

## **Section 4.5**

# **Visual Quality**



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## Acronyms and Abbreviations

BRT .....	Bus Rapid Transit
LRT .....	Light Rail Transit
Metro .....	Niagara Frontier Transit Metro System, Inc.
Project .....	Buffalo-Amherst-Tonawanda Corridor Transit Expansion
UB .....	University at Buffalo
VIA .....	Visual Impact Assessment



## 4. Environmental Consequences

### 4.5 VISUAL QUALITY

This section identifies and characterizes the Project’s potential to change existing visual and aesthetic resources. This assessment is informed by a detailed Visual Impact Assessment (VIA), provided as Appendix D5 of this Draft EIS, which compares the Project’s LRT Build Alternative and BRT Build Alternative to existing and No Build conditions. Upon evaluating visual changes, this section also considers the potential for Project impacts to the visual environment, as necessary. Table 4.5-1 summarizes the environmental consequences of the Project No Build Alternative, LRT Build Alternative, and BRT Build Alternative, as they relate to visual quality.

**Table 4.5-1. Visual Quality – Impact Summary**

Alternative	Degree of Visual Change	Impact
No Build Alternative	Negligible	No impact
LRT Build Alternative	Negligible to minor and moderate	No adverse impact
BRT Build Alternative	Minor to moderate	No adverse impact

#### 4.5.1 No Build Alternative

Absent the Project, in the No Build Alternative, there are negligible changes to existing visual conditions expected to occur. Therefore, there would be no impact to visual resources.

#### 4.5.2 Build Alternatives

The LRT Build Alternative and the BRT Build Alternative and their alignments are described in Chapter 2, “Alternatives Considered.” The visual elements of the Build Alternatives, described in Appendix D5, “Visual Impact Assessment”, would result in a change in the existing view of a visual resource, a change in the viewer’s perspective of a visual resource or may obstruct views to or from a visual resource. The visual design elements associated with LRT Build Alternative and BRT Build Alternative are conceptual in nature and will be further defined as the Project completes design and engineering.

##### 4.5.2.1 Viewpoints

Three viewpoints were selected to assess the change in visual quality that would result from the LRT Build Alternative and the BRT Build Alternative. Selection of viewpoints accounted for effects to visually sensitive resources, considered the impacted population’s sensitivity to the proposed visual changes of the Build Alternative, and considered locations with the potential for the most visual contrast between the Existing Conditions/No Build Alternative and the LRT Build Alternative and the BRT Build Alternative. Visual quality was assessed to evaluate the impacts of the Build Alternative. These locations and selection of views are described below.

- **Viewpoint 1** is looking north on Niagara Falls Boulevard between Kenmore Avenue and Princeton Avenue. This viewpoint, located in landscape unit 2 (Suburban Residential

District), was selected to show the potential visual impact of the Project alignment emerging above ground through a portal to continue at grade.

- **Viewpoint 2** is looking north along John James Audubon Parkway adjacent to the Skinnerville Cemetery. This viewpoint, located in landscape unit 4 (University District 2), was selected to show the potential visual impact of the Project alignment on a locally significant resource.
- **Viewpoint 3** is looking north on John James Audubon Parkway at the corner of Partridge Run, near Walton Woods. This viewpoint, located in landscape unit 5 (Suburban Office Residential District), was selected to show the potential visual impact of the Project alignment on John James Audubon Parkway, which would be visible.

#### **4.5.2.2 Potential Impacts**

To evaluate the level of visual impact under the LRT Build Alternative and the BRT Build Alternative, the changes to the environment (measured by the compatibility of the impact and change in visual quality) and sensitivity of the viewers to these changes were analyzed. The following section provides a visual representation of the Existing Conditions/No Build Alternative as compared to the LRT Build Alternative and the BRT Build Alternative using photo simulations to evaluate visual impact. The visualizations represent conceptual engineering. The final selection of Project design elements would be refined during final design.

Visual compatibility is defined as compatible or incompatible by analyzing any proposed contrasts to the existing scale, form, materials, and visual character. The sensitivity of viewers is defined by analyzing the viewer's exposure (i.e., proximity, extent, and duration) and awareness (i.e., attention, focus, and protection) of any changes in the visual character of visual resources.

#### **VIEWPOINT 1: NIAGARA FALLS BOULEVARD RESIDENTS NEAR PORTAL LOCATION**

This viewpoint was selected to show the location where the LRT Build Alternative would emerge above ground through a portal and continue at grade. The LRT Build Alternative will operate below grade for a short distance to connect with the existing underground Metro Rail terminus at the Metro Rail University Station. Figure 4.5-1 shows the view looking north on Niagara Falls Boulevard between Kenmore Avenue and Princeton Avenue in the Suburban Residential District, landscape unit 2. An artist's conceptual illustration of the proposed portal can be seen in the median of Niagara Falls Boulevard. The Build Alternatives are conceptual in nature and would be further defined as the Project completes design and engineering.

#### **Existing Conditions/No Build Alternative**

Figure 4.5-1 shows that the Niagara Falls Boulevard vehicular travel lanes and sidewalks are visible, along with residential homes and mature trees. The viewpoint is compatible and existing visual quality is moderate due to the mature trees that provide screening to the residential homes. Viewer groups include motorist, pedestrian, and bicycling traveler groups and residential, retail, and commercial neighbor groups. Existing viewer sensitivity is high due to the proximity of neighbors/viewers and the duration of time neighbor groups perceive this view.

### **Build Alternatives**

Under the LRT Build Alternative, there would be new visual elements for viewers. Figure 4.5-2 shows the portal location would be in the median of Niagara Falls Boulevard, along with the trackwork and overhead catenary. For both traveler and neighborhood viewer groups on Niagara Falls Boulevard, the proposed visual elements would not be out of character with existing transportation uses. Therefore, a minor visual change would occur, the impact is not considered adverse. These changes would have a neutral impact on visual quality because the degree of change would be minor, and the Project would be compatible with its surroundings. In addition, the inclusion of architectural design elements would help soften the view of the portal.

Figure 4.5-3 shows the dedicated busway under the BRT Build Alternative. As there would be no new visual elements for viewers, the BRT Build Alternative would be compatible with its surroundings and have a negligible visual change.

**Figure 4.5-1. Niagara Falls Boulevard Residents – Existing Conditions/No Build Alternative**



View north on Niagara Falls Boulevard between Kenmore Avenue and Princeton Avenue



**Figure 4.5-2. Niagara Falls Boulevard Residents – Visual Simulation of LRT Build Alternative**



Note: This visualization represents the conceptual design. Final selection of site details would be refined during preliminary and final design.

**Figure 4.5-3. Niagara Falls Boulevard Residents – Visual Simulation of BRT Build Alternative**



Note: This visualization represents the conceptual design. Final selection of site details would be refined during preliminary and final design.



## **VIEWPOINT 2: SKINNERSVILLE CEMETERY**

This viewpoint was selected to show the potential visual impact of the Project on the Skannersville Cemetery, a locally significant resource. Skannersville Cemetery is adjacent to the northbound travel lanes of John James Audubon Parkway near Frontier Road. Figure 4.5-4 shows the view looking north along John James Audubon Parkway adjacent to the Skannersville Cemetery in the University District 2, landscape unit 4.

### Existing Conditions/No Build Alternative

Figure 4.5-4 shows the northbound lanes of John James Audubon Parkway, adjacent to the cemetery, are visible from the cemetery. However, mature trees along the edge of the cemetery screen the roadway.

Viewer groups include motorist, pedestrian, and bicycling traveler groups; and institutional, retail, and commercial neighbor groups. Existing viewer sensitivity is moderate due to the proximity of neighbors and viewers and the duration of time neighbor groups perceive this view.

### Build Alternatives

Under the LRT Build Alternative, there would be new visual elements for viewers in the resource. The trackwork and overhead catenary of the proposed alignment in the existing northbound lanes of John James Audubon Parkway would be visible from the cemetery. For both traveler and neighborhood viewer groups, the proposed visual elements would not be out of character with existing transportation uses. However, as the cemetery has mature trees that would provide screening from the proposed visual elements, the visual change would be minor, and a visual impact is not anticipated as compared to the No Build Alternative.

Under the BRT Build Alternative, as there would be no new visual elements for viewers in the resource, the Project would be compatible with its surroundings and consistent with the No Build Alternative. The visual change would be negligible and not result in an adverse impact.

**Figure 4.5-4. Skannersville Cemetery – Existing Conditions/No Build Alternative**



Source: WSP

### **VIEWPOINT 3: AUDUBON NEW COMMUNITY NEAR WALTON WOODS**

This viewpoint was selected to show the potential visual impact of the LRT Build Alternative and BRT Build Alternative alignment located on John James Audubon Parkway near Walton Woods. Figure 4.5-5 shows the view looking north on John James Audubon Parkway at the corner of Partridge Run in the Suburban Office Residential District, landscape unit 5.

#### Existing Conditions/No Build Alternative

Figure 4.5-5 shows the vehicular lanes of John James Audubon Parkway are visible, along with vegetation and mature trees. The viewpoint is compatible and existing visual quality is moderate due to the mature trees that provide screening to the residential homes.

Viewer groups include motorist, pedestrian, and bicycling traveler groups and residential and recreational neighbor groups. The view is compatible and existing viewer sensitivity is high primarily because of the number of residential and recreational users. In addition, residential and recreational neighbors tend to be more sensitive to changes in visual quality than other types of viewers.

#### Build Alternatives

Under the LRT Build Alternative, there would be new visual elements for viewers in the resource. Figure 4.5-6 shows the trackwork and overhead catenary of the proposed alignment in the existing northbound lanes of John James Audubon Parkway would be visible. For traveler viewer groups, including pedestrians and bicyclists using the new bike lane, the LRT Build Alternative elements on John James Audubon Parkway would not be out of character with existing transportation uses. Therefore, a moderate visual change would occur, the impact is not considered significant. The existing mature trees and vegetation would provide screening of the LRT Build Alternative visual elements for residential and recreational neighbor groups. However, there may still be some impact to the existing character with the introduction of above ground equipment (e.g., overhead catenary, gate, and signal crossing). Increased landscaping to offer further screening would be considered during the design phase. The LRT Build Alternative would have a neutral impact on visual quality because the degree of change would be moderate, and the Project would be compatible with its surroundings.

As Figure 4.5-7 shows, under the BRT Build Alternative there would be no new visual elements for viewers in the resource. The BRT Build Alternative would be compatible with its surroundings and have a negligible visual change and not result in an adverse impact.



**Figure 4.5-5. Audubon New Community Near Walton Woods – Existing Conditions/No Build Alternative**



View north at the corner of John James Audubon Parkway and Partridge Run

**Figure 4.5-6. Audubon New Community Near Walton Woods – Visual Simulation of the LRT Build Alternative**



Note: This visualization is representative of conceptual design. Final selection of site details would be refined during preliminary and final design.

**Figure 4.5-7. Audubon New Community Near Walton Woods – Visual Simulation of the BRT Build Alternative**

Note: This visualization is representative of conceptual design. Final selection of site details would be refined during preliminary and final design.

#### 4.5.2.3 Summary of Visual Impact Assessment

Table 4.5-2 through Table 4.5-6 summarize the findings of the Visual Impact Assessment detailed within Appendix D5, “Visual Impact Assessment”. This summary compares the Project No Build Alternative to the LRT Build Alternative and BRT Build Alternative. A description of the impacted viewer groups and the anticipated degree of visual change organized by landscape unit is included.

**Table 4.5-2. Landscape Unit 1: University District 1**

Viewer Groups	Description	VIA Findings per Project Alternative: Degree of Visual Change		
		No Build Alternative	LRT Build Alternative	BRT Build Alternative
Travelers	Motorist	Negligible Visual Change	<u>Negligible Visual Change:</u> Alignment below grade No Adverse Impact.	<u>Minor Visual Change:</u> New BRT visual elements consistent with existing transportation uses. No Adverse Impact.
	Commercial Trucks			
	Bicycle and Pedestrian			
Neighbors	Residential	Negligible Visual Change	<u>Negligible Visual Change:</u> Alignment below grade No Adverse Impact.	<u>Minor Visual Change:</u> New BRT visual elements consistent with existing transportation uses. No Adverse Impact.
	Institutional			
	Retail			
	Commercial	Not Present		
	Recreational			



Table 4.5-3. Landscape Unit 2: Suburban Residential District

Viewer Groups	Description	VIA Findings per Project Alternative: Degree of Visual Change		
		No Build Alternative	LRT Build Alternative	BRT Build Alternative
Travelers	Motorist	Negligible Visual Change	<u>Minor Visual Change:</u> New LRT visual elements consistent with existing transportation uses and existing overhead wires. No Adverse Impact.	<u>Minor Visual Change:</u> New BRT visual elements consistent with existing transportation uses. No Adverse Impact.
	Commercial Trucks			
	Bicycle and Pedestrian			
Neighbors	Residential	Negligible Visual Change	<u>Moderate Visual Change:</u> New LRT visual elements consistent with existing transportation uses. Residential neighbors have high sensitivity to visual changes. No Adverse Impact. Project will consider context sensitive visual design of trackway and stations.	<u>Moderate Visual Change:</u> New BRT visual elements consistent with existing transportation uses. Residential neighbors have high sensitivity to visual changes. No Adverse Impact. Project will consider context sensitive visual design of stations.
	Institutional	Not Present		
	Retail	Negligible Visual Change	<u>Moderate Visual Change:</u> New LRT visual elements consistent with existing transportation uses. Retail and Commercial neighbors are sensitive to coherence and cultural order. No Adverse Impact. Project will consider design of trackway and stations that emphasizes area identity.	<u>Moderate Visual Change:</u> New BRT visual elements consistent with existing transportation uses. Retail and Commercial neighbors are sensitive to coherence and cultural order. No Adverse Impact. Project will consider design of stations that emphasizes area identity.
	Commercial			
	Recreational	Not Present		

**Table 4.5-4. Landscape Unit 3: Suburban Commercial District**

Viewer Groups	Description	VIA Findings per Project Alternative: Degree of Visual Change		
		No Build Alternative	LRT Build Alternative	BRT Build Alternative
Travelers	Motorist	Negligible Visual Change	<u>Minor Visual Change:</u> New LRT visual elements consistent with existing transportation uses and existing overhead wires.	<u>Minor Visual Change:</u> New BRT visual elements consistent with existing transportation uses.
	Commercial Trucks			
	Bicycle and Pedestrian		No Adverse Impact.	No Adverse Impact.
Neighbors	Residential	Negligible Visual Change	<u>Moderate Visual Change:</u> New LRT visual elements consistent with existing transportation uses. Residential neighbors have high sensitivity to visual changes.  No Adverse Impact. Project will consider context sensitive visual design of trackway and stations.	<u>Moderate Visual Change:</u> New BRT visual elements consistent with existing transportation uses. Residential neighbors have high sensitivity to visual changes.  No Adverse Impact. Project will consider context sensitive visual design of stations.
	Institutional		<u>Moderate Visual Change:</u> New LRT visual elements consistent with existing transportation uses. Institutional neighbors are sensitive to coherence and cultural order.  No Adverse Impact. Project will coordinate with neighbors, visual elements near Sweet Home Middle School, and ensure visual design of trackway and stations that emphasizes area identity.	<u>Moderate Visual Change:</u> New BRT visual elements consistent with existing transportation uses. Institutional neighbors are sensitive to coherence and cultural order.  No Adverse Impact. Project will coordinate with neighbors, visual elements near Sweet Home Middle School, and ensure visual design of stations that emphasizes area identity.
	Retail		<u>Moderate Visual Change:</u> New LRT visual elements consistent with existing transportation uses. Retail and Commercial neighbors are sensitive to coherence and cultural order.	<u>Moderate Visual Change:</u> New BRT visual elements consistent with existing transportation uses. Retail and Commercial neighbors are sensitive to coherence and cultural order.
	Commercial		No Adverse Impact. Project will consider design of trackway and stations that emphasizes area identity.	No Adverse Impact. Project will consider design of stations that emphasizes area identity.
	Recreational		Not Present	



Table 4.5-5. Landscape Unit 4: University District 2

Viewer Groups	Description	VIA Findings per Project Alternative: Degree of Visual Change		
		No Build Alternative	LRT Build Alternative	BRT Build Alternative
Travelers	Motorist	Negligible Visual Change	<u>Minor Visual Change:</u> New LRT visual elements consistent with existing transportation uses and existing overhead wires.	<u>Minor Visual Change:</u> New BRT visual elements consistent with existing transportation uses.
	Commercial Trucks			
	Bicycle and Pedestrian		No Adverse Impact.	No Adverse Impact.
Neighbors	Residential	Negligible Visual Change	<u>Moderate Visual Change:</u> New LRT visual elements consistent with existing transportation uses. Residential neighbors have high sensitivity to visual changes. No Adverse Impact. Project will consider context sensitive visual design of trackway and stations (tied to UB preferred aesthetic).	<u>Moderate Visual Change:</u> New BRT visual elements consistent with existing transportation uses. Residential neighbors have high sensitivity to visual changes. No Adverse Impact. Project will consider context sensitive visual design of stations (tied to UB preferred aesthetic).
	Institutional		<u>Moderate Visual Change:</u> New LRT visual elements consistent with existing transportation uses. Residential neighbors have high sensitivity to visual changes. Vegetative landscaping may be affected. No Adverse Impact. Project will consider context sensitive visual design of trackway and stations - specifically in coordination with UB. All landscaping elements will be replaced or enhanced.	<u>Moderate Visual Change:</u> New BRT visual elements consistent with existing transportation uses. Residential neighbors have high sensitivity to visual changes. Vegetative landscaping may be affected. No Adverse Impact. Project will consider context sensitive visual design of stations - specifically in coordination with UB. All landscaping elements will be replaced or enhanced.
	Retail	Not Present		
	Commercial	Not Present		
	Recreational	Not Present		

**Table 4.5-6. Landscape Unit 5: Suburban Office / Residential District**

Viewer Groups	Description	VIA Findings per Project Alternative: Degree of Visual Change		
		No Build Alternative	LRT Build Alternative	BRT Build Alternative
Travelers	Motorist	Negligible Visual Change	<u>Minor Visual Change:</u> New LRT visual elements consistent with existing transportation uses and existing overhead wires. No Adverse Impact.	<u>Minor Visual Change:</u> New BRT visual elements consistent with existing transportation uses. No Adverse Impact.
	Commercial Trucks	Negligible Visual Change		
	Bicycle and Pedestrian	Negligible Visual Change		
Neighbors	Residential	Negligible Visual Change	<u>Moderate Visual Change:</u> New LRT visual elements consistent with existing transportation uses. Residential neighbors have high sensitivity to visual changes. Vegetation and landscaping may be affected. No Adverse Impact. Project will consider context sensitive visual design of trackway and stations with a focus on viewpoints from Skiddersville Cemetery (additional vegetative screening). All vegetation and landscaping elements will either be replaced or enhanced.	<u>Moderate Visual Change:</u> New BRT visual elements consistent with existing transportation uses. Residential neighbors have high sensitivity to visual changes. Vegetation and landscaping may be affected. No Adverse Impact. Project will consider context sensitive visual design of stations with a focus on viewpoints from Skiddersville Cemetery (additional vegetative screening). All vegetation and landscaping elements will either be replaced or enhanced.
	Institutional		<u>Moderate Visual Change:</u> New LRT visual elements consistent with existing transportation uses. Institutional, Retail, and Commercial neighbors are sensitive to coherence and cultural order. No Adverse Impact. Project will coordinate with neighbors and visual design of trackway and stations that emphasizes area identity with a focus on viewpoints from Amherst Government and Library complex.	<u>Moderate Visual Change:</u> New BRT visual elements consistent with existing transportation uses. Retail and Commercial neighbors are sensitive to coherence and cultural order. No Adverse Impact. Project will coordinate with neighbors and visual design of stations that emphasizes area identity a focus on viewpoints from Amherst Government and Library complex.
	Retail			
	Commercial			
	Recreational		<u>Moderate Visual Change:</u> New LRT visual elements consistent with existing transportation uses. Future recreational neighbors are sensitive to visual resources that enhance their recreational experience. No Adverse Impact. Project will coordinate with neighbors and visual design of trackway and stations that adds purposeful landscaping to enhance the recreational experience.	<u>Moderate Visual Change:</u> New BRT visual elements consistent with existing transportation uses. Future recreational neighbors are sensitive to visual resources that enhance their recreational experience. No Adverse Impact. Project will coordinate with neighbors and visual design of stations that adds purposeful landscaping to enhance the recreational experience.

### 4.5.3 Potential Mitigation Strategies

The visual elements associated with the LRT Build Alternative and BRT Build Alternative are conceptual and will be further defined as the Project completes design and engineering. The Project would be visible from certain aesthetic resources or sensitive viewer locations along the Project alignment. However, the Project would not result in a significant adverse visual impact because the LRT Build Alternative and the BRT Build Alternative would not obstruct views to visual resources or otherwise significantly detract from, nor cause a diminishment of, the public's enjoyment of a resource. Therefore, no mitigation measures are necessary.

Given the findings of the VIA, future Project design will consider the users and neighbors present within each unique Landscape Unit. As described, a context sensitive design approach will further ensure that moderate visual changes are addressed. Such a design approach will also foster community acceptance and visual integration within the Project alignment.

Metro will incorporate the aesthetic Project design features to help minimize visual changes and add unique character to the stations and portals. These aesthetic design features will reinforce the spirit and identity of areas immediately surrounding station locations. Moreover, the lighting strategy at proposed stations would incorporate best practices related to duration and usage, brightness, orientation, directionality, form, and fixtures that would minimize light pollution.

As described in Section 4.9, "General Ecology and Wildlife", the disturbed areas not used for transportation infrastructure would be revegetated with species indigenous to Western New York to the extent practicable in accordance with a landscape plan developed for the Project.

The proposed stations for the LRT Build Alternative and BRT Build Alternative, as well as the LRT Build Alternative substations and catenary poles, will be designed to minimize visual changes. Specific measures for re-siting, concealment, buffers, increased landscaping, and other design approaches will be incorporated during a later design phase. In cases where the re-siting of above ground equipment is not possible, visual buffers could be used to reduce or obstruct views to the proposed project elements. Buffers include, but are not limited to, berms, fences, walls, or other above ground obstructions.