

# Chapter 19: Visual Resources

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## 19.1 Introduction

The aesthetic quality of a community or area depends on its visual resources—the physical features that make up the visible landscape, including land, water, vegetation, and human-made features such as buildings, roadways, and structures. This analysis considers the visual resources present along the proposed alternatives as well as typical user groups that would view those resources.



**Visual Impact Analysis Area.** The impact analysis area for the Mountain View Corridor (MVC) visual resources analysis is called the *viewshed*. The viewshed is defined as all areas where physical changes associated with the proposed alternatives could be seen. The views can be looking outward from the proposed alternatives or looking toward the alternatives. The viewshed is influenced by existing topography, vegetation, and structures and diminishes with hilly topography and tall vegetation or structures.

The viewshed for the area is a combination of agricultural and urban areas. The area primarily consists of relatively flat to gently sloping plains traversed by washes and alluvial fans from intermittent stream flows that originate in the Oquirrh Mountains to the west. The topography is also marked by lake terraces from the prehistoric Lake Bonneville. Slopes generally range from negligible in the northern area of the visual impact analysis area to 4% or more in the southern end.

Various land cover types exist in the visual impact analysis area including urban and disturbed lands, agricultural lands, grass and shrub lands, and riparian, riverine, and palustrine lands. Taller shrubs and trees occur primarily along fence lines and ditches. The groundcover ranges from sparse in disturbed areas and playa/mudflats to dense in areas of wet meadows near Utah Lake. The native vegetation in the corridor has been disturbed to varying degrees.

The northern limit of the visual impact analysis area is the Great Salt Lake and the southern limit is Utah Lake. The eastern limit is the Wasatch Range and the western limit is the Oquirrh Mountains.

**User Groups.** For the purpose of a visual analysis, there are two basic user groups associated with a transportation network: those using the network (who have views from the roadway) and those looking at the transportation network (who have views of the roadway). People using the roadway see some of the same views as people looking at the roadway.

The number of people using the existing transportation network in the visual impact analysis area will increase as the population grows. The other user group—those who view the transportation network—is more difficult to quantify but will also increase and includes local residents and agricultural landowners as well as commercial and industrial owners. There are also occasional recreational users of facilities such as the Lee Kay Center for Hunter Education, Utah Lake State Park, and the Jordan River Parkway Trail. The Utah National Guard's Camp Williams is also located in the southern portion of the viewshed.

The visual sensitivity of these user groups depends on the number and type of viewers and the frequency and duration of views. Visual sensitivity is also affected by viewer activity, awareness, and visual expectations in relation to the



number of viewers and viewing duration. The visual sensitivity is generally higher for the second group of users (roadway viewers) than for the group driving to and from their destination, with the exception of motorists who are on leisure or sightseeing trips (U.S. Forest Service 1974; USDA 1978; FHWA 1983).

Residential viewers typically have extended viewing periods and are concerned about changes in the views from their homes. On the west side of the Salt Lake Valley, these viewers have long-range views of the mountains to the east and west. In comments received during public meetings, residents stated that these long-range views of the mountains are very important to them. Many of the immediate views around the homes are of other residential developments. Viewers using recreation trails and areas, scenic highways, and scenic overlooks are also concerned about the changes in their views. On the other hand, commuters and non-recreational travelers have generally fleeting views and tend to focus on traffic and not on the surrounding scenery.

## 19.2 Regulatory Setting

Title 23 of the United States Code, Section 109(h), requires aesthetic values to be considered during project development. The Council on Environmental Quality regulations for implementing the National Environmental Policy Act, Section 1508.8, Effects, also state that aesthetic effects should be considered. To consider the aesthetic effects of the MVC, a visual analysis was performed for this Environmental Impact Statement (EIS). An analysis of visual impacts is required in an EIS by the Federal Highway Administration (FHWA) guidance in Technical Advisory T6640.8A, *Guidance on Preparing and Processing Environmental and Section 4(f) Documents* (FHWA 1987).

## 19.3 Resource Identification Methods

The methodology used for this visual analysis is based on FHWA's *Visual Impact Assessment for Highway Projects* manual (FHWA 1983) and the Bureau of Land Management's (BLM) *Visual Resource Inventory Handbook* and *Visual Resource Contrast Rating* handbooks (BLM manuals H-8410-1 and H-8431-1, 1980). The two agency methodologies are similar in that they both establish a baseline for visual characteristics and compare this baseline to the impacts from the proposed project. An approach modeled on the BLM methodology was followed because it provides a more systematic framework for analyzing visual impacts.

The first step in these methodologies was to determine the baseline visual character and any visual management objectives for the area. The landscape of the visual impact analysis area was previously modified from a more natural setting to an agricultural setting and is undergoing another transition to residential and commercial development. There are no specific visual management objectives defined by any of the jurisdictions in the visual impact analysis area; however, the land use plans that guide development in the area recognize that the area is undergoing substantial change.

**Key Observation Points.** The portions of the visual impact analysis area in Salt Lake and Utah Counties (called *landscape units* in the BLM methodology) were inventoried for existing foreground, middle-ground, and background views. Foreground views are those immediately visible; they show the local character of the area, such as rural or urban. The foreground is defined as the area within 0.5 mile of the viewer. The middle ground is defined as views within 0.5 mile to 4 miles, and the background views are 4 miles away or more.

Typical views, called *key viewpoints* or *key observation points* (KOPs), were selected from Salt Lake and Utah Counties to represent different types of views. Sixteen KOPs within the visual impact analysis area were chosen to represent the visual resources of the corridor. KOPs 1 through 11 are in Salt Lake County, and KOPs 12 through 16 are in Utah County. These KOPs are shown in [Figure 19-1 through Figure 19-4](#), Visual Resources Key Observation Points, and described below. Some features described in the text are not visible in the photo for each KOP because of the direction from which the photo was taken. These features that are not visible are denoted by an asterisk (\*).

## 19.4 Resources in Salt Lake County

The northern limit of the Salt Lake County alternatives is near Interstate 80 (I-80), but the visual impact analysis area includes views of Antelope Island. The views from the proposed alternatives extend to the Wasatch Range on the east and the Oquirrh Mountains on the west. The southern project area limit is the Utah County line, but the views from the proposed alternatives include the agricultural and urbanized areas of Utah County.

The Wasatch Range consists of uplifted, fault-block mountains that form the western edge of the Rocky Mountains and the dramatic, abrupt, wall-like Wasatch Front that rises over 6,000 feet above the eastern edge of the valley floor. Long-range views of the Wasatch Range to the east include Ensign Peak, Emigration Canyon, Parley's Canyon, Mill Creek Canyon, Mount Olympus, Lone Peak, Big and Little Cottonwood Canyons, and Point of the Mountain to

the south. The Kennecott Mine is the main feature that is visible along the foothills of the Oquirrh Mountains to the west.

To the north, short-range views include the Salt Lake City International Airport and the Salt Lake International Center business park. The Pioneer Landfill and several industrial properties border the impact analysis area to the east. Also visible are active and abandoned agricultural lands and open fields, a utility corridor, residential subdivisions, schools, and commercial retail developments. Specific views are described in the remainder of this section.

#### 19.4.1 KOP 1 – 7200 West and I-80

KOP 1 is located at the northern terminus of the 7200 West Freeway Alternative just south of I-80. Foreground views from this KOP primarily include land uses that support private grazing. Foreground and middle-ground views are primarily flat, heavily disturbed saline playa cow pasture. These pastures have been heavily grazed, and cheatgrass is fairly abundant. Background views include the Kennecott tailings pile to the northwest, the Oquirrh Mountains to the west, the Salt Lake County Landfill\* to the south, and the Wasatch Mountains\* to the east. (A \* denotes features that are not visible in the photograph.)



**Photo 19-1. KOP 1 – Looking Northwest at the Northern Terminus.**

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### 19.4.2 KOP 2 – 7200 West between the Salt Lake County Landfill and Kennecott Tailings Pond

KOP 2 is located between the Salt Lake County Landfill and the Kennecott tailings pond. As with KOP 1, foreground views at KOP 2 include primarily flat, heavily disturbed saline playa. The landfill is visible in the foreground to the south, while the Lee Kay Center for Hunter Education\* is visible in the middle-ground view just south of the landfill. Background views include the Kennecott mining operations and Oquirrh Mountains to the west and the Wasatch Mountains\* to the east. (A \* denotes features that are not visible in the photograph.)



**Photo 19-2. KOP 2 – Looking Southeast toward the Salt Lake County Landfill.**

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### 19.4.3 KOP 3 – 2615 South 7200 West near Western Mobile Estates

KOP 3 is located near Western Mobile Estates along 7200 West. At this point, 7200 West has the appearance of a rural road. State Route (SR) 201 is present in the foreground to the north, and a mobile-home park is present to the east. Wetlands\* are situated to the west and, although they are not visible from this KOP, the wetlands are visible when viewing the area from the west. The vegetation consists of mostly grasses and Russian olive trees. Foreground and middle-ground views to the south include homes. The fields, grasses, and Russian olive trees that can be viewed in the middle-ground views to the west have a coarse texture. Background views to the west include the Oquirrh Mountains\* and the Kennecott mining operations.\* Most of the background views to the east are blocked by the mobile-home park. To the north, light-industrial buildings and power lines are visible. (A \* denotes features that are not visible in the photograph.)



Photo 19-3. KOP 3 – Looking South along 7200 West.

#### 19.4.4 KOP 4 – International Center at Harold Gatty Road

KOP 4 is located in the heart of the International Center, an industrial complex just north of I-80 with many “big-box” buildings as well as hotels and restaurants that serve the nearby Salt Lake City International Airport. The foreground views on all sides include landscaping typically found in office complexes. The middle-ground views are mostly blocked by the surrounding buildings. Long-range views to the west include the Great Salt Lake\* and Oquirrh Mountains,\* and the Wasatch Range is visible in the background to the east. (A \* denotes features that are not visible in the photograph.)





### 19.4.5 KOP 5 – 5600 West near State Route 201

KOP 5 is located northeast of the Lee Kay Center for Hunter Education. The foreground to middle-ground views consist of primarily flat terrain with grazed fields and weeds. Light-industrial buildings are also visible. The Salt Lake City electrical substation\* is visible to the west. Antelope Island is visible to the northwest, the Wasatch Range\* to the east, the Oquirrh Mountains and Kennecott Mine\* (including smelter and stack) to the west, and rolling hills and distant homes in the background to the south. The township of Magna is also visible to the southwest. (A \* denotes features that are not visible in the photograph.)



**Photo 19-5. KOP 5 – Looking Southwest at the Lee Kay Center for Hunter Education Training Pond.**

### 19.4.6 KOP 6 – Near the Balmoral Condominiums at 2800 South 5660 West

KOP 6 is located near the Balmoral Condominiums. The site is on the northern side of West Valley City in a transition area from primarily open space and light-industrial uses to residential and commercial land use. The foreground views to the east and north are of the condominiums and of open space associated with a power line corridor to the west. The open space contains mostly a fine texture of successional weedy plants. The middle-ground views to the east are blocked by the condominiums. Houses are visible to the west, and a plateau with a water tower is visible to the south. The background views include the Wasatch Mountains\* to the east and the Oquirrh Mountains to the west as well as the Kennecott Copper Mine facilities to the west. (A \* denotes features that are not visible in the photograph.)



Photo 19-6. KOP 6 – Looking South toward Residential Development.

### 19.4.7 KOP 7 – Residential Area at 3140 South 5860 West

KOP 7 is located in a residential subdivision that begins about a block west of 5600 West. The topography at this KOP is flat where development has not yet occurred and the vegetation is sparse; this vegetation is mostly field weeds and grasses. The area adjacent to the subdivision (on the east) is primarily commercial retail, and much of the development is recent. Although most background and middle-ground views from this KOP are blocked by homes, the tops of the Oquirrh Mountains\* can be seen to the distant west and the tops of the Wasatch Range\* to the distant east. Middle-ground views to the east include large retail chain stores and restaurants such as Wal-Mart\* as well as 5600 West in between the homes. Homes in this area that are close to the KOP block the view of much of this retail development. Foreground views include houses in all directions as well as a field that separates the housing development from the retail development to the east. Views to the north include homes under construction. The power corridor runs down the middle of this housing development and can be viewed in the foreground. The power lines can be followed visually into the background to the north and south. (A \* denotes features that are not visible in the photograph.).



**Photo 19-7. KOP 7 – Looking South, Residential Development near 5600 West Just West of Wal-Mart.**

### 19.4.8 KOP 8 – East of Wal-Mart along 5600 West

The views at KOP 8 are of a rapidly developing commercial area. The foreground views consist of 5600 West and the parking lots of the adjacent commercial buildings including K-Mart, Wal-Mart, and Fazoli's Restaurant to the west. To the east, the foreground views are of power lines and an empty lot that transitions into the grass areas and ball fields of the West Valley Fitness Center.\* The middle-ground views include the West Valley Fitness Center, West Valley Fire Station, and Kohl's Department Store to the east as well as some residential development. To the west, the middle-ground views include the Wal-Mart and K-Mart buildings. Just past these buildings, the power corridor and new residential development can be seen. The background views include the Wasatch Mountains\* to the east and Oquirrh Mountains\* to the west. The views at this KOP are very representative of the developing urban nature of the visual impact analysis area. The power lines and paved width of 5600 West create directional lines in the landscape. (A \* denotes features that are not visible in the photograph.)



**Photo 19-8. KOP 8 – Looking Northwest, Commercial Development along 5600 West Just East of Wal-Mart.**

### 19.4.9 KOP 9 – West of 5600 West and North of 4700 South

KOP 9 has open grassland in the middle ground and foreground, which gives the ground a golden color and fine textures. These views are offset by power lines and water tanks. To the north, a church\* can be seen in the middle ground, but views are dominated by residential development in the background. Antelope Island can be seen in the background beyond the residential development. Along the foothills of the Oquirrh Mountains to the west, several structures associated with Alliant Techsystems are visible. The Frito-Lay plant\* is present in the background views to the south. Farther south and east is the West Ridge Golf Course,\* but it is not visible from this KOP. (A \* denotes features that are not visible in the photograph.)



**Photo 19-9. KOP 9 – Looking Northwest toward Antelope Island.**

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### 19.4.10 KOP 10 – Along SR 111 South of Old Bingham Highway

KOP 10 is located south of the Old Bingham Highway along SR 111. The views are wide open with mountain views of the Oquirrh\* and Wasatch Ranges in the background. To the west and southwest, the background views are dominated by the Kennecott mining operation,\* where large slopes of excavation material are devoid of vegetation. The foreground and middle-ground views are characteristic of the sagebrush steppe. A few scattered trees can be seen in the landscape. From this KOP, the dry-land agricultural fields can be seen in the far middle-ground views. (A \* denotes features that are not visible in the photograph.)



Photo 19-10. KOP 10 – Looking Northeast toward the Wasatch Front.

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### 19.4.11 KOP 11 – 12600 South near Legacy Springs Apartments

KOP 11 has a rural appearance but is quickly being transformed to residential development. The foreground and middle ground primarily consist of fallow farm fields and an open-space area adjacent to the Legacy Springs Apartments with one farmstead in immediate view. The background views include suburban residential development, more agriculture, and the Oquirrh, Lake, and Wasatch Mountains. To the west, the Kennecott Mine operations\* can be seen on the mountain side. The textures of the area are fine with open fields and successional plants along the open space. (A \* denotes features that are not visible in the photograph.)



**Photo 19-11. KOP 11 – Looking Southeast toward New Residential Development.**

## 19.5 Resources in Utah County

The northern limit of the Utah County alternatives is the Salt Lake County line, and the southern limit is the northern edge of Utah Lake. The eastern project area limit is Interstate 15 (I-15), but the views from the proposed alternatives extend to the Wasatch Range. The western project area limit is the eastern border of the city of Eagle Mountain, but the views from the proposed alternatives extend to the Oquirrh and Lake Mountains. Specific views are described for the KOPs in this section.

Long-range views include Utah Lake to the south and Spanish Fork Canyon, Mt. Timpanogos (elevation 11,750 feet), Mt. Nebo (elevation 11,928 feet), and Provo Canyon to the east. Long-range views to the west include the Oquirrh Mountains and the low-lying Lake Mountains. Short-range views include utility corridors, residential subdivisions, commercial developments, some industrial areas, and many farm fields and open areas.

Notable features in the visual impact analysis area in Utah County are Camp Williams, the Traverse Mountains, and the Jordan River. Camp Williams occupies 25,000 acres 26 miles south of Salt Lake City on the west slope of the Traverse Mountains. Although the Traverse Mountains are very small (17 miles maximum length and 5.5 miles maximum width), they are a prominent feature of the landscape because of their unusual east-west orientation (Marsell 1932). Utah Lake, which forms the southern limit of this segment, drains into the Great Salt Lake via the Jordan River. This river maintains a wide floodplain over its entire course except at the Jordan Narrows, where the river splits the Traverse Mountains into eastern and western sections (Marsell 1932).



### 19.5.1 KOP 12 – Connection between Redwood Road and I-15

KOP 12 is on Redwood Road east of Camp Williams. The foreground views at this KOP are primarily sagebrush steppe or short grass prairie. The sagebrush creates a rougher texture against the grasslands. Looking to the east, the dominant middle-ground view is the sand and gravel pits at Point of the Mountain. I-15 can be viewed just below the pits. Although not visible from this observation point, the Jordan River\* meanders through the area between Redwood Road\* and I-15. Camp Williams\* can be seen to the west. At this point, the topography rises gradually, but the views are similar to those of the foreground (mainly sagebrush steppe). In the background to the west and northwest, power poles can be seen as well as the Oquirrh Mountains\* to the northwest. The darker blue contrast of the Wasatch Mountains can be seen in the background to the north and east. Residential development dots the background to the north. (A \* denotes features that are not visible in the photograph.)



Photo 19-12. KOP 12 – Looking East toward Point of the Mountain.

### 19.5.2 KOP 13 – Redwood Road near 10400 North

KOP 13 is located near 10400 North and Redwood Road. The middle-ground and foreground views at this KOP are primarily agricultural with some sagebrush steppe to the northeast. Power lines, haystacks, and sunflowers can be seen in the foreground, and a mink ranch can be seen to the southeast. The middle-ground views are agricultural with residential development and commercial buildings along I-15 just below the mountain background. The buildings and golf course of Thanksgiving Point can be observed to the east. The Wasatch Mountains to the east and Lake Mountains\* to the southwest are visible in the background. With the exception of the sunflowers, little dramatic texture is observable in the landscape. (A \* denotes features that are not visible in the photograph.)



**Photo 19-13. KOP 13 – Looking Southeast over Agricultural Development.**

### 19.5.3 KOP 14 – Redwood Road near Main Street in Lehi

KOP 14 is located south of Main Street\* in Lehi. The observation point is west of the Jordan River\* in an area being graded for development; however, the river cannot be seen from the site. The foreground at this KOP is dominated by construction debris including drainage pipes and downed trees. The middle-ground views to the west and south are currently dominated by riparian trees such as willows, Russian olives, and cottonwoods. However, given the construction debris in the foreground, the middle-ground views are likely to be developed soon. The middle-ground view to the north is a rural residential horse property. This type of property is dominant in the area as are several pastures. North of the KOP, the landscape is dominated by wetland/riparian vegetation including mature trees. The Wasatch Mountains are visible in the background to the east, and the Oquirrh Mountains\* are visible in the background to the west. (A \* denotes features that are not visible in the photograph.)



Photo 19-14. KOP 14 – Looking West toward the Jordan River.



#### 19.5.4 KOP 15 – Near Jordan River Inlet to Utah Lake

KOP 15 is located just west of the Jordan River and Utah Lake inlet. To the west, the Jordan River is visible in the foreground, and the vegetation in the middle-ground and foreground views is primarily riparian vegetation including cottonwoods, willows, tamarisk, and common reed. Power lines are also present in the foreground. Lush greens stand out against the roadside and mountain views of the background. To the west, agricultural fields are also present. A contrasting texture is provided at this site by the mature trees, shrubs, and grasses.



Photo 19-15. KOP 15 – Looking West at the Jordan River.



### 19.5.5 KOP 16 – Near I-15 and 300 West

KOP 16, which is adjacent to I-15, has land uses and views consistent with the interstate including industrial and commercial buildings. In the foreground, the frontage roads to the water treatment plant can be seen as well as railroad tracks. Both create hard directional lines in the landscape. The middle ground includes more industrial buildings, a few farm buildings, and several power lines. In the background, the Oquirrh and Lake Mountains can be seen to the west and the Wasatch Mountains\* can be seen to the east. (A \* denotes features that are not visible in the photograph.)



**Photo 19-16. KOP 16 – Looking South toward Water Treatment Plant.**

## 19.6 Environmental Consequences

In accordance with FHWA Technical Advisory T6640.8A, this section identifies impacts from the proposed alternatives on existing visual resources in terms of the expected changes in views of and from the highway. Changes in the visual environment can be generally classified as either short-term impacts from construction or long-term impacts from permanently altering the landscape. This section also identifies measures to avoid, minimize, or reduce adverse visual impacts.

### 19.6.1 Methodology

A visual contrast rating was identified for each of the KOPs; these ratings are similar those used on the BLM contrast rating form. The BLM rating form was used because it provides a quantitative analysis and is similar to the FHWA guidance, which is more qualitative. The rating considered the amount of impacts or degree of contrast with the existing viewshed for short-term, construction-related impacts and for the long-term impacts of the proposed alternatives. The visual contrast ratings are defined as follows:

- **None:** The element of contrast is not visible or perceived.
- **Weak:** The element of contrast can be seen but does not attract attention.
- **Moderate:** The element of contrast begins to attract attention and begins to dominate the characteristic landscape.
- **Strong:** The element of contrast demands attention, will not be overlooked, and is dominant in the landscape.

In addition to determining the visual contrast rating at each KOP, visual photosimulations were completed to provide a representative illustration of the MVC project. These are presented in Appendix 19A, Photosimulations. The photosimulations were created using ground-level photographs. The different photosimulations help the reader understand the contrast ratings in pictorial format.

The impact analysis has been updated since the Draft EIS based on refinements to the action alternatives as described in Section 2.1.7.3, Design Options Incorporated in the Final EIS, and Section 2.1.7.4, Additional Changes to the Alternatives between the Draft EIS and Final EIS. This chapter has also been updated to address the utility companies' concerns about taller transmission towers resulting from utility relocations. New photosimulations have been included in Appendix 19A.

## 19.6.2 No-Action Alternative

The present visual setting has a mixed character with agricultural, industrial, commercial, and residential land uses. However, along the Wasatch Front, rapid urbanization is occurring. The agricultural land in Salt Lake and Utah Counties will continue to be converted into residential and commercial developments as the area grows. These planned developments, which will include associated infrastructure such as utilities and roads, will dramatically change the visual character of some areas from rural to urban.

Under the No-Action Alternative, the Mountain View Corridor would not be built, but the roadway improvements in the Wasatch Front Regional Council and Mountainland Association of Governments long-range transportation plans would continue to be made. These improvements would further define the visual character of the area as urban. The middle-ground and foreground views under the No-Action Alternative will become primarily residential and commercial. The background views would continue to be Antelope Island to north, the Wasatch Mountains to the east, and the Oquirrh Mountains to the west.

## 19.6.3 Salt Lake County Alternatives

In Salt Lake County, two roadway alternatives and a transit alternative which would be implemented as part of the roadway alternatives are under consideration: the 5600 West Transit Alternative, the 5800 West Freeway Alternative, and the 7200 West Freeway Alternative. Under the 5600 West Transit Alternative, there is a dedicated right-of-way option and a mixed-traffic option. In addition, a tolling option was considered for each freeway alternative. Impacts under each combination of alternatives and options are discussed in the following sections.

### 19.6.3.1 5600 West Transit Alternative

As described in Chapter 2, Alternatives, two transit options are under consideration along 5600 West in Salt Lake County. One option, the Dedicated Right-of-Way Option, would incorporate a transit system running down the center of the roadway, and the other, the Mixed-Traffic Option, would incorporate a transit system running alongside the roadway.

5600 West Transit Alternative Impacts		
KOP	Visual Contrast Rating	
	Dedicated Right-of-Way Option	Mixed-Traffic Option
KOP 4	Weak	Weak
KOP 5	Moderate	Moderate
KOP 6	Weak	Weak
KOP 8	Weak to Moderate	Weak to Moderate
KOP 11	Moderate	Moderate
Overall	Weak to Moderate	

## **5600 West Transit Alternative with Dedicated Right-of-Way Transit Option**

### *Construction-Related Impacts to Visual Resources*

Under the Dedicated Right-of-Way Transit Option, short-term, construction-related visual impacts would include construction-vehicle activity and the accompanying staging areas as well as traffic congestion. Because the project would be completed in phases, only specific segments of the corridor would experience construction-related impacts at any given time.

The primary viewers along the northern segment of this option would be travelers along 5600 West and visitors of the International Center. Along the middle segment of the proposed transit alternative from 3500 South to Herriman, the viewers would be both travelers and adjacent residents. KOPs 4 and 8 are located along the proposed transit option, while KOPs 5, 6, and 11 would have views of the proposed transit option.

For the motorists using 5600 West, the speed of vehicles would decrease during construction, which would increase motorists' viewing time. For the nearby residents, the construction viewing time would not change as it would for traveling motorists. The views for travelers and nearby residents would be temporarily reduced during construction. Until construction is completed, the construction vehicles would be present in the area and construction would visually stand out.

### *Long-Term Impacts to Visual Resources*

Under the Dedicated Right-of-Way Transit Option, long-term views along 5600 West would generally look similar to the current views along the corridor. For patrons of commercial businesses and residents along 5600 West, the views of the roadway would include 17 transit stations and the separation of the roadway with transit lines and overhead operating apparatuses. (See [Figure 2-6.2](#), Transit Typical Sections – Dedicated Right-of-Way Transit Option, and [Figure 2-7.2](#), Transit Typical Sections – Mixed-Traffic Transit Option, for pictures of the transit stations.) Otherwise, the roadway would look similar to the way it does now. The views looking out from the roadway or over the roadway would not change. Transit stations would be visible but would not be out of character compared to the existing buildings in the area. The commercial businesses and the power corridor in the foreground and middle ground would continue to be visible, as would the Wasatch and Oquirrh Mountains in the background.

A portion of the Dedicated Right-of-Way Transit Option would be on a new alignment from south of 10200 South to Herriman. This area is relatively



undeveloped but is currently developing. More discussion of this area can be found in Section 19.4.10, KOP 10 – Along SR 111 South of Old Bingham Highway, and Section 19.4.11, KOP 11 – 12600 South near Legacy Springs Apartments. Generally, the visual contrast rating of the transit option along the new alignment would be weak to moderate.

The primary viewers along the northern segment of this option would be travelers along 5600 West and visitors of the International Center. Along the middle segment of the proposed transit option from 3500 South to Herriman, the viewers would be both travelers and adjacent residents. KOPs 4 and 8 are located along the proposed transit option, while KOPs 5, 6, and 11 would have views of the proposed transit option.

The area near KOP 4, the International Center, is an urban area. The proposed transit line would be constructed within the existing right-of-way. There would be vertical structures such as a station and the overhead lines for the operation of the transit line. Otherwise, the views would remain unchanged for viewers in the area, and the visual contrast rating would be weak. The long-range views to the west include the Oquirrh Mountains, and the Wasatch Range is visible in the background to the east.

The area around KOP 8 is a commercially developed area. The addition of the transit line would be consistent with views of 5600 West and the adjacent commercial buildings. The transit line would add texture to the roadway from the trains and electric poles for the trolley cars. The electric poles would not be dominant in the landscape because there are already light poles and street signs in the area. Transit stations and park-and-ride lots would be added north and south of the KOP but would blend in form, color, and texture with the surrounding landscape. Park-and-ride lots would also be present south of KOP 9 and north of KOP 11. The introduction of the trolley cars would add larger vehicles to the visual landscape, but the trolley cars would not be out of scale with the cars and trucks that currently use 5600 West. Moreover, since trolley cars are not new to Salt Lake County, motorists are used to seeing them, so they would be more likely to blend in with the streetscape. The visual contrast rating at this KOP would be weak to moderate.

**Noise Barriers.** As shown in Appendix 13B, Expected Transit Noise Impacts, the Dedicated Right-of-Way Transit Option would not result in any noise impacts. Because no impacts are expected, no physical noise-abatement measures that could affect the viewshed (such as sound walls) are proposed.

**Overall Visual Contrast Rating.** The overall visual contrast rating for this transit option would be weak to moderate depending on whether the transit is on the existing alignment or a new alignment.

## 5600 West Transit Alternative with Mixed-Traffic Transit Option

### *Construction-Related Impacts to Visual Resources*

The Mixed-Traffic Transit Option would have the same general construction-related impacts as the Dedicated Right-of-Way Transit Option but would involve more construction-vehicle activity in the area. The Mixed-Traffic Transit Option would have 26 transit stations compared to 17 stations under the Dedicated Right-of-Way Transit Option, and it could take longer to construct the 26 transit stations.

### *Long-Term Impacts to Visual Resources*

The views of the Mixed-Traffic Transit Option would be similar to those of the Dedicated Right-of-Way Transit Option except that the location of the transit lanes on the roadway would be different and the lanes would be used by cars as well as trolleys. Because cars and trolleys would share the roadway, the Mixed-Traffic Transit Option might appear more seamless and integrated to the viewer of the system than would the Dedicated Right-of-Way Transit Option.

This transit option would have 26 transit stations instead of 17 as with the Dedicated Right-of-Way Transit Option. The transit stations would be located at the side of the 5600 West roadway instead of in the center of the roadway. The roadside stations might be more visible to adjacent viewers than the stations in the center of the roadway because they are closer to the viewer. Neither option would have a substantially contrasting view for users or viewers of the road compared to the already existing roadway.

**Noise Barriers.** As with the Dedicated Right-of-Way Transit Option, the Mixed-Traffic Transit Option would not require the construction of noise barriers that could affect the viewshed.

**Overall Visual Contrast Rating.** The overall visual contrast rating for this transit option would be weak to moderate depending on whether the transit is on the existing alignment or a new alignment.

**19.6.3.2 5800 West Freeway Alternative**

As described in Chapter 2, Alternatives, this alternative would consist of a freeway extending from I-80 to the Utah County line.

5800 West Freeway Alternative Impacts	
KOP	Visual Contrast Rating
KOP 5	Moderate
KOP 6	Moderate
KOP 7	Moderate
KOP 9	Moderate
KOP 10	Moderate
KOP 11	Moderate
Overall	Moderate

***Construction-Related Impacts to Visual Resources***

Under the 5800 West Freeway Alternative, short-term, construction-related visual impacts would include construction-vehicle activity and accompanying staging areas, stockpiling of excavated material, traffic congestion, and construction-related dust. Because the project would be completed in phases, only specific segments of the corridor would experience construction-related impacts at any given time.

During construction, the work zone would be cleared of vegetation. The exposed bare ground would contrast visually with the surrounding agricultural, residential, and/or municipal areas that the viewer is accustomed to seeing. Visual quality from sensitive viewer locations (such as residences next to the freeway) would be temporarily reduced during construction. Until the construction is completed and the right-of-way is revegetated, the construction area would stand out.

Construction-related visual impacts would likely be greatest just south of SR 201 through West Valley City where there are more residential developments and patrons of commercial businesses. Visual impacts during construction would also be present for residents on the west side of Kearns, at the Daybreak development in South Jordan (currently under development), and on the east side of Riverton.

The 5800 West Freeway Alternative would affect the views at KOPs 5, 6, 7, 9, 10, and 11. KOPs 6 and 7 are near the areas that would be most heavily affected during construction. KOPs 10 and 11 are in the less densely populated areas of the visual impact analysis area in Salt Lake County.

***Long-Term Impacts to Visual Resources***

The 5800 West Freeway Alternative follows the existing Utah Power corridor from SR 201 until 5400 South. At this location, the alignment runs west for about 0.5 mile and then turns south to connect the southern segment of the alternative with the existing Redwood Road transportation corridor near the Utah County line.

The long-term views of the proposed improvements would be of a multi-lane freeway. The foreground views surrounding the freeway would remain



unchanged where they are already developed and would develop according to the land use plan of the various jurisdictions where they are not developed. In most instances, the area is being converted from rural or agricultural land use to suburban and urban development, and the long-term foreground and middle-ground views would be urban or suburban.

The KOPs along this alternative are KOP 5, 6, and 7 for the segment of the alternative that is not shared with the 7200 West Freeway Alternative and KOPs 9, 10, and 11 for the segment that is shared by both alternatives. Each of these KOPs and visual contrasts is described below.

KOP 5 is located near the Lee Kay Center for Hunter Education, so the viewers at this KOP would likely be users of the educational center. There is urban development to the south and industrial development and grazing to the north. The background views are of the mountain ranges to the north and south. The site is adjacent to the newly reconstructed SR 201. Even though the area is being converted to urban use, it still retains a more rural character. The proposed project would change the visual character to a more urban appearance. Instead of the existing power lines that are visible, an elevated freeway would be visible. The middle-ground views of the foothills would be blocked by the elevated freeway, but the foreground and background views would remain the same. The project would introduce motion that wasn't previously in the landscape as motorists pass by on the freeway. The colors and textures would remain similar to those of the current landscape, but the freeway would add a new line to the landscape. The visual contrast rating at this KOP would be moderate.

The viewers at KOP 6 are residents of the nearby Balmoral Condominiums and the single-family housing and scattered school, church, and commercial facilities farther to the south. Residents are accustomed to seeing the open space of the nearby power corridor along with its associated power lines and poles. The lines and texture created by the power lines would contrast with the proposed freeway, which would present a raised, wide, horizontal band instead of the thin but tall power poles. In addition, a portion of the currently open space would be replaced with the freeway. The middle-ground views would continue to be blocked by the residences and the freeway, and the background views would remain mostly unchanged. The visual contrast rating at this KOP would be moderate for the foreground and middle-ground views.

Between KOPs 6 and 7, drainage structures would need to be built as part of the proposed project. The drainage structures would be detention basins or grassed swales. The detention basins would likely be grass-lined or open-water areas with wetland-type vegetation or a "wet pond" that is 4 feet to 5 feet deep. The swales would be covered with grass. The drainage structures might be visible to users of



the freeway or nearby residents. However, the drainage structures would not contrast in scale with the proposed freeway or adjacent land uses.

The area near KOP 7, although undeveloped to the west, is primarily a new residential area consisting of hard lines from the new residences with little vegetation present. To the east of the development are several commercial businesses that are consistent with the presence of 5600 West. There are electrical lines from the power corridor present at the KOP, but the electrical lines would become much more prominent because they would stand out against the backdrop of the elevated freeway and retaining wall. The freeway would contrast in color and texture from the existing views of residences and the power corridor. Even though there are commercial areas to the east and along 5600 West, the freeway would be very visible in this location because the middle-ground and foreground views are primarily residential. The background views would remain mostly unchanged. From north of this KOP (2700 South) south to 7800 South, a trail would be constructed along with the freeway. The trail would create no additional visual impacts for people viewing the freeway because the scale of the trail would be small compared to the freeway. The trail would introduce a new viewer group (trail users) to the freeway (see Chapter 11, Considerations Relating to Pedestrians and Bicyclists). Trails would also be present near KOPs 9, 11, 12, 13, and 14. The visual contrast rating for this KOP would be moderate.

KOP 9 is located between the 5800 West Freeway Alternative and the 7200 West Freeway Alternative just north of the segment that the alternatives have in common. The area is not developed but has residential development to the north and east with industrial development to the west (ATK Thiokol). To the south and east, a substation is visible. The freeway would create a contrast to the open grassland in terms of lines and color. The viewer group for the current area is small and consists mainly of residential viewers. Adding an above-ground freeway (see [Figure 2-8.4](#), Above-Grade and Below-Grade Freeway Examples) in this section would create a more urban appearance and would add hard-edged gray and brown lines to an otherwise brown foreground and middle ground. The background views would remain unchanged. The visual contrast rating for this KOP would be moderate. South of KOP 9, the freeway would be a depressed (below-grade) roadway section, which would help shield the views of the freeway for residents on the east side of the proposed freeway.

The dominant views at KOP 10 would be the wide-open steppe lands with surrounding mountains and the Kennecott Copper Mine operations. This KOP is some distance to the west of the proposed freeway and transit line and so provides a long-distance view of the proposed project. The user group at this KOP would be users of SR 111. A new freeway and transit line would be visible



from this KOP and would add new, bold lines that contrast with the existing steppe vegetation. The freeway would blend in with the urban development seen to the east. The visual contrast rating for this KOP would be moderate.

The area near KOP 11 is still mostly undeveloped but is rapidly being converted to urban use. Both transit and the proposed freeway would fit within the urban nature of this area after it is developed. User groups in this area are primarily the new residents. The rural character provided by the row crops and pastures is changing to urban, as indicated by the housing nearby. The lines, colors, and textures provided by the freeway and transit line would contrast substantially with the rural character even though they follow the same path as the existing power corridor. The existing power corridor is somewhat more transparent to the viewer. However, the lines, colors, and textures of the emerging development would not contrast as greatly with the proposed freeway and transit line. The freeway in this section would be depressed, which would help reduce the visibility of the freeway. The walls associated with the depressed freeway would be visible in the middle ground and foreground but would not contrast with the background. The visual contrast rating for this KOP would be moderate.

As part of this alternative, some of the existing electrical transmission lines would need to be relocated. Also, because the MVC would be wider than the existing roadway, this alternative might require larger transmission towers and poles to support electrical lines over the wider span. These larger towers and poles would have a greater visual impact on nearby residential areas, but they would be similar in type to the towers and poles that would be replaced and would be placed in the same general location. It is likely that the residents near this power corridor have become accustomed to the existing transmission towers and poles. Therefore, the replacement towers and poles would not substantially change the existing visual environment.

**Noise Barriers.** As described in Chapter 13, Noise, noise barriers would be effective, feasible, and reasonable at 10 locations along the 5800 West Freeway Alternative alignment. [Table 19.6-1](#) below summarizes feasible and reasonable noise barriers that were identified for all of the action alternatives.



Table 19.6-1. Noise-Abatement Barriers by Alternative

Alternative	Barrier Number <sup>a</sup>	Approximate Location of Barrier	Length and Height of Effective Barrier
5800 West Freeway	SL-2	East side between 3500 South and 4100 South	2,200 feet long 15 to 19 feet high
5800 West Freeway	SL-3	West side between 3500 South and open-space area north of 4100 South	1,400 feet long 15 to 19 feet high
5800 West Freeway	SL-4	Just north of 4300 South and south and west of Denver & Rio Grande Railroad alignment	2,000 feet long 19 feet high
5800 West Freeway	SL-5	East side just south of 4100 South to about 4300 South.	715 feet long 8 to 12 feet high
5800 West Freeway 7200 West Freeway	SL-7	East side between Borax Avenue and 6200 South	2,000 feet long 15 to 19 feet high
5800 West Freeway 7200 West Freeway	SL-8	East side between 6200 South and 7000 South	4,500 feet long 19 feet high
5800 West Freeway 7200 West Freeway	SL-9	East side between 8200 South and New Bingham Highway	2,500 feet long 17 to 19 feet high
5800 West Freeway 7200 West Freeway	SL-11	East side between 11800 South and 12600 South	3,500 feet long 15 to 19 feet high
5800 West Freeway 7200 West Freeway	SL-12	West side south of 12600 South	3,000 feet long 17 to 19 feet high
5800 West Freeway 7200 West Freeway	SL-13	East side south of 12600 South	1,500 feet long 15 to 19 feet high
7200 West Freeway	SL-15	East side between SR 201 interchange and just north of Parkway Boulevard	2,500 feet long 15 to 19 feet high
7200 West Freeway	SL-16	East side between Parkway Boulevard and 3100 South	2,000 feet long 15 to 19 feet high
7200 West Freeway	SL-19	West side between Parkway Boulevard and 3100 South	2,500 feet long 15 to 19 feet high
7200 West Freeway	SL-20	West side between 3100 South and 3500 South	2,500 feet long 15 to 19 feet high
7200 West Freeway	SL-21	West side, two sections between Jefferson Road and 4100 South	3,500 feet long 15 to 19 feet high
7200 West Freeway	SL-22	East side between Bello Avenue and 3800 South	2,500 feet long 15 to 19 feet high
7200 West Freeway	SL-23	West side between 3800 South and 4100 South	3,000 feet long 15 to 19 feet high
Southern Freeway	U-2	South side between 8700 West and 8000 West	4,500 feet long 12 to 20 feet high
2100 North Freeway	U-5	North side between 2300 West and 1900 West	2,500 feet long 12 to 20 feet high
2100 North Freeway	U-6	South side east of Union Pacific Railroad tracks near I-15 tie-in	1,265 feet long 12 to 20 feet high
Arterials	U-7	South side between 8700 West and 8000 West (1900 South arterial)	4,500 feet long 12 to 20 feet high
Arterials	U-10	North side between 2300 West and 1900 West near Union Pacific Railroad tracks (2100 North arterial)	2,500 feet long 12 to 20 feet high

See Chapter 13, Noise, for a detailed description of noise barrier numbers, locations, effectiveness, and feasibility.

<sup>a</sup> Barrier numbers are assigned in Chapter 13. Gaps in numbering indicate barriers that were evaluated but were not recommended. Barriers designated **SL-** are in Salt Lake County; barriers designated **U-** are in Utah County.



Noise barriers would be constructed only if agreed to by the local residents. Residents would weigh the costs and benefits associated with barriers, including their visual impacts. The barriers would attenuate roadway noise and block the roadway from view, but could also affect residents’ long-range views of the valley, foothills, and mountains. See Chapter 13, Noise, for more information about UDOT’s noise barrier policy.

**Overall Visual Contrast Rating.** The overall visual contrast rating for the 5800 West Freeway Alternative would be moderate.

### Combined Impacts of 5800 West Freeway and 5600 West Transit Alternatives

#### 5800 West Freeway Alternative with Dedicated Right-of-Way Transit Option

**Construction-Related Impacts to Visual Resources.** The construction-related visual impacts from the combined 5800 West Freeway Alternative and Dedicated Right-of-Way Transit Option would be short term and would involve primarily construction equipment, staging areas, and dust from construction activities. The construction would be phased, so different viewers would be affected at different times. For the transit option, the viewers would be primarily drivers along 5600 West or patrons of the commercial facilities along 5600 West. For the freeway alternative, the viewers most affected by the construction activities would be nearby residents.

Combined Impacts of 5800 West Freeway and 5600 West Transit Alternatives		
KOP	Visual Contrast Rating	
	Dedicated Right-of-Way Option	Mixed-Traffic Option
KOP 4	Weak	Weak
KOP 5	Moderate	Moderate
KOP 6	Moderate	Moderate
KOP 7	Moderate	Moderate
KOP 8	Weak to Moderate	Weak to Moderate
KOP 9	Moderate	Moderate
KOP 10	Moderate	Moderate
KOP 11	Moderate	Moderate
Overall	Moderate	

**Long-Term Impacts to Visual Resources.** The views of the Dedicated Right-of-Way Transit Option would be very similar to those of the existing 5600 West where it would be located. The visual changes along the 5800 West Freeway Alternative would be more apparent than the changes from the Dedicated Right-of-Way Transit Option because much of the 5800 West Freeway Alternative would be located in residentially developed areas, agricultural areas, or areas that are being converted from rural to urban and suburban. The 5800 West Freeway Alternative would alter the colors, forms, and textures of the rural, agricultural, or residential environment in the middle ground and foreground but would not create a strong contrast because the area is primarily urban or developing urban. The background views, and the views that more sharply define the viewsheds,





would not be altered by either the freeway alternative or the transit option. Overall, since the new facilities (freeway and transit) would be visually separated, there would be little combined visual impact, and the new facilities would not substantially contrast from the urban nature of the area.

Because the transit options do not include recommendations for noise barriers, the only visual effects associated with noise barriers under this transit option would be from the noise barriers recommended as part of the 5800 West Freeway Alternative.

The overall visual contrast rating for the combined freeway alternative and transit option would be moderate.

#### ***5800 West Freeway Alternative with Mixed-Traffic Transit Option***

The impacts from the combined 5800 West Freeway Alternative with Mixed-Traffic Transit Option would be the same as those from the 5800 West Freeway Alternative with Dedicated Right-of-Way Transit Option.

#### **5800 West Freeway Alternative with Tolling Option**

Under the 5800 West Freeway Alternative with Tolling Option, the overall facility design would not change compared to the non-tolled alternative. Therefore, impacts to visual resources would be the same as those from the 5800 West Freeway Alternative with one exception. As part of the Tolling Option, overhead toll gantries would be needed at either on ramps or off ramps along the freeway. The toll gantries are steel structures with scanning equipment mounted over each lane to scan each car that passes under the gantry for a toll card. The structures would be about 20 feet tall and would extend from one side of the freeway to the other. See Chapter 2, Alternatives, for a picture of the toll gantries. The toll gantries would not contrast with the existing landscape at any of the KOPs any more than would bridge structures on the proposed freeway. The visual contrast ratings for each KOP under the Tolling Option would be the same as those for the non-tolled alternative.



### 19.6.3.3 7200 West Freeway Alternative

As described in Chapter 2, Alternatives, this alternative would consist of a freeway alignment extending from I-80 to the Utah County line.

#### *Construction-Related Impacts to Visual Resources*

The construction-related visual impacts from the 7200 West Freeway Alternative would be similar to those from the 5800 West Freeway

Alternative and 5600 West Transit Alternative options except that the residents who would be most affected would be located in Magna and West Valley City instead of only West Valley City. KOPs 3 and 9 are representative of the views of the local residents. As with the 5800 West Freeway Alternative, visual impacts during construction would also be noticeable for residents on the west side of Kearns, at the Daybreak development in South Jordan (currently under development), and on the east side of Riverton.

#### *Long-Term Impacts to Visual Resources*

Most of the 7200 West Freeway Alternative would be developed along an existing transportation corridor. The footprint of the proposed freeway is wider than that of the existing roadway, so the proposed freeway would be more visible than the existing roadway. One segment of freeway is common to both of the Salt Lake County freeway alternatives, and the impacts from this segment are discussed under the 5800 West Freeway Alternative (KOPs 9, 10, and 11). The impacts associated with KOPs 1, 2, and 3 along the 7200 West Freeway Alternative are discussed below.

There are fewer freeway viewers at KOP 1 than in other parts of the corridor. The area is primarily used for grazing with light-industrial uses and the Pioneer Landfill to the south. There is a gravel road in the area, but no freeway presently exists. The freeway would introduce a hard line and darker colors into the current landscape and so would contrast both in line and in color from the existing views. Although the freeway would contrast from the current landscape, it would not alter the mountain views to the east and west. The visual contrast rating for this KOP would be moderate.

The viewer groups at KOP 2 see primarily the landfill. The landfill and berms surrounding the tailings ponds make the area feel closed in. The freeway would introduce darker grays and blacks in addition to the greens, blues, and tans with

7200 West Freeway Alternative Impacts	
KOP	Visual Contrast Rating
KOP 1	Moderate
KOP 2	Weak
KOP 3	Weak to Moderate
KOP 9	Moderate
KOP 10	Moderate
KOP 11	Moderate
Overall	Weak to Moderate



pink highlights that currently exist. The freeway would open the area to more viewers. The landfill and tailing ponds would be more exposed. However, the freeway would not detract from the already industrial character of the area. The Wasatch and Oquirrh Mountains would still be visible. The visual contrast rating for this KOP would be weak.

The present character of KOP 3 is residential with a more rural appearance. The views to the north include a light-industrial building and a warehouse, but this area is otherwise undeveloped. The foreground and middle-ground views are of a current road that does not have continuous curb and gutter, has overhead utility lines, and is dominated by larger trees that shield the views of the houses adjacent to the road. The viewers at KOP 3 are primarily the local residents who not only view the road but use the road to reach employment and shopping.

For most of the views at this KOP, there is an existing road, and the proposed freeway would not introduce a new element. However, the wider freeway section would remove the adjacent vegetation and make the freeway more visible to the residents and the houses more visible to motorists. The neighborhood feeling or scale created by the trees along the road would be eliminated. It is likely that, over time, vegetation in the residential lots would again screen some of the roadway. This area will include a frontage road in addition to the freeway.

The views for the residents at 4100 South and the proposed 7200 West freeway are likely to be affected more than those for other residents at this KOP because the existing 7200 West borders homes on the front and the proposed 7200 West freeway would border the homes on the back. The views for these residents would be the elevated freeway. The visual contrast rating for this KOP would be weak because the 7200 West freeway would generally follow the existing 7200 West in this area. In the area where the 7200 West freeway diverts from the existing 7200 West, the visual contract rating would be moderate.

From 5400 South to the Utah County line, the impacts would be the same as those from the 5800 West Freeway Alternative.

**Noise Barriers.** As shown in [Table 19.6-1](#) above, Noise-Abatement Barriers by Alternative, noise barriers would be effective, feasible, and reasonable at 13 locations along the 7200 West Freeway Alternative. Such barriers would be constructed only if agreed to by the local residents. Residents would weigh the costs and benefits associated with barriers, including their visual impacts. The barriers would attenuate roadway noise and block the roadway from view, but could also affect residents' long-range views of the valley, foothills, and mountains. See Chapter 13, Noise, for more information about UDOT's noise barrier policy.



**Overall Visual Contrast Rating.** The overall visual contrast rating for the 7200 West Freeway Alternative would be weak to moderate.

**Combined Impacts of 7200 West Freeway and 5600 West Transit Alternatives**

*7200 West Freeway Alternative with Dedicated Right-of-Way Transit Option*

**Construction-Related Impacts to Visual Resources.** The construction-related visual impacts from the combined 7200 West Freeway Alternative with Dedicated Right-of-Way Transit Option would be the same as those from the 5800 West Freeway Alternative with Dedicated Right-of-Way Transit Option, except that the residents who would be most affected would be located in Magna and West Valley City instead of only West Valley City.

**Long-Term Impacts to Visual Resources.** The long-term visual impact of the transit alternative would not contrast substantially from the surrounding viewshed. The 7200 West Freeway Alternative would alter the viewshed for those looking toward the highway in terms of form, color, and vegetation by introducing stronger lines into the landscape, changing the landscape from the green of vegetation to the gray of pavement, and adding height to the landscape with the elevated freeway section. The alternative would weakly contrast with the existing urban viewshed or environment. However, the foreground and some middle-ground views for local residents would strongly contrast with the current views of a smaller, at-grade freeway.

The background views with the presence of the 7200 West Freeway Alternative would not differ greatly from the current views. Overall, since the new facilities (freeway and transit) would be visually separated, there would be little combined visual impact, and the new facilities would not substantially contrast from the urban nature of the area.

Because the transit options do not include recommendations for noise barriers, the only visual effects associated with noise barriers under this transit option

Combined Impacts of 7200 West Freeway and 5600 West Transit Alternatives		
KOP	Visual Contrast Rating	
	Dedicated Right-of-Way Option	Mixed-Traffic Option
KOP 1	Moderate	Moderate
KOP 2	Weak	Weak
KOP 3	Weak	Weak
KOP 4	Weak	Weak
KOP 5	Moderate	Moderate
KOP 6	Moderate	Moderate
KOP 8	Weak to Moderate	Weak to Moderate
KOP 9	Moderate	Moderate
KOP 10	Moderate	Moderate
KOP 11	Moderate	Moderate
Overall	Weak to Moderate	



would be from the noise barriers recommended as part of the 7200 West Freeway Alternative.

The overall visual contrast rating for the combined freeway alternative and transit option would be weak to moderate.

***7200 West Freeway Alternative with Mixed-Traffic Transit Option***

The impacts from the combined 7200 West Freeway Alternative with Mixed-Traffic Transit Option would be the same as those from the 7200 West Freeway Alternative with Dedicated Right-of-Way Transit Option.

**7200 West Freeway Alternative with Tolling Option**

Under the 7200 West Freeway Alternative with Tolling Option, the overall facility design would not change compared to the non-tolled alternative except with regard to the addition of toll gantries as discussed in Section 19.6.3.2, 5800 West Freeway Alternative. The toll gantries would not contrast with the existing landscape at any of the KOPs any more than would bridge structures on the proposed roadway. The visual contrast ratings for each KOP under the Tolling Option would be the same as those for the non-tolled alternative.

**19.6.4 Utah County Alternatives**

In Utah County, three alternatives are under consideration: the Southern Freeway Alternative, the 2100 North Freeway Alternative, and the Arterials Alternative. In addition, a tolling option was evaluated for each Utah County alternative. Impacts under each combination of alternatives and options are discussed in the following sections.

**19.6.4.1 Southern Freeway Alternative**

As described in Chapter 2, Alternatives, this alternative would consist of a freeway extending from the Utah County line to I-15 at Lindon.

***Construction-Related Impacts to Visual Resources***

The visual impacts during construction from the Southern Freeway Alternative would be the same as those from the 5800 West Freeway Alternative except that the affected groups would be different. The viewers of the construction along this alternative would be personnel at Camp Williams and residents in Lehi and American Fork.

Southern Freeway Alternative Impacts	
KOP	Visual Contrast Rating
KOP 13	Strong
KOP 14	Moderate
KOP 15	Weak to Moderate
KOP 16	Moderate
Overall	Moderate



A few residents in Saratoga Springs along with residents in rural areas of Lehi and unincorporated Utah County would also see construction activities. KOPs 13, 15, and 16 represent the views of the local residents that would be diminished during construction.

### *Long-Term Impacts to Visual Resources*

The area crossed by the Southern Freeway Alternative is more rural and agricultural than the area crossed by the alternatives in Salt Lake County. The impacts of this alternative on KOPs 13, 14, 15, and 16 are discussed below. Viewers would see a contrast between the new freeway and the existing agricultural and rural landscape. However, the contrast would be lessened as the urban transition in the area continues.

At KOP 13, the general visual character is rural and agricultural for the middle ground and foreground. The agriculture is mostly row crops and animal production. The visual landscape on the horizon is the commercial development that follows the I-15 corridor. The farm owners and operators would see the new freeway on a regular basis as would the travelers along I-15. The views from I-15 would include the freeway in the landscape, but the freeway would diminish in scale and visibility as the viewers look toward the Oquirrh Mountains. Likewise, the viewers from Camp Williams would still have views of the Wasatch Mountains, although these users would have a more direct view of the wider freeway in the foreground, which would reduce their ability to see the more agricultural views in the distance. The visual contrast rating for this KOP would be strong.

Between KOPs 13 and 14, the freeway would be a depressed (below-grade) roadway section, which would minimize nearby viewers' views of the freeway. A trail would be part of the views at KOP 9 as well as at KOPs 12 and 14 (see the discussion of KOP 9 in Section 19.6.3.2, 5800 West Freeway Alternative). The trail would not cause any visual impact as part of the proposed freeway. In addition, there would be park-and-ride lots near KOPs 12, 14, and 15. However, as noted in the discussion of KOP 8 in Section 19.6.3.1, 5600 West Transit Alternative, the park-and-ride lots would not add substantially to the visual impact of the freeway because the park-and-ride lots are small and are consistent with the urban landscape created by the proposed freeway.

KOP 14 overlooks an area south of Main Street in Lehi. The area is undergoing development as evidenced by the construction debris. The new freeway would contrast with the river-bottom vegetation in line, color, texture, and form. However, the new urban development is more consistent with the proposed freeway. The users of this site are currently agricultural or rural residential



viewers. The recreation users along the Jordan River would see the more natural views of the river with scattered residential units visible. The visual contrast rating at this KOP would be moderate.

KOP 15 is not directly adjacent to the proposed freeway but would overlook the proposed freeway. The KOP is located at Wetlands Park (Radio-Controlled Airplane Park). The users viewing this site would be users of the Jordan River, Wetlands Park, and the nearby agricultural fields owned by the Church of Jesus Christ of Latter-day Saints. The site is removed from some of the urbanization occurring in other portions of the impact analysis area. The proposed freeway would differ in form, color, and texture from the current road that serves the park, although the visual changes at this KOP would be lessened because of the distance to the proposed freeway. The visual contrast rating at this KOP would be weak to moderate.

KOP 16 is located at the southern terminus of the Southern Freeway Alternative where it connects with I-15. At this location, the area is urbanized and there is little residential development. Viewers in this area are primarily users of I-15. Along the alternative to the east, the area is more rural with agriculture dominant. The freeway in this area would contrast visually with the existing land use. The viewers from the agricultural areas and I-15 who are accustomed to seeing the agricultural area would experience a moderate visual impact due to the urban form of the proposed freeway. The visual contrast rating for this KOP would be moderate.

**Noise Barriers.** As shown in [Table 19.6-1](#) above, Noise-Abatement Barriers by Alternative, a noise barrier would be effective, feasible, and reasonable at one location along the Southern Freeway Alternative alignment between 8700 West and 8000 West south of Lehi and north of Utah Lake. This barrier would be constructed only if agreed to by the local residents. Residents would weigh the costs and benefits associated with the barrier, including its visual impacts. The barrier would attenuate roadway noise and block the roadway from view, but could also affect residents' long-range views of the valley, foothills, and mountains. See Chapter 13, Noise, for more information about UDOT's noise barrier policy.

**Overall Visual Contrast Rating.** The overall visual contrast rating for the Southern Freeway Alternative would be moderate.

### **Southern Freeway Alternative with Tolling Option**

Under the Southern Freeway Alternative with Tolling Option, the overall facility design would not change compared to the non-tolled alternative except with regard to the addition of toll gantries as discussed in Section 19.6.3.2, 5800 West



Freeway Alternative. The toll gantries would not contrast with the existing landscape at any of the KOPs any more than would bridge structures on the proposed roadway. The visual contrast ratings for each KOP under the Tolling Option would be the same as those for the non-tolled alternative.

**19.6.4.2 2100 North Freeway Alternative**

As described in Chapter 2, Alternatives, this alternative would consist of a freeway extending from the Utah County line to SR 73 in Saratoga Springs and a lateral freeway extending east along 2100 North to I-15 in Lehi.

2100 North Freeway Alternative Impacts	
KOP	Visual Contrast Rating
KOP 13	Strong
KOP 14	Moderate
KOP 15	No Visual Impact
KOP 16	No Visual Impact
Overall	Moderate

***Construction-Related Impacts to Visual Resources***

The visual impacts during construction from the 2100 North Freeway Alternative would be the same as those from the 5800 West Freeway Alternative except that the affected groups would be different. The viewers of the construction along this alternative would be personnel at Camp Williams and residents in Lehi along 2100 North. A few residents in Saratoga Springs along with residents in rural areas of Lehi and unincorporated Utah County would also see construction activities where the alternative ends at SR 73. KOPs 13 and 14 represent the views of the local residents that would be diminished during construction.

***Long-Term Impacts to Visual Resources***

The impacts of this alternative on KOPs 13 and 14 are discussed below. Because this alternative would end at SR 73, there would be no visual impacts at KOPs 15 and 16. Overall, viewers at KOPs 13 and 14 would see a contrast between the new freeway and the existing agricultural and rural landscape. However, the contrast would be lessened as the urban transition in the area continues.

At KOP 13, the main views would be of the freeway through Camp Williams and the portion along 2100 North which would include both a freeway and a frontage road. In addition, there would be a freeway-to-freeway interchange with I-15 at 2100 North. The general visual character of this area is rural and agricultural for the middle ground and foreground. The agriculture is mostly row crops and animal production. The visual landscape on the horizon is the commercial development that follows the I-15 corridor. The 2100 North portion would substantially contrast in line and color with the agricultural area; however, the portion of this alternative near Redwood Road would be a depressed (below-





grade) roadway section, which would limit the visual impact. Farm owners and operators would see the new freeway on a regular basis as would the travelers along I-15. The views from I-15 would include the freeway in the landscape, but the freeway would diminish in scale and visibility as the viewers look toward the Oquirrh Mountains. Likewise, the viewers from Camp Williams would still have views of the Wasatch Mountains, although these users would have a more direct view of the wider freeway in the foreground and the freeway interchange with I-15, which would reduce their ability to see the more agricultural views in the distance. The MVC interchange with I-15 would be within the overall developed nature of the I-15 corridor. Overall, the visual contrast rating for this KOP would be strong.

Between KOPs 13 and 14, the freeway would be a depressed roadway section, which would minimize nearby viewers' views of the freeway. A trail would be part of the views at KOP 9 as well as at KOPs 12 and 14 (see the discussion of KOP 9 in Section 19.6.3.2, 5800 West Freeway Alternative). The trail would not cause any visual impact as part of the proposed freeway. In addition, there would be park-and-ride lots near KOPs 12 and 14. As noted in the discussion of KOP 8 in Section 19.6.3.1, 5600 West Transit Alternative, the park-and-ride lots would not add substantially to the visual impact of the freeway because the park-and-ride lots are small and are consistent with the urban landscape created by the proposed freeway.

KOP 14 overlooks an area south of Main Street in Lehi. The area is undergoing development as evidenced by the construction debris. The new freeway would contrast with the river-bottom vegetation in line, color, texture, and form; however, the new urban development is more consistent with the proposed freeway in lines, form, and texture. The users of this site are currently agricultural or rural residential viewers. The recreation users along the Jordan River would see the more natural views of the river with scattered residential units visible. The visual contrast rating at this KOP would be moderate.

**Noise Barriers.** As shown in [Table 19.6-1](#) above, Noise-Abatement Barriers by Alternative, noise barriers would be effective, feasible, and reasonable at two locations along the 2100 North Freeway Alternative alignment. These barriers would be constructed only if agreed to by the local residents. Residents would weigh the costs and benefits associated with the barriers, including their visual impacts. The barriers would attenuate roadway noise and block the roadway from view, but could also affect residents' long-range views of the valley, foothills, and mountains. See Chapter 13, Noise, for more information about UDOT's noise barrier policy.



**Overall Visual Contrast Rating.** The overall visual contrast rating for the 2100 North Freeway Alternative would be moderate. Compared to the other Utah County alternatives, the 2100 North Freeway Alternative would have the fewest impacts because the alternative covers the least amount of area and does not extend south toward Utah Lake.

**2100 North Freeway Alternative with Tolling Option**

Under the 2100 North Freeway Alternative with Tolling Option, the overall facility design would not change compared to the non-tolled alternative except with regard to the addition of toll gantries as discussed in Section 19.6.3.2, 5800 West Freeway Alternative. The toll gantries would not contrast with the existing landscape at any of the KOPs any more than would bridge structures on the proposed roadway. The visual contrast ratings for each KOP under the Tolling Option would be the same as those for the non-tolled alternative.

**19.6.4.3 Arterials Alternative**

As described in Chapter 2, Alternatives, this alternative would consist of a series of arterial roadways throughout northern Utah County. The combination of arterials includes a freeway segment from the Utah County line to SR 73 and arterial roadways at Porter Rockwell Boulevard, 2100 North, and 1900 South.

Arterials Alternative Impacts	
KOP	Visual Contrast Rating
KOP 13	Strong
KOP 14	Moderate
KOP 15	Weak to Moderate
KOP 16	Moderate
Overall	Moderate

**Construction-Related Impacts to Visual Resources**

The visual impacts during construction from the Arterials Alternative would be the same as those from the 5800 West Freeway Alternative except that the affected groups would be different. The viewers of the construction along this alternative would be personnel at Camp Williams and residents in Lehi, in particular for the 2100 North connection. A few residents in Saratoga Springs along with residents in rural areas of Lehi and unincorporated Utah County would also see construction activities. KOPs 13, 14, 15, and 16 represent the views of the local residents that would be diminished during construction.

**Long-Term Impacts to Visual Resources**

The impacts of this alternative on KOPs 13, 14, 15, and 16 are discussed below. Viewers would see a contrast between the new roadway and the existing agricultural and rural landscape. However, the contrast would be lessened as the urban transition in the area continues.



At KOP 13, two different freeway and arterial segments would be visible: the connections at 10400 North for Porter Rockwell and the 2100 North connection. The general visual character of this area is rural and agricultural for the middle ground and foreground. The agriculture is mostly row crops and animal production. The visual landscape on the horizon is the commercial development that follows the I-15 corridor. The 2100 North connection would substantially contrast in line and color with the agricultural area. The farm owners and operators would see the new freeway and arterial on a regular basis as would the travelers along I-15. The views from I-15 would include the roadway in the landscape, but the roadway would diminish in scale and visibility as the viewers look toward the Oquirrh Mountains. Likewise, the viewers from Camp Williams would still have views of the Wasatch Mountains, although these users would have a more direct view of the wider freeway in the foreground, which would reduce their ability to see the more agricultural views in the distance. The visual contrast rating for this KOP would be strong.

Between KOPs 13 and 14, the freeway would be a depressed (below-grade) roadway section, which would minimize nearby viewers' views of the roadway. A trail would be part of the views at KOP 9 as well as at KOPs 12 and 14 (see the discussion of KOP 9 in Section 19.6.3.2, 5800 West Freeway Alternative). The trail would not cause any visual impact as part of the proposed alternatives. In addition, there would be park-and-ride lots near KOPs 12, 14, and 15. As noted in the discussion of KOP 8 in Section 19.6.3.1, 5600 West Transit Alternative, the park-and-ride lots would not add substantially to the visual impact, because the park-and-ride lots are small and consistent with the urban landscape created by the proposed roadway.

KOP 14 overlooks an area south of Main Street in Lehi. The area is undergoing development as evidenced by construction debris. The new freeway would contrast with the river-bottom vegetation in line, color, texture, and form. The new urban development is more consistent with the proposed project in lines, form, and texture. The users of this site are currently agricultural or rural residential viewers. The recreation users along the Jordan River would see the more natural views of the river with scattered residential units visible. The visual contrast rating at this KOP would be moderate.

KOP 15 is not directly adjacent to the proposed arterial but overlooks the 1900 South portion of this alternative. The KOP is located at Wetlands Park (Radio-Controlled Airplane Park); users viewing this site would be users of the Jordan River, Wetlands Park, and the nearby agricultural fields owned by the Church of Jesus Christ of Latter-day Saints. The site is removed from some of the urbanization occurring in other portions of the impact analysis area. The proposed arterial would differ in form, color, and texture from the current road



that serves the park, although the visual changes at this KOP would be lessened because of the distance to the proposed roadway. The visual contrast rating at this KOP would be weak to moderate.

KOP 16 is located at the southern terminus of the arterial on 1900 South where it would connect with I-15. At this location, the area is urbanized and there is little residential development. Viewers in this area are primarily users of I-15. Along the proposed 1900 South arterial to the east, the area is more rural with agriculture dominant. The arterial in this area would contrast visually with the existing land use. The viewers from the agricultural areas and I-15 who are accustomed to seeing the agricultural area would experience a moderate visual impact due to the urban form of the proposed arterial. The visual contrast rating for this KOP would be moderate.

**Noise Barriers.** As shown in [Table 19.6-1](#) above, Noise-Abatement Barriers by Alternative, noise barriers would be effective, feasible, and reasonable at two locations along the Arterials Alternative alignment (one along the 1900 South arterial and one along the 2100 North arterial). Noise barriers would be constructed only if agreed to by the local residents. Residents would weigh the costs and benefits associated with barriers, including their visual impacts. The barriers would attenuate roadway noise and block the roadway from view, but could also affect residents' long-range views of the valley, foothills, and mountains. See Chapter 13, Noise, for more information about UDOT's noise barrier policy.

**Overall Visual Contrast Rating.** The overall visual contrast rating for the Arterials Alternative would be moderate.

### **Arterials Alternative with Tolling Option**

Under the Arterials Alternative with Tolling Option, the overall facility design would not change compared to the non-tolled alternative except with regard to the addition of toll gantries as discussed in Section 19.6.3.2, 5800 West Freeway Alternative. The toll gantries would not contrast with the existing landscape at any of the KOPs any more than would bridge structures on the proposed roadway. The visual contrast ratings for each KOP under the Tolling Option would be the same as those for the non-tolled alternative.



### 19.6.5 Mitigation Measures

During the preliminary design phase of the MVC project, depressing the roadway (below grade) was considered to reduce visual impacts. The final use of depressed sections will be evaluated during the final design phase after more detailed geotechnical and cost studies are performed. Additional aesthetic measures such as lighting; vegetation and plantings; the color of bridges, structures, and retaining walls; and other architectural features such as railings would be considered during the final design phase of the project.

*Landscaping and Lighting.* The park-and-ride lots would be landscaped with native drought-tolerant vegetation to reduce water flow and to serve as an aesthetic enhancement. For all roadways, landscape plans for the roadway include replacement landscaping and median landscaping to reduce the impacts from the loss of vegetation. Directional lighting will be used where appropriate to reduce impacts to nearby residences.

### 19.6.6 Cumulative Impacts

Cumulative impacts were analyzed for local and regionally important issues (farmlands, air quality, water quality, and ecosystems) as developed with resource agencies and the public during scoping. See Chapter 25, Cumulative Impacts, for a more detailed discussion of cumulative impacts.

### 19.6.7 Summary of Impacts

The long-term visual impacts from the action alternatives would be caused by increased pavement width or the addition of new pavement, including cut-and-fill; addition of transit stations and park-and-ride lots; loss of mature trees and urban vegetation; loss of agricultural land; and replacement of existing bridges, interchanges, and drainage structures. The proposed improvements would occur along the existing roadway corridors and the power corridor. Some of the improvements would occur along less-developed agricultural areas, some of which are being converted into urban or suburban development, some of which are not. The roadway improvements would not substantially alter the existing visual character of the area because the area is mostly urban or is being converted from rural to urban. Overall, the visual impacts from the Salt Lake County alternatives would be similar, but the 2100 North Freeway Alternative would have the fewest visual impacts because it would not extend south toward Utah Lake.

[Table 19.6-2](#) below summarizes the visual impacts from each combination of alternatives and options in Salt Lake County and Utah County.

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**Table 19.6-2. Summary of Visual Impacts for Combined Salt Lake County and Utah County Alternatives**

Alternative <sup>a</sup>	Degree of Contrast for Construction-Related Impacts				Degree of Contrast for Long-Term Impacts			
	None	Weak	Moderate	Strong	None	Weak	Moderate	Strong
<i>5800 West Freeway / 5600 West Transit / Southern Freeway</i>								
Dedicated Transit		X					X	
Mixed Transit		X					X	
<i>5800 West Freeway / 5600 West Transit / 2100 North Freeway</i>								
Dedicated Transit		X					X	
Mixed Transit		X					X	
<i>5800 West Freeway / 5600 West Transit / Arterials</i>								
Dedicated Transit		X					X	
Mixed Transit		X					X	
<i>7200 West Freeway / 5600 West Transit / Southern Freeway</i>								
Dedicated Transit		X					X	
Mixed Transit		X					X	
<i>7200 West Freeway / 5600 West Transit / 2100 North Freeway</i>								
Dedicated Transit		X					X	
Mixed Transit		X					X	
<i>7200 West Freeway / 5600 West Transit / Arterials</i>								
Dedicated Transit		X					X	
Mixed Transit		X					X	

The contrasts reported in the table combine the contrast of the foreground, middle ground, and background. Background views would have less visible contrast, while foreground views would have more visible contrast.

<sup>a</sup> Dedicated Transit = Dedicated Right-of-Way Transit Option; Mixed Transit = Mixed-Traffic Transit Option

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## 19.7 References

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