

# Executive Summary

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## ES.1 Introduction

The California Department of Transportation (Caltrans), as Lead Agency under the California Environmental Quality Act (CEQA), in cooperation with the Santa Clara Valley Transportation Authority (VTA) and the City of Sunnyvale (City), has prepared this Final Environmental Impact Report (EIR) for the Mathilda Avenue Improvements at State Route (SR) 237 and U.S. Highway 101 (US 101) Project (Project). The Project is also referred to as the Build Alternative. A No-Build Alternative is also considered.

During the early stages of the project development process, it was not yet determined if the proposed Project could have potentially significant impacts to the environment. As a result, the Project team decided to prepare an EIR due to the fair argument standard under CEQA. Preparing an EIR allowed for a more robust evaluation of the Project's potential impacts on the environment while the Project team continued to work to avoid and minimize potential environmental impacts.

## ES.2 Overview of the Project Area

The Project is located in the southern region of the San Francisco Bay Area in the City. The Project extends from Almanor Avenue/Ahwanee Avenue to Innovation Way and includes on- and off-ramp improvements at the SR 237/Mathilda Avenue and US 101/Mathilda Avenue interchanges. On SR- 237, the Project limits are from 0.3 mile east of the US 101/SR 237 interchange (post mile [PM] 2.7) to 0.3 mile east of the Mathilda Avenue undercrossing (PM 3.3). On US 101, the Project limits are from 0.5 mile south of the Mathilda Avenue overcrossing (PM 45.2) to 0.3 mile south of the SR 237/US 101 interchange (PM 45.8). The total length of the Project on Mathilda Avenue is approximately 1 mile.

In the general Project area, additional development projects include Moffett Place, Moffett Towers II, current development of the former Onizuka Air Force Station, and Perry Park development projects.

## ES.3 Statement of Project Purpose and Need

The primary purpose of the Project is to improve traffic operations on Mathilda Avenue through the US 101 and SR 237 interchanges.

Specifically, the objectives of the Project are to:

- Reduce congestion and improve traffic operations along Mathilda Avenue and at the SR 237/Mathilda Avenue and US 101/Mathilda Avenue interchanges.
- Improve mobility for all travel modes in the area including motor vehicles, transit, bicycles, and pedestrians.
- Provide standard crosswalks and sidewalks along Mathilda Avenue, improving access to local destinations such as Moffett Park, VTA light rail transit stations, and downtown Sunnyvale.

The Project is needed for the following reasons:

- Regional growth and new local development combined with inefficient roadway operations have resulted in substantial traffic congestion on Mathilda Avenue.
- Efficient access for all travel modes into and out of downtown Sunnyvale and development to the north of SR 237 is critical to a healthy and sustainable economy. Congestion on Mathilda Avenue adversely affects the economic vitality of the City.

## ES.4 Project Description

The Project includes the Project Build Alternative (generally referred to as the “Project” in this EIR) and No-Build Alternative. Criteria used for evaluation included, but were not limited to, Project cost, potential for environmental impacts, and the ability of an alternative to meet the Project’s objectives and purpose.

### ES.4.1 Build Alternative

A summary of the main improvements proposed by the Project is provided in sections ES.4.1 and ES.4.2, below. A detailed description of the improvements proposed by the Project is provided in Chapter 1, Section 1.3, *Project Description*. The design features of the Project include reconfiguration of the US 101 and SR 237 interchanges with Mathilda Avenue. As shown in Figure ES-1, this includes modification to on- and off-ramps; removal, addition, and signalization of intersections; and provision of new left-turn lanes. In addition, the Project would require modification to bicycle and pedestrian facilities, utilities, storm water treatment facilities, street lighting, ramp metering, signage, retaining walls, and light rail crossing facilities as described.

## Roadway Improvements

The Project would consist of the following roadway improvements:

- Provide three continuous through lanes in each direction on Mathilda Avenue.
- Remove the northbound US -101 loop off-ramp to Mathilda Avenue and shift traffic to the northbound US 101 diagonal off-ramp.
- Realign and widen the northbound US 101 ramps and signalize the ramp intersection with Mathilda Avenue, and construct a left-turn lane on southbound Mathilda Avenue to access the northbound US 101 loop on-ramp.
- Realign the southbound US 101 off-ramp and loop on-ramp and signalize the ramp intersection with Mathilda Avenue.
- Modify the Mathilda Avenue/Ross Drive signal intersection.<sup>1</sup>
- Close Moffett Park Drive between Bordeaux Drive and Mathilda Avenue, replace with a Class I bikeway,<sup>2</sup> and shift traffic to Bordeaux Drive and Innovation Way.<sup>3</sup> Innovation Way would be extended from Mathilda Avenue to Bordeaux Drive as part of the Moffett Place Campus Project. Moffett Park Drive eastbound north of Mathilda Avenue would remain. Moffett Park Drive would remain open to bicyclists and would become a Class I bikeway.
- Modify and signalize the Innovation Way and Juniper Networks driveway intersection.
- Remove the westbound SR 237 ramp signal intersection. Realign the westbound SR 237 off-ramp opposite Moffett Park Drive and modify the signal intersection. The existing signalized intersections on Mathilda Avenue at the SR 237 westbound off-ramp and Moffett Park Drive would be removed.
- Signalize the reconfigured westbound SR 237 off-ramp/Moffett Park Drive intersection. The westbound SR 237 off-ramp would be modified to intersect with Mathilda Avenue just south of the new signalized intersection. Mathilda Avenue northbound traffic heading to westbound SR 237 would have to make a U-turn movement<sup>4</sup> at the new signalized intersection to access the on-ramp.
- Modify the westbound SR 237 ramps to provide a diamond configuration.

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<sup>1</sup> The bus stop on the east side of Mathilda Avenue, south of Ross Drive, would be relocated 300 feet south, closer to US 101.

<sup>2</sup> Per the Highway Design Manual Index 1002.1, a Class I bikeway is a *bicycle path* that is completely separate from the roadway.

<sup>3</sup> Innovation Way would be extended from Mathilda Avenue to Bordeaux Drive by the Moffett Place development project.

<sup>4</sup> U-turn movement is part of the intersection improvement.

## Bicycle and Pedestrian Facilities

The proposed Project would be developed to provide improved mobility for all users, including bicyclists, pedestrians, transit riders, and motorists.

As shown in Figure ES-2, bicycle improvements on Mathilda Avenue would consist of Class II bike lanes<sup>5</sup> based on available pavement widths within the Project area, and would connect to the existing Class II bike lanes and Class III bike routes on Mathilda Avenue and the Class I bikeway on the Sunnyvale West Channel. Bicycle improvements on Moffett Park Drive would consist of a Class I bikeway between Borregas Avenue and Mathilda Avenue. Between Mathilda Avenue and Innovation Way, a Class I multi-use path would be installed.

Bicycle and pedestrian improvements in the Project area would be consistent with the *City of Sunnyvale 2006 Bicycle Plan* (City of Sunnyvale 2006) and the *Santa Clara Countywide Bicycle Plan* (Santa Clara County 2008), and would include:

- Upgrading existing pedestrian facilities to incorporate current Americans with Disabilities Act standards, including curb ramps at all crosswalks.
- Incorporating pavement delineation with new crosswalk markings.
- Installing pedestrian countdown signals at westbound SR 237 ramps, eastbound SR 237 ramps, Ross Drive, northbound US 101 ramps, and southbound US 101 ramps.
- Realigning (“teeing up”) and signaling ramp termini to provide new pedestrian crossings, where feasible.
- Installing sidewalk along the west side of Mathilda Avenue between Almanor Avenue/Ahwanee Avenue and Moffett Park Drive. The sidewalk would be a minimum of 6 feet wide where feasible.

### ES.4.2 No-Build Alternative

Under the No-Build Alternative, no changes would be made to the existing local roadways or freeway ramps within the Project limits. No construction activities would occur, and there would be no change in the operation of the existing facilities. Other planned and approved land use development and transportation improvements along local routes may be implemented by local agencies or under other projects.

### ES.4.3 Cost

The Project is included in the 2015 Federal Statewide Transportation Improvement Program (ID No. SCL130001) (California Department of Transportation 2014) and the current

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<sup>5</sup> Per the Highway Design Manual Index 1002.1, a Class II bikeway is a *bicycle lane* and a Class III bikeway is a *bicycle route*. A Class II bikeway lane has a separate striped bicycle-only lane adjacent to the roadway, and a Class III bikeway route is a shared roadway, often referred to as a *sharrow*.

Regional Transportation Plan/Sustainable Communities Strategy (Project No. 240554 in *Plan Bay Area*), which is updated by the Metropolitan Transportation Commission (Metropolitan Commission 2013). The Project is also identified in the Valley Transportation Plan 2040 (Santa Clara Valley Transportation Authority 2009) under ID H43 and in the City's Capital Improvement Program for Fiscal Year 2013/2014 as Project No. 826890 (City of Sunnyvale 2013).

Under the No-Build Alternative, no improvements would be made to the existing local roadways or freeway ramps within the Project limits. There would be no construction activities and therefore no capital costs. In comparison, the Build Alternative is anticipated to cost \$41.3 million dollars.<sup>6</sup> The City has committed local funding to the development of the Project. Other funding sources have yet to be determined, but may include a combination of state and local transportation funds.

#### **ES.4.4 Schedule**

Construction of these improvements would take approximately 250 working days, or 12 months, and is expected to start in early 2018. A combination of day and night work is anticipated. Weekend work is not anticipated. Short-term lane and ramp closures would be necessary to facilitate construction. A Traffic Management Plan (refer to Chapter 2, Section 2.14, *Traffic/Transportation*) would be implemented during construction to minimize and prevent delay and inconvenience to the traveling public.

### **ES.5 Summary of Environmental Impacts and Mitigation Measures**

Table ES-1 provides a summary of the environmental impacts of the Project and associated avoidance, minimization, and/or mitigation measures. Refer to Chapter 2, *Environmental Setting, Impacts, and Avoidance, Minimization and/or Mitigation Measures*, for a detailed impact analysis of each resource area, including the regulatory setting and existing conditions.

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<sup>6</sup> The escalated (2018) total Project cost is \$41.3 million dollars. The current (2013) total Project cost is \$39.8 million dollars.

**Table ES-1. Summary of Environmental Impacts and Avoidance, Minimization, and/or Mitigation Measures**

<b>Environmental Impact Topic</b>	<b>Build Alternative</b>	<b>No-Build Alternative</b>	<b>Avoidance, Minimization, and/or Mitigation Measure</b>
<b><i>Aesthetics (EIR Section 2.2)</i></b>			
Visual Character (Operation)	Less than Significant	No Impact	<b>AES-1:</b> Restore Highway Planting <b>AES-2:</b> Incorporate Bioretention Basins in Planting Design <b>AES-3:</b> Implement Aesthetic Treatment on Bridge Barriers, Sound Walls, and Retaining Walls
Visual Character (Construction)	Less than Significant	No Impact	No avoidance, minimization, and/or mitigation measures required. Changes in visual character during construction would be temporary. For permanent changes in visual character, the Project will implement <b>AES-1</b> through <b>AES-3</b> .
Light and Glare (Operation)	Less than Significant	No Impact	<b>AES-4:</b> Apply Minimum Lighting Standards
Light and Glare (Construction)	Less than Significant	No Impact	<b>AES-5:</b> Minimize Fugitive Light from Portable Sources Used for Construction
<b><i>Air Quality (EIR Section 2.3)</i></b>			
Conformity with Applicable Air Quality Plan	Conforms	No Impact	Not applicable.
Violate air quality standard for Carbon Monoxide (Operation)	Less than Significant	No Impact	No avoidance, minimization, and/or mitigation measures required.
Criteria Pollutants (Operation)	Less than Significant	No Impact	No avoidance, minimization, and/or mitigation measures required.
Mobile Source Air Toxic Emissions (Operation)	Less than Significant	No Impact	No avoidance, minimization, and/or mitigation measures required.
Criteria Pollutants (Construction)	Less than Significant	No Impact	<b>AQ-1:</b> Implement California Department of Transportation Standard Specification Section 14 <b>AQ-2:</b> Implement Basic and Additional Control Measures for Construction Emissions of Fugitive Dust
<b><i>Biological Resources (EIR Section 2.4)</i></b>			
Nesting Birds and Raptors (Construction)	Less than Significant	No Impact	<b>BIO-1:</b> Implement Nesting Birds Avoidance Measures
Tree Removal (Construction)	Less than Significant	No Impact	<b>BIO-2:</b> Implement Tree Avoidance, Minimization, or Replacement

<b>Environmental Impact Topic</b>	<b>Build Alternative</b>	<b>No-Build Alternative</b>	<b>Avoidance, Minimization, and/or Mitigation Measure</b>
Invasive Species (Construction)	Less than Significant	No Impact	<b>BIO-3:</b> Minimize the Introduction and Spread of Invasive Plants
<b><i>Cultural Resources (EIR Section 2.5)</i></b>			
Historic Architectural Resources	No Impact	No Impact	No avoidance, minimization, and/or mitigation measures required.
Archaeological Resources/Human Remains (Construction)	No Impact	No Impact	<b>CUL-1:</b> Stop Work if Cultural Resources are Encountered During Ground-Disturbing Activities <b>CUL-2:</b> Stop Work if Human Remains are Encountered During Ground-Disturbing Activities
Paleontological Resources (Construction)	No Impact	No Impact	<b>CUL-3:</b> Conduct Protocol and Procedures for Encountering Paleontological Resources
<b><i>Geology, Soils, and Seismicity (EIR Section 2.6)</i></b>			
Seismic activity, unstable geologic units, expansive and corrosive soils (Construction)	Less than Significant	No Impact	No avoidance, minimization, and/or mitigation measures required.
<b><i>Greenhouse Gas Emissions (EIR Section 2.7)</i></b>			
Greenhouse Gas Emissions	Not applicable	Not applicable	Refer to Section 2.7, <i>Greenhouse Gas Emissions</i> for a comprehensive discussion of greenhouse gas emissions. While Caltrans has provided the public and decision-makers as much information as possible about the Project, it is Caltrans determination that in the absence of further regulatory or scientific information related to GHG emissions and CEQA significance, it is too speculative to make a significance determination regarding the Project's direct and indirect impact with respect to climate change. Caltrans does remain firmly committed to implementing measures to help reduce the potential effects of the Project. These measures are outlined in the body of the environmental document.

<b>Environmental Impact Topic</b>	<b>Build Alternative</b>	<b>No-Build Alternative</b>	<b>Avoidance, Minimization, and/or Mitigation Measure</b>
<b><i>Hazardous Wastes/Materials (EIR Section 2.8)</i></b>			
Exposure to Hazardous Wastes/Materials (Aerially Deposited Lead, Hazardous Material Release Sites, Agricultural Pesticides, Naturally Occurring Asbestos, Lead-Based Paint, Asbestos-Containing Materials, Thermosplastic Paint, Asphalt Cement, Drainage Swales/Catch Basins) (Construction)	Less than Significant	No Impact	<b>HAZ-1:</b> Prepare Preliminary Site Investigation <b>HAZ-2:</b> Prepare Construction Risk Management Plan
<b><i>Hydrology and Water Quality (EIR Section 2.9)</i></b>			
Impacts to water quality standards/waste discharge requirements, alteration of drainage resulting in runoff or flooding (Operation)	Less than Significant	No Impact	<b>WQ-1:</b> Implement Best Management Practices
Impacts to depletion of groundwater supplies/interference with groundwater recharge (Operation)	Less than Significant	No Impact	No avoidance, minimization, and/or mitigation measures required.
Impacts to water quality standards/waste discharge requirements, depletion of groundwater supplies/interference with groundwater recharge (Construction)	Less than Significant	No Impact	<b>WQ-1:</b> Implement Best Management Practices
Impacts to depletion of groundwater supplies/interference with groundwater recharge, alteration of drainage resulting in runoff or flooding (Construction)	Less than Significant	No Impact	No avoidance, minimization, and/or mitigation measures required.
<b><i>Land Use and Recreation (EIR Section 2.10)</i></b>			
Division of an Established Community (Operation)	Beneficial	No Impact	No avoidance, minimization, and/or mitigation measures required.
Division of an Established Community (Construction)	No Impact	No Impact	No avoidance, minimization, and/or mitigation measures required.
Consistency with State, Regional, and Local Plans and Programs	Consistent	Not Consistent	Not applicable

<b>Environmental Impact Topic</b>	<b>Build Alternative</b>	<b>No-Build Alternative</b>	<b>Avoidance, Minimization, and/or Mitigation Measure</b>
<b><i>Noise and Vibration (EIR Section 2.11)</i></b>			
Permanent Noise (Operation)	No Impact	No Impact	No avoidance, minimization, and/or mitigation measures required.
Temporary Noise (Construction)	Less than Significant	No Impact	<b>NV-1:</b> Implement Noise-Reducing Construction Practices
Temporary Vibration (Construction)	Less than Significant	No Impact	<b>NV-2:</b> Implement Vibration-Reducing Construction Measures to Limit Groundborne Vibration at Nearby Structures and Residences
<b><i>Population and Housing (EIR Section 2.12)</i></b>			
Growth (Construction)	No Impact	No Impact	No avoidance, minimization, and/or mitigation measures required.
<b><i>Public Services and Utilities (EIR Section 2.13)</i></b>			
Public Services	No Impact	No Impact	No avoidance, minimization, and/or mitigation measures required.
Public Utilities (Construction)	No Impact	No Impact	No avoidance, minimization, and/or mitigation measures required.
<b><i>Transportation/Traffic (EIR Section 2.14)</i></b>			
Local Roadways and Ramp and Termini Operations	Less than Significant	No Impact	No avoidance, minimization, and/or mitigation measures required.
Impacts to Freeway Mainline Operations	Less than Significant	No Impact	No avoidance, minimization, and/or mitigation measures required.
Freeway System Performance	Less than Significant	No Impact	No avoidance, minimization, and/or mitigation measures required.
Impacts to Bicycle and Pedestrians	Beneficial	No Impact	No avoidance, minimization, and/or mitigation measures required.
Construction Impacts	Less than Significant	No Impact	<b>TRF-1:</b> Prepare a Transportation Management Plan
<b><i>Cumulative Impacts (EIR Section 2.15)</i></b>			
Cumulative Impacts	No Impact	Cumulative impacts will not be substantial	No avoidance, minimization, and/or mitigation measures required.

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