
Chapter 5

Environmental Setting, Impacts, and Mitigation

Together, this chapter and the Second Subsequent IS (included in Attachment G) describe substantial changes in the environmental setting, impacts, and mitigation measures for each of the environmental resource areas that were evaluated in the 2005 Final EIR, the 2007 Final SEIR, and the 2014 Subsequent IS/MND. Within each environmental resource area, only the proposed changes to the approved project that have the potential to result in an environmental effect or a change in adopted mitigation measures are discussed. For a detailed discussion of the existing setting at the time each prior environmental document was prepared, impacts (including the thresholds of significance), and mitigation measures, refer to Chapter 4 of the 2005 Final EIR, Chapter 5 of the 2007 Final SEIR, and Chapter 3 of the 2014 Subsequent IS/MND.

The SEIR-2 is focused on the potential for new significant impacts or a substantial increase in the severity of previously identified significant effects related to transportation, environmental justice, noise and vibration, air quality and climate change, and construction. Other environmental resource areas, where there are no impacts or where impacts can be mitigated to a less than significant level, are analyzed in the Second Subsequent IS. These resource areas analyzed in the Second Subsequent IS include Biological Resources, Community Services, Cultural Resources, Electromagnetic Fields, Energy, Geology/Soils/Seismicity, Hazardous Materials, Hydrology & Water Quality, Land Use, Safety & Security, Socioeconomics, Utilities, and Visual Quality.

The 2005 Final EIR evaluated three alternatives: No-Project, Baseline, and Light Rail Alternative. In the case of the Light Rail Alternative, numerous design options were reviewed for their environmental effects. Based on the project approved by the VTA Board of Directors in May 2005, the modifications to the project approved by the VTA Board of Directors in August 2007, and the modifications to the project approved by the VTA Board of Directors in March 2014, some of the environmental effects and mitigation measures described in the 2005 Final EIR, 2007 Final SEIR, and 2014 Subsequent IS/MND no longer apply to the proposed changes to the approved project. The 2005 Final EIR identified no adverse effects at Kollmar Drive, which would have been “cul-de-saced” and would have no longer connected to Capitol Avenue. Under the

proposed changes to the approved project, Kollmar Drive would not be “cul-de-saced” and would continue to be a two-way street, eliminating all adverse effects associated with the approved project. The impact and mitigation summary included for each section identifies the impacts and mitigation measures that are still relevant. Table 1-1 in Chapter 1, *Executive Summary*, lists the environmental impacts that apply to the approved project and the proposed changes to the approved project.

Section 5.1 Transportation

This section describes the potential transportation impacts associated with the proposed changes to the approved project. This section supplements Section 4.2 of the 2005 Final EIR, Section 5.1 of the 2007 Final SEIR, and Section 3.1 of the 2014 Subsequent IS/MND. This analysis is based on and supported by the August 23, 2018 *Eastridge to BART Regional Connector: Capitol Expressway Light Rail Project Supplemental Transportation Analysis* prepared by Hexagon Transportation Consultants, Inc. (included in Attachment D).

Environmental Setting

The following discussion describes the changes to the existing roadway operations; existing bicycle, pedestrian, and bus counts at Ocala Avenue; and existing parking demand at the Eastridge Park-and-Ride Lot since the preparation of the transportation analysis in the 2007 Final SEIR and the September 2012 *Capitol Expressway Light Rail Transportation Study for the EIS*. The September 2012 Transportation Study is based on 2009 traffic counts.

The applicable transportation regulations remain unchanged since the 2014 Subsequent IS/MND.

EXISTING TRAFFIC VOLUMES

Traffic counts were conducted at the following four study intersections in November 2017:

- Capitol Expressway and Capitol Avenue;
- Capitol Expressway and Story Road;
- Capitol Expressway and Ocala Avenue; and
- Capitol Expressway and Cunningham Avenue.

Other intersections in the project corridor were not included because the proposed changes were not expected to change future operations. Peak hour traffic counts at the study intersections may fluctuate up to 10 percent due to both random variation and changes in the upstream/downstream conditions. Table 5.1-1 shows the AM peak hour comparison where the 2017 traffic volumes are more than 10 percent different than the 2009 traffic volumes and where the individual movements have changes greater than or equal to 100 vehicles. As shown, differences in the AM peak hour were only within 10

percent of 6,078 total intersection volume for the Capitol Expressway and Capitol Avenue intersection. Table 5.1-2 shows the PM peak hour comparison where the 2016/2017 traffic volumes are more than 10 percent different than the 2009 traffic volumes and where the individual movements have changes greater than or equal to 100 vehicles. As shown, differences in the PM peak hour were within 10 percent for total intersection volume for all four intersections. Year 2016 PM peak hour traffic counts were used at Capitol Expressway’s intersections with Capitol Avenue and Story Road because of minor construction near these locations during the 2017 counts.

Table 5.1-1 AM Peak Hour Historical Traffic Volume Count Comparisons (2009 and 2017)

Intersection	Individual Movement Volume (% Difference)¹	Total 2009 Intersection Volume	Total 2017 Intersection Volume	Total Intersection Volume (% Difference)
Capitol Expressway & Capitol Avenue	Northbound through: - 21.6 Northbound right: + 308.6 Southbound left: + 53.4 Westbound right: + 55.8	6,077	6,078	0
Capitol Expressway & Story Road	Northbound right: + 105.6 Southbound through: + 30.1 Eastbound through: + 34.6 Eastbound right: + 368.9 Westbound left: + 87.9 Westbound right: - 15.3	6,770	7,878	+ 16
Capitol Expressway & Ocala Avenue	Northbound left: + 63.2 Southbound through: + 56.8	5,464	6,064	+ 11
Capitol Expressway & Cunningham Avenue	Northbound right: + 98.1 Southbound through: + 31.2	3,983	4,747	+ 19

Notes:

¹ Individual movement volumes are the total number of vehicles during the AM peak hour for all lanes of that movement. Only individual movements with changes greater than or equal to 100 vehicles and 10% difference in volume between 2009 and 2017 are shown in this table.

Source: Hexagon 2018.

Table 5.1-2 PM Peak Hour Historical Traffic Volume Count Comparisons (2009 and 2016/2017)

Intersection	Individual Movement Volume (% Difference)¹	Total 2009 Intersection Volume	Total 2012 Intersection Volume	Total 2014 Intersection Volume	Total 2016 or 2017 Intersection Volume	Total Intersection Volume (% Difference)
Capitol Expressway & Capitol Avenue ²	Westbound left: + 24.5	6,100	6,395	6,447	6,373	+ 4
Capitol Expressway & Story Road ²	Southbound left: - 26.6 Eastbound through: + 50.8 Eastbound right: + 49.1	7,333	8,025	7,524	7,848	+ 7
Capitol Expressway & Ocala Avenue	Northbound through: + 24.5 Eastbound right: - 38.4	5,662	N/A	N/A	5,758	+ 2
Capitol Expressway & Cunningham Avenue	Northbound through: + 26.0	4,147	N/A	N/A	4,496	+ 8

Notes:

N/A = Not Applicable

¹ Individual movement volumes are the total number of vehicles during the PM peak period for all lanes of that movement. Only individual movements with changes greater than or equal to 100 vehicles and 10 percent difference in volume between 2009 and 2016/2017 are shown in this table.

² 2016 counts were used at these intersections due to minor construction activities occurring in 2017.

Source: Hexagon 2018.

EXISTING HIGH-OCCUPANCY VEHICLE UTILIZATION

Generally, high-occupancy vehicle (HOV) volumes currently comprise between 9 and 25 percent of the total traffic volume on northbound and southbound Capitol Expressway.

EXISTING QUEUING OBSERVATIONS

Westbound left-turn queues from Ocala Avenue to southbound Capitol Expressway are not currently accommodated in the storage provided during the AM (7:00 am to 9:00 am), school PM (2:00 pm to 4:00 pm), or commute PM (4:00 pm to 6:00 pm) peak periods. For all other left-turn movements at the Capitol Expressway and Ocala Avenue intersection, the 95th percentile queues are accommodated during the AM, school PM, and commute PM peak periods.

EXISTING INTERSECTION LEVELS OF SERVICE

Table 5.1-3 shows the intersection LOS under existing conditions. The results of the intersection level of service analysis show that the intersection of Capitol Expressway and Story Road operates at LOS F. All other study intersections currently operate at acceptable levels of service (LOS E or better).

Table 5.1-3 Existing Intersection Level of Service

Intersection	Peak Hour	Average Delay (second/vehicle)	Level of Service
Capitol Expressway & Capitol Avenue ¹	AM	41.4	D
	PM	47.6	D
Capitol Expressway & Story Road ¹	AM	82.5	F
	PM	111.2	F
Capitol Expressway & Ocala Avenue	AM	62.2	E
	PM	74.0	E
Capitol Expressway & Cunningham Avenue	AM	22.6	C
	PM	12.6	B

Notes:

N/A = Not Applicable

¹ Denotes CMP intersection.

Bold indicates substandard Level of Service.

Source: Hexagon 2018.

EXISTING AUTOMOBILE TRAVEL TIME AND AVERAGE SPEED

Table 5.1-4 shows the average travel time and average speed of automobiles on Capitol Expressway between Interstate 680 and Tully Road. On October 25 and 26, 2017, it took between 4.5 minutes and 10 minutes to travel on Capitol Expressway between Interstate 680 and Tully Road during commute hours depending on direction, peak hour, and

whether an HOV lane was utilized. Average travel speeds ranged between 23 and 34 miles per hour. Generally, traffic in the HOV lanes experienced a slightly lower average automobile travel time and slightly higher automobile average travel speed.

Table 5.1-4 Existing Travel Time and Average Speed on Capitol Expressway, Interstate 680 to Tully Road

Vehicle Type	Direction	Peak Hour	Travel Time (min:sec)		Speed (miles per hour)	
			Average	Range	Average	Range
Mixed Flow	NB	AM	9:48	3:30-17:28	23	10-39
HOV	NB	AM	9:04	3:43-16:59	24	13-38
Mixed Flow	NB	PM	6:02	4:31-7:44	29	20-35
HOV	NB	PM	6:40	5:31-8:08	27	21-30
Mixed Flow	SB	AM	5:08	3:25-7:04	31	16-43
HOV	SB	AM	4:29	3:08-5:51	34	26-44
Mixed Flow	SB	PM	5:53	4:01-7:24	30	20-38
HOV	SB	PM	5:41	4:15-7:06	30	23-36

Notes:

Travel time data from October 25 and 26, 2017, approximately 16 runs per peak hour.

HOV = high-occupancy vehicle; NB = northbound; SB = southbound

Source: Hexagon 2018.

EXISTING BICYCLE, PEDESTRIAN, AND BUS COUNTS AT OCALA AVENUE

Much of the pedestrian and bicycle traffic in the vicinity of the Capitol Expressway corridor currently occurs around Ocala Avenue due to the presence of Ocala Middle School, which is located approximately 1,000 feet east of Capitol Expressway on Ocala Avenue. Of particular concern are bicycle and pedestrian crossings of Capitol Expressway by children. On November 1, 2017, counts of after-school bicycle and pedestrian trips crossing the Capitol Expressway and Ocala Avenue intersection during the school PM (2:00 pm to 4:00 pm) peak period show that most bicycle and pedestrian crossings were children (131 of 162 crossings were children) and mostly occurred across Capitol Expressway (as opposed to Ocala Avenue).

In addition, school bus trips were counted at the Capitol Expressway and Ocala Avenue intersection during the AM (7:00 am to 9:00 am), school PM (2:00 pm to 4:00 pm), and commute PM (4:00 pm to 6:00 pm) peak periods on November 1, 2017. During the AM peak period, there were 50 total buses (18 of which crossed Capitol Expressway). During the school PM peak period, there were 44 total buses (14 of which crossed Capitol Expressway). There were only two buses during the commute PM peak period (both crossed Capitol Expressway).

EXISTING EASTRIDGE PARK-AND-RIDE LOT PARKING DEMAND

The Eastridge Park-and-Ride Lot and Transit Center are located at Eastridge Mall. This station provides access to VTA bus routes 12, 22, 26, 31, 39, 70, 71, 77, 103, 180, and 522. Historical parking demand at the Eastridge Park-and-Ride Lot indicates that parking demand has grown between 2011 and 2017 (from as low as 21 parked vehicles in January 2011 to as high as 148 parked vehicles in October 2017). The existing parking supply of 180 currently exceeds parking demand.

EXISTING STATION RIDERSHIP

Estimates of daily transit boardings by station were provided by VTA from the countywide travel demand forecasting model. The existing 2017 daily transit boardings by station, with and without the proposed changes to the approved project, are provided in Table 5.1-5. Daily transit boardings without the proposed changes to the approved project are highest at the Alum Rock Station and lowest at the Eastridge Station.

Table 5.1-5 Existing (2017) Station Boarding Estimates

Daily Boardings	Eastridge Station	Story Station	Alum Rock Station	Total
Light Rail Transit	0	0	781	781
Bus	209	263	359	831
Total	209	263	1,140	1,612

Source: Hexagon 2018.

The existing mode split data for all trips in east San Jose and Milpitas are shown in Table 5.1-6. These data show that “drive alone” and “carpool” mode share are the highest mode shares.

Table 5.1-6 Existing (2017) East San Jose/ Milpitas Trip Mode Split

Mode	Existing 2017
Drive Alone	54.21%
Carpool	35.71%
Transit	2.53%
Bike	1.17%
Walk	6.39%

Source: Hexagon 2018.

VEHICLE MILES TRAVELED

In 2013, the State of California passed Senate Bill (SB) 743, which calls for a shift away from measures based on automobile delay. This is commonly measured by LOS in transportation analysis under CEQA. Since 2013, the State has issued several rounds of guidelines to assist Lead Agencies in implementing SB 743. These guidelines generally recommend the use of a broader measure called vehicle miles traveled (VMT), which measures the total amount of driving over a given area.

In January 2018, the California Natural Resources Agency began a rule-making period for the official changes to the State CEQA Guidelines to implement SB 743. In the Natural Resources Agency’s Proposed Regulatory Text, new Section 15064.3(b)2 states that “Transportation projects that reduce, or have no impact on, vehicle miles traveled should be presumed to cause a less than significant transportation impact.” The proposed changes to the approved project would likely reduce VMT because it would create an enhanced transit service that connects to the regional BART system, which is anticipated to shift some automobile trips to transit. The proposed changes would also reduce roadway capacity for a portion of the corridor by eliminating the HOV lanes on Capitol Expressway between Story Road and Tully Road. According to the Office of Planning and Research’s Technical Advisory on Evaluating Transportation Impacts in CEQA dated April 2018, “reducing roadway capacity (for example, by removing or repurposing motor vehicle travel lanes) will generally reduce VMT and therefore is presumed to cause a less-than-significant impact on transportation.” Generally, no transportation analysis is needed for such projects. Considering all of these factors, it is likely that the proposed changes to the approved project, similar to the approved project, would reduce VMT compared with the no project conditions.

Environmental Impacts and Mitigation

The impact discussion in this section primarily focuses on the proposed changes to the approved project that could result in new or more significant transportation impacts compared to the impacts previously identified and analyzed for the approved project. This discussion describes the near-term traffic conditions with the proposed changes to the approved project, including existing-plus-project conditions, year 2023 (opening year), and year 2043 (long-term) conditions. Future year (2023 and 2043) traffic conditions include existing traffic as well as expected growth between 2018 and the forecast year.

The majority of the proposed changes to the approved project (including the extension of the aerial guideway to grade-separate the Ocala Avenue and Cunningham Avenue intersections; modifications to the Eastridge Station platforms and tracks; reduction in parking spaces at the Eastridge Park-and-Ride lot; minor shift in the location and straightening of the Story Station pedestrian overcrossing and access modification to Story Station pedestrian access; relocation of a construction staging area; and relocation of PG&E electrical transmission facilities) would not result in changes to the transportation impacts previously identified and analyzed for the approved project.

One of the proposed changes to the approved project (revision to Capitol Expressway roadway lane configurations) would affect intersection LOS. This proposed change to the approved project could result in new or more significant transportation impacts compared to the impacts previously identified for the approved project.

IMPACTS ON INTERSECTIONS

At the study intersections, the minimum acceptable LOS was defined as LOS E, and project impacts at signalized intersections occur when:

- The LOS at an intersection drops below its LOS standard when project traffic is added; or
- An intersection that is operating worse than its LOS standard under no project conditions has an increase in critical delay of four or more seconds AND the demand-to-capacity ratio (V/C) is increased by more than 0.01 when project traffic is added.

The exception to these criteria is when the addition of project traffic reduces the amount of average stopped delay for critical movements (i.e. the change in average stopped delay for critical movements is negative). In this case, the criteria is when the project increases the critical V/C value by 0.01 or more. These criteria have changed subsequent to the certification of the 2014 Subsequent IS/MND.

LOS results at the four study intersections under existing (2017), year 2023, and year 2043 conditions with and without the proposed changes to the approved project are shown in Tables 5.1-7, 5.1-8, and 5.1-9, respectively.

Table 5.1-7 Existing (2017) Intersection Level of Service

Intersection	Year 2017					
	No Project			With Proposed Changes to the Approved Project		
	Peak Hour	Avg. Delay (sec/veh)	Level of Service	Avg. Delay (sec/veh)	Level of Service	Increase in Crit. Delay (sec)
Capitol Expressway & Capitol Avenue	AM	41.4	D	44.8	D	-1.0
	PM	47.6	D	47.7	D	-1.5
Capitol Expressway & Story Road	AM	82.5	F	119.2	F	71.6
	PM	111.2	F	137.2	F	9.5
Capitol Expressway & Ocala Avenue	AM	62.2	E	91.2	F	24.9
	PM	74.0	E	73.2	E	10.8
Capitol Expressway & Cunningham Avenue	AM	22.6	C	22.4	C	0.3
	PM	12.6	B	12.4	B	0.2

Notes:

Bold indicates substandard Level of Service.

Shaded rows indicate significant project impact.

Source: Hexagon 2018.

Table 5.1-8 Year 2023 Intersection Level of Service

Intersection	Year 2023					
	No Project			With Proposed Changes to the Approved Project		
	Peak Hour	Avg. Delay (sec/veh)	Level of Service	Avg. Delay (sec/veh)	Level of Service	Increase in Crit. Delay (sec)
Capitol Expressway & Capitol Avenue	AM	42.5	D	49.6	D	3.7
	PM	48.3	D	48.9	D	-1.1
Capitol Expressway & Story Road	AM ¹	94.4	F	128.9	F	66.5
	PM ²	123.0	F	159.0	F	22.9
Capitol Expressway & Ocala Avenue	AM	75.6	E	108.5	F	28.6
	PM ³	80.3	F	85.2	F	-51.2
Capitol Expressway & Cunningham Avenue	AM	33.0	C	29.8	C	-3.5
	PM	13.3	B	13.2	B	0.2

Notes:

Bold indicates substandard Level of Service.

Shaded rows indicate significant project impact.

¹ Change in demand-to-capacity ratio from no project to project conditions is + 0.279.² Change in demand-to-capacity ratio from no project to project conditions is + 0.095.³ Change in demand-to-capacity ratio from no project to project conditions is +0.158.

Source: Hexagon 2018.

Table 5.1-9 Year 2043 Intersection Level of Service

Intersection	Year 2043					
	No Project			With Proposed Changes to the Approved Project		
	Peak Hour	Avg. Delay (sec/veh)	Level of Service	Avg. Delay (sec/veh)	Level of Service	Increase in Crit. Delay (sec)
Capitol Expressway & Capitol Avenue	AM	55.9	E	67.0	E	6.3
	PM	55.5	E	69.4	E	19.1
Capitol Expressway & Story Road	AM ¹	113.9	F	144.5	F	60.2
	PM ²	187.1	F	251.4	F	75.2
Capitol Expressway & Ocala Avenue	AM ³	101.5	F	132.7	F	24.5
	PM ⁴	101.7	F	142.8	F	-35.9
Capitol Expressway & Cunningham Avenue	AM	41.9	D	36.5	D	-6.5
	PM	14.7	B	14.8	B	0.1

Notes:

Bold indicates substandard Level of Service.

Shaded rows indicate significant project impact.

¹ Change in demand-to-capacity ratio from no project to project conditions is +0.318.² Change in demand-to-capacity ratio from no project to project conditions is +0.124.³ Change in demand-to-capacity ratio from no project to project conditions is +0.041.⁴ Change in demand-to-capacity ratio from no project to project conditions is +0.198.

Source: Hexagon 2018.

Impact: The August 23, 2018 *Eastridge to BART Regional Connector: Capitol Expressway Light Rail Project Supplemental Transportation Analysis* indicates that the proposed changes to the approved project would result in a significant impact related to LOS at the Capitol Expressway and Story Road intersection under existing (2017), year 2023, and year 2043 conditions. This impact is due to the proposed removal of the HOV lanes and the addition of HOV lane traffic into the remaining mixed-flow lanes.

The following impacts from the 2005 Final EIR would still apply to the proposed changes to the approved project: TRN-2a (Traffic Impact at Capitol Expressway/Story Road in 2018 (now 2023)) and TRN-8b (Traffic Impact at Capitol Expressway/Story Road in 2025 (now 2043)).

Mitigation: In the 2005 Final EIR, no feasible mitigation was identified for impacts TRN-2a and TRN-8b. These significant and unavoidable impacts were included in a Statement of Overriding Considerations that was adopted by the VTA Board of Directors in May 2005.

The proposed changes to the approved project would need to include the restoration of the HOV lanes on Capitol Expressway in the northbound and southbound directions to reduce this impact to a less-than-significant level. However, there is currently insufficient right-of-way to restore the HOV lanes and additional right-of-way would require the removal of existing buildings and sidewalks along Capitol Expressway, which is infeasible. There is no feasible mitigation for this impact; thus, this impact would be “Significant and Unavoidable.” Based on the analysis above, the proposed changes to the approved project would result in new significant impacts or a substantial increase in the severity of previously identified significant impacts related to LOS.

Significant and unavoidable impact. No feasible mitigation.

Impact: The August 23, 2018 *Eastridge to BART Regional Connector: Capitol Expressway Light Rail Project Supplemental Transportation Analysis* indicates that the proposed changes to the approved project would result in a significant impact related to LOS at the Capitol Expressway and Ocala Avenue intersection under existing (2017) year, year 2023, and year 2043 conditions. This impact is due to the proposed removal of the HOV lanes, the removal of a northbound left-turn lane on Capitol Expressway, and the addition of HOV lane traffic into the remaining mixed-flow lanes.

The following impacts from the 2005 Final EIR would still apply to the proposed changes to the approved project: TRN-2b (Traffic Impact

at Capitol Expressway/Ocala Avenue in 2018 (now 2023)) and TRN-8c (Traffic Impact at Capitol Expressway/Ocala Avenue in 2025 (now 2043)).

Mitigation: In the 2005 Final EIR, no feasible mitigation was identified for Impact TRN-8c. These significant and unavoidable impacts were included in a Statement of Overriding Considerations that was adopted by the VTA Board of Directors in May 2005.

The proposed changes to the approved project would need to include the restoration of the HOV lanes on Capitol Expressway in the northbound and southbound directions to reduce this impact to a less-than-significant level. There is currently insufficient right-of-way to replace the HOV lanes and additional right-of-way would require the removal of existing buildings and sidewalks along Capitol Expressway, which is infeasible. There is no feasible mitigation for this impact and this impact would be “Significant and Unavoidable.” Based on the analysis above, the proposed changes to the approved project would result in new significant impacts or a substantial increase in the severity of previously identified significant impacts related to LOS.

Significant and unavoidable impact. No feasible mitigation.

IMPACTS ON PARKING AT EASTRIDGE PARK-AND-RIDE LOT

The Eastridge Park-and-Ride Lot currently includes 180 parking spaces provided by VTA. The approved project increases the parking to 445 spaces at Eastridge Station to partially address the anticipated increased demand of 481 spaces from the project. As part of the proposed changes to the approved project, VTA is proposing to reduce the number of parking spots added at the Eastridge Park-and-Ride Lot to approximately 200 spaces due to the relocation of VTA Paratransit staff and vehicles to a remodeled building at this location in September 2017, which has reduced the availability of parking there. See Section 3.3, *Changes in Circumstances*, in Chapter 3 for a discussion of the changes to the existing VTA Paratransit Offices at the Eastridge Park-and-Ride Lot. Table 5.1-10 shows the peak park and ride demand with the proposed changes to the approved project at the Eastridge Park-and-Ride Lot under existing (2017), year 2023, and year 2043 conditions. Based on VTA’s revised forecasts, the proposed changes to the approved project would continue to increase parking demand at the Eastridge Park-and-Ride Lot. VTA recognizes that there may be a shortfall in parking supply as a result of the proposed reduction in the additional parking spaces provided. VTA will monitor the demand and will increase parking as necessary, if possible. If increasing the parking supply is not possible, VTA will evaluate measures to promote non-vehicular access to the station and will coordinate with VTA Paratransit to reduce their demand for parking. As a result of these measures to increase supply or reduce demand, no indirect traffic or air quality impacts would be caused by cars circling and looking for parking at this station.

Table 5.1-10 Eastridge Park-and-Ride Lot Anticipated Parking Demand and Supply (Existing [2017] Year, Year 2023, and Year 2043)

Existing (2017) ¹		Year 2023 ²		Year 2043 ²	
Scenario	Parked Vehicles	Scenario	Parked Vehicles	Scenario	Parked Vehicles
Demand	114	Demand	293	Demand	374
Supply	180	Supply	200	Supply	200

Notes:

¹ Existing parking counts provided by VTA Operations on December 20, 2017.

² Future parking estimates provided by VTA Modeling on May 31, 2018.

Source: Hexagon 2018.

IMPACTS ON STATION RIDERSHIP

The 2023 and 2043 daily transit boardings by station, with and without the proposed changes to the approved project, are provided in Table 5.1-11. With the proposed changes, total transit boardings at the Alum Rock Station would decrease, while the number of boardings at the Story Station and the Eastridge Station would increase in both 2023 and 2043. This is expected given that Alum Rock is currently an end of the line station and the addition of more stations would allow patrons to select the most convenient location. With the proposed changes to the approved project, the highest percentage of light rail transit boardings at the Eastridge Transit Center would arrive by way of bus transfer, while the highest percentage of boardings at the Story and Alum Rock Stations would arrive by walking.

Table 5.1-11 Station Boarding Estimates (Year 2023 and Year 2043)

Daily Boardings	Eastridge Station		Story Station		Alum Rock Station		Total	
	No Project	With Project	No Project	With Project	No Project	With Project	No Project	With Project
Year 2023								
Light Rail Transit	0	1,224	0	777	1,745	979	1,745	2,980
Bus	896	918	379	418	862	506	2,137	1,842
Total	896	2,142	379	1,195	2,607	1,485	3,882	4,822
Year 2043								
Light Rail Transit	0	2,287	0	1,040	2,322	1,207	2,322	4,534
Bus	966	518	472	401	1,036	659	2,474	1,578
Total	966	2,805	472	1,441	3,358	1,866	4,796	6,112

Source: Hexagon 2018.

The mode split data for all trips in east San Jose and Milpitas are shown in Table 5.1-12. These data show that, with the proposed changes to the approved project, there would be a small decrease in “drive alone” and “carpool” mode share and a small increase in transit mode share in both 2023 and 2043 compared to 2017 (shown in Table 5.1-6).

Table 5.1-12 East San Jose/ Milpitas Trip Mode Split (Year 2023 and Year 2043)

Mode	Year 2023		Year 2043	
	No Project	With Project	No Project	With Project
Drive Alone	53.85%	53.82%	50.77%	50.73%
Carpool	35.53%	35.52%	34.05%	34.03%
Transit	3.17%	3.21%	5.84%	5.91%
Bike	1.21%	1.21%	1.59%	1.59%
Walk	6.25%	6.25%	7.74%	7.74%

Source: Hexagon 2018.

IMPACTS ON PEDESTRIANS AND BICYCLISTS, TRAVEL TIME, AND VEHICLE MILES TRAVELED

An overview of the potential impacts of the proposed changes to the approved project on pedestrians, bicyclists, travel time, and VMT is provided below.

- The proposed aerial guideway would result in fewer conflicts between light rail vehicles and school buses, bicyclists, and pedestrians.
- The proposed removal of the existing HOV lanes would result in higher average automobile delays and higher automobile travel times on Capitol Expressway.
- The proposed changes would not materially change the approved project’s construction impacts relative to the approved at-grade alignment. Long delays for traffic on Capitol Expressway would occur during construction. However, VTA would seek to minimize these delays to the greatest extent feasible and provide viable detour routes when appropriate.
- As with the approved project, it is anticipated that the proposed changes would reduce VMT by creating an enhanced transit service that would connect to the Bay Area Rapid Transit (BART) system. It is anticipated that the enhanced transit service would shift some automobile trips to transit. In addition, it is anticipated that the proposed reduction in roadway capacity on Capitol Expressway due to the removal of travel lanes would decrease automobile trips. Both of these effects of the proposed changes would generally reduce VMT.

IMPACTS DURING CONSTRUCTION

Construction-related traffic and equipment would be controlled by flagmen and subject to the procedures contained in a traffic management plan (TMP) prepared for the proposed changes to the approved project. Traffic that may attempt to use neighborhood streets to avoid construction areas would be confined by two characteristics of the existing roadway network adjacent to Capitol Expressway:

- First, there are no efficient, directly parallel detours around Capitol Expressway. However, some nearby arterials are capable of handling traffic diverted from Capitol Expressway: White Road, King Road, and US 101. Portable electronic variable message signs and other static signs would be strategically positioned at approaches of individual construction zones to warn motorists in advance of the construction and to direct traffic to use these alternative routes where feasible. Flagmen would be present at all major construction points to assist in the control of traffic and encourage the use of these roads as a detour.
- Second, there are very few paths of travel through neighborhood streets that offer parallel routes to Capitol Expressway. Therefore, neighborhood streets would be mostly protected from being used as cut-through streets by motorists.

Transit service on-time performance would be expected to drop during the construction period. Alternative bus stops would be located temporarily whenever existing bus stops are disrupted by construction.

Currently, bicyclists are able to use the shoulders of the project corridor. During construction of the proposed changes to the approved project, the shoulders of the project corridor would not be maintained to allow bicyclists to continue effective use of the corridor. Detour signs would be posted directing bicyclists to use alternative corridors during construction, where appropriate.

Several residential properties along the corridor would be affected by construction activities. During short periods of time, access may be restricted, and parking eliminated. VTA would coordinate the construction activities with the homeowners and tenants. Any adjustments to the construction schedule would be conveyed to the residents upon determination of the need to adjust the schedule. The construction duration and disruptions to residents would be kept to a minimum.

Several businesses along the corridor would be temporarily affected by construction. During short periods of time, access may be altered. However, overall access to the businesses would be maintained. Property owners and businesses would be notified in advance of construction and provided with a detailed construction schedule if their access would be restricted. Changes to the construction schedule would be conveyed as soon as possible. Construction duration would be kept to a minimum. Signs would be provided along Capitol Expressway indicating that the business is open during construction and that overall access is available.

Impact: The August 23, 2018 *Eastridge to BART Regional Connector: Capitol Expressway Light Rail Project Supplemental Transportation Analysis* indicates that the proposed lane reductions on Capitol Expressway during construction may cause study intersections to temporarily operate at LOS F, impacting passenger vehicles, buses, and trucks. The proposed changes to the approved project may also result in the temporary closures of bikeways, bus stops, and sidewalks in the corridor during construction. The duration, times, and locations of temporary closures during construction cannot be predicted with certainty.

The following impacts from the 2005 Final EIR would apply to the proposed changes to the approved project: TRN (CON)-1 (Long-Term Street or Lane Closure) and TRN (CON)-2 (Long-Term Loss of Parking or Access Essential for Business Operations).

Mitigation: The following mitigation measures identified in the 2005 Final EIR would still apply to the proposed changes to the approved project: TRN (CON)-2a (Prepare Traffic Management Plan), TRN (CON)-2b (Inform Public of Traffic Detours), and TRN (CON)-2c (Inform Public of Transit Service Changes).

During construction, VTA will prepare traffic handling plans, employ traffic flaggers, and endeavor to minimize peak hour delays to all users. However, such measures cannot guarantee that construction activities would not cause temporary significant impacts to passenger vehicles, buses, trucks, bikes, and pedestrians. There is no feasible mitigation for this impact and this impact would be “Significant and Unavoidable.” Based on the analysis above, the proposed changes to the approved project would result in new significant impacts or a substantial increase in the severity of previously identified significant transportation impacts during construction. With inclusion of these mitigation measures, the proposed changes to the approved project would result “Less than Significant” impacts related to parking during construction.

Significant and unavoidable impact. No feasible mitigation.