

Memorandum

To: CHAIR AND COMMISSIONERS

Date: June 15, 2010

From: BIMLA G. RHINEHART
Executive Director

File: Book Item 2.2c (24)
Action

Ref: **Final Supplemental Environmental Impact Report for the Capitol Expressway Light Rail Project (Resolution E-10-64)**

ISSUE: Should the Commission, as a Responsible Agency, accept the Final Supplemental Environmental Impact Report (FSEIR), Findings of Fact and Statement of Overriding Considerations for the Capitol Expressway Light Rail Project (project) in Santa Clara County and approve the project for future consideration of funding?

RECOMMENDATION: Staff recommends that the Commission accept the FSEIR, Findings of Fact and Statement of Overriding Considerations and approve the project for future consideration of funding.

BACKGROUND: The Santa Clara Valley Transportation Authority (SCVTA) is the CEQA lead agency for the project. The project is a 3.1 mile extension of light rail along Capitol Expressway in the City of San Jose from the existing Alum Rock Station to Eastridge Transit Center and ultimately to Nieman Boulevard. The project includes three new stations. To accommodate light rail with minimal right-of-way acquisition, the project will require removal of two HOV lanes from Capitol Expressway between Capitol Avenue and Quimby Road. Electrical transmission towers would also need to be relocated. In addition to extension of light rail service, the project will also incorporate attractive, urban design elements that include improved pedestrian and bicycle facilities, landscaping, and public art. These urban design elements will transform the corridor from an auto-oriented expressway to a landscaped multi-modal boulevard.

On May 5, 2005, the SCVTA Board of Directors (Board) approved the project, certified the Final Environmental Impact Report (FEIR) and adopted Findings, Facts in support of the Findings, a Statement of Overriding Considerations and a Mitigation Monitoring and Reporting Program. The FEIR identified impacts at three intersections that remain significant and unavoidable. However the SCVTA Board found that these significant and unavoidable impacts are outweighed by the benefits of the project.

The FSEIR was prepared to augment the previously certified FEIR to the extent necessary to address changed conditions and to examine environmental effects, mitigation measures, and design options. Changes to the approved project were proposed as a result of preliminary engineering in order to respond to agency comments, improve operations, minimize right-of-way

acquisition, and reduce environmental concerns and lower costs. The FSEIR determined that the project would have new significant and unavoidable impacts. Specifically, even with mitigation, impacts related to energy demand during peak periods; noise and vibration from operations at 11 residences; noise and vibration from construction; environmental justice due to the disproportionate affect to minority and low-income populations located along the corridor impacted by adverse noise and vibration impacts from operation and construction of the project; and cumulative effects on energy, vibration from operations and environmental justice when considered with past, present and reasonably foreseeable future projects remain significant and unavoidable. These impacts were not a result of the changes to the project, but of new information and new guidance on noise and vibration impact assessment. On August 2, 2007, the SCVTA Board approved the amendment to the project, certified the FSEIR and adopted Findings of Fact, a Statement of Overriding Considerations and a Mitigation Monitoring Reporting Program.

The project has two distinct phases. The first phase includes pedestrian and bus improvements. A revised addendum to the FSEIR was completed for this phase on June 14, 2010. The addendum was determined appropriate for the first phase since there will be no new significant environmental impacts not previously disclosed in the FSEIR nor substantial increases in the severity of any previously identified significant effects. The improvements in the first phase have independent utility and will not commit resources to or limit alternatives for the subsequent phase.

For project delivery purposes, SCVTA has divided the first phase into two segments. The first segment will construct pedestrian improvements and is estimated to cost \$18,537,000. Construction, estimated to begin in fiscal year 2010/11, is funded with STIP (\$16,000,000) and local (\$2,537,000) funds. The second segment, construction of the Eastridge Transit Center and bus improvements, is estimated to begin in fiscal year 2011/12, and is estimated to cost \$44,078,000. The cost of construction is funded with STIP (\$41,540,000) and local (\$2,538,000) funds.

The second phase of the project includes an extension of light rail along Capitol Expressway initially from the existing Alum Rock Station to Eastridge Transit Center and to Nieman Boulevard at a future date. This phase is estimated to begin in fiscal year 2014/15 and cost \$272,000,000. Federal and local funds are anticipated for funding of this phase.

On June 4, 2010 the SCVTA confirmed that the approved project is consistent with the scope of work programmed by the Commission and included in the Regional Transportation Plan.

Attachments

- Resolution E-10-64
- Statement of Overriding Considerations
- Project Location

CALIFORNIA TRANSPORTATION COMMISSION

Resolution for Consideration of Future Funding 04 – Santa Clara County Resolution E-10-64

- 1.1 **WHEREAS**, the Santa Clara Valley Transportation Authority (SCVTA) has completed a Final Supplemental Environmental Impact Report pursuant to the California Environmental Quality Act (CEQA) and the CEQA Guidelines for the Capitol Expressway Light Rail Project; and
- 1.2 **WHEREAS**, the SCVTA has certified that the Final Supplemental Environmental Impact Report has been completed pursuant to CEQA and the State CEQA Guidelines for its implementation; and
- 1.3 **WHEREAS**, the project will construct a 3.1 mile extension of light rail along Capitol Expressway in the City of San Jose from the existing Alum Rock Station to Eastridge Transit Center and ultimately to Nieman Boulevard and other improvements; and
- 1.4 **WHEREAS**, the California Transportation Commission, as a Responsible Agency, has considered the information contained in the Final Supplemental Environmental Impact Report; and
- 1.5 **WHEREAS**, Findings of Fact made pursuant to CEQA Guidelines indicate that specific unavoidable significant impacts related to three intersections, energy, noise and vibration, and environmental justice make it infeasible to avoid or fully mitigate to a less than significant level the effects associated with the project; and
- 1.6 **WHEREAS**, SCVTA completed a Revised Addendum to the FSEIR for pedestrian and bus improvements included in the first phase of the project and found no new significant environmental impacts not previously disclosed in the FSEIR nor substantial increases in the severity of previously identified significant effects; and
- 1.7 **WHEREAS**, the SCVTA adopted a Statement of Overriding Considerations for the project; and
- 1.8 **WHEREAS**, the SCVTA adopted a Mitigation Monitoring Reporting Program for the project; and
- 1.9 **WHEREAS**, the above significant effects are acceptable when balanced against the facts as set forth in the Statement of Overriding Considerations.
- 2.1 **NOW, THEREFORE, BE IT RESOLVED** that the California Transportation Commission does hereby accept the Final Supplemental Environmental Impact Report, Findings of Fact and Statement of Overriding Considerations and approve the above referenced project to allow for future consideration of funding.

3.1 CEQA Requirements

The California Environmental Quality Act (CEQA), Public Resources Code Section 21000 et seq., requires the lead agency to make written findings of project impacts whenever it decides to approve a project for which an EIR has been certified (Public Resources Code Section 21081). Regarding these findings, Section 15091 of the State CEQA Guidelines (Title 14, California Code of Regulations) states, in part:

- (a) No public agency shall approve or carry out a project for which an EIR has been certified which identifies one or more significant environmental effects of the project unless the public agency makes one or more written findings for each of those significant effects, accompanied by a brief explanation of the rationale for each finding. The possible findings are:
 - (1) Changes or alterations have been required in, or incorporated into, the project which avoid or substantially lessen the significant environmental effect as identified in the final EIR.
 - (2) Such changes or alterations are within the responsibility and jurisdiction of another public agency and not the agency making the finding. Such changes have been adopted by such other agency or can and should be adopted by such other agency.
 - (3) Specific economic, legal, social, technological, or other considerations, including provision of employment opportunities for highly trained workers, make infeasible the mitigation measures or project alternatives identified in the final EIR.
- (b) The findings required by subsection (a) shall be supported by substantial evidence in the record.

The “changes or alterations” referred to in the Guidelines may be mitigation measures, alternatives to the project, or changes to the project by the project proponent. The Draft Supplemental EIR and the 2005 FEIR for the Capitol Corridor Expressway identify mitigation measures that will reduce significant effects of the Project or mitigate other potential effects, which may not be, strictly speaking, environmental effects under CEQA. These mitigation

measures will be incorporated into the design of the Project. A Mitigation Monitoring and Reporting Plan will also be adopted by the VTA Board of Directors to ensure that the mitigation measures identified in the Draft Supplemental EIR, the 2005 FEIR, and in these Findings will be implemented.

The documents and other materials that constitute the record upon which VTA's decision and these findings are based can be reviewed at the following locations.

VTA Environmental Resource Planning
Building B
3331 North First Street
San Jose, CA 95134-1927

3.2 Findings Regarding Independent Review and Judgment

Each member of the VTA Board of Directors was provided a complete copy of the Draft Supplemental EIR and the 2005 FEIR for the Project. The VTA Board of Directors hereby finds that the Draft Supplemental EIR and 2005 FEIR reflect its independent judgment. The VTA Board of Directors also finds that the Board has independently reviewed and analyzed the Draft Supplemental EIR and 2005 FEIR prior to taking final action with respect to the Project.

3.3 Findings Regarding the Project

Having reviewed and considered the information contained in the Draft Supplemental EIR, the Findings, Facts in Support of Findings, Statement of Overriding Considerations, the Mitigation Monitoring and Reporting Plan, and the 2005 FEIR, the VTA Board of Directors finds that the Project, as described in the Draft Supplemental EIR, is an appropriate transit mode and alignment for the Project.

These findings identify new significant and unavoidable impacts and new less-than-significant impacts with mitigation resulting from the proposed changes to the approved Project identified in the Draft Supplemental EIR.

As discussed in Chapter 1 of these Findings, Facts in Support of Findings, and Statement of Overriding Considerations, the Recommended Light Rail Alternative (Project) did not include extending the light rail line beyond the tail track area at the proposed Nieman Boulevard Station. Because the 2005 Draft EIR also examined the corridor between Nieman Boulevard and SR 87, there are a number of impacts identified in the 2005 Draft EIR that are no longer pertinent to the Project.

The Project is an extension of the light rail line along the Capitol Expressway Corridor from north of the Capitol Avenue/Capitol Expressway intersection to Nieman Boulevard. Therefore, the following findings and supporting facts do

not address any of the impacts identified for the area between the terminus of the Project at Nieman Boulevard and SR 87. This includes (but is not limited to) the traffic impacts at the intersections of Capitol Expressway with Aborn Road, Silver Creek Road, Highway 101, McLaughlin Road, Senter Road, Monterey Highway (SR 82), and SR 87, as well as the biological impacts identified at Highway 101, Coyote Creek, and Canoas Creek in the 2005 Draft EIR. The revisions made to the Light Rail Alternative described in the 2005 Draft EIR by selection of the Project have avoided those impacts.

The traffic projections referenced in the following discussion are from the 2005 FEIR for the Project and *A Transportation Study for the Supplemental Environmental Impact Report* (October 2006).

3.3.1 Findings Regarding Significant and Unavoidable Effects

The VTA Board determines that, for the following significant effects, mitigation measures included in the Draft Supplemental EIR and the 2005 FEIR will lessen the effects but will not result in complete mitigation of the effects to a less-than-significant level. The findings reflect the VTA Board's decision to adopt the Project.

New Significant and Unavoidable Effects Identified in the Supplemental EIR

Energy—Increase Demand on Electricity Transmission Infrastructure

Significant Effect: Since the 2005 FEIR was approved, the slow to flat growth in the demand for electricity that occurred after the 2000 - 2001 energy crisis has changed. In addition to population and economic growth, higher-than-average summer temperatures and decreased consumer conservation efforts have increased electricity consumption in California. At the same time, the electricity generation and transmission network in California is under increasing strain to meet the growing demand, especially during peak periods. Peak period demand can be significantly higher than off-peak demand. The retirement of aging power plants, the slow pace of new plant construction, the limitations of the transmission network to supply surplus electricity from other regions, and inadequate infrastructure for the delivery and storage of natural gas, which provides 40% of the fuel for California's power plants, may affect the ability of California's energy infrastructure to generate and deliver electricity to where it is needed.

In general, the Project will have a beneficial effect on overall energy use by reducing vehicle miles traveled (VMT) and generating a relatively small increase in total electricity demand. However, information from the California Energy Commission seems to suggest that any project that will increase the demand for electricity will have a significant energy impact due to constraints on the

electrical transmission infrastructure, especially during peak periods. The Project would increase demand for electricity. Since forecasts indicate that existing and planned resources will not meet demand for electricity, surplus energy will need to be imported from other generators, particularly in the Southwest and Pacific Northwest. Due to the availability of imported energy from neighboring states, the impact of the Project on the electrical power generation system would not be significant. According to the 2005 Integrated Energy Policy Report, congestion and bottlenecks along the state's transmission lines has worsened causing serious disruptions in service, especially on hot summer days. Until the recommended improvements in transmission infrastructure are implemented, reliability cannot be assured. Since the Project will increase demand on the statewide electrical transmission grid, the impact will be significant and unavoidable (Impact E-9).

The Project would also contribute to cumulative impacts related to increased demand for electricity transmission infrastructure.

Findings: VTA hereby makes finding (a)(2), as described in Section 3.1 above, as required by Public Resources Code Section 21081, as stated in the CEQA Guidelines, Section 15091, with respect to the above identified effect.

Facts in Support of Findings

As evidenced by the California Energy Commission's 2005 Integrated Energy Policy Report, lack of available energy transmission infrastructure causes congestion and bottlenecks along the state's transmission lines thereby contributing to serious service disruptions, particularly during peak periods. Since the Project would increase demand for electricity from imported generators, the Project would need to rely on efficient transfer of energy sources from existing transmission infrastructure. However, this infrastructure is already insufficient in providing existing levels of transmission services. Improvements to this infrastructure are not under the jurisdiction of the VTA, and would need to be undertaken by the appropriate public agency with jurisdiction of the state's transmission infrastructure. Those agencies should adopt changes to their existing infrastructure to improve transmission of energy resources to the state. Therefore, there are no changes or alterations that can be incorporated into the Project, which would avoid or substantially lessen this significant environmental effect.

Environmental Justice—Result in Disproportionately High and Adverse Health or Environmental Effects on Minority and Low-Income Populations

Significant Effect: As discussed in Section 5.13, Noise and Vibration, and Section 5.18, Construction Impacts of the Supplemental EIR, there will be the following significant and unavoidable impacts: Vibration from light rail operations will have an adverse effect at 11 homes, which it may not be feasible or reasonable to mitigate with vibration dampening track construction materials or modifications to light rail operations. Noise and vibration from pile driving during construction will have adverse noise effects at 54 residences and 5 non-

residential buildings, and adverse vibration effects at 43 residences and 1 church. (Impact EJ-1)

The Project would contribute to cumulative impacts related to environmental justice.

Findings: VTA hereby makes finding (a)(3), as described in Section 3.1 above, as required by Public Resources Code Section 21081, as stated in the CEQA Guidelines, Section 15091, with respect to the above-identified effect.

Facts in Support of Findings

- As described in Mitigation Measures NV-1a, NV-1b, NV(Construction)1a-1f, NV(Construction)-2, NV(Construction)-3, and NV-4a—NV-4c below, while VTA will investigate methods to minimize these effects, it may not be feasible or reasonable given the local soil conditions and the existing technology to reduce these effects. Since these impacts would occur only within the corridor and since the study area population has a lower income per capita and higher percentage of minorities than the city as a whole, the Project will continue to have a significant and unavoidable environmental justice impact even with implementation of mitigation measures.
- The Project would continue to contribute to cumulative impacts related to environmental justice.

Noise and Vibration—Vibration Levels in Buildings from Transit Operations that Exceed Federal Transit Administration Criteria

Significant Effect: Detailed comparisons of existing and future vibration levels at adjacent properties along the corridor are presented in Table 5-7 of the Supplemental EIR (which is hereby incorporated by reference). The *Noise and Vibration Study for Supplemental Environmental Impact Review* identified 26 locations where vibration levels would exceed FTA's detailed analysis criteria (DAC) for nighttime. At 1 of these 26 locations, the FTA's DAC for daytime would also be exceeded. These locations are as follows: Seven properties are on both sides of S. Capitol Avenue between Lombard Avenue and Westboro Drive, and are adjacent to an embankment section. One property is on the east side of Capitol Avenue near Capitol Expressway and is located 30 feet from the aerial light rail structure. Eight properties are on the west side of Capitol Expressway along Brenford Drive between Sussex Drive and Murtha Drive, and are adjacent to an embankment section. Ten properties are on the west side of Capitol Expressway between Greenstone Court and Pinkstone Court, and are located less than 90 feet from the at-grade light rail alignment where train speeds are expected to reach 55 mph. Vibration levels that exceed the FTA's DAC are considered significant (Impact NV-4).

The Project would contribute to cumulative impacts related to vibration from operations.

Findings: VTA hereby makes finding (a)(3), as described in Section 3.1 above, as required by Public Resources Code Section 21081, as stated in the CEQA Guidelines, Section 15091, with respect to the above-identified effect

Facts in Support of Findings

- One mitigation measure that could potentially reduce or avoid vibration impacts was conducted during preliminary engineering, additional vibration and soil propagation testing as recommended in the 2005 FEIR. This testing confirmed that the local soil conditions are contributing to the vibration impact. In *the Noise and Vibration Study for the Supplemental Environmental Impact Review*, it is recommended that further tests, which combine the soil response (LSR) and the building vibration response (BVR), be conducted during Final Engineering to provide project-specific information on the potential local behaviors of buildings. This information could refine the analysis of the Project's effect on vibration. If the follow-up testing concludes that vibration levels would not exceed FTA's DAC, no further action would be required. If the follow-up testing confirms exceedences of the FTA's DAC, VTA will evaluate the feasibility of mitigation to reduce the severity of the impacts to a less than significant level.
- Another mitigation measure that could potentially avoid or reduce vibration impacts is the use of a 12-inch layer of tire-derived aggregate (TDA) beneath a subballast layer of 12 inches and a ballast layer of 12 inches thickness at the vibration-sensitive locations listed in Table 5-8. As shown in Table 5-7, TDA would be unable to reduce vibration at 12 locations where the frequency is below 16 Hz. TDA has been found to have little effect for vibration below 16 Hz. At 1 location (Sta. 13+90, NB) adjacent to the aerial structure, it may be possible to provide vibration isolation between the guideway and the support bent, similar to isolation designs that have been recommended for Automated People Mover systems. Increasing the foundation stiffness may also reduce ground vibration (e.g., using large diameter friction piles driven to a substantial depth). For the other 11 locations along the at-grade alignment, FTA's DAC are exceeded during the weekday nighttime hours of 6:00 am to 7:00 am when VTA is operating 3 - car trains at peak headways. It may be possible to reduce these impacts by incorporating the following vibration isolation systems into the trackbed:
 - Thicker TDA Layer: It is possible that increasing the thickness of the TDA layer to 18-inches or perhaps greater would improve the low frequency characteristics of the TDA layer. A finite element analysis or test measurement program will be considered during Final Engineering to evaluate how much additional vibration reduction could be achieved.
 - Floating Slab Trackbed: Floating slabs are ideal for reducing low frequency vibration components below 30 Hz. Because the vibration at these 11 properties along the at-grade alignment exceeds the DAC in the 10 Hz 1/3 octave band, a special floating slab similar to the BART system that uses a

very heavy design with a resonant frequency in the 5 to 10 Hz frequency range would be required. The disadvantage of this type of system is the expense. Typical double-tie floating slab system costs approximately \$600 per track foot.

- Further mitigation measures that could reduce or avoid significant impacts for the 11 locations where FTA's DAC for nighttime are exceeded, involve the following modifications to light rail operations between the hours of 6:00 am and 7:00 am, which would reduce the vibration levels below FTA's DAC.
 - Reduce train service from 3 - car to 1 - or 2 - car trains: This modification would reduce the vibration on the order of 1 to 2 dB, or 2 to 3 dB, respectively, in the 10 or 12.5 Hz 1/3-octave band.
 - Reduced speed: Reducing the speed from 55 mph to 45 mph would reduce the vibration by 1 to 2 dB, depending on local soil conditions.
- VTA will evaluate the reasonableness and feasibility of adopting additional vibration isolation or operational modifications to mitigate the significant vibration effects at the 11 locations along the at-grade alignment listed in Table 5-7. However, VTA is concerned that the costs of these mitigation measures may exceed the benefits, especially given VTA's experiences along its existing system. With the closest property located 64 feet from the nearest track, VTA is concerned that the assumptions used to calculate the future vibration levels may be overestimating the Project's effects.
- Because further noise and vibration evaluations will be required at the 26 locations where potentially significant impacts occur, and these evaluations may or may not result in implementation of further mitigation measures due to technical feasibility and financial costs, and because it is not known whether it will be feasible or reasonable for VTA to adopt additional mitigation measures for the 11 properties along the at-grade alignment where the FTA's DAC for nighttime are exceeded, this impact would remain potentially significant and unavoidable.
- The Project would continue to contribute to cumulative impacts related to operational vibration.

Noise and Vibration—Construction

NV-2 (Construction) Generation of Noise from Pile Driving that Substantially Affects Nearby Sensitive Receptors (LTS with Mitigation under 2005 FEIR)

Significant Effect: The *Noise and Vibration Study For the Supplemental Environmental Impact Review* evaluated the effect of pile driving on noise and vibration levels at sensitive receptors along the CELR corridor. Using FTA's construction noise criteria, there is the potential for significant construction noise

impacts at 54 residences and 5 non-residential buildings between Capitol Avenue and Story Road listed in Table 5-10 of the Supplemental EIR (which is hereby incorporated by reference) as a result of pile driving that will be necessary to place the columns for the aerial structure.

The Project would contribute to cumulative impacts resulting from construction-related noise.

Findings: VTA hereby makes finding (a)(3), as described in Section 3.1 above, as required by Public Resources Code Section 21081, as stated in the CEQA Guidelines, Section 15091, with respect to the above-identified effect.

Facts in Support of Findings

- As recommended by Mitigation Measure NV(Construction)-2 and in addition to the mitigation measures NV-1a through 1f described below for construction noise, VTA will develop a Construction Noise Mitigation Plan for pile driving during Final Engineering to minimize the noise level and duration using all reasonable and feasible means available. This plan will establish reasonable noise limits based on the type of equipment that will be used, consider creating incentives for the contractor to implement measures to reduce the noise level and duration where it exceeds FTA construction noise criteria by at least 5 dBA, develop a noise monitoring program for ensuring compliance with noise limits, and restrict nighttime pile driving where feasible.
- If the pile driving noise cannot be reduced below the FTA criteria and will exceed three days in duration, the plan will evaluate the need for establishing a daytime “quiet” place where affected residents and businesses can conduct quiet or work activities.
- Given the uncertainty of whether existing or new technologies will reduce noise from pile driving below FTA criteria and whether these technologies are feasible and reasonable, VTA has determined that this impact is potentially significant and unavoidable.
- The Project would continue to contribute to cumulative impacts resulting from construction-related noise.

NV-3 (Construction Generation of Vibration from Pile Driving that Substantially Affects Nearby Sensitive Receptors (LTS with Mitigation under 2005 FEIR))

Significant Effects: *The Noise and Vibration Study For the Supplemental Environmental Impact Review* evaluated the effect of pile driving on noise and vibration levels at sensitive receptors along the CELR corridor. Groundborne vibration is generally perceptible to people at much lower levels than is required to cause cosmetic or structural damage. While annoyance caused by vibration is a concern during construction, VTA considers damage to buildings as the primary criteria for a significant construction vibration impact. FTA’s criterion

for construction vibration damage is 0.2 PPV (in/sec) for the type of structures located adjacent to pile driving locations.

In Table 5-11 of the Supplemental EIR (which is hereby incorporated by reference), the location of potentially significant vibration impacts is identified. At 43 properties, there is the potential for cosmetic damage, such as cracks in the plaster or drywall, which can be repaired and do not affect the structural integrity of the building. At 1 property that is located 35 feet from a column for the aerial structure, there is the potential for structural damage.

The Project would contribute to cumulative impacts resulting from construction-related vibration.

Findings: VTA hereby makes finding (a)(3), as described in Section 3.1 above, as required by Public Resources Code Section 21081, as stated in the CEQA Guidelines, Section 15091, with respect to the above-identified effect.

Facts in Support of Findings

- As recommended by Mitigation Measure NV (Construction)—3 VTA will develop a Construction Vibration Mitigation Plan for pile driving to minimize vibration level and duration using all reasonable and feasible technologies available, such as soil-mix or non-impact methods. This plan will establish reasonable vibration limits based on the type of equipment that will be used, consider creating incentives for the contractor to implement measures to reduce the vibration level and duration where it exceeds FTA construction vibration damage criteria, develop a vibration monitoring program for ensuring compliance with vibration limits, and restrict nighttime pile driving where feasible. In addition, the plan will include a detailed building survey for cracks before and after pile driving at properties listed in Table 5-11. Any cracks attributed to pile driving will be repaired. If the damage is more extensive, VTA may determine that it is more cost-effective to acquire the property and relocate the residents than repair the damage, especially if the damage affects the structural integrity of the building. It is also possible that items on shelves or walls may move during pile driving. As a result, the plan will include assistance to residences and businesses for removing and replacing fragile items from shelves and walls before and after pile driving. The plan will also evaluate the need for providing lodging or establishing a daytime center for residents affected by construction vibration.
- Since it is possible that construction vibration levels will exceed the FTA criteria even with mitigation, VTA has determined that this impact is potentially significant and unavoidable.
- The Project would continue to contribute to cumulative impacts resulting from construction-related vibration.

Significant and Unavoidable Effects Identified in the 2005 FEIR that Remain Unchanged

Transportation—Traffic Impacts at Capitol Expressway Intersection with Story Road (2010)

Significant Effect: The Capitol Expressway/Story Road intersection currently operates at LOS F. Under the traffic conditions projected with the Project in 2010, the delay value and V/C ratio for the intersection in the AM and PM peak hours would exceed the thresholds for an intersection that already operates at LOS F, resulting in significant effects. Potential mitigation measures were identified as part of project alternatives that could minimize these significant effects on traffic; however, in implementing these mitigation measures, further significant impacts would occur. (Impact TRN-2a)

Findings: VTA hereby makes finding (a)(3), as described in Section 3.1 above, as required by Public Resources Code Section 21081, as stated in the CEQA Guidelines, Section 15091, with respect to the above-identified effect.

Facts in Support of Findings

- A potential mitigation measure would be to replace the existing HOV lanes removed as part of the Project with new HOV lanes between I-680 and Nieman Boulevard. Because the existing HOV lanes would be removed to provide space for the light rail trackway, approximately 11 additional feet of right-of-way would need to be acquired on both sides of Capitol Expressway. All four quadrants of the Story Road intersection would require right-of-way acquisitions that would result in displacements of commercial properties. This 8-lane alternative would result in 53 additional partial property acquisitions between Alum Rock and Eastridge, as compared to the Light Rail Alternative (45 residential, 5 commercial, 3 other), and 27 additional full parcel acquisitions (all residential) for a total of 80 additional parcels impacted. Retaining eight lanes would impact significantly more recreational and biologically sensitive property. It would also result in additional noise and vibration impacts because of the relocation of traffic lanes 11 feet closer to existing residential and park areas. It is therefore infeasible because of its increased environmental impacts and increased costs from acquisition.

Another potential mitigation measure would be to construct a grade separation, with Capitol Expressway depressed and traveling under Story Road. To implement this mitigation, three to four residential properties on the northwest side and seven to ten residences on the southwest side of the intersection would be displaced. The frontage roads on the northeast and southeast sides of the intersection would also be acquired to provide sufficient right-of-way, further impacting business and residential access.

In addition, this would affect the design of the light rail's grade-separated crossing of Story Road. The selected Light Rail Alternative provides for an

aerial alignment of the line at the Story Road station. Depressing Capitol Expressway would require an increased height for the aerial viaduct.

The cost of these additional acquisitions and project re-design make this potential mitigation measure infeasible. According to Table 7-3 in Volume I of the 2005 FEIR, it would cost an additional \$65 million for a tunnel under Story Road. (Note: This cost estimate has not been revised since the Final EIR was certified in May 2005. Based on increases in costs for labor and materials, the cost for a tunnel at Story Road has likely increased).

Transportation—Traffic Impacts at Capitol Expressway Intersection with Ocala Avenue (2010)

Significant Effect: The Capitol Expressway/Ocala Avenue intersection currently operates at LOS D. Under the traffic conditions projected with the Project in 2010, the LOS for the intersection would decline to LOS E in the PM peak hour, resulting in a significant effect. A potential mitigation measure was identified that could minimize the significant effects on traffic; however, implementing the mitigation measure would result in further significant noise impacts, physical disruption to adjoining residences, and increased acquisition costs. (Impact TRN-2b)

Findings: VTA hereby makes finding (a)(3), as described in Section 3.1 above, as required by Public Resources Code Section 21081, as stated in the CEQA Guidelines, Section 15091, with respect to the above-identified effect.

Facts in Support of Findings

- The potential mitigation measure would be to replace the existing HOV lanes removed as part of the Project with new HOV lanes. Because the existing HOV lanes would be removed to provide space for the light rail trackway, right-of-way would not be available for this mitigation and would need to be acquired from adjacent property. Retaining eight traffic lanes would require approximately 11 additional feet of right-of-way on both sides of Capitol Expressway. All four quadrants of the intersection would require right-of-way acquisitions that would result in displacements of residential and industrial properties. This 8-lane alternative would result in 53 additional partial property acquisitions (45 residential, 5 commercial, 3 other) between Alum Rock and Eastridge, as compared to the Light Rail Alternative, and 27 additional full parcel acquisitions (all residential) for a total of 80 additional parcels impacted. Retaining eight lanes would impact significantly more recreational and biologically sensitive property. It would also result in additional noise and vibration impacts because of the relocation of traffic lanes 11 feet closer to existing residential and park areas. It is therefore infeasible because of its increased environmental impacts and increased costs from acquisition.

Transportation—Traffic Impacts at Capitol Expressway Intersection with Story Road (2025)

Significant Effect: The Capitol Expressway/Story Road intersection currently operates at LOS F. Under projected traffic conditions with the Project in 2025, the delay value and V/C ratio for the intersection for the PM peak hour would exceed the thresholds for an intersection that already operates at LOS F, resulting in a significant effect. Potential mitigation measures were identified as part of project alternatives that could minimize these significant effects on traffic; however, in implementing these mitigation measures, further significant impacts would occur. (Impact TRN-8b)

Findings: VTA hereby makes finding (a)(3), as described in Section 3.1 above, as required by Public Resources Code Section 21081, as stated in the CEQA Guidelines, Section 15091, with respect to the above-identified effect.

Facts in Support of Findings

- A potential mitigation measure would be to replace the existing HOV lanes removed as part of the Project with new HOV lanes between I-680 and Nieman Boulevard. Because the existing HOV lanes would be removed to provide space for the light rail line, approximately 11 additional feet of right-of-way would need to be acquired on both sides of Capitol Expressway. All four quadrants of the Story Road intersection would require right-of-way acquisitions that would result in displacements of commercial properties. This 8-lane alternative would result in 53 additional partial property acquisitions between Alum Rock and Eastridge, as compared to the Light Rail Alternative (45 residential, 5 commercial, 3 other), and 27 additional full parcel acquisitions (all residential) for a total of 80 additional parcels impacted. Retaining eight lanes would impact significantly more recreational and biologically sensitive property. It would also result in additional noise and vibration impacts because of the relocation of traffic lanes 11 feet closer to existing residential and park areas. It is therefore infeasible because of its increased environmental impacts and increased costs from acquisition.
- Another potential mitigation measure would be to install a grade separation, with Capitol Expressway depressed and traveling under Story Road. To implement this mitigation, three to four residential properties on the northwest side and seven to ten residences on the southwest side of the intersection would be displaced. The frontage roads on the northeast and southeast sides of the intersection would also be acquired to provide sufficient right-of-way, further impacting business and residential access.

In addition, this would affect the design of the light rail's grade-separated crossing of Story Road. The selected Light Rail Alternative provides for an aerial alignment of the line at the Story Road station. Depressing Capitol Expressway would require an increased height for the aerial viaduct.

The cost of these additional acquisitions and project re-design make this

potential mitigation measure infeasible. According to Table 7-3 in Volume I of the 2005 FEIR, it would cost an additional \$65 million for a tunnel under Story Road. (Note: This cost estimate has not been revised since the Final EIR was certified in May 2005. Based on increases in costs for labor and materials, the cost for a tunnel at Story Road has likely increased).

Transportation—Traffic Impacts at Capitol Expressway Intersection with Ocala Avenue (2025)

Significant Effect: The Capitol Expressway/Ocala Avenue intersection currently operates at LOS D. Under traffic conditions projected with the Project in 2025, the LOS for the intersection in the AM peak hour would decline to LOS E, resulting in a significant effect. In the PM peak hour, the delay value and V/C ratio for the intersection would exceed the thresholds for an intersection that already operates at LOS E, resulting in a significant effect. A potential mitigation measure was identified that could minimize the significant effects on traffic; however, implementing the mitigation measure would result in further significant noise impacts, physical disruption to adjoining residences, and increased acquisition costs. (Impact TRN-8c)

Findings: VTA hereby makes finding (a)(3), as described in Section 3.1 above, as required by Public Resources Code Section 21081, as stated in the CEQA Guidelines, Section 15091, with respect to the above-identified effect.

Facts in Support of Findings

- A potential mitigation measure would be to replace the existing HOV lanes removed as part of the Project with new HOV lanes between I-680 and Nieman Boulevard. Because the existing HOV lanes would be removed to provide space for the light rail line, approximately 11 additional feet of right-of-way would need to be acquired on both sides of Capitol Expressway. All four quadrants of the Ocala Avenue intersection would require right-of-way acquisitions that would result in displacements of residential and industrial properties. This 8-lane alternative would result in 53 additional partial property acquisitions between Alum Rock and Eastridge, as compared to the Light Rail Alternative (45 residential, 5 commercial, 3 other), and 27 additional full parcel acquisitions (all residential) for a total of 80 additional parcels impacted. Retaining eight lanes would impact significantly more recreational and biologically sensitive property. It would also result in additional noise and vibration impacts because of the relocation of traffic lanes 11 feet closer to existing residential and park areas. It is therefore infeasible because of its increased environmental impacts and increased costs from acquisition.

Transportation—Traffic Impacts at Capitol Expressway Intersection with Quimby Road (2025)

Significant Effect: The Capitol Expressway/Quimby Road intersection currently operates at LOS E in the AM peak hour and LOS F in the PM peak

hour. In 2025, the LOS for the intersection in the AM peak hour is projected to decline to LOS F, resulting in a significant effect. In the PM peak hour, the delay value and V/C ratio for the intersection would exceed the thresholds for an intersection that already operates at LOS F, resulting in a significant effect. (Impact TRN-8e)

The Project would also contribute to a cumulative effect on traffic at this intersection.

Findings: VTA hereby makes finding (a)(3), as described in Section 3.1 above, as required by Public Resources Code Section 21081, as stated in the CEQA Guidelines, Section 15091, with respect to the above-identified effect.

Facts in Support of Findings

- A potential mitigation measure would be to replace the existing HOV lanes removed as part of the Project with new HOV lanes between I-680 and Nieman Boulevard. Because the existing HOV lanes would be removed to provide space for the light rail line, approximately 11 additional feet of right-of-way would need to be acquired on both sides of Capitol Expressway. All four quadrants of the Quimby Road intersection would require right-of-way acquisitions that would result in displacements of commercial properties. This 8-lane alternative would result in 53 additional partial property acquisitions between Alum Rock and Eastridge, as compared to the Light Rail Alternative (45 residential, 5 commercial, 3 other), and 27 additional full parcel acquisitions (all residential) for a total of 80 additional parcels impacted. Retaining eight lanes would impact significantly more recreational and biologically sensitive property. It would also result in additional noise and vibration impacts because of the relocation of traffic lanes 11 feet closer to existing residential and park areas. It is therefore infeasible because of its increased environmental impacts and increased costs from acquisition.

3.3.2 Findings Regarding Significant Effects Mitigated to Less-Than-Significant Levels

VTA has determined that, for the following effects, mitigation measures included in the Draft Supplemental EIR and the 2005 FEIR will mitigate the effects of the Project to a less-than-significant level.

New Significant Effects Mitigated to Less-Than-Significant Levels as Identified in the Supplemental EIR

Noise and Vibration—Noise Levels in Buildings from Transit Operations that Exceed Federal Transit Administration Criteria

Significant Effect: *The Noise and Vibration Study for Supplemental Environmental Impact Review* identified that there will be severe noise impacts at 8 properties and moderate noise impacts at 41 properties along the CELR

Section 4

Overriding Considerations

The 2005 FEIR and the Draft Supplemental EIR indicate that if the Project is implemented, certain significant environmental effects may be unavoidable. As required by the CEQA Guidelines Section 15093, the VTA Board of Directors finds that the unavoidable significant effects described in Section 3 of this document are acceptable because of the overriding considerations described below. These benefits of the Project outweigh its unavoidable environmental effects. The proposed design changes to the Project do not affect the following statements of fact in support of overriding considerations.

4.1 Statements of Fact in Support of Overriding Considerations

The Project is designed to improve public transit service in the Capitol Expressway Corridor. More specifically, the Project has several benefits including: 1) improve public transit service in the Corridor, 2) provide an attractive transit alternative, 3) enhance regional connectivity, 4) improve regional air quality, 5) improve mobility options, and 6) support local economic and land development goals. Specifically, the Project would:

- Improve public transit service in the Corridor

As discussed in the 2005 FEIR, the Project would reduce automobile trips and improve VTA transit ridership system-wide. The Project is estimated to have a daily ridership increase of 2,135 boardings in 2030 with the extension to the Eastridge Station.

- Provide an attractive transit alternative

As discussed in the FEIR, the Project would also provide travel time benefits compared to the automobile and bus modes of travel. In 2010, travel time for the Project from Alum Rock Station to Eastridge would range from 2.98 minutes faster than autos in the northbound AM peak direction to 4.3 minutes faster than autos in the southbound PM peak direction. In 2025, travel time benefits for the Project would increase from 5.3 minutes faster than autos in the northbound AM peak direction, to 5.7 minutes faster than autos for the southbound PM peak direction.

- Enhance regional connectivity

The Metropolitan Transportation Commission's Regional Transportation Plan (RTP) identifies priority transportation projects within the Bay Area. The Project, as well as other light rail extensions in VTA's 2000 Measure A Transit Program, are included in the RTP. Therefore, approval of the Project will enable the RTP to be implemented.

- Improve regional air quality

As identified in Tables 4.3-4, 4.3-5 and 4.3-6 of the 2005 FEIR, the Project would result in improved air quality in comparison to future projections without the Light Rail Project. Ridership projections indicate that transit ridership would increase both system-wide and within the Capitol Expressway Corridor under the Light Rail Project. Because light rail service would remove single-occupant-vehicle trips from the road, reduced emissions would result. Decreases in daily vehicle miles traveled would result along with associated reduced emissions of ROG, NO_x, and PM10.

- Improve mobility options

The Project supports the Major Investment Study (MIS) initiated in 1999 for the Downtown/East Valley study area. Specifically, the Project supports the five MIS goals; improve mobility, increase transit ridership, target the highest commute corridors, with emphasis on work trips and school trips, promote liveable neighborhoods; and engage community support.

VTA's Valley Transportation Plan 2020 (VTP 2020), adopted by the Board of Directors in 2000, included light rail along Capitol Expressway in its capital investment program. This program identified those specific transit projects that would be implemented during the 20-year time frame of VTP 2020, consistent with the "Measure A" ½ cent sales tax approved by Santa Clara County voters in November 2000. Accordingly, the Project will implement the Measure A Transit Program. In addition, VTP 2030, which was recently adopted in February 2005, and the 2000 Measure A Revenue and Expenditure Plan, which was adopted in June 2006, reaffirm VTA's commitment to the Capitol Expressway Light Rail Project.

- Support local economic and land development goals

The Project represents the incremental extension of the light rail line envisioned under the City of San Jose General Plan. Chapter 5 of the City of San Jose General Plan 2020 states that "[t]he Capitol Avenue/Expressway Corridor is structured around a future light rail line and would ultimately link large portions of eastern San José with Downtown and central San José." As further described in Chapter 5 of General Plan 2020, the City depends upon the construction and operation of this future light rail line to help relieve the traffic congestion anticipated to accompany additional development along this corridor.

The Project will enable the implementation of the following Transportation Policy of the City of San Jose General Plan 2020 by providing extended transit access to residents along the Capitol Expressway Corridor. It would serve

schools, a regional shopping facility (Eastridge Mall), libraries, and recreational facilities.

“Policy 11. The City should cooperate with the Santa Clara Valley Transportation Authority, the California Department of Transportation and other transportation agencies to achieve the following objectives for the County's public transit system:

- “Provide all segments of the City's population, including people with disabilities, elderly, youth and people who are economically disadvantaged, with adequate access to public transit. Public transit should be designed to be an attractive, convenient, dependable and safe alternative to the automobile.
- “Enhance transit service in major commute corridors, and provide convenient transfers between public transit systems and other modes of travel.
- “Develop an efficient and attractive public transit system which meets the travel demand at major activity centers, such as the Downtown, major employment centers, major regional commercial centers, government offices, and colleges and universities.
- “New development should be required to install indented curbs for bus pullouts, bus shelters and other transit-related public improvements, where appropriate.”

Capitol Expressway Light Rail Project Project Vicinity Map

