

Section 3.16 Visual Quality

Introduction

This section discusses existing conditions, effects and mitigation measures of the alternatives in regards to visual quality. The Federal Highway Administration’s “Visual Impact Assessment for Highway Projects” was used to evaluate impacts.

For the purposes of this analysis, the study area is considered the area from which elements of the proposed alternatives are visually prominent; generally an area that encompasses the entire Capitol Expressway Corridor and all areas located approximately 100 feet from edge of the right-of-way along the corridor.

This section includes photos and figures that originally were included in Section 4.18 of the 2005 FEIR and Section 5.17 of the 2007 FEIR. These photos and figures have been revised as appropriate. A summary of this information can be found in the Capitol Expressway Corridor Background Report, which is available from VTA Environmental Programs upon request.

Affected Environment

REGIONAL SETTING

The Capitol Expressway Corridor is located within San Jose, which is Santa Clara County. In general, this area is characterized by land that gently slopes toward San Francisco Bay from rounded and rolling grass-covered hills of the Diablo Range to the east. Seasonal changes are notable because of the natural grasslands turning green due to winter rainfall and becoming gold during the dry season. Background views include broad vistas of the hills to the east from a variety of locations along the corridor.

LOCAL SETTING

The topography of the study area is generally flat, but there are distant views of the valley hills in the background from any vantage point along Capitol Expressway (Figure 3.16-1). Most of the study area is developed, but creeks traverse or run adjacent to the corridor. Portions of the corridor contain vacant land interspersed between development.

The major land uses within the corridor are residential and commercial. Most of the corridor contains single-family and multifamily residential uses directly adjacent to the expressway. Commercial facilities such as shopping centers and small strip malls are interspersed through the corridor. Major development along the corridor includes Reid-Hillview Airport, Eastridge Mall, and the Eastridge Transit Center. Recreational uses include Lake Cunningham Park (Raging Waters Waterpark). However, these

uses are not necessarily accessible from Capitol Expressway. A detailed description of these features is provided below.

Environmental Consequences

This section describes the NEPA analysis relating to visual quality for the project. It describes the methods used to determine the project's effects and lists the factors used to conclude whether an effect would be adverse. Because evaluating visual effects is inherently subjective, federal and professional standards of visual assessment methodology have been used to determine potential effects on aesthetic values of the project area. Measures to mitigate adverse effects accompany each effect discussion.

APPROACH AND METHODS

Using the concepts and terminology, described at the beginning of this section, and criteria for determining effects, described above, analysis of the visual effects of the project are based on:

- direct field observation from select vantage points (conducted February 2010);
- a review of photographic documentation of key views of and from the project site and simulations provided in the 2007 SEIR (VTA 2007) and 2005 FEIR (VTA 2005);
- review of project construction drawings; and
- review of the project in regard to compliance with state and local ordinances, regulations, and professional standards pertaining to visual quality.

EFFECTS AND MITIGATION MEASURES

No-Build Alternative

The No-Build Alternative is not anticipated to result in any adverse visual quality effects.

Light Rail Alternative

A discussion of construction impacts related to visual quality (lighting as a result of construction activities) is included in Section 3.18 *Construction*.

Impact: **Substantial Alteration or Effect on a Scenic Vista**

Introduction of the light rail alignment would alter views of scenic vistas from the study area, particularly in areas where the alignment and/or stations are above grade (refer to Figure 3.16-2 which illustrates a visual simulation of the proposed project at Capitol Avenue). This would include aerial structures south of Alum Rock Station and Tully Road, and the two-level Story Road Station. However, existing vistas



View of Capitol Expressway and hills in the background.



View of Capitol Expressway, single-family residential in the foreground, and hills in the background.



Capitol Expressway near South Capitol Avenue Looking Northeast.



Visual simulation of proposed aerial trackway.

of the valley foothills of the Diablo Range (refer to Figure 3.16-1) are already impeded by existing study area development, including but not limited to soundwalls, commercial development, two-story residential development, and vegetation. The Light Rail Alternative would be an extension of the light rail alignment north of Alum Rock Station, and would be similar in character to existing transportation/transit already in the Capitol Expressway Corridor (e.g., Eastridge Transit Center). Furthermore, viewers that could be affected are limited to motorists (who are focusing on the road), pedestrians, commercial/retail operators and patrons, residents, and transit passengers. Views from the east side of Capitol Expressway Corridor would not be changed and views farther from the corridor would not likely be affected. Therefore, although the Light Rail Alternative would alter views of a scenic vista this is not considered an adverse effect.

No adverse effects. No mitigation required.

Impact: Damage Scenic Resources Along a State Scenic Highway

The Light Rail Alternative would be located along the Capitol Expressway Corridor between the Alum Rock Station and the Eastridge Transit Center. As previously stated, there are no state-designated scenic highways within the study area, therefore there would be no adverse effects related to this topic.

No adverse effects. No mitigation required.

Impact: Creation of a New Source of Substantial Light or Glare

Consistent with the rest of the VTA light rail system, implementation of the Light Rail Alternative would result in almost 24-hour operations. The proposed operations would require lighting to be provided at the proposed light rail stations and Park-and-Ride lots 24 hours per day. This lighting would slightly increase light and glare affecting residences in the Capitol Expressway Corridor. This would be considered an adverse effect. However, implementation of the following mitigation measure would minimize this effect.

Mitigation: VQ-1 – Incorporate Lighting Design Standards to Minimize Fugitive Light and Glare

VTA shall design lighting to illuminate designated areas only, to minimize intrusion onto adjoining land uses. VTA shall control potential light and glare by directing lighting associated with proposed Park-and-Ride facilities and stations onto the premises of each facility, and by ensuring that driveways providing access to parking areas are not directly opposite the windows of residential buildings. Lighting at

platform-only stations shall be at reduced levels during hours when the light rail is not running. This would reduce potential light or glare and would not result in an adverse effect. The following specific elements shall be incorporated into the project design.

- Luminaire placement should be the minimum allowable by VTA, and spacing should be the maximum allowable, for safety.
- Luminaires should be cutoff-type fixtures that cast low-angle illumination to minimize incidental spillover of light onto adjacent private properties. Fixtures that project upward or horizontally should not be used.
- Luminaires should be directed toward the facility and away from adjacent residences and open space areas.
- Luminaire lamps should provide good color rendering and natural light qualities. Low-pressure and high-pressure sodium fixtures that are not color-corrected should not be used.
- Luminaire intensity should be the minimum allowable for safety.
- Luminaire mountings should be downcast and the height of the poles minimized to reduce potential for backscatter into the nighttime sky and incidental spillover of light into adjacent private properties and open space.
- Luminaire mountings should have nonglare finishes.
- All project surfaces shall be designed and finished to reduce horizontal glare from the sun.

Impact: Degradation of Existing Visual Quality

Changes to the existing visual character of the Capitol Expressway Corridor would occur as a result of the Light Rail Alternative. These changes would include the construction of new station features such as shelters and platforms, and the placement of new trackway. Traction Power System and Substation (TPSS) structures (approximately 650-750 square feet in area and 12-15 feet in height) would be placed in two locations along the alignment, on the southwest corner of Capitol Expressway and Ocala Avenue, and at the Eastridge Transit Center. In most locations, perhaps the most noticeable visual feature of this alternative would be the presence of the Overhead Contact System (OCS) that supplies electrical power to light rail vehicles. Visual simulations of OCS are shown in Figure 3.16-2, Figure 3.16-3, Figure 3.16-4, and Figure 3.16-7). The following discussion describes representative viewpoints from selected locations in the corridor, their existing conditions, and how the proposed project would result in changes in visual quality.



Existing View of Capitol Avenue Looking South from Highwood Drive.



Visual Simulation of Aerial Guideway at Capitol Avenue Looking South from Highwood Drive.



Existing View of Capitol Avenue from Highwood Drive.



Visual Simulation of Aerial Guideway at Capitol Avenue from Highwood Drive.



Existing Aerial View of Story Road and Capitol Expressway.



Visual Simulation of Aerial View of Story Road and Capitol Expressway.



Existing View of Story Road Looking South.



Visual Simulation of Story Road Aerial Structure, Station, and Pedestrian Overcrossing.

Figure 3.16-6
Conceptual Viewpoint Simulation 5, Story Road



Existing View of Ocala Avenue Looking South.



Visual Simulation of Ocala Avenue At-Grade Crossing.

Capitol Avenue/Capitol Expressway to Ocala Avenue

Views in the Capitol Avenue/Capitol Expressway to Ocala Avenue area would be altered by introduction of the Light Rail Alternative aerial guideway in the median of Capitol Avenue and Capitol Expressway.

Viewpoint 1 – Capitol Expressway and Highwood Drive

The change in visual quality at this location is illustrated in Visual Simulations 2 and 3 in Figure 3.16-3 and Figure 3.16-4. The aerial guideway would add a large concrete structure and supporting trackway facilities, such as the overhead contact wire and catenary poles, into an urban setting that currently contains overhead power lines, street light poles, and traffic signals along an urban expressway. The aerial structure would be located approximately 38 feet above the ground level, but would be considerably lower than the existing overhead electrical towers in the area. With the OCS, the highest point on the structure would be 56 feet above ground level. The existing soundwall is shown in this simulation. This view would be most visible to residents adjacent to the light rail alignment in this location. Pedestrians, employees of businesses in the area, mobile viewers such as VTA bus transit passengers, automobile drivers, and bicyclists would have intermittent views of the new concrete structure as they pass by. The introduction of the aerial structure would affect the visual quality of this area by introducing an intrusive element into the viewshed at this location.

Viewpoint 2 – Capitol Expressway and Capitol Avenue

The change in visual quality at this location is illustrated in Visual Simulation 1 shown in Figure 3.16-2. At this location, the alignment is shown crossing northbound Capitol Expressway and would transition to the median of the roadway just south of this site. The proposed aerial structure is visible, as well as the existing soundwall, trees, and landscaping in the median. This view would be most visible to the residents adjacent to the light rail alignment in this location, pedestrians, and employees of businesses in the area. Mobile viewers such as VTA bus transit passengers, automobile drivers, and bicyclists would have intermittent views of the structure as they pass. The view of the roadway itself is enhanced by the urban parkway design of the streetscape.

Viewpoint 3 – Capitol Expressway and Story Road (South)

The change in visual quality in this location is illustrated in the visual simulations, in Figure 3.16-5 and Figure 3.16-6. The existing roadway

is the most dominant feature in this view. The proposed structure and landscaping would obstruct some existing long range views. Figure 3.16-6 illustrates ground level views, visible to pedestrians, motorists, and adjacent commercial/residential development, and shows the aerial structures, pedestrian overcrossings, and related facilities. Both of these simulations show the aerial light rail station and the pedestrian overcrossing at the southwest corner of the intersection. The most significant change in the area would be the introduction of the aerial structure and station access facilities.

Viewpoint 4 – Capitol Expressway and Story Road (North)

As described in Viewpoint 3, visual simulations in Figure 3.16-5 and Figure 3.16-6 illustrate that the most visible feature of the Light Rail Alternative is the pedestrian bridge to the mezzanine and the structure that houses the stairs. At this location, these features would be most visible to pedestrians along the corridor and residents of adjacent homes. Viewers traveling through the corridor such as VTA bus transit passengers, automobile drivers, and bicyclists would have intermittent views of these facilities as they pass. Although the aerial structure is intrusive, it is softened by the enhancement of the landscaping in this area.

Ocala Avenue to Tully Road

Views within the Ocala Avenue to Tully Road area would be altered by introduction of the Light Rail Alternative alignment in the median, the Story Road Station and the continuation of the alignment through Ocala and Cunningham Avenue.

Viewpoint 5 – Capitol Expressway and Ocala Avenue

The visual simulation in Figure 3.16-7 illustrates the change in visual quality at this location. Existing views include the roadway, electrical transmission towers, and Reid-Hillview Airport. The addition of landscaping in the median and along both sides of Capitol Expressway will soften existing views from the roadway and reduce the prominence of the light rail trackway, OCS poles, catenary wires, and station facilities. The replacement of the wide lattice electrical transmission tower with a tall narrow TSP will reduce its massive appearance. The substation building and wall will add a new structural element to the visual environment at this location.

Viewpoint 6 – Capitol Expressway and Tully Road

The visual simulation in Figure 3.16-8 illustrates the change in visual quality for views from this location. The existing view is dominated in



Existing View of Capitol Expressway North of Tully Road.



Visual Simulation of Relocated Transmission Facilities North of Tully Road.

the foreground by the roadway, ruderal habitat, electrical transmission towers, and the Reid-Hillview Airport to the west. In the background, there are distant views of the foothills that border the project area to the east. These views would be affected by moving the electrical transmission towers from the median to the east side of Capitol Expressway. The wide lattice towers would be replaced with tall, narrow TSP's that would be located at the toe of the slope east of Capitol Expressway. The TSP's could be as high as 110 feet, which is taller than the existing lattice towers. Views of the TSP's would be softened by the addition of landscaping in the median and along both sides of Capitol Expressway.

Tully Road to Quimby Road

Views within the Tully Road to Quimby Road area would be altered by introduction of the Light Rail Alternative corridor transitioning from the Capitol Expressway median to side-running at-grade into the Eastridge Transit Center.

Viewpoint 7 – Thompson Creek

Figure 3.16-9 shows a representative view of Thompson Creek. The existing views from this location are dominated by an existing shopping center (not shown in figures), Thompson Creek, Capitol Expressway, and the Eastridge Transit Center. Due to the increased proximity to Thompson Creek, poles will be more visible from homes on the east side of the Thompson Creek and from the future Thompson Creek Trail, which is planned for the east bank, as shown in Visual Simulation 8 (Figure 3.16-9).

Viewpoint 8 – Eastridge Transit Center

Figure 3.16-10 depicts representative views from the existing Eastridge Transit Center. In these views are the bus transfer facility, transit center roadways and signage, and background views of the valley foothills.

This figure also shows a simulation of an at-grade light rail station at the Eastridge Transit Center. In the ground-level foreground views of this option, the project proposes landscaping, lighting, and decorative paving elements. Scenic vista of the hills in the distant background would be partially obstructed by the trees in the landscaping, and the built structures which would represent the most significant change in this viewshed.

These changes would affect VTA bus transit commuters using the transit center, patrons of Eastridge Mall, roadway travelers,

pedestrians, and bicyclists. Views at this location could be similar to the views at the proposed Park-and-Ride lots along the alignment, where automobiles and transit centers would dominate the viewshed. The Light Rail Alternative includes substantial landscaping which would soften the project's effects to visual quality. Implementation of the following mitigation measures would further reduce potential impacts related to visual quality.

Mitigation: VQ-2 – Refine Project Design for Consistency Within the Community

VTA shall develop and implement a public involvement program regarding station design during the final design phase of the Light Rail Alternative.

Mitigation: VQ-3 – Implement Project Landscaping Plan, Implementing Best Management Practices

VTA shall develop and implement a comprehensive landscaping plan to soften the massing, hardscape, and structural elements of the Light Rail Alternative. The landscaping shall be designed to be consistent with vegetation types and patterns within the Capitol Expressway Corridor, and shall provide year-round aesthetic enhancement.

As part of this plan, VTA shall review project designs to ensure that the following elements are implemented in the Project landscaping plan to the extent feasible:

- 85 percent of the species composition of open space areas shall reflect species that are native to the Plan Area and California. The species list should include trees, shrubs, and an herbaceous understory of varying heights, as well as evergreen and deciduous types. Plant variety will increase diversity by providing multiple layers, seasonality, more diverse habitat, and reduced susceptibility to disease.
- 75 percent of the plant composition for landscaping in parks and public/quasi public and commercial areas shall be comprised of species that are native to the Plan Area and California. Use of native species promotes a visual character of California that is being lost through development and reliance on non-native ornamental plant species. Native plant species can be used to create attractive spaces, high in aesthetic quality, that are not only drought-tolerant but attract more wildlife than traditional landscape palettes.
- Under no circumstances will any invasive plant species be used at any location.



Existing Views of Thompson Creek.



Visual Simulation of Electrical Transmission Facilities Near Thompson Creek.



Existing Conditions - Eastridge Transit Center.



Visual simulation of Eastridge Station - "At Grade"

Figure 3.16-10
Conceptual Viewpoint Simulation 9, Eastridge Transit Center

- Vegetation shall be planted within the first year following project completion.
- An irrigation and maintenance program shall be implemented during the plant establishment period and carried on an as needed basis, such as in a drought, as supplemental irrigation.
- Irrigation in public and commercial areas shall utilize a smart watering system that evaluates the existing site conditions and plant material against weather conditions to avoid overwatering of such areas. The irrigation system will be managed in such a manner that any broken spray head, pipes, or other components of the system are fixed within 1 to 2 days, or the zone or system will be shut down until it can be fixed to avoid unusually high water flows.

CUMULATIVE EFFECTS

No-Build Alternative

The No-Build Alternative would not contribute to cumulative impacts on visual resources.

Light Rail Alternative

The Light Rail Alternative in combination with other reasonably foreseeable projects would potentially result in cumulative impacts on visual resources. However, implementation of Mitigation Measures VQ-1 through VQ-3 (also refer to Section 3.18 *Construction*, CON-13) would minimize the Light Rail Alternative's contribution to adverse cumulative visual resources impacts.

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