

A. INTRODUCTION

This chapter assesses the potential effects of the Proposed Project on the visual character and aesthetic conditions of the surrounding area as compared with the No Action Alternative. This chapter serves as a summary of the more detailed analysis presented in **Appendix C**, “Visual and Aesthetic Conditions.” The study area for visual resources extends approximately 600 feet north and south of the project site along an approximately six-mile length of the Northeast Corridor (NEC) (see Figure 1 of **Appendix C**). In addition, to account for more distant views of the project site along the Harford and Cecil County waterfronts, the study area extends approximately one half-mile north and south near the waterfront, utilizing the Thomas J. Hatem Memorial Bridge that carries the Pulaski Highway (Route 40) over the Susquehanna River as the northern boundary (see Figure 2, Photo Key and Figure 3, Photo 1 of **Appendix C**). As discussed in Chapter 2, “Project Alternatives,” this Environmental Assessment (EA) evaluates two Build Alternatives: Alternative 9A and Alternative 9B. Alternative 9A was selected as the Preferred Alternative.

B. REGULATORY CONTEXT AND METHODOLOGY

This assessment has been prepared in accordance with Federal Highway Administration (FHWA) guidelines for visual analyses, including *Guidelines for the Visual Impact Assessment of Highway Projects Documents* (2013), *Environmental Impact Statement Visual Impact Discussion* (undated), and *Guidance Material on the Preparation of Visual Impact Assessments* (1986).

To prepare this analysis and determine potential effects, the Project Team collected information through field visits and identified visually sensitive locations, viewer groups, and duration of views. In addition, the Federal Railroad Administration (FRA)/Maryland Department of Transportation (MDOT) requested input through public outreach information sessions and dedicated meetings of Section 106 consulting parties. The information received at those meetings as well as any written comments received have been taken into consideration in this aesthetics analysis as well as in the Proposed Project’s design process.

C. AFFECTED ENVIRONMENT

EXISTING VISUAL CHARACTER

The project site consists of a portion of the National Railroad Passenger Corporation’s (Amtrak) NEC, a two-track rail line oriented roughly northeast-southwest¹ across the Susquehanna River.

¹ Unlike Chapter 2, which refers to locations in the study area according to “railroad north” and “railroad south,” this analysis uses compass north and south when referring to direction.

Susquehanna River Rail Bridge Project

The tracks run at-grade and on an embankment in Havre de Grace and Perryville and cross the Susquehanna River on the Susquehanna River Rail Bridge. Prominent visual features in the study area include the City of Havre de Grace and the Town of Perryville, the Susquehanna River, the Susquehanna River Rail Bridge, the Thomas J. Hatem Memorial Bridge, the mouth of the Chesapeake Bay, and the southern tip of Garrett Island, which is part of the Blackwater National Wildlife Refuge, as well as historic resources within Cecil and Harford Counties.

The study area is characterized by a mix of relatively rural agricultural areas; low-rise, medium-density waterfront areas; some suburban development; and light industrial, hotel, and commercial uses along major transportation corridors. The portion of the study area northwest of the NEC in Perryville is characterized by low-rise, urban development consisting of residential, commercial, institutional, and park uses. Development located directly on the Perryville waterfront in this area consists mainly of low-rise condominiums with private marinas on the river.

The Perry Point Veterans Administration (VA) Medical Center, evaluated as eligible for listing on the National Register of Historic Places (NR), is located south of the NEC along the waterfront in Cecil County, and consists of large open spaces and residences of primarily two- to two-and-a-half stories in the study area. At the southern end of the complex is the NR-listed Perry Point Mansion House and Mill. The portion of the study area in Havre de Grace consists mainly of low-rise, medium-density urban development including residential, commercial, institutional, and park uses. Development located directly on the waterfront consists primarily of commercial and light industrial uses, marinas, undeveloped lots, and parks. Portions of Havre de Grace further west include athletic fields, such as Stancil Field Park located at the southwest corner of Old Post Road and Old Bay Lane, and some suburban development.

The entire visual resources study area is within the Lower Susquehanna Heritage Greenway (LSHG), which was designated by the Maryland Heritage Areas Authority as a Certified Heritage Area in 1997 through its *Maryland Heritage Preservation and Tourism Areas Development Program*. As identified in the *Lower Susquehanna Heritage Greenway Management Plan* (May 2000), the visual character of the LSHG includes natural resources such as parks and waterfront areas; the Susquehanna River, Chesapeake Bay, and Garrett Island; rail infrastructure and multiple bridges crossing the Susquehanna River; open space; numerous pedestrian, bicycle, and historic trails; and man-made or cultural resources, including historic structures, districts, and archaeological sites.

VISUALLY SENSITIVE RESOURCES WITHIN THE LOWER SUSQUEHANNA HERITAGE GREENWAY (LSHG)

FHWA's *Guidance Material on the Preparation of Visual Impact Assessments* defines visual resources as those physical features that make up the visible landscape, including land, water, vegetation, and man-made elements to which viewers attach visual value. Visually sensitive resources may include historic buildings, open spaces such as parks and landscaped plazas, and views to natural resources such as water features and natural vegetation. The LSHG includes natural resources and open space, trails, and man-made resources, each of which is listed below and described in more detail in **Appendix C**.

NATURAL RESOURCES/OPEN SPACE

The most prominent natural resource features in the study area are the water-related resources, including the Susquehanna River, the mouth of the Chesapeake Bay, and the southern tip of

Garrett Island, which is part of the Blackwater National Wildlife Refuge. These features are of extremely high value in terms of the area’s visual and aesthetic qualities. In addition, there are several public parks and areas of open space located along the waterfront in the visual study area (see Chapter 6, “Parks, Trails, and Recreational Resources” for a more detailed description of parks in the study area). These areas are important for facilitating views to the river and its natural features. Prominent waterfront parks include: Jean S. Roberts Memorial Park; David R. Craig Park; McLhinney Park; and Frank J. Hutchins Memorial Park.

Additional parks and areas of open space are located within the study area, but are far enough removed from the river that they do not contain important views to the river and its natural features. These open space areas include the Roye-Williams Elementary School, the Havre de Grace Middle/High School Athletic Fields, Battery Village Park, Swan Harbor Farm, and Somerset Manor, and in Perryville Trego Field/Perryville Mini-Park and Perryville Community Park.

TRAILS

The LSHG contains a portion of or all of the following trails, which serve to thematically link historic sites and/or open space areas, or provide recreational paths: the East Coast Greenway; Mason-Dixon Trail; Maryland Civil War Western Shore Baltimore Trail; Captain John Smith Chesapeake National Historic Trail; Washington-Rochambeau Revolutionary Route; Star-Spangled Banner National Historic Trail; Old Town Loop; Old Town/New Town Trail; and the Havre de Grace Waterfront Walkway.²

MAN-MADE ELEMENTS

Historic resources in the study area, which are further described in Chapter 8, “Cultural Resources,” are the existing Susquehanna River Rail Bridge and nine related undergrade bridges; the Havre de Grace Historic District; the Southern Terminus, Susquehanna and Tidewater Canal—South Lock #1 and Toll House; Rodgers Tavern; the Perry Point Mansion House and Mill; the Perryville Railroad Station complex; the Perry Point Veterans Administration Medical Center Historic District; the Perryville United Methodist Church; and the Perryville Presbyterian Church. In addition to these formally identified historic resources, there is another man-made feature of visual prominence: the Thomas J. Hatem Memorial Bridge.

VIEWER GROUPS AND VIEW DURATIONS

Viewer groups are groups of people who are visually affected by a project in a similar way. Viewer groups in the area consist of pedestrians/bicyclists, motorists, rail passengers, and boaters. These viewer groups may be divided into two categories: those that have views of visually sensitive resources and those that have views from those resources. Pedestrians and bicyclists generally have longer view durations than motorists and rail passengers as they are not traveling at high speeds.

² See **Appendix D**, “Cultural Resources” for an analysis of the Captain John Smith Chesapeake National Historic Trail resources with respect to the Proposed Project and the draft Programmatic Agreement, which includes a commitment to further consider National Historic Trails in the future.

PEDESTRIANS AND BICYCLISTS

The majority of the pedestrian and bicyclist traffic in the study area occurs in the streets and waterfront parks in the Havre de Grace Historic District, as well as the waterfront areas near Rodgers Tavern in Perryville, and the Perry Point VA Medical Center (including the Perry Point Mansion and Mill) in Cecil County. View of pedestrians and bicyclists in the four waterfront parks in the Havre de Grace Historic District can be characterized as long, clear views of visually contributing elements of the LSHG, including waterfront areas in Perryville and Cecil County, the Susquehanna River and Chesapeake Bay, Garrett Island, the Susquehanna River Rail Bridge, and the Thomas J. Hatem Memorial Bridge.

MOTORISTS

Motorists travel on multiple roadways that pass through the study area. Major roads in the study area include the Pulaski Highway (Route 40) and Route 7. A dense network of secondary and tertiary roads is located in the Havre de Grace portion of the study area. The network of roads in Perryville is less dense, and roads in the Cecil County portion of the study area south of the project site are primarily tertiary roads. Motorists traveling on Route 40 have a view of the Susquehanna River, Garrett Island, and the Susquehanna River Rail Bridge as they cross the Susquehanna River on the Thomas J. Hatem Memorial Bridge; however, the speed of traffic on this bridge limits the amount of time motorists have for observation. In other areas, like the Perry Point VA Medical Center, motorists travel more slowly along tertiary roads and enjoy longer views of river-related features of the LSHG. In other areas, for example along Broad Street in Perryville, motorists have views of the Susquehanna River Rail Bridge and other historic sites. Views are somewhat obstructed north of the project site in Perryville and in Havre de Grace. Views of river-related visually contributing elements of the LSHG are possible in Havre de Grace at Water Street north of the project site, North Union Avenue south of the project site, and east from North Adams and Otsego Streets in the study area north of the project site. In addition, the bridge abutment, four of the undergrade bridges, and the Havre de Grace Historic District are visible to motorists in Havre de Grace driving along the tertiary streets in close proximity to the bridge. Specific views are described in more detail in **Appendix C**.

RAIL PASSENGERS

Amtrak and Maryland Area Regional Commuter (MARC) rail passengers traveling on the NEC through the study area are afforded brief but clear views of some of the elements that contribute to the visual character of the LSHG, including buildings within the Havre de Grace Historic District. As passengers travel on the Susquehanna River Rail Bridge, they have expansive views south towards the Susquehanna River, Chesapeake Bay, and the Havre de Grace and Cecil County waterfronts. To the north, rail passengers have clear views of the Susquehanna River, Garrett Island, the Thomas J. Hatem Memorial Bridge, and waterfront areas in Havre de Grace and Perryville. Rail passengers are afforded a brief view of Rodgers Tavern. Because the Perryville Railroad Station is a MARC station, the passengers have longer views of the station when the train stops to drop off and pick up commuters, as well as a limited side view of the Perry Interlocking Tower. Similarly, MARC rail passengers using the station to board or exit a train are afforded views of all sides of the station, a historic structure constructed of brick and exhibiting Colonial Revival features such as its large round-arched windows.

BOATERS

The Susquehanna River is used by commercial boats, as well as by recreational vessels. Marinas and boat launches are located in waterfront locations and provide long, clear views of the river-related features of the LSHG, including waterfront areas in Perryville and Cecil County, the Susquehanna River and Chesapeake Bay, Southern Terminus, Susquehanna and Tidewater Canal—South Lock #1 and Toll House, Garrett Island, the Susquehanna River Rail Bridge, and the Thomas J. Hatem Memorial Bridge.

Boaters traveling on the Susquehanna River in the study area have long, expansive views of the LSHG, including the river itself, the Susquehanna River Rail Bridge, buildings on the waterfront in the Havre de Grace Historic District, and waterfront areas in Perryville and Cecil County. The Susquehanna River Rail Bridge’s large triangular truss components and large stone piers are prominent visual features for boaters traveling under the bridge. Boaters can see Rodgers Tavern, although views are somewhat obscured by intervening vegetation. Other historic structures located further inland are not visible to boaters on the Susquehanna River in the study area.

D. NO ACTION ALTERNATIVE

As described in Chapter 2, “Project Alternatives,” under the No Action Alternative, the existing Susquehanna River Rail Bridge will remain in service, with continued frequent maintenance issues and minimal repairs. The planned development projects discussed in the Chapter 4, “Land Use and Community Facilities,” consist primarily of residential and mixed-use infill projects in Havre de Grace and Perryville. Other projects include a proposed Waterfront Heritage Park in Havre de Grace along Water Street, the Havre de Grace Middle School/High School Replacement Project, and the Lower Ferry Park in Perryville at Broad Street and Roundhouse Drive. Additionally, MARC has planned a Northeast Maintenance Facility³ in the study area, for maintenance and storage on a 115-acre site in Perryville adjacent to the NEC.

The residential infill projects in the Havre de Grace Historic District require review and approval from the Havre de Grace Historic Preservation Commission; therefore, it is anticipated that these projects would be in keeping with the overall visual and aesthetic character of the district. It is also anticipated that the creation of the Waterfront Heritage Park in Havre de Grace and the Lower Ferry Park in Perryville would create publicly accessible open spaces with views of the study area. The projects in the No Action Alternative are not anticipated to result in substantial changes to visually sensitive resources.

E. POTENTIAL IMPACTS OF THE BUILD ALTERNATIVES

The Proposed Project’s visual effects on the LSHG were evaluated from two perspectives:

- Overall “big picture” effects, looking at the area as a whole, both in close proximity to the bridge and further removed; and
- Site-specific effects, relating to a view to/from a visually sensitive resource.

³ <http://mta.maryland.gov/marc-maintenance-facility>, accessed December 31, 2015.

OVERALL VISUAL CHARACTER

The three main factors considered in assessing the Proposed Project's visual effects on the overall visual character were proximity of the viewer to the bridge, the proposed change from one bridge to two bridges, and the proposed new bridge design, including style, materials, pier design, and height. From locations in close proximity to the bridge, defined as either beneath the bridge or within 600 feet of the bridge, there would be an adverse visual effect on the overall viewshed, especially due to the change from one bridge to two bridges. From locations further north and south of the bridge, the visual effect would be minimized by the fact that the two bridges would be adjacent to each other in an area that visually consists of numerous bridge crossings. Looking from many locations within the LSHG, the two adjacent bridges would be consistent with the area's current overall visual character.

The proposed bridge design incorporates a central arch, a girder deck, and "keyhole" arch piers, all elements that would have been found in traditional bridge design, and would therefore be compatible with the area's overall visual character. Although the pier material will change from the existing stone to concrete, this element will be counterbalanced by the fact that the approach spans, which are the portions of the bridge on either side of the bridge's central feature, and the bridge piers will be more streamlined and attenuated than the existing bridge deck and stone piers; therefore, it is anticipated that views through and under the proposed bridge would be more readily available. In addition, the proposed height of the new bridges, which would be a maximum increase of 14 feet at the river's navigational channel, would not have an adverse effect on the area's visual character when looking at the overall area, which contains several other bridges that are higher in elevation.

Pedestrians/bicyclists would have the longest duration of views and there would be an adverse visual effect on their views from either underneath the bridge or in close proximity to the bridge, due to the increased mass from one bridge to two bridges. From points further removed from the Proposed Project, the overall character of the LSHG would not be adversely affected as long as the two new bridges use a design for the bridges and piers that is traditional and allows greater views under the bridges.

The views to visual resources that motorists experience are generally of short duration, due to the relatively high speeds at which they tend to travel through the study area. There would be an adverse visual effect on motorists' views from either underneath the bridge or in close proximity to the bridge. However, motorists traveling on Route 40 across the Thomas J. Hatem Memorial Bridge currently experience brief but expansive views of the LSHG. When looking south from the bridge, the existing Susquehanna River Rail Bridge is a visible but relatively distant element of the LSHG view corridor. Because the alignment, height, and dimensions of the bridges proposed in either Build Alternative would not differ substantially from the existing Susquehanna River Rail Bridge, views to the LSHG would not substantially change, and the change in design of the new bridges, including the use of concrete for the new bridge piers, would be minimally perceptible.

Rail passengers traveling on the NEC would not be able to see both of the proposed bridges at the same time; however, views of the LSHG would be altered by the introduction of the additional bridge. This change would be a significant change, but would not be adverse because the view would be compatible with the area's multiple bridge crossings. This assessment is conditioned on the two new bridges using a traditional design for the bridges and piers.

Commercial and recreational boaters on the Susquehanna River have long, expansive views of the LSHG. The replacement of the existing Susquehanna River Rail Bridge with the two bridges proposed with Alternatives 9A and/or Alternative 9B would somewhat alter views from the boaters' perspective. However, because the alignment, height, and dimensions of the bridges proposed in either Build Alternative would not differ substantially from the existing bridge, the Proposed Project would not block views of the LSHG; expansive views north and south of the Susquehanna River, Chesapeake Bay, and the Havre de Grace and Cecil County waterfronts would still be afforded from the boaters' perspective.

Thus, for all user groups, the effects on the overall visual and aesthetic qualities of the study area depend greatly on the viewer's location, with a visual adverse effect being from underneath the bridge or in close proximity to it. The fact that the proposed design for the two new bridges would be traditional in character and would allow greater views under the bridge would serve to minimize the adverse visual effect on resources within close proximity to the bridges and avoid an adverse effect from resources further removed.

SITE-SPECIFIC EFFECTS

The list below contains discussion of specific sites assessed to have significant visual impacts:

- Pedestrian, bicyclist, and motorist views from waterfront open space areas (i.e., McLhinney Park and Frank J. Hutchins Memorial Park in the Havre de Grace Historic District, viewing areas behind Rodgers Tavern, and waterfront areas along the Perry Point VA Medical Center Historic District) would be altered by the change from one bridge to two bridges as well as the change in the design and materials of the new bridges.
- Havre de Grace Historic District. There would be adverse visual effects from the proposed widening that would result in the NEC and the requisite retaining walls being closer to structures within the Havre de Grace Historic District; the altered views of the Susquehanna River from resources in close proximity to the bridges, including Jean S. Roberts Memorial Park and David R. Craig Park; and alterations to the Historic District's four undergrade bridges.
- Rodgers Tavern. The views from the front of Rodgers Tavern would be adversely affected by the widening of the bridge approach and a retaining wall running along the embankment. In addition, there would be a clear view of one of the bridge piers that would be placed in close proximity to the Broad Street underpass.
- Views of the Perryville Railroad Station Complex for rail passengers would be altered by the proposed retaining walls and the relocation of the Perry Interlocking Tower.
- Undergrade Bridges. The Proposed Project would result in visual adverse effects to eight of the nine undergrade bridges (excluding the Lily Run undergrade bridge).

F. MINIMIZATION AND MITIGATION OF IMPACTS

OVERALL VISUAL CHARACTER

As described above, for all user groups, the effects on the overall visual and aesthetic qualities of the study area depend greatly on the viewer's location, with a visual adverse effect from underneath the bridge or in close proximity to it. The fact that the proposed design for the two new bridges would be traditional in character and allow greater views under the bridge would

Susquehanna River Rail Bridge Project

serve to minimize the adverse visual effect on resources within close proximity to the bridges and avoid an adverse effect from resources further removed.

SITE-SPECIFIC EFFECTS

In terms of site-specific effects within the LSHG, several potential visual adverse effects can be avoided or minimized through the following:

- Pedestrian, bicyclist, and motorist views from waterfront:
 - Traditional bridge design
 - Greater views under the bridge
 - Proposed design for the two new bridges would be traditional in character and would allow greater views under the bridge. This would minimize the adverse visual effect on resources within close proximity to the bridges and avoid an adverse effect from resources further removed
- Havre de Grace Historic District:
 - Traditional bridge design
 - *Secretary of the Interior's Standards for the Treatment of Historic Properties* (SOI Standards)
 - Larger pier openings with greater view
 - See below for undergrade bridge discussion
- Rodgers Tavern:
 - Architecturally pleasing treatment and/or mural for retaining wall (per Town of Perryville's recommendation)
 - Architecturally pleasing materials for retaining wall
 - Traditional design
 - Larger pier openings with greater view
- Perryville Railroad Station Complex:
 - Ensuring historic compatibility (materials, features, size, scale, proportion), to the extent possible
 - SOI Standards
 - Shifting Perry Interlocking Tower rather than demolishing
- Undergrade Bridges:
 - Form lining (emulating stone, appropriately stained)
 - Appropriate staining
 - SOI Standards

*