SECTION 6-4-3
VISUAL RESOURCES AND AESTHETIC CONSIDERATIONS

A Visual Impact Assessment (VIA; see **Appendix F**) was prepared for the I-81 Viaduct Project (the Project) consistent with the *Guidelines for the Visual Impact Assessment of Highway Projects* issued by the Federal Highway Administration (FHWA) in 2015 (FHWA-HEP-15-029[1]), the NYSDOT visual assessment policy, and pursuant to the New York State Department of Environmental Conservation Program and Policy Assessing and Mitigating Visual Impacts (NYSDEC DEP-00-2). The primary purpose of the VIA is to inform the public, State and Federal regulators, engineers, designers, decision-makers, public officials, and other stakeholders about important visual resources near the Project and the potential visual effects of the Project alternatives relative to existing conditions. In accordance with these guidelines, the existing visual character, quality of the affected visual environment, and the viewer response to visual resources provide a framework for assessing the change in visual character and quality that would occur as a result of the Project. The VIA for the I-81 Viaduct Project included the following phases and components, as defined in FHWA-HEP-15-029:

Establishment Phase

- Establishing the Project's regulatory context with respect to visual impacts, per Section 4.3 of the FHWA's *Guidelines for the Visual Impact Assessment of Highway Projects*;
- Identifying the Project's Area of Visual Effect (AVE), which includes the visual range of proposed Project elements under the No Build, Viaduct, and Community Grid Alternatives;
- Mapping the Project's viewshed accounting for local topography and visual obstructions; and
- Defining the visual character of the Project's AVE by landscape units, or areas that have the same or similar types of visual character and land use.

Inventory Phase

- Inventorying and evaluating existing visual resources and viewer groups, and then considering the relationship between viewers and their environment;
- Describing the appearance and compatibility of the visible components of the Project;
- Establishment of viewer preference; and
- Selecting key views for visual assessment and determining visual quality.

Analysis Phase

- Evaluating potential visibility through visual simulation of proposed components, including design elements being considered for incorporation into the Project; and
- Assessing changes to visual quality resultant from Project impacts.

[1] FHWA. Guidelines for the Visual Impact Assessment of Highway Projects. https://www.environment.fhwa.dot.gov/guidebook/documents/VIA_Guidelines_for_Highway_Projects.asp. January 2015.

Mitigation Phase

- Describing measures to be implemented, if necessary, to mitigate adverse visual effects and identify opportunities for visual enhancements in the Project Area.

The preparation of the VIA involved collection and review of property data, including existing City of Syracuse comprehensive plans (e.g., City of Syracuse 2012) and land use studies relevant to visual resources within the AVE. Land use parcel data, topography, aerial photographs, and cultural resources information[2] were acquired from various state and local agency sources for use in project mapping, graphic illustrations, and visual simulations from key viewpoints within the AVE. Site reconnaissance and field investigations were conducted to photo-document existing visual character and quality. The VIA is provided in **Appendix F**.

6-4-3.1 AFFECTED ENVIRONMENT

6-4-3.1.1 ESTABLISHMENT PHASE

Existing Visual Character

The visual setting for the Project is primarily an urban environment that is visually dominated by built forms. These forms include commercial, institutional, and residential buildings of varying height, architectural style, scale, and massing (vertical and horizontal). Other site characteristics include public utilities (poles and wires), signage, surface streets, parking lots, pedestrian areas, sidewalks, and elevated interstate highway infrastructure (viaducts and ramps). Downtown Syracuse is the region's urban center located southwest of the I-81/I-690 interchange. The elevated viaduct portion of I-81 in Syracuse is a prominent visual feature of the city's urban landscape. The visual characteristics of the urban environment are discussed in more detail in the VIA in **Appendix F**.

Topography in the Project vicinity ranges from relatively flat along the interstates in Downtown Syracuse to more rolling terrain with increased elevations in the outer portions of the surrounding neighborhoods. This increase in topography is most noticeable in the University Hill neighborhood (southeast of Downtown) and north of the I-81/I-690 interchange in the city's Northside neighborhood. Elevations in the Project vicinity range from approximately 390 feet above mean sea level (amsl) on the shore of Onondaga Lake to approximately 485 feet amsl near Oakwood Cemetery in the University Hill neighborhood. West of Syracuse, elevations range from 380 to 600 feet amsl, and undulating landscapes are characterized by till plains, rolling hills, drumlins, outwash plains, and valleys. East of Syracuse, elevations range from 370 to 450 feet amsl and consist of lake-plain topography, low hills, and lowlands.

[2] Sources of data reviewed and incorporated into the analyses for the VIA included: 1. AKRF, Inc., 2016. I-81 Viaduct Project Architectural Resources Survey. Report prepared by AKRF, Inc., New York, New York on behalf of New York State Department of Transportation, Albany, New York; 2. City of Syracuse, 2012. Syracuse Comprehensive Plan 2040. City of Syracuse, Syracuse, New York; 3. City of Syracuse. 2016. Syracuse Neighborhoods [shapefile]; 4. National Park Service. 2017. National Register of Historic Places [website]. U.S. Department of the Interior; 5. New York State Office of Parks, Recreation, and Historic Preservation (NYSOPRHP). 2017. National Register of Historic Places listings in New York State [shapefile]; 6. Onondaga County. 2017. Onondaga County Parcel Data. Syracuse-Onondaga County G.I.S. on the Web [website]; 7. Onondaga County. 2017. Building Footprints [shapefile]; 8. United States Forest Service. 2010. USFS LIDAR 2010 [GIS dataset]; 9. United State Geological Survey. 2010. National Elevation Dataset [GIS dataset].

Vegetation, although limited in many areas along the I-81 viaduct, occurs throughout the visual environment surrounding the Project. Tree heights, canopy coverage, and density of vegetation typically increase as the distance from Downtown increases. In Downtown, vegetation is mostly deciduous and includes street trees, some lawns, and landscaped areas. These vegetative characteristics are seen in neighborhood parks and on the grounds of both private and public facilities. Vacant lots typically include some shrub cover and young trees. Outside of the Downtown core, in surrounding residential neighborhoods and commercial areas, vegetation is more abundant. The vegetation is mostly deciduous with some evergreen trees and shrubs. During the leaf-off season (late fall, winter, and early spring), the Project's visibility may increase from areas characterized by deciduous vegetation. Some neighborhood hilltops and City parks contain dense stands of woodland that create a visible edge on the horizon in mid-ground and background views from the Project and adjacent areas.

Area of Visual Effect (AVE)

The *Guidelines for the Visual Impact Assessment of Highway Projects* (FHWA 2015) specify that visual impacts should be assessed within a given project's AVE, which is defined as the area of project visibility. The AVE for the proposed Project is defined as the area within 0.5-mile of the Limits of Disturbance (LOD) for either build alternative (see **Figure 6-4-3-1**). As described in the VIA, viewshed analysis, and the results of field review, visibility of the existing Project and anticipated visibility of the proposed alternatives are limited in most locations due to distances of less than 0.5-mile from the Project. Therefore, the 0.5-mile AVE represents a conservative study area within which to assess the potential visual effects of the Project.

The VIA is primarily focused on the Central Study Area in Downtown Syracuse. This area includes the I-81/I-690 interchange, which has the greatest potential for substantial changes in visual character and quality resulting from the Project alternatives. The changes to the I-81/I-481 interchanges, as well as the proposed work along existing I-481 (such as the installation of noise barriers), under the Community Grid Alternative are in areas that have low viewer sensitivity. In general, the improvements would be compatible with the existing visual environment and have minimal impact on visual quality.

Landscape Units

The existing visual character of the AVE is described in the VIA in terms of the affected visual environment, affected viewer population, and the visual quality of the landscape units established to determine baseline visual conditions. The VIA defines 14 landscape units in the AVE. As stated previously, the VIA is focused on the Central Study Area in Downtown Syracuse because it has the greatest potential for substantial changes in visual character and visual quality resulting from Project alternatives (see **Figure 6-4-3-1**). Landscape units are geographic areas that generally correspond to areas with a distinct visual character, defined by factors such as topography, density, scale, architectural character, land use, vegetation, and use by different viewer groups. Visual characteristics are generally uniform within a landscape unit. Each landscape unit is defined by distinct visual qualities that provide a unique identity based on visual characteristics. Landscape units within the AVE are listed in **Table 6-4-3-1**. Landscape units are described in greater detail and illustrated in the VIA (see **Appendix F**).

6-4-3.1.2 INVENTORY PHASE

Affected Environment

As described previously in "Existing Visual Character," the affected environment is an urban landscape. The density, mass, and architectural character of the built environment are the most significant factors contributing to the visual character of the Downtown area and surrounding parts of the city. The density of the built environment, including residential, institutional, civic, commercial, and industrial properties, is greatest in the Urban Downtown Core landscape unit and areas immediately adjacent to the viaduct and I-81/I-690 interchange area. The areas outside the Urban Downtown Core landscape unit exhibit a suburban visual character, exhibited through lower and more modern building forms, less density, and more open space between buildings. In these areas, the vegetation is generally characterized by maintained lawn and designed/ornamental planting plans.

As described in more detail in the VIA (see **Appendix F**), the visual environment for the Project includes visually sensitive areas. These sensitive areas include sites and districts that are eligible for listing or listed on the National Register (NR) of Historic Places, the Erie Canalway National Heritage Corridor, and local parks and recreational resources, such as the Syracuse Connective Corridor and Onondaga Creekwalk along Onondaga Creek.

Affected Population

Consistent with *Guidelines for the Visual Impact Assessment of Highway Projects* (FHWA 2015), two primary viewer groups (and subgroups of each) are considered in the visual analysis to identify the Project's affected population. Viewer groups are defined as "neighbors" (those who have views of the Project) and "travelers" (those who have views from the Project) (FHWA 2015). Neighbors are defined as persons located near or adjacent to the Project. Neighbors may be located anywhere within the AVE if they have a potential view to the Project. Neighbors include persons traveling on non-Project local roadways and other travel routes such as sidewalks and trails, but do not include persons traveling on Project interstates or affected surface streets. Neighbors are classified by the landscape unit where they are located, which is used to characterize their sensitivity to changes in visual character and quality. The anticipated sensitivity to changes in the visual environment for the various types of viewer groups within the AVE is summarized below (FHWA 2015).

Travelers make up the second viewer group. Travelers are on Project roadways with views from the interstates or Project-affected streets within the AVE. These viewers remain travelers if they are located on Project roadways, including the viaduct and the I-81/I-690 interchange. This group consists of existing and future Project users. Viewer groups and subgroups are identified by landscape unit in **Table 6-4-3-1** and discussed in detail in the VIA (see **Appendix F**).

Residents and building occupants include potential neighbors who live and work within the AVE. They generally view the urban landscape from relatively static locations, such as their homes, yards, schools, workplace. Building occupants may include business customers and patrons who may temporarily occupy or visit a location with a view of the Project. Except when involved in local travel, residents are likely to be stationary and have frequent, prolonged duration views of the landscape. Residents may view the urban landscape from ground level or elevated viewpoints, such as the upper floors of homes and buildings. These viewers' sensitivity to changes in visual quality is variable.

However, it is assumed that residents may be very sensitive to changes in views, both positively and negatively, from their homes and yards because they have chosen to reside at those locations.

Table 6-4-3-1
Viewer Groups and Subgroups by Landscape Unit

Landscape Units in the Project AVE	Viewer Groups												
	Travelers Group				Neighbors Group								
	Subgroups				Predominant Subgroups								
	Commuting (Commuters)	*Touring (Tourists)*	*Shipping (Deliveries)*		*Residents (Homes, Apartments, Condos)*	*Recreationists (Bicyclists, Trail Users)*	*Institutional (Professionals, Students, etc.)*	*Civic (Event Participants, Public Services)*	*Retail (Shoppers)*	*Commercial (Business Patrons & Workers)*	*Industrial (Employees)*	*Motorists and Transit Users*	*Pedestrians*
Transportation Corridor – Highway	X	X	X									X	
Transportation Corridor – Commercial Arterial	X	X	X							X	X	X	X
Urban Downtown Core					X	X	X	X	X	X		X	X
Urban Neighborhood – Residential					X	X						X	X
Urban Neighborhood – Commercial Core									X	X		X	X
Urban Neighborhood – Mixed Use					X	X				X		X	X
Urban Institutional Campus					X	X	X	X		X		X	X
Urban Legacy Industrial										X	X	X	X
Urban Large-Scale Development	X					X			X	X	X	X	X
Suburban Commercial										X		X	
Suburban Residential					X							X	
Open Space – Undeveloped						X							
Open Space – Designed Landscape						X		X					X
Open Space – Waterfront						X		X					X

Commuters are passing through the area with views from motor vehicles on their way to work, home, or other destinations. Commuters are typically moving, have a relatively narrow field of view because they are focused on driving, and are destination oriented. Drivers are generally focused on roadway and traffic conditions ahead of them and do not have many opportunities to observe roadside and surrounding scenes. Passengers have greater opportunities than drivers for prolonged views and an increased awareness of changes in the visual environment. Commuters' sensitivity to changes in visual quality is variable. It is assumed that regular, local commuters familiar with the area may be very sensitive to changes in views that they travel through on a regular basis.

Tourists and recreationists include residents and out-of-town visitors involved in cultural, recreational, and entertainment activities. These activities take place at parks, civic places, historic sites, retail space, entertainment venues, water bodies, and undeveloped open spaces with natural settings (e.g., hiking and biking trails). These viewers may be concentrated at such sites within the AVE and can be stationary or mobile. These same individuals may view the landscape as travelers from highways while

on their way to these destinations. Tourists, bicyclists, boaters, shoppers, cultural event participants, and those involved in passive activities (e.g., picnicking, sightseeing) are part of this group. Urban landscapes, such as public venues and event gathering places, may be very important to their experience and sensitivity may be high. Recreational users and tourists may experience continuous views of landscape features over relatively long durations and sensitivities may vary with their activities.

Key Views

Key viewpoints were selected to provide representative views of the Project and analyze potential visual changes that would result from each build alternative. Existing conditions and visibility of the Project were documented and photographed during multiple site visits throughout the AVE in 2016, 2017, 2019, and 2020. As described in more detail in the VIA (see **Appendix F**), photographs were taken from 200 viewpoints to document representative views of existing conditions and views of the Project from diverse visual settings within the AVE. The site visits and photography were conducted in accordance with *Guidelines for the Visual Impact Assessment of Highway Projects*, Appendix E: Field Reconnaissance Techniques (FHWA 2015). Viewpoints typically represented the most open, unobstructed available views to the Project to the extent that was practicable, given constraints such as private property. Some viewpoints were selected to provide representative views from certain landscape units or viewer circumstances, for example, from locations where existing vegetation and/or the built environment screen views of the Project.

In addition, some viewpoints were located on the roofs of public parking garages to provide representative examples of elevated views within the urban setting, comparable to views that would be available from interior areas of tall buildings within the AVE. The Project is a prominent feature in many views from tall buildings in Downtown Syracuse. Although views from the roofs of parking garages are not considered to be sensitive, these viewpoints provide open views of the Project from publicly accessible elevated vantage points that are representative of views that would be available to residents and employees who occupy tall buildings in the areas adjacent to these parking structures. These elevated vantage points provide open, longer distance, and panoramic views of the Project in its urban setting that are not generally available from ground-surface vantage points in the visual study area. Therefore, photographs depicting the No Build Alternative/existing conditions and visual simulations depicting the build alternatives from rooftop locations were included to represent the views that would be available to residents and workers who regularly experience views of the Project from elevated vantage points.

Viewpoints located on bridges and overpasses were selected to provide representative views of travelers on the interstate system as well as views of motorists and pedestrians traveling on elevated structures that would be affected by the Project. These elevated vantage points provide longer distance views of the Project as a transportation corridor within the context of its urban setting that are not generally available from ground-surface vantage points in the visual study area. Therefore, photographs depicting the No Build Alternative/existing conditions and visual simulations depicting the build alternatives from these locations were included to represent the views that would be available to interstate travelers as well as motorists and pedestrians who regularly experience views of the Project from elevated vantage points.

Thirty-two (32) key viewpoints were selected to prepare visual simulations for both build alternatives to evaluate potential visual effects and the degree of change in visual quality (see **Figure 6-4-3-2**). The

methodology for the preparation of the visual simulations is discussed in Chapter 2 of the VIA (see **Appendix F**). The visual simulations are representative of design intent and the preliminary layout of site elements. These elements will be further refined as the design progresses for each build alternative. The final selection of site elements such as lighting, planting, and paving, as well as materials, colors, and finishes, will be determined during final design. Trees and plantings are shown in the visual simulations in an established and mature state to allow for a direct, equivalent comparison of each build alternative relative to the No Build Alternative/existing conditions. These key viewpoints were selected based on multiple factors, including:

- The viewpoints provide open views of proposed highway infrastructure and Project changes (as indicated by field verification) or provide representative views of the screening effects of vegetation and/or buildings from selected area;
- The viewpoints illustrate Project visibility from sensitive areas and resources within the AVE identified by stakeholders and state agencies;
- The viewpoints illustrate typical views from landscape units where views of the Project would be available;
- The viewpoints illustrate typical views of the Project that would be available to representative viewer groups within the AVE; and
- The photos obtained from the viewpoints display good landscape composition, lighting, exposure, and/or representative documentation of existing conditions.

6-4-3.1.3 ANALYSIS PHASE

Evaluation of Visual Quality

The FHWA VIA guidelines provide recommendations for those professional individuals who are responsible for the production of a VIA with regard to skills, training and experience. The guidelines recommend professionals who have completed training in VIA's, Context Sensitive Solutions, Complete Streets, and public involvement.[3] The evaluation of visual quality for this project was performed by a panel of seven registered landscape architects. The landscape architects evaluated the visual quality of the existing visual environment, as well as the potential effect of the Project on the visual environment. Landscape architects have academic and professional training and expertise in aesthetics and design issues and opportunities related to visual quality. The panel of landscape architects who conducted the visual impact rating was made up of registered professionals employed by the firms involved in the Project. However, none of the panel members had previous direct involvement in the design or any other aspects of the Project. In addition, the panel included individuals with varying degrees of familiarity with the Project setting, including residents of the City of Syracuse and Onondaga County as well as non-local representatives. The selection of panel members provided for a diverse and unbiased professional assessment of potential visual quality and visual impacts for the Project alternatives. The visual impact methodology and criteria used by the panel are described in more detail in **Appendix F**.

[3] FHWA. Guidelines for the Visual Impact Assessment of Highway Projects. Section 3.1 https://www.environment.fhwa.dot.gov/guidebook/documents/VIA_Guidelines_for_Highway_Projects.asp. January 2015.

The panel's evaluation was based on a comparison of the photographic simulations of the Project's build alternatives to photos of existing conditions. For this analysis, the existing conditions are assumed to represent conditions under the No Build Alternative. The visual compatibility of the Project was considered by comparing the existing visual character of the AVE in terms of the natural, cultural, and Project environments to the visual character of each build alternative, with consideration given to its scale, form, and materials. The potential visual effect of each build alternative was evaluated relative to the existing character and quality of the visual environment.

The sensitivity of viewer groups to changes in visual quality from these representative viewpoint locations was considered in anticipating their response. Viewer sensitivity was determined by considering viewer exposure (proximity, extent, and duration) and awareness (attention, focus, protection) per FHWA guidelines. The analysis considers the sensitivity of viewer groups to changes in visual quality by anticipating their response to the alternatives. Existing viewer sensitivity within the affected environment considers viewer exposure (proximity, extent, and duration) and awareness (attention, focus, protection) under the No Build and build alternatives. For instance, viewer sensitivity is considered high if viewer exposure is considered high, if awareness of the changes in visual character is considered prominent, and/or if the viewer would be otherwise perceptive of changes in the visual environment. The evaluation of contrast in visual character considers project scale, form, color, and texture/materials. In each simulation, an alternative is considered compatible if the environment can absorb the visual changes that result from the proposed project and the environment has compatible or similar visual character. Viewer sensitivity and overall Project compatibility at each of the 32 selected viewpoints are summarized in **Table 6-4-3-2**.

Table 6-4-3-2
Summary of Viewer Sensitivity and Project Compatibility for Selected Viewpoints

Selected Viewpoint	Landscape Unit	Overall Viewer Sensitivity[1]	Overall Project Compatibility[2]		
			No Build	Viaduct	Community Grid
1	Urban Downtown Core	Moderate	Compatible	Incompatible	Incompatible
2	Urban Downtown Core	Moderate	Compatible	Incompatible	Compatible
3	Urban Downtown Core	Moderate	Incompatible	Incompatible	Compatible
4	Urban Downtown Core	High	Compatible	Incompatible	Compatible
5	Urban Downtown Core	Moderate	Incompatible	Incompatible	Compatible
6	Urban Institutional Campus	Moderate	Incompatible	Incompatible	Compatible
7	Urban Institutional Campus	High	Incompatible	Incompatible	Compatible
8	Urban Institutional Campus	Moderate	Compatible	Compatible	Compatible
9	Urban Institutional Campus	Moderate	Incompatible	Incompatible	Compatible
10	Transportation Corridor Commercial Arterial	Moderate	Incompatible	Incompatible	Compatible
11	Transportation Corridor Commercial Arterial	Moderate	Compatible	Incompatible	Compatible
12	Transportation Corridor Commercial Arterial	Moderate	Compatible	Incompatible	Compatible
13	Transportation Corridor Commercial Arterial	Low	Compatible	Compatible	Compatible
14	Transportation Corridor Commercial Arterial	Moderate	Compatible	Compatible	Compatible
15	Transportation Corridor Commercial Arterial	Moderate	Compatible	Compatible	Compatible
16	Transportation Corridor Highway	Moderate	Compatible	Incompatible	Incompatible

Table 6-4-3-2 (Cont'd)
Summary of Viewer Sensitivity and Project Compatibility for Selected Viewpoints

Selected Viewpoint	Landscape Unit	Overall Viewer Sensitivity[1]	Overall Project Compatibility[2]		
			No Build	Viaduct	Community Grid
17	Transportation Corridor Highway	Low	Compatible	Compatible	Compatible
18	Transportation Corridor Highway	Moderate	Incompatible	Compatible	Compatible
19	Transportation Corridor Highway	Moderate	Compatible	Compatible	Compatible
20	Transportation Corridor Highway	Moderate	Compatible	Compatible	Compatible
21	Urban Neighborhood Residential	Moderate	Incompatible	Incompatible	Compatible
22	Urban Neighborhood Residential	High	Incompatible	Incompatible	Compatible
23	Urban Neighborhood Residential	High	Incompatible	Incompatible	Compatible
24	Urban Neighborhood Residential	High	Incompatible	Incompatible	Incompatible
25	Urban Neighborhood Mixed Use	Moderate	Compatible	Incompatible	Compatible
26	Urban Neighborhood Mixed Use	Moderate	Compatible	Compatible	Compatible
27	Urban Neighborhood Commercial Core	High	Compatible	Incompatible	Incompatible
28	Urban Legacy Industrial	Moderate	Incompatible	Compatible	Compatible
29	Urban Large-Scale Development	Moderate	Compatible	Compatible	Compatible
30	Urban Large-Scale Development	Moderate	Compatible	Compatible	Compatible
31	Suburban Commercial	Moderate	Compatible	Incompatible	Incompatible
32	Suburban Residential	Moderate	Compatible	Compatible	Compatible

Notes:
[1] Viewer sensitivity is based on viewer exposure (i.e., proximity, extent, and duration) and viewer awareness of the Project (i.e., attention, focus, protection). Viewer sensitivity is considered high if viewer exposure is considered high, if awareness of the changes in visual character is considered prominent, and/or if the viewer would be otherwise perceptive of changes in the visual environment. Viewpoints with high viewer sensitivity include those within a relatively short distance to the Project, many potential viewers, long duration views, locations from which the Project is a prominent feature or focal point in the view, and/or visually sensitive areas.
[2] Compatibility considers Project scale, form, color, and texture/materials. In each simulation, an alternative is considered compatible if the environment can absorb the proposed Project and the environment has compatible or similar visual character.

The panel rated visual quality at each selected viewpoint under the No Build, Viaduct, and Community Grid Alternatives. Panel members considered Project vividness, intactness, and unity within a viewer's field of vision based on photographs taken during field reconnaissance. Existing visual quality was assigned a numerical score by the panel, which considered the landscape unit and potentially affected viewer groups for each viewpoint. Visual quality was rated on a scale of 0.1 to 5.0, as listed below:

0.1 to 1.0 = Low Visual Quality
1.1 to 2.0 = Moderate Low Visual Quality
2.1 to 3.0 = Moderate Visual Quality
3.1 to 4.0 = Moderate High Visual Quality
4.1 to 5.0 = High Visual Quality

Changes in visual quality resulting from the Viaduct and Community Grid Alternatives were evaluated by assigning scores comparing each of the two build alternatives to the No Build Alternative based on

photo simulations illustrating Project elements under each alternative. The results of this evaluation are summarized in **Table 6-4-3-3**.

Table 6-4-3-3
Visual Impact Summary for Selected Viewpoints

Selected Viewpoint	Visual Quality: Existing/ No Build Alternative (Visual Quality Rating)	Viaduct Alternative		Community Grid Alternative	
		Visual Quality: Viaduct Alternative (Visual Quality Rating)	Degree of Impact: Viaduct Alternative (Change in Visual Quality Rating)	Visual Quality: Community Grid Alternative (Visual Quality Rating)	Degree of Impact: Community Grid Alternative (Change in Visual Quality Rating)
1	Moderate Low (+1.8)	Moderate Low (+1.7)	Neutral (-0.1)	Moderate Low (+1.8)	Neutral (0)
2	Moderate Low (+2.0)	Moderate Low (+1.3)	Minor Adverse (-0.8)	Moderate (+2.9)	Minor Beneficial (+0.8)
3	Moderate Low (+1.6)	Moderate Low (+1.2)	Minor Adverse (-0.4)	Moderate (+2.3)	Minor Beneficial (+0.7)
4	Moderate (+2.3)	Moderate Low (+1.7)	Minor Adverse (-0.6)	Moderate High (+3.3)	Beneficial (+1.0)
5	Moderate Low (+1.4)	Low (+1.0)	Minor Adverse (-0.4)	Moderate Low (+1.5)	Neutral (+0.1)
6	Moderate Low (+1.3)	Moderate Low (+1.2)	Neutral (-0.1)	Moderate High (+3.4)	Beneficial (+2.1)
7	Moderate Low (+1.4)	Moderate Low (+1.5)	Neutral (+0.1)	Moderate (+2.6)	Beneficial (+1.2)
8	Moderate Low (+1.1)	Moderate Low (+2.0)	Minor Beneficial (+0.9)	Moderate (+2.1)	Beneficial (+1.0)
9	Moderate (+2.5)	Moderate (+2.3)	Minor Adverse (-0.2)	Moderate (+2.8)	Minor Beneficial (+0.3)
10	Moderate Low (+1.2)	Moderate Low (+1.2)	Neutral (0)	Moderate (+2.5)	Beneficial (+1.2)
11	Moderate Low (+1.4)	Moderate Low (+1.8)	Minor Beneficial (+0.4)	Moderate (+3.1)	Beneficial (+1.7)
12	Moderate Low (+1.2)	Moderate Low (+1.1)	Neutral (-0.1)	Moderate (+2.5)	Beneficial (+1.3)
13	Moderate Low (+1.6)	Moderate Low (+1.6)	Neutral (0)	Moderate (+2.9)	Beneficial (+1.3)
14	Moderate Low (+1.7)	Moderate Low (+1.7)	Neutral (0)	Moderate (+2.4)	Minor Beneficial (+0.7)
15	Moderate Low (+1.2)	Moderate Low (+1.9)	Minor Beneficial (+0.7)	Moderate Low (+1.9)	Minor Beneficial (+0.7)
16	Moderate Low (+1.4)	Low (+0.7)	Minor Adverse (-0.7)	Moderate Low (+1.4)	Neutral (0)
17	Moderate Low (+2.0)	Moderate Low (+1.4)	Minor Adverse (-0.7)	Moderate Low (+1.5)	Minor Adverse (-0.6)
18	Moderate Low (1.2)	Moderate Low (1.7)	Minor Beneficial (+0.5)	Moderate (2.7)	Beneficial (+1.5)
19	Moderate Low (+2.0)	Moderate Low (+1.8)	Minor Adverse (-0.2)	Moderate Low (+1.8)	Minor Adverse (-0.2)
20	Moderate (+2.1)	Moderate Low (+1.5)	Minor Adverse (-0.6)	Moderate Low (+1.5)	Minor Adverse (-0.6)
21	Moderate (+2.1)	Moderate Low (+2.0)	Neutral (-0.1)	Moderate (+2.6)	Minor Beneficial (+0.5)
22	Moderate Low (+1.3)	Moderate Low (+1.4)	Neutral (+0.1)	Moderate (+3.0)	Beneficial (+1.7)
23	Moderate Low (+1.4)	Moderate Low (+1.4)	Neutral (0)	Moderate (+2.8)	Beneficial (+1.4)
24	Moderate Low (+1.1)	Moderate Low (+1.2)	Neutral (+0.1)	Moderate Low (+1.5)	Minor Beneficial (+0.5)

Table 6-4-3-3 (cont'd)
Visual Impact Summary for Selected Viewpoints

Selected Viewpoint	Visual Quality: Existing/ No Build Alternative (Visual Quality Rating)	Viaduct Alternative		Community Grid Alternative	
		Visual Quality: Viaduct Alternative (Visual Quality Rating)	Degree of Impact: Viaduct Alternative (Change in Visual Quality Rating)	Visual Quality: Community Grid Alternative (Visual Quality Rating)	Degree of Impact: Community Grid Alternative (Change in Visual Quality Rating)
25	Moderate (+2.3)	Moderate (+2.1)	Minor Adverse (-0.2)	Moderate (+2.2)	Neutral (-0.1)
26	Moderate Low (+1.4)	Moderate Low (+1.8)	Minor Beneficial (+0.4)	Moderate (+2.2)	Minor Beneficial (+0.8)
27	Moderate (+2.3)	Moderate Low (+1.4)	Minor Adverse (-0.9)	Moderate Low (+1.4)	Minor Adverse (-0.9)
28	Moderate Low (+1.3)	Moderate (+2.5)	Beneficial (+1.2)	Moderate (+2.5)	Beneficial (+1.2)
29	Moderate Low (+1.3)	Moderate (+2.6)	Beneficial (+1.3)	Moderate (+2.6)	Beneficial (+1.3)
30	Moderate Low (+1.3)	Moderate Low (+1.6)	Minor Beneficial (+0.4)	Moderate Low (+1.6)	Minor Beneficial (+0.4)
31	Moderate (+2.6)	Moderate Low (+2.0)	Minor Adverse (-0.6)	Moderate Low (+2.0)	Minor Adverse (-0.6)
32	Moderate (+2.4)	Moderate Low (+1.6)	Minor Adverse (-0.8)	Moderate Low (+1.6)	Minor Adverse (-0.8)

The visual quality ratings for each build alternative were compared to the visual quality score for the existing conditions/No Build Alternative to determine the degree of potential visual impact for each build alternative. Viewer sensitivity and changes in visual quality help define the degree of impact as adverse, beneficial, or neutral. In instances where the visual quality score for either build alternative (relative to existing conditions) increased, the degree of impact is noted as minor beneficial or beneficial. In instances where the visual quality score for either build alternative (relative to existing conditions) decreased, the degree of impact is noted as minor adverse or adverse. In instances where there is little or no change (or a *de minimis* change) in visual quality between existing conditions and either build alternative, the degree of impact is noted as neutral. Impact determination was based on the change in the visual quality score, as listed below.

-1.0 and over = Adverse
-0.2 to -0.9 = Minor Adverse
+0.1 to -0.1 = Neutral
+0.2 to +0.9 = Minor Beneficial
+1.0 and over = Beneficial

The visual quality scores provided by the members of the rating panel were averaged to provide an overall score for each viewpoint. No individual scores were omitted or otherwise not considered in the analysis. This ensures that the range of variability among the raters was taken into consideration for the analysis. The evaluations/ratings of visual quality for each view were generally consistent among the scores provided by the rating panel.

6-4-3.1.4 ASSESSMENT OF VISUAL IMPACTS FROM KEY VIEWS

Visual quality was evaluated from 32 key representative viewpoints (see **Figures 6-4-3-3 through 6-4-3-31**). These viewpoints were selected for visual simulations to provide a basis for the evaluation of the Project's potential visual effects and the degree of change in visual quality.

The visual simulations in **Figures 6-4-3-3 through 6-4-3-31** are organized by landscape unit. Larger-scale versions of the photo simulations and their descriptions of No Build and build alternatives are provided in the VIA (see **Appendix F**).

6-4-3.2 NO BUILD ALTERNATIVE

The No Build Alternative would maintain I-81 in its existing configuration. Ongoing maintenance and repairs would be made to ensure the safety of the traveling public, and safety measures would be implemented to the greatest extent feasible and financially practicable. Structural deficiencies and safety considerations would be addressed as part of NYSDOT's ongoing maintenance program. Routine maintenance efforts would include repairing pavement cracks, patching holes in bridge decks, cleaning drainage systems, and operational considerations (e.g., signage and other low-cost improvements). Under the No Build Alternative, large-scale replacement and rehabilitation efforts would not be undertaken, non-standard highway features would remain as is, and existing interchanges would not be modified. The No Build Alternative would not involve changes in transportation right-of-way, interstate infrastructure, property acquisition, or removal of buildings and would not provide any of the visual benefits that could be achieved by the build alternatives.

As described in **Table 6-4-3-3**, the existing visual quality under the No Build Alternative and from the 32 selected viewpoints evaluated in the VIA is generally considered as moderate low. Approximately 72 percent (23 viewpoints) of these selected viewpoints were evaluated as having low and moderate low visual quality. This is primarily due to the degraded appearance of the existing I-81 highway infrastructure and condition of adjacent areas. Approximately 25 percent (eight viewpoints) of the views possess moderate visual quality. The overall evaluation of visual quality at selected viewpoints throughout the AVE is indicative of the generally degraded visual quality that characterizes most areas adjacent to the existing I-81 viaduct.

Under the No Build Alternative, existing visual character and visual quality within the Project's visual environment and right-of-way would not be substantially affected in the short term. However, at some point, routine maintenance of existing project infrastructure would be unable to keep pace with the deterioration of highway pavements, concrete, steel bridges, and other elevated segments, and would result in diminished visual quality over time. As summarized in **Table 6-4-3-2**, the No Build Alternative is considered incompatible with its surroundings due (in some instances) to the scale and the deteriorated appearance of existing infrastructure. The No Build Alternative is also considered incompatible within the context of its visual environment from 13 of the 32 (41 percent) selected viewpoints evaluated in this VIA. Nineteen (19) of the selected viewpoints (59 percent) rated the No Build Alternative as compatible. This compatibility may be the result of decades of land use changes that have adapted to the presence of I-81. In addition, vegetation and other types of screening may reduce the contrast and scale of I-81 with surrounding areas. Locations where viewer sensitivity is considered high and the existing infrastructure is perceived as incompatible include Viewpoints 7 (Harrison Street at Almond Street), 22 (Pioneer Homes), 23 (Wilson Park Basketball Courts), and 24

(North Townsend Street at Burnet Avenue). These locations are within the Urban Institutional Campus landscape unit and the Urban Residential Neighborhood landscape units, where viewer awareness of the Project is heightened by proximity to the interstate. In these locations, viewers are exposed to nearby and frequent views of I-81. Viewpoints 4 (Connective Corridor – East Genesee Street at South McBride Street) and 27 (Basin Street at Kirkpatrick Street) are considered to have a high viewer sensitivity while the existing Project is perceived as compatible. Two viewpoints (6 percent) are associated with low viewer sensitivity, and 24 viewpoints (75 percent) are associated with moderate sensitivity.

6-4-3.3 ENVIRONMENTAL CONSEQUENCES OF THE VIADUCT ALTERNATIVE

6-4-3.3.1 PERMANENT/OPERATIONAL EFFECTS

The Viaduct Alternative would replace the elevated sections of the highway with a new viaduct and associated ramps, creating a higher and wider transportation footprint. The increased width of the transportation right-of-way would result in the need for property acquisitions and the removal of 24 buildings and one structure (a smokestack). Elevated sections of the new viaduct would vary in height along the alignment, generally ranging from 30 to 35 feet tall. The new viaduct would be approximately 10 to 15 feet higher than the current viaduct along Almond Street. These changes would alter existing visual quality of the Project environment from many viewpoints within the AVE. The result would be a reduction in the density of the built environment adjacent to the Project, the removal of historic and modern buildings that contribute to the aesthetic character of Downtown Syracuse, and an increase in the visibility and scale of transportation-related infrastructure. In addition, the Viaduct Alternative would include the construction of two new flyover ramps between I-81 and I-690, each approximately 35 feet wide. The eastbound I-690 to northbound I-81 ramp would be the tallest piece of infrastructure of the Project, reaching approximately 70 feet above existing grade at its highest point.

The visual quality ratings conducted as part of the VIA provide a basis for considering the visual effects of the Viaduct Alternative. As described in **Section 6-4-3.2**, the overall visual quality rating for views of existing conditions (the No Build Alternative) was generally moderate low. As shown in **Table 6-4-3-3**, the visual quality ratings (averaged scores) for simulations showing the Viaduct Alternative range from low (a score of 0.7; Viewpoint 16 - at Butternut Street Bridge overlooking I-81) to moderate (a score of 2.8; Viewpoint 29 - at North Clinton Street between Bear Street and Court Street). In the simulations of the Viaduct Alternative, the simulations from 26 viewpoints (81 percent) were rated as having moderate low visual quality, while two viewpoints (6 percent) were rated as having low visual quality, and four (13 percent) were rated as having moderate visual quality.

Based on the visual quality ratings presented in **Table 6-4-3-3**, the simulations depict 11 viewpoints (or 34 percent of the evaluated viewpoints) where the Viaduct Alternative would not appreciably change overall visual quality, resulting in a neutral rating. For example, at these locations an existing low visual quality rating would remain low under the Viaduct Alternative. Simulations that illustrate a neutral change in overall visual quality under the Viaduct Alternative are:

- Viewpoint 1 (Clinton Square - South Salina Street at Erie Boulevard East; see **Figure 6-4-3-3**)
- Viewpoint 6 (Upstate Medical University Parking Garage - Almond Street at Harrison Street; see **Figure 6-4-3-8**)

- Viewpoint 7 (Harrison Street at Almond Street; see **Figure 6-4-3-9**)
- Viewpoint 10 (Erie Boulevard East between South State Street and South Townsend Street; see **Figure 6-4-3-12**)
- Viewpoint 12 (Erie Boulevard East between Forman Avenue and Almond Street; see **Figure 6-4-3-14**)
- Viewpoint 13 (South Crouse Avenue at East Fayette Street; see **Figure 6-4-3-15**)
- Viewpoint 14 (Irving Avenue at Fayette Street; see **Figure 6-4-3-16**)
- Viewpoint 21 (Dr. King Elementary School – MLK, Jr. East at Oakwood Avenue; see **Figure 6-4-3-23**)
- Viewpoint 22 (Pioneer Homes - West of I-81 and Almond Street; see **Figure 6-4-3-24**)
- Viewpoint 23 (Wilson Park Basketball Courts - Jackson Street; see **Figure 6-4-3-25**)
- Viewpoint 24 (North Townsend Street at Burnet Avenue; see **Figure 6-4-3-26**)

Based on the visual quality ratings presented in **Table 6-4-3-3**, the simulations from 13 viewpoints (or 41 percent of the evaluated viewpoints) depict locations where the Viaduct Alternative would result in a minor adverse change in overall visual quality. In these locations the visual quality would be reduced from moderate under existing conditions to moderate low (e.g., Viewpoints 4, 16, and 31) or from moderate low to low (e.g., Viewpoint 5). In other instances (e.g., Viewpoints 2, 3, 9, 17, and 25), the overall visual quality rating does not change (i.e., the visual quality under both the No Build and Viaduct Alternatives are the same, for instance, moderate or moderate low), but there was a reduction in the numerical score for visual quality (for instance, visual quality would be reduced from 1.9 under the No Build Alternative to 1.3 under the Viaduct Alternative). Simulations that illustrate an adverse or minor adverse change in overall visual quality under the Viaduct Alternative are:

- Viewpoint 2 (Erie Boulevard East at Montgomery Street; see **Figure 6-4-3-4**)
- Viewpoint 3 (Montgomery Street at East Water Street; see **Figure 6-4-3-5**)
- Viewpoint 4 (Connective Corridor - East Genesee Street between South McBride Street; see **Figure 6-4-3-6**)
- Viewpoint 5 (South Townsend Street at East Washington Street; see **Figure 6-4-3-7**)
- Viewpoint 9 (St. Joseph's Hospital Parking Garage - Hickory Street between Prospect Street and North Townsend Street; see **Figure 6-4-3-11**)
- Viewpoint 16 (Butternut Street Bridge over I-81; see **Figure 6-4-3-18**)
- Viewpoint 17 (Court Street Bridge over I-81; see **Figure 6-4-3-19**)
- Viewpoint 19 (Teall Avenue at Burnet Avenue; see **Figure 6-4-3-21**)
- Viewpoint 20 (I-81 West of Oakwood Cemetery; see **Figure 6-4-3-22**)
- Viewpoint 25 (North Clinton Street at Genant Drive; see **Figure 6-4-3-28**)
- Viewpoint 27 (Basin Street at Kirkpatrick Street; see **Figure 6-4-3-29**)

- Viewpoint 31 (DeWitt Town Hall - Butternut Drive; see **Figure 6-4-3-33**)
- Viewpoint 32 (Wells Avenue East of Oakley Drive; see **Figure 6-4-3-34**)

Factors contributing to adverse effects include the introduction of infrastructure where it does not currently exist, the obstruction of current views because of new infrastructure, increased scale (height, mass), shadowing effects, the removal of buildings, and the removal or alteration of other landscape features. The removal of existing buildings, particularly when these removals are in the foreground of views, would result in more open views of elevated highway infrastructure, contributing to the adverse effect on overall visual quality. This result is seen from Viewpoint 4 (Connective Corridor - East Genesee Street at South McBride Street), Viewpoint 5 (South Townsend Street at East Washington Street), and Viewpoint 16 (Butternut Street Bridge over I-81). The removal of buildings would result in gaps in the existing urban fabric and character and, in some instances, more open and prominent views of the Project. The Viaduct Alternative would also create adverse effects at Viewpoints 25 in the Franklin Square neighborhood, resulting from the construction of new ramps between I-81 and I-690 (which do not exist currently). These adverse impacts would typically occur where the new viaduct would dominate foreground views and, to a lesser extent, mid-ground views. In addition, the noise barriers included in the Viaduct Alternative would result in minor adverse visual effects at Viewpoints 19, 20, 27, 31, and 32. Viewers who would experience these adverse effects are mostly within the neighbors' viewer group.

The simulations from eight viewpoints (or approximately 25 percent of the evaluated viewpoints) depict locations that illustrate a beneficial impact on visual quality. Simulations that illustrate a beneficial or minor beneficial change in overall visual quality under the Viaduct Alternative are:

- Viewpoint 8 (Renwick Avenue at Van Buren Street; see **Figure 6-4-3-10**)
- Viewpoint 11 (Crowne Plaza Parking Garage - Almond Street at East Fayette Street; see **Figure 6-4-3-13**)
- Viewpoint 15 (Butternut Street at North Salina Street; see **Figure 6-4-3-17**)
- Viewpoint 18 (Almond Street at East Adams Street; see **Figure 6-4-3-20**)
- Viewpoint 26 (North Clinton Street at Genant Drive; see **Figure 6-4-3-28**)
- Viewpoint 28 (West Genesee Street at Plum Street; see **Figure 6-4-3-30**)
- Viewpoint 29 (North Clinton Street between Bear Street and Court Street; see **Figure 6-4-3-31**)
- Viewpoint 30 (Hiawatha Boulevard Bridge over I-81; see **Figure 6-4-3-32**)

In the locations listed above, the overall visual effect would be beneficial because the visual quality at these locations would increase, for example, from moderate low to moderate (e.g., Viewpoint 28). Features of the Viaduct Alternative that would result in beneficial changes to the visual environment in some locations include the replacement of aging and deteriorated infrastructure with new facilities, new streetscaping, pedestrian-friendly features (such as new sidewalks and crosswalks), bike lanes, and street trees. Additional improvements may include removal or reduction of signage, overgrown vegetation, and other visual clutter. Viewer groups that are likely to appreciate these beneficial changes to the visual environment include commuters on the viaduct itself, who may regard the increased scale

of the roadway as positive in terms of perceived safety or convenience while driving, as well as motorists and pedestrians along surface streets that would be improved under the Viaduct Alternative. Other viewer groups such as pedestrians, commuters, transit riders, and building occupants would experience a positive reaction to the Viaduct Alternative in areas where a sense of visual order and repetition of desirable patterns in the landscape (e.g., street trees, lampposts) would replace a more cluttered, degraded, and chaotic landscape under existing conditions. The creation of discernible patterns and distinct edge treatments between pedestrian areas and vehicular travel lanes, particularly as seen in foreground views, would also be experienced as improvements in visual quality.

The evaluation of potential visual impacts of the Viaduct Alternative indicates that approximately 34 percent (11) of selected viewpoint locations would experience neutral effects, 41 percent (13) adverse effects, and 25 percent (8) beneficial effects due to localized replacement of degraded transportation infrastructure and enhancement of affected streets. The Viaduct Alternative would replace the existing viaduct along the same established transportation corridor that has adapted and deteriorated visually over the decades to the presence of the interstate. As a result, existing visual quality is low to, at best, moderate within the context of the Project Area. An increase in the scale of new transportation infrastructure under this alternative would require removal of historic and other visually prominent buildings that contribute to the architectural character and density of the built environment in the urban landscape. Removing these buildings would create additional voids in the urban and visual fabric of the city. The urban environment is visually dominated by the existing highway's infrastructure, generally perceived as incompatible within its visual context, and that would not change under the Viaduct Alternative.

6-4-3.3.2 CONSTRUCTION EFFECTS

During construction, the Viaduct Alternative would result in short-term, temporary changes in visual quality. Project-related visual effects during construction would include the movement and activity of construction vehicles and personnel; the generation of fugitive dust from demolition, earth-moving, and grading activities; fugitive light created by portable lights, mostly during nighttime construction work; exposure of ground surfaces, soils, and buildings that were screened from views; and the introduction of equipment and materials into staging areas.

6-4-3.3.3 INDIRECT EFFECTS

Indirect effects on the visual environmental that would potentially result from the Viaduct Alternative could include construction of new development or changes to the landscape in the areas adjacent to the Project. If such development were to occur, it could result in changes to the visual environment, such as construction of new buildings, demolition of existing buildings or removal of other features to facilitate new development, clearing of vegetation, installation of new landscaping, or streetscape improvements. However, as discussed in **Section 6-2-1, Neighborhood Character**, the Viaduct Alternative is not expected to alter development and redevelopment proposals. Although the Viaduct Alternative would improve connections between neighborhoods on either side of the highway, the visual barrier would remain, which would not create an environment more attractive or conducive to development types most likely to locate in a Downtown given current market trends—residential and mixed-use—as compared to the No Build Alternative. Therefore, the Viaduct Alternative is not

anticipated to result in adverse indirect visual effects, because changes in neighborhood land use or future development patterns are not expected.

6-4-3.3.4 CUMULATIVE EFFECTS

Additional visual effects created by other concurrent large-scale transportation projects in the AVE are not anticipated. The removal of buildings required to construct the Viaduct Alternative would increase the visibility of the Project by extending views of transportation infrastructure and simultaneously reducing the density and diversity of the built environment adjacent to the Project. As described in **Section 6-2-1, Neighborhood Character**, the Viaduct Alternative would not result in adverse indirect effects on land use and is not anticipated to affect future development patterns in areas adjacent to the Project (relative to the No Build Alternative). Under the Viaduct Alternative, the elevated highway infrastructure would continue to present a barrier to residential and mixed-use development in the areas adjacent to the Project. The replacement viaduct would continue to be a visual barrier.

6-4-3.3.5 MITIGATION

Measures to mitigate the visual effects of construction activities would include best management practices during construction, such as minimizing the amount of time between ground disturbance and restoration of staging areas and construction areas; minimizing the illumination of work areas to maintain safe conditions, while preventing the direction of lighting from areas other than work sites; controlling dust and debris from collecting in work areas and along roadways used to transport equipment and materials; and restoring disturbed areas with replacement vegetation and landscaping features as soon as practicable.

As described in **Chapter 4, Construction Means and Methods**, NYSDOT will require the Contractor to implement construction protocols and practices, as well as measures to avoid, minimize, or mitigate visual effects during construction.

Given the scale of the Viaduct Alternative, some of the adverse permanent and operational impacts are unavoidable and measures to minimize the effects are generally not available. Consistent with its policies, NYSDOT would consider and apply context-sensitive design solutions where practicable. This could include planting of street trees and other vegetative screening measures, streetscape improvements, selection of appropriate design and construction materials, and surface design treatments of structures, such as abutments and retaining walls, and pavements. The overall improvements to the visual quality of the Viaduct Alternative, in comparison to the existing degraded conditions of the No Build Alternative, would contribute somewhat to the overall mitigation of adverse impacts.

As part of the Viaduct Alternative, NYSDOT would provide replacement landscaping as overall enhancement and aesthetic improvement efforts. Streetscape enhancements would be provided along Almond Street and portions of West Street and Erie Boulevard, as well as portions of connecting streets. Streetscape enhancements may include sidewalks, specialty pavements and aesthetic treatments for walkways, site furnishings such as benches and trash receptacles, landscape plantings, and green infrastructure for stormwater management. Streetscape enhancements would be designed to provide an overall sense of visual cohesiveness. The Central Study Area is spatially confined so mitigation

through partial screening of views from adjacent locations to reduce adverse visual impacts is also highly restricted. Some screening of limited views may be possible through the enhancement of streetscapes with additional street trees. In some cases, variation in the style and form of support structures, for example at bridge overpasses, could enhance visual compatibility with the context of surrounding neighborhoods. Surface treatments, such as using native stone materials for concrete columns, abutments, and support structures, may be possible enhancements in some locations. Strategic placement of plantings may soften the appearance of constructed elements in certain locations.

Avoidance of adverse visual impacts, such as in the Franklin Square neighborhood resulting from construction of proposed connector ramps between existing I-81 and I-690, would require the identification of alternative routes or means of connection, which would result in other direct and indirect impacts to other areas.

In addition, the Viaduct Alternative provides an opportunity for the enhancement of gateway areas to the City (see VIA in **Appendix F, Section 4.4.2**). Gateway enhancements may be developed to create a distinct and identifiable sense of entry and sense of place. These enhancements include establishment of a consistent theme or motif, use of specialty materials and site elements, historical elements, landscaping, signage, aesthetic earth forms, and sculptural elements to mark the entrance to the City. Gateway opportunities have been identified at the new West Street and Genesee Street intersection, the Clinton Street exit, and on Almond Street between the Adams and Harrison Streets on- and off-ramps.

6-4-3.4 ENVIRONMENTAL CONSEQUENCES OF THE COMMUNITY GRID ALTERNATIVE

6-4-3.4.1 PERMANENT/OPERATIONAL EFFECTS

The Community Grid Alternative would result in changes in the visual character and visual quality of the Project environment. The most substantial change to the visual environment proposed under the Community Grid Alternative is the removal of the existing I-81 viaduct and associated infrastructure throughout Downtown Syracuse.

The visual quality ratings conducted as part of the VIA provide a basis for considering the visual effects of the Community Grid Alternative. As shown in **Table 6-4-3-3**, the visual quality ratings for simulations showing the Community Grid Alternative range from moderate low (a score of 1.4 at Viewpoint 16, which depict the Butternut Street bridge overlooking I-81, respectively) to moderate high (a score of 3.4 at Viewpoint 6, which depicts Harrison Street and Almond Street from a representative elevated location at the Upstate Medical Parking Garage). Simulations from 12 viewpoints were rated as having moderate low visual quality, 18 viewpoints were rated as having moderate visual quality, and two were rated as having moderate high visual quality. Based on the simulations and ratings, the Community Grid Alternative would result in an overall minor beneficial or beneficial change in the visual quality in the Project Area.

Based on the visual quality ratings presented in **Table 6-4-3-3**, the simulations from four viewpoints (13 percent of the evaluated viewpoints) depict locations where the Community Grid Alternative would result in neutral effects on visual quality. In these locations, the overall visual effect is considered

neutral because the alternative would not result in a substantial change in visual quality (i.e., the visual quality rating, such as moderate low, would remain the same as the existing condition). Simulations that illustrate a neutral change in overall visual quality under the Community Grid Alternative are:

- Viewpoint 1 (Clinton Square - South Salina Street at Erie Boulevard East; see **Figure 6-4-3-3**)
- Viewpoint 5 (South Townsend Street at East Washington Street; see **Figure 6-4-3-7**)
- Viewpoint 16 (Butternut Street Bridge over I-81/BL 81; see **Figure 6-4-3-18**)
- Viewpoint 25 (Franklin Square - North Franklin Street at Evans Street; see **Figure 6-4-3-27**)

Elements of the Community Grid Alternative that could be perceived as adverse changes in the visual environment, such as the obstruction of views or removal of mature vegetation, would be balanced or offset for some viewers by improvements to the visual environment resulting from the improved condition of infrastructure and streetscaping enhancements. Based on the visual quality ratings presented in **Table 6-4-3-3**, the simulations from six viewpoints (approximately 19 percent of the evaluated viewpoints) depict locations where the Community Grid Alternative would result in a minor adverse change in overall visual quality.

- Viewpoint 17 (Court Street Bridge overlooking BL 81; see **Figure 6-4-3-19**)
- Viewpoint 19 (Teall Avenue at Burnet Avenue; see **Figure 6-4-3-21**)
- Viewpoint 20 (I-81 West of Oakwood Cemetery; see **Figure 6-4-3-22**)
- Viewpoint 27 (Basin Street at Kirkpatrick Street; see **Figure 6-4-3-29**)
- Viewpoint 31 (DeWitt Town Hall - Butternut Drive; see **Figure 6-4-3-33**)
- Viewpoint 32 (Wells Avenue East of Oakley Drive; see **Figure 6-4-3-34**)

The location depicted in Viewpoint 17 would experience a minor adverse change in perceived visual quality due to the obstruction of existing views by safety fencing. In addition, the noise barriers included in the Community Grid Alternative would result in minor adverse visual effects at Viewpoints 19, 20, 27, 31, and 32. However, these adverse impacts to visual quality are restricted to specific areas where more substantial changes to existing roadways or infrastructure are necessary.

From most (69 percent, 22 viewpoints) of the locations included in the evaluation, the Community Grid Alternative would result in a minor beneficial (28 percent, nine viewpoints) or beneficial (41 percent, 13 viewpoints) improvement in overall visual quality. These improvements would be experienced at 22 of the 32 viewpoints evaluated in the VIA (see **Table 6-4-3-3**). In general, the evaluation of visual quality at these representative viewpoints indicates that the Community Grid would result in a substantial improvement in overall visual quality within the AVE. The highest rated beneficial effects on visual quality are found in Viewpoints 4, 6, 7, 8, 10, 11, 12, 13, 18, 22, 23, 28 and 29. Viewpoints with minor beneficial or beneficial effects are:

- Viewpoint 2 (Erie Boulevard East at Montgomery Street; see **Figure 6-4-3-4**)
- Viewpoint 3 (Montgomery Street at East Water Street; see **Figure 6-4-3-5**)
- Viewpoint 4 (Connective Corridor - East Genesee Street at South McBride Street; see **Figure 6-4-3-6**)

- Viewpoint 6 (Upstate Medical University Parking Garage - Almond Street at Harrison Street; see **Figure 6-4-3-8**)
- Viewpoint 7 (Harrison Street at Almond Street; see **Figure 6-4-3-9**)
- Viewpoint 8 (Renwick Avenue at Van Buren Street; see **Figure 6-4-3-10**)
- Viewpoint 9 (St. Joseph's Hospital Parking Garage - Hickory Street between Prospect Street and North Townsend; see **Figure 6-4-3-11**)
- Viewpoint 10 (Erie Boulevard East between South State Street and South Townsend Street; see **Figure 6-4-3-12**)
- Viewpoint 11 (Crowne Plaza Parking Garage - Almond Street at East Fayette Street; see **Figure 6-4-3-13**)
- Viewpoint 12 (Erie Boulevard East between Forman Avenue and Almond Street; see **Figure 6-4-3-14**)
- Viewpoint 13 (South Crouse Avenue at East Fayette Street; see **Figure 6-4-3-15**)
- Viewpoint 14 (Irving Avenue at Fayette Street; see **Figure 6-4-3-16**)
- Viewpoint 15 (Butternut Street at North Salina Street; see **Figure 6-4-3-17**)
- Viewpoint 18 (Almond Street and East Adams Street; see **Figure 6-4-3-20**)
- Viewpoint 21 (Dr. King Elementary School - MLK, Jr. East at Oakwood Avenue; see **Figure 6-4-3-23**)
- Viewpoint 22 (Pioneer Homes - West of I-81 and Almond Street; see **Figure 6-4-3-24**)
- Viewpoint 23 (Wilson Park Basketball Courts - Jackson Street; see **Figure 6-4-3-25**)
- Viewpoint 24 (North Townsend Street at Burnet Avenue; see **Figure 6-4-3-26**)
- Viewpoint 26 (North Clinton Street at Genant Drive; see **Figure 6-4-3-28**)
- Viewpoint 28 (West Genesee Street at Plum Street; see **Figure 6-4-3-30**)
- Viewpoint 29 (North Clinton Street between Bear Street and Court Street; see **Figure 6-4-3-31**)
- Viewpoint 30 (Hiawatha Boulevard Bridge over I-81/BL 81; see **Figure 6-4-3-32**)

Beneficial changes to the visual environment include the removal of elevated highway structures, creation of extended views to surrounding areas, the daylighting of areas that are currently cast in shadows from existing highway infrastructure, streetscaping enhancements, and removal or replacement of deteriorating infrastructure. The city's urban landscape would become more visually unified with the exposure of more distant views of Downtown and surrounding neighborhoods.

Each of the viewpoints above would experience a substantial increase in visual quality due to the removal of the viaduct as well as associated improvements to affected surface streets. Other locations would experience minor improvements in visual quality. Streetscape treatments including new street trees, lighting, sidewalks, crosswalks, greenspace, and a reduction in visual clutter would enhance visual

quality. Creating sharp edges between vehicular and pedestrian areas, introducing attractive design features with visually compatible materials, and establishing a repetition of visual patterns would help unify views, providing a greater sense of order to the visual landscape. Viewers who would be most affected by the Community Grid Alternative include Downtown and University Hill commuters, pedestrians, neighborhood residents, commercial/institutional building occupants, and local business patrons.

The evaluation of potential visual impact of the Community Grid Alternative indicates that 13 percent (four) of selected viewpoint locations would experience neutral effects, 19 percent (six) adverse effects, and 69 percent (22) beneficial effects. The overall potential visual impact of the Community Grid Alternative would be minor beneficial to beneficial, depending on viewer location and the quality of the visual environment. The Community Grid Alternative would remove the existing deteriorating viaduct and replace it with modifications to the city's surface street network. Removal of the viaduct would create new and/or more open views for a variety of viewer groups from both ground level and from elevated locations where existing views are obstructed by existing I-81 transportation infrastructure. Modifications under the Community Grid Alternative would include new street improvements, bridge reconstruction, other transportation-related improvements, and the creation of a new signalized roadway along Almond Street. Enhanced streetscaping and pedestrian features would also be provided at many locations within the Project Area. New gateways into the city would also be created to provide additional opportunities for design treatments that would contribute to an improved sense of place within the city. The combination of these changes would improve overall visual quality from its current low rating in most areas to moderate and moderate high visual quality within the Project Area.

6-4-3.4.2 CONSTRUCTION EFFECTS

During construction, visual effects of the Community Grid Alternative would be short term with temporary changes in visual character. Project-related visual effects during construction would include the movement and activity of construction vehicles and personnel; the generation of fugitive dust from demolition, earth-moving, and grading activities; fugitive light created by portable lights, mostly during nighttime construction work; exposure of ground surfaces, soils, and buildings that were screened from views; and the introduction of equipment and materials into staging areas.

6-4-3.4.3 INDIRECT EFFECTS

Indirect effects on the visual environmental that would potentially result from the Community Grid Alternative could include new development or other changes to the landscape in the areas adjacent to the Project. If such development were to occur, it could result in changes to the visual environment, such as construction of new buildings, demolition of existing buildings or removal of other features to facilitate new development, clearing of vegetation, installation of new landscaping, or streetscape improvements. As described in **Section 6-2-1, Neighborhood Character**, where the highway would be removed and replaced with a surface street, the Community Grid Alternative could potentially result in new development on parcels that would be created in the former right-of-way of I-81.

Changes to the visual environment associated with potential development in these newly opened areas could include the construction of new buildings, which depending on the quality of design and

materials could result in adverse or beneficial visual impacts. The siting of new buildings, including their location relative to nearby structures and features, orientation on their lots, and density relative to adjacent development, could also have adverse or beneficial impacts on visual quality. Site improvements installed as part of new development, including parking lots/facilities, open space, plantings, or other landscape features, could also result in adverse or beneficial impacts, depending on the quality of the design. Although there are no plans for redevelopment as part of the implementation of this alternative, any new development that could occur would be presumed to be similar to surrounding land use and the underlying zoning. Therefore, it is anticipated that potential changes to the visual environment resulting from this development would be beneficial relative to the No Build Alternative/existing conditions.

The Community Grid Alternative is anticipated to result in beneficial indirect visual effects because changes in neighborhood land use or future development patterns, including development of parcels in the former right-of-way or adjacent vacant/underutilized properties, such as parking areas, are anticipated to result in improved aesthetics and visual quality. As described in **Section 6-2-2.4**, future development is likely to occur on vacant land that does not displace current uses. Infill development such as residential or a mix of uses that includes residential, office, and ground floor retail would further reconnect existing neighborhoods and would be anticipated to have a positive effect on both neighborhood cohesion and the visual environment within the Central Study Area.

6-4-3.4.4 CUMULATIVE EFFECTS

Additional visual effects created by other concurrent large-scale transportation projects in the AVE are not anticipated. As described above and in **Section 6-2-1.3**, the Community Grid Alternative would not result in adverse indirect effects on land use and would produce land use benefits through potential new development opportunities and improved connections between existing neighborhoods. The area would also be attractive to development due to its proximity to, and improved pedestrian and visual connections between, Downtown and University Hill job centers. Future changes in land use in the adjacent areas may include designed open space, new buildings, or other development. Any of these uses would result in beneficial effects to the Project's visual setting.

6-4-3.4.5 MITIGATION

Measures to mitigate the visual effects of construction activities would include best management practices during construction, such as minimizing the amount of time between ground disturbance and restoration of staging areas and construction areas; minimizing the illumination of work areas to maintain safe conditions, but preventing the direction of lighting from areas other than work sites; controlling dust and debris from collecting in work areas and along roadways used to transport equipment and materials; and minimizing the removal of vegetation and restoring disturbed areas with replacement vegetation and landscaping features as soon as practicable.

As described in **Chapter 4, Construction Means and Methods**, NYSDOT will require the Contractor to implement construction protocols and practices, as well as measures to avoid, minimize, or mitigate visual effects during construction.

Consistent with its policies, NYSDOT would consider and apply context-sensitive design solutions where practicable. This is anticipated to include planting of street trees and other vegetative screening

measures, streetscape improvements, selection of materials, and surface design treatments of structures, such as abutments and retaining walls, and pavements. The overall improvements to the visual quality of the Project under both build alternatives would contribute to the mitigation of adverse impacts.

As part of the Community Grid Alternative, NYSDOT would provide or replace landscaping as a part of overall aesthetic enhancements and improvements. Streetscape enhancements would be provided along Almond Street and portions of Erie Boulevard, West Street, and Crouse and Irving Avenues, as well as portions of connecting streets. Streetscape enhancements could include sidewalks, specialty pavements and aesthetic treatments for walkways, site furnishings such as benches and trash receptacles, landscape plantings, and green infrastructure for stormwater management. Streetscape enhancements would be designed to provide an overall sense of visual cohesiveness. Almond Street would include a landscaped median from Martin Luther King, Jr. East to I-690 (see Viewpoint 6 simulation), lending a distinctive character to the length of the roadway.

Important points of entry to the street network would be enhanced as gateways (see VIA in **Appendix F, Section 4.4.3**). Gateway enhancements would be developed to create a distinct and identifiable sense of entry and sense of place. These enhancements could include establishment of a consistent theme or motif, use of specialty materials and site elements, historical elements, landscaping, signage, aesthetic earth forms, and sculptural elements to mark the entrance to the City. Gateways have been identified at the new West Street and Genesee Street intersection, the new James Street exit at Oswego Boulevard through the creation of a new "Canal District," at the new Crouse and Irving Avenues interchange with I-690, at the new Martin Luther King, Jr. East entrance to the City, and at the northern segment of BL 81 between the Onondaga Parkway/Old Liverpool Road interchange and I-690.

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