APPENDIX 3.2-C: TRAFFIC MITIGATION MEASURES SCREENING

1 INTRODUCTION

On February 5, 2021, the California High Speed Rail Authority (Authority) finalized "Decision-making Guidance for the Adoption of Traffic Mitigation Measures" (Authority 2021). This memorandum describes Senate Bill (SB) 743 and its effect on California Environmental Quality Act (CEQA) transportation analysis, describes National Environmental Policy Act (NEPA) requirements concerning the analysis of traffic effects and consideration of mitigation, and provides criteria for screening and selection of traffic mitigation. Five screening criteria were identified:

- The mitigation measure does not cause an increase in vehicle miles traveled (VMT).
- The measure would not contradict the objectives of SB 743.
- The measure is not more disruptive to the community than the traffic effect itself.
- The measure does not result in unmitigable secondary environmental effects.
- The California High-Speed Rail Authority (Authority) has determined the measure is practicable.

This appendix describes screening of traffic mitigation measures under consideration by the Authority as mitigation for traffic delays/congestion. A total of 44 potential site-specific traffic mitigation measures were reviewed in this screening analysis. Some of these measures would apply to all four project alternatives; some would only apply to one of the four alternatives. Eleven of the measures under consideration would not meet one or more of the screening criteria above, leaving 33 remaining measures which are included in Section 3.2, Transportation. The number of remaining measures varies by alternative, as discussed below.

2 SCREENING METHODOLOGY

The application and interpretation of the screening criteria are described below.

Increase in VMT

The Office of Planning and Research (OPR) (OPR 2018) has issued guidance in the evaluation of VMT, given its role in SB 743 implementation. The following is a description of project types that OPR indicates would generally lead to a measurable and substantial increase in vehicle travel/VMT.

- Addition of through lanes on existing or new highways, including general purpose lanes, high-occupancy vehicle (HOV) lanes, peak period lanes, auxiliary lanes, or lanes through grade-separated interchanges

OPR identifies a list of road projects, the most potentially relevant of which are listed below, that would not likely lead to a substantial or measurable increase in vehicle travel and therefore generally would not require an induced travel analysis.

- Addition of an auxiliary lane of less than 1 mile in length designed to improve roadway safety
- Addition of roadway capacity on local or collector streets provided the project also substantially improves conditions for pedestrians, cyclists, and, if applicable, transit
- Installation, removal, or reconfiguration of traffic control devices, including Transit Signal Priority (TSP) features
- Timing of signals to optimize vehicle, bicycle, or pedestrian flow
- Installation of traffic metering systems, detection systems, cameras, changeable message signs and other electronics designed to optimize vehicle, bicycle, or pedestrian flow
- Grade separation to separate vehicles from rail, transit, pedestrians, or bicycles or to replace a lane to separate preferential vehicles (e.g., HOV, HOT, or trucks) from general vehicles
- Installation of roundabouts or traffic circles
- Installation or reconfiguration of traffic calming devices
- Addition of new or enhanced bike or pedestrian facilities on existing streets/highways or within existing public rights-of-way

- Addition of Class I bike paths, trails, multi-use paths, or other off-road facilities that serve nonmotorized travel
- Rehabilitation, maintenance, replacement, safety, and repair projects designed to improve the condition of existing transportation assets

The National Center for Sustainable Transportation (NCST no date) provides an induced travel calculator that estimates the VMT induced annually because of adding vehicle travel lanes in any of California's urbanized counties. The annual induced VMT is calculated based on the facility type (freeway vs arterial), county location, and number of lane miles added.

In summary, the current mainstream view, articulated by OPR, is that mitigation measures that include signal timing modifications, installation of new traffic control devices, and/or turn lanes at intersections would not likely lead to a measurable increase in vehicle travel and VMT. Mitigation measures that add through lanes, either on freeway or arterial facilities, are likely to result in induced travel effects, particularly if the added travel lanes are through lanes of a mile or more in length.

While there are some differing opinions on this matter, the Authority has decided to rely on the written OPR guidance and follow the guidance of the state agency at the forefront of the consideration of VMT at this time.

Contradict the objectives of SB 743

The objectives of SB 743 are as follows:

- To promote the state's goals of reducing greenhouse gas (GHG) emissions and traffic-related air pollution,
- To promote the development of a multimodal transportation system,
- To provide clean, efficient access to destinations,
- To address the environmental impacts of traffic, such as noise, air pollution, and safety
- To balance congestion management with statewide goals related to infill development (diversity of land uses), promotion of public health through active transportation.

This screening evaluation considered a mitigation measure to not pass screening for the SB 743 criterion if it contradicted a SB 743 objective, as in it would make it more difficult to achieve the objectives due to some physical or operational hindrance.

- *GHG emissions and air pollution*: SB 743 identifies that reducing VMT will result in reducing GHG emissions and air pollution. Thus, a mitigation measure will be considered to contradict SB 743 if it substantially increases VMT. Since all the traffic mitigation measures will reduce traffic delay at intersections, if they do not substantially increase VMT, they would lower localized emissions (such as carbon monoxide) at congested intersections.
- *Multimodal transportation system*: Traffic mitigation measures, by definition, are addressing onroad vehicle congestion/delay, and onroad travel is dominated by private passenger vehicles. Thus, the primary beneficiary of traffic mitigation measures are private passenger vehicles, but bus transit will also benefit where transit crosses an intersection addressed by mitigation. None of the traffic mitigation measures under consideration would block or impede bus, rail, pedestrian, or bicycle modes of travel; they can all be designed to accommodate existing bike lanes, sidewalks, or bus stops. As such, they will not hinder the operation of a multi-modal system or block the completion of future multi-modal investments. As such, none of the measures currently under consideration are considered to contradict this objective.
- *Clean, efficient access to destinations*: Passenger cars are the dominant mode of travel in the project corridor. While there are plans to expand some transit systems (including the BART system and the potential increase of Caltrain service to Gilroy), the corridor between San Jose and Gilroy does not have efficient transit systems today, as reflected by the low mode share of transit in general. As a result, passenger vehicles are the most efficient mode of travel at present and likely for some time. As

to the "clean" criterion, transit modes are much cleaner on a passenger mile basis than personal vehicles, on average. However, none of the traffic mitigation measures under consideration would block or impede bus, rail, pedestrian, or bicycle modes of travel; as such, they will not hinder the operation of clean, efficient transit at present or block the development of such modes in the future. As such, none of the measures currently under consideration are considered to contradict this objective.

- *Noise, air pollution, and safety*: Air pollution was addressed in the first subcriteria above. SB 743 does not state that one of its purposes is to reduce noise or improve safety. Instead, it states that switching from level of service (LOS) to VMT does not relieve a lead agency from still addressing noise or safety associated with increases in traffic. As such, noise and safety have not been used as a SB 743 consistency criteria for this evaluation.
- *Infill development*: Traffic mitigation supports all development but is not targeted at infill especially. It is possible that traffic mitigation measures may help residents infill areas in downtown Gilroy and downtown San Jose, when they drive, to get in and out of their infill developments better. None of the traffic mitigation measures under consideration would block or otherwise impede infill development. As such, none of the measures currently under consideration are considered to contradict this objective.
- *Promotion of public health through active transportation:* Traffic mitigation measures do not promote active transportation such as biking or walking. However, all the traffic mitigation measures under consideration can be designed to accommodate existing bike lanes and sidewalks. As such, none of the measures currently under consideration are considered to contradict this objective.

More disruptive than the traffic effect itself

Evaluation under this criterion requires comparison of the effects of implementing a mitigation measure, which may include residential or business displacement, conversion of prime farmland or other effects, against the benefits of reducing traffic congestion/delay. This requires a comparison of different types of effects, which is not readily reduced to an objective quantitative comparison. As a result, there is inevitably some level of subjective judgement in completing screening against this criterion. Nevertheless, the evaluation of the mitigation measures regarding this criterion was conducted as follows:

- The traffic benefits of the measures were identified by identifying the highest traffic delay reduction during a peak period provided by the measure. The number of people exposed to the delay were identified by the PM peak total intersection volume.
- The secondary effects were identified by identifying first whether the measure could be completed in the existing road right-of-way or not. If it could not, then the effects of acquisition of right-of-way were evaluated by reviewing whether biological habitat, built environment historic sites, residences, business structures, important farmland, or publicly owned parks, recreational areas, or wildlife refuges were present. Operational effects considered included generation of VMT (which is also used as a proxy for operational air pollution, GHG emissions, and energy) and noise.
- Temporary effects during construction were not considered to be more disruptive than permanent traffic delays that are more than the adverse criteria used in the EIR/EIS.
- Permanent effects that could be resolved by mitigation were not considered to be more disruptive than permanent traffic delays that are more than the adverse criteria used in the EIR/EIS.
- Permanent effects that cannot be resolved by mitigation were considered to be more disruptive than permanent traffic delay effects that are less than 30 seconds.
- If the traffic delay reduction benefits are more than 30 seconds of intersection delay, this was considered to outweigh the identified permanent secondary effects identified in this evaluation.

Unmitigable secondary environmental effects

"Unmitigable" effects are defined in three different ways for this evaluation: (1) if the measure would result in a significant unavoidable impact under CEQA (such as conversion of prime farmland); (2) if the

measure would result in adverse effects that cannot be avoided under NEPA (such as operational noise) that would be considered adverse even after the adoption of other measures to reduce the secondary effects, and/or (3) if the measure would contribute to previously identified disproportionately high and adverse effects on minority populations or low-income populations.

The focus in this evaluation is on permanent effects, not temporary effects that may occur during the construction of site-specific traffic measures.

Payment for property acquisition and relocation assistance will be provided per state and federal requirements. Where there is adequate local availability for residential and/or commercial relocation within the same community, displacement is considered a “mitigable” effect. Where there is not adequate availability, displacement is considered an “unmitigable” effect.

Practicable

Practicability was defined in terms of technical, logistical, and financial feasibility. Logistical feasibility includes whether the measure is within the defined responsibilities and mission of the Authority.

3 SCREENING RESULTS BY CRITERION

The site-specific traffic mitigation measures under consideration are shown in Table 3.2-1, including identification of the location of impacts addressed, whether they are in an environmental justice community, a description of the measure, identification of which alternatives the mitigation applies to, the PM peak intersection traffic volumes, the traffic delay effects of the different alternatives, and the traffic benefits of the mitigation in terms of reduced delay.

The screening evaluation and results are summarized below. Table 3.2-2 presents the details of the evaluation including description of the secondary effects, whether additional right-of-way is required, whether the additional right-of-way acquisition would likely result in displacement of residences or businesses, whether the measure has additional effect on top of the project alternatives. Table 3.2-2 also identifies whether the measure would increase VMT, contradict the objectives of SB 743, have an unmitigable secondary effect, be more disruptive than the traffic effect, whether it would pass the four screening criteria. Table 3.2-2 also identifies whether the measure would reduce emergency vehicle response times (based on the analysis in Section 3.11, Safety and Security), but emergency vehicle response time was only considered in this evaluation if the traffic measure would reduce peak hour delays by more than 30 seconds (which is the adverse effect criteria used in Section 3.11).

Increase in VMT

Following OPR guidance, traffic measures improvements that do not include widening of roadways between crossing streets are not considered to result in a substantial increase in VMT. Three measures, one involving widening of U.S. Highway (US) 101 and two that would involve widening of Monterey Road, are considered to result in a substantial increase in VMT and would not meet this criterion.

Contradict the objectives of SB 743

Apart from the three mitigation measures that are considered to result in a substantial increase in VMT, none of the other measures are considered to contradict SB 743 objectives for the reasons discussed above in the discussion of methodology.

More disruptive to the community than the traffic effect itself

No biological habitat, built environment historic sites or publicly owned parks, recreational areas, or wildlife refuges were identified within the likely footprint of any of the traffic mitigation measures for intersection impacts. Some of the measures would include the acquisition of residential or commercial land, and some would likely result in displacement of residences or commercial businesses. Some of the displacements would occur in areas where relocation can occur within the same jurisdictions and some would not. Most of the traffic mitigation measures would occur within census districts where the percentage of minority persons or percentage of low-income persons is greater than the reference community (e.g., environmental justice communities) but a few would not.

Nine mitigation measures were identified as resulting in secondary effects that are more disruptive to the community than the traffic effect itself and thus would not meet this criterion. The secondary effects that outweighed the traffic benefits of the measures were the displacement of residences or businesses in an environmental justice community where there is insufficient availability to relocate them within the same local environmental justice community.

Unmitigable secondary environmental effects

Seven mitigation measures were identified as resulting in unmitigable secondary effects. These unmitigable effects included conversion of prime farmland/farmland of state importance and displacement of residential and/or commercial businesses where there is insufficient availability to relocate the residence or business within the same jurisdiction.

Practicability

Many of the measures are standard local intersection improvements and are considered practicable to implement. However, due to the substantial cost and high level of disruption and right-of-way needs, expanding US 101 and grade separations are not considered financially or institutionally practicable for implementation by the Authority given its defined responsibilities and mission.

4 OVERALL RESULTS AND RECOMMENDATIONS

Eleven out of 44 traffic mitigation measures would fail one or more of the first four of the screening criteria using the methodology described above, which would leave 33 remaining measures. These eleven measures are as follows:

Alternatives 1, 2, and 3:

- TR-MM#X.1: US 101 Corridor Mobility Improvements—Fair Share Contribution
- TR-MM#X.2: Coleman Avenue/Hedding Street—Widen and Reconfigure Eastbound Approach
- TR-MM#X.3: Coleman Avenue/Taylor Street—Widen and Reconfigure Southbound Approach
- TR-MM#X.4: Delmas Avenue/West San Fernando Street—Add Eastbound and Westbound Left Turn Lanes
- TR-MM#X.5: Autumn Street/West Fernando Street—Provide Eastbound and Westbound Left Turn Lanes
- TR-MM#X.6: Montgomery Street/Park Avenue: Reconfigure Northbound and Eastbound Approaches

Alternative 2 only:

- TR-MM#X.10: Monterey Road/Buena Vista Avenue

Alternative 4:

- TR-MM#X.7: Monterey Road/Masten Avenue
- TR-MM#X.8: Monterey Road/East Main Avenue—Widen and Reconfigure Westbound Approach
- TR MM #X.9: Depot Road/San Martin Avenue—Widen and Reconfigure Westbound Approach
- TR MM #X.11: Monterey Road/Leavesley Road —Widen and Reconfigure Eastbound Approach and Southbound Approach

The overall results of the screening are as follows (the remaining measures are shown in Table 3.2-2):

- Alternatives 1:
  - Total of 29 measures considered
  - 6 measures excluded
  - 23 measures remaining

- Alternative 2:
  - Total of 33 measures considered
  - 7 measures excluded
  - 26 measures remaining
- Alternative 3:
  - Total of 28 measures considered
  - 6 measures excluded
  - 22 measures remaining
- Alternative 4
  - Total of 17 measures considered
  - 5 measures excluded
  - 12 measures remaining

5 REFERENCES

California High-Speed Rail Authority (Authority). 2021. *Decision-making Guidance for the Adoption of Traffic Mitigation Measures*. Memorandum from Serge Stanich, Director of Environmental Services, to Mike McCormick, Gary Kennerley, Rick Simon, and Mark Chang, Strategic Delivery. February 5, 2021.

National Center for Sustainable Transportation (NCST). No Date. Induced Travel Calculator. https://ncst.ucdavis.edu/research-product/induced-travel-calculator (accessed April 29, 2021).

Office of Planning and Research, State of California (OPR). 2018. *Technical Advisory on Evaluating Transportation Impacts in CEQA*. December. https://opr.ca.gov/docs/20190122-743_Technical_Advisory.pdf (accessed April 29, 2021).

Table 3.2-1 Traffic Mitigation Measures Screening Evaluation, Part One

Mitigation Measure	Intersection(s)	Community	EJ Community?	Detail	Alt. 1	Alt. 2	Alt. 3	Alt. 4	Traffic Volume (PM peak)	Traffic Delay all Alts. (if same) or Alt. 1.	MM Benefit All Alts. (if same) or Alt. 1	Delay (person-hours/day)	Traffic Delay Alt. 2 (if diff)	MM Benefit Alt. 2 (if Diff)	Traffic Delay Alt. 4 (if diff)	MM Benefit Alt. 4 (if Diff)
TR-MM#1a: Monterey Road Construction Modifications	Monterey Road intersections in SSJ	South San Jose	Yes	Pre-time and coordinate signals, maintain channelized right turns, maintain right turns, restripe one left turn lane.	X	X	X		6,780	Not quantified	Maintenance of existing LOS	NA				
TR-MM#1b: The Alameda (SR 82)/Taylor Street–Naglee Avenue—Restripe Northbound Approach	D4	San Jose Diridon	Yes	Approach would be reconfigured to provide a left turn lane, two through lanes, and an exclusive right turn lane	X	X	X		6,512	9.6	-6.6	-24				
TR-MM#1c: Optimize Signal Coordination on West Santa Clara Street from Stockton Street to Autumn Street in San Jose	D13, D14, D15	San Jose Diridon	Yes	Modify the signal and optimize the signal timings and coordination for the traffic signals on West Santa Clara Street from Stockton Street to Autumn Street. This improvement includes the intersections of West Santa Clara Street with Stockton Street, Cahill Street Montgomery Street, and Autumn Street	X	X	X	X	3,696/3,673/ 5,468	4.3	-12.5	-26			23.5	NA
TR-MM#1d: Monterey Road/Capitol Expressway EB Ramps—Widen and Reconfigure	M2	South San Jose	Yes	Widen and reconfigure the Monterey Road/Capitol Expressway EB Ramps intersection. The specific improvements include lengthening the southbound left turn pocket on Monterey Road and construction of a second westbound right turn lane.	X	X	X		5,080	44.7	-77.9	-220	56.4	-88.6		
TR-MM#1e: Monterey Road/Chynoweth Avenue-Roeder Road—Widen and Reconfigure	M9	South San Jose	Yes	Widen and reconfigure the Monterey Road/Chynoweth Avenue-Roeder Road intersection. The specific improvements include widening the northbound Monterey Road approach to add an additional left turn pocket and a right turn pocket, modify the eastbound Chynoweth Avenue approach to provide one shared through-right and one left turn only lane and widen the westbound Roeder Road approach to provide for an additional left turn pocket.	X	X	X	X	6,800	18	-112.6	-425	32.4	-95.6		
TR-MM#1f: Monterey Road/Senter Road—Widen and Reconfigure Southbound Approach	M3	South San Jose	Yes	Widen the southbound Monterey Road approach to the Senter Road intersection to add an additional southbound left turn pocket. Modification to the project design in the median of Monterey Road	X	X	X		5,440	40.3	-117.6	-355				
TR-MM#1g: Monterey Road/Senter Road—Widen and Reconfigure Westbound Approach	M3	South San Jose	Yes	Widen the westbound Senter Road approach to the Monterey Road intersection to add an additional westbound right turn pocket	X	X	X		5,440	40.3	-117.6	-355	23.8	-134.4		

Mitigation Measure	Intersection(s)	Community	EJ Community?	Detail	Alt. 1	Alt. 2	Alt. 3	Alt. 4	Traffic Volume (PM peak)	Traffic Delay all Alts. (if same) or Alt. 1.	MM Benefit All Alts. (if same) or Alt. 1	Delay (person-hours/day)	Traffic Delay Alt. 2 (if diff)	MM Benefit Alt. 2 (if Diff)	Traffic Delay Alt. 4 (if diff)	MM Benefit Alt. 4 (if Diff)
TR-MM#1h: Monterey Road/Blossom Hill Westbound Ramps—Reconfigure Northbound Approach	M11, M23, M24	South San Jose	Yes	Modify/widen the northbound Monterey Road approach to the Blossom Hill Road westbound ramps intersection to provide an exclusive right turn lane. Remove northbound right turn lane. Modifications and improvements to the traffic signal at the Monterey Road/Blossom Hill Road westbound ramps intersection.	X	X	X		6,390/6,300/ 3,400	76.6	-78.8	145	42.6	-64.5		
TR-MM#1i: Monterey Road/Blossom Hill Road Eastbound Ramps—Widen and Reconfigure	M12	South San Jose	Yes	Widen and reconfigure the Monterey Road/Blossom Hill Road Eastbound Ramps intersection (mitigation for Alternatives 1 and 3). The specific improvements include prohibiting U-turns on the southbound Monterey Road approach and widening the westbound approach to add a right turn lane. Widen and reconfigure the Monterey Road/Blossom Hill Road eastbound ramps intersection (mitigation for Alternative 2). The specific improvements include widening the westbound approach to add a right turn lane and widening the southbound approach to add a left turn pocket.	X	X	X		5,480	103.4	-134	-408	77.8	-108.5		
TR-MM#1j: Senter Road/Hellyer Avenue—Restripe Westbound Approach	M30	South San Jose	Yes	Stripe the westbound Hellyer Avenue approach to the Senter Road intersection to add an additional westbound left turn pocket and one shared-through right lane and change the intersection's signal phasing.	X	X	X		2,200	NA	NA	NA				
TR-MM#1k: Houndshaven Way/Skyway Drive—Widen and Reconfigure	M5	South San Jose	Yes	Widen and reconfigure the Houndshaven Way/Skyway Drive intersection. The specific improvements include widening the eastbound Skyway Drive approach to provide two left turn pockets and a shared through-right turn lane and widening the westbound approach to provide one right turn pocket, one through lane, and one left turn pocket.	X	X	X		1,710	144.8	N/A	NA	144.8	-142.2		
TR MM #1l: Vistapark/Branham Lane—Reconfigure Southbound Approach	M32	South San Jose	No	Reconfigure the southbound Vistapark Drive approach to the Branham Lane intersection to add an additional southbound left turn pocket. This improvement would require modifications to the existing median, intersection restriping and modifications to the traffic signal.	X	X	X		4,020	13.6	-31.5	-70				

Mitigation Measure	Intersection(s)	Community	EJ Community?	Detail	Alt. 1	Alt. 2	Alt. 3	Alt. 4	Traffic Volume (PM peak)	Traffic Delay all Alts. (if same) or Alt. 1.	MM Benefit All Alts. (if same) or Alt. 1	Delay (person-hours/day)	Traffic Delay Alt. 2 (if diff)	MM Benefit Alt. 2 (if Diff)	Traffic Delay Alt. 4 (if diff)	MM Benefit Alt. 4 (if Diff)
TR MM#1m: Lean Avenue/Blossom Hill Road – Improve Signal Phasing	M37	South San Jose	Yes	Modify the traffic signal phasing on the northbound and southbound approaches to Blossom Hill Road to replace the existing split phasing with protected left turn phasing.	X	X	X		1,970	26.3	-29.9	-33				
TR MM#1n: Cottle Road/Poughkeepsie Road – Restripe Eastbound Approach	M40	South San Jose	Yes	Restripe the intersection's eastbound Poughkeepsie Road approach to the Cottle Road intersection to provide an exclusive right turn lane. This would be accomplished by modifying the existing shared through-right turn lane to be an exclusive right turn lane	X	X	X		3,820	31.2	-31.1	-66				
TR-MM#1o: Santa Teresa Boulevard/Bernal Road—Restripe Westbound Approach	M17	South San Jose	Yes	Restripe the westbound approach at the Santa Teresa Boulevard/Bernal Road intersection, modify the westbound Bernal Road approach to convert a through lane to a left turn lane, and changes to the intersection's signal phasing.	X	X	X		3,930	16.7	-35.4	-77	16.7	-35.4		
TR-MM#1p: Santa Teresa Boulevard/Bailey Avenue—Reconfigure	M18	South San Jose	Yes	Reconfigure the Santa Teresa Boulevard/Bailey Avenue intersection. The specific improvements include the removal of the northbound and southbound channelized right turn pockets and their conversion to shared through-right lanes. Modifications to the existing traffic signal system at the intersection.	X	X	X		4,790	53.5	-61.9	-165	-296501			
TR-MM#1q: Monterey Road/Tilton Avenue—Various Improvements	M46	Morgan Hill	Yes	The mitigation for Alternatives 1 and 3 is the addition of a second eastbound right turn lane. Would require the elimination of on-street parking on the north side of Tilton Avenue approaching the intersection and narrowing of the landscaping on the south side of the roadway. Modifications to the traffic and rail signal systems at the intersection would also be necessary. The mitigation for Alternative 4 is the interconnection of the Monterey Road/Tilton Avenue intersection with the Monterey Road/Burnett Avenue intersection.	X		X	X	4,120 (Alt. 1) / 1,480 (Alt. 4)	52.5	-69.1	-158			19.2	-23.2

Mitigation Measure	Intersection(s)	Community	EJ Community?	Detail	Alt. 1	Alt. 2	Alt. 3	Alt. 4	Traffic Volume (PM peak)	Traffic Delay all Alts. (if same) or Alt. 1.	MM Benefit All Alts. (if same) or Alt. 1	Delay (person-hours/day)	Traffic Delay Alt. 2 (if diff)	MM Benefit Alt. 2 (if Diff)	Traffic Delay Alt. 4 (if diff)	MM Benefit Alt. 4 (if Diff)
TR-MM#1r: Hale Avenue/Madrone Parkway—Signal at New Connection	M46	Morgan Hill	No	Alternative 2 alters the roadways and connections for Monterey Road/Tilton Avenue, and this intersection is replaced by a new connection at Hale Avenue/Madrone Parkway. The specific improvement as mitigation for Alternative 2 is the installation of a traffic signal at the new Hale Avenue/Madrone Parkway intersection.		X			2,370	114.5	-168.8	-222				
TR-MM#1s: Monterey Road/Madrone Parkway—Widen and Reconfigure	M47	Morgan Hill	Yes	Widen and reconfigure the Monterey Road/Madrone Parkway intersection. The specific improvements include reconfiguring the eastbound approach to include two right turn lanes and two left turn lanes and widening of the southbound approach to include a second southbound left turn lane		X			5,200	130.1	-101.4	-293				
TR MM #1t: Monterey Road/San Martin Avenue—Restripe Southbound Approach	MH6	San Martin	No	Restripe the southbound Monterey Road approach to provide additional capacity for the southbound left turn lane. This improvement would require the removal of the adjacent northbound left turn lane on Monterey Road into Burbank Avenue				X	490	12.1	NA	NA				
TR MM #1u: Monterey Road/IOOF Avenue—Widen and Reconfigure Southbound Approach	G25	Gilroy	Yes	Widen the southbound approach of Monterey Road to provide an additional southbound left pocket				X	3,458	126.7	-123.1	-236				
TR-MM#1v: Coordinate Signal Timings on 10th Street from Chestnut Street to Monterey Road in Gilroy	G36, G37, G38	Gilroy	Yes	Furnish and install signal interconnect equipment and coordinate all signals on 10th Street from Monterey Road to Chestnut Street. This improvement includes the intersections of 10th Street with Chestnut Street, Alexander Street, and Monterey Road	X	X			2,849/2,430/ 3,203	174.7	-170	-269	134.5	-130.5		
TR MM #1w: Chestnut Street/Luchessa Ave—Reconfigure Southbound Approach.	G60	Gilroy	Yes	Restripe the southbound approach of Chestnut Street to Luchessa Avenue to provide a southbound right pocket				X	2,804	27.3	-16.3	-25				
TR-MM#1x.1: Cahill Street/Stover-Crandall Street—Install Traffic Signal	D21	San Jose Diridon	Yes	Traffic signals	X	X	X	X	629	143	-167	-58			89.4	-92.6
TR-MM#1x.2: Montgomery Street/Stover-Crandall Street—Install Traffic Signal	D22	San Jose Diridon	Yes	Traffic signals				X	842	103.9	-167.1	-78				

Mitigation Measure	Intersection(s)	Community	EJ Community?	Detail	Alt. 1	Alt. 2	Alt. 3	Alt. 4	Traffic Volume (PM peak)	Traffic Delay all Alts. (if same) or Alt. 1.	MM Benefit All Alts. (if same) or Alt. 1	Delay (person-hours/day)	Traffic Delay Alt. 2 (if diff)	MM Benefit Alt. 2 (if Diff)	Traffic Delay Alt. 4 (if diff)	MM Benefit Alt. 4 (if Diff)
TR-MM#1x.3: Cahill Street/West San Fernando Street—Install Traffic Signal	D23	San Jose Diridon	Yes	Traffic signals	X	X	X	X	916	19.8	-38.2	-19			60.5	-61.1
TR-MM#1x.4: Houndshaven Way/Skyway Drive—Install Traffic Signal	M5	South San Jose	Yes	Traffic signals	X	X	X		770	144.8	NA	NA	144.8	-142.2		
TR-MM#1x.5: Hale Avenue/Tilton Avenue—Install Traffic Signal	M19	Morgan Hill	No	Traffic signals	X	X	X		2,230	74.6	-105.4	-131				
TR-MM#1x.6: East Main Avenue/Depot Street—Install Traffic Signal	MH11	Morgan Hill	Yes	Traffic signals				X	3,650	NA	-158.3	-321				
TR-MM#1x.7: Railroad Avenue/Tennant Avenue—Install Traffic Signal	MH2	Morgan Hill	Yes	Traffic signals		X			2,330	165.8	-161.2	-209				
TR-MM#1x.8: Llagas Road/San Martin Avenue—Install Traffic Signal	MH8	San Martin	No	Traffic signals		X			1,140	32	-55.6	-35				
TR-MM#1x.9: School Access/IOOF Avenue—Install Traffic Signal	G53	Gilroy	Yes	Traffic signals				X	2,198	40.1	-50.1	-61				
TR-MM#1x.10: SR 25/Bloomfield—Install Traffic Signal	GM4	Gilroy	Yes	Traffic signals	X	X	X	X	2,736	27	-52.8	-80			82.5	-130.2
TR-MM#X.1 US 101 Corridor Mobility Improvements—Fair Share Contribution	Freeway interchanges in South San Jose	South San Jose	Yes	Caltrans has identified future freeway widening and the construction of express lanes in the affected segments of US 101. These improvements would reduce the impact on freeway operations resulting from the project. While the improvements are included in the MTC RTP, they are not part of the implementation program funded for 2040. In concept, this measure would require the project to make a fair share contribution towards mobility improvements in the affected section of the highway corridor.	X	X	X		NA	NA	NA	NA				

Mitigation Measure	Intersection(s)	Community	EJ Community?	Detail	Alt. 1	Alt. 2	Alt. 3	Alt. 4	Traffic Volume (PM peak)	Traffic Delay all Alts. (if same) or Alt. 1.	MM Benefit All Alts. (if same) or Alt. 1	Delay (person-hours/day)	Traffic Delay Alt. 2 (if diff)	MM Benefit Alt. 2 (if Diff)	Traffic Delay Alt. 4 (if diff)	MM Benefit Alt. 4 (if Diff)
TR-MM#X.2: Coleman Avenue/Hedding Street—Widen and Reconfigure Eastbound Approach	D41	San Jose Diridon	Yes	Widen the eastbound Hedding Street approach to provide an additional left turn lane and an exclusive right turn lane, with the elimination of the existing channelized right turn. Modification to the traffic signal and removal of on-street parking on the south side of Hedding Street between Coleman Avenue and Chestnut Street.	X	X	X		8,720	6.8	-19.9	-96				
TR-MM#X.3: Coleman Avenue/Taylor Street—Widen and Reconfigure Southbound Approach	D42	San Jose Diridon	Yes	Widen the southbound Coleman Avenue approach to the Taylor Street intersection to include an exclusive right turn pocket and convert the existing shared through right to through-only lane. Modification to the traffic signal	X	X	X		8,218	5.3	-17.2	-79				
TR-MM#X.4: Delmas Avenue/West San Fernando Street—Add Eastbound and Westbound Left Turn Lanes	D44	San Jose Diridon	Yes	Modify the Delmas Avenue/West San Fernando Street intersection to provide exclusive eastbound and westbound (West San Fernando Street) left turn lanes. Modifications to the traffic signal at Delmas Avenue/West San Fernando Street intersection to accommodate the new movements and new protected phasing in the eastbound and westbound directions would also be necessary. Modifications to the adjacent VTA light rail crossing and signal system would be required.	X	X	X		1,543	13.7	-23.4	-20				
TR-MM#X.5: Autumn Street/West Fernando Street —Provide Eastbound and Westbound Left Turn Lanes	D25	San Jose Diridon	Yes	Modify the Autumn Street/West San Fernando Street intersection to provide exclusive eastbound and westbound (West San Fernando Street) left turn lanes and would apply to all project alternatives. This improvement would require the widening of West San Fernando Street and the acquisition of right-of-way from adjacent properties. Modifications to the traffic signal at Autumn Street/West San Fernando Street intersection to accommodate the new movements and new protected phasing in the eastbound and westbound directions would also be necessary.	X	X	X		3,246	8.5	NA	NA				

Mitigation Measure	Intersection(s)	Community	EJ Community?	Detail	Alt. 1	Alt. 2	Alt. 3	Alt. 4	Traffic Volume (PM peak)	Traffic Delay all Alts. (if same) or Alt. 1.	MM Benefit All Alts. (if same) or Alt. 1	Delay (person-hours/day)	Traffic Delay Alt. 2 (if diff)	MM Benefit Alt. 2 (if Diff)	Traffic Delay Alt. 4 (if diff)	MM Benefit Alt. 4 (if Diff)
TR-MM#X.6: Montgomery Street/Park Avenue: Reconfigure Northbound and Eastbound Approaches	D27	San Jose Diridon	Yes	Reconfigure the northbound and eastbound approaches to the intersection. This measure would reconfigure the northbound Montgomery Street approach to the Park Avenue intersection, removing the channelized right turn lane and restriping the northbound approach to provide two left turn pockets, one through lane and one shared through-right lane. This modification would also involve signal phasing changes, from the current north-south lead left phasing to a lead-lag phasing. This measure would also modify/restripe the eastbound lanes of Park Avenue at the Montgomery Street/Park Avenue intersection to provide two eastbound lanes on Park Avenue entering and departing the intersection. This measure would require the widening by restriping of the roadway to four lanes for 300 feet on either side of Montgomery Street, with standard transitions.	X	X	X		3,513	28.6	NA	NA				
TR-MM#X.7: Monterey Road/East Main Avenue—Widen and Reconfigure Westbound Approach	MH10	Morgan Hill	Yes	Widen the westbound East Main Avenue approach to provide an exclusive right turn lane and convert the shared through/right lane into a dedicated through lane. This improvement would require modification to the traffic signal, and the acquisition of right-of-way on the north side of East Main Street.				X	3,620	14.2	-78.3	-157				
TR MM #X.8: Depot Road/San Martin Avenue—Widen and Reconfigure Westbound Approach	MH7	San Martin	No	Widen the westbound San Martin Avenue approach to provide an additional westbound through lane. Removal of parking on the north side of San Martin Avenue				X	3,440	58.6	-73	-140				
TR-MM#X.9: Monterey Road/Masten Avenue	MH26	San Martin	No	Widen and reconfigure the Monterey Road/Masten Avenue intersection. The specific improvements include widening Masten Avenue to four lanes and widening Monterey Road to six lanes between Masten Avenue and Rucker Avenue.				X	1,170	53.6	NA	NA				
TR-MM#1l.10: Monterey Road/Buena Vista Avenue	G1	Gilroy	Yes	Widen and reconfigure the Monterey Road/Buena Vista Avenue intersection. The specific improvements include widening Monterey Road to six lanes between Buena Vista Avenue and Las Animas Avenue.		X			3,652	75.1	-75.5	-153				

Mitigation Measure	Intersection(s)	Community	EJ Community?	Detail	Alt. 1	Alt. 2	Alt. 3	Alt. 4	Traffic Volume (PM peak)	Traffic Delay all Alts. (if same) or Alt. 1.	MM Benefit All Alts. (if same) or Alt. 1	Delay (person-hours/day)	Traffic Delay Alt. 2 (if diff)	MM Benefit Alt. 2 (if Diff)	Traffic Delay Alt. 4 (if diff)	MM Benefit Alt. 4 (if Diff)
TR MM #X.11: Monterey Road/Leavesley Road — Widen and Reconfigure Eastbound Approach and Southbound Approach	G15	Gilroy	Yes	Widen the eastbound approach of Leavesley Avenue to provide a dedicated right turn pocket, and the southbound approach of Monterey Road to provide an additional southbound left pocket.				X	2,334	26.1	-14.9	-19				
TR-MM#X.12: Grade Separations	Multiple	San Jose, Morgan Hill, San Martin Gilroy	Yes	While grade separations are a technically feasible way to reduce traffic impacts at at-grade crossing locations, it is a highly expensive mitigation strategy and requires a collaborative approach of state, regional, and local agencies to fund and implement. The Authority would support future regional efforts for grade separation where acceptable to local communities and where federal, state, regional, and local funding can be obtained to fund these improvements.				X	NA	NA				NA	NA
					6	**7**	**6**	**5**								

Alt. = alternative
EB = eastbound
EJ = environmental justice
LOS = level of service
MM = mitigation measure
MTC = Metropolitan Transportation Commission
NA = not applicable
RTP = regional transportation plan
SR = State Route
SSJ = South San Jose
US = U.S. Highway
VTA = Santa Clara Valley Transportation Authority

Table 3.2-2 Traffic Mitigation Measures Screening Evaluation, Part Two

Mitigation Measure	Intersection(s)	Community	Alt. 1	Alt. 2	Alt. 3	Alt. 4	Secondary Effect	Additional ROW?	Displacement?	More effect?	C1: Increase VMT?	C2: Contradict objectives of SB 743?	C3: More Disruptive than Traffic Effect?	C4: Unmitigable Secondary Effect?	C5: Practicable?	Pass Screening?
TR-MM#1a: Monterey Road Construction Modifications	Monterey Road intersections in SSJ	South San Jose	X	X	X		The improvements would occur entirely in the existing rights-of-way and the project footprint of the project alternatives	No	No	No	No	No. See text discussion.	No	No	Yes	Yes
TR-MM#1b: The Alameda (SR 82)/Taylor Street–Naglee Avenue—Restripe Northbound Approach	D4	San Jose Diridon	X	X	X		Removing curb on-street parking for the block between West Taylor Street and Naglee Avenue on the east side of The Alameda.	No	No	Yes	No	No. See text discussion.	No	No	Yes	Yes
TR-MM#1c: Optimize Signal Coordination on West Santa Clara Street from Stockton Street to Autumn Street in San Jose	D13, D14, D15	San Jose Diridon	X	X	X	X	All work would be accomplished in the existing roadway right-of-way.	No	No	No	No	No. See text discussion.	No	No	Yes	Yes
TR-MM#1d: Monterey Road/Capitol Expressway EB Ramps—Widen and Reconfigure	M2	South San Jose	X	X	X		This improvement would be accommodated within the existing roadway right-of-way.	No	No	No	No	No. See text discussion.	No	No	Yes	Yes
TR-MM#1e: Monterey Road/Chynoweth Avenue-Roeder Road—Widen and Reconfigure	M9	South San Jose	X	X	X	X	Right-of-way would need be acquired in the northeast and southeast corners of intersection, which are occupied by commercial establishments (reconfigure two gas stations pumps)	Yes	Yes (gas pumps)	Yes	No	No. See text discussion.	No	No Gas pumps can be relocated.	Yes	Yes
TR-MM#1f: Monterey Road/Senter Road—Widen and Reconfigure Southbound Approach	M3	South San Jose	X	X	X		Acquisition of right-of-way from the northeast corner of the intersection, which is occupied by commercial establishments Acquisition on gas station property; possibly reconfiguration of pumps and building and parking lot	Yes	Yes (gas pumps)	Yes	No	No. See text discussion.	No	No Gas pumps can be relocated.	Yes	Yes
TR-MM#1g: Monterey Road/Senter Road—Widen and Reconfigure Westbound Approach	M3	South San Jose	X	X	X		Acquisition of additional right-of-way in the northeast corner of the intersection, Acquisition on gas station property; possibly reconfiguration of pumps and building	Yes	Yes (gas pumps)	Yes	No	No. See text discussion.	No	No Gas pumps can be relocated.	Yes	Yes
TR-MM#1h: Monterey Road/Blossom Hill Westbound Ramps—Reconfigure Northbound Approach	M11, M23, M24	South San Jose	X	X	X		All work would be accomplished in the existing roadway right-of-way.	No	No	No	No	No. See text discussion.	No	No	Yes	Yes

Mitigation Measure	Intersection(s)	Community	Alt. 1	Alt. 2	Alt. 3	Alt. 4	Secondary Effect	Additional ROW?	Displacement?	More effect?	C1: Increase VMT?	C2: Contradict objectives of SB 743?	C3: More Disruptive than Traffic Effect?	C4: Unmitigable Secondary Effect?	C5: Practicable?	Pass Screening?
TR-MM#1i: Monterey Road/Blossom Hill Road Eastbound Ramps—Widen and Reconfigure	M12	South San Jose	X	X	X		Acquisition of additional right-of-way from the northeast corner of the intersection would be necessary. This parcel is currently unoccupied (middle of the SE interchange loop is ornamental woodland). No additional to Alt. 2 (because the IC is rebuilt with Alt. 2).	Yes	No	Yes	No	No. See text discussion.	No	No	Yes	Yes
TR-MM#1j: Senter Road/Hellyer Avenue—Restripe Westbound Approach	M30	South San Jose	X	X	X		All work would be accomplished in the existing roadway right-of-way.	No	No	No	No	No. See text discussion.	No	No	Yes	Yes
TR-MM#1k: Houndshaven Way/Skyway Drive—Widen and Reconfigure	M5	South San Jose	X	X	X		This would require acquisition of additional right-of-way from the parcel east of Monterey Road that is north of Skyway Drive, which is being procured as part of the project, so no additional displacement beyond the project	Yes	No additional beyond that included in the project.	Yes	No	No. See text discussion.	No	No	Yes	Yes
TR MM #1l: Vistapark/Branham Lane—Reconfigure Southbound Approach	M32	South San Jose	X	X	X		All work would be accomplished in the existing roadway right-of-way.	No	No	No	No	No. See text discussion.	No	No	Yes	Yes
TR MM#1m: Lean Avenue/Blossom Hill Road – Improve Signal Phasing	M37	South San Jose	X	X	X		All work would be accomplished in the existing roadway right-of-way.	No	No	No	No	No. See text discussion.	No	No	Yes	Yes
TR MM#1n: Cottle Road/Poughkeepsie Road – Restripe Eastbound Approach	M40	South San Jose	X	X	X		All work would be accomplished in the existing roadway right-of-way.	No	No	No	No	No. See text discussion.	No	No	Yes	Yes
TR-MM#1o: Santa Teresa Boulevard/Bernal Road—Restripe Westbound Approach	M17	South San Jose	X	X	X		All work would be accomplished in the existing roadway right-of-way.	No	No	No	No	No. See text discussion.	No	No	Yes	Yes
TR-MM#1p: Santa Teresa Boulevard/Bailey Avenue—Reconfigure	M18	South San Jose	X	X	X		This improvement could be accomplished entirely in the existing right-of-way.	No	No	Yes	No	No. See text discussion.	No	No	Yes	Yes

Mitigation Measure	Intersection(s)	Community	Alt. 1	Alt. 2	Alt. 3	Alt. 4	Secondary Effect	Additional ROW?	Displacement?	More effect?	C1: Increase VMT?	C2: Contradict objectives of SB 743?	C3: More Disruptive than Traffic Effect?	C4: Unmitigable Secondary Effect?	C5: Practicable?	Pass Screening?
TR-MM#1q: Monterey Road/Tilton Avenue—Various Improvements	M46	Morgan Hill	X		X	X	Alternatives 1/3: Elimination of on-street parking on the north side of Tilton Avenue approaching the intersection and narrowing of the landscaping on the south side of the roadway (residential) Modifications to the traffic and rail signal systems at the intersection. Alternative 4 would be accomplished within the roadway right-of-way.	Yes (Alt. 1, 3)	No	Yes	No	No. See text discussion.	No	No	Yes	Yes
TR-MM#1r: Hale Avenue/Madrone Parkway—Signal at New Connection	M46	Morgan Hill		X			Would be accomplished within the roadway right-of-way.	No	No	No	No	No. See text discussion.	No	No	Yes	Yes
TR-MM#1s: Monterey Road/Madrone Parkway—Widen and Reconfigure	M47	Morgan Hill		X			Would require a modification to the Alternative 2 roadway design modifications at this location and would be accommodated within the Alternative 2 footprint and right-of-way	No	No	No	No	No. See text discussion.	No	No	Yes	Yes
TR MM #1t: Monterey Road/San Martin Avenue—Restripe Southbound Approach	MH6	San Martin				X	All work would be accomplished in the existing roadway right-of-way but would result in the removal of vehicle capacity at an adjacent intersection (Monterey/Burbank)	No	No	Yes	No	No. See text discussion.	No	No	Yes	Yes
TR MM #1u: Monterey Road/IOOF Avenue—Widen and Reconfigure Southbound Approach	G25	Gilroy				X	Removal of parking on the west side of Monterey Road.	No	No	Yes	No	No. See text discussion.	No	No	Yes	Yes
TR-MM#1v: Coordinate Signal Timings on 10th Street from Chestnut Street to Monterey Road in Gilroy	G36, G37, G38	Gilroy	X	X			All work would be accomplished in the existing roadway right-of-way.	No	No	No	No	No. See text discussion.	No	No	Yes	Yes
TR MM #1w: Chestnut Street/Luchessa Ave—Reconfigure Southbound Approach	G60	Gilroy				X	All work would be accomplished in the existing roadway right-of-way.	No	No	No	No	No. See text discussion.	No	No	Yes	Yes
TR-MM#1x.1: Cahill Street/Stover-Crandall Street—Install Traffic Signal	D21	San Jose Diridon	X	X	X	X	All work would be accomplished in the existing roadway right-of-way.	No	No	No	No	No. See text discussion.	No	No	Yes	Yes

Mitigation Measure	Intersection(s)	Community	Alt. 1	Alt. 2	Alt. 3	Alt. 4	Secondary Effect	Additional ROW?	Displacement?	More effect?	C1: Increase VMT?	C2: Contradict objectives of SB 743?	C3: More Disruptive than Traffic Effect?	C4: Unmitigable Secondary Effect?	C5: Practicable?	Pass Screening?
TR-MM#1x.2: Montgomery Street/Stover-Crandall Street—Install Traffic Signal	D22	San Jose Diridon				X	All work would be accomplished in the existing roadway right-of-way.	No	No	No	No	No. See text discussion.	No	No	Yes	Yes
TR-MM#1x.3: Cahill Street/West San Fernando Street—Install Traffic Signal	D23	San Jose Diridon	X	X	X	X	All work would be accomplished in the existing roadway right-of-way.	No	No	No	No	No. See text discussion.	No	No	Yes	Yes
TR-MM#1x.4: Houndshaven Way/Skyway Drive—Install Traffic Signal	M5	South San Jose	X	X	X		All work would be accomplished in the existing roadway right-of-way.	No	No	No	No	No. See text discussion.	No	No	Yes	Yes
TR-MM#1x.5: Hale Avenue/Tilton Avenue—Install Traffic Signal	M19	Morgan Hill	X	X	X		All work would be accomplished in the existing roadway right-of-way.	No	No	No	No	No. See text discussion.	No	No	Yes	Yes
TR-MM#1x.6: East Main Avenue/Depot Street—Install Traffic Signal	MH11	Morgan Hill				X	All work would be accomplished in the existing roadway right-of-way.	No	No	No	No	No. See text discussion.	No	No	Yes	Yes
TR-MM#1x.7: Railroad Avenue/Tennant Avenue—Install Traffic Signal	MH2	Morgan Hill		X			All work would be accomplished in the existing roadway right-of-way.	No	No	No	No	No. See text discussion.	No	No	Yes	Yes
TR-MM#1x.8: Llagas Road/San Martin Avenue—Install Traffic Signal	MH8	San Martin		X			All work would be accomplished in the existing roadway right-of-way.	No	No	No	No	No. See text discussion.	No	No	Yes	Yes
TR-MM#1x.9: School Access/IOOF Avenue—Install Traffic Signal	G53	Gilroy				X	All work would be accomplished in the existing roadway right-of-way.	No	No	No	No	No. See text discussion.	No	No	Yes	Yes
TR-MM#1x.10: SR 25/Bloomfield—Install Traffic Signal	GM4	Gilroy	X	X	X	X	All work would be accomplished in the existing roadway right-of-way but there would be removal of parking on the west side of Monterey Road.	No	No	No	No	No. See text discussion.	No	No	Yes	Yes
TR-MM#X.1 US 101 Corridor Mobility Improvements - Fair Share Contribution	Freeway interchanges in South San Jose	South San Jose	X	X	X		Widening of the freeway and adding new freeway capacity would likely result in a substantial increase in VMT. Widening could also result in acquisition of right-of-way and displacements, construction disruption, traffic noise effects, biological resource effects, and other effects.	Likely	Potentially	Yes	Yes	Yes	Yes Widening of US 101 may be necessary for other regional movement needs but would be disproportionate to the project's traffic effects.	Yes While not analyzed in any detail, large-scale freeway widening usually results in some unmitigable effects.	No It is outside the Authority's mission and authority to fund freeway expansion.	No

Mitigation Measure	Intersection(s)	Community	Alt. 1	Alt. 2	Alt. 3	Alt. 4	Secondary Effect	Additional ROW?	Displacement?	More effect?	C1: Increase VMT?	C2: Contradict objectives of SB 743?	C3: More Disruptive than Traffic Effect?	C4: Unmitigable Secondary Effect?	C5: Practicable?	Pass Screening?
TR-MM#X.2: Coleman Avenue/Hedding Street—Widen and Reconfigure Eastbound Approach	D41	San Jose Diridon	X	X	X		Removal of on-street parking on the south side of Hedding Street between Coleman Avenue and Chestnut Street, and the acquisition of right-of-way on the south side of Hedding Street. Displace commercial building SE corner of Coleman/Hedding and displacement of 3 residences up to 300' from intersection	Yes	Yes (3 residential and 1 commercial) There is available residential and commercial relocation in San Jose.	Yes	No	No. See text discussion.	Yes Although there is available relocation in San Jose, relocation may not occur within EJ community. Also traffic delay effect (7 to 20 seconds) is limited.	No Primary effect is displacement, but there is available relocation availability in San Jose in general.	Yes	No
TR-MM#X.3: Coleman Avenue/Taylor Street—Widen and Reconfigure Southbound Approach	D42	San Jose Diridon	X	X	X		Widening of Coleman Avenue, which would require the acquisition of adjacent property on the west side of Coleman Avenue occupied by commercial establishments. Acquisition of parking and one displacement of commercial building	Yes	Yes (commercial) There is available commercial relocation in San Jose.	Yes	No	No. See text discussion.	Yes Although there is available relocation in San Jose, relocation may not occur within EJ community. Also traffic delay effect (5 to 17 seconds) is limited.	No Primary effect is displacement, but there is available relocation availability in San Jose in general.	Yes	No
TR-MM#X.4: Delmas Avenue/West San Fernando Street—Add Eastbound and Westbound Left Turn Lanes	D44	San Jose Diridon	X	X	X		Acquisition of adjacent property and changes to the adjacent VTA light rail crossing and signal system. Residential (5-7) and commercial building (1) displacement 300 feet on either side of the intersection.	Yes	Yes (5-7 residential and 1 commercial) There is available residential and commercial relocation in San Jose.	Yes	No	No. See text discussion.	Yes Although there is available relocation in San Jose, relocation may not occur within EJ community. In addition, unavoidable temporary disruption to VTA during construction. Also traffic delay effect (14 to 23 seconds) is limited.	No There is available relocation availability in San Jose in general.	Yes	No
TR-MM#X.5: Autumn Street/West Fernando Street—Provide Eastbound and Westbound Left Turn Lanes	D25	San Jose Diridon	X	X	X		The City of San Jose has recently narrowed Autumn Street by one northbound through lane and bike improvements (including bike lanes) have been made and West San Fernando Street has also been narrowed to include bike lanes. As a result, this measure would require adding back the through lanes and removing the bike lanes (which would be inconsistent with the City's road diet intent for this location) or acquisition of substantial adjacent property, which would result in commercial and/or residential displacements	Yes	Yes	Yes	No	No. See text discussion.	Yes. Although there is available relocation in San Jose, relocation may not occur within EJ community. Inconsistent with current City circulation planning. Also traffic delay effect (8 seconds) is limited.	No There is available relocation availability in San Jose in general.	Yes	No

Mitigation Measure	Intersection(s)	Community	Alt. 1	Alt. 2	Alt. 3	Alt. 4	Secondary Effect	Additional ROW?	Displacement?	More effect?	C1: Increase VMT?	C2: Contradict objectives of SB 743?	C3: More Disruptive than Traffic Effect?	C4: Unmitigable Secondary Effect?	C5: Practicable?	Pass Screening?
TR-MM#X.6: Montgomery Street/Park Avenue: Reconfigure Northbound and Eastbound Approaches	D27	San Jose Diridon	X	X	X		The City of San Jose has recently made improvements to the Montgomery Street/Park Avenue intersection. Northbound Montgomery was narrowed by one through lane to add in bike improvements. As a result, this measure would require adding back the through lane and removing the bike lanes, which would be inconsistent with the City's road diet intent for this location, or acquisition of substantial adjacent property, which would result in commercial and/or residential displacements.	Yes	Yes	Yes	No	No. See text discussion.	Yes Although there is available relocation in San Jose, relocation may not occur within EJ community. Inconsistent with current City circulation planning Also traffic delay effect (28 seconds) is limited.	No There is available relocation availability in San Jose in general.	Yes	No
TR-MM#X.7: Monterey Road/East Main Avenue—Widen and Reconfigure Westbound Approach	MH10	Morgan Hill				X	Acquisition of right-of-way on the north side of East Main Street. This right-of-way is currently occupied by commercial establishments.	Yes	Yes (commercial) There is insufficient commercial relocation availability in Gilroy with Alt. 4.	Yes	No	No. See text discussion.	Yes Would result in commercial displacement within EJ community and there is insufficient relocation availability in Gilroy. Also traffic delay effect (14 seconds) is limited.	Yes Would result in commercial displacement and there is insufficient commercial relocation availability in Gilroy.	Yes	No
TR MM #X.8: Depot Road/San Martin Avenue—Widen and Reconfigure Westbound Approach	MH7	San Martin				X	Acquisition of right-of-way and removal of parking on the north side of San Martin Avenue. The parcel is currently occupied by a commercial establishment and 2-3 residences	Yes	Yes (commercial and 2-3 residences) There is insufficient commercial relocation availability in San Martin.	Yes	No	No. See text discussion.	No Would result in commercial displacement and there is insufficient commercial relocation availability in San Martin, but the traffic effect is substantial (59 seconds per move and 140 person hours/day) and the MM would completely avoid the delay.	Yes Would result in commercial displacement and there is insufficient commercial relocation availability in San Martin.	Yes	No

Mitigation Measure	Intersection(s)	Community	Alt. 1	Alt. 2	Alt. 3	Alt. 4	Secondary Effect	Additional ROW?	Displacement?	More effect?	C1: Increase VMT?	C2: Contradict objectives of SB 743?	C3: More Disruptive than Traffic Effect?	C4: Unmitigable Secondary Effect?	C5: Practicable?	Pass Screening?
TR-MM#X.9: Monterey Road/Masten Avenue	MH26	San Martin				X	Would require the procurement of additional right-of-way along the north side or south side of Masten Avenue and on the west side of Monterey Road between Masten and Ricker. Along Masten, the area within 300 feet of the intersection is prime farmland or farmland of state importance on the south and vacant land on the north side. The area west of Monterey Road is prime farmland	Yes	No	Yes	Yes (0.43 mile increase from 4 to 6 lanes)	Yes Probably would not induce VMT on its own, but it would widen 0.43 miles of Monterey Road which could contribute to cumulative VMT inducement.	No	Yes While the amount of generated VMT would be far smaller than the VMT reduction due to HSR, the project would convert prime farmland/ farmland of state importance.	Yes	No
TR-MM#1l.10: Monterey Road/Buena Vista Avenue	G1	Gilroy		X			Right-of-way would need to be acquired on both sides of Monterey Road between Buena Vista Avenue and Las Animas Avenue. These parcels are occupied by agricultural, commercial, or residential uses. Widening to the west would require acquisition of prime farmland and farmland of state importance, commercial land, and residential property and may displace a number of residences.	Yes	Yes (residential) There is insufficient residential relocation in Gilroy with Alt. 2.	Yes	Yes (0.9 mile increase 4 to 6 lanes)	Yes Roadway widening is adjacent to development and could induce VMT	No. Would result in residential displacement without available relocation locally but the traffic effect is substantial (75 seconds per move, and 153 hours delay per day) and the MM would completely avoid the delay.	Yes While the amount of generated VMT would be far smaller than the VMT reduction due to HSR, there is insufficient residential relocation availability in Gilroy with Alt. 2. Would also convert prime farmland/farmland of state importance.	Yes	No
TR MM #X.11: Monterey Road/Leavesley Road —Widen and Reconfigure Eastbound Approach and Southbound Approach	G15	Gilroy				X	Right-of-way acquisition on the northwest and southwest corners of the intersection. These parcels are occupied by commercial establishments.	Yes	Yes (commercial) There is insufficient commercial relocation availability in Gilroy with Alt. 4.	Yes	No	No. See text discussion.	Yes Would result in commercial displacement within EJ community and insufficient local relocation availability in Gilroy.	Yes Would result in commercial displacement and there is insufficient commercial relocation availability in Gilroy.	Yes	No

Mitigation Measure	Intersection(s)	Community	Alt. 1	Alt. 2	Alt. 3	Alt. 4	Secondary Effect	Additional ROW?	Displacement?	More effect?	C1: Increase VMT?	C2: Contradict objectives of SB 743?	C3: More Disruptive than Traffic Effect?	C4: Unmitigable Secondary Effect?	C5: Practicable?	Pass Screening?
TR-MM#X.12: Grade Separations	Multiple	San Jose, Morgan Hill, San Martin Gilroy				X	Grade separations, depending on location and design can have substantial secondary environmental impacts, including construction disruption to roadways and rail operations as well as construction noise and air pollution emissions, visual aesthetic changes, right-of-way acquisition, displacement of residential and commercial development, encroachment on public parks and open space, removal of trees and vegetation, and impacts on groundwater. However, it is speculative to ascribe specific impacts absent detailed location and designs.	Yes	Yes	Yes	No	No. See text discussion.	Yes Would result in residential and commercial displacements within EJ communities and there is insufficient local relocation availability in certain locations. Construction disruption would be extensive.	Yes Would result in residential and commercial displacements within EJ communities and there is insufficient local relocation availability in certain locations. Construction disruption would be extensive.	No. While the Authority supports a regional effort to identify funding and implement crossing improvements, the Authority cannot commit to a comprehensive program of grade separations to address all significantly affected intersections because of funding limitations without jeopardizing the implementation of the project.	No

Alt. = alternative
Authority = California High-Speed Rail Authority
EB = eastbound
EJ = environmental justice
HSR = high-speed rail
IC = interchange
MM = mitigation measure
ROW = right-of-way
SB = southbound
SE = southeast
SR = State Route
SSJ = South San Jose
US = U.S. Highway
VMT = vehicle miles traveled
VTA = Santa Clara Valley Transportation Authority