Alternatives Analysis Report

# **Appendix Q**

Visual Resources Technical Memorandum





#### TECHNICAL MEMORANDUM

# Visual Resources

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This technical memorandum provides analysis of the visual characteristics within the project study area, identify, and evaluate the existing visual settings, and provide a preliminary evaluation on the extent of impact on the visual setting. The Level I screening analysis evaluated 42 alternatives including 1 advanced technologies, 1 spot/local improvement, 7 bus rapid transit, 8 commuter and light rail, 11 freeway, and 13 highway alternatives along with the No Build alternative. The Level II screening analysis evaluated 12 alternatives (with 3 variations) including a TSM/TDM improvement, 3 bus rapid transit, 4 light rail transit, 4 freeway, and 2 highway alternatives along with the No Build conditions. All alternatives are discussed below in detail.

# Methodology

For the Level I Screening process, the methodology used to provide the analysis was the review of each Level I Alternative using Geographical Information System (GIS) analysis, specifically using the ArcGIS viewer software. This viewer allows for the collection of data from an aerial map of the study area with overlays of each Level I Alternative.

For the Level I analysis, the criteria used to analyze the visual intrusion into the communities was determined by whether the alternative had a feature or features that would be perceived by viewers located in the adjacent land uses to the alternative's alignment. If an alternative had an elevated feature(s), it would have the highest visibility perceived by viewers located in the adjacent land uses (represented in Table 1 by a number 1). If an alternative had at-grade feature(s), it would have a moderate visibility perceived by viewers located in the adjacent land uses (represented in Table 1 by a number 3) and if an alternative had a depressed feature(s), it would have the lowest visibility perceived by viewers located in the adjacent land uses (represented in Table 1 by a number 5).

For the Level II Screening effort the following steps were utilized to assess the visual intrusion:

- 1. Identify and review the overall project setting.
- 2. Identify and analyze existing visual resources.
- 3. Analyze the visual appearance of project alternatives.





- 4. Analyze the visual impacts of the project alternatives. -
  - a. A matrix was developed of potential effects based on standard Caltrans scenic evaluation criteria.
     The matrix also illustrates an estimated level of sensitivity the general public may have towards the change in visual context caused by the various alternatives.

The following resources were utilized to develop the Level II Screening.

- Alternative alignment data received from the SR-710 Study project team.
- City websites.
- Caltrans website.
- Los Angeles Conservancy website.
- Histories of the cities of the San Gabriel Valley accessed online.
- City General Plans accessed online.
- USGS Topographic maps.
- Google Maps
- Google Earth, with alternative alignments (kmz) overlay.
- LSA Associates GIS online dataset.
- Site visits driving the project alternative routes based on accessibility.

# **Regional Setting**

The general area for the project study includes the San Gabriel Mountains to the north, Santa Monica Mountains to the east, Montebello Hills and Puente Hills to the southeast, Los Angeles plain to the south, Santa Monica Mountains to the west, and Verdugo Mountains/San Rafael Hills to the northwest. The mountainous areas of the San Gabriel and Verdugo Mountains are relatively undeveloped and have extensive natural/native habitats along with non-native grassland areas. Griffith Park in the west has a large area of undeveloped native habitat.

The region has areas of pre-existing dense urban and suburban development (residential, commercial, and industrial), along with religious, educational, public institution, recreational park, various open space, rail, and transportation (streets and freeways) uses. The region also has a few significant river and stream courses (Los Angeles River, Arroyo Seco, Rio Hondo River) within the project study area.

# **Local Setting**

The local setting for visual resources would be different for each of the alternatives' alignment. Land uses adjacent to the alignments include single-family residential, multi-family residential, commercial, industrial, public buildings and facilities, local and regional parks that are typical of the dense urban and suburban setting of the study area. For local viewers, a depressed feature and an at-grade feature of an alternative would not be perceived as a change to the existing built environment, however, an elevated feature would be perceived as a change to the existing built environment. The visual character and/or intrusion for each alternative are discussed below. The alternatives proposed in the Level II Screening process includes routes through the cities of (listed alphabetically): Alhambra, Alta Dena, Arcadia, Baldwin Park, Duarte, East Los Angeles, El Monte, Glendale, Irwindale, La Cañada Flintridge, Los Angeles, Monrovia, Monterey Park, Pasadena, Rosemead, San Gabriel, San Marino, South El Monte, South Pasadena, and Temple City.

# Resources in Study Area

Within the Study Area, partial views of the San Gabriel Mountains and Verdugo Mountains can be seen from a variety of locations within the cities. Views of the significant river and stream courses can be seen from areas adjacent to them. The northern section of the project study area includes a portion of the Arroyo Seco Historic Parkway which is part of State Route 110 and was designated in 2002 by the National Scenic Byways Program (under jurisdiction of the U.S. Department of Transportation, Federal Highway Administration) as a historic byway based on its archeological, cultural, historic, natural, recreational and scenic qualities. The Arroyo Seco Historic Parkway is approximately 8 miles long and originates from U.S. Route 101 to Glenarm Street in Pasadena, California.

### **Potential Effects to Resources**

**No Build Alternative.** The No Build Alternative would have an at-grade visual character and would not be perceived as a change or visual intrusion into the community as represented by a number 3 rating.

**Transportation System Management/Travel Demand Management (TSM/TDM) Alternative.** The TSM/TDM Alternative would provide spot improvements, local street improvements, intelligent transportation systems (ITS) improvements, expanded transit service and add active transportation facilities (pedestrian and bicycle facilities).

A total of 42 local street and hot spot improvements (A1-EX through A41-EI and one unidentified alternative not labeled on the CAD files) were reviewed in the ArcGIS viewer.

For the TSM/TDM Alternative analysis, these alternatives would have an at-grade visual character and would not be perceived as a change or visual intrusion into the community as represented by a number 3 rating.

# **Bus Rapid Transit Alternatives**

- **BRT-1.** Alternative BRT-1 would have an at-grade visual character and would not be perceived as a change or visual intrusion into the community as represented by a number 3 rating.
- **BRT-2.** Alternative BRT-2 would have an at-grade visual character and would not be perceived as a change or visual intrusion into the community as represented by a number 3 rating.
- **BRT-3.** Alternative BRT-3 would have an at-grade visual character and would not be perceived as a change or visual intrusion into the community as represented by a number 3 rating.
- **BRT-4.** Alternative BRT-4 would have an at-grade visual character and would not be perceived as a change or visual intrusion into the community as represented by a number 3 rating.
- **BRT-5.** Alternative BRT-5 would have an at-grade visual character and would not be perceived as a change or visual intrusion into the community as represented by a number 3 rating.
- **BRT-6.** Alternative BRT-6 would have an at-grade visual character and would not be perceived as a change or visual intrusion into the community as represented by a number 3 rating.
- **BRT-7.** Alternative BRT-7 would have an at-grade visual character and would not be perceived as a change or visual intrusion into the community as represented by a number 3 rating.

#### **Light Rail Transit Alternatives**

**LRT-1.** Alternative LRT-1 would have an at-grade visual character and would not be perceived as a change or visual intrusion into the community as represented by a number 3 rating.

- **LRT-2.** Alternative LRT-2 would have an at-grade visual character and would not be perceived as a change or visual intrusion into the community as represented by a number 3 rating.
- **LRT-3.** Alternative LRT-3 would have an elevated feature(s) and the visual character would be perceived as a change or visual intrusion into the community as represented by a number 1 rating.
- **LRT-4.** Alternative LRT-4 would have an elevated feature(s) and the visual character would be perceived as a change or visual intrusion into the community as represented by a number 1 rating.
- **LRT-5.** Alternative LRT-5 would have an at-grade visual character and would not be perceived as a change or visual intrusion into the community as represented by a number 3 rating.

#### Commuter Rail Alternatives

- **CR-1.** Alternative CR-1 would have an at-grade visual character and would not be perceived as a change or visual intrusion into the community as represented by a number 3 rating.
- **CR-2.** Alternative CR-2 would have an at-grade visual character and would not be perceived as a change or visual intrusion into the community as represented by a number 3 rating.
- **CR-3.** Alternative CR-3 would have an at-grade visual character and would not be perceived as a change or visual intrusion into the community as represented by a number 3 rating.

### Freeway Alternatives

- **Freeway-1.** Alternative Freeway-1 would have a depressed feature and the visual character would be perceived as no change or visual intrusion into the community as represented by a number 5 rating.
- **Freeway-2.** Alternative Freeway-2 would have a depressed feature and the visual character would be perceived as no change or visual intrusion into the community as represented by a number 5 rating.
- **Freeway-3.** Alternative Freeway-3 would have a depressed feature and the visual character would be perceived as no change or visual intrusion into the community as represented by a number 5 rating.
- **Freeway-4.** Alternative Freeway-4 would have a depressed feature and the visual character would be perceived as no change or visual intrusion into the community as represented by a number 5 rating.
- **Freeway-5.** Alternative Freeway-5 would have a depressed feature and the visual character would be perceived as no change or visual intrusion into the community as represented by a number 5 rating.
- **Freeway-6.** Alternative Freeway -6 would have a depressed feature and the visual character would be perceived as no change or visual intrusion into the community as represented by a number 5 rating.
- **Freeway-7.** Alternative Freeway-7 would have a depressed feature and the visual character would be perceived as no change or visual intrusion into the community as represented by a number 5 rating.

**Freeway-8.** Alternative Freeway-8 would have a depressed feature and the visual character would be perceived as no change or visual intrusion into the community as represented by a number 5 rating.

**Freeway-9.** Alternative Freeway-9 would have a depressed feature and the visual character would be perceived as no change or visual intrusion into the community as represented by a number 5 rating.

**Freeway-10.** Alternative Freeway-10 would have a depressed feature and the visual character would be perceived as no change or visual intrusion into the community as represented by a number 5 rating.

**Freeway-11.** Alternative Freeway-11 would have an elevated feature and the visual character would be perceived as a change or visual intrusion into the community as represented by a number 1 rating.

### Highway/Arterial Alternatives

**Highway-1.** Alternative Highway-1 would have an at-grade visual character and would not be perceived as a change or visual intrusion into the community as represented by a number 3 rating.

**Highway-2.** Alternative Highway-2 would have an at-grade visual character and would not be perceived as a change or visual intrusion into the community as represented by a number 3 rating.

**Highway-3.** Alternative Highway-3 would have an at-grade visual character and would not be perceived as a change or visual intrusion into the community as represented by a number 3 rating.

**Highway-4.** Alternative Highway-4 would have an at-grade visual character and would not be perceived as a change or visual intrusion into the community as represented by a number 3 rating.

**Highway-5.** Alternative Highway-5 would have an at-grade visual character and would not be perceived as a change or visual intrusion into the community as represented by a number 3 rating.

**Highway-6.** Alternative Highway-6 would have an at-grade visual character and would not be perceived as a change or visual intrusion into the community as represented by a number 3 rating.

**Highway-7.** Alternative Highway-7 would have an at-grade visual character and would not be perceived as a change or visual intrusion into the community as represented by a number 3 rating.

**Highway-8.** Alternative Highway-8 would have an at-grade visual character and would not be perceived as a change or visual intrusion into the community as represented by a number 3 rating.

**Highway-9.** Alternative Highway-9 would have an at-grade visual character and would not be perceived as a change or visual intrusion into the community as represented by a number 3 rating.

**Highway-10.** Alternative Highway-10 would have an at-grade visual character and would not be perceived as a change or visual intrusion into the community as represented by a number 3 rating.

**Highway-11.** Alternative Highway-11 would have an at-grade visual character and would not be perceived as a change or visual intrusion into the community as represented by a number 3 rating.

**Highway-12.** Alternative Highway-12 would have an at-grade visual character and would not be perceived as a change or visual intrusion into the community as represented by a number 3 rating.

**Highway-13.** Alternative Highway-13 would have an at-grade visual character and would not be perceived as a change or visual intrusion into the community as represented by a number 3 rating.

# **Advanced Technology Alternative**

This alternative would have an at-grade visual character and would not be perceived as a change or visual intrusion into the community as represented by a number 3 rating.

# **Summary of Potential Effects to Visual Resources**

# Table 1: Summary of the Level I Potential Effects to Resources by Alternative

The following table provides the summary of the Level I analysis of potential effects to visual resources (visual intrusion) in the SR-710 Project Study Area.

As shown in Table 1, most of the Level I Alternatives (28 of the 42) have a moderate visibility to viewers located in the adjacent land uses, including the No Build Alternative. Alternatives LRT-3, LRT-4 and F-11 have the highest visibility to viewers located in the adjacent land uses because of the elevated features as part of these alternatives, and Freeway Alternatives F-1 through F-10 have the lowest visibility to viewers located in the adjacent land uses because of the depressed features of these alternatives.

TABLE 1
Level I Screening of SR-710 Project Alternatives
Effects to Visual Resources (Visual Intrusion)
by Alternative

Resources	1) No Build	2) TSM/ TDM	3) BRT-1	4) BRT-2	5) BRT-3	6) BRT-4	7) BRT-5	8) BRT-6	9) BRT-7	10) LRT-1	11) LRT-2	12) LRT-3	13) LRT-4	14) LRT-5	15) CR-1	16) CR-2	17) CR-3	18) F-1	19) F-2	- 1	21) 22 F-4 F-		-	25) F-8	26) F-9	27) F-10	28) F-11	29) H-1			32) 33) H-4 H-5	-	35) H-7	36) H-8	37) H-9	38) H-10	39) H-11	40) H-12	41) 42) H-13 Ad. Tech
Effects to Visual Resources affected by Alternative	3	3	3	3	3	3	3	3	3	3	3	1	1	3	3	3	3	5	5	5	5 5	5	5	5	5	5	1	3	3	3	3 3	3	3	3	3	3	3	3	3 3

Source: LSA Associates, Inc., March 2012.

Criteria Notes:

1 = Highest visibility of the alternative to adjacent land use- elevated feature

3 = Moderate visibility of the alternative to adjacent land use- at-grade feature

5 = Lowest visibility of the alternative to adjacent land use- depressed feature

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# **Potential Effects to Resources**

# **Level II Screening**

As stated above, the methodology utilized for the Level II Screening process included information collected from multiple websites, historic data and general plans, USGS topographic and internet maps, LSA GIS online dataset and site visits.

A number of parks, built features, drives, and miscellaneous major urban locations will potentially be impacted by one or more of the project alternatives. A number of these elements have been identified with the alternative that impacts them in the Visual Context matrix, Table 2, provided below.

#### No Build Alternative

The No Build Alternative would have an anticipated low change in overall visual character. The No Build Alternative has a visual intrusion rating of 1, which is a low impact.

# TSM/TDM Alternative

The refined Level II TSM/TDM alternative proposes expanded transit service consisting largely of ITS and other improvements, all of which would also have an anticipated low change in overall visual character. The TSM/TDM Alternatives have a visual intrusion rating of 1, which is a low impact.

### **Bus Rapid Transit Alternatives**

The following Bus Rapid Transit (BRT) alternatives were reviewed for Level II screening of the alternative's effects on the change in overall visual quality and/or character for the SR-710 Project Study Area.

#### BRT-1

Alternative BRT-1 would have a low noticeable change in physical characteristics due to this alternative consisting of modifications to Frequency, bus numbers, routing, and schedule. Alternative BRT-1 has a visual intrusion rating of 1, which is a low impact.

#### **BRT-6**

Alternative BRT-6 would have a low noticeable change in physical characteristics due to this alternative consisting of modifications to frequency, bus numbers, routing, and schedule. Alternative BRT-6 has a visual intrusion rating of 1, which is a low impact.

#### BRT-6a

Alternative BRT-6a would have a low noticeable change in physical characteristics due to this alternative consisting of modifications to frequency, bus numbers, routing, and schedule. Alternative BRT-6a consists of a different terminal loop in Pasadena. Alternative BRT-6a has a visual intrusion rating of 1, which is a low impact.

### **Light Rail Transit Alternatives**

The following Light Rail Transit (LRT) alternatives were reviewed for Level II screening of the alternative's effects on the change in overall visual quality and/or character for the SR-710 Project Study Area. Refer to the Visual Context Matrix, Table 2, for additional visual feature impact information.

# **TABLE 2: Visual Context**

	Alternative																
Major Urban Location	No Build	TSM/TDM	BRT-1	BRT-6	BRT-6A	LRT-4a	LRT-4b	LRT-4d	LRT-4 Maint. Facility	LRT-6	LRT-6 Maint. Facility	F-2	F-5	F-6	F-7	H-2	Н-6
Belvedere Park						Χ	Х	Х									
710 Mini Corridor (Floral to Hellman)						Χ	Х	Х				Х	Х	Х	Χ		
Monterey Park Golf Course																	
California State University, Los Angeles						Х	Х					Χ	Х	Χ	Χ		
Los Angeles County Public Works Building						Χ											
Fremont Avenue Corridor						Χ	Х	Χ				Χ	Х	Χ	Χ	Х	
Alhambra Pool								Χ									
Huntington Drive			Х	Х	Х												
Private School														Х	Х		
Huntington Hospital			Х	Х	Х									Χ	Χ		
Singer Park														Х	Χ		
High-Rise Office Park														Х	Χ		
South Arroyo													Х				
Pasadena City College				Х													
California Institute of Technology				Χ													
Transition Points	0	0	0	0	0	2	3	3	0	4	0	0	0	0	0	0	0

#### LRT-4a

This alternative includes aerial, at-grade, and bored tunnel segments, as well as a maintenance yard. Alternative LRT-4a would have a high impact on the overall visual quality of the existing environment due to a high number of physical changes to the existing site to accommodate the aerial segment of this alternative. The aerial segment is comprised of approximately the first 45 percent of the project originating at the south end of the project limit at the commercial center on 3<sup>rd</sup> Street and S. Mednik Avenue and ending approximately at Valley Boulevard where the tracks transition from aerial route to a bored tunnel route The introduction of an aerial segment would add a second story to the commercial center greatly changing the visual as well as the architectural character of the center. Alternative LRT-4a has a visual intrusion rating of 3, which is a high impact.

#### LRT-4b

This alternative includes aerial, at-grade, excavated and bored tunnel segments, as well as a maintenance yard. Alternative LRT-4b would have a high impact on the overall visual quality of the existing environment due to a high number of physical changes to the existing site to accommodate this alternative. Visual impacts begin with the introduction of the aerial station over the commercial center at 3<sup>rd</sup> Street and S. Mednik Avenue changing the architectural and visual character of the center. Continuing northbound along the project route, the elevated route continues to impact the visual quality northbound across from Belvedere Park, along various locations of the route at Floral Drive, and at the crossing of the Interstate 710 freeway. The route crosses the Interstate 710 and then continues to parallel the Interstate 710 freeway along the natural hillside, greatly changing the hillside's natural character. An additional key area of visual impact is at Cal State Los Angeles. The overall visual impact increases further north at the grade portion of the route on Fremont Avenue. Alternative LRT-4b has a visual intrusion rating of 3, which is a high impact.

#### LRT-4d

This alternative includes aerial, at grade, and cut and cover segments. Alternative LRT-4a would have a high impact on the overall visual quality of the existing environment due to a high number of physical changes to the existing site to accommodate this alternative. Visual impacts begin with the introduction of the aerial station over the commercial center at 3<sup>rd</sup> Street and S. Mednik Avenue changing the architectural and visual character of the center. Continuing northbound along the project route, the elevated route continues to impact the visual quality northbound across from Belvedere Park, along various locations of the route at Floral Drive, and at the crossing of the Interstate 710 freeway. The route crosses Interstate 710 and then continues to parallel Interstate 710 along the natural hillside, greatly changing the hillside's natural character. An additional key area of visual impact is at Cal State Los Angeles. The overall visual impact increases further north at the grade portion of the route on Fremont Avenue. Alternative LRT-4d has a visual intrusion rating of 3, which is a high impact.

#### LRT-6

This alternative includes aerial and at grade segments. Alternative LRT-6 would have a high impact on the overall visual quality of the existing environment due to a high number of physical changes to the existing site to accommodate this alternative. Beginning south of the State Route 60 freeway and proceeding north along Atlantic Boulevard the aerial segment will greatly impact the visual character of the area by the addition of the raised segment. Additional areas of high visual impact are along Atlantic Boulevard just past the college where the segment drops down to grade, and further north where the segment alternates from at grade to aerial segments. Alternative LRT-6 has a visual intrusion rating of 3, which is a high impact.

# **Freeway Alternatives**

The following Freeway (F) alternatives were reviewed for Level II screening of the alternative's effects on the change in overall visual quality and/or character for the SR-710 Project Study Area. Refer to the Visual Context Matrix, Table 2, for additional visual feature impact information.

#### F-2

This alternative includes aerial, at grade, bored tunnel, and cut and cover tunnel segments. Alternative F-2 would have an impact on the overall visual quality of the existing environment at several locations. Beginning at the southernmost cut and cover segment, then again, north on the segment at the second cut and cover segment where a residential hillside neighborhood will be disturbed for approximately 700 linear feet wide and 3,000 linear feet long section. Continuing further north, the segment transitions from a cut and cover segment to an aerial segment and then meets the grade and ties into the Glendale freeway which is part of State Route 2. The aerial segment crosses Eagle Rock Boulevard and will impact the visual quality of the area. Alternative F-2 could potentially affect 750 linear feet of Arroyo Seco Historic Parkway (State Route 110). Alternative F-2 has a visual intrusion rating of 2, which is a moderate impact.

#### F-5

This alternative includes at grade, a bored tunnel, and cut and cover tunnel segments. Alternative F-5 would have a high impact on the overall visual quality of the existing environment due to physical changes to the existing site to accommodate this alternative. Beginning at the south end of this alternative it would have a high impact approximately 1,300 linear feet both north and south of W Valley Boulevard and then further impacts the visual quality at the next segment to the north where there is a transition from cut and cover tunnel to a bored tunnel segment. Further northwest, approximately 3,000 linear feet from San Pasqual Avenue, the bored tunnel segment transitions to a cut and cover tunnel for approximately 1,000 linear feet The transition will impact an existing residential neighborhood. This impact will continue north, at grade, through the neighborhood until this alternative ties into the State Route 134 freeway. Alternative F-5 could potentially affect 300 linear feet of Arroyo Seco Historic Parkway (State Route 110). Alternative F-5 has a visual intrusion rating of 3, which is a high impact.

#### F-6

This alternative includes above grade, at grade, and depressed segments. Alternative F-6 has a meandering alignment through residential neighborhoods and will have a high impact in the overall visual quality of the existing environment for approximately 90 percent of the segment. Beginning at the southern end of the segment (the Interstate 710/Interstate 10 interchange, approximately 900 linear feet south of Paseo Ranchos Castilla), this alternative is at grade then transitions to a depressed segment just north of Norwich Avenue. This alternative segment continues as a depressed segment through residential neighborhoods up to the State Route 110 freeway where the segment is at grade and then continues further north as a depressed segment. Alternative F-6 has a visual intrusion rating of 3, which is a high impact.

#### F-7

This alternative includes at grade, bored tunnel, and cut and cover segments. Alternative F-7 would have a high impact in the overall visual quality of the existing environment due to physical changes to the existing site to accommodate this alternative. Beginning at the southern end of the segment, at the Interstate 710/Interstate 10 interchange, the route transitions from an at grade segment to a cut and cover tunnel approximately 1,300 linear feet south of Valley Boulevard and continues approximately 1,300 linear feet north of Valley Boulevard where the bored tunnel segment begins. The bored tunnel segment transitions to a cut and cover segment approximately 500 linear feet north of W. California Boulevard and then transitions to an at grade segment at approximately W. Green Street. Alternative F-7 has a visual intrusion rating of 3, which is a high impact.

#### H-2

This is an at grade alternative that involved arterial improvements. Alternative H-2 would have a high impact in the overall visual quality of the existing environment due to physical changes to the existing site to accommodate this alternative. Beginning at the southern end of the segment, the visual impact would stretch the entire length of the segment. Intermittent instances of increased landscaping will add to the visual impact of the alternative. Additionally, this alternative crosses the Arroyo Seco Golf Couse at the golf course's southern edge almost at a perpendicular angle to the Interstate 110 freeway for approximately 1,700 linear feet and has the potential for a large amount of right-of-way acquisition. Alternative H-2 could potentially affect 250 linear feet of Arroyo Seco Historic Parkway (State Route 110). Alternative H-2 has a visual intrusion rating of 3, which is a high impact.

#### H-6

This is an at grade alternative. Alternative H-6 would have a moderate impact in the overall visual quality of the existing environment due to low physical changes to the existing site to accommodate this alternative. The overall character of the route would change and there is the potential for a large amount of right-of-way acquisition for the addition of the travel lanes throughout the segment, in addition to the intermittent instances of landscape that would add to the visual impact of the segment. Alternative H-6 has a visual intrusion rating of 2, which is a moderate impact.

# **Summary of Potential Effects to Resources**

### Table 3: Summary of Potential Effects to Resources

The following table is a summary of the Level II analysis of potential effects to the overall visual character of the SR-710 Project Study Area.

In summary, the No Build Alternative has an overall rating of visual character including the change to the visual environment and viewer sensitivity of 10.

The TSM/TDM Alternatives have an overall rating of visual character including the change to the visual environment and viewer sensitivity of 10.

Alternatives BRT-1, BRT-6 and BRT-6a have an overall rating of visual character including the change to the visual environment and viewer sensitivity of 14, 13, and 11, respectively.

Alternatives LRT-4a, LRT-4b, LRT-4d and LRT-6 have an overall rating of visual character including the change to the visual environment and viewer sensitivity of 27, 26, 27, and 26, respectively.

Alternatives F-2, F-5, F-6, and F-7 have an overall rating of visual character including the change to the visual environment and viewer sensitivity of 25, 28, 27, and 24, respectively, and Alternatives H-2 and H-6 have an overall rating of visual character including the change to the visual environment and viewer sensitivity of 26 and 22, respectively. Alternative F-5 has the highest rating of impact for visual character and the No Build and TSM/TDM both have the lowest rating of impact for visual character.

# **SR-710 Study (TABLE 3: Summary of Potential Effects)**

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Scores: 3=high 2=medium 1=low	No Build	TSM/TDM	BRT-1	BRT-6	BRT-6A	LRT-4a	LRT-4b	LRT-4d	LRT-4 Maint. Facility	LRT-6	LRT-6 Maint. Facility	F-2	F-5	F-6	F-7	н-2	9-н
CHANGE TO THE VISUAL ENVIRONMENT																	
Question #1: Will the project result in a noticeable change in the physical characteristics of the existing environment?	1	1	1	1	1	3	3	3	2	3	2	2	3	3	3	3	2
Question #2: Will the project contrast with the visual character desired by the community?	1	1	2	1	1	3	3	3	2	3	2	2	3	3	1	2	2
Question #3: What level of project features and construction impacts are proposed?	1	1	1	1	1	3	3	3	2	3	2	2	3	3	2	3	2
Question #4: What is the possibility that the project changes may be mitigated by normal means such as landscaping and architectural enhancement.	1	1	1	1	1	3	3	3	3	2	3	3	3	2	3	2	1
Question #5: What is the probability that this project, result in an aggregate adverse change in overall visual quality or character of the visual environment.	1	1	1	1	1	3	3	3	3	3	2	3	3	3	3	3	2
VIEWER SENSITIVITY																	
Question #1: What is the potential that the project proposal may be controversial within the community, or opposed by any organized group?	1	1	2	2	1	3	3	3	3	3	2	3	3	3	3	3	3
Question #2: How sensitive are potential viewer-groups likely to be regarding visible changes proposed by the project?	1	1	2	2	1	2	2	2	3	2	3	3	3	3	3	3	3
Question #3: To what degree does the project appear to be consistent with applicable laws, ordinances, regulations, policies or standards?	1	1	1	1	1	1	2	2	2	2	2	2	2	2	1	2	2
Question #4: Are any permits going to be required by outside regulatory agencies (i.e., Federal, State, or local) that will necessitate a particular level of Visual Impact Assessment?	1	1	1	1	1	3	1	2	2	2	2	2	2	2	2	2	2
Question #5: Will the Project Development Team or public benefit from a more detailed visual analysis in order to help reach consensus on a course of action?	1	1	2	2	2	3	3	3	3	3	3	3	3	3	3	3	3
Overall Score	10	10	14	13	11	27	26	27	25	26	23	25	28	27	24	26	22

# Summary of Visual Resources by Alternative

# Table 4: Summary of Potential Effects to Visual Resources by Alternative

Table 4 summarizes the evaluation of the Level II Screening for visual intrusion into communities and the linear footage of the potential effects to the designated scenic corridors and/or vistas by alternative.

TABLE 4
Level II Screening of SR-710 Project Alternatives
Summary of Potential Effects to Visual Resources by Alternative

Resources	No Build	TSM/TDM	BRT-1	BRT-6	BRT-6A	LRT-4a	LRT-4b	LRT-4d	LRT-6	F-2	F-5	F-6	F-7	H-2	H-6
Visual Intrusion into communities (Low=1, Medium=2, High=3)	1	1	1	1	1	3	3	3	3	2	3	3	3	3	2
Linear feet of alternative through designated scenic corridors and/or vistas	0	0	0	0	0	0	0	0	0	750	300	0	0	250	0