Walkway over the Hudson

Final Design Report
and
Environmental Assessment
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Walkway Over the Hudson

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U.S. Department of Transportation
Federal Highway Administration

National Parks Service

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PREFERRED ALTERNATIVE

This project proposes to transform the dormant Poughkeepsie-Highland Railroad Bridge into a pedestrian and bicycle trail called "Walkway Over the Hudson." The bridge is located in the City of Poughkeepsie, Dutchess County (east side of the Hudson River) and the Town of Lloyd, Ulster County (west side of the river).

The Poughkeepsie-Highland Railroad Bridge holds tremendous historic significance. When construction was completed in 1888, the bridge was the longest one in the world. It served as a vital link in the transportation of people and goods between Albany and New York City. Train volumes exceeded 3500 cars/day during World War II, at the peak of railroad usage. In the late 1950's, traffic volumes on the bridge began a steady decline. The last train crossed the bridge in 1974 due to a fire on the east side of the bridge that caused damage to rail ties and decking material. The fire, combined with the declining use of the bridge, prompted the termination of rail service. This bridge is currently listed on the New York State Historic Register.

In 1995, a not-for-profit organization, Walkway Over the Hudson, assumed ownership of the bridge with the intent of transforming usage into a facility to accommodate pedestrians and bicyclists. Walkway Over the Hudson has been working closely with the Dyson Foundation to secure the necessary funds for the renovation of the bridge. The project schedule is on the fast-track, with construction planned to begin in the summer of 2008, and the bridge opening to the public by September 2009 as part of the 2009 Henry Hudson Quadricentennial Celebration.

The Rehabilitation Alternative, described in detail in **Section III.C** of this report, has been identified as the preferred alternative, over-and-above the Null Alternative and the Removal (i.e., demolition) Alternative. This Rehabilitation Alternative proposes to transform the existing railroad bridge into a pedestrian and bicyclist trail, linking the expansive trail systems that exist on the east and west sides of the Hudson River. Three design options were considered under the Rehabilitation Alternative, providing incrementally greater levels of trail width, access options, and amenities. The second design option has been chosen based on a comparison of the range of available features against available funds.

Construction work would involve removal of the existing bridge deck including side railings, track rails, and ties. Structural repairs would then be completed prior to installation of a new pre-cast, reinforced concrete deck on the bridge. The deck would be 24' wide on the approach spans and 33.5' wide on the main span. Key features would include hand rails similar to those on the nearby Franklin D. Roosevelt (Mid-Hudson) Bridge, pedestrian lighting on the deck, elevator access at the east abutment, and parking facilities near both ends of the bridge abutments. It is the intent to implement these new features in such a way that captures the industrial character of the bridge's original function. A photographic rendering of the proposed condition is found in Figure III-2.

Construction costs are currently estimated at $25 million. Walkway Over the Hudson currently is seeking state, federal, local government, and private funding to support this project. Funding commitments must be secured in order to initiate the construction phase of the project. Upon completion of construction activities, the New York State Office of Parks, Recreation and Historic Preservation will assume responsibility for administering public use of the Walkway Over the Hudson, including staffing, operating costs, and maintaining the trail features and associated public facilities. Ownership of the bridge structure

will be transferred to an appropriate New York State entity (not yet determined) which will be responsible for maintaining the bridge deck, steel superstructure, piers, and substructure.

This project is classified as a SEQRA Type I Action project. The project is classified as a Class II Action (Categorical Exclusion) based on the NEPA checklist included in **Appendix F**.

I. INTRODUCTION

This project proposes to convert the existing, dormant, Poughkeepsie-Highland Railroad Bridge to a pedestrian and bicycle trail ("Walkway over the Hudson") that will serve as a link between extensive trail networks on either side of the Hudson River. The work will involve removing all of the existing material above the structural steel, including railroad ties, rail, pedestrian railing, and abandoned utilities. New deck and railings will be added, and appropriate access and termini will be created. The project construction cost for the Feasible Alternative is estimated to be $25 million, and will be funded by a mix of federal, state and private funds. The project is being classified as a Class II Action (Categorical Exclusion) under the National Environmental Policy Act (NEPA), and as a Type I Action under the State Environmental Quality Review Act (SEQRA). The Lead Agency will grant Design Approval. The project is scheduled to be let in the summer of 2008.

This report has been prepared to describe existing conditions, establish project needs, and identify and evaluate alternative improvements to address the project needs. The evaluations considered the social, economic and environmental impacts associated with the project. For additional information regarding this project, contact:

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II. PROJECT IDENTIFICATION, EVOLUTION, CONDITIONS AND NEEDS, AND OBJECTIVES

A. PROJECT IDENTIFICATION

1. Project Type:

Conversion of a 1.25 mile long, historic railroad bridge into a trail, whereby a key link is provided for the connection of the bridge to an extensive regional pedestrian and bicycle trail network on the east and west sides of the Hudson River.

2. Project Location:

a. The Poughkeepsie-Highland Railroad Bridge over the Hudson River is located in the City of Poughkeepsie, Dutchess County, and the Town of Lloyd, Ulster County. The bridge is north of the New York State Bridge Authority's Franklin D. Roosevelt (Mid-Hudson) Bridge. The project work limits include the entire bridge, and extend inland, on both the east and west sides of the bridge, approximately 200 ft from the abutments, within the Walkway Over the Hudson right-of-way. The east and west termini connect to railroad right-of-way that is currently being converted, under separate project initiatives, to pedestrian and bicycle trails that link up to the greater, regional trail network.

b. Figure II-1 presents a Location and Area Map. This figure is also provided in a larger format in **Appendix A**.

Figure II-1: Project Location Map

B. PROJECT EVOLUTION

The Poughkeepsie-Highland Railroad Bridge holds tremendous historic significance: constructed in 1888, it was the longest bridge in the world when the first train crossed it. The completion of this bridge established a vital link in the transportation of people and goods between Albany and New York City. Although the need for freight transportation between Albany and New York City continues today, the Poughkeepsie-Highland Railroad Bridge ended rail service in 1974 following a decline in demand for the use of this particular bridge.

The bridge is considered a 19th Century engineering marvel, having set records for the use of structural steel, and the length of its spans. The four river piers are supported on massive concrete filled, timber crib foundations over ten stories tall. Railroad traffic over the bridge increased dramatically in the early 20th century, resulting in the need for immense improvements. Between 1906 and 1907, and later between 1918 and 1919, structural steel was added to accommodate longer and heavier trains. Train volumes exceeded 3500 cars/day during World War II. It wasn't until the late 1950's that traffic volumes on the bridge began a steady decline, a decline that was attributed to the creation of the interstate highway system, as well as the opening of the Castleton-on-Hudson railroad bridge just south of Albany.

The last train crossed the bridge in 1974. A fire erupted on the east side of the bridge damaging rail ties and decking material. This incident, along with the declining demand for use of the bridge, prompted the bridge owner, Penn Central, to terminate service. Following the fire incident, the east approach was stripped of railroad ties, rail, and other surface features to prevent the possibility of un-maintained materials falling onto residents, streets and rail lines beneath the bridge. In this stripped area, only the bridge superstructure remains.

In 1995, a not-for-profit organization, Walkway Over the Hudson, assumed ownership of the bridge with the intent of transforming usage into a facility to accommodate pedestrians and bicyclists. Numerous studies and reports from both sides of the river have supported the conversion of the Poughkeepsie-Highland Railroad Bridge to non-motorized use - most notably, the New York State Department of Transportation's June 2002, "*Maybrook Multi-Modal Corridor Study*."

Walkway Over the Hudson has received wide-spread support for their vision. **Appendix G** contains numerous copies of support letters from a variety of stakeholders. This support has enabled Preliminary Design efforts to get under way, such as, the bridge inspection efforts, and preparation of this Design Report. Walkway Over the Hudson has been working closely with the Dyson Foundation to secure the necessary funds for the renovation of the bridge. The project schedule is on the fast-track, with fabrication and construction contracts planned to begin in the spring and summer of 2008, and the bridge opened to the public by September 2009 as part of the 2009 Henry Hudson Quadricentennial Celebration.

C. CONDITIONS AND NEEDS

1. Transportation Conditions, Deficiencies and Engineering Considerations:

a. Functional Classification

The bridge was constructed for rail traffic only. It is currently abandoned. On the east side, the bridge spans five (5) collector streets, two (2) arterials, and one (1) active rail line. On the west side, the bridge spans two (2) collectors, and one (1) rail line. Additionally, the bridge spans the Hudson River which is a navigable waterway for recreational and commercial vessels.

b. Ownership and Maintenance Jurisdiction

The bridge is currently owned and maintained by Walkway Over the Hudson, a not-for-profit organization. Upon completion of the project, the New York State Office of Parks, Recreation and Historic Preservation will assume responsibility for administering public use of the Walkway Over the Hudson, including staffing, operating costs, and maintaining the trail features and associated public facilities. Ownership of the bridge structure will be transferred to an appropriate New York State entity (not yet determined) which will be responsible for maintaining the bridge deck, steel superstructure, piers, and substructure.

c. Culture, Terrain and Climatic Conditions

(1) Area Type – The Poughkeepsie-Highland Railroad Bridge connects the City of Poughkeepsie, Dutchess County, on the east side of the Hudson River with the Town of Lloyd, Ulster County, on the west side of the river. Land use on the east side differs substantially from that of the west side. The surrounding area on the east side is highly urban in context, with a mixture of industrial, commercial and residential space. The west approach, on the other hand is more rural in context, with large areas of open green space, and sparse residential development.

Several parks exist throughout the surrounding area of the Poughkeepsie-Highland Railroad Bridge: (1) Johnson-Iorio Memorial Park resides on the west side of the river, near the shore, south of the bridge. The park offers scenic views of Poughkeepsie on the other side of the river, and is linked to Scenic Hudson's Franny Reese Preserve which was recently transferred to NYS Office of Parks, Recreation and Historic Preservation. (2) Victor C. Waryas Park resides on the east side of the river, along the shore, just to the south of the bridge. This park offers beautiful views up and down the Hudson River, including panoramic views of the two nearby bridges spanning the river. (3) Pulaski Park, an urban recreational park, also resides on the east side of the river, a short distance north of the Poughkeepsie-Highland east abutment. (4) Wheaton Park is also an urban recreational park located south of the bridge in Poughkeepsie. Other parks exist within the City of Poughkeepsie, but further inland.

Other noteworthy area features include the Poughkeepsie Train Station and the Central Hudson Power Station, both located in the City of Poughkeepsie, along the eastern shore near the subject bridge.

The area, as it exists today, is the product of 180 years of expanded development that coincided with the boom along the Hudson Valley. This boom began in 1825, when the Erie Canal opened up doors to the Great Lakes and western products, and continued strong into the 1900's until alternate transportation means and routes were implemented. Despite the development expanse, "the essential nature and traditions of the Hudson Valley still prevail."[1] Or, to put it in the words of historian Paul Wilstach in 1933, "The units of busy life here seem to punctuate Nature without prevailing over it."[2]

(2) Terrain – The Poughkeepsie-Highland Railroad Bridge spans the Hudson River valley floor between the urban city of Poughkeepsie in Dutchess County and the more rural township of Lloyd in Ulster County. The City of Poughkeepsie is located on the eastern slope descending toward the river. The terrain within the Town of Lloyd is much more varied (hilly), having steeper slopes along the west river than that of Poughkeepsie.

(3) Climate Conditions – No unusual climate conditions exist that would affect project design or construction.

d. Control of Access

Existing access onto the Poughkeepsie-Highland Railroad Bridge within the project limits is strictly controlled by the Walkway Over the Hudson group. Access from the west side of the bridge is controlled by a locked security gate, and an effective security intrusion system linked to local law enforcement. The east end of the bridge is fenced, and contains no deck system to walk on – only the bridge's steel superstructure remains.

The bridge is elevated over several roads and two active rail lines. The bridge does not prohibit the through traffic of vehicles on any of those transportation facilities.

e. Existing Highway Section

(1) Right-of-Way – The existing right-of-way of the rail corridor between the western project limit and Pier 0 in the Town of Lloyd has a width of 200 feet. The right-of-way between Pier 0 and Talmadge Road in the City of Poughkeepsie is approximately 60 feet in width. **Appendix D** contains record bridge plans that show pier locations. The Poughkeepsie Bridge Company acquired most of the right-of-way circa 1887/1888. At the highway underpasses, the bridge substructure and appurtenances are encompassed with 6-feet high chain link fence. The chain link fencing continues, generally parallel with the rail line; though the fence does not exist everywhere along the rail line.

[1] "Greenway Connections – Greenway Compact Program and Guides for Dutchess County Communities." Dutchess County Department of Planning and Development. March 8, 2000. Page 1.
[2] "Greenway Connections – Greenway Compact Program and Guides for Dutchess County Communities." Dutchess County Department of Planning and Development. March 8, 2000. Page 1, inset.

Further, the fence location does not always coincide with the approximate right-of-way which varies in alignment throughout. Rather, it remains generally parallel with the rail line. As a result, in many cases, adjacent property owners encroach in the railroad right-of-way. In fact, some of the intermittent fencing was continued erroneously by adjacent property owners. This is most evident in the area between Talmadge Road and Washington Street on the south side of the railroad. The encroaching properties front on Gifford Ave.; nos. 10 through 36. A preliminary assessment also shows encroachments by adjacent owners in the following areas:

i. Between Albany/Dutchess and Delafield streets on the north and south

ii. Between Delafield and Talmadge on the north and south

There are also encroachments of rail appurtenances onto adjacent properties in the following areas:

i. The concrete retaining wall encroaches into the yards of at least two properties at no. 38 and 42 Gifford Avenue

ii. The fence at the property of Frank Poleto et al at the southeast corner of Talmadge and the Walkway Over the Hudson property.

iii. The fence at the Talmadge and Delafield right-of-ways.

iv. The east abutment at Washington Street

Items iii.) and iv.) above may be covered in easements granted by the City of Poughkeepsie. A preliminary review of the Ulster County right-of-way revealed no serious encroachments. Property owners will be contacted regarding their enchroachment status. The complete Encroachment Report can be found in **Appendix H**.

(2) Travel Lanes and Shoulders – The Poughkeepsie-Highland Railroad Bridge is an abandoned railroad bridge, not a highway section. There are no vehicular travel lanes or shoulders.

(3) Curb – There are no curbs on the bridge.

(4) Medians – There are no medians on the bridge.

(5) Grades and Curves

i. Vertical – The bridge profile varies from 1.25% (descending west to east) on the west approach, transitioning to level grade on most of the main span, and transitioning again to 1.25% (descending west to east) on the east approach.

ii. Horizontal – The horizontal alignment of the bridge is tangent from the west approach, through the main span, and to a distance of approximately 2268 feet

inland on the east side. From this point eastward, the bridge has an approximate 2200 foot horizontal curve.

(6) Intersection Geometry and Conditions – There are no intersections on the Poughkeepsie-Highland Railroad Bridge.

(7) Parking Regulations – The bridge was constructed for railroad use only, and so there is no vehicular parking on the bridge. There are allowances for parking on the local street network surrounding the bridge in the City of Poughkeepsie.

(8) Roadside Elements – On the bridge, hand rail exists on both sides of the track. In addition, where the tracks touch down on the east side, some fencing exists as a separation between the railroad property and adjacent land owners. More information on the chain link fence can be found in the Right-of-Way subsection **(II.C.1.e.1.)**.

f. Abutting Highway Segments and Future Plans for Abutting Highway Segments

The Poughkeepsie-Highland Railroad Bridge crosses over a total of nine (9) roadways: Ransom Road and Oakes Road on the west side of the river, and North Water Street, State Route 9, Albany Street, Dutchess Avenue, Delafield Street, Talmadge Street, Washington Street (State Route 9G) on the east side. These are all grade separated crossings. Therefore, the flow of traffic on these roads is not prohibited by the bridge. The same is true for the active railroad lines that pass beneath the bridge along both shores of the Hudson River, and for water vessels that run up and down the Hudson River.

The Dutchess County Rail-Trail will be located along the along the CSX rail bed, stretching from East Fishkill to Morgan Lake, in the City of Poughkeepsie. The final phase of construction for this project is scheduled to begin in the Fall of 2008. This project is located approximately 1.3 miles east of the eastern terminus of the Poughkeepsie-Highland Railroad Bridge, and is a key component in the regional pedestrian/bicycle network.

Dutchess County is in negotiations to purchase the 1.3 mile stretch of CSX owned rail bed between the Walkway Over the Hudson project and Morgan Lake. The County would use this rail bed to connect the Walkway and Ulster County Trails to the Dutchess County rail-trail network.

Hudson Valley Rail-Trail Project will be expanded to include the stretch of railroad from Haviland Road to Commercial Avenue and is planned to be open by September 2009. This rail-trail project will link the Walkway Over the Hudson bridge to the regional pedestrian and bike network on the west side of the Hudson River.

The NYS Office of Parks, Recreation, and Historic Preservation recently acquired ownership of the Scenic Hudson wooded hillside trail system (Franny Reese Preserve) on the west side of the bridge. Walkway Over the Hudson users will be able to access this wooded parkland using Haviland Road. Upon completion of the Hudson Valley Rail-Trail section between Haviland Road and Commercial Avenue, trail users will have direct access between the Franny Reese trail system and the Walkway Over the Hudson bridge.

Consequently, Walkway Over the Hudson is the final piece of infrastructure that links the east and west side trail networks together.

g. Speeds and Delay

Not applicable.

h. Traffic

Not applicable.

i. Level of Service (LOS)

Not applicable.

j. Deficiencies in Current Facilities Based on Intended Use

This bridge was designed for rail use and is being proposed herein as a trail for pedestrians and bicyclists. As such, several features would need to be addressed in order to properly serve the new type of traffic:

- Railing
- Fall protection
- Trail surface
- Parking accommodations
- Access to/from parking facilities
- Handicapped access, including features for the blind
- Suicide prevention measures
- Lighting
- Security
- Maintenance
- Emergency Access

k. Safety Considerations

The existing bridge was constructed for rail use and not as a pedestrian trail facility. Furthermore, the era in which the bridge was constructed and last maintained predates safety measures that are standard to today's practice. Consequently, the bridge, in its current state, retains many safety problems. The concern is elevated in consideration of its intended use as a pedestrian and bicycle trail system. Safety problems include the following: side railings (poor condition, missing in areas, and non-standard design), lack of a solid travel surface, minor structural deficiencies, and lack of lighting.

l. Pavement and Shoulder Conditions

The bridge was designed for train traffic, and is being proposed herein as a trail for pedestrians and bicyclists. As such, the existing surface is inadequate for use as a trail surface.

m. Railings, Median Barriers and Impact Attenuators

There are no guide railings, median barriers, or impact attenuators located on the bridge. The hand railings on the bridge are in very poor condition, or missing.

n. Traffic Control Devices

The bridge was designed for train traffic, and is being proposed herein as a trail for pedestrians and bicyclists. As such, proper traffic control devices do not exist on the bridge and adjoining sections of railroad to guide the proposed users (i.e., pedestrians and bicyclists).

o. Structures:

(1) Description – The former Poughkeepsie-Highland Railroad Bridge is over 6,700 feet long, and consists of numerous spans in three distinct segments: a west approach, the main spans, and an east approach. All structures consist of three parallel lines of superstructure elements, either steel truss or steel girder. See **Appendix D** for the plans, profiles, and typical sections of the existing structure.

The West Approach is 1,034-feet long and is constructed of two 145-foot long pin-connected Warren deck truss spans, eight 50 to 60-foot long plate girder spans, and nine 30-foot long plate girder spans straddling adjacent bents. Each span is simply supported and consists of three longitudinal members (girders or trusses) spaced at 11-feet on center, for a total width of 22-feet between the centerlines of the north and south members. The superstructure is supported on eighteen variable height steel bents founded on either concrete pedestals or cut stone blocks at the base of each column. Longitudinal bracing extends between adjacent bents to form tower piers. The North and Center members support a deck of timber ties and track from the abandoned railroad line. There is no deck between the South and Center members. The West Approach spans over one (1) local roadway and through rolling terrain, in the Town of Lloyd.

The Main Span is 3,094-feet long and consists of seven steel deck truss spans that are symmetrical about the centerline of Span 4. The trusses are comprised of two 525-foot long fixed spans, three 548-foot long cantilever spans, and two 201-foot long anchor spans at each end of the bridge. Each cantilever span is constructed of a 212-ft simple span Warren truss suspended from two 159-foot long cantilever arms. All spans have three longitudinal truss lines spaced at 15-feet on center, for a total width of 30-feet between the centerlines of the north and south trusses. The truss spans are braced transversely with top and bottom lateral bracing that is connected to the North and South Trusses with an intermediate connection to the top and bottom chord of the Center Truss. Diagonal sway bracing rods and eyebars, connected between the North and South Trusses, are also provided at every other panel point and the ends of spans. The structure has an open deck system consisting of two longitudinal stringers, framed into transverse floorbeams that are supported on the trusses at each panel point. The stringers are spaced 7-feet apart about the centerline of the bridge. The Main Span supports a deck of timber ties and track from the abandoned railroad line, except that the timber ties and track over the east shoreline have been removed. The substructure

for the main span consists of two concrete anchor piers (Piers 0 and 7), two land-based steel towers founded on concrete piers (Piers 1 and 6), and four steel towers anchored to concrete and masonry piers supported by concrete-filled timber cribbing (Piers 2 – 5). The Main Span crosses over a local roadway and CSX railroad on the west shore, the Hudson River, and property of Central Hudson on the east shore. The average deck level above the Hudson River is 212 feet.

The East Approach is 2,640-feet long and is constructed of five pin-connected Warren deck truss spans (span lengths of 117 feet, 117 feet, 175 feet, 115 feet and 161 feet), nineteen 60 to 85-foot long plate girder spans, and twenty-three 18 to 30-foot long plate girder spans straddling adjacent bents. Each span is simply supported and consists of three main longitudinal supporting members spaced at 11-feet on center, for a total width of 22-feet between the centerlines of the north and south members. The former deck of timber ties and rail has been removed from the East Approach. The superstructure is supported on forty-six variable height steel tower bents founded on either concrete pedestals or cut stone blocks at the base of each column. Longitudinal bracing extends between adjacent bents to form tower piers. The East Approach spans several local roadways, one state highway, a MTA Metro North railroad, and an established urban residential neighborhood.

(2) Clearances – The Poughkeepsie-Highland Railroad Bridge has 160 feet +/- vertical navigation clearance over the Hudson River, which exceeds the minimum US Coast Guard requirements for such traffic. The minimum vertical clearance for vehicular traffic is 18-feet where the Poughkeepsie-Highland Railroad Bridge spans over Washington Street in Poughkeepsie adjacent to the east abutment. This, and the vertical clearances at all other roadway underpasses, exceeds minimum requirements.

(3) History & Deficiencies

i. History: The Poughkeepsie-Highland Railroad Bridge is a 19th Century engineering marvel on the National Historic Register. The cornerstone was laid in 1873, and when it was completed in 1888, five years after the Brooklyn Bridge, it was the longest bridge in the world (6,767 feet). It had the largest cantilever spans ever built, and the four river piers were supported on massive concrete-filled timber crib foundations over ten stories tall. As the first bridge spanning the Hudson River between Albany and New York City, it had an enormous impact on the transportation of freight throughout in the Northeast, and today's transportation network.

Rise to the interstate highway system in the 1950's and construction of the newer Castleton-on-Hudson Railroad Bridge just south of Albany, was cause to a steady decline in the use of the Poughkeepsie-Highland Railroad Bridge. The last train crossed the bridge in 1974, shortly before a fire erupted on the east side of the bridge damaging rail ties and decking material. This incident, along with the declining use of the bridge, prompted the bridge owner, Penn Central, to terminate service permanently. The bridge has been dormant for the past 33 years.

ii. Inspection and Deficiencies: From September through November of 2007, engineers conducted a series of inspections to assess the condition of the bridge

structure for future use as a trail system. The effort included the inspections of the abutments, superstructure, substructure, deck and approaches, as well as inspection of the stream channel and banks. The results of the bridge inspection have been published under separate cover, the Executive Summary of which is provided in **Appendix C**. Inspectors identified significant deterioration in many secondary members, however the primary members typically were found to be in fair condition (15% to 20% section loss), and the results of the load rating indicate that this level of deterioration will not affect the bridge's capability to carry the proposed loads. Some elements of the deck framing system on the East Approach trusses exhibit excessive plastic deformation caused by the 1974 fire.

In addition, diving inspections to assess the pier and foundation conditions below water were conducted in November of 2006 and November 2007. The Diving Inspection Report is provided in **Appendix B**.

(4) Restrictions – The bridge is currently owned by a private, not-for-profit, organization, and closed to public access. The bridge deck and the right-of-way at grade is fenced and locked. An electronic security system monitors activity on and near the bridge, and is managed by local authorities and the Walkway Over the Hudson organization. Persons are allowed walking access onto the bridge or right-of-way by appointment, as guests of the Walkway Over the Hudson. All guests are required to sign a liability waiver form.

(5) Future Conditions – The bridge has not been maintained for over 30 years and is showing signs of its age. Continued lack of maintenance will result in continued degradation of the structure, eventually requiring it to be dismantled for safety reasons. The bridge currently spans the Hudson River, a navigable waterway with commercial and recreational vessels; it also extends inland, spanning roadways, railways, and residential neighborhoods, thereby heightening the safety concern. Thus a dilapidated structure would pose safety concerns for peoples traveling beneath the bridge.

(6) Waterway - A Coast Guard Jurisdiction Checklist has been completed (see **Appendix F**). A Coast Guard Permit is not required for this project, but coordination with the Coast Guard will continue throughout the design process.

p. Hydraulics of Bridges and Large Culverts

The Hudson River is a drowned estuary, meaning that the river's flow is influenced by tidal effects. The tidal influence along the Hudson River extends from the Battery in New York City (River Mile 0.0) upstream to the Green Island Dam in Troy, New York, or approximately 154 miles. The Poughkeepsie-Highland Railroad Bridge is located at approximately River Mile 77, or about half-way up the tidal reach, with an upstream drainage area of 11,860 square miles. Being in this tidal zone, the direction of flow alternates between upstream and downstream on a diurnal basis, changing approximately every 6½ hours.

The most recent diving inspection performed in November 2006 (see **Appendix B**) at the four piers located in the Hudson River reported no signs of scour within the vicinity of the

piers. This finding is consistent with previous diving inspections conducted in 2002 and 1979. The proposed underwater repairs to the river piers will not affect the hydraulic opening, therefore the existing hydraulic conditions of the Hudson River at this location will not be affected. These proposed pier repairs will be completed under a separate contract. A detailed hydraulic evaluation will not be conducted.

q. Drainage Systems

There is no drainage system on the bridge; precipitation merely falls onto the structural components and runs through gaps to the land and water below. The rail bed surface contains many gaps between the rail ties and structural components which allow for runoff to filter through without the need for a dedicated drainage system. Beneath and adjacent to the bridge on the west side, runoff is handled via open drainage system. On the east side in urban Poughkeepsie, runoff beneath and adjacent to the bridge is handled via closed drainage system which convey stormwater in the street sewers, ultimately leading westward to the Hudson River.

r. Geotechnical Conditions

The soil strata beneath the Hudson River consist of approximately 70 ft of river bottom sediments (clay, silt, sand) over a 15 ft thick layer of gravel on bedrock. The river piers are founded upon the gravel layer.

Previous studies[3] have reported that the east and west approach structures are founded on sedimentary shale and limestone. It is assumed that this sedimentary rock extends under the entire bridge structure.

Soil borings will be taken at each potential elevator location to determine site specific geotechnical parameters necessary for foundation design.

s. Utilities

Central Hudson utilized the bridge to support its electric transmission lines until 1984 when it decided to relocate the transmission lines under the Hudson River. However, the steel support frames cantilevered from every fourth floorbeam (approximately 110 to 120 feet apart), and the de-energized cables which they had supported, still remain on the main span.

An abandoned 6 inch pipe that had been utilized for fire suppression is located at deck level on the north side of the bridge.

An abandoned telephone line is located underneath the bridge.

The Walkway Over the Hudson has a temporary electrical line running from the west abutment to Pier 2 to provide electricity for maintenance activities.

[3] DeLeuw, Cather & Company (1980). *Inspection and Rating of the Poughkeepsie Railroad Bridge Phase II Final Report, Volume 1.* Washington, DC: US Department of Transportation Federal Railroad Administration.

t. Railroads

The Poughkeepsie-Highland Railroad Bridge spans over two CSX owned lines. In the Town of Lloyd, the bridge spans over CSX's heavily used West Shore River Line, which accommodates 30-35 long freight trains each day. The line is used for freight trains only. In the City of Poughkeepsie, the bridge spans over Metro-North owned tracks just north of the Poughkeepsie RR Station. The line carries a handful of CSX freight trains and 26 Amtrak trains each day. Equally busy, south of the train station, Metro North trains operate between Poughkeepsie and New York City. Many of those trains reconfigure under the Poughkeepsie- Highland Bridge.

u. Visual Environment

The proposed Walkway Over the Hudson (Walkway) and associated project area lies within the Esopus/Lloyd Scenic Area of Statewide Significance (SASS) EL-5 Highland Bluffs Subunit. This subunit is generally located along the western shore of the Hudson River and extends to the eastern shore. The physical character of this scenic subunit consists of steep wooded bluffs that rise 150 feet above the Hudson River. Rock cliffs and rock cuts for the railroad tracks and the access road to the Mid-Hudson Bridge accentuate the steepness.

On the western side, the narrow shoreline of the Hudson River is accentuated by the strong linear form of the existing CSX railroad. Above the bluffs, where the bridge meets grade, is a small section of rolling upland. Vegetation on the western shore consists of dense woodland, occasionally disturbed by clearing for residential structures. This section of the river is straight north and south of the Walkway. The Walkway structure, once it reaches the western side of the river, disappears into the wooded steep slope and is not visible to the traveling public, except for nearby residents.

The eastern shore of the Hudson River slopes upward more gradually than the western side, and is developed within the City and Town of Poughkeepsie. The eastern end of the Walkway is elevated for a significant length throughout the City of Poughkeepsie until it finally touches grade at Washington Street. Although the bridge extends for quite a distance through the city, it is well screened by existing mature vegetation and built structures, and is only fully visible where is crosses roadways and at the eastern shoreline.

Full views of the Walkway Over the Hudson bridge are available from both shorelines of the river, from the Mid Hudson Bridge, and from limited areas on land at the higher elevations, in addition to from the river channel itself. The massive bridge structure of the Walkway, in conjunction with the Franklin D. Roosevelt Bridge, dominates the immediate landscape of the project area. Generally, due to the viewing distance, the bridge occupies the midground or background of views and detail is lost. The massive pier towers and the steel lattice work of the truss superstructure are the main visual elements of the bridge. The natural tones of the weathered (rusted) color of the bridge blend with and compliment the local rugged landscape.

From the bridge, there are spectacular unobstructed views of the Hudson River Valley to the north, panoramic views of the City and Town of Poughkeepsie to the east, the Mid

Hudson Bridge and the river valley to the south, and the wooded Highland Bluffs to the west.

v. Provisions for Pedestrians and Bicyclists

The bridge was designed for train traffic, and is being proposed herein as a trail for pedestrians and bicyclists. Currently, there are no provisions for bicyclists on the bridge. There is however, restricted access for pedestrians – albeit not for general public use. Current pedestrian access is limited to the west side and part of the main span via temporary, steel-grated walkway. There is no access to the east side due to the 1974 fire which prompted the removal of the bridge deck for safety reasons.

The existing railing system is in poor condition and does not meet current AASHTO or ADA design criteria. The wrought iron railing is corroded and cracked, with numerous posts and rails missing. The wood curbing to which the railing posts are mounted is also deteriorated and can not be relied upon to adequately support the posts.

The Walkway is not open to the general public, but limited tours are available by request to the Walkway Over the Hudson organization. A signed liability waiver is required. The bridge is protected by a locked gate and security system.

w. Planned Development for Area

The Poughkeepsie-Dutchess County Transportation Council (PDCTC) published their "*Major Projects Report - June 2006."* This document was reviewed to identify other planned projects occurring within a one (1) mile radius of the subject project site. There are three projects in the City of Poughkeepsie currently in the planning stages:

- Luckey Platt Redevelopment – this project involves the construction of a multi-use building with retail and apartment space to be constructed on Main Street near Academy Street.
- Adriance Memorial Library – this project involves the construction of a new building to serve as the Poughkeepsie Public Library to be constructed on Market Street near NYS Route 44/55.

The Dutchess County Rail-Trail will be located along the existing rail bed, stretching from East Fishkill to Morgan Lake, in the City of Poughkeepsie. This federally-funded project is scheduled to begin construction in the Fall of 2007, with the final phase of construction beginning in the Fall of 2008. The trail terminates in the City of Poughkeepsie at the Morgan Lake Park, near Creek Road. This project is located approximately 1.3 miles east of the eastern terminus of the Poughkeepsie-Highland Railroad Bridge, and is a key component in the regional pedestrian/bicycle network.

Dutchess County is in negotiations to purchase the 1.3 mile stretch of CSX owned rail bed between the Walkway Over the Hudson project and Morgan Lake. The County would use this rail bed to connect the Walkway and Ulster County Trails to the Dutchess County rail-trail network.

On the west side, the Ulster County Transportation Council (UCTC) Final FFY 2008-2012 Transportation Improvement Program cites the Hudson Valley Rail-Trail Project, the development of which extends from Haviland Road to Commercial Avenue. This rail-trail project is located adjacent to the west end of the Poughkeepsie-Highland Railroad Bridge. This $730,000 project is planned for completion in September 2009, and is a key component in the regional pedestrian/bicycle network.

The NYS Office of Parks Recreation and Historic Preservation recently acquired ownership of the Scenic Hudson wooded hillside trail system (Franny Reese Preserve) on the west side of the bridge. Walkway Over the Hudson users will be able to access this wooded parkland using Haviland Road. Upon completion of the Hudson Valley Rail-Trail section between Haviland Road and Commercial Avenue (see above), trail users will have direct access between the Franny Reese trail system and the Walkway Over the Hudson bridge.

x. System Elements and Conditions

The proposed development of the Walkway Over the Hudson project accommodates pedestrians and bicyclists only. Therefore, its direct effect on traffic is limited to that of pedestrians and bicyclists. The Mid-Hudson Bridge is currently the primary means for pedestrians and bicyclists to cross the Hudson River in this region. The Mid-Hudson Bridge does not have a designated bicycle lane, so pedestrians and bicyclists must share the sidewalk. Bicyclists must get off of their bikes, and walk them across the bridge for safety reasons. Mid-Hudson Bridge users must also maneuver steep slopes at each of the approach spans. Due to the initial use of the Poughkeepsie-Highland Railroad Bridge for train passage, it is a higher structure with significantly flatter approach spans. The Walkway Over the Hudson project would be a key component of the regional bicycle/pedestrian network. This project would provide a more convenient, and user friendly crossing for both pedestrians and bicyclists, as well as link trail systems on the east and west sides of the Hudson River. This link would significantly enhance the mobility and experience of pedestrians and bicyclists. In order to establish this link, however, the Poughkeepsie-Highland Railroad Bridge must be restored to safely accommodate the traffic. It currently lacks the proper infrastructure to accommodate the intended traffic. However, the scope of this project includes improvements to the bridge structure and features to transform the bridge into a corridor for pedestrians and bicyclists.

y. Environmental Integration

The proposed project will offer great environmental enhancement. It will allow for integration of the Ulster and Dutchess components of the Maybrook Corridor. It will augment existing State Park land, and help to enhance outdoor awareness and appreciation among residents and visitors for the Hudson River, and the Esopus/Lloyd Scenic Area of Statewide Significance (**Section II.C.u.**). It will also preserve a structure on the National Register of Historic Places and afford access to view this resource first hand.

2. Needs

a. Project Level Needs

Based on the aforementioned conditions, the following transportation needs have been identified within the project limits:

(1) Surface Needs – A bridge deck able to accommodate pedestrian and bicycle traffic is needed.

(2) Safety Needs – In order for the Walkway Over the Hudson Bridge to be opened for general public use, several safety needs will be addressed. These needs will be addressed as part of the purchase and/or construction contracts being developed for this project.

- Site access – secure and handicap accessible access from parking areas
- Walking surface –decking with high friction surface is needed
- Railing – solid railing installed to proper geometrics and anticipated loads
- Lighting – wherever nighttime presence is allowed, proper pedestrian lighting is needed to illuminate the trail
- Security – gates are needed to prevent unwarranted access to the bridge; vandal fencing is needed where the Walkway passes over roadways and railroads
- Emergency Services – facilitation of emergency services is needed for a variety of scenarios, including: rescue operations; medical emergencies; enforcement conditions. In addition, suicide prevention measures need to be implemented on site

(3) Bridge Structural Needs – This project has performed a complete inspection and load rating to ensure the structure is safe for its current and intended use and does not pose a hazard to persons or facilities on, adjacent to, or beneath the structure. A summary of the bridge inspection and the load rating are provided in **Appendix C**. Repairs will be required to numerous secondary members, however most primary members are in fair condition and will not require major repair, rehabilitation, or replacement. Specific elements in need of repair or replacement will be identified and addressed as part of the Final Design effort.

(4) Drainage Needs – Given the proposed use of a solid surface for pedestrian travel, there is a need to convey and discharge runoff from the bridge surface to the ground surface below. The drainage design must address erosion and ensure protection of the bridge structure.

(5) Environmental Needs – Progression of this project needs to address the following environmental factors: a) preserve a bridge on the National Historic Register spanning an American Heritage River; b) provide an essential link in a 30 plus mile Mid-Hudson Valley trail network; c) provide for environmental education opportunities; d) provide for railroad and engineering education opportunities; e) preserve and enhance scenic vistas in a SASS; f) provide residents and visitors with a unique recreation opportunity; g) not impair the Poughkeepsie Deepwater Habitat or impact threatened and

endangered species; and h) protect the public from hazardous waste or contaminated materials.

b. Corridor and Area Level Needs

(1) Capacity Needs – The project is necessary to provide a key multi-modal link between adjacent non-vehicular (pedestrian and bicycle) trails being developed in Dutchess and Ulster counties to accommodate the increasing bicycle and pedestrian demands from county residents.

(2) Modal Interrelationship – The project is necessary to provide an essential link in the regional non-vehicular transportation network, and provide local residents, particularly those of the City of Poughkeepsie and the several colleges with a very unique, dedicated and safe facility to enjoy the Hudson River and the State parkland on the west shore. The project's close proximity to the Metro-North train station will provide trail user's with additional means to reaching the trail. The unique opportunities provided by an historic bridge with spectacular views will encourage multi-modal transportation in the Mid-Hudson Valley.

(3) System Needs – The proposed project is necessary to provide the key link in the multi-modal 23-mile Maybrook Corridor. The project provides convenient access across the Hudson River, and links the existing and proposed trail networks on both sides of the river in the Mid-Hudson Valley. The project provides 1.25 miles of shared use trail as recommended in the Maybrook Multi-Modal Corridor Study (PIN#8805.89.101). The west end of the bridge will connect to the Hudson Valley Rail Trail network in the Town of Lloyd. The east end of the bridge will connect with the CSX right-of-ways (currently being acquired by Dutchess County), the Dutchess Rail-Trail, and the local Poughkeepsie street network.

(4) Mobility Needs – The proposed project is necessary to provide a key link in the growing Mid-Hudson Valley multi-modal trail network, and associated increasing demand for such facilities. Due to its close proximity to the Poughkeepsie Railroad Station, visitors from NYC to Albany will be able to go from trains to the trail network and other recreational destinations without the need for a motor vehicle.

(5) Social Demands and Economic Development – The proposed project is necessary to provide a safe, convenient, and unique open space link between Dutchess and Ulster counties which will stimulate social interaction and economic development. Situated in the center of the City of Poughkeepsie, within walking or short bicycle ride for residents of all backgrounds, including students in nearby colleges, the uniqueness of the Walkway will encourage residents to increase their daily physical activity, and will provide a unique gathering place for all residents, enhancing community cohesion. The bridge will encourage regular exercise, which will improve the overall health of local residents. These same benefits will exist for residents in the less densely populated Town of Lloyd. With the dedicated pedestrian and bike link between the separate trail networks on both sides of the river, users on one side will be able to take advantage of services on the other, providing a sense of unity and cohesion.

Conversion of the historic bridge to a public park and regional trail link will enhance the regional economy (see **Section IV.B.2.a.**). The uniqueness of the project (vistas, world's longest pedestrian bridge, etc), coupled with existing regional attractions such as the Home of Franklin Delano Roosevelt national historic site, will result in an increase in visitors to the region. The project's inherent recreational and tourism merits will draw additional people to existing establishments, and stimulate new businesses and economic activity. The close proximity of the Metro North station to the bridge will encourage visitors by train to visit local establishments by foot or bicycle, making downtown Poughkeepsie more dynamic.

c. Transportation Plans

This project is included on the Draft 2008 – 2012 New York Statewide Transportation Improvement Program approved December 10, 2007 as PIN 8759.97 (HPP 2717): "Poughkeepsie-Highland Railroad Bridge – Walkway Over The Hudson." This project is also included on the Poughkeepsie-Dutchess Counties Transportation Council 2008-2012 Transportation Improvement Program effective October 12, 2007.

D. OBJECTIVES

The following objectives have been identified for this project:

Primary Objective:

1. Provide a Connector, Dedicated Solely for Pedestrians and Bicyclists, to Link the Greater Regional Trail Networks that Exist on Both Sides of the Hudson River. Having a dedicated trail link encourages greater usage by improving safety, providing scenic opportunities, and enhancing the availability of the extended trail system to more users.

Secondary Objectives:

1. Save and Restore a Bridge on the National Historic Register. The Poughkeepsie-Highland Railroad Bridge, opened in 1888, holds tremendous historic significance. As the first bridge constructed across the Hudson River between New York City and Albany, it had enormous impact on transportation throughout the Northeast United States.

2. Enhance the Regional Economy. The completed project will be an attraction for tourists, and tying the trail networks on both sides of the river will stimulate pedestrian and bicycle activity, benefiting local businesses and increasing property values.

3. Be a Centerpiece for the State of New York's 2009 Henry Hudson Quadricentennial Celebration.

4. Expand State Park Land. The New York State Office of Parks, Recreation and Historic Preservation has interest in operating the completed bridge walkway as a State Park, connecting it with State Parkland recently acquired from Scenic Hudson property on the west shore of the river.

5. Stimulate the Quality of Life for Hudson Valley Residents. Provide a unique and convenient opportunity to recreate, relax and enjoy the Hudson Valley vista, and provide a gathering place to meet and socialize with others.

6. Increase Local and Regional Recreational System by Providing a Unique Elevated Linear Park and Contiguous Regional Trail System.

7. Provide an Educational Resource. The completed project provides a unique opportunity to educate the public on: Hudson River ecosystems, bridge engineering and railroad history.

III. ALTERNATIVES CONSIDERED AND EVALUATIONS

A. DESIGN CRITERIA

1. Standards

The following publications set forth the design criteria for the conversion of the Poughkeepsie Highland Railroad Bridge into a multi-use trail and public park.

- A Policy on Geometric Design of Highways and Streets 2004, American Association of State Highway and Transportation Officials (AASHTO), (Green Book)
- Guide for the Development of Bicycle Facilities (AASHTO), 1999
- Designing Sidewalks and Trails for Access, Best Practices Design Guide (United States Department of Transportation Federal Highway Administration (FHWA)), 2001
- Pedestrian Facilities Users Guide – Providing Safety and Mobility (FHWA), 2002
- NYSDOT Highway Design Manual (HDM)
- National Manual on Uniform Traffic Control Devices for Streets and Highways (MUTCD) and the New York State Supplement.
- Standard Specifications for Highway Bridges, American Association of State Highway and Transportation Officials (AASHTO)
- NYSDOT Bridge Manual (BM)
- ADA Accessibility Guidelines for Buildings and Facilities
- AASHTO Guide Specification for Design of Pedestrian Bridges, American Association of State Highway and Transportation Officials (AASHTO)
- AASHTO Guide for the Design of Park and Ride Facilities, American Association of State Highway and Transportation Officials (AASHTO)
- USDOT Designing Sidewalks and Trails for Access, Part I of II, July 1999
- USDOT Designing Sidewalks and Trails for Access, Part II of II, Sept. 2001
- Standards for the Treatment of Historic Properties, Secretary of the Interior

2. Critical Design Elements

Refer to the Table III-1.

Table III-1: Design Criteria

Component:	**Off-Road Multi Use Path Alignment**		
PIN:	**8759.97**	NHS (Y/N):	**No**
Route No. & Name:	**Walkway over the Hudson**	Functional Class:	**Multi Use Path**
Project Type:	**Miscellaneous/Special Work**	Design Class:	**Multi Use Path**
% Trucks:	**Not Applicable**	Terrain:	**Rolling**
ADT:	**Not Applicable**	Truck Access Rte.:	**Not Applicable**

DESIGN ELEMENT	CRITERIA	EXISTING	PROPOSED	SOURCE
Design Speed (Bicycles)	20 mph	N/A	20 mph	AASHTO Design of Bicycle Facilities
Trail Width				
Approaches on Grade	12 ft Min	N/A	12 ft Min	HDM 18.8
Bridge	8 ft Min 12 ft Min Preferred	N/A	12 ft Min 32 ft Max	BM Table 2-1
Bike Lane	5 ft Min (one-way)	N/A	5 ft Min (one-way)	HDM 18.7
Sidewalks	5 ft Min 6 ft 6 in adjacent to Parking	N/A	5 ft Min 6 ft 6 in adjacent to Parking	HDM 18.6.6.1
Cross Slope				
Normal Crown	2.0% Max	0	2.0%	HDM 18.6.6.1
Superelevation Rate	2% Max	0	N/A	HDM 18.6.2
Shoulders				
Graded Shoulder	2 ft	0	2 ft	HDM 18.6.2
Slope of Graded Area	1:6 (minimum)	0	1:6	HDM 18.6.2
Alignment & Profile				
Maximum Grade	5% (over 800 ft)	1.25%	5%	HDM 18.6.6.4
Stopping Sight Distance	210 ft Min (ascending) 260 ft Min (descending)	>1000 ft	210 ft (ascending) 260 ft (descending)	AASHTO Design of Bicycle Facilities
Horizontal Clearance				
From edge of path	3 ft Min	N/A	4 ft Min	HDM 18.6.6
From centerline of railroad to bridge substructures	33 ft	N/A	Match Existing	BM 2.5.3, Table 2-2
Navigational clearance between bridge piers	500 ft	N/A	Match Existing	USCG: 33 CFR Chapter 1, Subchapter J – Bridges
Vertical Clearance:				
Above Trail	8 ft Min 10 ft Desirable	No obstruction	No Obstructions	HDM 18.6.7
Over Roadway	14 ft Min 14 ft 6 in Preferred	> 14 ft 6 in	Match Existing	BM 2.4.1 Table 2-2
Over Railroad	22 ft	> 22 ft	Match Existing, >22 ft	BM 2.4.2
Freeboard	2 ft	> 2 ft	> 2 ft	BM 2.4.3

DESIGN ELEMENT	CRITERIA	EXISTING	PROPOSED	SOURCE
Over Navigable Waterway	135 ft from MHW	> 135 ft from MHW	Match Existing	USCG: 33 CFR Chapter 1, Subchapter J – Bridges
Railing Height:				
On Bridge	4 ft 6 in	3 ft 11 in	4 ft 6 inches	HDM 18.7.9.6
Off Bridge	3 ft (grade separation of 18" to 48") 3 ft 6 in (grade separation > 48")	N/A	4 ft 6 inches	HDM 18.6.6.8
Off Bridge (bicycle)	4 ft 6 in	N/A	4 ft 6 inches	HDM 18.7.9.6
Railing Openings:				
Up to 27" above grade	4 in Max	N/A	4 inches	HDM 18.6.6.8
> 27" above grade	6 in Max	N/A	4 inches	HDM 18.6.6.8
Railing Capacity	Rails: 50 plf horizontal and vertical Posts: 50 plf horizontal at 54 inches	N/A	Rails: 50 plf horizontal and vertical Posts: 50 plf horizontal at 54 in	AASHTO 2.7.2.2
Structural Capacity:				
Pedestrian	85 psf	Unknown	85 psf	BM
Emergency Vehicle	Single H-10	Unknown	Single HS-20 Desirable	BM
Inspection Vehicle	UB-75	Unknown	UB-75	N/A
Pedestrian Accommodations	ADA	Limited	ADA	HDM Chapter 18
Level of Service	A	N/A	A	HDM 18.6.5.2
Parking Lot standards:				
Aisle width	45 deg one-way $\geq$ 12' 90 deg two-way $\geq$ 24'	N/A	45 deg one-way = 16' 90 deg two-way = 24'	Engineering Best Practice/ Town Code
Parking Stall width	$\geq$ 9'	N/A	9'	Engineering Best Practice/ Town Code
Parking Stall depth	$\geq$ 18'	N/A	$\geq$ 18'	Engineering Best Practice/ Town Code
Handicap Parking	ADA	N/A	ADA	ADA standards

3. Other Controlling Parameters

The Following Design Storm recurrence intervals will be used:

(1) Storm Drainage Systems: 10-year storm recurrence interval

(2) Ditches: 10-year storm recurrence interval

B. ALTERNATIVES CONSIDERED

Three alternatives were considered as a solution to the identified problems. They are: 1) Null Alternative; 2) Removal Alternative; 3) Rehabilitation Alternative.

a. The **Null Alternative** would provide for continuing the current program of minimal maintenance: preserving the integrity of existing constraints that limit public access to the bridge and adjacent Walkway Over the Hudson property; continuing efforts to meet the requirements of USCG for navigation lighting; and protecting the public from potential hazards from the antiquated structure. This alternative would allow for continued deterioration of the structure, resulting in increased maintenance demands with the eventuality of a much costlier project in the future – whether demolition or rehabilitation. The Null Alternative does not address the project needs or meet its objectives, and is thus dismissed from further consideration.

The Null Alternative would make no provisions for pedestrian and bicycle crossing of the Hudson River. Currently, pedestrians must share use of the Mid-Hudson Bridge. The Mid-Hudson Bridge has no designated bike/pedestrian lane, so bicyclists and pedestrians must share use of the sidewalk. To get to the Mid-Hudson Bridge, trail users must leave the pedestrian only trails and interact with vehicular traffic on city streets. Also, to assure safety of all Mid-Hudson Bridge users, bicyclists are required to walk their bikes across the Mid-Hudson Bridge. Mid-Hudson Bridge users must also maneuver steep slopes at each of the approach spans. Due to the initial use of the Poughkeepsie-Highland Railroad Bridge for train passage, it is a higher structure with significantly flatter approach spans. These flatter approaches would make bicycle travel more onvenient.

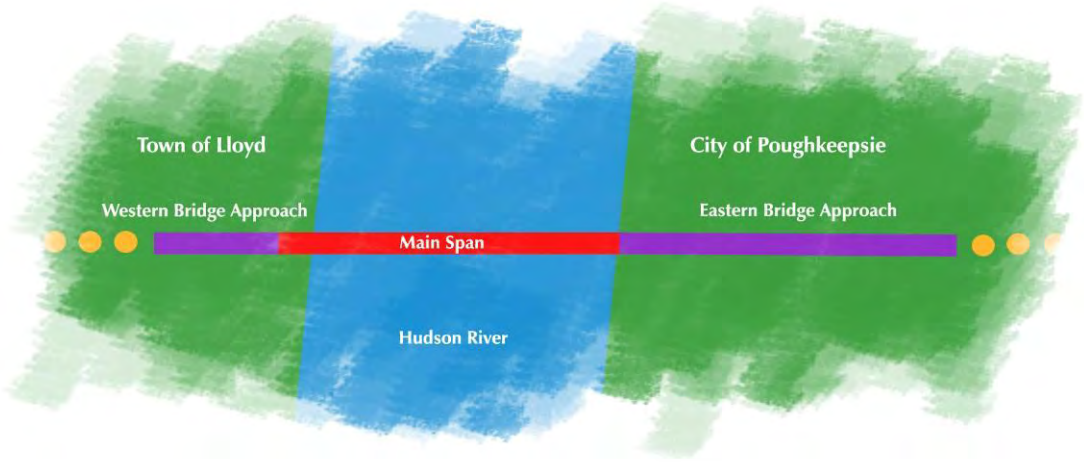
b. The **Removal Alternative** provides for removing the existing structure in it's entirety as a means to permanently eliminate any hazard the bridge may pose to the public now or in the future. However, removing the existing structure would cause significant impacts to environmental resources, including :

- The Poughkeepsie-Highland Railroad Bridge is listed in the National Register of Historic Places and is a significant icon in the history and development that occurred in the Hudson Valley Region.
- Removing the structure would remove an element of the Esopus/Lloyd Scenic Area of Statewide Significance.
- Removing the structure would cause damage to the Poughkeepsie Deepwater Habitat, a Significant Coastal Fish and Wildlife habitat under New York State's Coastal Management Program.
- Removing the structure would disturb sediments in the river known to contain Polychlorinated biphenyls (PCB's).

Finally, the Removal Alternative is estimated to cost over $54 million, more than twice the cost of the Functional Option of the Rehabilitation Alternative. Because of the excessive cost, the potential for significant environmental impact, and because the Removal Alternative does not address the project needs or meet its objectives, it is dismissed from further consideration.

c. The **Rehabilitation Alternative** would create a multi-use trail over the Hudson River as well as a public park and recreational destination. In addition, it would connect the existing and proposed trail networks on either side of the Hudson River. The rehabilitation alternative includes: removing the remaining ties and rails, railings, and abandoned utilities from the structure, performing necessary structural repairs, and installing a new deck system with railing, fencing, and lighting. Three design options are considered, each providing incrementally greater levels of trail width, access options, and trail amenities, as described below. Refer to Figure III-1 which identifies the various segments of the bridge as referenced in the following discussions.

Figure III-1: Bridge Layout Nomenclature



(1) Design Option 1: Minimal Construction to Provide Trail – This alternative provides for a nominal width trail surface (approximately 15 ft out-to-out with a 12 ft clear trail width) that extends the full length of the bridge with a few wider sections on the main span to create a resting/gathering point for visitors. Provisions to widen the walkway in the future could be integrated into the design. There would be no lighting provided under this alternative, thereby limiting the functional operation of the facilities to a period from dawn to dusk. Minimal ADA-compliant access to the trail, consisting of ramps on grade or on structure, would be provided at both ends of the bridge. Limited amenities would be provided. The aesthetic quality of the various features would also be limited to basic, standard stock items having little to no connection to the early industrial character that this bridge retains. The improvements included in this design option are estimated to cost approximately $18 million.

(2) Design Option 2: Functional Long Term Trail – This alternative provides for a nominal width (approximately 24 ft out-to-out width) trail surface on the approach spans and a wider (approximately 33.5 ft out-to-out width) trail surface on the main span where users will tend to congregate. Pedestrian railing would be installed for safety concerns. Park benches and other accessories are included in this design option to enhance the comfort and experience of the walkway, and minimal illumination of the walkway would be provided with simple poles and fixtures. The lighting and railing would

retain some connection to an early industrial character without exactly replicating the features of the Poughkeepsie-Highland Railroad Bridge. ADA-compliant access to the trail would be provided at both ends of the bridge via ramps on grade at the east and west ends of the bridge. In addition, an elevator/stair tower at Washington Street would be provided. The improvements included in this design option are estimated to cost approximately $25 million.

(3) Design Option 3: Icon Trail – This alternative provides for a trail surface the full width (24 ft out-to-out on the approach spans; 33.5 ft out-to-out on the main span) of the bridge. Upgrades from the previous, simpler design options would include custom pedestrian railings that mimic the industrial character of the original railing, pedestrian lighting of a more historic character, and additional trail amenities. The precast concrete panels that make up the walkway surface would be cast with colored and textured surface treatment for aesthetic appeal. There would be more walkway lighting than that proposed by the Functional Long Term Trail alternative, improving illumination of the walkway surface. In addition to the access provided by the Functional Design Option, two more elevator/tower access points would be provided, for a total of four: Washington Street, Delafield Street, North Water Street, and Pier #6 on the east shore of the Hudson River. The improvements included in this design option are estimated to cost approximately $35 million.

Design Option 2 of the Rehabilitation Alternative - Functional Long Term Trail is the Preferred Alternative for the following reasons:

- it satisfies more of the project objectives, and addresses all project needs to a greater extent than Design Option 1 – Minimum Construction to Provide Trail
- like Design Option 3 – Icon Trail, the Functional Long Term Trail design option satisfies the project needs and objectives. However the Functional Long Term Trail design option minimizes costs

Although Design Option 3 - Icon Trail provides greater amenities, those amenities come at a significantly greater cost. The Functional Long Term Trail design option strikes a balance of meeting the essential needs and minimum design criteria, creating an attractive and inviting destination, and responsible financial accountability. Therefore, the Functional Long Term Trail is progressed as the Feasible Alternative, being detailed further in this report beginning in **Section III.C.**, below.

C. FEASIBLE ALTERNATIVE

1. Description of Feasible Alternative

The Rehabilitation Alternative best meets the objectives of this project, and is considered the only feasible alternative. In the previous section of the report, three design options were presented within the Rehabilitation Alternative: (1) the Minimal Construction to Provide Trail; (2) Functional Long Term Trail; and (3) Icon Trail. Of course, the Icon Trail offers the most features, but those features come at a high cost. Through a review of available and anticipated funding, and estimated costs of the three design options, it was determined that the Functional

Long Term Trail be the appropriate choice to move forward for this project at this stage. For now, the Icon Trail is viewed as risky (fiscally speaking) due to its much higher costs. However, it should not be precluded as a future goal - commensurate with the project's success.

Furthermore, following the issuance of the Draft Design Report and the public meeting on January 9, 2008, the project received tremendous support. As a result of the boosted confidence, the Functional Long Term Trail has been enhanced beyond that presented in at the Draft Design Report stage. And so, some of the Icon Trail features have been incorporated into the current plan for Function Long Term Trail.

See **Appendix D** for proposed plan, profile and section.

Figure III-2: Proposed Walkway Rendering

2. Engineering Considerations of Feasible Alternative

a. Special Geometric Features

The feasible alternative complies with the geometric features and cross section elements in the Design Criteria Table III-1 with the exception of the following:

(1) Non-Standard Features – none.

(2) Non-Conforming Features – none.

b. Safety Considerations

Having been originally constructed for rail traffic, several features would need to be addressed in order to transform the bridge into a safe travel facility for pedestrians and bicyclists. Structural repairs would be made to ensure adequate structural support for the new design loads. The existing train rail surface would be removed and a solid surface provided to safely support people and emergency vehicles on the bridge. Handicapped accessibility would be provided. The antiquated hand railing on the bridge would be replaced with a structurally sound rail system, designed to current standards. Further, the railing would be designed, as required, for a low-impact vehicular collision – a conservative measure. In addition, pedestrian lighting would be supplied for nighttime use.

The aforementioned provisions for emergency vehicles will require access onto the bridge from the adjoing roadways. On the west end, an approach trail would connect the bridge to the Haviland Road parking lot, providing unobstructed access onto the bridge for emergency vehicles. Although similar plans for an at-grade access for emergency vehicles on the east side are still underway, only the western access is certain for opening-day in September 2009. The Walkway continues to work with the City of Poughkeepsie and Dutchess County on plans to provide at-grade access to the bridge via Parker Avenue and the approaching CSX right-of-way, and hopes that this east access will too be available come opening day. Nevertheless, ultimately, access onto and over the bridge would be provided at both ends of the bridge. Provisions for emergency vehicular access onto and across the bridge are being planned for to tend to various emergency situations that may arise, including the potential need for emergency vehicles to cross the river in the event of an impasse on the nearby Mid-Hudson Bridge.

c. Trail Surface Treatment

The trail within the project limits will include a variety of walking surface types. Prefabricated, reinforced concrete deck panels will be installed on the bridge. The portions of the trail connecting the bridge to key access points, parking, and adjacent trails will make use of a permeable asphalt surface to limit stormwater runoff. This material will minimize the environmental impact that the new trail connections will have on the existing environment. The bridge and all access points from accessible parking areas will be fully ADA compliant.

d. Structures

The bridge spans several local roads, a state highway, two active railroads, and the Hudson River. Minimum vertical and horizontal clearances are met by the current configuration, and the proposed rehabilitation and conversion will not reduce any existing clearances.

The diving inspection conducted in November 2006 identified that the stone masonry portion of the piers is generally in fair condition with intermittent areas of missing mortar from between the joints and occasional instances of moderately spalled and loose coping stones. Below water, significant horizontal voids were observed at Piers 2 and 3. Repair of these conditions would entail repointing the stone masonry and grouting the voids. These repairs are not considered critical and may be postponed to a future project. However,

interim inspections of the substructures should be conducted annually to monitor the progression of these voids and assess the timing for needed repairs.

Based on the results of the detailed superstructure inspection, an analysis and load rating of the structure has been conducted to assess the capability of the structure to support the proposed loads. A summary of the bridge inspection and load rating is provided in **Appendix C**. The bridge inspection report and load rating analysis form the basis for identifying specific repairs that are required.

The proposed pedestrian walkway and repairs to the structure are designed to accommodate pedestrian live load of 85 psf, a vehicular live load of HS-20, and an under-bridge inspection vehicle.

The structural rehabilitation and conversion to pedestrian use will address all repairs to the existing structure that are necessary to safely carry the proposed loads and which were identified by the inspection, analysis, and load rating. Localized cleaning and painting will be performed at those locations that will become inaccessible after installation of the new deck system. However, cleaning the entire structure and applying a new protective coating system is not required at this time. A cost for cleaning and painting is estimated for planning purposes should this work be considered in the future. The existing deck, consisting of timber ties and steel rails, the existing wrought iron railing, and all abandoned utilities will be removed from the structure. A new deck system, consisting of precast, reinforced concrete panels supported on elements of the existing steel deck framing system, will be installed. Pedestrian railing, meeting the minimum height requirements for pedestrian and bicycle safety, will be installed along the entire length of the bridge, and projectile barrier fence will be installed over all roadways and railroads. Figures III-3 and III-4 illustrate the conceptual deck, railing, and lighting system proposed for the approach spans and the main span, respectively.

e. Hydraulics

Because the proposed underwater repairs to the river piers will not change the hydraulic opening between piers, scour assessment of the proposed conditions would match that of the existing conditions. In other words, proposed modifications to the bridge will not change the hydraulic effects at the bridge.

Figure III-3: Typical Bridge Section at Approach Spans

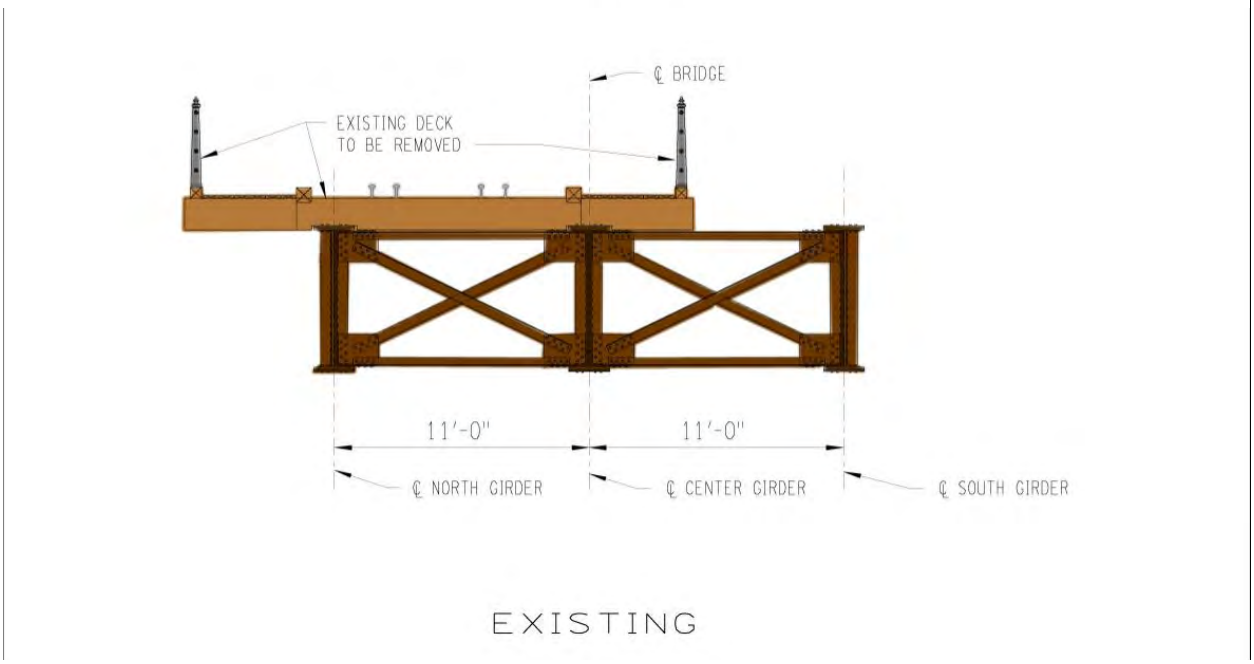
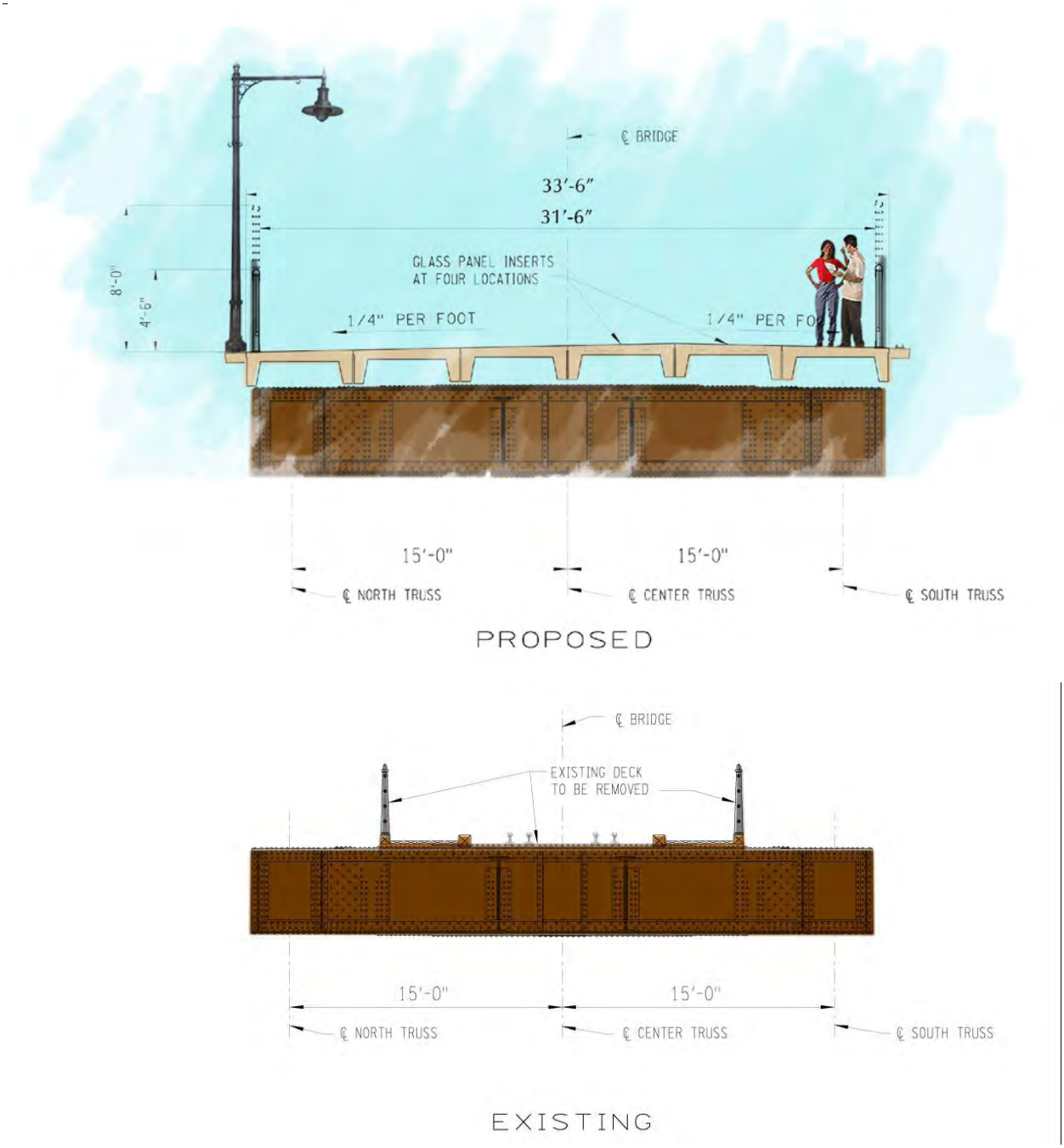


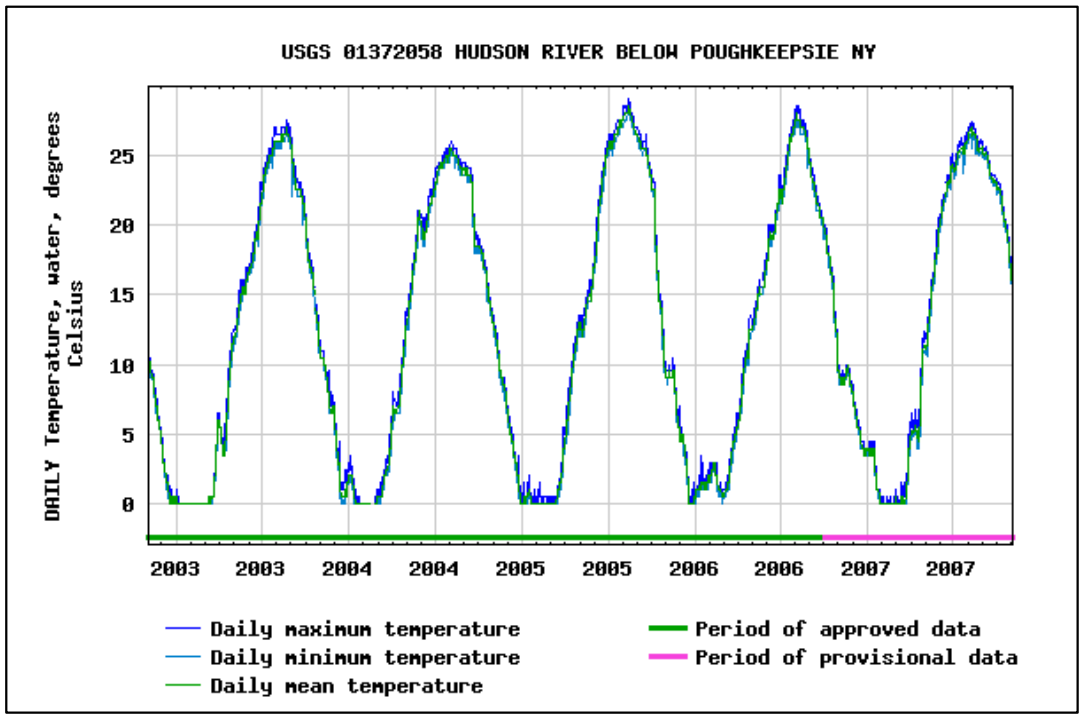
Figure III-4: Typical Bridge Section at Main Span



f. Ice Conditions

The river generally freezes in this area with water temperatures below freezing for approximately three months of each year typically. Figure III-5 below indicates average temperature for the past five years. The ice and the subsequent breakup each spring creates a particularly harsh condition for abrasion of the pier foundations at the water line. This is exacerbated by the vertical rise and fall of the ice created by the diurnal tides. However, the granite walls that were provided in the original 1880's construction have proven to be appropriate for this condition.

Figure III-5: Average Temperature of Hudson River



g. Drainage

An open drainage system in the form of sheet flow would be maintained over most of the structure. Where the bridge is over roadways or railroad, a closed drainage system will be implemented. This closed drainage system would channelize surface runoff to drains that would convey runoff to the ground below in a manner that does not impact adjacent structures nor induce erosion.

h. Maintenance Responsibility

Upon completion of construction activities, the New York State Office of Parks, Recreation and Historic Preservation will assume responsibility for administering public use of the Walkway Over the Hudson, including staffing, operating costs, and maintaining the trail features and associated public facilities. Ownership of the bridge structure will be

transferred to an appropriate New York State entity (not yet determined) which will be responsible for maintaining the bridge deck, steel superstructure, piers, and substructure.

Table III-2: Maintenance Responsibility

Feature	Maintenance Responsibility
Approach Trail and Facilities	West – Town of Lloyd/Hudson Valley Rail Trail East – Dutchess County
Trail Features on Bridge	NYS Parks/ Walkway Over the Hudson
Bridge Structure, including deck, superstructure, substructures	A New York State entity (not yet determined)
Lighting & utilities	NYS Parks
Trailheads and parking	NYS Parks
Adjacent trail systems	West – Town of Lloyd/ Hudson Valley Rail Trail East – Dutchess County

i. Maintenance and Protection of Traffic

The majority of construction will take place in areas outside existing roadways. It is anticipated that two-way traffic would be maintained on Ransom Road, Oakes Road, North Water Street, Route 9, Albany Street, Dutchess Avenue, Delafield Street, Talmadge Street, and Washington Street during most of the construction phase. These roadways will be closed for very short durations while panels are being placed. A minimum of one-way alternating traffic would be maintained on Haviland Road and Washington Street while access points to bridge are being constructed and panels and work equipment are being delivered. All work zone traffic control would comply with current NYSDOT specifications, the MUTCD, and New York State Supplement.

Any work performed over the right-of-way of CSX or Metro North will, at a minimum, require a permit from the involved railroad, and could possibly also require railroad flag persons on site during periods of active construction.

U.S. Army Corps of Engineers and U.S. Coast Guard regulations will be followed. Special consideration will be made to ensure that debris does not inadvertently fall to the water or land surface below. No work in the Hudson River is planned for this project.

j. Geotechnical

No bridge foundation work is anticipated that will disturb existing soils.

Soil borings will be extracted for the purpose of designing the foundation of the Washington Street elevator.

Over one (1) acre of soil may be disturbed for creation of parking and maintenance areas.

k. Utilities

The abandoned Central Hudson lines that are currently attached to the bridge will be removed during construction. The abandoned water line on the bridge will also be removed

during construction. The Contractor would be required to call for stake-out of all existing utilities within the project limits prior to beginning any work. Protection of the existing utilities beneath the bridge will be required of the Contractor.

l. Railroads

The Poughkeepsie-Highland Railroad Bridge spans over two CSX owned lines. In the Town of Lloyd, the bridge spans over CSX's heavily used West Shore River Line, which accommodates 30-35 long freight trains each day. The line is used for freight trains only. In the City of Poughkeepsie, the bridge spans over CSX owned Hudson Line tracks just north of the Poughkeepsie RR Station. The line carries a handful of freight trains, as well as 26 Amtrak trains each day. South of the train station, Metro North owns the tracks. Any work performed over the right-of-way of CSX or Metro North will, at a minimum, require a permit from the involved railroad, and could possibly also require railroad flag persons on site during periods of active construction.

m. Right-of-Way (ROW)

An existing agreement with Central Hudson is being amended to allow a construction area on the west side of the bridge. This area will also be used for parking once completed.. At this time, no right-of-way acquisition is expected.

n. Landscape Development

All disturbed areas will be re-established with vegetation to permanently stabilize the soil. Any trees and vegetation in conflict with the construction will be removed.

o. Provisions for Pedestrians, including Persons with Disabilities

The proposed Walkway Over the Hudson would create a system of facilities, separate from vehicular streets, for pedestrians to cross the Hudson River. Grades and cross-slopes would be consistent with the guidelines of the Americans with Disability Act (ADA). Curb ramps and detectable warning surfaces would be installed at all needed locations. Benches would be installed at periodic locations. The trail would be of sufficient width for shared use by bicyclists and pedestrians. The Walkway will serve as a link between the trails established on both the east and west ends of the bridge. Pedestrians can benefit from the Poughkeepsie-Highland Railroad Bridge in their ability to enjoy the beautiful vistas offered by the Hudson River through convenient and direct access.

p. Provisions for Bicycling

The proposed Walkway Over the Hudson would create a new facility, separate from vehicular streets, for bicyclists across the Hudson River. The trail would be of sufficient width for shared use by bicyclists and pedestrians. The alternative connection between the trails on the east and west ends of the bridge requires bicyclists to make a significant detour to the Mid-Hudson Bridge. Bicyclists are required to walk their bikes across the bridge. Travel to and across this busy vehicular bridge can be daunting for an inexperienced bicyclist and a clear link between the existing railroad trail and the bridge is non-existent.

The Walkway would provide a safe and obvious connection, encouraging use of trails on both east and west sides.

q. Usage & Access

(1) Trail Usage - Given the historic significance that this structure would retain, the Walkway is anticipated to draw the interest of persons from around the region, as well as bring visitors from outside the region and state. In January 2008, an Economic and Fiscal Impact Report (see **Appendix I**) was conducted to ascertain potential impacts that this project would have on the regional economy, and included estimates on the number of users of the proposed Walkway trail. The study notes a projected population of 123,200 people in 2009 for the geographic area surrounding the proposed Walkway. Based on this population, and drawing off of others studies for user rates, the study estimates the trail could attract 157,700 visitors from the local community and 110,000 visitors from outside Dutchess and Ulster counties (annually). Therefore, the total projected annual trail visits are estimated to be approximately 267,700.

To estimate peak period usage of the Walkway trail, the Mohawk Hudson Bike Hike Trail Analysis of Trail Use Regional Benefits and Economic Impact Report was referenced. Based on field counts, this report estimated a peak period trail usage equal to 0.1164% of the annual usage (Usage Ratio). Applying this Usage Ratio to the aforementioned annual usage for the Walkway trail (267,000) yields an estimated peak period usage of 312 persons. This, of course, excludes special event traffic.

(2) Parking – Parking lots will be available on both the east and west approaches. Parking needs were estimated based on the aforementioned peak period usage. It should be noted that not all users will drive, and that for those users that do drive to the Walkway, more than one person, on average, will travel in a given vehicle. Consequently, parking needs for peak period were estimated as follows: 112 spaces (east access location) and 75 spaces (west access location). Proposed parking locations are identified in Figure III-6 and **Appendix A**, with detailed parking lot layouts found in **Appendix D**.

A trailhead parking area will be provided for the east approach on the west side of Washington Street underneath the bridge with a drive aisle located just south of the bridge running east-west. This parking area will accommodate approximately 100 vehicles, including four (4) handicap parking spaces. Additional parking can be found on surrounding city streets as needed. Given the loss of vegetation to construct the parking lots, a buffer would be installed to promote privacy from the parking facility. These accommodations are proposed to meet opening-day needs for parking near the east access. However, coordination with the City of Poughkeepsie is ongoing to find a more ideal and convenient parking location east of Washington Street. Current discussions place this parking facility on unused property north of Parker Avenue near the rail spur. This facility is contingent on successful negotiations between Dutchess County and CSX railroad to purchase the rail property and convert to a rail-trail. Once approved, this more ideal parking facility would be design and constructed under a separate contract.

Figure III-6: Parking and Access Location Map

A parking area will be provided at the west approach, southwest of the abutment on Haviland Road. This parking area will be located on the north side of Haviland Road and will accommodate a minimum of 12 vehicles, including four (4) handicap parking spaces. Additional parking will be provided via on-street parking on Haviland Rd. The Town of Lloyd will be striping the roadway to include two 14-foot travel lanes and an 8-foot parking lane. At least 40 spaces can be accommodated along the roadway.

(3) Access - Initially, use of the Walkway will be permitted year round from dawn through 9:00 pm. The Walkway will be closed during icy or dangerous conditions. New York State Office of Parks, Recreation and Historic Preservation will adjust these hours and dates of operation as public demand and trail use demands. Details of winter use of the trail, such as plowing services are still being determined.

Access on the west approach will be provided at the west abutment and will be ADA accessible. Visitors can access the trail on the west side from Haviland Road.

Access on the east approach will be provided by an elevator proposed to be located at bent 45, just west of Washington Street. The enclosed elevator will be ADA accessible. An additional elevator, located at Pier 6, may be provided in the future for convenient access from the Metro North/Amtrak train station. A north-south trail leading to and from the Mid-Hudson Children's Museum will allow visitors convenient access to this "Waterfront" elevator.

The above noted elevator structures include alternative staircase towers. A rendering of elevator concepts being considered at Washington Street and the Waterfront are shown in Figure III-7. The elevator locations are illustrated in plan view on Figure III-6 and in **Appendix A**.

- Washington Street – an elevator (one cab) and staircase at this location would provide ADA-compliant access near the eastern terminus of the project. (Elevator Location 1)

- Pier 6 at the Eastern Shore of the Hudson River – this location would take advantage of existing and planned parks and public spaces along the shore of the Hudson River, and would offer a dramatic view as passengers ascended approximately 200 ft to reach the trail. (Elevator Location 2)

The Feasible Alternative allows for a maximum of two elevator towers, with the Washington Street location considered a first priority. If sufficient funds are available, the North Water Street location will be constructed.

Figure III-7: Conceptual Elevator & Stair Towers

Washington Street

Pier 6 – Along Waterfront

r. Lighting

Lighting is proposed for the Walkway over the Hudson. Industrial style light poles and fixtures will be provided along the length of the bridge. The light fixtures will be designed with cutoffs to minimize light spill.

s. Project Enhancements

Enhancements for the Walkway over the Hudson will include trail lighting on the bridge. The use of solar panels to power these lights is being explored. On the bridge deck, glass portals may be provided at specific intervals to afford views of the bridge truss substructure as well as down to the river. In addition, seating will be provided at strategic locations along the length of the Walkway for pause, rest, and sightseeing opportunities. The use of benches made of recycled materials is being examined. Periodic overlooks will be provided for significant views and vistas. Interpretive signage will be provided along with way finding signage and kiosks identifying trail routes, trailheads, parking locations, and other significant regional points of interest.

D. PROJECT COST AND SCHEDULE

1. Estimate of Probable Costs

Table III-3: Estimate of Probable Costs

Alternative	Rehab: Icon	Rehab: Functional	Rehab: Minimal	Removal	Null
Demolition	$ 1,500,000	$ 1,500,000	$ 1,500,000	$ 35,500,000	$ 250,000
Structural Repairs	$ 2,500,000	$ 2,500,000	$ 2,500,000	$ 0	$
Substructure Repair (Land Piers)	$ 0	$ 0	$ 0	$ 0	$
Deck	$ 12,688,535	$ 11,444,377	$ 5,997,267	$ 0	$
Railing	$ 3,414,975	$ 2,240,175	$ 1,563,450	$ 0	$
Lighting	$ 731,491	$ 577,472	$ 0	$ 0	$
Elevator (s)	$ 2,590,000	$ 790,000	$ 560,000	$ 0	$
Approaches	$ 185,000	$ 150,000	$ 95,000	$ 0	$
Trail Features	$ 975,639	$ 510,639	$ 190,754	$ 0	$
Subtotal	**$ 24,795,202**	**$ 19,712,663**	**$ 12,406,471**	**$ 35,500,000**	**$ 250,000**
ROW Acquisition	$ 100,000	$ 0	$ 0	$ 0	$
MPoT	$ 200,000	$ 100,000	$ 100,000	$ 2,100,000	$
RR Force Account	$ 300,000	$ 200,000	$ 200,000	$ 400,000	$
Survey & Stakeout	$ 600,000	$ 300,000	$ 300,000	$ 350,000	$
Mobilization	$ 2,599,520	$ 600,000	$ 600,000	$ 1,400,000	$ 50,000
Contingency	$ 28,594,722	$ 2,091,266	$ 1,360,647	$ 7,850,000	$ 300,000
Total, incl. Contingency	$ 2,700,000	$ 23,003,930	$ 14,967,118	$ 47,100,000	$ 45,000
Construction Insp. & Eng. Support	**$** 2,590,000	$ 2,000,000	$ 1,700,000	$ 7,065,000	**$ 345,000**
Total w/contingency & inspection & engineering support	$ **31,294,722**	**$ 25,003,930**	**$ 16,667,118**	**$ 54,165,000**	$ 250,000

NOTE: 1. Completion of this project on the schedule identified above is contingent upon Walkway Over the Hudson securing state, federal, local government, and private funding commitments necessary to initiate construction in March, 2008.

2. Null demolition costs include the removal of old railroad ties to prevent a falling hazard.

The cost estimates for the above alternatives have undergone changes since the time of the Draft Design Report. As findings from studies were finalized, and as the design progressed to greater detail, the cost estimates were updated accordingly. In general, the cost of each of the three Design Options of the Rehabilitation Alternatives was reduced by a lower contingency, applied consistently throughout (i.e., 10%). This lower contingency most affected the Icon Design Alternative and is the primary reason for the noticed reduction in cost for this alternative. The Functional Design Alternative, though reduced significantly by a lower contingency did not have an overall reduction in cost. The reason is due to the fact that some features were added in that previously did not exist. For example, the strong public support of the project and the desire to have a full-width walkway on the approaches motivated a decision to change the approach width from 15 feet to 24 feet. In addition, water service on the bridge was added to the plan. These additions, along with others, offset the reduced contingency. Consequently, the overall cost of the Functional Design Alternative remained the same as that presented in the Draft Design Report.

2. Schedule

Table III-4: Project Schedule

Task Description	Start Date	End Date
Preliminary Design	July 2007	February 2008
Detailed Design	July 2007	June 2008
SEQRA Process / Final Design Report	August 2007	February 2008
Demolition Work	June 2008	August 2008
Fabrication of Deck Panels	May 2008	April 2009
General Construction	September 2008	August 2009
Opening	September 2009	September 2009

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IV. SOCIAL, ECONOMIC AND ENVIRONMENTAL CONSIDERATIONS

A. INTRODUCTION

1. **National Environmental Policy Act Classification –** This project qualifies as a Class II Categorical Exclusion under the provisions of the National Environmental Policy Act (NEPA) as implemented by the Federal Highway Administration (FHWA) regulations, 23 CFR 771.117(d)(3). The NEPA checklist is included in **Appendix F**. The Federal Highway Administration is the lead agency for NEPA coordination.

2. **State Environmental Quality Review Act and Lead Agency –** The New York State Office of Parks, Recreation and Historic Preservation is the lead agency for the project. The project is classified as a SEQRA Type I Action per 6 NYCRR 617.4. A SEQRA Full Environmental Assessment Form is provided in **Appendix F**.

B. SOCIAL, ECONOMIC AND ENVIRONMENTAL CONSEQUENCES

1. **Social Consequences –** This section discusses how implementation for the proposed action may impact certain socially sensitive features within the study area.

a. Affected Population

The property west of the bridge is primarily residential, while the properties on the east side of the bridge are a combination of commercial and residential. This project is not anticipated to have any impact on the population of the area.

b. Local Planning

(1) Comprehensive Plans - The Town of Lloyd 2005 Comprehensive Plan notes that the Hudson River shoreline is one of the Town's most significant natural resources and considers the views to and from the Hudson River to be some of Town's most critical visual resources. The Comprehensive Plan states that, "Creating connections between existing and proposed trails throughout the Town will expand recreational opportunities and encourage alternative modes of transportation and tourism." The Walkway Over the Hudson is consistent with the Town of Lloyd Comprehensive Plan.

The City of Poughkeepsie most recently updated the Comprehensive Plan in November 1998. One of the goals of the Plan is the revitalization of the Hudson River Shoreline. This goal calls for the shoreline and waterfront to be accessible to the public for recreational and commercial uses wherever possible. The Walkway Over the Hudson project would attract pedestrian users to the Poughkeepsie shoreline. This project is consistent with the goals of the Poughkeepsie Comprehensive Plan.

(2) Local Waterfront Revitalization Programs - A Local Waterfront Revitalization Program (LWRP) was approved for the Town of Lloyd in March 1995. The LWRP points out

that the most scenic views of the Town of Lloyd waterfront are visible from the Hudson River or the City of Poughkeepsie shoreline. The Walkway project would provide a pedestrian friendly environment from which to view the Lloyd waterfront and its scenic wooded bluffs. Benches on the Walkway would encourage users to sit and take in the scenic views of both the Hudson River and the Lloyd shoreline. The New York State Department of State (NYSDOS) Division of Coastal Resources has reviewed the consistency of the project with all of the policies listed in the LWRP.

The LWRP for the City of Poughkeepsie was drafted by the Waterfront Advisory Committee and adopted in 1998. The LWRP provides the City and its residents with guidelines for existing and future land use decisions along the Hudson River waterfront. The goal of the LWRP is to achieve a balance, permitting the beneficial use of coastal resources while preventing loss of natural resources. The LWRP calls for the restoration, revitalization, and redevelopment of deteriorated and underutilized waterfront areas for commercial, cultural, recreational, and other compatible uses. The Walkway Over The Hudson would revitalize the City of Poughkeepsie by infusing the waterfront with recreational activities such as bike riding, walking, and jogging, and restoring the Poughkeepsie-Highland Railroad Bridge to a functioning, usable resource.

The City of Poughkeepsie LWRP was never approved by the NYSDOS. The NYSDOS Division of Coastal Resources will therefore not review the project for consistency with the City of Poughkeepsie LWRP. The project has, however been reviewed for its consistency with the New York State Coastal Policies (see **Section IV.B.3.h**).

(3) Transportation Plans - The Ulster County Transportation Council (UCTC) serves as the Metropolitan Planning Organization (MPO) for the Town of Lloyd. The UCTC has a Year 2030 Long Range Transportation Plan and a 2008-2012 five year Transportation Improvement Plan (TIP) in place. This project is consistent with the UCTC long range transportation plan.

The Poughkeepsie-Dutchess County Transportation Council (PDCTC) serves as the MPO for the City of Poughkeepsie. The PDCTC has a Year 2030 Long Range Transportation Plan. The Walkway Over the Hudson project is listed as a SAFETEA-LU high priority project in the Draft 2008-2012 TIP. This project is consistent with the PDCTC long range transportation plan.

The PDCTC adopted a Bicycle and Pedestrian Plan in March 1996 to identify projects and actions to increase the number and improve the condition of bicycle and pedestrian routes. The Walkway Over the Hudson project is consistent with this plan providing connections to activity centers in the region.

(4) Planned Development – Details on planned developments for the project area can be found in **Section II.C.w.**

c. Community Character

Community character can be defined as the distinctive traits or qualities of a small social unit, such as a neighborhood, village or town, which is located within a larger social unit.

The character of a community is closely related to a number of factors including population density and distribution, land use types and patterns, the physical environment (e.g., climate, air quality, sound levels, etc.), and aesthetic qualities. The combination of these and other factors, such as infrastructure, contributes to the quality of life and character of a given community.

Conversion of the area to profitable space, connection of pedestrian/bicycle transportation facilities to a wider regional network; and improved vistas for visitors and local pedestrians, would all contribute to a beneficial impact, making the community a safer and friendlier home and destination for all to enjoy.

d. Changes in Travel Patterns or Accessibility

There is a 40-mile corridor, commonly referred to as the Maybrook Corridor, which has been the subject of many studies of recent. The most notable study was the *Maybrook Multi-Modal Corridor Study* (June 2002) administered by the New York State Department of Transportation. The Maybrook Corridor transverses three counties (Orange and Ulster Counties on the west side of the Hudson River and continues into Dutchess County on the east side of the river) and several municipal governments. The Poughkeepsie-Highland Railroad Bridge is centrally located along the Maybrook Corridor and is the very means by which the east and west sections of the corridor are connected. The study does make mention of an alternate connection point for pedestrians and bicyclists over the river: that is, the Mid-Hudson Bridge which is the sole crossing for vehicular traffic between Poughkeepsie and the west side. The outcome of the study was a recommendation for reuse of the Poughkeepsie-Highland Railroad Bridge as a pedestrian/bicycle crossing, recognizing its significance as a key link in the regional bicycle/pedestrian network.

The proposed Rehabilitation Alternative, contrary to the No-Build Alternative, provides a logical connection between the east side and west side pedestrian/bicycle networks, and significantly enhances the experience for travelers. The Poughkeepsie-Highland Railroad Bridge, if opened for use by pedestrians and bicyclists, sits strategically within the intended alignment of the pedestrian/bicycle networks. Without use of the Poughkeepsie-Highland Railroad Bridge to cross the Hudson River, pedestrians must share use of the Mid-Hudson Bridge. The Mid-Hudson Bridge has no designated bike/pedestrian lane, so bicyclists and pedestrians must share use of the sidewalk. Trail users must leave the pedestrian only trails and interact with vehicular traffic on city streets to get to the Mid-Hudson Bridge. Less experienced bicyclists may be uncomfortable with this interaction and avoid using the Mid-Hudson Bridge. In addition, to assure safety of pedestrians, bicyclists are required to walk their bikes across the Mid-Hudson Bridge. Therefore, the Poughkeepsie-Highland Railroad Bridge becomes a vital connector, providing a seamless connection between the pedestrian trails on the east and west side of the Hudson River. Pedestrians also benefit from the Poughkeepsie-Highland Railroad Bridge in their ability to enjoy the beautiful vistas offered by the Hudson River through convenient and direct access. The result is an overall enhanced experience for pedestrians and bicyclists alike.

The Walkway project will provide parking on both sides of the bridge. On the east side, parking will be provided underneath the bridge near the proposed Washington Street elevator between Washington and Talmadge Streets. This parking area is expected to meet opening day needs. Coordination with the City of Poughkeepsie is ongoing to locate a

more ideal and convenient parking location (see January 25, 2008 letter from Mayor Tkazyik to Erik Kulleseid - Appendix G). The projected additional parking demand from the Walkway project is not expected to disrupt traffic flow or current on-street parking conditions.

On the west side, parking will be provided in an area to be located on the north side of Haviland Road and on Haviland Road itself. The Town of Lloyd will be marking the roadway in this area to designate a parking lane. These proposed parking areas should not have any effect on the existing traffic patterns in this area.

e. Impacts on School Districts, Recreation Areas, Churches or Businesses

Several positive changes would be expected as a result of implementation of the Rehabilitation Alternative:

- Although no changes to school district boundaries would result from the proposed action, local schools and colleges would have convenient access to a great historic resource to benefit from.
- Recreation areas would benefit from the proposed action through the enhancement of riverside parks, seamless connection of the Maybrook Corridor between the east and west sides of the river, and of course, the 1.25 mile vista platform (i.e., rehabilitated bridge) overlooking the Hudson River, the City of Poughkeepsie and the Town of Lloyd.
- The proposed action would result in increased business from the tourism draw - businesses such as novelty shops, restaurants and educational centers would be natural by-products of such a proposed action.

f. Impacts on Police, Fire Protection, and Ambulance

The proposed action may result in increased demand for emergency services due to the growth expected in the immediate vicinity of the project (see **Section IV.B.2.a)**. Consequently, access on the Walkway itself to respond to an ill or injured patron would be provided. The project does not preclude emergency access via existing routes, but rather expands the flexibility of mobility of emergency services: a benefit is achieved in opening access to emergency vehicles, in that, an alternative route between Poughkeepsie and the Town of Lloyd is provided for emergency assistance. For example, in the event that the Mid-Hudson Bridge is congested, for whatever reason, the Poughkeepsie-Highland Railroad Bridge would serve as an alternative crossing for emergency vehicles.

g. Impacts on Highway Safety, Traffic Safety, and Overall Public Safety

The proposed project is not anticipated to impact highway safety or public safety in the project area.

h. General Social Groups Benefited or Harmed

The proposed project will not involve the acquisition of any businesses or residences. No local minority, elderly, or low income populations will be disproportionately affected. The

shared use facility will be available for all age groups, races, and income levels. No impacts related to environmental justice are anticipated. The proposed parking area on the east side beneath the bridge will require vegetation removal. Therefore, a commensurate buffer will be created between adjacent private landowners and the parking lot.

2. Economic Consequences –

a. Impacts on Regional and Local Economies

Public expenditures on construction projects can have direct impacts on regional and local economies. Further, there is a multiplier effect that occurs within the general economy for dollars invested in a project. Due to the nature of this project, both economic and fiscal benefits can be expected. An economic impact is identified as effect that direct, indirect, and induced new spending or investment has on an economy's employment, wages, and business sales. A project's fiscal impact is measured by the projected change to the state and local tax jurisdictions based on the economic impact. An Economic & Fiscal Impact Report was prepared by Camoin Associates and is located in **Appendix I**.

Construction of the Walkway Over the Hudson will cost approximately $25 Million. Approximately 37% (9.25 Million) of the total construction funding is expected to be spent on firms located in Dutchess or Ulster Counties, and the remaining 95% is likely to be spent within New York State.

The initial economic impact of construction is compounded as contractors make purchases from local vendors and as employees spend their wages locally. This "multiplier effect" plays a role the total economic impact. The construction of the Walkway is estimated to produce a total of $13.7 Million for Dutchess and Ulster Counties, and $15.3 Million in new economic activity.

Table IV-1: One Time Economic Impacts from Construction Phase

Region	New Construction Spending	Multiplier	Total Impact
Dutchess and Ulster County	$9,262,572	1.48	$13,708,606
New York State[1]	$9,000,000	1.70	$15,300,000

NOTES: [1] $9 Million from private, non-NYS sources.
Table is referenced from the Economic & Fiscal Impact Report by Camoin Associates

Given the historic significance, and world-renowned status (to be the World's longest pedestrian bridge) that this structure would retain, the potential for beneficial economic impact, both locally and statewide, is expected. This structure is anticipated to draw the attention of tourists from around the region, including some visitors from outside New York State. Service industries will be needed to support the tourist industry. It is anticipated that parks, recreation, overnight accommodations and food services will be among the primary business services sought from the local area.

The 2009 projected population of the geographic area surrounding the proposed Walkway will total 123,202 people. Assuming a local trail usage ratio based on the Maybrook Multi-Modal Corridor Study, it is anticipated that the trail could attract 157,699 local visits annually. Assuming that each local visitor spends $14.44 per use, the annual spending by local users would total $2.3 Million. However, this spending is not considered to be a new injection into the local economy, as the residents would likely have spent this money elsewhere in the community.

The Walkway location and scenic attributes provide the opportunity to capture a substantial tourist market outside of the local area. An anticipated 110,000 visitors from outside Dutchess and Ulster Counties are projected annually. The visitors from outside of Dutchess and Ulster Counties are comprised of individuals that extend a scheduled trip to the region, as well as those to visit the area as a direct result of the Walkway Over the Hudson. Of the 110,000 out of town visitors, 45,000 are expected to come from outside of New York State. It is anticipated that 70,000 will be day-trippers, and 40,000 will be overnight travelers. A total of $14.6 Million in new annual visitor spending is anticipated in Dutchess and Ulster Counties. This new annual income translates to $21 Million for Dutchess and Ulster Counties when the "multiplier effect" is considered. This would allow for the creation of 258 new local jobs, and $7.9 Million in new wages. It would also crate 155 new jobs elsewhere in the state, and $4.8 Million in new wages.

Table IV-2: Annual Economic Impact Summary

	Dutchess and Ulster Counties	**New York State**
New Sales	$21,066,975	$12,628,176
New Jobs	258	155
New Earnings	$7,940,960	$4,760,049

NOTES: Table is referenced from the Economic & Fiscal Impact Report by Camoin Associates

The fiscal impacts, or increase in tax revenues, are anticipated for both local Counties and New York State in the form of sales tax, income tax, occupancy tax, and property tax revenues. Dutchess and Ulster Counties will receive an approximately $730,000 in additional tax revenues due to Walkway visitors, and New York State will receive approximately $600,000 in increased tax revenues, for a total of $1.3 Million. The Economic & Fiscal Impact Report is located in **Appendix I**.

3. **Environmental Consequences –** There are no significant environmental impacts. Following are the relevant environmental issues:

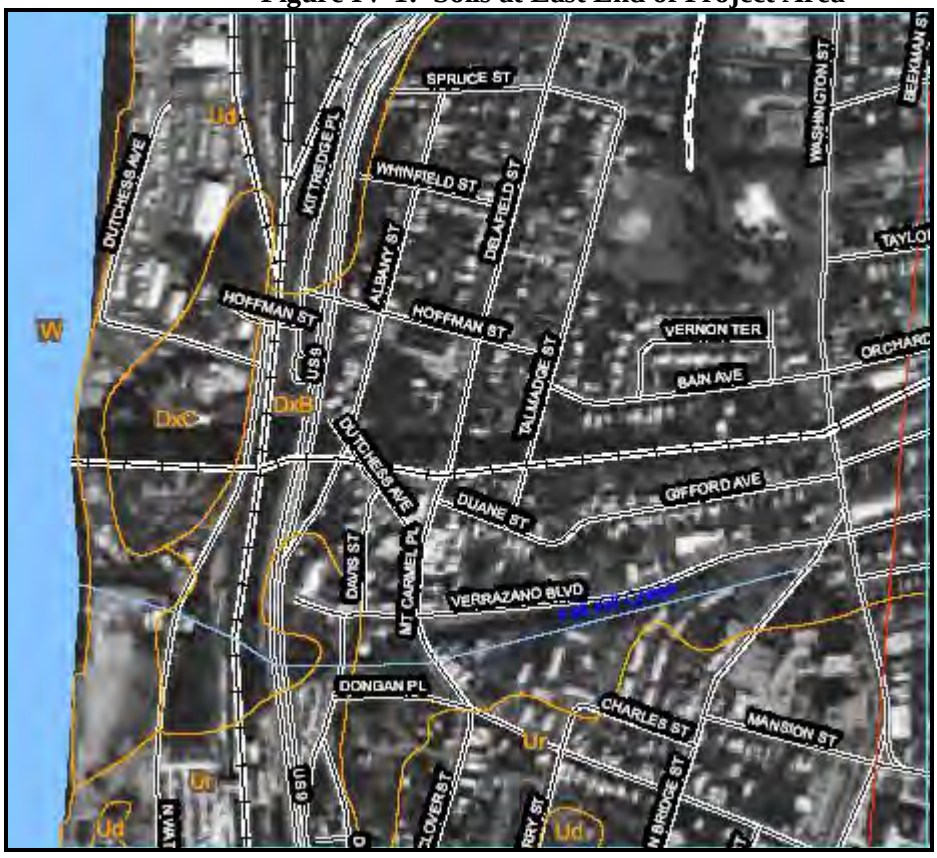
a. General Ecology & Endangered Species

The project area consists of three basic ecotypes. The majority of the project corridor consists of the former railway bridge span over the open waters of the Hudson River. On the eastern shore (Dutchess County), the project corridor is located within the City of Poughkeepsie and is entirely urbanized. The USDA Natural Resources Conservation Service (NRCS) reports that the soils in this location consist predominantly of DxB soils (Dutchess-Cardigan-Urban, undulating rocky) with small portions of DxC (Dutchess-

Cardigan-Urban, rolling rock) and Ud (Udorphent, smoothed) (See Figure IV-1).[4] The area proposed for construction of a parking area beneath the Walkway on the east side of the river was substantially disturbed during the original construction of the railroad bridge, and contains second growth trees and invasive non-native species. While the parking area construction will require removal of trees and vegetation beneath the Walkway, plans will include restoration and landscaping in association with parking area construction.

On the western shore (Ulster County), the landscape is more rural. Most of the corridor here is occupied by the former railway structure; however, wooded, shrubby, and open disturbed areas do exist along the perimeter. Soils in this location consist predominantly of NBF soils (Nassau-Bath-Rocky outcrop complex, very steep) and a small portion of BOD (Bath-Nassau-Rocky outcrop complex, hilly) inclusion (see Figure IV-2). The NRCS also reports that trees common to both the Ulster soil types are black cherry, northern red oak, sugar maple, and eastern white pine. These species would be most consistent with Rich Mesophytic Forests as described by Edinger, Gregory J. et al (2002) *Ecological Communities of New York State*, NYS NHP Department of Environmental Conservation, 625 Broadway, 5th Floor, Albany, NY).

Figure IV-1: Soils at East End of Project Area



[4] See http://websoilsurvey.nrcs.usda.gov/app

Figure IV-2: Soils at West End of Project Area

(1) Threatened and Endangered Species

Consultation under Section 7 of the Endangered Species Act was performed through the U.S. Fish and Wildlife Service (USFWS) website.[5] Documentation from this website is provided in **Appendix F**. The listed species for the two counties have been combined in Table IV-1. No critical habitat was identified by the USFWS Critical Habitat Portal at or near the project site in either county.

A letter dated September 7, 2007 was sent to the National Oceanic and Atmospheric Administration National Marine Fisheries Service (NMFS). To date, no reply has been received.

[5] See http://www.fws.gov/northeast/nyfo/es/section7.htm

Table IV-3: Federally Listed Endangered and Threatened Species and Candidate Species

Common Name	Scientific Name	Status	Dutchess County	Ulster County
Atlantic Sturgeon	*Acipenser oxyrinchus oxyrinchus*	Candidate	X	
Shortnose sturgeon	*Acipenser brevirostrum*	Endangered	X	X
Bald Eagle	*Haliaeetus leucocephalus*	Delisted	X	X
Bog Turtle	*Clemmys muhlenbergii*	Threatened	X	X
Indiana Bat (Summer)	*Myotis sodalist*	Endangered	X	X
Indiana Bat (Winter)	*Myotis sodalist*	Endangered		X
New England Cottontail	*Sylvilagus transitionalis*	Candidate	X	
Northern Wild Monkshood	*Aconitum noveboracense*	Threatened		X
Small Whorled Pogonia (Historic)	*Isotria medeoloides*	Threatened		X

Correspondence from the New York State Department of Environmental Conservation (NYSDEC) Natural Heritage Program (NHP) was received on September 24, 2007. The letter stated that ten (10) state-listed species were potentially present within or near the project area (**Appendix F**). The listed species for Dutchess and Ulster counties have been combined in Table IV-2.

Table IV-4: State Listed Endangered and Threatened Species and Candidate Species

Common Name	Scientific Name	Status	Dutchess County	Ulster County
Shortnose Sturgeon	*Acipenser brevirostrum*	Endangered	X	X
Peregrine Falcon	*Falco peregrinus*	Endangered	X	
Virginia Snakeroot	*Aristolochia serpentaria*	Endangered		X
Straw Sedge	*Carex straminea*	Endangered		X
Golden Corydalis	*Corydalis aurea*	Threatened		X
Velvety Bush-clover	*Lespedeza stuevei*	Threatened		X
Golden Club	*Orontium aquaticum*	Threatened	X	
Heartleaf Plantain	*Plantago cordata*	Threatened		X
Erect Knotweed	*Polygonum erectum*	Endangered		X
Small-flowered Crowfoot	*Ranunculus micranthus*	Threatened		X

The requirements of the listed species and the probability of them existing at or near the project corridor are described below. This includes the property under the Poughkeepsie-Highland Railroad Bridge as well as all areas being considered for parking facilities and for access.

i. **Atlantic Sturgeon** inhabits the shallow waters of the United States continental shelf. They ascend coastal rivers to spawn. The USFWS lists this sturgeon as a candidate species, which means that while it is not currently protected, it is being considered for listing. **Shortnose Sturgeon** inhabits the Hudson River estuary. They prefer deep pools with soft substrates and vegetated bottoms, but individuals may vary in preference for various water depths and substrate types. This species is state-listed and federally-list as Endangered. The USFWS notes that both these

sturgeons occur in the Hudson River and the principal responsibility for these species is vested with the NMFS. The Rehabilitation Alternative is not expected to disturb these species or their habitat as discussed under the "Poughkeepsie Deepwater Habitat" later in this section.

ii. **Dwarf Wedgemussel** is listed by the USFWS as occurring in the Housatonic River drainage basin. The portion of Housatonic basin that is present within Dutchess County is not within the project area, but rather is located much further east, adjacent to Connecticut. This species is listed as Endangered in New York as well as Endangered federally, yet the species was not listed by the NHP response letter. The NHP data is specific to the project area, whereas the federal data is county wide; therefore, this species would not be expected to be present in the project area.

iii. The **Bald Eagle** was delisted on August 8, 2007. There are no longer Endangered Species Act requirements for the protection of this species; however, the eagle continues to receive protection under the Bald and Golden Eagle Protection Act and the Migratory Bird Treaty Act. Eagles nest near coastlines, rivers, or lakes. They may nest in trees, on cliffs, on rock promontories, and or on manmade structures. The Hudson River has increasingly popular with bald eagles, especially as wintering habitat. The NYSDEC Breeding Bird Atlas (www.dec.ny.gov/animals/7312.html) records the sighting of Bald Eagles in 2004 in possible nesting habitat in Atlas Block 5861A, which includes the project area. However, though the bald eagle is listed as Threatened in New York, but the species was not listed in the NHP response letter. The NHP data is specific to the project area, whereas the federal data is county wide; therefore the bald eagle would not be expected to found in the project area. Furthermore, the Rehabilitation Alternative would not include the taking of any tall trees, and the Rehabilitation Alternative will not impair the ability for bald eagles to access the open waters of the Hudson River in hunting for food.

iv. **Peregrine Falcons** nest on ledges, rocky cliffs, or on manmade structures such as bridges and tall buildings, especially near urban areas. Ideal locations include undisturbed areas with a wide view, near water, and close to plentiful prey. These conditions are found on the Mid-Hudson Bridge, just downstream of the project corridor, where Peregrine falcons have nested every year since 1996, except 2001. The NYSDEC, in cooperation with the NYS Bridge Authority, maintains a webcam of the nesting area (http://www.dec.ny.gov/animals/34268.html). Peregrine falcons defend the area around a nest from other Peregrine falcons, and it would not be expected to find another nest on the Poughkeepsie Highland Railroad Bridge.[6] This was confirmed by bridge inspection crews, who observed a lot of Peregrine falcon hunting activity in the project area, but no evidence of nesting. It is therefore concluded that the Rehabilitation Alternative will not disturb or preclude Peregrine falcon nests, and may provide increased opportunities for observation to the public.

v. **Bog Turtle** is found in habitats with cool, shallow, slow-moving water, deep-soft muck soils, and tussock-forming herbaceous vegetation. This type of wetland and soil are not present within the project area. In addition, though Bog Turtle is listed as Endangered in New York as well as Threatened federally, but the species was not

[6] Telephone conversation with NYSDEC Region 3 personnel on October 16, 2007.

listed in the NHP response letter. The NHP data is specific to the project area, whereas the federal data is county wide; therefore the Bog Turtle would not be expected to found in the project area.

vi. **Indiana Bat** winters in caves and summers in forests along river courses. In New York, eight overwintering caves are known, one of which is located in Ulster County. However, this species is listed as Endangered in New York as well as Endangered federally, yet the species was not listed in the NHP response letter. The NHP data is specific to the project area, whereas the federal data is county wide; therefore, neither summer nor winter habitat for the Indiana Bat would be expected to be present in the project area.

vii. The USFWS lists **New England Cottontail** as a candidate species, which means that while it is not currently protected, it is being considered for listing. Few details are available about its preferred habitat, but the cottontail is generally reported to be found in young woodlands with thick cover. Areas of young woodlands with thick cover are present in the Ulster County portion of the project area. Since the project corridor is narrow and consists mainly of the old railway structures, the project corridor is not expected to represent a significant source of habitat for this species. Since the project Rehabilitation Alternative consists of the reconstruction of an existing structure, no impacts to this species would be expected.

viii. **Northern Wild Monkshood** is found in habitats that include algific (cold air) talus (loose rock) slopes, partially shaded cliffs, and streamsides. The most necessary components are high humidity and cool soil conditions. It grows on either sandstone or limestone. The project area in Ulster County consists predominantly of NBF soils which are not limestone or sandstone. The small portion of BOD soils are derived from parent materials that include sandstone (as well as siltstone or shale), but the present state of BOD soils consists of loamy till. The Iowa Natural Heritage Foundation (www.inhf.org/ecosysm.htm) states that algific talus slopes are a rare and almost unknown ecosystem; and, that the entire world's supply of this ecosystem consists of a few hundred tiny patches in Iowa, Wisconsin, Minnesota, and Illinois. Therefore, this species is not expected to be present in the project area.

ix. **Small Whorled Pogonia** is found in semi-open, mixed deciduous mesic forests in second- or third-growth successional stages. Soils are highly acidic, and many are fragipans (naturally occurring dense, impermeable layers) on shallow-to-bedrock or shallow-to-clay slopes, where lateral water drainage from upslope sources occurs. Occasionally, the orchid can be found in more calcium-rich sites, including limestone areas in New York. Mesic forests, acid soils, and fragipans do occur at the site. Limestone soils are not present at the project site. The USFWS lists the occurrence of this species as historic. In addition, Small Whorled Pogonia is listed as Endangered in New York as well as Threatened federally, but the species was not listed in the NHP response letter. The NHP data is specific to the project area, whereas the federal data is county wide; therefore this species would not be expected to found in the project area.

x. **Virginia Snakeroot** is found in moist or dry, sloping upland woods. The species favors southwest to southeast facing slopes and is found in association with Oak-

Hickory or Chestnut Oak forests. The NRCS list the trees common to the soil types found in the Ulster portion of the project area as black cherry, northern red oak, sugar maple, and eastern white pine, which is more consistent with Rich Mesophytic forests than with Oak-Hickory or Chestnut Oak forests as described by Edinger, Gregory J. et al (2002). In addition, this species was last observed in the Town of Lloyd in 1895. Due to the historic nature of the species, the lack of Oak-Hickory or Chestnut Oak forests, and the fact that the narrow project corridor (approximately 100 feet) was likely completely cleared and manipulated during the construction of the old railway, this species is not expected to be currently present within the project area.

xi. **Straw Sedge** is found along swamp margins and in marshes. No state or federal wetlands have been mapped to the project area, nor have any hydric soils been mapped to this area. The species was last observed in the Town of Lloyd in 1896. Due to the historic nature of species, the previously disturbed nature of the railway corridor, the lack of swamps or marshes, and the lack of hydric soils in the area, this species would not expected to be present in the project area.

xii. **Golden Corydalis** is found on rocky banks or sandy soils. The species was last observed in the Town of Lloyd in 1887. The bank of the Hudson in the Town of Lloyd within the project area currently consists of riprap. Therefore, this species would not be expected to be found within the project area.

xiii. **Heartleaf Plantain,** in the Hudson Valley, is restricted to the edges of the freshwater tidal portions of the Hudson River. It is especially found on calcareous soils. No calcareous soils are located within the project area. In addition, the species was last observed in the Town of Lloyd in 1887. Due to the historical nature of this species, the previously disturbed character of the railway corridor, and the lack of calcareous soils, this species would not be expected to be found within the project area.

xiv. **Erect Knotweed** was last observed in the Town of Lloyd in 1887. It is found in dry disturbed areas, particularly empty lots and fields. This type of habitat is present in the project area. Due to the historic nature of the record, this species would not expected to be found in the project area. In order to confirm this, a qualified botanist visited project area on November 2, 2007. All locations in the project area that meet the criteria for habitat, that may be used for construction or construction access were surveyed. No specimens of erect knotweed were found. It is therefore concluded that this species is not in the project area. A copy of the botanist's report may found in **Appendix F**.

xv. **Small-flowered Crowfoot** was last observed in the Town of Lloyd in 1893. It is found growing on slopes in dry or moist rich rocky woods, open rocky woods, or disturbed sites. This type of habitat is present in the project area. Due to the historic nature of the record, this species would not be expected to be found in the project area; however, the rocky woods sections will need to be canvassed in the field to confirm the absence of this species. This species may be identified in the month of May, at which time a qualified botanist will survey areas that meet the criteria for habitat and that may be used for construction or construction access. If found,

coordination with the NHP will be necessary to ensure that impacts to this species do not occur under the Rehabilitation Alternative.

xvi. **Golden club** is found in swamps, pond margins, bogs, and slow-moving streams. The species was last observed in the City of Poughkeepsie in 1896. The Poughkeepsie portion of the project area is now entirely urban, and the described wetland habitats are not found. Due to the historic nature of this species, the current urban condition of the City of Poughkeepsie, and the lack of wetlands in this area, this species would not be expected to be found within the project area.

In summary, the only species for which potential habitat exists in the project corridor is the **erect Knotweed** and **small-flowered crowfoot**. A qualified botanist reviewed all appropriate habitat in the project corridor for the **erect knotweed**, and did not find this species. Should any habitat suitable for the **Small-flowered crowfoot** be required for construction or access, a biological survey will be conducted for this species in May 2008.

(2) Poughkeepsie Deepwater Habitat

This stretch of the Hudson River is part of the "Poughkeepsie Deepwater Habitat," which has been recommended by NYSDEC and designated by the NYS Department of State (NYSDOS) as a Significant Coastal Fish and Wildlife Habitat under New York State's Coastal Management Program. The Poughkeepsie Deepwater Habitat encompasses a 14-mile stretch of the Hudson River extending from the Villages of West Park in Ulster County and Hyde Park in Dutchess County south to the hamlet of Marlboro in Ulster County. It is a nearly continuous river bottom trench, from 30 feet deep to the bottom. Most of this area has water depths of 50 feet or greater. This habitat provides wintering habitat for the shortnose sturgeon (discussed above) and it supports an unusual diversity of marine species. Shortnose sturgeon also use this area as a spawning grounds. A unique feature of this habitat is that denser brackish water is overlain by fresh water near the salt wedge, providing an environment that supports a variety of estuarine and marine species, including Atlantic silverside (*Menidia menidia*), bay anchovies (*Anchoa mitchilli*), bluefish (*Pomatomus saltatrix*), weakfish (*Cynoscion regalis*) and hogchokers (*Trinectes maculates*).[7] In addition, large numbers of striped bass (*Morone saxatilis*) spawn in this area along with Atlantic tomcod (*Microgdus tomcod*) and white perch (*Morone americana*).[8]

A habitat impairment test must be met for any activity that is subject to consistency review under federal and state laws, or under applicable local laws contained in the Town of Lloyd approved Local Waterfront Revitalization Program or in the New York State Coastal Boundary (see **Section IV.B.3.h**). The specific habitat impairment test that must be met is as follows: In order to protect and preserve a significant habitat, land and water uses or development shall not be undertaken if such actions would:

[7] See: http://www.nyswaterfronts.com/waterfront_natural_narratives.asp
http://training.fws.gov/library/pubs5/web_link/text/upp_hud.htm

[8] Letter dated April 1, 1998 from NYSDEC to NYSDOS regarding the City of Poughkeepsie LWRP.

- destroy the habitat; or,
- significantly impair the viability of a habitat.

There is not work to be accomplished in the waters of the Hudson River under the Rehabilitation Alternative as discussed in **Section IV.B.3.c**. Any construction work performed on the land surface and construction access areas will be protected with appropriate erosion and sediment control as discussed in **Section IV.B.3.c.** None of the construction in the Rehabilitation Alternative will alter the temperature, substrate or salinity of the river. To ensure that the Rehabilitation Alternative will meet the habitat impairment test, project specifications will include the means to prevent any construction debris from falling into the water.

b. Ground Water

Federal participation is not allowed for any project that the U.S. Environmental Protection Agency (USEPA) Administrator determines may contaminate a Sole Source Aquifer Area as designated under the authority of Section 1424(e) of the Safe Drinking Water Act of 1974. A review of USEPA mapping concludes that the project area is not located near any Sole Source Aquifers. This project does not require further review pursuant to Section 1424(e) of the Safe Drinking Water Act.

The NYSDEC Technical and Operational Guidance Series (TOGS) 2.1.3 discusses the identification of certain groundwater sources as "Primary Water Supply Aquifer Areas" or "Principal Aquifer Areas" as part of "geographic targeting." This "geographic targeting" does not directly regulate such areas, but serves as a method for enhancing existing regulatory protection (such as SPDES, Section 401 Water Quality Certification, and the SEQRA process) in critical locations where the groundwater resource is most productive and most vulnerable. Technical and Operational Guidance Series 2.1.3. defines "Primary Water Supply Aquifers" as "highly productive aquifers presently utilized as sources of water supply by major municipal water supply systems." It defines "Principal Aquifers" as "aquifers known to be highly productive or whose geology suggests an abundant and high quality potential water supply, but which are not intensively used as sources of water supply by major municipal systems at the present time." Information sent by the NYSDEC dated October 18, 2007 state that according to their records, there are no primary aquifers within the project area.

c. Surface Water

The main surface water in the project area is the Hudson River. The river is a Class A water. The best usages of a Class A stream, as defined in 6 NYCRR Part 701.6, are as a water supply source for drinking, culinary or food processing purposes; primary and secondary contact recreation; and fishing. The waters shall also be suitable for fish propagation and survival. Both the City of Poughkeepsie and the Highland Water District are served by water from the Hudson River. Class A waters are protected under 6 NYCRR Part 608, Protection of Waters.

On the east side of the Hudson River, the bridge is elevated through the City of Poughkeepsie. There are no named streams in the immediate area of the bridge. Surface

water in the vicinity of the bridge primarily runs off into closed drainage systems. On the west side of the river, the bridge is elevated through a steep forested area in the Town of Lloyd. There is one unnamed tributary to the Hudson River flowing under the bridge just north of Ransom Road. This stream is classified as a Class C water. The best usage of Class C waters is fishing. Class C waters are not protected under 6 NYCRR Part 608, Protection of Waters (see Figure IV-3).

None of the water bodies located within the project area is designated as wild, scenic, or recreational rivers in the State or Federal programs. Therefore, permits or variances under the Federal Wild, Scenic, and Recreational Rivers Act and State regulations (6 NYCRR Part 666) are not required as part of this project.

Most of the construction for the Rehabilitation Alternative will occur on the bridge deck over the surface waters. During construction, containment techniques will be utilized to assure that contaminants and debris does not fall from the bridge deck into any of the surface waters described above.

The Rehabilitation Alternative does not include any work in the Hudson River. Repairs to the bridge piers to fill void areas found in Piers 2 and 3 (see **Appendix B**) will be accomplished in the future and will not be included in this project.[9]

No construction work is anticipated near the unnamed stream under the west side of the bridge. Removal of existing debris, including old utility tower structures may be accomplished without impacting that stream. Erosion and Sediment control will be provided in areas where access is required for equipment to prevent sediment and potential contaminants from entering the unnamed tributary or the Hudson River.

Under the Rehabilitation Alternative, construction under the east side of the bridge would be limited to an elevator and stairs just west of Washington Street, and a parking under the bridge between Talmadge Street and Washington Street (see **Section III.C.2.d.**). Appropriate erosion and sediment control will be provided at these sites to prevent sediment and contaminants from entering the Hudson River. The location of additional parking on the east side of the Walkway is ongoing with the City of Poughkeepsie Mayor's Office.

Coverage under the NYSDEC State Pollutant Discharge Elimination System (SPDES) General Permit for Stormwater Discharges from Construction Activities (GP-0-08-001) is required for any construction project that disturbs more than 1 acre of land.[10] Construction of the Rehabilitation Alternative is anticipated to disturb more than 1 acre for parking and maintenance areas, so coverage under this permit is anticipated. As such, a Stormwater

[9] This work would involve sealing the outer surface of the work area by installing formwork or grout bags around upper portion of the pier. It would not be necessary to install cofferdams into the bottom of the river. After dewatering, the void areas would then be pumped full with concrete. The formwork or grout bags would prevent direct contact of the concrete with the waters of the Hudson River. All permits required for this work would be acquired at the time of the repair.

[10] It is assumed that regulations for this permit will be in effect by the time of construction.

Figure IV-3: Surface Waters in the Project Area*

*(Source: http://www.nysgis.state.ny.us/gateway/mg/index.html)

Pollution Prevention Plan would be prepared that would include appropriate erosion and sediment control techniques will be provided for any construction conducted on land areas, and permanent stormwater quality measures implemented as appropriate for the given site.

d. State Wetlands

There are no NYSDEC freshwater wetlands mapped within 100 feet of the project area. There are no NYSDEC tidal wetlands mapped within 300 feet of the project area. Therefore no permits would be required under Articles 24 or 25 of the Environmental Conservation Law.

e. Federal Jurisdictional Wetlands

Soils in the project area are discussed in Section IV.B.3.a, General Ecology and Endangered Species. None of the mapped soils in the project area are classified as hydric soils. National Wetland Inventory maps for the project area were reviewed. There were no mapped wetlands shown on these maps. In a site visit on September 26, 2007 the unnamed tributary on the west side of the bridge was observed where it crosses under the bridge just west of Ransom Road. The grade of the stream flattens in the vicinity of a bridge pier at this location. This area, covering approximately 2,000 to 3,000 square feet, includes wetland vegetation, and is likely a federal wetland area. The area was not delineated but it may be assumed that this area is a small federal wetland. Under the Rehabilitation Alternative, there are no improvements planned for this pier. During final design, plans will include fencing around this area to ensure that it is avoided by construction equipment.

f. Flood Plains

It is necessary to consider and evaluate any significant flood plain encroachments in accordance with the provisions of Executive Order 11988, Flood Plain Management, as implemented in 23 CFR 650 Subpart A, *Location and Hydraulic Design of Encroachments on Flood Plains* and 6 NYCRR 502, *Flood Plain Management Criteria for State Projects*. The 100-year flood plains for the Hudson River within the project area have been identified using the following Flood Insurance Rate Maps:

- City of Poughkeepsie Community Panel Number 360222 000 1 B effective January 5, 1984
- Town of Lloyd, Community Panel Number 361012 0012 D effective July 5, 2000.

On both sides of the Hudson River, the flood plain area is shown as a small strip along the edge of the river. The railroad bridge spans the flood plain of the Hudson River. None of the work in the Rehabilitation Alternative would place any fill within the flood plain areas and there would therefore be no encroachments to evaluate.

g. Navigable Waterways

The Hudson River is considered a navigable waterway by the U. S. Army Corps of Engineers (USACE) and by U.S. Coast Guard (USCG). Since the Hudson River is navigable, Sections 9 and 10 of the Rivers and Harbors Act of 1899 apply to work performed above and in the river respectively. A "U. S. Coast Guard Jurisdiction Checklist" has been completed and is included in **Appendix F**. The Rehabilitation Alternative is considered a Bridge Rehabilitation Project. It will not include any change in horizontal or vertical clearance. As noted in the form, a Section 9 permit should not be required from the USCG, but coordination will be required in the performance of work on the project.

Section 10 (33 U.S.C. 403) covers construction, excavation, or deposition of materials in, over, or under such waters, or any work which would affect the course, location, condition, or capacity of those waters. Inquiry was made of the USACE New York District regarding applicability of Section 10 to the proposed project. It was determined that since no work is proposed in the water, but over the water only, a Section 10 permit (nationwide or individual) would not be required.[11]

h. Coastal Zone Management

The NYSDOS has authority from State and Federal legislation to insure that State and Federal government activities along the coasts and waterways of New York State are consistent with NYS Coastal Policies and any approved Local Waterfront Revitalization Program (LWRP). The project area is located in the Hudson River Region in mapping published by the NYSDOS website.[12] The Poughkeepsie (North) map shows that the Landward Coastal Boundary line on the east side of the river follows along NYS Route 9 (Washington Street), which is the eastern terminus of the bridge. The Landward Coastal Boundary on the west side of the river follows along NYS Route 9W, which is to the west of the project western terminus. The entire project area is therefore in the coastal zone (see Figure IV-4). On the east side of the river, the area from Washington Street to the river is included in the City of Poughkeepsie Local Waterfront Revitalization Program, which was adopted in 1999.[13] On the west side of the river, the area from Route 9W to the river is included in the Town of Lloyd Local Waterfront Revitalization Program which was adopted by the Town, approved by the NYSDOS and concurred with by the U.S. Office of Ocean and Coastal Resource Management in 1995.

Because of the involvement of the NYS Office of Parks Recreation and Historic Preservation as the lead agency under the SEQRA, it must be determined that the project is consistent with the Town of Lloyd Local Waterfront Revitalization Program and with the New York State Coastal Policies. A consistency review is also required where state or federal permits are required for the project.

The portion of the Hudson River in the project area includes the "Poughkeepsie Deepwater Habitat, which is Significant Coastal Fish and Wildlife Habitat. A "habitat impairment

[11] Telephone conversation with representatives of USACE, New York District, on January 15, 2008.
[12] http://nyswaterfronts.com/maps_lakes_central1.asp
[13] The City of Poughkeepsie LWRP was not approved by the NYSDOS.

test" must be met for any activity that is subject to consistency review under federal and state laws. A discussion of how the Rehabilitation Alternative meets this test is included in **Section IV.B.3.a.** The project area also includes the Esopus-Lloyd Scenic Area of Statewide Significance (see **Section II.C.1.u.**). The Rehabilitation Alternative would not affect or impair the scenic quality of the SASS as discussed in **Section IV.B.3.p.**

The NYS Office of Parks, Recreation and Historic Preservation as lead agency under SEQR conducted a coastal consistency review for this project. This review addressed both the statewide coastal policies as well as the applicable policies within the Town of Lloyd's LWRP. Based on that review the agency determined that the project would be consistent with state and local coastal management program policies. This determination was forwarded to both the New York Department of State, the Town of Lloyd, and the City of Poughkeepsie for their review and each have concurred with this determination. A completed Coastal Consistency Form (CAF), Supplemental Information to the CAF and OPRHP's certification of consistency are located in **Appendix F**.

i. Historic Resources

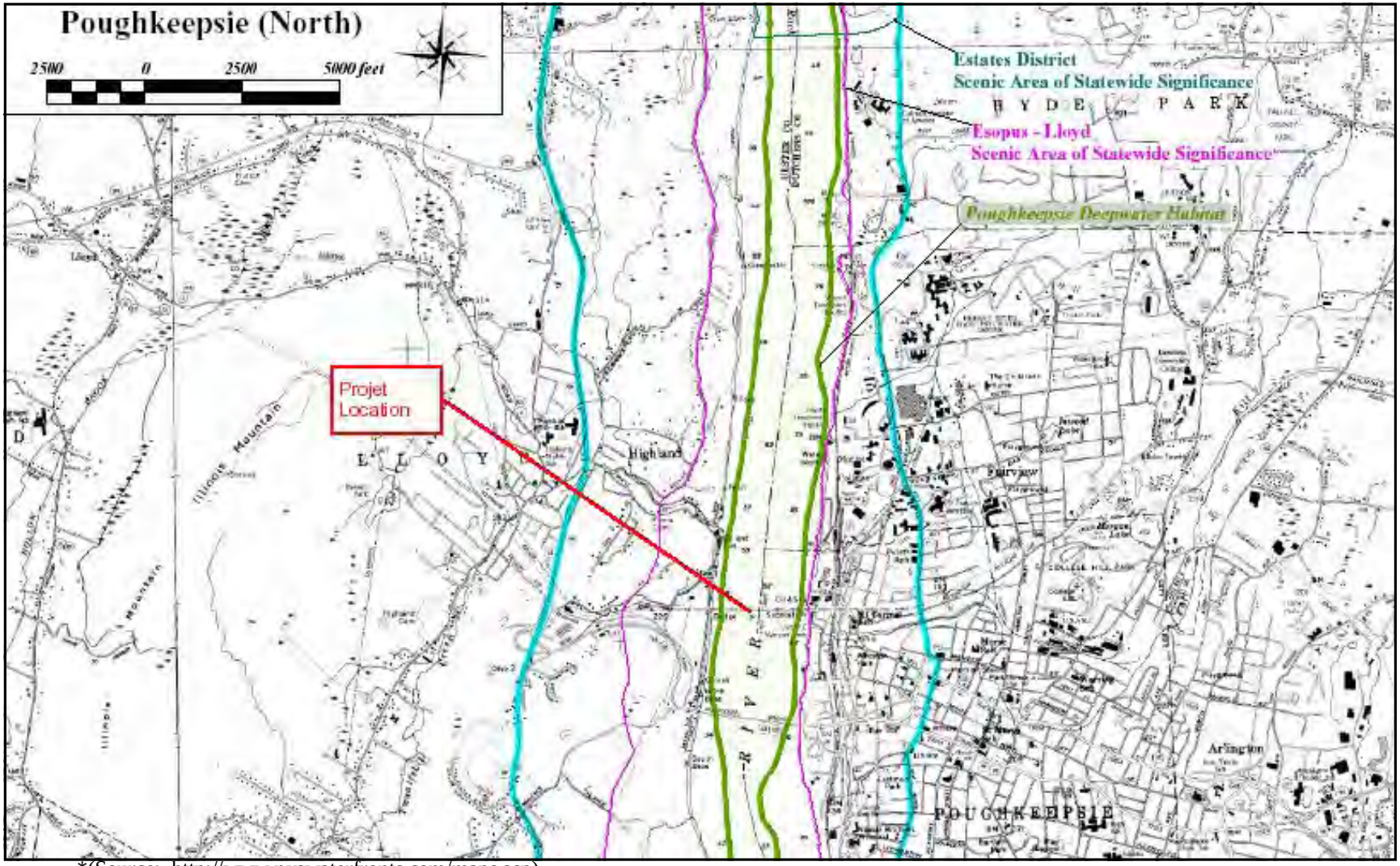
The Poughkeepsie-Highland Railroad Bridge is listed on the National Register of Historic Places. The National Park Service listing date is February 23, 1979. In a letter dated January 25, 2008, the NYS Office of Parks, Recreation and Historic Preservation, which serves as the State Historic Preservation Officer (SHPO) for the consultation process under Section 106 of the Historic Preservation Act, stated the opinion that the proposed project will have No Adverse Effect on the Poughkeepsie Railroad Bridge with the condition that project details, including railings, decking, lighting, vertical access, electrical service, water service, etc. will be developed in consultation with the SHPO.

Projects funded by the FHWA that use land from any historic site of national, state, or local significance are subject to 49 USC 303 of the U. S. Department of Transportation Act, commonly referred to as 4(f). However, 23 CFR 771.135(f) states that "The Administration may determine that section 4(f) requirements to not apply to restoration, rehabilitation, or maintenance of transportation facilities that are on or eligible for the National Register when: (1) Such work will not adversely affect the historic qualities of the facility that caused it to be on or eligible for the National Register, and (2) the SHPO and the Advisory Council on Historic Preservation (ACHP) have been consulted and have not objected to the Administration finding in paragraph(f)(1) of this section." In the January 25, 2008 letter, the SHPO recommend "that the Federal Highway Administration determine that Section 4(f) requirements do not apply to the "Walkway Over the Hudson" in accordance with 23 CFR 771.135(f) because of our opinion that the proposed project will not adversely affect the historic qualities of the structure that caused it to be listed on the National Register."

j. Parks

There are no parks or recreational areas located at the project site. The nearest park on the west side of the river includes the Town of Lloyd Johnson-Iorio Memorial Park. Nearby parks on the east side of the river include the Victor C. Waryas Park, Dongan Place and Pulaski Park. Under the Rehabilitation Alternative, the NYS Office of Parks, Recreation

Figure IV-4: NYS Coastal Zone Mapping for Project Area*



*(Source: http://www.nyswaterfronts.com/maps.asp)

and Historic Preservation will assume responsibility for administering public use of the Walkway Over the Hudson, including staffing, operating costs, and maintaining the trail features and associated public facilities. Ownership of the bridge structure will be transferred to an appropriate New York State entity (not yet determined) which will be responsible for maintaining the bridge deck, steel superstructure, piers, and substructure. A Section 4(f) Evaluation is therefore not required with regard to parkland and there will be no involvement with Section 6(f) of the U. S. Land and Water Conservation Fund Act.

k. Hazardous Waste/Contaminated Material

A hazardous waste-contaminated materials screening was conducted of the project corridor. The screening was conducted in general accordance with NYSDOT environmental procedures. The screening included review of available environmental databases, review of Sanborn® Fire Insurance Maps, site reconnaissance/walk-over and sampling/analysis for lead and asbestos. Details regarding the screening are included in a Technical Report, located in **Appendix F**.

Regulatory database searches were conducted of the project area and included ASTM E 1527-05 listed environmental databases, limited to a 0.25-mile radius around the project alignment. This review was supplemented where applicable with a search using the Federal U.S. EPA Evirofacts web-based databases and the October 2007 NYSDEC Spills Event and Waste web-based databases. A site reconnaissance and walk-over was conducted on October 8, 2007 through October 10, 2007. During the site walkover apparent evidence of dumping and debris was observed. Visible evidence of stained, discolored or distressed vegetation; stained soils; seepage; or recently disturbed soils were observed at the time of the site walk over. Details regarding these observations are included in a Technical Report, located in **Appendix F**.

Accessible portions of the bridge were inspected for the presence of hazardous materials. Substances included the presence of lead and anti-decay products in the railroad ties (creosol and semi volatile compounds). The following materials were confirmed as lead based paint (>0.5% by weight) through analytical testing.

- Bridge Paint West – 10.2% lead
- Bridge Paint Middle – 9.8% lead
- Bridge Paint , L36 Bottom Cord – 8.51% lead
- Bridge Paint East – 8.96% lead

Two wire/cables located under the west side of the bridge, between Ransom Road and the river, in the area of Pier 9, was observed hanging from the structure. The larger wire appeared to be oil-soaked and was sampled for the possible presence of Polychlorinated biphenyls (PCBs). No PCB's were detected. Miscellaneous debris was observed below the bridge structure on both sides of the river. During the site walkover there was no visible evidence of petroleum or chemical storage tanks, fill ports or vent pipes observed on the walkway property. Utilities within the area of the project included typical pole mounted utilities. Also found were signs indicating buried utilities within close proximity to the walkway property.

Grease Paint is located on the bridge structure's east approach truss spans and was sampled for analysis. The grease paint sample was submitted to an environmental laboratory for analysis of PCB's. No PCB's were detected. The grease paint must be handled and disposed of properly taking into account that the associated paint that it is attached to contains lead based paint and asbestos.

The database screening resulted in the identification of three sites of concern in the study corridor. The first is the **Washington Street Sunoco Station** located at 128 Washington Street, which abuts the project site on the north side at the eastern limit of the project area. The station is listed in the database report indicating the presence of underground storage tanks at the site and includes NYSDEC Spill #9800975. The database listing indicates the cleanup of soils at the site in 1998. No closure date for the spill was listed in the database report and the spill is assumed to still be open. Further investigation/testing is recommended for any construction that may take place below the bridge in the vicinity of this site.

A Freedom of Information Letter was sent to the NYSDEC for information regarding the above site. The NYSDEC responded by letter which included the sites NYSDEC Spill Report Form, Inspection Forms, Petroleum Bulk Storage information, Notices of Violations and an Order on Consent. The Spill Report Form indicated that the spill file was last updated August 11, 2004 but there remains no closure date to the Spill Report for this site. The Order on Concent addresses the violations at the station for failing to maintain spill prevention equipment, failing to maintain leak detection and failing to maintain stage I vapor recovery.

The second site of concern is a filling station identified on the Sanborn® maps located south of the railroad bridge and west of Washington Street. It is the current **Foreign Car Specialists** repair shop located at 124 Washington Street. Further investigation/testing is recommended for any construction that may take place below the bridge in the vicinity of this site.

A freedom of information letter was sent to the NYSDEC for information regarding this site. There was no information forwarded regarding the Foreign Car Specialists repair shop.

As an additional source, a freedom of information letter was sent to the Poughkeepsie Fire Department. A response from the fire department indicated that there is no record of an above/underground tank removal or installation for the 124 Washington Street site.

The third site of concern is a listing for the **Poughkeepsie Gas Works (Central Hudson)–North Water Street Manufactured Gas Plant (MGP)** coal tar site. The database report indicated that the location is included in the listing as a former MGP. It is not unusual for coal tar and other MGP wastes to migrate in the subsurface. Further investigation/testing is recommended for any construction that may take place below the bridge near this site.

A freedom of information letter was sent to the NYSDEC for information regarding the above referenced site. There has been no information forwarded regarding the Central Hudson Gas & Electric or Poughkeepsie Gas Works property.

Screening of subsurface soils or for the potential of subsurface impacts in the areas of adjoining properties may be addressed initially during the geotechnical boring program. Depending on boring locations, findings during this phase of walkway evaluation should be able to identify potential concerns from the adjoining properties.

The potential for bridge material to have fallen to the ground below the bridge exists. This debris has the potential to elevate the levels of lead and other contaminants in the soils below the bridge. The evaluation of these soils should be taken into account prior to the development of the area below.

Sediments in the Hudson River bed are known to contain PCB's. Remedial activities are proposed and ongoing at various sections of the river under the jurisdiction of the NYSDEC and the EPA. Rehabilitation and construction of the walkway trail on the bridge surface do not anticipate the disturbance of river sediments. All proposed bridge rehabilitation and construction work is anticipated to be well above the waters surface at this time.

l. Asbestos

The potential for encountering Asbestos Containing Materials (ACM) was assessed during the October 2007 site visit. Accessible materials were evaluated and a Limited Asbestos Containing Materials Survey Report dated January 22, 2008 (see **Appendix F**) was completed. The following materials were collected from the bridge and submitted for analysis:

- Tars on Surfaces
- Rail Plate Insulator Pads
- Deck and Structure Paints
- Sealants/Caulk
- Wire/Cable Jackets

The following materials tested positive for asbestos (>1% by weight).

- Sealant – steel bridge foot to concrete or stone pier.
  - West end of Bridge - 7% Chrysotile
  - East end of the Bridge – 26% Chrysotile
- Bridge Paint West End – 3% Actinolite/Tremolite
- Tar on Railroad Ties, Middle of Bridge – 19% Chrysotile
- Tar on Railroad Ties, West end of Bridge – 26% Chrysotile
- Tar on Wood Railing Base – 18% Chrysotile

Asbestos abatement procedures will need to be coordinated in removing these materials from the bridge.

The potential for bridge material to have fallen to the ground below the bridge exists. This debris has the potential to elevate the levels of ACM's and other contaminants in the soils below the bridge. The evaluation of these soils should be taken into account prior to the development of the area below.

m. Air Quality

An air quality analysis is not necessary since this project will not increase traffic volumes, reduce source-receptor distances or change other existing conditions to such a degree as to jeopardize attainment of the National Ambient Air Quality Standards.

n. Noise

The project does not qualify as a Type I project under 23 CFR 772 and a noise study was therefore not performed.

o. Energy

The proposed project will not significantly affect: energy consumption in the project area during and after construction; there will be no increase in vehicle miles of travel (VMT); no additional vehicle trips; and no change in land use development patterns, travel patterns or vehicle operating speeds. Therefore an energy analysis is not required.

p. Farmlands

The Rehabilitation Alternative would not involve the acquisition of any undeveloped property. There is therefore no further review required under the Federal Farmland Protection Act. The east side of the Rehabilitation Alternative is located in an urban area, and there are no Agricultural Districts in the vicinity of the project. On the west side, there are no Agricultural Districts in the vicinity of the project. Furthermore, there is no property acquisition anticipated from private landowners for the Rehabilitation Alternative. Therefore there is no further review required under Article 25-AA of the New York State Agricultural and Markets Law Section 305(4).

q. Visual Impact

No significant visual impacts are expected from this project. Due to the expansive viewing distances to the bridge from either the river or the shorelines, and from the limited and/or restricted views of the bridge from land, there will be no perceptible change to the bridge structure. The change in railing type and the addition of light poles will be a very minor, if perceptible, change to the current bridge. In addition, close views of the bridge are generally from the base of the bridge which affords views largely of the underside. If visible at all, new elements on the surface of the bridge will have varying degrees of visibility and will not be significant.

r. Permits and Approvals

The following permits will be obtained prior to contract advertisement:

(1) NYSDEC SPDES General Permit for Stormwater Discharges from Construction Activities (GP-0-08-001). This is needed because construction activities are expected to disturb more than one acre of soil.

(2) Permits from CSX Transportation, Amtrak and Metro-North Railroads are required because the project will involve work over these railroads.

(3) Easement from Central Hudson Electric and Gas. This will be required for access to the project on the west side from Haviland Road.

(4) Possible City of Poughkeepsie permits may be needed for parking areas/access to the project on the east side.

(5) Possible Town of Lloyd permits may be needed for parking areas/access to the project on the west side.

(6) NYSDOT Highway Work Permit. This permit will be required because the project will involve work over State roadways as identified in **Section II.C.1.f.**

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V. PROJECT COORDINATION

The Walkway Over the Hudson has performed various public outreach activities since 1995. These events included information tables at public events, newspaper articles in the New York Times and Poughkeepsie Journal, and half-hour informational television session on local public and cable stations. The Walkway Over the Hudson has also maintained their website to help keep the public informed of the status of the project.

Many agencies, both public and private, have been involved with this project. These involved agencies included the Walkway Over the Hudson, Dyson Foundation, NYS Department of Transportation, NYS Bridge Authority, National Parks Service, Department of State, and the NYS Office of Parks, Recreation and Historic Preservation. Coordination amongst all of these agencies has been critical to the progression of the project.

The following is a listing of pertinent project correspondence with federal, state and local agencies and the public. This correspondence summarizes the coordination process and the key issues and pertinent information received from the public and government agencies. A copy of each of the project correspondence listed below can be found in **Appendix G**.

Table V-1: Project Coordination

Date	From	To	Subject
September 26, 2007			Brainstorming Session
October 18, 2007	NYS Department of Environmental Conservation	Bergmann Associates	NYS Natural Heritage Information
October 21, 2007	US Fish & Wildlife Service	Bergmann Associates	Threatened and Endangered Species
November 12, 2007	NYS Office of Parks, Recreation, and Historic Preservation	Representatives of Involved/Interested Agencies	Lead Agency Designation
January 9, 2008			Public Information Meeting
January 25, 2008	City of Poughkeepsie, Mayor's Office	NYS Office of Parks, Recreation, and Historic Preservation	Parking in the City of Poughkeepsie
January 25, 2008	NYS Office of Parks, Recreation, and Historic Preservation - Historic Preservation Field Services Bureau	Bergmann Associates	Historic Structures, Park Services
February 15, 2008	Town of Lloyd Supervisor	Bergmann Associates	Parking in the Town of Lloyd
February 19, 2008	Town of Lloyd Supervisor	Bergmann Associates	Local Waterfront Reviatlization Plan Consistency

Table V-2: Public Comments and Responses

Comment Number	Comment	Response
1	Happy that this project is becoming a reality.	Thank you for the support.
2	The rust looks very bad where the steel meets the rock when you pass under the bridge by boat. Will this project do any painting of the steel on the bridge or will it remain rust colored?	The bridge will not be painted as part of this project.
3	What happened to the money donated for planks through Bill Sepe?	The money donated for the bridge planks was been used for preliminary bridge studies. The Walkway Over the Hudson has a record of the contributors and is in the process of listing these donors on its website at www.walkway.org. Additional means of acknowledging these donors for their foresight and support are being discussed.
4	Seems to me a "provision" for light rail use. A single line Shuttle perhaps. A longer useful season. Parking for users? Fence not to obstruct cameras. A beautiful bridge at Senasqua Rd., Croton, has 1 inch grid chain-no way to shoot through it. Police call boxes. Colored lights please. Expand "park" like grounds at each end.	The Walkway Over the Hudson will be used for pedestrian and bicycle purposes. Details of the Walkway operational plan have not been finalized. The seasonal usage of the bridge has not yet been decided. There will be no fencing located along the main span of the bridge. A 4' 6" pedestrian hand rail will be provided. Suicide prevention call boxes will be located on the bridge. These phones provide a direct connection to local police. The lighting plan for the Walkway includes the use of only standard white lighting at this time. Lighting will be provided only to allow safe crossing of the bridge at night, while minimizing light pollution to the surrounding community. The Walkway Over the Hudson Project will be limited to the Highland-Poughkeepsie Railroad Bridge. The trail will remain on the existing rail bed, with access provided to the Franny Reese Memorial Park.
5	Will people really ride bikes in that wind?	The biking community has shown immense support for this project.
6	Phones & other measures that have been taken elsewhere I.e. Mid-Hudson to reduce/ prevent suicide activity	Suicide prevention call boxes will be located on the bridge. These phones provide a direct connection to local police.

Comment Number	Comment	Response
7	First aid station	No first aid station is planned at this time. Two call boxes will be located on the bridge. These phones provide a direct connection to local police. Emergency vehicles will have access to the Walkway if necessary.
8	Something green i.e. tall grasses that do well in strong wind. Without greenery it feels like something is missing	The deck of the Walkway will be constructed of prefabricated concrete panels. There are no provisions for planters on the deck at this time.
9	Must have restrooms, not a johnny on the spot.	Initially, portable restrooms will be available. New York State Parks plans to construct permanent restroom facilities that will be either conventional or composting.
10	No alcohol. That would be a mess. Selling alcohol encourages drinking which is a danger. Littering of bottles would also be a risk.	The Walkway Over the Hudson will become a New York State Park and will follow New York State Parks rules and regulations regarding alcohol.
11	Nice presentations- sounds pleasurable.	Thank you for the support.
12	Long term plans should include the possibility of people using the bridge during the winter months by enclosing it. This would make the area a magnet for tourists in the winter as well as in the summer.	Details of the Walkway operational plan have not been finalized. The seasonal usage and snow removal plan have not yet been decided.
13	The city of Poughkeepsie would benefit from the increased tourism (as would Dutchess County) due to the bridge. They may also be able to help fund the project.	Economic benefits are projected for the area surrounding the Walkway as found in the Economic and Fiscal Impact Report. The project will be funded by State funding, as well as private donations. Both Dutchess County and the City of Poughkeepsie fully support the development of the Walkway Over the Hudson. They have each offered valuable input on the on the project.
14	I live next to the bridge on the west approach. As such I am concerned about privacy. Taller fencing/ privacy screen should be put up to maintain privacy of those living next to the structure.	There are no plans for a privacy screen at this time. Security cameras will be located on the Walkway. Officers will patrol the area as necessary. The design team will meet with local residents to address their concerns.
15	Definitely do the glass panels. I would urge you to do whatever parts of the "icon" plan would be needed to avoid throwing away materials or re-working portions if you (actually we) want to upgrade to "icon" in the future.	The portals will be included in the final design of the Walkway.
16	Sounds great, lets get started on it!	Thank you for the support.

Comment Number	Comment	Response
17	All my life I have had a strong affection for the Poughkeepsie Railroad Bridge. My main interest is that it be preserved. Walkway Over the Hudson seems to be a great way to preserve and enhance the bridge. I am happy to support the effort.	Thank you for the support.
18	This is a great endeavor and I have been following this story for quite some time. It was not until this summer when my son and I ventured across the Mid-Hudson Bridge it really peaked my interests. What a great way to recycle one of the great structures of the world. The economic possibilities are endless. I will do my best to spread the word about this great idea & venture.	Thank you for the support.
19	I'm absolutely thrilled that this dream is becoming real.	Thank you for the support.
20	I'm wondering about snow removal plans. It would be nice if at least 1/3 of the bridge could keep its snow cover for benefit of cross country skiers. Also, their should be receptacles at both ends of the bridge for recycling and trash.	Details of the Walkway operational plan have not been finalized. The seasonal usage and snow removal plan have not yet been decided. A "carry in, carry out" policy will be encouraged. However, trash receptacles will be located at each end of the bridge for convenience.
21	You have to anticipate possibility of suicides. Please don't try to prevent this by high fences. But having a sign similar to that of on the Mid-Hudson Bridge giving a number to call if you are depressed & perhaps some leaflets available at the entrances would be a good preventing measure.	There will be no fencing located along the main span of the bridge. A 4' 6" pedestrian hand rail will be provided. Suicide prevention call boxes will be located on the bridge. These phones provide a direct connection to local police.
22	Parker and Washington St.'s intersect so it sounds like the same access point. If they're going to access it from there, there is space right up the street (Parker) to make a parking lot if they choose. I don't see how people could access it from the river front, unless they're installing elevators, no one is climbing all those stairs.	Parking near the Washington Street elevator will be provided under the Walkway, between Washington and Talmadge Streets. This elevator will be ADA accessible as well as a stairway available. Additional parking in the City of Poughkeepsie is being coordinated with the Mayor's Office. An elevator is planned for the vicinity of the Children's Museum when future funding becomes available.
23	Just what all the home owners need in this area. Strangers walking through their backyard, with the occasional bottle or rock being tossed off the walkway. Unless you own a home near the bridge you can not imagine the negative impact this project is going to have on their properties and quality of life. Right	There are no plans for a privacy screen at this time. Security cameras will be located on the Walkway. Officers will patrol the area as necessary. The design team will meet with local residents to address their concerns. The design team is currently looking into the cost of additional vandal fencing at this time.

Comment Number	Comment	Response
24	Take public transportation to the access points on Parker and Washington Streets. Dream on.	Parking near the Washington Street elevator will be provided under the Walkway, between Washington and Talmadge Streets. This elevator will be ADA accessible as well as a stairway available. Additional parking in the City of Poughkeepsie is being coordinated with the Mayor's Office. An elevator is planned for the vicinity of the Children's Museum when future funding becomes available. The City of Poughkeepsie, in conjunction with the design team, will continue to work with the City's public transportation authority to provide transportation between the train station and the Washington Street access point.
25	If you noticed on the draft plan there were more than one access point on the east side of the bridge. There was another near Parker Ave. also. Poughkeepsie does have public transportation and I'm sure there will be accommodation's made to make a stop at the Washington location.	Parking near the Washington Street elevator will be provided under the Walkway, between Washington and Talmadge Streets. This elevator will be ADA accessible as well as a stairway available. Additional parking in the City of Poughkeepsie is being coordinated with the Mayor's Office. The City of Poughkeepsie, in conjunction with the design team, will continue to work with the City's public transportation authority to provide transportation between the train station and the Washington Street access point. An elevator is planned for the vicinity of the Children's Museum when future funding becomes available.
26	Rusting hulk…hmmmm I guess it would be better to pay someone 50 million to take it down. Or better still let it fall down and create much more in litigation than to try and do something and attract some regional income to this area. I think we all saw what happened when this region placed all it's eggs into one the IBM basket. The bridge is within walking distance to the train station and as the presentation showed most of the revenue will come from visitors from outside the area. A host of people and business's will benefit and they too are tax payers.	The Economic & Fiscal Impact Report has been completed and is include in Appendix I. Money spent by local users is not included as an economic benefit, as this money would likely be spent elsewhere in the region. Visitors from outside Dutchess and Ulster Counties would be bringing new revenues to the region.
27	It's wonderful to see a dream come true-I was an active member and I can no longer drive at night. Every time I cross the Mid-Hudson Bridge, and see the bridge-it's awesome. My daughter lives in Hyde Park so I get to see that great view and see it future. I worked with Bill Sepe for a while. I appreciate all the info I get by mail and I enjoyed the book Bridging the Hudson by Carleton Mabee.	Thank you for the support.

Comment Number	Comment	Response
28	I want to see a connection to the rail trail which dead ends in Highland and connection in Poughkeepsie to the new rail trail in Dutchess County. Will there be tolls charged? Will there be time limitations and seasonal limitations? The Adirondack Mt. Club is looking forward to this spectacular loop walk. Cross Mid-Hudson Bridge and then up over RR Bridge and back to my car or vice versa. To show this on a detailed map as I am hazy about the connection on the Poughkeepsie side. Also the Bird Club will take advantage of the river views.	In Highland, a connecting trail is in the planning stages along the CSX rail bed between Haviland Road and Commercial Avenue. This section of trail is expected to be open for use in time for the Walkway Over the Hudson opening. In Poughkeepsie, Dutchess County is currently in negotiations to purchase the 1.3 miles of CSX rail bed that would connect the Walkway to the Dutchess County Trail system at Morgan Lake.
29	I believe completing the walkway will be a great asset to the Mid-Hudson Valley. It will attract tourists and be a boom to the area. It is a wonderful way to experience the beauty of the river.	Thank you for the support.
30	1. This will well serve the area residents. 2. It will, with the historic estates, colleges and museums make the area a tourist destination. 3. It is a welcome change in the use of public funds. 4. It will be a boost for the state, showing it can get good things done.	Thank you for the support.
31	The presentation is the best and most complete of any public hearing I have ever attended. My 20 year career involved many public hearings involving major financial issues, and the Walkway hearing justified the entire project and public benefit. You are to be congratulated. I look forward to more events, and the chance to walk over the walkway.	Thank you for the support.
32	We would like to hear more about plans for access to the Walkway from the west (Highland Ulster Co.) side of the river.	Access from Highland will be provided via an at-grade/walk-on access point. A parking lot will be provided at this location, as well as a striped on-street parking lane.
33	I think the bridge should have structure illuminating lighting not just handrail lighting. If it is a tradeoff eliminate the handrail lighting.	Both handrail and post lighting are being explored at this time. Your suggestion will be taken into consideration during the decision process.
34	This is a great idea.	Thank you for the support.
35	If there is to be only one elevator access on the east side, I believe that it should be near the river (e.g. Water St.) not Washington Street. The river will be a focal point for visitors, and I believe that this is where the access to the bridge should be.	Parking near the Washington Street elevator will be provided under the Walkway, between Washington and Talmadge Streets. This elevator will be ADA accessible as well as a stairway available. Additional parking in the City of Poughkeepsie is being coordinated with the Mayor's Office. An elevator is planned for the vicinity of the Children's Museum when future funding becomes available.

Comment Number	Comment	Response
36	I was surprised to see that an access point on Washington Street in Poughkeepsie is part of the plan. Apparently, no one has thought about where (according the article) the "267,700 visitors per year" are going to park their cars. If you are familiar with this area of the city, you well know the parking situation on the surrounding streets. It's been a big issue with local residents/renters for quite some time. There needs to be some careful thought put into having an access in an area where there is no public parking lot. Perhaps the walkway project should wait until the funding is in place for the access point to be where it belongs, which is on the river front. Instead, it appears that this project is being rushed to meet a September 2009 anniversary deadline. The main access point for handicapped and bikes belongs on the riverfront (for multiple reasons other than the parking issues). This was not addressed during the meeting last night. I would like to find out what the thought process is for this issue.	Parking near the Washington Street elevator will be provided under the Walkway, between Washington and Talmadge Streets. This elevator will be ADA accessible as well as a stairway available. Additional parking in the City of Poughkeepsie is being coordinated with the Mayor's Office. An elevator is planned for the vicinity of the Children's Museum when future funding becomes available.
37	Our congratulations on the work done so far on the Walkway Over The Hudson.	Thank you for the support.

Comment Number	Comment	Response
38	There is a way to add another virtue to the many this project already possesses: to serve as a showcase for a new renewable energy technology which my company hopes to manufacture in the Hudson Valley soon. Please take a look at the pictures below. The Aerotecture wind turbine has been installed at several high-profile locations in Chicago by its inventor, but has not yet been deployed anywhere East of the Mississippi. While designed primarily to provide distributed generation on urban commercial rooftops, it has also been envisioned as appropriate for bridge, thruway, and seafront boardwalk installations, all of which imply public sector sites. The first picture below envisions the turbine underneath a suspension bridge; it would be even less intrusive under the Poughkeepsie Bridge. The river would act as a corridor to augment the wind speed normally encountered in the valley. We estimate that some 300 turbines could generate between 600,000 and 800,000 kWh per year, meeting the power needs of the bridge lighting and perhaps other uses as well. Please see the Aerotecture website at www.aerotecture.com As the East Coast representative for Aerotecture, we at Direct Global Power/AeroCity would propose working on this with your team and with Central Hudson Power, the most progressive utility in the State. Direct Global Power is a part owner of Prism Solar Technologies, a new PV module manufacturing company located in Kingston. We know that Central Hudson supports renewable energy, and we would work closely with the company and with you to make the Walkway not only a commemoration of the past, but a signpost to the future and a boost to efforts to make the Hudson Valley the renewable energy capital of the State and the nation.	Thank you for the suggestions. We will consider your recommendations during the design phase of the project.
39	I very much look forward to the conversion of the Poughkeepsie Highland Railroad Bridge into a pedestrian walkway. I believe this project will benefit Poughkeepsie, Dutchess and Ulster Counties, the Hudson Valley region, and New York State as a whole.	Thank you for the support.

Comment Number	Comment	Response
40	I hope the final plans will retain as many of the historical elements as possible. For example, while the existing railings are clearly insufficient for a pedestrian walkway, I hope they could be used in conjunction with new more appropriate railings, possibly by placing the new railings either in front of or behind the existing railings. At a minimum I hope the old railings could be relocated to some other more appropriate location on the structure. In addition, I hope a section of the existing track and walkway could be saved, either under a new glass walkway or in a small cordoned off area, so visitors can see how the facility worked as a railroad bridge. Retaining features such as the firefighting system is critical to ensuring the bridge serves not just as a scenic attraction, but as an historic one as well.	For safety purposes, the existing hand rails will be removed, and replaced will a similar, industrial style handrail that meets current pedestrian trail safety standards. Unfortunately, the existing trail bed/ties had been treated with fire retardants to reduce fire damage caused by train sparks, and emissions from the trains have contaminated the ties. They must be disposed of properly to prevent harm to Walkway users.
41	I like the option that was chosen and how the walkway will look once completed.	Thank you for the support.
42	One question I had concerned how visitors will access the entrances on the Poughkeepsie side. I expect that out of town visitors will arrive by train or will drive and be parking the various lots across the city, which are not really close to where the planned elevators will be installed. Even the train station parking isn't that close to the elevators and during the week is usually full, including Rinaldi Blvd. Visitors parking in the city lots and those coming up by train will have to walk some distance along city streets to get to the entrances. Will the city provide some type of free transportation from the parking areas and train station to the Washington Street and waterfront elevators? This transportation could also be expanded to include the streets on which the various restaurants are located, to encourage visitors to make use of them, along with a map showing their locations and types of food they provide.	Parking near the Washington Street elevator will be provided under the Walkway, between Washington and Talmadge Streets. This elevator will be ADA accessible as well as a stairway available. Additional parking in the City of Poughkeepsie is being coordinated with the Mayor's Office. The City of Poughkeepsie, in conjunction with the design team, will continue to work with the City's public transportation authority to provide transportation between the train station and the Washington Street access point. An elevator is planned for the vicinity of the Children's Museum when future funding becomes available. The City currently has no plans to provide free transportation to the Washington Street access point.
43	I think it is a great idea! I've been watching this project since I was a teenager. I'm an avid outdoorsman and cyclist and I feel that the completion of the Walkway Over the Hudson will be a great asset to our community. I'm glad to see that it is making it this far and I hope to see its completion very soon. The glass sections would be very exciting and if it is at all feasible then I think they should be added. It will allow everyone to see the great engineering of the bridge up close and personal.	Thank you for the support.

Comment Number	Comment	Response
44	I think this project is fantastic and the way you are going about it is right on! If you can keep those glass panels that will allow people to look down at the river in your plans I think that would be a great feature. Keep up the fabulous work! Tonight's meeting was extremely informative and well organized.	Thank you for the support.
45	We can't wait! We understand these are expenses involved but we think there should be as many access points as possible. For example people arriving in Poughkeepsie by train are unlikely to walk all the way to Washington St. in order to double back to the river.	Parking near the Washington Street elevator will be provided under the Walkway, between Washington and Talmadge Streets. This elevator will be ADA accessible as well as a stairway available. Additional parking in the City of Poughkeepsie is being coordinated with the Mayor's Office. The City of Poughkeepsie, in conjunction with the design team, will continue to work with the City's public transportation authority to provide transportation between the train station and the Washington Street access point. An elevator is planned for the vicinity of the Children's Museum when future funding becomes available.
46	This is a wonderful project that will do much to continue the revitalization of the Mid-Hudson Valley, generally, and the city of Poughkeepsie, specifically. I am especially excited about the linking of the four area colleges with a walk/bike trail. The bridge is an integral part of our lives. Thank you for doing this!	Thank you for the support.
47	Have lived in the Mid-Hudson region since 1966- Wappinger Falls to Hyde Park and most recently New Paltz. Very excited about the Walkway Over the Hudson project. To see the railroad bridge begin to come to life as a pedestrian/bicycle/walkway- chance for all to gaze out & see the beautiful Hudson River. A real prize for the region- economically, locally, environmentally, etc. Opportunities to connect the various rail trails etc. in Ulster/Dutchess.	Thank you for the support.
48	Please include comfort stations on both sides (or the middle) of the walkway.	Initially, portable restrooms will be available. New York State Parks plans to construct permanent restroom facilities that will be either conventional or composting.
49	The person with the original idea for the walkway needs to be acknowledged- Bill Sepe	Bill Sepe has been a great asset to this project.
50	Presentation was terrific! The ideas for development & management seem very good. I like the idea of having the state and national parks involved. I agree to the "preferred option".	Thank you for the support.

Comment Number	Comment	Response
51	I hope their will be some landscaping included in the plan.	The deck of the Walkway will be constructed of prefabricated concrete panels. There are no provisions for planters on the deck at this time.
52	Let's get ready for the 2009 celebration with an elevator (at least one). See the Storm King Art Center in Mountainville, NY for some ideas. They have a great outdoor elevator.	Parking near the Washington Street elevator will be provided under the Walkway, between Washington and Talmadge Streets. This elevator will be ADA accessible as well as a stairway available. Additional parking in the City of Poughkeepsie is being coordinated with the Mayor's Office. An elevator is planned for the vicinity of the Children's Museum when future funding becomes available.
53	I very much enjoyed the meeting Wednesday evening. The Bergmann Associates representatives did a great job of answering all my questions about particulars of the project, especially the main presenter.	Thank you for the support.
54	I spoke with Mitch Markay and he recalled my email from several weeks ago regarding architectural services and said there are some design issues I might be able to help with. I would like to volunteer my time to assist you with these design elements.	Thank you for the support.
55	This project will be an excellent addition to the community and will be a major asset to the area. It should proceed and be completed according to the schedule outlined in the proposal. I look forward to seeing the completed walkway and using it.	Thank you for the support.
56	I think the Walkway Over the Hudson is a great project!	Thank you for the support.
57	Concern- How to address the issue of the bridges attractiveness to those with a suicide bent.	Suicide prevention call boxes will be located on the bridge. These phones provide a direct connection to local police.
58	Some day I would like to see a continual trail that would link into our own New Paltz/ Cardinal trail	In Highland, a connecting trail is in the planning stages along the CSX rail bed between Haviland Road and Commercial Avenue. This section of trail is expected to be open for use in time for the Walkway Over the Hudson opening. In Poughkeepsie, Dutchess County is currently in negotiations to purchase the 1.3 miles of CSX rail bed that would connect the Walkway to the Dutchess County Trail system at Morgan Lake.
59	I assume there will be rest rooms at each end where sewer facilities can be connected. There certainly should be!	Initially, portable restrooms will be available. New York State Parks plans to construct permanent restroom facilities that will be either conventional or composting.

Comment Number	Comment	Response
60	It looks great! Keep up the good work.	Thank you for the support.
61	As a long time resident I am looking forward to this new look. The meeting was very informative. Good play on your part not to offer refreshments. Unless you could have taken a couple fishes and be able to feed the multitudes.	Thank you for the support.
62	Has anyone thought to recognize Bill Sepe for his long and tired less effort to get/keep this project viable.	Bill Sepe has been a great asset to this project. His efforts will not be forgotten.
63	Wonderful project- Thanks	Thank you for the support.
64	How will you remove snow? Salt should not be used. Fence looks low, might want to consider 5 foot fence and curved inward to prevent climbing over.	Details of the Walkway operational plan have not been finalized. The hours of operation and snow removal plan have not yet been decided. There will be no fencing located along the main span of the bridge to preserve the views from the top of the bridge. A 4' 6" pedestrian hand rail will be provided. The installation of a curved top rail is being considered. Suicide prevention call boxes will be located on the bridge. These phones provide a direct connection to local police.
65	I was very pleased by the information received and the large turnout. I found the visual displays and the presentation were done at a very professional level.	Thank you for the support.
66	I have a couple of suggestions with respect to retaining the bridge as a "railroad" bridge as it is converted to a walkway. I was hoping that perhaps the platform could be put down on top of the rail that is still on the bridge so that the rail was perpetually still part of the bridge as a testimonial to its former use. While speaking to one of the engineers, I was told this was not possible from an engineering point of view. May I suggest that some of the rail currently on the bridge that will be removed be used in the construction of some historical kiosks at various points along the walkway to commemorate and show respect for its former users, the people who built the bridge, & the people who manned the trains that ran over it for so many generations. I don't know what the plans are for the width of the bicycle path that will run down the center of the walkway. I'm sure that it has to be wider than 4 ft 8 1/2 in. but if it could be some multiple of 4 ft 8 1/2 in., that would also be a good testimonial to its rail use; 4 ft 8 1/2 in. the width of the standard gauge of N. American RR.	Unfortunately, the existing trail bed/ties had been treated with fire retardants to reduce fire damage caused by train sparks, and emissions from the trains have contaminated the ties. They must be disposed of properly to prevent harm to Walkway users. The bicycle lanes must be a minimum of 5 feet wide in each direction to conform to New York State standards for bike lanes.

Comment Number	Comment	Response
67	Out of respect for the historical construction of the bridge the practice of cutting edge technology should be incorporated into the new walkway. Specifically relating to the comment made about this being a "green" project, the lighting should be powered by solar cells or some other form of renewal energy. The feasibility also of using alternative energy sources to power the elevators or elevators at the east end should be examined.	The use of solar power for lighting is being evaluated. The installation of park benches made of recycled plastic is also being examined.
68	When showing the artist sketch of the proposed walkway, mention was made of the glass panels in the walkway that could be used to see down through the infrastructure of the bridge. I got the impression that these were considered to be a nice idea, but expendable. I find them more then a nice idea. I do not see them as expendable. I think that this is a fantastic idea and something that should be retained.	The portals will be included in the final design of the Walkway.
69	A bridge anecdote: Back in the early 1970's, as a member of the Clearwater crew, we invented the Poughkeepsie Railroad Bridge Weave. When sailing out of Poughkeepsie, if we had opposing brisk wind and current and could pretty much sail wherever we wanted to, we made it a point to do a series of figure 8 movements going across the river using the bridge piers in lieu of slalom flags. We had no trouble under the trusses.	We are happy to hear of additional uses for this historic structure.
70	The idea of elevators on the Poughkeepsie side is nice but what happens when there is a power outage or mechanical breakdown? Will there be stairs or ramps?	Stairs will be provided at each elevator location.
71	I am a biker and would like to see a continuous path which hooks up to the Dutchess rail trail to have a gradual graded approach to the bridge. Concessions stands should be off the bridge on either side so that the lanes of through bikers is not impeded. Concessions stands on the bridge will lead to congestion and bottle necks of loitering people, and could lead to injury. Overall the project looks great!	In Highland, a connecting trail is in the planning stages along the CSX rail bed between Haviland Road and Commercial Avenue. This section of trail is expected to be open for use in time for the Walkway Over the Hudson opening. In Poughkeepsie, Dutchess County is currently in negotiations to purchase the 1.3 miles of CSX rail bed that would connect the Walkway to the Dutchess County Trail system at Morgan Lake. Vendors will be located on the main span of the bridge, but will be limited to the pedestrian areas. The bike lane will be clearly delineated to avoid pedestrian/bicycle incidents.

Comment Number	Comment	Response
72	Put a digital camera on the Railroad bridge touring the Poughkeepsie bridge for a birds eye view. Utilize Parks Department website to gain access to it. Then have a page to click on if a person wants to donate to WOTH. Consider installing wind and solar as power source for the elevators. Insure complete accessibility for the disabled.	Thank you for the suggestions. We will consider your recommendations during the design phase of the project. The Walkway and access points will be handicap accessible and all features will be ADA compliant.
73	If there is room it would be good to have separate lanes for buses, in-line skaters, & pedestrians. And ramps to get onto bridge. I hope there will be viewing platforms that stretch out a bit onto benches that face the river or backless benches so people can see either way. I hope whatever fencing you have, it won't block the view of the river. What about a crossing for skiers? A ski lane after a snowfall in the winter?	The Walkway will be a pedestrian facility. Buses will not be allowed on the trail. All pedestrians, bicyclists, and in-line skaters will be able to access the Walkway via at-grade connections, elevators, and stairs. Benches will be located along the main span of the bridge to allow visitors to sit and admire the view of the Hudson River. There will be no fencing located along the main span of the bridge. A 4' 6" pedestrian hand rail will be provided.
74	Years ago I sent money for a plank with my friends names on it. I hope you still have records for those planks.	The money donated for the bridge planks was been used for preliminary bridge studies. The Walkway Over the Hudson has a record of the contributors and is in the process of listing these donors on its website at www.walkway.org. Additional means of acknowledging these donors for their foresight and support are being discussed.
75	I am curious if there is any significant involvement in the new walkway effort from railroad organizations. I think involvement from various RR historical societies, and also potentially from RR related companies today, would provide valuable input and also may be a source of additional funding for the project. I think turning the bridge into a walkway and state park assets are a good idea. However, I would like to see linkages to the bridges RR heritage in the final design & implementation. This could be as simple as railroad theme accents in the design or the walkway & historical plaques discussing the RR history of the bridge. I'm sure more elaborate enhancements could be conceived such as multimedia kiosks or even RR exhibition on the shore.	The design team is working closely with the New York State Office of Parks, Recreation, and Historic Preservation to preserve the historic and industrial nature of the bridge. Kiosks providing information on both the natural and historic resources of the Walkway area will be provided.

Comment Number	Comment	Response
76	As a memorial related to the bridge and also as an additional way to raise funding for the project, has any thought been given to the idea of allowing those connected with the RR bridge over it's long history to be memorialized on plaques, "bricks" or benches. I believe something similar was done at Ellis Island where family members of Ellis Island immigrants were able to place the names of the relatives on display at the facility.	Thank you for the suggestions. We will consider your recommendations during the design phase of the project.
77	It was briefly mentioned in the presentation that the project would look to utilize "green" (environmentally friendly) principles where possible. I was curious to learn more details about the "green" items currently being planned.	The use of solar power for lighting is being evaluated, as well as use of park benches made of recycled plastic. The use of composting restrooms is being evaluated.
78	As you are likely well aware the Hudson River in that area has significant recreational and commercial boating activity. I think that it would enhance the overall project if boat dock facilities adjacent to the bridge could be included in the state park facility. This would provide additional "traffic" for the park and the surrounding area. Linkages could be made with existing tour boats to include a stop at the new state park as part of their itinerary. A new ferry service could also be instituted as part of the state park to enhance the experience...walk across the bridge and take a ferry back.	Thank you for the suggestion. We will consider your recommendation during the design phase of the project.
79	Has any thought been given to information technology that would be available at the park? A simple example would be to make wireless internet access available across the bridge. Visitors could sit on a bench using their laptops while enjoying the air and the view. Perhaps a local university such as Marist could install and maintain the systems of the park. I think providing web based cameras would also be advantageous. The cameras could provide live views over the internet and show weather and the activity on the river & shorelines. Again, the university might be interested in maintaining & providing this service. Naturally cameras (focused on the bridge & structure) could also be utilized for safety and security purposes.	Thank you for the suggestion. We will consider your recommendation during the design phase of the project. There is no current plan for including internet access or public cameras on the Walkway. Security cameras will be in place, but not accessible by the public.
80	It seems that a ramp rather than an elevator would be a better way to get up onto the walkway. I have used circular ramps with my bicycle in Buffalo. The advantage is that ramps do not break down or need as frequent maintenance as an elevator. They get cleaned when it rains, don't get stuck, etc.	While a ramp would be another option for Walkway access, they require more surface area. Access locations are currently limited to the existing railroad right-of-way, and would not allow for the construction of a ramp.

Comment Number	Comment	Response
81	A concrete surface is dangerous for runners' joints. I was hoping to be able to incorporate the walkway into my training program. Is it possible to have a narrow strip of softer material run the length of the walkway? Even macadam would be better than concrete but a rubberized track surface would be ideal.	Thank you for the suggestion. We will consider your recommendation during the design phase of the project.
82	Will there be suicide hotline phones installed?	Suicide prevention call boxes will be located on the bridge. These phones provide a direct connection to local police.
83	Thank you for working on this valuable project!	Thank you for the support.
84	Residents expressed concerns about the difficulty it will be to rely on the city on-street system for parking.	Parking near the Washington Street elevator will be provided under the Walkway, between Washington and Talmadge Streets. Additional parking in the City of Poughkeepsie is being coordinated with the Mayor's Office.
85	A resident wanted to know what will happen to "her rail tie." Apparently, and not too long ago, she donated $100 to have her name engraved on a rail tie on the bridge.	The money donated for the bridge planks was been used for preliminary bridge studies. The Walkway Over the Hudson has a record of the contributors and is in the process of listing these donors on its website at www.walkway.org. Additional means of acknowledging these donors for their foresight and support are being discussed.
86	Privacy fencing was a frequent question for adjacent residents.	There are no plans for a privacy screen at this time. Security cameras will be located on the Walkway. Officers will patrol the area as necessary. The design team will meet with local residents to address their concerns.
87	Audra Barton (Executive Vice President & CFO, Poughkeepsie Area Chamber of Commerce) expressed concern about the lack of parking around Washington Street. They mentioned that between Parker Avenue and the future rail trail section just east of Washington Street lies several vacant lots that would offer much more parking.	Parking near the Washington Street elevator will be provided under the Walkway, between Washington and Talmadge Streets. Additional parking in the City of Poughkeepsie is being coordinated with the Mayor's Office.

Comment Number	Comment	Response
88	Last year I began to become involved in Walkway over the Hudson, primarily because of Fred Schaeffer. The concept itself is alluring....to have something so wonderful in our backyard that enhances our community is GREAT in and of itself. But when I had the opportunity to work more closely with Fred and personally witness the tireless efforts he and the other members have put into this project, I couldn't help but get caught up in the enthusiasm they created! Last night I attended the public meeting held at the Poughkeepsie Grand Hotel and again I felt that same spark re-ignite in my heart, that since 9/11/2001 our communities are truly becoming united in a common cause for the Better!! I applaud all who contributed in any way and would especially like to acknowledge Fred and his leadership in making THIS A REALITY!!!	Thank you for the support.
89	At the meeting last night the presenter from the Parks Dept. mentioned there had not been a dedication or name of the Walkway as of yet. I would like to be the first to cast a vote. The name should be "The Fred Schaeffer Hudson Valley Community Dream Walkway" named after the man with a heart as big as the bridge itself & recognizing that this dream in our community would not be possible without Fred's vision. Without people like Fred dedicating their time, effort, resources, and skills the world would be a lesser place. I hope to work with Fred again and get to see this project through to completion so we may all enjoy access to this marvelous dream in our community!	This suggestion will be considered while developing a name for the Walkway.
90	I am a great fan of the project, and was even slightly involved during Bill Sepe's period. (On a personal note, it seems somehow sad that the entire event the other day went by without his name even being mentioned once. Somehow that doesn't seem right.)	Bill Sepe has played a significant role in the development of this project. His efforts will not be forgotten. Thank you for the support.

Comment Number	Comment	Response
91	I think it is wildly hopeful to think the walkway will ever be that populated and that realistically at any one time the walkway will likely have only 10% of the people shown. I'm afraid the walkway experience will feel to many pedestrians like walking along a runway, a long, long runway. A highway ramp, cold and unyielding and unwelcoming. A highway ramp with a world class view, that's certainly true, but otherwise a determined march rather than a Sunday stroll. One must keep in mind that the walkway will be a mile or so, each way; for many folk, a long walk. My fear is that the plan as offered seems to make the walk seem bloody endless. I think many folks will get up to the walkway level and look down the walkway (if it is as rendered) and think, "Nuts! Too long a trek for me today!" Which, I think we can all agree, is inconsistent with the whole idea.	The long "runway" look of the Walkway will be broken up by benches, vendors, and other amenities on the bridge. The benches will be located throughout the Walkway for any users who are unable to walk all the way across the bridge, or would just like to admire the views closer to land.
92	I was thinking that the path squiggles. At no point, without leaning over the edge, is one aware of the total distance to be traveled. Every 500 ft. or so, the path moves from one side of the surface to the other, the interruption, a landscaped area, each different in amenities, in design, in materials, etc., each one however, offering resting and shelter points. Each one of these rest areas is sponsored by a different organization, who designs and pays for the site's creation (under Walkway's supervision) and yearly rent for its maintenance. Perhaps there are different sizes at different prices: the midpoint might be worth more than the quarters. The point of course, as a non profit, is to make money, but merely to cover expenses. Each site, 4 of them, 5 of them, 6 of them, are essentially seasonally rented to various companies who find the advertising value- nothing overt, just an announcement as on NPR- worth the cost.	The Walkway Over the Hudson will be a New York State Park. Maintenance will be paid for out of the New York State Parks budget.
93	Thank you for serving the cause by standing at the sign in table. It is a wonderful project, a lot of people have worked very hard to see it completed, and you are part of that effort! Frankly, almost everybody, especially those who don't have to directly pay for it, think it is a worthwhile project. I think it is a worthwhile project.	Thank you for the support.

Comment Number	Comment	Response
94	I myself have been up on the deck of the bridge because of the early efforts of Bill Sepe. While he may have had a different "approach", and he wasn't even the "owner" of the bridge, (the mysterious guy in Pennsylvania who no one could ever contact, was the owner,) and Bill certainly was too "individualistic" to ever coax a million and a half grant money out of the Dyson Foundation, or approach the State of New York.....but I think a mention of Bill Sepe's role in the very early days of the Walkway deserves to be mentioned when it is time to dedicate the longest pedestrian bridge in the world, a jewel of the mid-Hudson Valley, an inspiring monument to the beauty of nature and the ingenuity of mankind.	Bill Sepe has played a significant role in the development of this project. His efforts will not be forgotten.
95	I heard a speaker at the meeting say an elevator is PROPOSED, yet the decking has a biking lane....suppose the "proposed" elevator becomes too costly or is not somehow approved- how will bicycles get up to the bicycle lane on the deck area without an elevator?	At grade access will be provided on the Highland side of the Walkway. Bicycle access will be provided on the Poughkeepsie side in the form of an elevator at Washington Street.
96	Is there plans in cooperation with the mental health board to install a "suicide prevention" phone and signage, like exists currently on the vehicular bridges? I know, this is a "downer", and spoils the idyllic nature of the project, but still.	Suicide prevention call boxes will be located on the bridge. These phones provide a direct connection to local police.
97	Suppose work delays cause the project to not be completed until November....massive projects like this, and relatively "untested" or unique work situations like this project have no "prior history" of knowing what to expect.... is there still suitable Quadricentennial 400th events planned that could feature the Walkway in November? Now, no more "negative" questions, but I have a "historical" question- the speaker said the 1974 fire occurred in part because there was no longer a "maintenance crew" to get an early start on extinguishing that fire...who can I contact to research if there were previous fires, that WERE extinguished because of an alert and ready crew---or could it be the case that there never ever was a previous fire caused by sparks in the 100 previous years of operation? I am not a "scholar" or interested because of a specific project, it just occurred to me while listening at that meeting that fires must have happened before- what was the outcome?	Events for the Quadricentennial are still being planned by the Hudson-Fulton-Champlain Quadricentennial Commission and Hudson 400. Some of the planned events include a kayak trip, a festival, and the arrival of the Half Moon. The history of the bridge is detailed in the book titled Bridging the Hudson written by Carleton Mabee.

Comment Number	Comment	Response
98	The trains were up on the bridge, and then at some point came down to "sea level" tracks and continued eastbound on level ground to New England. Whatever happened to the rest of the route? I think it would be interesting to have a "map" or trail indicated showing where the heck the tracks were after they left the bridge! And show on the map the route to Pennsylvania coal fields. Does any of that 1888 track still exist, still used by other railroads?	West of the Poughkeepsie-Highland Bridge, the old railbed has been transformed into the Hudson Valley Rail Trail. This is a 5 mile trail that goes from the Hamlet of Highland to Route 299, half way to New Paltz. East of the Poughkeepsie-Highland Bridge, there is currently a 1.3 mile stretch of abandoned rail bed that terminates at Morgan Lake Park. Dutchess County is in negotiations with CSX to convert this stretch of rail bed into a rail trail. The Dutchess Rail Trail Park is currently transforming 12 miles of rail bed into a rail trail. This rail trail will stretch from Morgan Lake Park to the Town of East Fishkill.
99	There is the planned access to the Walkway from the Poughkeepsie side--is it possible to walk from "level" ground, meaning tracks laid on the ground, up an incline to the bridge?	The Walkway Over the Hudson project ends at Washington Street on the Poughkeepsie side of the river. This does not allow for an at-grade access point to the trail system at this time. Access will be provided via an elevator and stair case to be located at Washington Street.
100	Suggestions: To have a covered area on the bridge in case a quick rainstorm comes through or wind storm. It would be nice to have those binoculars for people to see the scenery. Would there be emergency carts on the bridge? Like a golf cart to help take a person who is sick quickly off the bridge. Maybe there should be a solar panel in a spot for shelter-could give warmth and lighting. You know how some driveways are heated underneath for ice and snow removal. Do you think there could be a way to put heat underneath the walkway to keep ice off? Probably a few emergency telephones or even a real telephone on the bridge. What would keep birds off the bridge? Next thing will be to have a ferry going across the river too so if someone walks across and then they are tired they can take the ferry back. A gift store with postcards and food. The money would go back to the bridge fund also some drinks and food. Trash cans and bathrooms are important too for emergency and kids.	Thank you for the suggestions. We will consider your recommendations during the design phase of the project. There is no plan to provide emergency carts along the bridge. However, emergency vehicles will have access to the Walkway if necessary. The use of solar panels to power the lighting system on the bridge is being examined. Suicide prevention call boxes will be located on the bridge. These phones provide a direct connection to local police. Private vendors will be welcome on the bridge to provide refreshments. Restrooms and trash receptacles will be available.

Comment Number	Comment	Response
101	Suggestions: A microphone for music & announcements on the bridge. Groups should volunteer to work at the gift shop. Like the Girl Scouts and Boy Scouts & in exchange they would get movie tickets or something. Other fundraisers for the bridge: a fashion show: revolutionary Army, Civil war, etc. parade for the Veterans, Easter parade, a teddy bear parade. Maybe a clear canvas that will roll up over the walkway & cover the walkway from rain or snow.	Thank you for the suggestions. We will consider your recommendations during the design phase of the project. Events on the Walkway will be allowed after obtaining a permit.
102	Accolades for David Rocco and all the others who did the groundwork to get this project underway.	Thank you for the support.
103	Collaboration between Highland and Poughkeepsie for the initiation of summer concerts/ festivals at this location.	Events on the Walkway will be allowed after obtaining a permit.
104	The presentation was excellent.	Thank you for the support.
105	Some significant things I would like to see on the bridge and bridge entrances would be a history of the bridge as to why it was built at Poughkeepsie, the many different railroads who owned the bridge and possibly the placing of historical markers to show where the 2 guard shacks were at Washington St. to prevent sabotage during WW2.	Thank you for the suggestions. We will consider your recommendations during the design phase of the project.
106	Thank you for your informative meeting!	Thank you for the support.
107	For safety reasons has an engineering study been accomplished that has determined this height to be sufficient? In our view, this bridge is much higher than other bridges over the Hudson, and is therefore more subject to strong winds. Will these railings prevent someone moving on a bicycle from being blown over?	A detailed structural study of the bridge has been completed. The bridge was found to be more than adequate to handle the loads of a pedestrian trail. A 4' 6" pedestrian hand rail will be provided for the main span of the bridge. The bicycle lane will be located in the center of the Walkway.
108	I attended the public meeting on Jan 9. I would like to say that I completely support the Walkway project. The team is doing an excellent job!	Thank you for the support.
109	There will be a bike lane in the center of the walkway with pedestrian lanes on each side. Has the team considered putting those plastic bumps along the lane markers to help emphasize the boundary? I think this will increase the safety, especially for youth riders or people not paying close enough attention. On the down side, I suppose this would make it more difficult for snow removal in the winter. Perhaps there is another way to mildly emphasize the lane boundaries more than just painted lines.	The design team is still looking at various means of delineating the bicycle lane. Your suggestion will be taken into consideration.

Comment Number	Comment	Response
110	I attended the public meeting on Jan 9. and thought it was excellent. The communications-press & email advertising of the event, the logistics, the opportunity to review/discuss with experts, then the formal presentation, the content-the "info boards" on tri-pods, and the PowerPoint slides. All were very well done. I also suspect that the experts who attended to represent the activities to date enjoyed speaking with "real people" about their findings. Please keep up the good work and continue to reach out to the community. We are eager to support this project in any way we can.	Thank you for the support.
111	During the event I asked one of the engineers if the original railings up on the bridge would be able to be used. As I suspected, the answer was that their design does not deliver the standard of safety we have now, so would need to be replaced. I suggest you explore ways to re-use the railings along the rail trails connecting to the bridge. For example in Highland and Poughkeepsie along the trail where it is at grade - where it doesn't need a safety rail, but still could benefit from a trail "marker". Perhaps use them at RailTrail road crossings to prevent automobile access. Also they could be used to mark the path from the Poughkeepsie Train Station to the Walkway access point / elevator. The railings aren't fancy, but they are original. They are handsome, They evoke the "look and feel" of the original bridge In the marketing profession we call that Brand Image which is a Good Thing. Also, in today's environment, re-use is encouraged. It is a Green Thing. Finally, they are Historic. And you know how important it is to preserve them.	Thank you for the suggestions. We will consider your recommendations during the design phase of the project.
112	My wife, friends and I are in FULL support of this project and want to see it to completion. Thanks very much for your efforts and I look forward to the progress.	Thank you for the support.
113	The mentioned glass viewports would be great. This would allow people to get a good perspective on the height. Controlling lighting on the bridge so that it doesn't interfere with other venues I feel is important. Light directed down to Route 9 or shipping [sic] could cause problems. I wonder if there is a way to illuminate the deck slightly, but not such that we pollute the skies with light, thus providing for better viewing of the stars at night.	The portals will be included in the final design of the Walkway. The lighting on the bridge will be designed to focus on the Walkway. Light levels will be just high enough to provide safe passage across the bridge, while low enough to minimize light pollution.

Comment Number	Comment	Response
114	There needs to be rest rooms available, a towering American Flag in the middle would be an asset, distance markers (i.e. Distance from the Mid-Hudson Bridge, the shore lines, Boston, Miami, etc), benches to rest or to simply sit on, don't charge an admission fee.	Thank you for the suggestions. We will consider your recommendations during the design phase of the project. Restrooms and trash receptacles will be available. Benches will be located throughout the Walkway. No entrance or user fee will be charged for use of the Walkway.
115	A great project! Every effort should be made to see that it is completed in time for the 2009 celebration. Nice Work Walkway!	Thank you for the support.
116	I think the Walkway project is a grand historical idea.	Thank you for the support.
117	As an artist, I would like to see several art components to the project. First, I would like to see original hand-painted vertical banners on both sides of the Walkway- perhaps 61 to represent the 61 NY State counties or 50 for the US states. Second, I would like to see a laser light artist do a performance on the evening of opening day after Joe's bridge music and before the fireworks. Also a regatta or fireworks spraying colored water. Another proposal is a 200 ft. banner on one side of the bridge highlighting the many important historical aspects of the Hudson Valley i.e.- FDR, S.Morse, Smith Bros., Vassar, Regatta, etc. To elaborate on the banner idea. G.A.S. gallery can administer the coordination of funding and curating the artist. The banners can be displayed at G.A.S. before the event and have them auctioned off to raise money for the artist and for WOTH. I can also do a special TV program on the banners & the opening event on "Arts Focus" Time Warner Cable TV show on Ch.23. I am the producer & host.	Thank you for the suggestions. We will consider your recommendations during the design phase of the project.
118	Banners hung at holiday times will get thousands of new supporters for us.	The use of decorative banners will be incorporated into the design.

Comment Number	Comment	Response
119	I attended the meeting last night at the Grand Hotel. During the presentation there was a slide that showed where the money which has been raised to date (2.9 million) had come from and how much by each source of contribution. When reviewing the "complete presentation" on the website, I do not see that slide. How could one obtain the information that was contained in that slide? My one suggestion for your Web site would be to give a link to the Dutchess County Trails website which provides very good maps including the northern terminus point in Morgan Lake Park. Since the point of the Walkway project is to connect to this trail, it would be good to show people what the "grand plan" is.	The PowerPoint presentation has been reposted on the Walkway Over the Hudson website with the "Committed Funding Sources" slide. Adding a link to the Dutchess County Trails website is a good suggestion. The Walkway Over the Hudson will consider adding the link.
120	I am very impressed that the whole PowerPoint presentation from last night is on your Web site. Your organization is doing a super job at getting the word out and drumming up support. Last night was an excellent job by all involved. When you are this organized and informative, it should make gathering support that much easier.	Thank you for the support.
121	It is disturbing that Gov. Spitzer, on his State of the State address, included a recommendation to fund the Poughkeepsie RR Bridge project. This rusting relic of an aged engineering feat has long been a grotesque assault on the scenic views of the Hudson River between the shores of Poughkeepsie and Highland. Groups have expressed various ideas on how to rehabilitate this wreck. Now some wish to transform it into a tourist mecca that will attract visitors from around the nation and throughout the world. Perhaps we might even expect visitors from far reach of the universe! I have no problem with the goals of the bridge fanciers if the entire enterprise is funded solely with private capital and without any tax breaks. When one considers the difficult economic conditions present in this country & in this state, I can't see why the Governor would elect to allocate $16 million tax dollars in order to fund a group's grandiose whim. NY is facing a serious budget gap of some $4B & it would be much more appropriate if that $1M were invested in improving our schools, medical care, infrastructure, etc.	The Poughkeepsie-Highland Bridge is a Nationally Historic Structure. These structures have been deemed a significant part of American history, and as such, should be preserved for future generations to enjoy. While the State will be dedicating funds to this project over a two year period, the economic study estimates that the Walkway will produce approximately $12.6 Million in new sales for the State. New York State will receive an estimated $604,000 in State taxes each year due to sales related to the Walkway.

Comment Number	Comment	Response
122	This project is simply WRONG! Did you know the access will be via elevator on Washington St in Poughkeepsie with no provision for parking for the supposed throngs of people who will be coming. Pity the poor homeowners who live on the nearby streets who will have cars parked on their streets and have the peering eyes of these folks looking down on them. Yuck!	We acknowledge that parking is a concern in the City of Poughkeepsie. Parking near the Washington Street elevator will be provided under the Walkway, between Washington and Talmadge Streets. This will minimize the need for on-street parking. Additional parking in the City of Poughkeepsie is being coordinated with the Mayor's Office. There are no plans for a privacy screen at this time. Security cameras will be located on the Walkway. Officers will patrol the area as necessary. The design team will meet with local residents to address their concerns.
123	A major tourist attraction? I can't imagine Stewart Airport being overwhelmed, Route 9 clogged with traffic, and our local hotels booked to the hilt because of this bridge. It looks more like a "largest ball of tinfoil" attraction than anything else	Economic and fiscal impact experts were consulted to estimate the draw of tourists to the Walkway. Their study was based on similar projects, as well as trail usage on the surrounding trail networks and tourist visitors to other are attractions.
124	Cast Iron? Who makes ANY structure with cast iron? With the price of scrap metal being what it is, the bridge could be worth a LOT of money.	The bridge is primarily constructed of steel members. Some of the smaller elements of the structure are made of cast iron.
125	Our state and country is littered with cheese museums, train museums, yarn museums, aquariums, minor league baseball parks, and other boondogles that were funded with taxpayer dollars under the misguided perception that the project would be come a tourist mecca that pumps more money back into the community than it has received in taxpayer support. The reality is often quite different in that many of the projects never become self-sufficient and will continue to need large taxpayer subsidaries year after year to stay afloat. I predict right now that the bridgewalk will become one of those boondogles. I doubt there have been any marketing surveys to determine the number of people who have the stomach to walk the bridge, and how many of those people will become repeat bridgewalkers once the initial novelty wears off. In a couple of years, "been there done that" will force the bridgewalk promoters to mug the taxpayers again and again for even more money to stay afloat.	Unlike these other monuments, the Poughkeepsie-Highland Bridge is a Nationally Historic Structure. These structures have been deemed a significant part of American history, and as such, should be preserved for future generations to enjoy. There has been overwhelming public support for this project.

Comment Number	Comment	Response
126	The better approach would have been to sell shares in the bridge to investors & let the free market decide whether the bridgewalk is a good idea. And if the bridgewalk can't stand on it's own, then tear down the bridge. Indeed, I'm willing to bet that the money spent to tear the bridge down would pump a heck of a lot of money into the local economy than the cost to keep it up.	The Walkway project has received substantial funding from private sources. There has been overwhelming public support for this project.
127	The cost to demolish would be huge. And then you end up with nothing. Engineers have studied the structure and it's safe for decades to come, it's cast iron. But the real cost benefit is that it will attract tourists. Tourists come now to the Hudson Valley this will be another stopping point. We need more tourists if you hate what we pay in taxes. For every dollar collected from a resident, it costs the government $1.30. This is the national average. For every dollar collected from a tourist, it costs less than 75 cents. So if you want to in the long run be fiscally better off, make the Walkway over the Hudson a reality.	Thank you for the support.
128	As a railroad bridge, it helped the Mid-Hudson Valley grow commercially, bringing a better life to the people. As a walkway/ bikeway it will help tourism grow and allow more people to have greater enjoyment of the Mid-Hudson Valley.	Thank you for the support.
129	This is a great project and should receive major support. I love the portal window idea. I am happy to see projects that focus on the river.	Thank you for the support.
130	Thank you for this wonderful project!	Thank you for the support.
131	One thought would be to provide some sort of soft surface over the concrete slabs to provide a more cushioned surface for running. Perhaps like the surface on a track. The Mid-Hudson Road Runners Club would like to organize a run over the bridge (as we did for the opening of the new span of the Newburgh-Beacon Bridge) for its opening. Please contact me at the phone/address/email below regarding this.	Thank you for the suggestion. We will consider your recommendation during the design phase of the project.
132	I think the bridge should keep the colors it had as a working RR bridge in order to preserve its identity and aesthetic value as a piece of industrial architecture. We shouldn't pretty it up in any way.	There are no plans to paint or otherwise alter the appearance of the bridge. We agree that it is important to stay with the industrial feel of the bridge to preserve its identity.
133	Walkway Over the Hudson is a very worthwhile project. It will allow community and visitors exercise & enjoyment, bringing income and fun for all. Thank you for working on this endeavor.	Thank you for the support.

Comment Number	Comment	Response
134	Old infrastructure made attractive & functional excites people. Everybody loves the river. The idea of an easy ride to Highland & the West Side of the Hudson is thrilling. People will lead bikes in on cars & come to see it, so plan lots of parking.	Thank you for the support. Parking will be provided on both the Highland and Poughkeepsie sides of the bridge.
135	Bike lock ups and racks for those who want to hike or pause or wander in town.	This is a good recommendation and will be considered.
136	I'd like to see (be told authoritatively) why 500 people showed up on January 9th. It was thrilling to see such a large segment of the community interested in the "waterfront". It certainly wasn't because they wanted to complain or protest!	This project has received immense support for the local community. Local residents are very excited about seeing their dream of the Walkway come to fruition.
137	This is a great idea whose time has finally come. Like the High Line in Manhattan, the Walkway rescues an outdated, derelict railroad track and turns it into a world class destination. I expect it will be on every "100 things to do before you die" list. I attended the excellent public meeting on January 9th.	Thank you for the support.
138	Access points- This is critical, as I know from experience with the wildly popular Coastal Trail in Anchorage.	At-grade/walk-on access will be provided on the west side of the bridge. On the east side of the bridge, an elevator will be provided at Washington Street. This elevator will be ADA accessible as well as a stairway available. An elevator is planned for the vicinity of the Children's Museum when future funding becomes available.
139	Parking- This project will be enormously popular. Please don't underestimate the need for parking.	The need for parking near the Walkway is understood, and various parking locations are being explored.
140	Easy access from the Metro-North Station. Like Dea-Beacon, I can imagine Metro-North in a collaborative offer of transportation & advertising. A great day trip from the city & envirous.	The City of Poughkeepsie, in conjunction with the design team, will continue to work with the City's public transportation authority to provide transportation between the train station and the Washington Street access point. Thank you for the support.
141	1. Bathrooms are critical. 2. Look down through the glass to see the piers, yes. 3. Vendors on the bridge? YES. I'm thinking of the trail that runs along the Hudson in Chelsea & the Village to Battery Park. A few places to bring a picnic, have an ice cream cone, etc.	Initially, portable restrooms will be available. New York State Parks plans to construct permanent restroom facilities that will be either conventional or composting. The portals will be included in the final design of the Walkway. Vendors and benches will be located on the main span of the bridge.

Comment Number	Comment	Response
142	We all know that the Poughkeepsie-Highland RR Bridge is historic and will be recreational and attract tourism to both Dutchess & Ulster counties. The informational meeting held at the Poughkeepsie Grand Hotel was very well attended and the presentation well received.	Thank you for the support.
143	My comment is about the plans for structurally renovating the bridge. I believe that the railings need to be higher than proposed, for safety reasons, and also that the surface should not be narrowed to each end, which could cause bottle necking, and impede fire, police, or ambulance emergency vehicles. If necessary cost wise, only narrow ends to 21 ft. instead of 15 ft.	The proposed railings are 4' 6" tall, which conforms to design standards for bridge pedestrian railings. The approach spans will have a width of 24 feet.
144	Include lots of benches for resting and enjoying view, include water fountains/taps, keep lighting downward for events such as fireworks, lighting behind benches, away from railing may help with view at night, bike lane wide enough for passing (dotted center line), perhaps strip lighting imbedded in Deck can highlight bike lanes at night (center lane and edges), emergency phones on bridge, unobstructed wide enough lanes for emergency vehicles access (movable ballards to prevent vehicle access otherwise)	Benches will be located throughout the length of the bridge, and a drinking fountain will be available. Lighting options are still being explored, but will be located along the railing to prevent interference with the bicycle lanes. The bicycle lane will provide for a 5' lane in each direction. Emergency call boxes will be located on the bridge. These phones provide a direct connection to the local police. Emergency vehicle access will be provided as necessary.
145	I would like to express my gratitude to Fred Schaffer and staff of Walkway Over the Hudson for their dedication and diligence as they near the completion of the former Poughkeepsie RR Bridge into a walkway and bike path over the Hudson River. The presentation was well organized. The diagrams, explanations were well defined and seemed thorough. With inspection, design and environmental studies near completion and reaching out for funding the project is well underway to its projected goal of opening in Sept. 2009. Gov. Spitzer has recognized the organization's accomplishments and announced that the Poughkeepsie RR Bridge will become a state park. Congratulations! The Walkway project has truly been an inspiration for not-for-profit organizations which are also struggling to achieve their goals. Too often we hear, that will never happen. This is a perfect example it can!	Thank you for the support.
146	Congratulations on a well written Draft Design Report and a successful public information meeting. As a bicyclist and walker, I strongly support this project which will be a valuable asset to our community.	Thank you for the support.

Comment Number	Comment	Response
147	I do, however, have a substantial comment regarding the width of the approach spans. The west one is 1030', about 0.2 miles, and the east one is 2640', about 0.5 miles. They will be too narrow for a length that is 54% of the total bridge length! At the meeting and in the Draft Design Report description of the Preferred Alternative this width is described as 15', but on page III-10 the clear width is shown as 12'. Given the combined barrier/fence which will be 8' tall, this area will feel too tight. In addition, cyclists will shy away from the barrier by at least one foot for comfort making the useable width even less.	The approach spans will have a width of 24 feet.
148	Another, and equally serious concern related to this narrow approach span width is the potential use of the bridge by emergency vehicles. There are two situations where this could occur, attending to an injured individual on the bridge or an emergency vehicle using the crossing as an alternative should the Mid-Hudson Bridge be blocked. How will cyclists, pedestrians, those with strollers, and in the worst case handicapped individuals get out of the way of a vehicle that will need about 10' to pass? Will the attendants have sufficient room to exit the vehicle along these narrow approach spans? While other bridges over the Hudson River have narrow walkway/bikeways, they have traffic lanes immediately adjacent to them for access by emergency responders. The New York State Department of Transportation uses a 14' paved surface between the safety rails on their trail bridges, which matches the approach trail – 10 feet paved with a two foot clear area on each side. This width is sufficient for the typical trail bridge which is often less than 150'.	The approach spans will have a width of 24 feet.
149	Consideration should be given to creating a clear width of at least 20' for the approach spans on this bridge. This would provide a more comfortable feel and eliminate the concerns associated with sharing the bridge with emergency vehicles.	The approach spans will have a width of 24 feet.
150	The public and private funding partnership in place to pay for this project will not last forever, now is the time to build this project and to build it to the width that will make it safe and enjoyable.	The approach spans will have a width of 24 feet.
151	Regarding the historic nature of the existing bridge, is there a way to re-use the rails from the bridge in the reconstruction? While they could not be used as a safety feature on the bridge, consideration should be given to using them to line the trail leading from the new parking areas toward the bridge.	Unfortunately, the existing trail bed/ties had been treated with fire retardants to reduce fire damage caused by train sparks, and emissions from the trains have contaminated the ties. They must be disposed of properly to prevent harm to Walkway users.

Comment Number	Comment	Response
152	As I mentioned the evening of the 9th, the presentation of that evening was terrific, and the progress made toward the creation of the planned pedestrian Bridge is most impressive. This will be a terrific boon to tourism in the area. In particular, it will be a great shot in the arm for the City of Poughkeepsie. Again, many thanks for your great work, to date. And I am grateful that you continue to keep the community informed and involved.	Thank you for the support.
153	Because of parking, but other issues, as well, I believe the proposed first elevator should be placed close to the waterfront rather than on Washington St. Washington St does not offer the same sense of "gateway" that a waterfront entrance would.	Parking near the Washington Street elevator will be provided under the Walkway, between Washington and Talmadge Streets. This elevator will be ADA accessible as well as a stairway available. Additional parking in the City of Poughkeepsie is being coordinated with the Mayor's Office. An elevator is planned for the vicinity of the Children's Museum when future funding becomes available.
154	As the project proceeds, I hope there are opportunities to pursue those ways in which the proposed walkway and surrounding economic benefits can address the needs of our City's youth, and other city residents who need employment. Around these, and other issues, I certainly hope that the City's Planning Department, the Mayor, and the Council will be consulted and viewed as resources that will benefit the project	The Economic and Fiscal Impact Report estimates that 258 new local jobs will be created as a result of this project.
155	Of course parking will need to be addressed. In that the walkway is projected to draw over 250,000 visitors per year, 110,000 of whom will be from outside Dutchess and Ulster Counties, there will be a considerable need for parking. So, of course all planning will need to take this into account.	Parking near the Washington Street elevator will be provided under the Walkway, between Washington and Talmadge Streets. This elevator will be ADA accessible as well as a stairway available. Additional parking in the City of Poughkeepsie is being coordinated with the Mayor's Office.
156	My husband and I attended the January 9 meeting at the Poughkeepsie Grand Hotel. FABULOUS! We are really excited about this.	Thank you for the support.

Comment Number	Comment	Response
157	Some suggestions/comments: Toilet facilities are a must. Port-a-johns are OK, as long as they are kept clean. I know this can be a problem, but I hope they can be maintained all year round, not just seasonally. We are runners, and it's frustrating when we run in certain areas that have permanent or port-a-john facilities but everything is locked or gone in the winter. Please consider a rubberized surface over the concrete on the jogging section. It is brutal to run on concrete. Loved the idea of the glass in certain areas of the span that allows folks to look done at the water. Please keep that in the plan. Vending: hopefully not tacky ;-) Would you consider vending carts like in NYC with a variety of foods instead of the usual (unhealthy) hot dogs. Ice cream & yogurt are musts -maybe a fruit stand and/or smoothies made from fresh fruit and no-fat yogurt. Might be nice to have a race the morning of the grand opening in Sept 2009 - a short run that starts in Poughkeepsie, runs across the bridge to the other side and returns to Poughkeepsie; maybe combine the run with a short biking event.	Initially, portable restrooms will be available. New York State Parks plans to construct permanent restroom facilities that will be either conventional or composting. Details of the Walkway operational plan have not been finalized. The seasonal usage of the bridge has not yet been decided. Your suggestion of a rubberized running surface will be considered during the design of the deck. The portals will be included in the final design of the Walkway. Vendors of all types would be welcome on the bridge. A grand opening race is a good idea and will be considered.
158	Have the walkway open all 4 seasons. Hopefully the walkway will be open "dawn to dusk" like other parks.	Details of the Walkway operational plan have not been finalized. The seasonal usage of the bridge has not yet been decided.
159	Security: Have some security who will be on bikes (weather permitting)--perfect for the walkway, friendlier, allows the security folks to be quickly mobile and still mingle with everyone.	Security cameras will be located on the Walkway. Officers will patrol the area as necessary.
160	I attended the meeting and was very impressed by the interest the state has taken to advance the project to a national park. As a community member I have always recognized the potential of this wonderful asset. I think the project has an aggressive schedule to maintain and I look forward to continued progress.	Thank you for the support.
161	My concern from what was presented is there was no mention of an informational booth of historical memorabilia to share with the general public such as a visitors center that other state parks have. Is this in the plan anywhere? As for appearance- many a comment was made as to how the walkway looks like a barren highway. Will there be any plantings to have a park feel and any shaded areas to rest under?	Kiosks providing information on both the natural and historic resources of the Walkway area will be provided. The long “runway” look of the Walkway will be broken up by benches, vendors, lighting, and other amenities on the bridge. There are no provisions for planters on the deck at this time.
162	Please use solar power. Make it a model for the future. Provide adequate bathroom facilities, even if you charge a fee.	Solar power is being evaluated as a possible source of power for the light fixtures on the bridge.

Comment Number	Comment	Response
163	Ensure adequate parking away from residential areas.	Parking near the Washington Street elevator will be provided under the Walkway, between Washington and Talmadge Streets. This elevator will be ADA accessible as well as a stairway available. Additional parking in the City of Poughkeepsie is being coordinated with the Mayor's Office.
164	Use solar power panels hung from the deck to power electrical needs of the bridge. Install barriers under bridge to store power for use at night. And excess electric back into power grid. Bridge lighting will have to be low at sides and overhead to light center of deck.	Solar power is being evaluated as a possible source of power for the light fixtures on the bridge.
165	Eliminate Washington elevator and use access point along Parker Ave.	The limits of this project end at Washington Street. The Walkway Over the Hudson organization does not own the rail bed along Parker Avenue. CSX Railroad still owns the 1.3 mile stretch of tracks between Washington Street and Lake Morgan Park. Dutchess county is currently in negotiations with CSX to purchase this section of rail bed.
166	Ensure adequate parking away from residential areas. Build ramp & parking area 200 yards up on Parker Ave. (west side) which is now a vacant lot.	Parking near the Washington Street elevator will be provided under the Walkway, between Washington and Talmadge Streets. This elevator will be ADA accessible as well as a stairway available. Additional parking in the City of Poughkeepsie is being coordinated with the Mayor's Office.
167	Test paint on bridge for lead abatement. Lead abatement must be addressed before work is begun on the bridge. Ensure funds will be available in future for proper maintenance of the park.	The bridge paint was tested and found to contain lead. The paint where the new deck meets the steel will be removed during the construction phase of the project and disposed of properly. The Walkway will be maintained by the New York State Office of Parks, Recreation, & Historic Preservation and maintenance costs will come from the State Parks budget.
168	As a neighbor of the walkway and a business owner in the neighborhood we are all excited to see the progress get underway. I feel the board will do what is in the best interest of the community. The center plan that you propose seems most logical.	Thank you for the support.
169	I have only one concern. The fence separating our properties is not correct. If you can contact me regarding this I would appreciate it. We as a family have been maintaining both sides of the fence since 1975, when we moved in.	The design team will meet with local residents to address their concerns.

Comment Number	Comment	Response
170	I live on Bain Avenue in the City of Poughkeepsie. My family has owned and resided on this property since 1953. I have safety and privacy concerns regarding the proximity of my property to the bridge. I have enclosed photos for your review. I will be exposed to the constant flow of Walkway visitors who will now have visual access to my backyard 365 days a year. Unless privacy fencing and/or a structure is put in place along the bridge that runs behind my house (both before and after my property line) my family and I face serious quality of life issues.	Security cameras will be located on the Walkway. Officers will patrol the area as necessary. There are no plans for a privacy screen at this time. Security cameras will be located on the Walkway. Officers will patrol the area as necessary. The design team will meet with local residents to address their concerns.
171	Who will prevent debris and vandalism by items being thrown over the railings onto homeowners properties? What provisions are being considered to protect our privacy and security? Who will provide security to the Walkway during evening hours? Noise pollution is also a concern. These are all serious issues that homeowners near the bridge face that I now bring to your attention. I am asking that members of the walkway design team visit my home to view for themselves the potential security and privacy issues both my family and property face as a result of the project. I ask that you please contact me to arrange an on-site meeting at my home and provide me the opportunity to show you, in person, my unique and disturbing situation that I now face due to the Walkway. I look forward to hearing and meeting with you to determine the best solution to these problems.	We appreciate your concern about security issues. Security cameras will be located on the Walkway. Officers will patrol the area as necessary. Projectile prevention fencing will be provided at all roadway and railroad crossings. There are no plans for a privacy screen at this time. The design team will meet with local residents to address their concerns. While there is a potential for increased noise levels at residences closest to the Walkway, the elevation of the bridge will minimize this disturbance. The loudest hours can be expected on weekend afternoons.
172	In addition to the proposed access point on Washington Street adding to my personal security and privacy concerns, the potential parking situation is seriously underestimated.	Parking near the Washington Street elevator will be provided under the Walkway, between Washington and Talmadge Streets. This elevator will be ADA accessible as well as a stairway available. Additional parking in the City of Poughkeepsie is being coordinated with the Mayor's Office. Security cameras will be located on the Walkway. Officers will patrol the area as necessary.
173	My wife (Leigh) and I attended your successful Public Information Meeting on Jan. 9, 2008. Congrats to a job well done! We believe this is a fantastic project and will end up with worldwide visibility once completed! As fellow cyclists, we have been supportive of Fred for years on this project.	Thank you for the support.

Comment Number	Comment	Response
174	Restrooms or Porta Potties of some sort should be placed at each end of the Walkway. Maybe parking lots? Please have plenty of garbage cans on the Walkway and in the parking lots with properly scheduled pick-up times to avoid polluting the environment. Please make dogs welcomed! Have signs requesting them to be on leashes and for owners to pickup after them. Please include having "doggie cleanup bag dispensers" located at each end of the Walkway and in the middle. We are dog owners and love to have our dogs with us, but there is always need to encourage other owners to be responsible for their pets. It can be very dangerous for all if bikes & dogs unexpectedly interact.	Initially, portable restrooms will be available. New York State Parks plans to construct permanent restroom facilities that will be either conventional or composting. Garbage receptacles will be available. Parking will be available in the vicinity of the access points on both the west and east sides of the Walkway. A parking lot will be provided on Haviland Road, in addition to a striped on-street parking lane. Parking near the Washington Street elevator will be provided under the Walkway, between Washington and Talmadge Streets. This elevator will be ADA accessible as well as a stairway available. Additional parking in the City of Poughkeepsie is being coordinated with the Mayor's Office. Dogs will be welcome on the Walkway. As a State Park, a leash law will apply. The drinking fountains installed on the Walkway will have a doggie water bowl attachment. There are no plans for an "Oops!" station at this time.
175	Use environmental friendly ice/snow removal. If possible, we suggest only clearing 2/3 of the width of the Walkway in the winter time, so the other 1/3 could potentially be used for cross-country skiing. That would be beautiful. Many walkers and cyclists like to cross-country ski in the winter. If possible, a water fountain at the 1/2 way point of the Walkway would be nice, even if only available during the summer time.	Details of the Walkway operational plan have not been finalized. The seasonal usage of the bridge has not yet been decided. A drinking water fountain will be located on the bridge.
176	Seems like 25-35 parking spaces on both sides of the Walkway is not enough, considering the projected estimated 275K visitors per year (if we caught that number correctly from the charts). That's an average of almost 700 per day. I think the charts stated 150K local visitors and 100K non-local visitors. Sorry if we didn't get those numbers right, but we assume the volume is high and 50-60 parking spaces just seems too few.	A parking lot will be provided on Haviland Road, in addition to a striped on-street parking lane. Parking near the Washington Street elevator will be provided under the Walkway, between Washington and Talmadge Streets. This elevator will be ADA accessible as well as a stairway available. Additional parking in the City of Poughkeepsie is being coordinated with the Mayor's Office.
178	Please have recycle collection containers (i.e.: with holes just for can/bottles, etc.) to help support recycling and environmental friendliness.	Garbage receptacles will be available. The inclusion of recycle bins is a good suggestion and will be considered.

Comment Number	Comment	Response
179	It would be nice to have some sort of security (i.e.: cameras) in the parking lots and/or on the Walkway, as thieves will know folks will be on the Walkway for extended periods of time after parking their cars.	Security cameras will be located on the Walkway. Officers will patrol the area as necessary.
180	Keep bike lane in center as planned.	The bike lane will be designed in the center of the Walkway.
181	There should be bathrooms, shelter from the rain, and possibly a quick way to get back to other side for the disabled - a ferry or such. There is a need for food and water on the bridge for the disabled and handicapped. Part of the Bridge should be covered. There should be fake owls, or a sound only birds can hear or lights that would bother birds to keep away pigeons. On both sides of the bridge, there should be help kiosks with info/bathrooms/first aid. How about a Public Address system for announcements or musical events on the bridge?	These are all good recommendations and will be considered. Initially, portable restrooms will be available. New York State Parks plans to construct permanent restroom facilities that will be either conventional or composting. Vendors will be welcome on the Walkway. The drinking fountains will be ADA accessible.
182	On the West side of the bridge, there could be some sort of attraction that could include a Hudson Valley History museum, Science Museum, a library, a star-gazing terrace, a tourist center, community space, a gift shop or a cafeteria. The gift shop/cafeteria could be staffed/supplied by local volunteers including crafts people (eg. the quilter's guild) and culinary school students. Students could do this work for school credit. This attraction center could also contain bathrooms and other amenities. This center could also be funded and furnished by donations. The outside of the center could be painted with murals done by local children. This would get their parents interested in the project.	These are all good recommendations and will be considered.
183	Parking at Metro North Depot is already at capacity, this must be considered. Maybe there could be a trolley or tram to take people from the bridge to the Metro-North station.	Parking near the Washington Street elevator will be provided under the Walkway, between Washington and Talmadge Streets. This elevator will be ADA accessible as well as a stairway available. Additional parking in the City of Poughkeepsie is being coordinated with the Mayor's Office.

Comment Number	Comment	Response
184	If the electricity goes out, will people get stuck in the elevator? Can water be pumped from the river to put out fires on the bridge? Can you build the Walkway with heat elements underneath to prevent ice? There should be emergency phones with a direct line to 911. There should be an alarm to get peoples' attention and as a warning. Also fire alarms and extinguishers. There should be security cameras and people to monitor them.	Stairs will be available at all elevator location is the event of an emergency. Access on west side of the bridge will be via an at-grade/walk-on access point. Emergency call boxes will be located on the bridge. These phones provide a direct connection to the local police. Emergency vehicle access will be provided as necessary. Security cameras will be located on the Walkway. Officers will patrol the area as necessary. Details of the Walkway operational plan have not been finalized. The seasonal usage of the bridge has not yet been decided. There are no plans for the use of radiant heat to prevent ice build up.
185	Alternative energies should be utilized for the elevator. This could bring good press. Recycling is very important.	These are all good recommendations and will be considered.
186	We may need to plan for more roads with the added traffic. Perhaps a tourist bus could make a loop from area hotels to the bridge and other tourist destinations. You should involve the community as much as possible through volunteer staffing and holding of contests. Involvement from civic groups is critical. Art projects relating to the project should be well publicized. I was once a Montessori School teacher in Yorktown and we entered all sorts of art contests and this was great publicity for the school. You should hold various fundraisers to fund the amenities of the bridge. You could sell calendars and pens and stamps, etc. Local businesses should be solicited for donations of either money, goods or services. A Hudson River tour boat could be incorporated into a fundraiser. Change donation receptacles should be placed all over the area. Fairs, carnivals and raffles will also work. Pancake breakfasts and spaghetti dinners are good fundraisers.	The existing road system will be capable of handling the additional vehicular traffic. These are all good recommendations and will be considered.
187	First of all, I would like to thank the Walkway and the various agencies for hosting the informational meeting earlier this month. The presentation on the bridge project was very informative and interesting. I have been a long-time supporter of the project from buying walkway t-shirts to making small monetary contributions over the years. I have been quite interested in the project since I first traversed part of the Poughkeepsie Highland RR bridge on cold December day, some ten years ago, when the Walkway had an open house and allowed the public to walk the bridge.	Thank you for the support.

Comment Number	Comment	Response
188	Lighting, handrails and pedestrian amenities - If possible, it would be great for the Walkway project to mirror the styling used at the Poughkeepsie Railroad Station for the type of benches, lighting, etc. that are used on the Walkway. Metro-North did a good job with incorporating the old style of lights, etc. with the new technology of today. It would seem like a natural thing for the Walkway to do the same. Is anyone from Metro-North RR on the advisory or design committee for the Walkway project? If not, there should be. Glass (see-through) Decking Panels - This will be a great feature provided the panels can hold vehicle weight. This see-through panel idea sounds like the elevated glass platform over the rim of the Grand Canyon that was just opened by the Indian Reservation. It will make the Walkway Over the Hudson an excellent tourist attraction! Information kiosks - If not already planned, there should be permanent kiosks at both entrances to the Walkway that tell the stories of the railroad bridge, the Walkway project and about the Walkway organization, including its founder, Mr. Sepe. After all, he is a part of that history.	All of the proposed lighting, hand rails, and pedestrian amenities selected will reflect the industrial design of the structure. The portals will be included in the final design of the Walkway. Kiosks providing information on both the natural and historic resources of the Walkway area will be provided. These are all good recommendations and will be considered.
189	Ambulance/Emergency Vehicle Access - I know that many publicly-owned, pedestrian trails built today require that they be able to accommodate ambulances and police vehicles in case anyone gets injured or requires immediate emergency attention while en-route on the trail. It is my hope that the Walkway project be no different and that vehicle access to the whole Walkway and bridge is readily available to emergency responders. Someone from the design team told me the night of the January 9th meeting that they did not think emergency vehicles would be able to drive on the Walkway because the on-ramps to the bridge would not be wide enough to accommodate access for such vehicles. It would be a mistake, and not in the public interest, if viable, rapid access has not been provided to enable conventional, motorized emergency vehicles to safely travel across the entire span of the Walkway, including the bridge and its on ramps.	Emergency vehicle access will be provided as necessary.
190	Emergency Phones - Someone from the design team told me at the January 9th meeting that there would be only two emergency phones on the entire span of the Walkway. Two phones are not enough given the long span of the bridge. Ideally, dedicated emergency phones should be located every 400 ft. of the Walkway (including those portions on land, especially on the Poughkeepsie side), and the phones should automatically ring at the 911 headquarters of the respective agencies having jurisdiction over the bridge.	Emergency call boxes will be located on the bridge. These phones provide a direct connection to the local police. Emergency vehicle access will be provided as necessary. Your recommendation regarding the location of the phones will be considered.

Comment Number	Comment	Response
191	Salt-resistant concrete - It was said at the January 9th meeting, that the rail bridge has lasted so long because no salt has been dumped on it during past winters. If it is possible to use salt-resistant concrete panels for the decking, and/or to prevent the future use of salt for melting ice on the bridge once it has been open to the public, that would be good to do. Perhaps a law or regulation could be passed making it illegal to use salt on the bridge? Sounds crazy, but it may be a practical necessity to codify how routine trail maintenance, like snow and ice removal, will be performed on the Walkway bridge.	Details of the Walkway operational plan have not been finalized. The seasonal usage of the bridge has not yet been decided. We will take your recommendations into consideration.
192	Walkway fundraiser planks - Several years ago, people contributed money to "purchase" planks across the bridge as part of one the earlier Walkway fundraisers. Now that the State is taking over the Walkway, how will these donor "planks" be showcased or memorialized at the project site? Or, will the contributions to purchase a plank be returned to their respective donors?	The money donated for the bridge planks was been used for preliminary bridge studies. The Walkway Over the Hudson has a record of the contributors and is in the process of listing these donors on its website at www.walkway.org. Additional means of acknowledging these donors for their foresight and support are being discussed.
193	Washington Street elevator - This is a bad location to access the Walkway bridge as it is a high crime neighborhood in Poughkeepsie and there is insufficient parking in the area. And, many people would not feel safe getting on an elevator at this location. Besides, why should the on-going expense for an elevator at Washington St. be incurred by the project when you can easily access the Walkway trail, at-grade, from Parker Avenue? Providing sufficient, safe off-street parking at this entrance point to the Walkway should be considered and included in the initial design of the Walkway project.	Parking near the Washington Street elevator will be provided under the Walkway, between Washington and Talmadge Streets. Additional parking in the City of Poughkeepsie is being coordinated with the Mayor's Office. Security cameras will be located on the Walkway. Officers will patrol the area as necessary. The limits of this project end at Washington Street. The Walkway Over the Hudson organization does not own the rail bed along Parker Avenue. CSX Railroad still owns the 1.3 mile stretch of tracks between Washington Street and Lake Morgan Park. Dutchess county is currently in negotiations with CSX to purchase this section of rail bed.
194	Permits - In the Walkway draft design report that presently appears on-line, it said that a permit was not required from the US Coast Guard for this project. But what about the navigational aides for the bridge piers that have to be installed? This seems like something that the Coast Guard would want to have jurisdiction over.	No bridge piers will be installed as a result of this project.

Comment Number	Comment	Response
195	Prevailing Wages for Walkway Project - It seems to me by having a private organization, like Walkway over the Hudson, contract for all the construction work for this project immediately prior to the bridge being turned over to New York State, that the State is trying to avoid the public bid process, the Wicks Law, and the need to pay prevailing wages for the construction work that is to be performed on the Walkway. As a result, it is my concern that if title to the bridge is turned over to the State shortly after completion of the project, and the workers have not been paid properly, and the project has not been bid in accordance with the various State Laws for public projects, that construction firms and labor unions may have cause for action against the State. It is my hope that since public funds will be used for this project, that prevailing wages are paid and a competitive public bid process is utilized to select the contractor(s) to work on the Walkway project.	All of the construction contracts will be advertised as a public bid. This project is receiving federal funds, and prevailing wages will be paid to all workers.
196	Opening Day blessings - On the Opening Day of the Walkway to the public, representatives from the various faiths/religions based in the City of Poughkeepsie and Highland should visibly perform some collective, on-site blessing of the Walkway as part of the day's ceremonies. We have Catholic, Jewish, Muslim, and Protestant congregations in the City of Poughkeepsie, to name a few. It's great to have the Governor and other political dignitaries at the Walkway's Opening Day ceremony, but it is more important to have God's representatives also present at the event.	This is a good recommendation and will be considered.

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VI. LIST OF PREPARERS AND LIST OF ACKNOWLEDGEMENTS

The team of consultants contracted to prepare this Design Report included:

- Bergmann Associates
- McLaren Engineering Group

Bergmann Associates
1 Computer Drive South
Albany, New York 12205

Bergmann Associates was responsible for technical preparation of the design report.

Table VI-1: Bergmann Associates Team Members

Name	Responsibilities	Education	Experience
Peter M. Melewski, PE	Project Manager	MS Urban & Environmental Studies, BS Civil Engineering	25 yrs
Dean R. Goodison, PE	Deputy Project Manager	BS Civil Engineering	13 yrs
Michael Cooper, PE	Structural Engineer	MS Structural Engineering	10 yrs
David A. Thurnherr, PE	Structural Engineer	MS Structural Engineering	22 yrs
Mark R. Johns, ASLA	Landscape Architect	BS Landscape Architecture	23 yrs
James F. Boggs	Environmental Scientist	MS Natural Resources Management	30 yrs
Gina M. Wilkolaski, PE	Project Engineer	BS Civil Engineering	8 yrs
Lindsay A. Zefting	Design Engineer	BS Civil Engineering	1 yr

McLaren Engineering Group
100 Snakehill Road
West Nyack, NY 10994

The McLaren Engineering Group assisted Bergmann Associates in the preparation of the design report and inspections.

Table VI-2: McLaren Engineering Group Team Members

Name	Responsibilities	Education	Experience
Mal McLaren	Manager	MS Structural Engineering	32 yrs
George Assis	Structural Engineer	PhD Structural Engineering	32 yrs
James Green	Diving Engineer	BS Civil Engineering	21 yrs

Project Support:

During the course of this project, the following individuals have made substantial contributions:

Table VI-3: Organizations Offering Project Support

Organization	Name	Title
The Beacon Institute	John Cronin	CEO
Dutchess County Economic Development Corporation	Theresa Kelly	Empire Zone Coordinator
Dutchess County Tourism	Mary Kay Vrba	Director of Tourism
Dyson Foundation	Diana M. Gurieva	Executive Vice President
The Hudson River Navigator	Vincent Taraagna	
Hudson River Valley Greenway	Mary Mangione	Acting Executive Director
Hudson Valley Rail Trail Association, Inc.	Raymond J. Costantino	President
National Parks Service	Karl Beard	NY Projects Director
Poughkeepsie Area Chamber of Commerce	Charles S. North	President and CEO
Rails-To-Trails Conservancy	Jeff Ciabotti	VP of Trail Development
Parks & Trails New York	Robin Dropkin	Executive Director
Scenic Hudson	Ned Sullivan	President
	Toshi & Peter Seeger	Concerned Resident
Town of Lloyd	Nancy E. Hammond	Deputy Supervisor
Town of Lloyd	Robert Shepard	Supervisor
Town of Poughkeepsie	Patricia Myers	Supervisor
Town of Wappinger	Joseph Ruggiero	Supervisor
The Trust For Public Land	Rose H. Harvey	Regional Director
Ulster County Legislature	David B. Donaldson	Chairman
Ulster County Tourism	Richard J. Remsnyder	Director

Table VI-4: Public Officials Offering Project Support

Name	District
Assemblyman Tom Kirwan	100th Assembly District
Assemblyman Joel M. Miller	102nd Assembly District
Congresswoman Kirsten Gillibrand	20th District, New York
Congressman John Hall	19th District, New York
Senator Hillary Rodham Clinton	US Senate, New York
Senator Vincent L. Leibell	40th District
Senator Stephen M. Saland	41st District
Senator Charles E. Schumer	US Senate, New York

Other Acknowledgements:
During the course of this project, the following individuals have made substantial contributions (see "Brainstorming Session" notes in **Appendix G**):

Table VI-5: Acknowledgements

Name	Organization
Bill Moreau	NYS Bridge Authority
Garrett Jobson	NYS Office of Parks, Recreation, and Historic Places
Chuck Benfer	Walkway Over The Hudson
Dick Coller	Walkway Over The Hudson
Mike Duffy	Dyson Foundation
Butch Marcelle	Fort Miller Group
Scott Harrigan	Fort Miller Group
John Gonyea	Fort Miller Group
Charles Slutzky	I.& O.A. Slutzky, Inc.
Rob Bettigole	Past President, Exodermic Bridge Institute
Jeff DiStefano	Harrison and Burrowes

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