

APPENDIX D

PRELIMINARY ENVIRONMENTAL REVIEW

Appendix D -

Preliminary Environmental Review

The recommendation of a previous SR 85 Study (State Route 85 Express Lanes Project) was to convert the HOV lane in sections 1, 2 and 3 to an express lane and to add a second express lane in section 2, adjacent to the one running the length of the corridor. This corresponds to Alternative 2-2 of this study. The Environmental Impact Statement for the previous SR 85 project was completed April 2015 with a finding of no significant impact. In November 2016, Santa Clara County voters approved Measure B, a 30-year, half-cent countywide sales tax to enhance transit, highways, expressways and active transportation (bicycles, pedestrians and complete streets). State Route 85 Corridor Transit Study was identified in a list of eligible funding categories and projects. Up to \$350 million dollars will be available for transit, congestion relief and noise abatement projects throughout the corridor over the 30-year life of the funding measure. A lawsuit was filed in 2017 challenging the validity of Measure B. As the lawsuit made its way through the courts, funds collected from Measure B were held in escrow. With all litigation settled, VTA began dispersing funding January 30, 2019.

Given that all the proposed alternatives of this study stay within the existing SR 85 right-of-way, the findings of the previous environmental work can be used in a preliminary review of environmental impacts.

Environmental Impact Categories

The following is a brief discussion of the environmental impacts of the previous study in the context of a preliminary review of the impacts associated with the existing set of alternatives.

Land Use/Growth

It was concluded that the previous project if constructed would not change or conflict with the land use in the corridor and that projected growth and development in the corridor would occur with or without construction of the project. Given that the project connects existing and established transit centers, and all new stations would be located within SR 85 right of way and any off corridor stops or stations would be existing facilities located in already developed areas, any of the build alternatives is not anticipated to contribute to any additional growth or land use changes.

Farmlands/Timberlands

No farmland/timberland impacts associated with construction.

Community Impacts

No community impacts are associated with the build alternatives. There would be no acquisition of residences, businesses or other land uses. No barriers to movement would be associated with the project. All off corridor stops and stations would be existing facilities and all new stations would be within SR 85 right of way.

Environmental Justice

No environmental justice impacts would result from the project. There would be no disproportionate or adverse impacts to any minority or low-income populations. None of the build alternatives would impact existing residences or businesses.

Utility/Emergency Services

No utility relocations are anticipated, and emergency services access would be maintained during the construction under any of the build alternatives.

Traffic and Transportation/Pedestrian and Bicycle Facilities

There would be no impact to pedestrian and bicycle facilities under any of the build alternatives as there are none present on SR 85. The previous environmental documentation projected impaired traffic flow in some segments of SR 85, including the HOV lane under the no build alternative in both 2015 and 2035. It can be assumed that any of the build alternatives would improve travel times as compared with the No Build in 2015 and 2035. It is anticipated express lane segments would operate at or close to free-flow conditions.

Visual/Aesthetics

The project under any of the proposed alternatives would not change the visual appearance or aesthetics of the corridor and all new infrastructure would be consistent with the freeway setting that exists.

Cultural Resources

The area of potential effects contains at least 20 cultural resources sites. Subsurface geoarchaeological explorations were conducted as part of the previously completed environmental analysis to identify obscured or buried archeological resources that could be affected by project construction. None were found during testing. It was determined the project would not affect a Section 4(f) historic resource. Mitigation measures can be implemented if cultural materials are unearthed during construction. Construction would be halted, and a qualified archaeologist would assess the find and procedures described in state law would be implemented.

Hydrology and Floodplain

Parts of the corridor are in the 100-year floodplain. None of the build alternatives would increase the amount of area in the floodplain and would not significantly increase impervious surfaces or runoff quality. Measures could be implemented during construction to avoid or minimize impacts to water quality and storm water runoff.

Water Quality and Storm Water Runoff

Project construction could have temporary impacts to water quality and storm water runoff from erosion. Construction always includes the risk of spills and fluid leaks from construction vehicles, equipment, or materials. The temporary impacts to water quality and storm water runoff increase as the area of disturbed soil and impervious surface increases. The project area is

susceptible to hydromodification. Temporary and permanent erosion control best management practices can be implemented to address water quality and storm water runoff issues and to maintain or restore the area to preconstruction conditions.

Geology/Soils/Seismicity/Topography

The project area could be exposed to strong earthquake shaking. Untreated soil in the area of foundations for overhead signs and widened SR 85 bridge decks could be subject to liquefaction. These issues can be mitigated by following seismic design requirements. Build alternatives with more station construction would have an increased need for seismic design elements.

Paleontology

With any construction project there is the potential to encounter unexpected subsurface paleontological resources. A Paleontological Mitigation Plan will include monitoring during active construction to allow for collection and curation of any fossils found. The potential for encountering paleontological resources increase with the size of the construction area.

Hazardous Waste/Materials

Five potential hazardous materials sites are outside but located within one mile of the corridor. Encountering contaminated ground water during construction from these sites has been deemed a medium to high risk in the previous environmental document. Asbestos or pesticides from previous agricultural land uses in the project corridor may be present in the soil adjacent to the corridor. Soils in the immediate vicinity of SR 85 may have contaminated surface soils from break wear, oil, grease and exhaust from vehicular traffic and contain aurally deposited lead (ADL) and other heavy metals. Further investigation of hazardous materials sites prior to construction are needed to avoid contaminated groundwater. Soils and groundwater will be tested prior to final project design to determine management options and any special handling requirements. If contaminated soils, ground water or other hazardous materials are encountered, they will be disposed of per regulations.

Air Quality

The project would not violate standards for particulate matter. Minor increases in mobile source air toxics in the project opening year and horizon year would be offset by emissions improvements from national control programs. Additional improvement in air quality could be achieved using an electric BRT fleet. Alternatives that reduce the number of vehicle trips and result in a shift from single occupant vehicles to carpools or transit would improve air quality.

Natural Communities

As noted in the previous environmental document, the corridor is built out with pavement and other types of urban development. All alternatives stay within the existing right-of-way. Potential impacts to natural communities would be during construction and those can be mitigated through proper survey prior to construction and identification of measures to protect adjacent natural communities during construction. Station construction would increase the area of potential impact. Alternatives that include more stations would involve more planning to protect natural communities prior to construction.

Wetlands and Other Waters

It is assumed that none of the build alternatives will impact wetlands or other waters. Temporary indirect impacts could be associated with construction related discharges. These could be mitigated.

Plant Species

The area within the corridor has been disturbed by roadway development. Any impacts would be negligible. All areas where stations and stops would be developed have been disturbed by existing development.

Animal Species

Under the previous alternative evaluated, project construction could result in temporary effects to .57 acres of potential upland habitat for the western pond turtle. It has been noted that there would be no permeant impacts to special status birds or bats. Project construction noise could temporarily disturb migratory birds, nesting raptors, and special status bats. Construction could be timed to mitigate these impacts. The larger the construction footprint with additional lane miles or stations, the more potential temporary construction impacts.

Threatened and Endangered Species

Potential construction related impacts could result in temporary effects to upland habitat for the California red-legged frog and the California tiger salamander and temporary and permanent impacts to the DRLF habitat associated with bridge widening at Saratoga Creek. There is very low potential for construction impacts to the bay checkerspot butterfly and the canyon jewel flower. Impacts can be avoided and minimized by preconstruction surveys and precautions during construction.

Invasive Species

Project construction has the potential to spread invasive species. In the SR 85 corridor English ivy and sweet fennel are known invasive species. Preconstruction surveys and precautions during construction can eliminate or minimize potential impacts.

Cumulative Impacts

No cumulative impacts were identified during the previous environmental work.

Noise

Traffic Noise levels would vary by alternative. All alternatives will increase the volume of buses along SR 85 and thus increase traffic related noise, but not perhaps a perceptible increase. The alternative evaluated in the previous environmental work was determined to have no effect on existing noise levels, or no more than a 3-decible increase. Alternatives such as Alternative 3-3 that involves a right side transit lane implemented by reducing the right side shoulder as well as Alternative 3-3, right side bus on shoulder have potential to increase traffic noise levels, but most likely not a perceptible increase in noise. Some segments of the corridor have existing noise barriers. These may need to be relocated in some cases.

Growth

The documentation in the done previously indicates that alternative evaluated does not have any impact on growth. It is stated that the growth projected in the corridor will occur with or without project construction. None of the build alternatives would involve providing new access to undeveloped areas. The build alternatives would locate stations within the existing SR 85 right of way or use existing transit stations or stops.

Duration of Construction

Duration of Construction will vary by alternative. It is assumed that alternatives such as those that involve more construction in more sections and additional stations will require longer construction periods. Construction can have a variety of impacts to the natural environment as well as noise, aesthetics and congestion. It can also result in additional costs associated with mitigation.

Utilities and Drainage

The larger the footprint of the alternative associated with widening, the greater potential for impacts on drainage. An increase in impervious surface area creates the need to address drainage and may impact the existing roadway drainage structures requiring them to be rebuilt. Thus, alternatives that require widening of the roadway have the potential for additional drainage impacts.

Utilities are sometimes an area of concern. Often there is utility infrastructure in roadway expansion areas that must be moved. No utility impacts were identified in the previous environmental documentation.

Summary of Impacts

The following table summarizes impacts by alternative.

Summary of Preliminary Environmental Impacts

Alternative		Land Use	Growth	Farmlands/Timberlands	Community Impacts
1-1	No Change	None	None	None	None
Express Lanes	2-1 HOV To Express Lane	None. Project stays within existing ROW.	None. No new stops or stations.	None. Project contained within the existing ROW.	None. Project contained within the existing ROW.
	2-2 Short Dual Express Lane	None. Project stays within existing ROW.	None. No new stops or stations.	None. Project contained within the existing ROW.	None. Project contained within the existing ROW.
	2-3 Long Dual Express Lane	None. Project stays within existing ROW.	None. No new stops or stations.	None. Project contained within the existing ROW.	None. Project contained within the existing ROW.
Transit Lanes	3-1 Short Median Transit Lane	None. Project stays within existing ROW.	None. New stops and stations would be in previously developed areas.	None. Project contained within the existing ROW.	None. Project contained within the existing ROW.
	3-2 Long Median Transit Lane	None. Project stays within existing ROW.	None. New stops and stations would be in previously developed areas.	None. Project contained within the existing ROW.	None. Project contained within the existing ROW.
	3-3 Right Side Transit Lane	None. Project stays within existing ROW.	None. New stops and stations would be in previously developed areas.	None. Project contained within the existing ROW.	None. Project contained within the existing ROW.
Bus On Shoulder	4-1 Median Bus On Shoulder	None. Project stays within existing ROW.	None. New stops and stations would be in previously developed areas.	None. Project contained within the existing ROW.	None. Project contained within the existing ROW.
	4-2 Right Side Bus On Shoulder	None. Project stays within existing ROW.	None. New stops and stations would be in previously developed areas.	None. Project contained within the existing ROW.	None. Project contained within the existing ROW.

Summary of Preliminary Environmental Impacts (continued)

Alternative			Hazardous Waste/Materials	Air Quality	Noise	Natural Communities
	1-1	No Change	None	None	None	None
Express Lanes	2-1	HOV To Express Lane	None	None	None	None
	2-2	Short Dual Express Lane	Risk of encounter contaminated groundwater during construction in Section 2.	Potential for temporary construction impacts. butt would not exceed state thresholds.	No perceptible increase in noise. Addition of center express lane could move traffic in Section 2 away from receptors.	Potential tree removal and impact to vegetation in Section 2.
	2-3	Long Dual Express Lane	Risk of encounter contaminated groundwater during construction in Sections 1 and 2.	Potential for temporary construction impacts. butt would not exceed state thresholds.	No perceptible increase in noise. Addition of center express lane could move traffic in Sections 1 and 2 away from receptors.	Potential tree removal and impact to vegetation in Sections 1 and 2.
Transit Lanes	3-1	Short Median Transit Lane	Risk of encounter contaminated groundwater during construction in Section 2.	Potential for temporary construction impacts. butt would not exceed state thresholds.	No perceptible increase in noise. Addition of center transit lane could move traffic in Section 2 away from receptors.	Potential tree removal and impact to vegetation in Section 2.
	3-2	Long Median Transit Lane	Risk of encounter contaminated groundwater during construction in Sections and 2.	Potential for temporary construction impacts. butt would not exceed state thresholds.	No perceptible increase in noise. Addition of center transit lanes could move traffic in Sections 1 and 2 away from receptors.	Potential tree removal and impact to vegetation in Sections 1 and 2.
	3-3	Right Side Transit Lane	Risk of encounter contaminated groundwater during construction in Sections and 2.	Potential for temporary construction impacts. butt would not exceed state thresholds.	No perceptible increase in noise. Addition of right side transit lanes could move traffic in Sections 1 and 2 closer to receptors.	Potential tree removal and impact to vegetation in Sections 1 and 2.
Bus On Shoulder	4-1	Median Bus On Shoulder	Risk of encounter contaminated groundwater during construction in Sections and 2.	Potential for temporary construction impacts. butt would not exceed state thresholds.	No perceptible increase in noise. Addition of center median bus on shoulder could move buss traffic in Sections 1 and 2 away from receptors.	Potential tree removal and impact to vegetation in Sections 1 and 2.
	4-2	Right Side Bus On Shoulder	Risk of encounter contaminated groundwater during construction in Sections 1 and 2.	Potential for temporary construction impacts. butt would not exceed state thresholds.	No perceptible increase in noise. Addition of right side bus on shoulder could move bus traffic in Sections 1 and 2 closer to receptors.	Potential tree removal and impact to vegetation in Sections 1 and 2.

Summary of Preliminary Environmental Impacts (continued)

Alternative		Wetlands and Other Waters	Plant Species	Animal Species	Threatened and Endangered Species	
1-1	No Change	None	None	None	None	
Express Lanes	2-1	HOV To Express Lane	None	None	None	
	2-2	Short Dual Express Lane	Potential for temporary impacts associated with construction related discharges in Section 2.	None or negligible.	Potential temporary construction impacts in Section 2.	Potential for temporary construction impacts in Section 2.
	2-3	Long Dual Express Lane	Potential for temporary impacts associated with construction related discharges in Sections 1 and 2.	None or negligible.	Potential temporary construction impacts in Sections 1 and 2.	Potential for temporary construction impacts in Sections 1 and 2.
Transit Lanes	3-1	Short Median Transit Lane	Potential for temporary impacts associated with construction related discharges in Section 2.	None or negligible.	Potential temporary construction impacts in Sections 1 and 2.	Potential for temporary construction impacts in Sections 1 and 2.
	3-2	Long Median Transit Lane	Potential for temporary impacts associated with construction related discharges in Sections 1 and 2.	None or negligible.	Potential temporary construction impacts in Sections 1 and 2.	Potential for temporary construction impacts in Sections 1 and 2.
	3-3	Right Side Transit Lane	Potential for temporary impacts associated with construction related discharges in Sections 1 and 2.	None or negligible.	Potential temporary construction impacts in Sections 1 and 2.	Potential for temporary construction impacts in Sections 1 and 2.
Bus On Shoulder	4-1	Median Bus On Shoulder	Potential for temporary impacts associated with construction related discharges in Sections 1 and 2.	None or negligible.	Potential temporary construction impacts in Sections 1 and 2.	Potential for temporary construction impacts in Sections 1 and 2.
	4-2	Right Side Bus On Shoulder	Potential for temporary impacts associated with construction related discharges in Sections 1 and 2.	None or negligible.	Potential temporary construction impacts in Sections 1 and 2.	Potential for temporary construction impacts in Sections 1 and 2.

Summary of Preliminary Environmental Impacts (continued)

Alternative		Environmental Justice	Utility/Emergency Services	Traffic and Transportation/pedestrian and bicycle Facilities	Visual/Aesthetics	
1-1	No Change	None	None	Previous environmental documentation noted impaired traffic flow in both build and future years. No impact on pedestrian and bicycle facilities. No impact to pedestrian and bicycle facilities.	None	
Express Lanes	2-1	HOV To Express Lane	Project has the potential to improve traffic flow.	None	Positive impacts on traffic flow. No impacts to bicycle and pedestrian facilities.	Project would be visually and aesthetically compatible with existing freeway setting
	2-2	Short Dual Express Lane	Positive impact. Project would improve traffic flow with additional benefits in Section 2.	Potential for some traffic related construction impacts in Section 2.	Positive impacts on traffic flow. No impacts to bicycle and pedestrian facilities.	Project would be visually and aesthetically compatible with existing freeway setting
	2-3	Long Dual Express Lane	Positive impact. Project would improve traffic flow with additional benefits in Sections 1 and 2.	Potential for some traffic related construction impacts in Sections 1 and 2.	Positive impacts on traffic flow. No impacts to bicycle and pedestrian facilities.	Project would be visually and aesthetically compatible with existing freeway setting
Transit Lanes	3-1	Short Median Transit Lane	Positive impact. Project would improve traffic flow with additional benefits in Sections 1 and provide a transit option.	Potential for some traffic related construction impacts in section 2.	Positive impacts on traffic flow. No impacts to bicycle and pedestrian facilities.	Project would be visually and aesthetically compatible with existing freeway setting
	3-2	Long Median Transit Lane	Positive impact. Project would improve traffic flow with additional benefits in Sections 1 and 2 and provide a transit option.	Potential for some construction related impacts in Sections 1 and 2.	Positive impacts on traffic flow. No impacts to bicycle and pedestrian facilities.	Project would be visually and aesthetically compatible with existing freeway setting
	3-3	Right Side Transit Lane	Positive impact. Project would improve traffic flow with additional benefits in Sections 1 and 2 and provide a transit option.	Potential for some construction related impacts in Sections 1 and 2.	Positive impacts on traffic flow. No impacts to bicycle and pedestrian facilities.	Project would be visually and aesthetically compatible with existing freeway setting
Bus On Shoulder	4-1	Median Bus On Shoulder	Positive impact. Project would improve traffic flow with additional benefits in Sections 1 and 2 and provide a transit option.	Potential for some construction related impacts in Sections 1 and 2.	Positive impacts on traffic flow. No impacts to bicycle and pedestrian facilities.	Project would be visually and aesthetically compatible with existing freeway setting
	4-2	Right Side Bus On Shoulder	Positive impact. Project would improve traffic flow with additional benefits in Sections 1 and 2 and provide a transit option.	Potential for some construction related impacts in Sections 1 and 2.	Positive impacts on traffic flow. No impacts to bicycle and pedestrian facilities.	Project would be visually and aesthetically compatible with existing freeway setting

Summary of Preliminary Environmental Impacts (continued)

Alternative		Hydrology and Floodplain	Water Quality and Storm Water Runoff	Geology/Soils/Seismicity/ Topography	Paleontology	
1-1	No Change	None	None	None	None	
Express Lanes	2-1	HOV To Express Lane	None	None	None	
	2-2	Short Dual Express Lane	None	Potential temporary impacts during construction in Section 2.	None	Potential for encountering unexposed subsurface paleontological resources in Section 2.
	2-3	Long Dual Express Lane	None	Potential temporary impacts during construction in Sections 1 and 2. Mitigation possible.	None	Potential for encountering unexposed subsurface paleontological resources in Sections 1 and 2.
Transit Lanes	3-1	Short Median Transit Lane	None	Potential temporary impacts during construction in Section 2. Mitigation possible.	Need to construct stations/stops and any widened bridge decks to seismic standards.	Potential for encountering unexposed subsurface paleontological resources in Sections 1 and 2.
	3-2	Long Median Transit Lane	None	Potential temporary impacts during construction in Sections 1 and 2. Mitigation possible.	Potential for encountering unexposed subsurface paleontological resources in Sections 1 and 2.	Potential for encountering unexposed subsurface paleontological resources in Sections 1 and 2.
	3-3	Right Side Transit Lane	None	Potential temporary impacts during construction in Sections 1 and 2. Mitigation possible.	Need to construct stations/stops and any widened bridge decks to seismic standards.	Potential for encountering unexposed subsurface paleontological resources in Sections 1 and 2.
Bus On Shoulder	4-1	Median Bus On Shoulder	None	Potential temporary impacts during construction in Sections 1 and 2. Mitigation possible.	Need to construct stations/stops and any widened bridge decks to seismic standards.	Potential for encountering unexposed subsurface paleontological resources in Sections 1 and 2.
	4-2	Right Side Bus On Shoulder	None	Potential for encountering unexposed subsurface paleontological resources in Sections 1 and 2.	Need to construct stations/stops and any widened bridge decks to seismic standards.	Potential for encountering unexposed subsurface paleontological resources in Sections 1 and 2.

Summary of Preliminary Environmental Impacts (continued)

Alternative		Invasive Species	Cumulative Impacts
1-1	No Change	None	None
Express Lanes	2-1	HOV To Express Lane	None
	2-2	Short Dual Express Lane	Potential for the inadvertent spread of invasive species during construction in Section 2, but can be mitigated.
	2-3	Long Dual Express Lane	Potential for the inadvertent spread of invasive species during construction in Sections 1 and 2, but can be mitigated.
Transit Lanes	3-1	Short Median Transit Lane	Potential for the inadvertent spread of invasive species during construction in Section 2, but can be mitigated.
	3-2	Long Median Transit Lane	Potential for the inadvertent spread of invasive species during construction in Sections 1 and 2, but can be mitigated.
	3-3	Right Side Transit Lane	Potential for the inadvertent spread of invasive species during construction in Sections 1 and 2, but can be mitigated.
Bus On Shoulder	4-1	Median Bus On Shoulder	Potential for the inadvertent spread of invasive species during construction in Sections 1 and 2, but can be mitigated.
	4-2	Right Side Bus On Shoulder	Potential for the inadvertent spread of invasive species during construction in Sections 1 and 2, but can be mitigated.