

DISCUSSION:

Prioritization Process Results

Highway Interchanges

The 2016 Measure B Highway Interchanges Competitive Grant Program call for projects was released on August 16, 2021, and applications were due on October 12, 2021. A total of 13 applications were received and measured against the six Board-approved criteria, resulting in a ranked prioritization list requesting \$1.04 billion (YOE) in 2016 Measure B Highway Interchanges allocations. The \$1.04 billion (YOE) requested by the 13 applications exceeds the availability of Highway Interchanges program category funds. In a separate memorandum, staff's recommended funding strategy provides \$196,810,500 (YOE) in funding to 12 of 13 projects.

Projects that were grandfathered into the Program and not subject to the call for projects - those projects funded through design or construction, are allocated funding based on their ability to meet the Board-adopted Project Readiness Criteria. Finally, staff recommends that \$41 million in 2017 dollars be allocated for the Highway Interchanges Noise Abatement Competitive Grant Program, to be developed in 2022.

Caltrain Grade Separation

With the approval of the Program Guidelines, the VTA Board directed staff to work with the cities of Sunnyvale, Mountain View and Palo Alto and other partners to develop an implementation plan to deliver the eight eligible 2016 Measure B Caltrain Grade Separation project. Staff began to develop the plan -- a valuable process coordinating with cities and Caltrain and discuss phasing and funding options for delivering all eight eligible projects. The meetings were used to collect and exchange information on the projects and to give information on grade separation best practices. VTA staff presented information related to different project phasing options over a 30-year period; as well as different funding scenarios - including different funding splits, allocation timelines, and potential bonding options.

After the Board's adoption of the 2016 Measure B Program Principles and Project Readiness criteria for Need/Capacity-based program categories in spring 2021, the cities of Sunnyvale, Mountain View and Palo Alto jointly submitted to VTA a jointly developed fund allocation

proposal, agreed to by each city. The allocation agreement allocates funds by percentage to each jurisdiction, instead of by eligible project, as follows:

- City of Sunnyvale: 25%
- City of Mountain View: 25%
- City of Palo Alto: 50%

VTA agrees with the allocation agreement proposed by the cities, will continue to assist, and support the Cities in funding and delivery of the eligible projects, and will continue to schedule regular meetings with City staff and Caltrain for continued information exchange and coordination. All allocation requests are subject to the three Board-approved Project Readiness Criteria.

FY2022/FY2023 Biennial Budget Recommendations

Attachment A shows the Recommended Amended 2016 Measure B Program FY 2022 and FY 2023 Biennial Budget. This includes prior allocations made by the Board, as well as allocations for the remaining two Need/Capacity-based program categories. Below is a summary of the recommendations:

Highway Interchanges - \$157.89 requested; Meets Project Readiness Criteria

Only four of the staff-recommended projects from the ranked, prioritized list of projects requested funding for the current biennial budget cycle. Combined with the requests for grandfathered projects, the recommended Highway Interchanges allocation for FY 2022/FY 2023 funds eight projects.

The amount requested by grandfathered projects for this budget cycle is \$128.2 million. The remaining \$29.69 million is allocated to projects from the prioritization list. The list of Highway Interchanges projects and their Fiscal Years 2022 and 2023 recommended allocations is shown on Attachment B.

The recommended Amended FY 2022 and FY 2023 Biennial Budget request also includes reallocation of previously approved funding for two projects: SR 237/Mathilda Ave & US 101/Mathilda Ave. Interchange Improvements Project and the I-280 Northbound: Second Exit Lane to Foothill Expressway Project. Both projects have completed construction and are in the process of closing out. However, prior to close out of the I-280 Northbound: Second Exit Lane to Foothill Expressway Project, Caltrans is requiring that the project include additional landscape. The additional landscape was unexpected and was not included in the original project budget.

Existing allocation for the SR 237/Mathilda Ave & US 101/Mathilda Ave. Interchange Improvements Project is expected to be more than sufficient to close out that project, including its landscape/plant establishment requirement.

The net zero change requested for the two project is as follows:

Project	Current 2016 Measure B Allocation	Change	New 2016 Measure B Allocation
SR 237/Mathilda/US101 IC	\$22,000,000	(\$700,000)	\$21,300,000
I-280 NB: 2 nd Exit Lane to Foothill Expressway	\$4,800,000	\$700,000	\$5,500,000

This requested change is reflected in the Highway Interchanges projects and their Fiscal Years 2022 and 2023 recommended allocations on Attachment B.

Budget appropriation requests for the VTA Highway Program projects are the subject of an upcoming memo and not a part of this recommendation.

Caltrain Grade Separation - \$33 million requested; Meets Project Readiness Criteria

\$60 million was requested by project sponsors for FY 2022 and FY 2023. This program has \$27 million of previously approved allocations available for distribution in this biennial budget cycle. Therefore, an additional \$33 million is being requested to advance the following projects:

- Mary Avenue
- Rengstorff
- Churchill
- Meadow/Charleston
- Palo Alto Ave

10-year Program (FY2022 to FY2031) Recommendations

Attachment C shows the Recommended Amended 10-year Program (FY 2022 to FY 2031), including allocations for the remaining two Need/Capacity-based programs: Highway Interchanges and Caltrain Grade Separations, highlighted in yellow. The remaining program category allocations were approved by the Board in August 2021.

The requests for the Highway Interchanges and Caltrain Grade Separations reflect requests from project sponsors that have also met the Project Readiness Criteria.

ALTERNATIVES:

The Board of Directors can choose to reject staff’s recommendations, modify the amounts, or proposed alternative categories to amend in the FY 2022 and FY 2023 Biennial Budget. A delay in the approval of the proposed Biennial Budget may significantly impact the completion of two highway projects currently closing out the construction phase, as well as impact the schedules of the various Highway Interchange and Caltrain Grade Separation projects.

The Board of Directors can choose not to approve the proposed FY 2022 to FY 2031 10-year Program allocations, modify the allocations, or proposed alternative categories. Should the Board not approve the proposed FY 2022 to FY 2031, 10-year Program allocations, receipt of external funding may be delayed and progress on various projects may be delayed.

CLIMATE IMPACT:

Allocating budget to the 2016 Measure B Program will have various impacts to the climate as the Program funds nine different program categories.

Prepared by: Jane Shinn
Memo No. 7900

ATTACHMENTS:

- MT7900_Attachment A_Biennial Budget Augmentation (PDF)
- MT7900_AttachmentB_Hwy_Project_List_2016MB_FY22FY23_110521 (PDF)
- MT7900_Attachment C_10-year_Program_110821 (PDF)
- FY22FY23_and10-yearProgram_Augmentation_NovCommittees (PDF)

Attachment A
Proposed Augmented 2016 Measure B Program FY2022/FY2023 Biennial Budget
Allocations (\$ in Millions)

	FY2022	FY2023
Administrative Costs	\$1.00	\$1.00
Program Category		
Formula-based Programs		
Local Streets & Roads	\$52.96	\$47.74
Bicycle & Pedestrian		
Education & Encouragement	\$1.97	\$1.49
Capital Projects	\$18.45	
Planning Projects	\$1.16	
Transit Operations		
Enhance Core Network ⁽¹⁾	\$19.65	\$14.52
Expand Mobility & Affordable Fares ⁽¹⁾	\$3.94	\$2.98
Innovative Transit Models	\$1.60	\$1.59
Improve Amenities	\$1.90	
Need/Capacity-based Programs		
BART Phase II ⁽²⁾	\$0	
Caltrain Corridor Capacity	\$12.34	\$17.01
SR 85 Corridor ⁽²⁾	\$0	
County Expressways ⁽²⁾	\$0	
Caltrain Grade Separation	\$33.00	
Highway Interchanges	\$157.89	
TOTAL	\$392.19	

(1) Total is included in the VTA Transit Fund Operating Budget for the FY2022 & FY2023 Biennial Budget

(2) Previous allocations or other funding available for work to continue through FY022 and FY2023

Proposed 2016 Measure B (MB) Highway Interchanges Program FY22 and FY23 Projects and Allocation

ATTACHMENT B: DETAILED 2016 MEASURE B HIGHWAY PROGRAM BUDGET REQUEST

ID	Route	Project Title	Total Est. Project Cost (\$M)	Jurisdiction	Implementing Agency	2016 MB FY18 - FY21 Allocation	2016 MB FY22 - FY23 Request	2016 MB FY18- FY23 Total
A	17	SR 17 Southbound/Hamilton Ave. Off-Ramp Widening	\$2.0	Campbell	Campbell	\$1.00	\$0.00	\$1.00
B	17	SR 17/San Tomas Expressway Interim Improvements	\$1.0	Campbell	Campbell	\$1.00	\$0.00	\$1.00
C	All	Hwy. Transportation Operations System/Freeway Performance Initiative Phase 1 & 2	\$54.0	Countywide	VTA	\$3.00	\$0.00	\$3.00
D	All	Noise Abatement Program (Countywide)	\$50.0	Countywide	VTA	\$4.00	\$0.00	\$4.00
E	280	I-280/Wolfe Rd. Interchange Improvements	\$92.0	Cupertino	VTA	\$7.50	\$85.20	\$92.70
F	280	I-280 Northbound: Second Exit Lane to Foothill Expressway	\$5.5	Cupertino, Los Altos	VTA	\$4.80	\$0.70	\$5.50
G	17	Highway 17 Corridor Congestion Relief including SR 17/SR 9 interchange	\$100.0	Los Gatos	VTA	\$5.40	\$7.80	\$13.20
H	152	US 101/SR 25 Interchange	\$104.0	Gilroy	VTA	\$10.00	\$36.00	\$46.00
I	101	US 101/Buena Vista Ave. Interchange Improvements	\$35.0	Gilroy	VTA	\$0.00	\$0.00	\$0.00
J	237	Calaveras Boulevard Widening - Near-term improvements	\$2.5	Milpitas	VTA	\$2.30	\$1.50	\$3.80
K	237	SR 237 Westbound On-Ramp at Middlefield Road	\$50.0	Mt View	VTA	\$6.30	\$0.00	\$6.30
L	101	US 101 Interchanges Improvements: San Antonio Rd. to Charleston Rd./Rengstorff Ave.	\$35.0	Palo Alto, Mt View	VTA	\$2.00	\$5.32	\$7.32
M	101	US 101 Southbound/Trimble Rd./De La Cruz Blvd./Central Expwy. Interchange Improvements	\$76.0	San Jose	VTA	\$47.00	\$0.00	\$47.00
N	101	Double Lane Southbound US 101 off-ramp to Southbound SR 87	\$3.0	San Jose	VTA	\$3.00	\$0.00	\$3.00
O	101	US 101/Mabury Rd./Taylor St. Interchange Construction	\$95.0	San Jose	San Jose	\$3.00	\$0.00	\$3.00
P	280	I-280/Winchester Blvd. Interchange Improvements	\$151.0	San Jose	VTA	\$9.00	\$11.57	\$20.57
Q	87	SR 87 Technology-based Corridor Improvements - (SR 87 Charcot On-ramp HOV Bypass)	\$3.0	San Jose	VTA	\$2.70	\$0.00	\$2.70
R	101	US 101/Zanker Rd./Skyport Dr./Fourth St. Interchange Improvements	\$240.0	San Jose	VTA	\$9.00	\$0.00	\$9.00
S	101	US 101/Old Oakland Rd. Interchange Improvements	\$25.0	San Jose	San Jose	\$0.00	\$0.00	\$0.00
T	101	US 101/Blossom Hill Rd. Interchange Improvements	\$47.0	San Jose	San Jose	\$35.00	\$5.50	\$40.50
U	880	Charcot Overcrossing	\$50.0	San Jose	San Jose	\$27.50	\$0.00	\$27.50
V	237	SR 237/Mathilda Ave. and US 101/Mathilda Ave. Interchange Improvement + follow-up Landscaping	\$47.0	Sunnyvale	VTA	\$22.00	(\$0.70)	\$21.30
W	101	US 101/SR 152/10th Street Interchange Improvement	\$35.0	Gilroy	VTA	\$1.00	\$0.00	\$1.00
X	101	US 101/Shoreline Blvd NB Off-ramp Realignment and Bus Lane	\$36.4	Mountain View	Mountain View	\$0.00	\$5.00	\$5.00
Y		Highway Program Management/Oversight		VTA	VTA	\$0.40	\$0.00	\$0.40
Totals						\$206.50	\$157.89	\$364.39

2016 MEASURE B	% of Program Tax Revenue	FY18 to FY21 Allocation	Fiscal Year									
			2022	2023	2024	2025	2026	2027	2028	2029	2030	2031
Administrative	NA	13.20	1.00	1.00	3.30	3.30	3.30	3.30	3.50	3.60	3.60	3.75
Bond Interest & Issuance Costs ⁽¹⁾	NA					0.38	8.09	29.23	43.46	48.59	47.71	45.99
Formula Programs ⁽²⁾												
Local Streets and Roads	19.05%	170.00	52.96	47.74	47.14	48.13	49.13	50.14	51.12	52.13	53.17	54.20
Bicycle & Pedestrian	3.97%	33.20	13.13	9.95	9.82	10.03	10.24	10.45	10.65	10.86	11.08	11.29
Transit Operations	7.94%	66.61	26.28	19.89	19.65	20.06	20.48	20.90	21.31	21.73	22.16	22.59
Subtotal Formula Programs		269.81	92.37	77.58	76.61	78.22	79.85	81.49	83.08	84.73	86.42	88.08
Need/Capacity Based Programs												
BART Phase II	23.81%	150.00	-	-	271.40	-	442.30	439.00	168.10	170.80	178.40	87.90
Caltrain Corridor Capacity	4.98%	13.10	12.34	17.01	67.50	35.50	81.20	83.64	58.42	14.47	14.90	15.35
SR 85 Corridor	5.56%	14.50	-	-	2.65	2.75	11.25	11.59	101.49	104.54	-	-
County Expressways	11.90%	50.00	-	-	37.70	30.09	1.40	40.00	-	-	-	80.00
Caltrain Grade Separation	11.11%	38.00	19.00	14.00	26.22	196.00	194.55	84.00	228.10			
Highway Interchanges	11.90%	206.90	21.02	136.87	135.97	25.70	18.20	-	13.53	-	14.35	-
Subtotal Need/Capacity-based Programs			52.36	167.88	541.44	290.04	748.90	658.23	569.64	289.81	207.65	183.25
TOTAL 2016 MEASURE B ALLOCATION		755.51	145.73	246.46	621.35	371.95	840.14	772.25	699.69	426.73	345.38	321.07

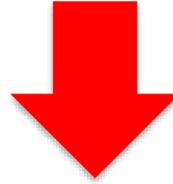
⁽¹⁾ Illustrative only and subject to change. Any use of financing requires Board approval.

⁽²⁾ FY2022 trues up previous allocations for formula-based categories

2016 Measure B FY2022/FY2023 Biennial Budget & 10-year Program Amendments

Advisory Committees
November 2021

2016 Measure B November Committees/December BOD Actions



Highway IC Prioritized Project List

- Approve project list
- Approve funding strategy
- Authorize General Manager to execute agreements
- TAC/CAC/PAC/CMPP

2016 Measure B FY22/FY23 Biennial Budget & 10-year Program Augmentation

- Approve augmentation to 2016 MB Program Budget for Highway & Caltrain Grade Sep allocations
- TAC/CAC/PAC/CMPP/A&F

VTA FY22/FY23 Biennial Budget Amendment

- Approve VTA Augmentation for a) 2016 Measure B and b) Funds for Guadalupe attack
- Approve appropriations for VTP Highway Projects
- A&F only

Program Categories

Formula-based Program

- Local Streets & Roads
- Bicycle & Pedestrian
- Transit Operations

Need/Capacity-based

- BART Phase II
- Caltrain Corridor Capacity
- County Expressways
- SR 85 Corridor
- *Caltrain Grade Separations*
- *Highway Interchanges*

2016 Measure B 10-Year Program & Biennial Budget

- Formula-based and four of six Need/Capacity-based programs allocations previously approved
- All Need/Capacity-based project allocations subject to Board-approved Project Readiness Criteria
- Highway Interchanges – Prioritization based on results of call for projects and projects grandfathered into the program
- Caltrain Grade Separations – Fund allocation plan as agreed to by the Cities of Sunnyvale, Mountain View and Palo Alto

FY2022/FY2023 2016 Measure B Budget – Formula Programs (\$ Millions) *Adopted June 3, 2021*

	FY2022	FY2023
Administrative Costs	1.00	1.00
Formula-based Program Category		
Local Streets & Roads	\$52.96	\$47.74
Transit Operations	\$26.28	\$19.89
Bicycle & Pedestrian	\$13.13	\$9.95
TOTAL Administrative Costs & Formula-based Programs	\$171.95	

FY2022/FY2023 2016 Measure B Budget (\$ Millions)

(Approved August 5, 2021)

	FY2022	FY2023
Need/Capacity-based Program Category		
BART Phase II*	\$0	
Caltrain Corridor Capacity Improvements	\$12.34	\$17.01
County Expressways*	\$0	
SR 85 Corridor*	\$0	
TOTAL	\$29.35	

*Previous allocations or other funding available for work to continue through FY2022 and FY2023

Proposed Amended FY2022/FY2023 2016 Measure B Program Budget (\$ Millions)

	FY2022	FY2023
Administrative Costs	1.00	1.00
Formula-based Program Category		
Local Streets & Roads	\$52.96	\$47.74
Transit Operations	\$26.28	\$19.89
Bicycle & Pedestrian	\$13.13	\$9.95
Subtotal Administrative Costs & Formula-based Programs	\$171.95	
Need/Capacity-based Program Category		
BART Phase II*	\$0	
Caltrain Corridor Capacity Improvements	\$12.34	\$17.01
County Expressways*	\$0	
SR 85 Corridor*	\$0	
Highway Interchanges	\$157.89	
Caltrain Grade Separations	\$33.00	
Subtotal Four Need/Capacity-based Programs	\$220.24	
TOTAL	\$392.19	

*Previous allocations or other funding available for work to continue through FY2022 and FY2023

2016 Measure B 10-year Program FY2022 to FY2031

Formula-based Program

- Local Streets & Roads
- Bicycle & Pedestrian
- Transit Operations

Need/Capacity-based

- BART Phase II
- Caltrain Corridor Capacity
- County Expressways
- SR 85 Corridor
- *Caltrain Grade Separations*
- *Highway Interchanges*

Proposed 2016 Measure B 10-Year Program Allocations

2016 MEASURE B	% of Program Tax Revenue	FY18 to FY21 Allocation	Fiscal Year									
			2022	2023	2024	2025	2026	2027	2028	2029	2030	2031
Administrative	NA	13.20	1.00	1.00	3.30	3.30	3.30	3.30	3.50	3.60	3.60	3.75
Bond Interest & Issuance Costs ⁽¹⁾	NA					0.38	8.09	29.23	43.46	48.59	47.71	45.99
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SR 85 Corridor	5.56%	14.50	-	-	2.65	2.75	11.25	11.59	101.49	104.54	-	-
County Expressways	11.90%	50.00	-	-	37.70	30.09	1.40	40.00	-	-	-	80.00
Caltrain Grade Separation	11.11%	38.00	19.00	14.00	26.22	196.00	194.55	84.00	228.10			
Highway Interchanges	11.90%	206.90	21.02	136.87	135.97	25.70	18.20	-	13.53	-	14.35	-
Subtotal Need/Capacity-based Programs			52.36	167.88	541.44	290.04	748.90	658.23	569.64	289.81	207.65	183.25
TOTAL 2016 MEASURE B ALLOCATION		755.51	145.73	246.46	621.35	371.95	840.14	772.25	699.69	426.73	345.38	321.07
⁽¹⁾ Illustrative only and subject to change. Any use of financing requires Board approval.												
⁽²⁾ FY2022 trues up previous allocations for formula-based categories												

Summary

- Augment the 2016 Measure B Program Fiscal Years 2022 and 2023 Biennial Budget by \$190.89 million for the final two 2016 Measure B Need/Capacity-based program categories: 1) Highway Interchanges and 2) Caltrain Grade Separations.
- Approve the Amended 2016 Measure B 10-year Program (FY 2022 to 2031).

TAC Work Plan
November 2021 - May 2022

Doc ID	Origin	Short Title	11/10 TAC	12/2 BOD	12/8 TAC	1/6 BOD	1/12 TAC	2/3 BOD
7900	Dept - Grants ar	2016 MB FY22/FY23 Biennial Budget and 10-Year Program Amends	A	A				
7897	Dept - Grants ar	2016 MB Highway Interchanges Program Prioritized Project List	A	A				
7835	Dept - Transport	2021 CMP Document	A	A				
7452	Dept - Transport	US101 Mobility Action Plan	A	A				
7955	Dept - Transport	Five-Year Battery-Electric Bus Strategy	A	A				
7870	Dept - Program	Programmed Project Monitoring - Quarterly Report	I	I				
7305	Dept - Transport	2021 Better Bus Stops Update			I	I		
7910	Dept - Traffic En	2021 Transportation Systems Monitoring Program Report					I	I
7927	Dept - Program	Vehicle Registration Fee (VRF) Annual Report					I	I