THE TOWN OF
RHINEBECK · NEW YORK
FOUNDED 1686

January 7, 2019

The Honorable Rossana Rosado
NYS Secretary of State
One Commerce Plaza
99 Washington Ave
Albany, NY 12231

Re: Amtrak's Proposed Impasse Fencing and Locked Gates
Application F-2018-0060

Dear Secretary Rosado:

Municipalities along Amtrak's Empire Corridor South from Rensselaer to Poughkeepsie are seriously concerned about the incremental and ongoing loss of public access to the Hudson River. These concerns have been heightened over the past year because Amtrak has proposed impasse fencing and locked gates at several locations between Rhinebeck and Stuyvesant. During the New York State Department of State's (NYS DOS) public comment period on Application F-2018-0060, over 300 comment letters and two petitions with over 2,000 signatures were submitted raising concerns about the proposal.

On September 6th, five Columbia County Town Supervisors signed a letter which raised questions about the transparency of the process. They insisted that mitigation efforts be made an integral part of the process, and urged NYS DOS to dismiss the application as inconsistent if there is no good faith effort on the part of Amtrak to agree to mitigation so that access to the River is not further limited.

Hence, the Town of Rhinebeck, which has an adopted and approved Local Waterfront Revitalization Program (LWRP), the Town of Germantown, which has finalized its Local Waterfront Redevelopment Strategy (LWRS), and the 10 additional undersigned municipalities along the east side of the Hudson River from Poughkeepsie to Rensselaer ask you to compel Amtrak not to implement its impasse fencing and locked gate project and object to the project as currently proposed. Amtrak's proposal prevents the achievement of, and is not consistent with, New York State Coastal Management Program's (NYS CMP) policies. The proposal is also not consistent with several policies in Rhinebeck's LWRP and Germantown's LWRS.

Please take note that this letter goes beyond the concerns of Rhinebeck and Germantown. The Village of Castleton-on-Hudson has already lost access to its only riverfront park. In 2012 NYS DOT tried to close the grade crossing at Ferry Road in Stuyvesant. In addition, Hyde Park has recently reported that it is grappling with unsafe "orphan bridges" across the railroad tracks.

Proposed Amtrak Impasse Fencing and Locked Gates Project: Amtrak is proposing to construct 8,200 linear feet of imposing, eight-foot tall, black metal impasse fence and locked gates at several locations

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where none currently exist along the Empire Corridor South from Milepost 75 to Milepost 141. According to the Federal Consistency Application Form (FCAF) these locations include Rhinecliff, Tivoli, Cheviot, Germantown, North Germantown, Stockport and Stuyvesant. Amtrak has also stated that in the future it intends to propose additional impasse fencing and/or locked gates in Hyde Park and Hudson. Further, while the application states that 8,200 feet of impasse fencing will be constructed, the total of fencing in this phase of the project is just 1,770 feet. This begs the question—which of our communities will be subject to the remaining 6,430 feet of impasse fencing? And how will our access be impacted? The effects of the current proposal and any future impasse fencing and locked gates need to be simultaneously reviewed in their entirety, not on a case-by-case basis in a segmented review.

Impact of Currently Proposed Amtrak Impasse Fencing Project: As proposed, Amtrak's impasse fences and locked gates would eliminate generations of existing Hudson River public access for water-related recreation at specific locations and along a 66-mile stretch of the Empire Corridor South between Poughkeepsie and Rensselaer. The impasse fencing and locked gates would also eliminate future needed public river access, negatively affect the scenic value of the Hudson River Valley and prevent development of future projects that would be consistent with the NYS CMP and approved LWRPs. Finally, based on current published public safety data, it is not evident the impasse fencing or locked gates are necessary.

Needed Action: The undersigned strongly believe that the construction of impasse fencing and locked gates would have significant negative effects on the achievement of the NYS CMP and approved LWRPs. We ask you to object to the project as currently proposed, compel Amtrak to modify its current proposal and:

- Assess Hudson River public access needs along the entire Empire Corridor South from Rensselaer to Poughkeepsie in cooperation with local governments, relevant State agencies, Hudson River users, other public access stakeholders and the general public;
- Update the most recent NYSDOT public safety data in the Corridor;
- Conduct an open and transparent public process to achieve buy-in and develop a plan that balances safety and access;
- Review with each affected community (whether or not their LWRP has been approved), involved State agency and the general public, the above mentioned access needs assessment and updated public safety data, as well as future Amtrak proposal(s) and impact on public's ability to gain access to the River; and
- Work with Amtrak to revise subsequent proposals to reflect the above data, assessments and comments to better ensure consistency with the NYS CMP and approved LWRPs.

Attached are two documents. *Impact of Amtrak's Proposed Impasse Fencing and Locked Gates on Achievement of Public Access Policies in New York State's Coastal Management Program and the Town of Rhinebeck LWRP* provides more detailed information on the current proposal's lack of consistency with the public access policies in the NYS CMP and Rhinebeck LWRP. The attachment, *At Grade Passenger Rail Pedestrian and Trail Crossings* describes possible alternatives that would minimize negative impacts on the public's ability to gain access to the River.

The Towns of Rhinebeck and Germantown as well as the 10 undersigned municipalities, look forward to working with you, NYS Department of Transportation and Amtrak to ensure affected public safety,

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public access, scenic values and future development issues are resolved in a manner consistent with the NYS CMP and approved LWRPs.

Thank you.

Sincerely,

Supervisor Elizabeth Spinzia
Town of Rhinebeck

Supervisor Robert W. Beaury
Town of Germantown

Mayor Rick Rector
City of Hudson

Supervisor Raymond Staats
Town of Clermont

Supervisor Aileen Rohr
Town of Hyde Park

Supervisor James Guzzi
Town of Livingston

Supervisor Robert McKeon
Town of Red Hook

Supervisor Matt Murrell
Town of Stockport

Supervisor Ron Knott
Town of Stuyvesant

Mayor Robert Schmidt
Village of Castleton-on-Hudson

Mayor Gary Bassett
Village of Rhinebeck

Mayor Joel R. Griffith
Village of Tivoli

Cc Jeff Quain, Capital Region Representative for the Governor
Kisha Santiago-Martinez, New York State Department of State, Deputy Secretary of State for Development, Planning, and Community Infrastructure
Matthew Maraglio, New York State Department of State, Coastal Resources Specialist
Scott Keller, Hudson River Valley Greenway, Acting Executive Director

Attachments: *Impact of Amtrak's Proposed Impasse Fencing and Locked Gates on Achievement of Public Access Policies in New York State's Coastal Management Program and the Town of Rhinebeck LWRP*

At Grade Passenger Rail Pedestrian and Trail Crossings

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January 4, 2019

Impact of Amtrak's Proposed Impasse Fencing and Locked Gates on Achievement of New York State's Coastal Management Policies Related to Public Access and the Town of Rhinebeck LWRP

Amtrak has filed a Federal Consistency Application Form (F-2018-0060) to construct 8,200 linear feet of impasse fencing and locked gates where none currently exist along a 66-mile stretch of the Empire Corridor South between Mileposts 75 and 141. Amtrak's stated purpose for the proposal is to "establish an impasse fence where it does not currently exist to keep trespassers and vehicle traffic off of the Amtrak Right of Way... to deter a train collision." The original application included eight sites in five municipalities: the Town of Rhinebeck, Village of Tivoli, and Towns of Germantown, Stockport and Stuyvesant. The proposal is not consistent with the New York State Coastal Management Program (NYS CMP), Rhinebeck's Local Waterfront Revitalization Program (LWRP), and public access policies in other approved LWRPs.

The largest concern voiced by municipal officials, stakeholders, and the general public during NYS Department of State's (NYS DOS) comment period related to F-2018-0060 continues to be related to the loss of public access for water-related recreation. Therefore, this paper will focus on how the construction of impasse fencing and locked gates would negatively impact public access goals of the NYS CMP (Policies 19, 20, 21, 23, 24 and 25) and Rhinebeck's LWRP (Policies 1, 1A, 2, 19, 20, 20A, 21, 21 B, 24, 24A, and 24B, as well as several proposed projects in the LWRP).

Broader Approach Needed to Balance Safety and Water-Related Recreational Access Goals

Because this application and subsequent actions would involve sites along 66 miles of shoreline between Poughkeepsie and Rensselaer, locked gates and/or impasse fences at each individual site would have the potential to restrict, reduce or even eliminate access along long stretches of riverfront where people have for generations been enjoying water-related recreational uses such as fishing, duck hunting, birding, and boating. As a result, the NYS DOS must take a broader view of this application and consider the geographic totality of the loss of access between Poughkeepsie and Rensselaer.

Hyde Park Supervisor Aileen Rohr and Hudson Mayor Rick Rector have indicated that proposals for locked gates and impasse fences will be submitted at a later date in those municipalities. In addition, on September 4, 2018, State Senator Sue Serino wrote to NYS Department of Transportation (NYS DOT) Commissioner Paul A. Karas expressing concern about "orphan bridges" that span the Empire Corridor South posing "imminent safety concern" with no clear record of ownership (See Attached letter). One such bridge is in Hyde Park. Hyde Park Supervisor Aileen Rohr has indicated that since the Town has very limited at-grade access across the railroad, these orphan bridges provide "a very real and important option for public access to the Hudson River."

Although not part of this application, access has already been lost at the Village of Castleton-on Hudson Riverfront Park due to the construction of fencing along the railroad. As a result, the entire park has been rendered inaccessible from the Village and its Main Street businesses. The *Rensselaer County Hudson River Access Plan* (June 2018) on pages 13-14 identifies this publicly-owned site (Site ID #3) as one of the County's highest priorities for the reestablishment of public access https://www.renstrust.org/images/projects/HudsonRiverAccessPlan_FINAL_3-25-18_forweb_Revised.pdf. Village officials as well as the Village of Castleton-on-Hudson Main Street Association have also identified reestablishing public access to this waterfront park as a high priority. See Attached, *Public Access to the Hudson River in the Village of Castleton-on-Hudson*, Gina Giuliano, PhD.

While Amtrak has deferred the site in Tivoli (MP 99.5—Tivoli Road/Diana Street) to a later phase, a prior agreement between CSX and the Village requires that upon the construction of Tivoli's waterfront park, the existing, legal grade crossing at Diana Street must be closed and future access to the park must be provided by a pedestrian overpass. The prospect of an overpass has generated significant concern in Tivoli regarding its inability to provide access to small paddlecraft; the loss of usable park space that must be devoted to the overpass; visual impact of the large structure; and project cost.

Although not directly related to Amtrak's current application (F-2018-0060), these issues related to Hyde Park, Hudson, Castleton-on-Hudson and Tivoli are germane to the bigger picture because these and other riverfront communities have been incrementally losing river access due railroad policy. In order to advance the NYS CMP's Public Access Policies, enhancing public safety and providing public access for water-related recreation on the Hudson River must be considered in a holistic manner. Without this broader approach places where people currently enjoy—and historically have enjoyed—river access for water-related recreational uses will be forever lost as will opportunities for new access. This broader approach is also needed in order to be consistent with several Local Waterfront Revitalization Programs (LWRPs), including Rhinebeck's.

Below is a discussion of the impact of Amtrak's proposed locked gates and impasse fences on achieving the public access policies in New York State's Coastal Management Policy and Rhinebeck's LWRP.

INCONSISTENCIES WITH STATE COASTAL MANAGEMENT POLICY
Impasse fencing and Locked Gates Would Not Be Consistent with NYS CMP Policy 19
Protect, maintain, and increase the level and types of access to public water related recreation resources and facilities

Policy 19 includes guidelines that explain the goals of the policy and how they are to be interpreted:

> "The existing access from adjacent or proximate public lands or facilities to public water related recreation resources and facilities shall not be reduced, nor shall the possibility of increasing access in the future from adjacent or proximate public lands or facilities to public water related recreation resources and facilities be eliminated, unless in the latter case, estimates of future use of these resources and facilities are too low to justify maintaining or providing increased public access, or unless such actions are found to be necessary by the public body having jurisdiction over such access as the result of a reasonable justification of the need to meet system-wide objectives."

Amtrak's January 12, 2018 cover letter, explicitly states that "The fencing will reduce access to the Hudson River..." This, prima facia, conveys a loss of access, which is not consistent with Policy 19. The proposed 700-foot long impasse fencing at the Mile Post (MP) 104.98—Germantown Town Park would prevent access to the shoreline where people have enjoyed fishing, boating and swimming for generations. In addition the Town of Germantown's Draft Local Waterfront Revitalization Study (LWRS) *Initial Issues, Opportunity and Vision Report* (September 2017) identifies this riverfront parcel as a site for future public access (page 7). Numerous public comments submitted by the Germantown Waterfront Advisory Committee (WAC) and others also indicate that the public has long been using this site for water-related recreation.

Proposed locked gates at four locations (Mile Posts (MP) 118.0—Stockport Creek Conserve (sic); 106.7—Anchorage Road; 103.50—Cheviot, 90.1—CP 89; and 89.0--Rhinecliff) would prevent people from accessing the shoreline for fishing and other water-related recreational activities. For example, the shoreline north of Rhinecliff is used extensively by anglers, particularly those fishing for Striped bass in the spring. This is demonstrated by public comments. In addition, a review of Google Maps' satellite view reveals that 30 vehicles are parked along the access road along the railroad between Rhinecliff and Clermont State Park. Based on the state of vegetation it can be deduced that this is springtime when the Striped bass are running. Fishing for Striped bass is not only a water-related recreational; activity, it is an important part of the Hudson Valley's history, culture and economy.

<u>Based on the above, Amtrak's proposed locked gates and impasse would not be consistent with NIS CMP Policy 19.</u>

INCONSISTENCIES WITH THE RHINEBECK LOCAL WATERFRONT REVITALIZATION PROGRAM
Impasse fencing and Locked Gates Would Not Be Consistent with Rhinebeck's LWRP
Two of the sites that are subject to Application F-2018-0060 are located in Rhinebeck: MP 89—Rhinecliff and MP 89.1/CP89. Based on the Rhinebeck Waterfront Advisory Committee's review of Amtrak's application and cover letter, dated January 12, 2018 cover letter, which states that *"The fencing will reduce access to the Hudson River..."*

the action would not be consistent with Policies 1, 1A, 2, 19, 20, 20A, 21, 21B, 24, 24A, and 24B as well as several proposed projects in its approved LWRP. These inconsistencies will be highlighted below. Note that the accounting below is intended as a representative sample of ways in which Amtrak's proposed impasse fencing and locked gates at MP 90.1/CR89 and MP 90-Rhinecliff are not consistent with Public Access Policies and Proposed Projects in Rhinebeck's LWRP. The Town reserves the right to submit additional Consistency comments at a future date.

More public access is needed in Rhinebeck—not less

Section II of Rhinebeck's LWRP, Existing Land Uses, water-related uses, states in no uncertain terms the need to provide more public access—not less, which would result should Amtrak's proposal for locked gates and fences be implemented:

> *"In spite of impediments to public access, people hungering to enjoy water-related uses on the River have found ways to do so. "Fishermen also utilize the shores of the Hudson River throughout the waterfront area... Fishermen with and/or without specific permission fish off the shores of the Landsman Kill and other streams at a variety of locations and enter the areas primarily across private property. Moreover, fishermen and duck hunters enter the Astor Cove and Vanderburgh Cove area under similar conditions. Property owners of landing sites included in the inventory subsection on Coastal Access Points may launch or dock boats at those locations for private recreational use, but these activities are generally limited by the need to cross the railroad tracks at grade level at most locations.*
>
> *Rhinebeck LWRP, Section II-6*

The importance of expanding river access and the railroad's role as an impediment to access

Rhinebeck's LWRP also states that "the Hudson offers a unique and an essential open space, as well as a scenic area that is a major visual focus within the western-most portions of the Town." The River's presence is described as "both overpowering and calming, and the benefits to residents of the Town are many-fold" (*Rhinebeck LWRP, page II-11*). However, in spite of the Hudson River's value for providing open space, the LWRP also acknowledges the railroad's role in limiting peoples' access to the River:

> *"the Hudson River itself has played a relatively minor role in the life of the Town, primarily because of the limited public access to the River. The railroad tracks along the shoreline have severely limited safe access to the River for commercial and recreational activities. (page II-25). The historic Town Landing at Rhinecliff has provided the only major public access to Rhinebeck's Hudson River shore since the construction of the railroad (page II-25). In fact the LWRP calls out a specific issue facing Rhinebeck residents and officials: how to gain additional access points to the River*
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> *Rhinebeck LWRP, page II-24*

The LWRP further states that "Several factors have limited public access to the River for the last century. A primary factor has been the development of the railroad along the shore-line of the Town and the policies and practices of railroad management which have severely restricted public and private access to the River. Higher speed train traffic has limited what were once considered usable grade crossings and bridges over the tracks and are now in various stages of disrepair. The Town of Rhinebeck and the NYS Department of Transportation (NYS DOT) have recently restored the pedestrian and vehicular bridges which lead to the Town Dock. The only other overhead crossing presently allowing access to the River in Rhinebeck is a crossing on the private estate, the Meadows (Leacote) (page II-27).

AMTRAK'S PROPOSAL IS NOT CONSISTENT WITH THE FOLLOWING POLICIES IN RHINEBECK'S LWRP

POLICY 1
RESTORE, REVITALIZE, AND REDEVELOP DETERIORATED AND UNDERUTILIZED WATERFRONT AREAS FOR COMMERCIAL, INDUSTRIAL, CULTURAL, RECREATIONAL, AND OTHER COMPATIBLE USES.

The Explanation of Policy 1 states that

> *"Other coastal access points, such as Slate Dock and Long Dock, which currently have only on-grade crossing of the railroad tracks (which have been closed due to safety considerations), need to be further studied for re-utilization and redevelopment possibilities."*
>
> *Rhinebeck LWRP, Section III - 2*

POLICY 1A
ENCOURAGE GROWTH OF THE TOURISM SECTOR OF THE TOWN ECONOMY THROUGH: (1) REVITALIZATION, REDEVELOPMENT, PRESERVATION OR ENHANCEMENT OF AREAS AND STRUCTURES WITHIN THE WATERFRONT REVITALIZATION AREA / HISTORIC SHORELAND SCENIC DISTRICT / ESTATES DISTRICT SCENIC AREA OF STATEWIDE SIGNIFICANCE AND (2) TAKING STEPS TO INFORM THE PUBLIC OF EXISTING AREAS OF HISTORIC, SCENIC, AND RECREATIONAL INTEREST.

The Explanation of Policy 1A states that:

> "The Efforts to promote recreational fishing and boating, cultural activities, marinas, water-related recreational facilities, historic preservation, natural resource preservation, the preservation of vistas and views, and other activities which will make the waterfront area vital for residential, commercial and recreational usage and appealing for tourists in appropriate locations will be pursued. This will be accomplished through promoting the use of historic estates for cultural purposes, working with railroad interests to secure access to Long Dock, Slate Dock and Morton's Dock, creative use of low density zoning, clustering, and conservation easements."
>
> *Rhinebeck LWRP, Section III - 3*

POLICY 2
FACILITATE THE SITING OF WATER-DEPENDENT USES AND FACILITIES ON OR ADJACENT TO COASTAL WATERS.

The Explanation of Policy 2 states:

> "Expanding the utilization and/or area of existing water-dependent uses and attracting additional water-dependent uses and activities that are consistent with Town planning objectives is a priority. See list of Hudson River "Coastal Access Points" in Section II which includes several sites that could be developed for water-related recreation purposes and/or public access including the Town Landing in Rhinecliff, Wilderstein Landing/Morton Dock, Slate Dock and Long Dock."
>
> *Rhinebeck LWRP, Section III - 4*

POLICY 19
PROTECT, MAINTAIN, AND INCREASE THE LEVEL AND TYPES OF ACCESS TO PUBLIC WATER-RELATED RECREATION RESOURCES AND FACILITIES SO THAT THESE RESOURCES AND FACILITIES MAY BE FULLY UTILIZED IN ACCORDANCE WITH REASONABLY ANTICIPATED PUBLIC RECREATION NEEDS AND THE PROTECTION OF HISTORIC AND NATURAL RESOURCES. IN PROVIDING SUCH ACCESS, PRIORITY SHALL BE GIVEN TO PUBLIC BEACHES, BOATING FACILITIES, FISHING AREAS AND WATERFRONT PARKS.

Policy 19 is the LWRP's policy that addresses public access. The Explanation of Policy 19 states that:

> It is important in the Town to protect, maintain and increase pedestrian and, where appropriate, vehicular access to public water-related recreation resources and facilities, including opportunities for swimming, boating (including excursion boats and ice boats), fishing and appreciation of scenic vistas.

Policy 19 goes on to identify why access to the Hudson River is limited in Rhinebeck and identifies several locations, including Slate Dock, as a site where future access could be provided:

> The major access problem in Rhinebeck involves crossing of the railroad tracks. The only public above-grade crossing (excluding the Kingston-Rhinecliff Bridge which takes travelers beyond the Rhinebeck shores) is located within the hamlet of Rhinecliff and has been a focus of Town rehabilitation and improvement efforts for the past two to three decades. The private bridge at the Meadows provides the only other vehicular bridge in the Town. Currently at-grade crossing of the railroad tracks is required to reach Wilderstein Landing / Morton Dock, Long Dock, Slate Dock, and most of the Town's other potential waterfront areas. Improved access could be accomplished in the future by public, private or a combination of efforts. This policy calls for a balance among the following factors: the level of access to a resource or facility; the capacity of a resource or facility; and the protection of natural resources.

In addition, Policy 19 offers several guidelines that are to be used in determining the consistency of a proposed action with this policy.

> 1. The existing access from public lands or facilities to public water-related resources and facilities shall neither be reduced, nor should the possibility of increasing access in the future from public lands or facilities to public water-related recreation resources and facilities be eliminated, unless there is a significant threat to public safety from a current or proposed use.
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> 2. Any proposed project to increase public access to public water-related recreation resources and facilities shall be analyzed according to the following factors:
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> a. The level of access to be provided should be in accord with estimated public use.
>
> b. The level of access to be provided shall not cause a degree of use which would exceed the physical capability of the resource of facility. c. The level or type of use shall be conditioned on the requirements of public safety.
>
> 4. The following activities will not be permitted unless the actions are found necessary for, or to be of great benefit to, or for the common good of Town residents.
>
> a. Construction of public facilities which physically prevent the provision of convenient public access to public water-related recreation resources and facilities.
>
> b. Construction of private facilities which physically prevent the provision of convenient public access to public water-related recreation resources or facilities from public lands and facilities.
>
> *Rhinebeck LWRP, Section III – 23-28*

Locked gates and impasse fencing at MP 90.1/CR 89 would clearly violate Policy 19, including Guideline 1, which states that "existing access from public lands or facilities to public water-related resources and facilities shall neither be reduced, nor should the possibility of increasing access in the future from public lands or facilities to public water-related recreation resources and facilities be eliminated, unless there is a significant threat to public safety from a current or proposed use."

In addition, locked gates and impasse fencing would prevent water-related recreational activities, including but not limited to, shoreline fishing, as well as fishing in coves and duck hunting both north and south of Rhinebeck.

While Amtrak might believe there is a significant threat to public safety at this location, Amtrak has not demonstrated a record of incidents, injuries, or fatalities at this location. Further, the Town of Rhinebeck believes that simply erecting locked gates and fences without regard to loss of existing and future public river access is the only way to address safety issues. The Town requests that other safety improvements, as have been used along other high speed rail lines across the nation, should be considered at this location so that public access can be maintained or even increased at this Slate Dock. (See attached White Paper, *At Grade Passenger Rail Pedestrian & Trail Crossings Empire Corridor South*).

These Guidelines also prohibit the construction of private facilities that would physically prevent the provision of convenient access to public water related recreational resources from public lands or facilities.

Given that the proposed locked gates and impasse fencing MP 90.1/CR89 would reduce, and possible eliminate existing and future public access from Slate Dock Road, a public street, Amtrak's application would not be consistent with Policies 1, 1A, 2, and 19.

POLICY 20
ACCESS TO THE PUBLICLY-OWNED FORESHORE AND TO LANDS IMMEDIATELY ADJACENT TO THE FORESHORE OR THE WATER'S EDGE THAT ARE PUBLICLY-OWNED SHALL BE PROVIDED, AND IT SHOULD BE PROVIDED IN A MANNER COMPATIBLE WITH ADJOINING USES. SUCH LANDS SHALL BE RETAINED IN PUBLIC OWNERSHIP.

The Explanation of Policy 20 states:

> "Access to the publicly-owned foreshore and adjacent land within the waterfront area shall be provided for water-related recreational activities, as well as for those activities which require only minimal facilities for their enjoyment. Examples of activities requiring access would include: boating, walking along the waterfront, the enjoyment of scenic resources, bicycling, bird watching, photography, nature study, hunting and fishing. In Rhinebeck there are two significant limitations to the extent of possible public access: (1) the railroad extends along the entire shore-line physically restricting safe and ready access to the foreshore and (2) several shorefront owners have been granted underwater rights to parcels west of and adjacent to the railroad and only a portion of the Town's foreshore has remained in public (State) hands.
>
> The following guidelines will be used in determining the consistency of a proposed action with this policy:
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> 1. Existing access from public lands or facilities to existing public coastal lands and/or waters shall not be reduced, nor shall the possibility of increasing access in the future from adjacent or nearby public lands or facilities to public coastal lands and/or waters be eliminated, unless such actions are demonstrated to be of overriding public benefit. A reduction in the existing level of public access includes, but is not limited to, the following:
>
> a. Pedestrian access is diminished or eliminated because of hazardous crossings required at new or altered transportation facilities, electric power transmission lines, or similar linear facilities.
>
> 5. Within the Hudson River waters of the Town, most underwater lands --- including the foreshore, tidal waters and submerged lands under tidal waters below the mean high water line --- are owned by the State under the Public Trust Doctrine, but the rights to some underwater lands are held by private owners whose lands abut the River. While publicly-owned lands shall be retained in public ownership, traditional

sales of easements on lands underwater to adjacent onshore property owners could be consistent with this policy, provided such easements do not substantially interfere with continued public use of the public lands on which the easement is granted. Also, public use of such publicly-owned underwater lands and lands immediately adjacent to the shore shall be discouraged where such use would be inappropriate for reasons of public safety or the protection of fragile coastal resources.

In New York State, the courts have interpreted the Public Trust Doctrine to mean, when applied to recreation, that the public has the right to use public trust lands and waters for bathing, boating, fishing and other lawful purposes when the tide is in; and when the tide is out, to walk along the foreshore to gain access to the water for these purposes and to lounge and recline on the foreshore. Upland property owners whose lands abut public trust resources have certain rights of their own. The public cannot access public trust land across private land without the owner's permission. Additionally, these upland owners possess riparian rights to the Hudson River. These rights entitle the owner to access navigable water. These rights are however limited as to the type of use which may be placed in the water, and they must be reasonably exercised. By the nature of location over the water, the exercise of these rights almost always interferes with public use of the water and the lands subject to the Public Trust Doctrine.

In New York State, adjacent upland owners can also apply to purchase or lease underwater lands. While such acquisitions in the 18th and 19th centuries were generally of large expanses of public trust lands and waters to promote the development of commerce, more recent private uses of public trust lands include marinas, commercial fishing operations and recreational boating. While the courts have consistently recognized the Public Trust Doctrine as a sovereign right held for the people, they have also recognized the validity of grants of public trust lands to riparian owners. The courts have held that where some types of grants have been made by the State without any express reservation of the public rights, the public trust and accompanying public rights have been extinguished, although the State may still regulate such lands under its police power and may authorize local governments to do so as well. The courts have also held that some grants may be invalid if the grant is not in the public interest.

The importance of the Public Trust lands for public access and as a recreational resource and the use of the Public Trust Doctrine to better protect the State's coastal areas, their living resources, and the public's right to access and enjoy them have recently been re-emphasized. Private actions that interfere with the public's opportunity to use and enjoy these commercially and recreationally productive resources have increasingly come into question.

In 1992, the NYS Legislature passed Chapter 791, codifying, in part, the public trust in underwater lands. The Legislature found that regulation of projects and structures, proposed to be constructed in or over State-owned land underwater, was necessary to responsibly manage the State's proprietary interests in trust lands. Additionally, the regulation would severely restrict alienation into private ownership of public trust lands owned by the State. The intent of the Act was to ensure that waterfront owners' reasonable exercise of riparian rights and access to navigable waters did not adversely affect the public's rights. The Legislature stated that use of trust lands is to be consistent with the public interest in reasonable use and responsible management of waterways for the purposes of navigation, commerce, fishing, bathing, recreation, environmental and aesthetic protection, and access to the navigable waters and lands underwater of the State.

Increased access to the publicly-owned foreshore will be sought through review of proposed site plans and subdivision plans for waterfront parcels and possible negotiation with developers of proposed projects, particularly where waterfront access sites have been identified (see Map 6, "Coastal Access Points" and the related inventory chart on Coastal Access Sites). In addition, the establishment of scenic lookout/parking areas such as the one proposed at Vanderburgh Cove will also increase opportunities for passive and active recreational use of the public foreshore areas.

Rhinebeck LWRP, Section III – 25-28

Policy 20 elaborates on several points—the need to provide public access to the publicly-owned foreshore, the importance of the Public Trust lands for public access and as a recreational resource, and it reinforces the public's right to that access under the Public Trust Doctrine.

Proposed locked gates and impasse fencing at MP 90.1/CP 89, as well as the locked gate proposed at MP 89—Rhinecliff, would result in a loss of public access for water-related recreation and, therefore, would be not be consistent with the Rhinebeck LWRP.

POLICY 20A
REASONABLE VEHICULAR ACCESS AND PEDESTRIAN ACCESS SHALL BE PROVIDED, WHENEVER FEASIBLE, TO THE PUBLICLY OWNED FORESHORE AND PUBLIC OWNERSHIP OR EASEMENT OVER ADJOINING LAND WILL BE PURSUED, WHERE APPROPRIATE.

The Policy indicates that:

> "Current access to the foreshore is extremely limited because of the location of the railroad relative to the Hudson shoreline and the development of estates lining the River, which have, for the most part, remained in private hands. For the future, there may be several methods of providing access in addition to the Town Landing area at Rhinecliff. These include: reinforcement of the 25-mile historic hike and bike trail, development of a complementary trail system (utilizing portions of the abandoned railroad bed extending northeastward from Rhinecliff to the Red Hook Town line); the provision of access across transportation facilities to the waterfront; and the promotion of mixed and multi-use development.
>
> As mentioned also in the explanation to Policy 19, the Town has significant problems with gaining physical access to the water's edge. Town, County and State officials need to continue to work closely with railroad interests to assure that the rail corporation maintains and repairs the bridges over the railroad. Moreover, in the remainder of the Town, any crossing of the tracks must now be done at grade except at the Astor tunnel, the Town Landing, and the vehicular bridge at The Meadows (see chart of coastal access points in Inventory and Analysis Section).
>
> As indicated in Policy 21B, it may be desirable in the future to develop other sites, such as Slate Dock, Long Dock and/or Morton's Dock to gain access to the publicly-owned foreshore and to establish water-related public/private recreational uses. "
>
> *Rhinebeck LWRP, Section III – 28*

In addition to citing the construction of the railroad as the reason that shoreline access is so limited, the Policy expresses the Town's intent to consider a develop site, including at Slate Dock, for river access. Therefore, Amtrak's proposed locked gates and impasse fencing at MP 90.2/CP89 (Slate Dock Road) and the proposed gate at MP 89 is not consistent with Policy 20A.

POLICY 21
WATER-DEPENDENT AND WATER-ENHANCED RECREATION WILL BE ENCOURAGED AND FACILITATED, AND WILL BE GIVEN PRIORITY OVER NON-WATER-RELATED USES ALONG THE COAST, PROVIDED IT IS CONSISTENT WITH THE PRESERVATION AND ENHANCEMENT OF OTHER COASTAL RESOURCES AND TAKES INTO ACCOUNT DEMAND FOR SUCH FACILITIES. IN FACILITATING SUCH ACTIVITIES, PRIORITY SHALL BE GIVEN TO AREAS WHERE ACCESS TO THE RECREATION OPPORTUNITIES OF THE COAST CAN BE PROVIDED BY NEW OR EXISTING PUBLIC SECTION III - 29 TRANSPORTATION SERVICES AND TO THOSE AREAS WHERE THE USE OF THE SHORE IS SEVERELY RESTRICTED BY EXISTING DEVELOPMENT.

The Explanation of this Policy states that:

> Water-related recreation includes such obviously water-dependent activities as boating, swimming, fishing, trapping and waterfowl hunting, as well as certain activities which are enhanced by a coastal location and increase the general public's access to the coast such as bike and other trails, picnic areas, scenic overlooks and passive recreation areas that take advantage of coastal scenery. Since the railroad borders the entire shore of the Town, there are only limited opportunities for development of water-related recreation. Sites with potential for development or redevelopment of water-related recreation and/or public access to the water are included in the list of Coastal Access Sites in the Inventory and Analysis Section.
>
> *Rhinebeck LWRP, Section III – 28-30*

The explanation also provides factors to be considered In addition, in developing and reviewing specific recreation facility proposals, such as might occur if and when the Town advances a project at Slate Dock. One such factor is #7, stating that "Priority for increasing water-related recreation opportunities shall be to those areas where access can be provided by new or existing public transportation and those areas where use of the shore is severely restricted by railroads."

Water-related recreational activities, including but not limited to, fishing, duck hunting and boating, which have traditionally been enjoyed by Town residents and others at Slate Dock and other locations along the railroad should be encouraged and prioritized, particularly at places along the shore where the railroad has severely restricted access. Therefore, locked gates and impasse fencing proposed at MP 90.1/CP89 and MP 89-Rhinecliff would not be consistent with Policy 21.

POLICY 21B
EXPLORE THE FEASIBILITY OF UTILIZING WATERFRONT ACCESS AREAS SUCH AS WILDERSTEIN LANDING/MORTON'S DOCK, SLATE DOCK, OR LONG DOCK AREAS FOR PUBLIC AND/OR PRIVATE WATER-RELATED AND/OR WATER-ENHANCED RECREATIONAL PURPOSES SUCH AS BOAT-LAUNCHING SITES, FISHING AREAS AND WATERFRONT PARKS.

Policy 21 states that

> "The Wilderstein Landing/Morton Dock area is expected to be improved as part of the restoration efforts at the Wilderstein estate. Long Dock and Slate Dock areas located slightly north of Rhinecliff (see Map 6), currently owned by CSX, are in poor condition and in need of refurbishing or redevelopment. Any major development would require construction of a bridge across the railroad tracks. The development of a waterfront walkway (or boardwalk) from the Town Dock to Slate Dock and ultimately to Long Dock would provide an important amenity along the riverfront.
>
> Priority should be given, therefore, to recreational development of the Wilderstein Landing/Morton's Dock, Slate Dock, or Long Dock areas as the primary use or as a multiple use of the parcels, particularly since use of most of the shore of Rhinebeck is severely restricted by the presence of the railroad. Public access to the Hudson River at regular intervals should be accomplished by various means including acquisition of parcels through gift or purchase, acquisition of easements or through subdivision regulation and/or site plan review requiring provision of recreation lands and/or public access as part of the development plan. See Policies 1, 2, 19, 22.
>
> *Rhinebeck LWRP, Section III – 31-32*

As indicated above, this Policy states in no uncertain terms the that Town believes it is important to construct a trail between the Town Landing, which is Rhinebeck's only formal public access to the Hudson, to Slate Dock and

ultimately Long Dock. Therefore, Amtrak's proposed locked gates and fencing would limit access to Slate Dock and Long Dock and, as such, would not be consistent with Policy 21B.

POLICY 22
DEVELOPMENT, WHEN LOCATED ADJACENT TO THE SHORE, WILL PROVIDE FOR WATER-RELATED RECREATION, AS A MULTIPLE USE, WHENEVER SUCH RECREATIONAL USE IS APPROPRIATE IN LIGHT OF REASONABLY ANTICIPATED DEMAND FOR SUCH ACTIVITIES AND THE PRIMARY PURPOSE OF THE DEVELOPMENT.

The Explanation of Policy 22 states that:

> "In Rhinebeck, railroad tracks parallel the Hudson River shore, so that construction of a safe means to cross the tracks must be an integral part of plans for River water-related recreation.
>
> Whenever a proposed development is compatible with the natural and built environments of the Town and consistent with the LWRP policies and the development could, through the provision of recreation and other multiple uses, significantly increase public use of the shore, then such development should be encouraged to locate adjacent to the shore. Such developments in Rhinebeck might include the reuse or redevelopment of the large waterfront estates along the Hudson, of dock areas such as Long Dock and Slate Dock (currently owned by CSX), Wilderstein Landing / Morton Dock or other access points listed in the inventory, or of properties along the streams of the Town, such as the Millpond area of the Landsman Kill.
>
> *Rhinebeck LWRP, Section III – 32-33*

As indicated elsewhere in the Rhinebeck LWRP, Policy 22 expresses the Town's desire to develop Slate Dock and Long Dock for public recreational access. Amtrak's proposed locked gates and impasse fencing at MP 90.1/CP 89 could preclude the development of these areas for public access and, therefore, is not consistent with Policy 22.

AMTRAK'S PROPOSAL IS ALSO NOT CONSISTENT WITH PROPOSED USES AND PROJECTS IDENTIFIED IN RHINEBECK'S LWRP

Because Amtrak's proposed locked gates and impasse fences at MP 89-Rhinecliff and MP 90.1-CP 89, Slate Dock Road would reduce public access for water-related recreational uses, the action is not consistent with the following public and private projects proposed in the Rhinebeck LWRP. These projects are described below:

Public Projects, 12, "Proposed Projects"
Waterfront Walkway
The Town has suggested development of a waterfront walkway, or "boardwalk", along the riverfront linking the Town Dock first to Slate Dock and ultimately to Long Dock.

Rhinebeck LWRP, Section IV – 4

Efforts to Establish Water-Related Recreation Facilities at Possible Coastal Access Points
Public and private efforts need to be encouraged that would permit or facilitate the siting of water-related recreation facilities at locations identified as possible future public or public/private access points, such as the Slate Dock, Long Dock or Wilderstein/Morton Dock areas (NOTE: the LWRP includes a list in Section II for other possible access sites). Careful consideration needs to be given to, and funding will have to be sought for, construction of safe above-grade railroad crossings.

Rhinebeck LWRP, Section IV –10

At-Grade Passenger Rail Pedestrian & Trail Crossings
Empire Corridor South
WHITE PAPER & RESOURCES

Prepared for:

SCENIC HUDSON

Prepared by:

McLaren ENGINEERING GROUP
applied ingenuity

November 2018

11/14/18

INTRODUCTION

Introduction

The National Railroad Passenger Corporation (Amtrak) has proposed constructing impasse fencing along the Empire Corridor South in locations where it currently does not exist to keep trespassers and vehicles off Amtrak right of way. The proposal was submitted and is subject to a New York State Coastal Management Program (CMP) Consistency Determination by New York's Department of State (DOS), the state's lead Coastal Management agency.

Scenic Hudson, a land preservation and environmental organization in the Hudson Valley, is concerned that this fencing—located between Poughkeepsie (MP 75) and Rensselaer (MP 141)—will eliminate public access to the Hudson River where water-dependent and water-related activities have been enjoyed for generations.

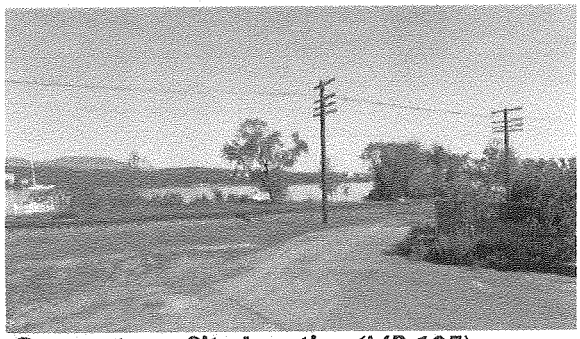
Municipal officials, advocacy organizations and hundreds of stakeholders in the corridor have submitted comments to the DOS expressing concerns about loss of river access for fishing, hunting and boating; impact on views; and increased response time for emergency providers such as police and fire departments and Emergency Medical Service (EMS) responders.

The project as currently proposed affects coastal resources and inhibits achievement of New York's CMP policies. Scenic Hudson has therefore retained McLaren Engineering Group (McLaren) to determine if practical at-grade protected pedestrian or trail crossing solutions exist that could be advanced at some of these locations.

McLaren has conducted a desktop literature review to assess current installations of conventional and higher speed at-grade pedestrian and trail rail crossings, policies and procedures, and applicable standards. Interviews with key individuals in the industry nationally were conducted to gather additional information.

Higher speed rail is defined as trains that travel at top speeds of 90 to 110 mph. High speed rail is defined as speeds above 110mph.[1]

McLaren also was asked to provide a preliminary overview of the proposed project's potential impact on coastal resources and achievement of New York's CMP policies. The findings are outlined in this white paper.



Germantown Site Location (MP 105)

Background

The project's impact on the achievement of NYS CMP public access policies is of primary concern. For example, the shore of the Hudson River between Rhinecliff (MP 89.0) and Stuyvesant Landing (MP 123.8), the site of eight proposed fencing locations, is an important and well-used resource for water-dependent activities such as fishing, hunting and recreational boating. Access to the river requires crossing the Empire Corridor South tracks, which is done at designated crossings and other locations. Train speeds in this portion of the Empire Corridor South can reach 90 mph. [2]

[1] New York State Department of Transportation. (2012). *High Speed Rail Empire Corridor Online Briefing.* https://web.archive.org/web/20160304074513/https://www.dot.ny.gov/content/delivery/Main-Projects/S93751-Home/S93751--Repository/ECHSR_Online_Briefing_March_2012.pdf

[2] New York State Department of Transportation. (2014). *Tier 1 Draft EIS. Draft Environmental Impact Statement, page 2-48.* New York State Department of Transportation. P10-11 https://www.dot.ny.gov/content/delivery/Main-Projects/S93751-Home/S93751--Repository/04chap2.pdf

Amtrak states that the fences will serve to direct pedestrians and vehicle traffic to public crossings that will be protected by crossing gates equipped with early warning devices.

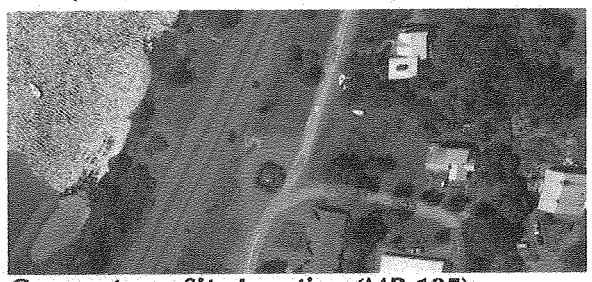
In one instance, described in Amtrak's application (Amtrak Federal Consistency Form, January 12, 2018) as "MP 104.98—Germantown Town Park," no crossing currently exists and the 700-foot-long fence would prevent—and effectively end—generations of Hudson River access for water-dependent and water-related uses.

Proposed fencing at Tivoli (MP 99.2) has been deferred, as the village is in the process of planning a waterfront park at that site. CSX sold the site to the village in order to develop a park. The sale included a condition that upon park construction, the existing grade crossing at Diana Street would be closed and a grade-separated pedestrian overpass installed to access the riverfront. This requirement has caused concern among village officials; neighboring residents; people who have been launching kayaks, canoes and other small boats; anglers; and others. Their concern is based on an array of factors: high cost; reduced access to launch boats; dedication of valuable riverfront land to a large pedestrian bridge structure instead of park purposes; and visual impacts affecting the Hudson National Historic Landmark District and the Clermont Subunit (ED-1) of the Estates District Scenic Area of Statewide Significance.

This white paper provides a review of current literature, including the American Association of State Highway Transportation Officials (AASHTO), Manual on Uniform Traffic Control Devices (MUTCD), and other engineering standards that apply to pedestrian and trailway crossings of high or higher speed passenger rail lines. The white paper will assess current installations of such at-grade crossings, as well as the techniques used and related policies and procedures. Based on this assessment, the white paper will provide guidance as to whether at-grade pedestrian crossings are a viable option in the Empire South Corridor.

Project Purpose & Need

Amtrak has indicated it is proposing these actions to improve public safety along the Empire Corridor South. The recommendations from Federal Rail Administration (FRA) state: "Eliminate all redundant or unnecessary crossings, together with any crossings that cannot be made safe due to crossing geometry or proximity of complex highway intersections" and "Install the most sophisticated traffic control/warning devices compatible with the location, (e.g. four quadrant gates) where train operating speeds are between 80 and 110 mph."[3] Amtrak's application would not "eliminate...redundant or unnecessary crossings," nor does the proposal include "the most sophisticated traffic control/warning devices." As currently proposed, Amtrak would construct the gates and fences without conducting a regional assessment of access needs or undertaking an analysis of their impacts on coastal resources and achievement of NYS CMP policies.



Germantown Site Location (MP 105)

In addition, a recent study of the safety record of trains in the Empire Corridor (Buffalo to New York City) conducted by the New York State Department of Transportation (NYSDOT) states, "From 2002 to 2011, of the 10 incidents which occurred at public grade crossings along the Empire Corridor, seven resulted in injuries, but no fatalities."[4] This would appear to obviate—or

[3] US Dept. of Transportation - Federal Highway Administration. (Last Modified 2014, October 15). *Safety*. https://safety.fhwa.dot.gov/hsip/xings/com_roaduser/07010/sec04a.cfm

[4] New York State Department of Transportation. (2014). *Tier 1 Draft EIS. Draft Environmental Impact Statement, page 2-48*. New York State Department of Transportation. P2-48

at least reduce—the need for a grade-separated overpass at Tivoli.

NYS CMP POLICIES & GUIDELINES

The federal Coastal Zone Management Act requires the federal government to comply with a state's approved CMP when taking actions that are likely to affect coastal resources. The CMP agency and DOS are responsible for reviewing proposed federal actions. They either concur with or object to the federal proposal as being consistent with the state's CMP.

The CMP and the Local Waterfront Revitalization Program (LWRP), also administered by the New York DOS, provide clear direction for the provision of public access in proposed actions affecting coastal uses and resources. LWRPs are locally-prepared, comprehensive land- and water-use programs for a community's natural, public, working waterfront and developed coastal areas. They provide a comprehensive structure within which critical coastal issues can be addressed. Both the Town of Rhinebeck and Village of Tivoli, which are among the eight proposed fencing locations, have completed approved LWRPs.[5]

Once an LWRP is approved by the New York State Secretary of State, state agency actions are required to be consistent with the approved LWRP to the maximum extent practicable. When the federal government concurs with the incorporation of an LWRP into the CMP, federal agency actions also must be consistent with the approved addition to the CMP.[6]

https://www.dot.ny.gov/content/delivery/Main-Projects/S93751-Home/S93751--Repository/04chap2.pdf

[5] New York State Department of State. Planning & Development. *Frequently Asked Questions*. Local Waterfront Revitalization Program (LWRP) https://www.dos.ny.gov/opd/faq.html

[6] New York State Department of State. Planning & Development. *Local Waterfront Revitalization Program (LWRP)*. Division of Planning. https://www.dos.ny.gov/opd/programs/lwrp.html

POLICIES, STANDARDS AND TECHNIQUES FOR AT-GRADE, GATE-PROTECTED PEDESTRIAN CROSSINGS

In its January 12, 2018, Federal Consistency Assessment Form, Amtrak acknowledges that the project will reduce public access to the Hudson River and shoreline. As currently proposed, it primarily affects coastal resources and achievement of NYS CMP policies 19, 20 and 21.

Policy 19 guidelines state, "the existing access from adjacent or proximate public lands or facilities [such as public parks, parking lots or other public property] to public water related recreation resources and facilities [Hudson River and shoreline] shall not be reduced, nor shall the possibility of increasing access in the future...be eliminated."

Since the project would reduce—and not increase—public access, it does not appear to achieve or advance Policy 19.

Policy 20 Explanation of Policy states, "in coastal areas where there are little or no recreation facilities providing specific water-related recreational activities, access to the publicly-owned lands of the coast at large should be provided for numerous activities:

- **walking along a beach or a city waterfront**
- **bicycling**
- **bird watching**
- **photography**
- **nature study**
- **beachcombing**
- **fishing and hunting"**

There are several methods of providing access...[including] "the provision of access across transportation facilities."

Since this project does not provide new access for a variety of water-related activities, it appears neither to achieve nor advance Policy 20.

Policy 21 Explanation of Policy states, "among priority areas for increasing water-related recreation opportunities are those areas where access to the recreation opportunities of the coast can be provided...and those areas where the use of the shore is severely restricted by...railroads."

Since the project does not provide new access opportunities over railroads, it does not appear to achieve or advance Policy 21.

Warning devices and traffic control for railroad-highway crossings consist primarily of signs, pavement markings, flashing light signals and automatic gates. Criteria for the design, placement, installment and operation of these devices are covered in the MUTCD.[7] Crossing angle, crossing surfaces, trail width and flange opening between the rail and trail surface are important considerations in the design of an at-grade trail-rail crossing.[8]

A 2002 US DOT report that assesses rails with trails provides considerable detail on the design of at-grade rail-with-trail and trail-related crossings.[9] In addition to the MUTCD standard devices, innovative treatments have been developed to encourage cautious pedestrian behavior. The appropriate traffic-control system should be determined by an engineering study for all trail-rail crossings to determine the best combination of active safety devices. Key considerations include train frequency and speed, sight distance, other train operating characteristics, presence of potential obstructions and volume of trail users. Active traffic control systems advise trail users of the approach or presence of a train at railroad crossings. Information regarding the appropriate uses, location and clearance dimensions for active traffic control devices can be found in Part 8 of the MUTCD.[10]

Passive and active devices may be used to supplement highway-related active control devices to improve non-motorist safety at trail-rail crossings. Passive devices include fencing, swing gates, pedestrian barriers, pavement markings and texturing, refuge areas and fixed message signs. Active devices include flashers, audible active control devices, automated pedestrian gates, pedestrian signals, variable message signs and blank-out signs. These devices should be considered at crossings with high pedestrian traffic volumes, high train speeds or frequency, extremely wide crossings, complex crossing geometry with complex right-of-way assignment, school zones, inadequate sight distance and/or multiple tracks. All pedestrian facilities should be designed to minimize pedestrian crossing time, and devices should be designed to avoid trapping pedestrians between sets of tracks.[11]

The MUTCD provides guidance on the types of signage, signals and warning devices for at-grade rail crossings. Chapter 8 focuses specifically on at-grade trail-rail crossings for pedestrians.

"Traffic control for trail grade crossings includes all signs, signals, markings, other warning devices, and their supports at trail grade crossings and along trail approaches to grade crossings. The function of this traffic control is to

[7] American Association of State Highway & Transportation Officials. (2011 - 6th Edition). *A Policy on Geometric Design of Highways & Streets.*

[8] American Association of State Highway & Transportation Officials. (2012 - 4th Edition). *Guide for the Development of Bicycle Facilities.*

[9] US Department of Transportation. (2002). *Rails with Trails: Lessons Learned.* US Department of Transportation. P74
https://www.transit.dot.gov/sites/fta.dot.gov/files/docs/RailsWithTrails.pdf

[10] US Department of Transportation. (2002). *Rails with Trails: Lessons Learned.* US Department of Transportation. P77
https://www.transit.dot.gov/sites/fta.dot.gov/files/docs/RailsWithTrails.pdf

[11] US Dept. of Transportation - Federal Highway Administration. (Last Modified 2014, October 15). *Safety.*
https://safety.fhwa.dot.gov/hsip/xings/com_roaduser/07010/sec04c.cfm#j

promote safety and provide effective operation of both rail and trail traffic at trail grade crossings."[12]

The requirement for extra warning time for pedestrians and motorists at grade crossings with higher speed rail operations is emerging as an additional issue for safety upgrades. Currently, the typical warning time at crossings where pedestrians may be present is between 20 and 30 seconds for conventional-speed trains. In areas with train speeds up to 110 mph, confirmation signals are needed to inform the crew and the onboard computer that the crossing is clear, and a warning time of at least 80 seconds is recommended.[13]

Bridge structures provide another option for pedestrian and trail crossings over rail lines. However, while bridges can provide an additional level of safety over at-grade crossings, there are drawbacks, which may include cost (a bridge costs approximately $1.5 million versus $50,000-$300,000 for an at-grade crossing designed to current standards) [14]; aesthetics, with site constrants due to the location of the tracks in relation to the river; ADA standards; and kayak/canoe portage. In addition, maintenance and emergency-vehicle access to the riverfront will be needed in most cases, which would require an at-grade crossing in addition to a pedestrian or trail bridge.

[12] Manual on Uniform Traffic Control Devices (MUTCD). (2009). *2009 Edition Chapter 8D. Trail Grade Crossings.* MUTCD. https://mutcd.fhwa.dot.gov/htm/2009/part8/part8d.htm#figure8D01

[13] Paul Metaxatos & P.S. Sriraj, P. M. (April 2013). *Pedestiran/Bicyclist Warning Devices & Signs at Highway-Rail and Trail-Rail Grade Crossings.* Illinois Center for Transportation. https://www.americantrails.org/files/pdf/FHWA-ICT-rail-path-crossing.pdf

[14] PEDSAFE/FHWA. (2013). *Pedestrian Safety at Railroad Crossings.* http://www.pedbikesafe.org/pedsafe/countermeasures_detail.cfm?CM_NUM=66

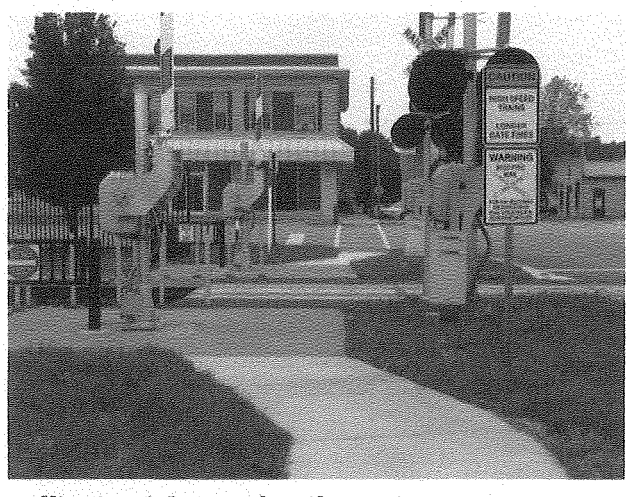
ILLUSTRATIVE EXAMPLES

Examples of current conventional and higher speed at-grade pedestrian and trail-rail crossings include the Illinois High Speed Rail, Florida Brightline and Orange County Metrolink.

ILLINOIS HIGH SPEED RAIL, CHICAGO-ST. LOUIS

The overall purpose of the Illinois High Speed Rail project is to enhance the passenger transportation network within the 284-mile Chicago to St. Louis corridor, resulting in a more balanced use of the transportation system. Although the project is still in progress, much has already been done toward accomplishing the goal of a 110-mph corridor. The program has consisted of track improvements, enhanced signal systems and grade-crossing improvements that have included four quadrant gates, pedestrian gates and fencing, as well as pedestrian escape gates. An 80-second warning signal prior to a train's arrival affords vehicles and pedestrians time to cross.

The Illinois Department of Transportation (IDOT) Bureau of Railroads is leading the overall management for the project's development and implementation.



Illinois High Speed Rail crossing

Installation of the improved at-grade crossings and signals began in 2014 and is just being completed. Trains are currently operating at 79 mph, but will soon increase to 90 mph as software improvements are completed. The trains will eventually run at up to 110 mph. According to phone interviews conducted with two IDOT officials, no issues have been reported with the upgraded crossings.[15]

The 284-mile Illinois High Speed Rail program clearly demonstrates that a system containing dozens of at-grade crossings can be operated and maintained safely. The 80-second advance notification to clear the track is recommended for the Empire Corridor South.

FLORIDA BRIGHTLINE

The Florida Brightline is an express intercity rail line operating at speeds up to 79 mph between Miami and West Palm Beach, with an intermediate stop at Fort Lauderdale. Developed by All Aboard Florida, a wholly owned subsidiary of Florida East Coast Industries, it is the nation's only privately owned and operated intercity passenger railroad. The Brightline runs along the state's densest population corridor, which contains more than 6 million residents and a regular influx of tourists.

Florida Brightline (*Palm Beach Post*)

The Fort Lauderdale to West Palm Beach segment opened on January 13, 2018, followed by Fort Lauderdale to Miami on May 19. An extension from West Palm Beach to Orlando via Cocoa is scheduled to open in 2021, with more extensions planned. The project included more than $1.5 billion in upgrades to the rail corridor between Miami and Cocoa. These improvements included double tracking the corridor, improving signaling systems and upgrading some grade crossings.[16]

However, grade-crossing improvements have not been made at all locations. In Palm Beach County, 20 out of 80 Brightline crossings are not being improved to keep motorists, bicyclists or pedestrians from maneuvering around lowered warning gates. Curbed median islands and flexible polymer markers will be added to some crossings in West Palm Beach to deter this activity.[17] Less than half of the Brightline crossings have quad gates.

Since Brightline service began in January 2018, there have been several fatalities and injuries that occurred as a result of pedestrians and bicyclists moving around a lowered gate or crossing along the tracks.

The Florida Brightline clearly has encountered serious safety issues. While we should pay close attention to the lessons learned, it should be noted that the Brightline introduced high speed trains in an urban corridor without making sufficient upgrades. In contrast, the Empire Corridor South is proposing modest speed increases in a corridor where open access to the river predates the rail line's construction in the 19th century.

[15] Interviews with Eliott Ramos and Bryan Trygg, IDOT 2018
Illiniois Department of Transportation and Federal Railroad Administration, (2018). *Chicago to St. Louis High Speed Rail Project.* http://www.idothsr.org/about/team.aspx

[16] Wikipedia, (2018). *Brightline.* https://en.wikipedia.org/wiki/Brightline

[17] Palm Beach Post. (2018) *Brightline.*

METROLINK ORANGE COUNTY LINE

California's Metrolink Orange County is a commuter rail service operating between Los Angeles and Oceanside in San Diego. It is part of the larger Metrolink system operating on 534 miles of rail in Southern California. The City of San Clemente, Orange County Transportation Authority (OCTA) and Metrolink worked cooperatively to construct safety enhancements, including five new at-grade pedestrian crossings along a 2.5-mile segment providing connections to an oceanside trail and popular beach. The latest at-grade crossing equipment was installed, including pedestrian crossing gate arms, lights, bells, emergency egress gates, fencing and an audible warning system that was part of a quiet zone initiative. The crossings were installed in 2008 and the audible warning systems for quiet zones around 2014. Although operating speeds along portions of the Orange County line reach up to 90 mph, speeds on the San Clemente segment are below 50 mph due to the line's curvature. The example is nonetheless instructive since the crossing equipment upgrades are similar to those used in the Illinois High Speed Rail systems. No formal reports have been prepared about the crossings, but rail operators reported to the city that they like the improvements because fencing along the 2.5-mile segment directs people to the crossings, preventing them from crossing the tracks anywhere. There has been one incident, a fatality, in the area where improvements were made; however, police determined it to be a suicide.[18]

The Metrolink Orange County Line is an excellent example of pedestrian rail crossing upgrades being made to achieve improved waterfront access.

[18] Tom Bonigut, City of San Clemente Engineering Office (October 1, 2018) *Phone interview* Orange County Transportation Authority Website, 2013 Orange County Transportation Authority, (2013). *San Clemente Pedestrian Crossings.* https://www.octa.net/Projects-and-Programs/All-Projects/Rail-Projects/Railroad-Crossing-Enhancements/San-Clemente-Pedestrian-Crossings/

San Clemente Metrolink Crossing

SUMMARY OF FINDINGS

The purpose of this white paper is to conduct a preliminary desktop review of pedestrian crossings of high or higher speed rail lines, and to follow up with a few select interviews with industry experts. Its findings would determine if at-grade protected crossings are practical in the Empire Corridor South (particularly Rhinecliff to Stuyvesant Landing), where Amtrak train speeds may be as high as 90 mph. The paper also provides a preliminary overview of the project's impact on coastal resources and achievement of the NYS CMP policies.

Preliminary findings strongly show that by using readily available technology, at-grade, gate-protected pedestrian crossings are a viable, safe and practical alternative to bridge construction or total elimination of access at Germantown, Tivoli and other locations along the Empire Corridor South.

Public access to the Hudson River has been an important tradition in the communities between Rhinecliff and Stuyvesant Landing for generations. Indeed, the LWRPs of Rhinebeck and Tivoli provide blueprints for the stewardship and enjoyment of natural, public and developed waterfront resources along the river.

As noted by PEDSAFE[19], a pedestrian bridge can cost $1.5 million or higher, as documented in the preliminary budget developed for Village of Tivoli waterfront park (2016 Master Plan). Conversely, state-of-the-art at-grade crossings can cost $50,000-$300,000, depending on existing conditions. In addition to being significantly lower in construction costs, at-grade crossings require less maintenance, provide easier portage opportunities (kayaks/canoes) and are more aesthetically pleasing. At-grade crossings for pedestrians also can be combined with emergency and maintenance vehicle access.

Based on McLaren's review of literature, interviews and illustrative examples, at-grade pedestrian or trail crossings of the Empire South corridor between Rhinecliff and Stuyvesant Landing, if properly designed to current AASHTO and MUTCD standards, are feasible. Such a design would include features such as pedestrian gates, pedestrian escape gates, fencing and an 80-second signal delay.

Based on analysis of the NYS CMP Policies, approved LWRPs and public comments, it appears the project as currently proposed may affect coastal resources and may not achieve or advance NYS CMP policies.

At-grade pedestrian crossings using state-of-the-art engineering practices and solutions would provide safety and increase access to the Hudson River. This approach, considering safety and access together, is needed to satisfy consistency requirements of local LWRPs and NYS Coastal policies, and may be an acceptable solution to all stakeholders.

CONTACTS

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[19] PEDSAFE/FHWA. (2013). *Pedestrian Safety at Railroad Crossings*. http://www.pedbikesafe.org/pedsafe/countermeasures_detail.cfm?CM_NUM=66

APPENDIX – VARIOUS RESOURCES

These additional resources were reviewed in the development of the white paper.

Interviews

Wes Coates, former Amtrak General Manager—Empire Service Product Line; currently Executive Director, Catskill Revitalization Corporation/General Manager—Delaware & Ulster Railroad, interviewed September 2018 by Peter Melewski, PE, MEG.

Elliott Ramos, Project Engineer, Illinois DOT Rail Division, interviewed September 17, 2018, by John DiMura, MEG.

Brian Trygg, Illinois DOT Local Roadways Bureau, interviewed September 14, 2018, by John DiMura, MEG. During the public comment period, DOS received comments from 302 individuals and a petition with 108 signatures. There are two still-active (change.org) petitions, one with 495 signatures, the other with 1,643 signatures.

Tom Bonigut, City of San Clemente Engineering Office, interviewed October 1, 2018, via phone by John DiMura, MEG.

Rails to Trails Conservancy: Rails -with Trails Design, Management and Operating Characteristics of 61 Trails Along Active Railroads

Rails to Trails Conservancy. (2005). *Rails with Trails: A Preliminary Assessment of Safety and Grade Crossings*. Rails to Trails Conservancy.
https://www.railstotrails.org/resourcehandler.ashx?name=rails-with-trails-a-preliminary-assessment-of-safety-and-grade-crossings&id=4616&fileName=RwT_Grade_Crossings_Report_final_lr.pdf

Rails-with-Trails: A Preliminary Assessment of Safety and Grade Crossings

https://www.railstotrails.org/resourcehandler.ashx?name=rails-with-trails-a-preliminary-assessment-of-safety-and-grade-crossings&id=4616&fileName=RwT_Grade_Crossings_Report_final_lr.pdf

America's Rails-with-Trails

https://www.railstotrails.org/resourcehandler.ashx?name=americas-rails-with-trails-report&id=2982&fileName=RwT%20Report_FINAL_103113_low%20res.pdf

Transportation Research Board (TRB) – Innovations Deserving Exploratory Analysis (IDEA) High Speed Rail Final Reports

http://www.trb.org/Publications/PubsIDEAHighSpeedRailFinalReports.aspx

- Project 11: Integrated Quad Gate Crossing Control Systems
- Project 8: Remote Sensing Advance Warning Systems Test Project
- Project 5: Enhanced Proximity Warning System for Locomotives

Progressive Railroading

Crossings w/better warning devices – Jan. 2010
https://www.progressiverailroading.com/c_s/article/Railroads-arm-grade-crossings-with-better-warning-devices--22316

Florida WTOP – New High-Speed Train – 4th death

https://wtop.com/travel/2018/01/man-hit-by-floridas-new-high-speed-train-4th-death-so-far/
15 second warning before train goes by.

PEDSAFE: Pedestrian Safety at Railroad Crossings
http://www.pedbikesafe.org/pedsafe/countermeasures_detail.cfm?CM_NUM=66

Crossing collisions & fatalities by year (general) has decreased
https://oli.org/about-us/news/collisions-casulties

Published on Aug 21, 2017—New Railroad Crossing
New railroad crossing installation on Daniels Road in Moore Haven, Florida, next to Sportsman Village near the Caloosahatchee Canal and Lake Okeechobee. A wood post and cross bucks (visible on Google Maps) previously provided the only warning at this SCFE former CSX crossing.
There were no signals, lights, gates or bells. https://www.youtube.com/watch?v=nUGSXQO96rs

Meadowview Road Railroad Crossing with New Gate Getting Installed, SACRT 122 Light Rail
Published on Aug 24, 2015
The Sacramento Regional Transit Blue line opened today with service to CRC for the light rail. A new gate is being installed on UPRR gate because a car hit the gate and broke it when it was lowered. While the gate was being fixed, trains had to blow its horn through the crossing. Also, the SACRT Gateless mast signal had its lights twisted more toward the sidewalk. More info below.

Crossing Info:
4 Signals, 2 Gateless, 2 Gated, 1 Lindsay Rail Cantilever, 1 WCH Cantilever, 2 General Signal Type 2 Electronic Bells, 1 NEG Electronic Bell, and 1 WCH Mechanical Bell. Signals by me are owned by SACRT and Bells ring through whole activation. Signals on other side are owned by UP and Bells ring till gates rise. New Gateless Mast Signal by Me has Newer Gen 12" Harmon Fading LEDs inside Safetran Light Frames, Safetran Brackets, Siemens Signal Base, Safetran Dwarf Signal for Light Rail, and GS Type 2 E-Bell. New Cantilever on my side has newer gen 12" Harmon Fading LEDs inside WCH Light Frames, WCH Brackets, and GS Type 2 E-Bell. New Cantilevers Gated Mast Signal has a pair of newer gen 12" Harmon Fading LEDs inside Safetran Light Frames, Safetran Brackets, Siemens Mechanism, Safetran/Siemens Counterweight Arms, and Siemens Signal Base. New Gateless Mast Signal on other side of tracks has 12" General Electric/WCH LEDs inside Safetran Light Frames, Safetran Brackets, Safetran Signal Base, and NEG E-Bell. Old Cantilever Mast on other side has 12" WCH 2nd Gen LEDs inside Safetran Light Frames, Safetran Brackets, and WCH Mechanical Bell. Cantilever on other side overhead has 12" UP LEDs inside Federal Signal/WCD Light Frames and WRRS Brackets. Cantilevers Gated Mast Signal has a short mast with UP Gate LEDs, Safetran Mechanism, Safetran Counterweight Arms, and Safetran Signal Base. The Tram Sign Signals in the middle of the tracks are owned by SACRT. One of them to the right has a Siemens Signal base and a Safetran Dwarf Signal for Light Rail. There are also two Yellow Flasher Signals that activate if there is car traffic stopped at railroad tracks.

Trams:
Train to Cosumnes River College Station
- SACRT 122 Siemens Duewag u2a
- SACRT 120 Siemens Duewag u2a
https://www.youtube.com/watch?v=5k0gWiwM6OA

Train Lines:
UPRR Sacramento Sub and SACRT Blue Line/Sacramento, CA.

Minneapolis Light Rail - Pedestrian Crossing
http://oldtrails.com/LightRail/Minneapolis/raillmin45.htm

Pedestrian RR crossing

https://www.reddit.com/r/CitiesSkylines/comments/327u6m/a_pedestrian_railroad_crossing_using_dirt_roads/#bottom-comments

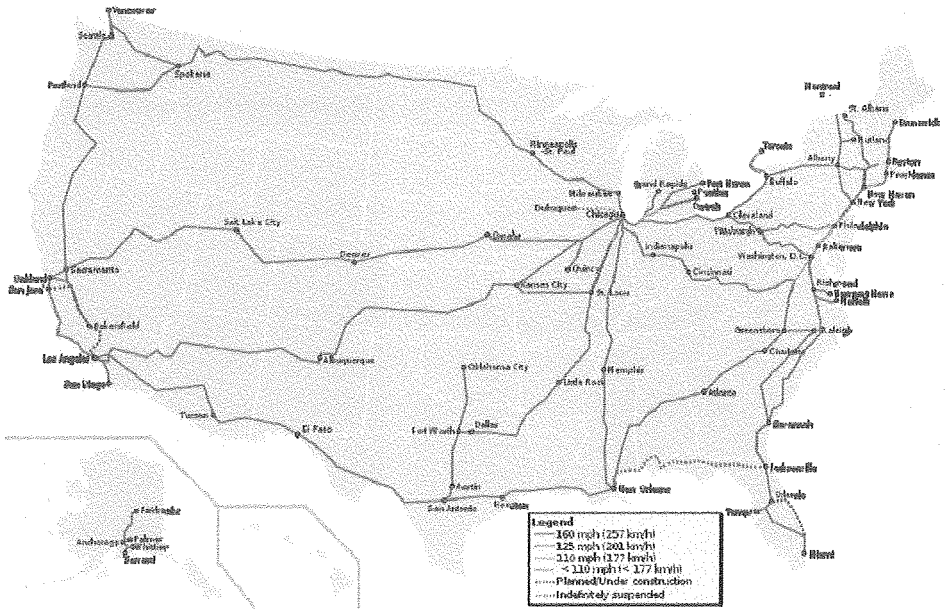
MN at Grade Trail Crossing

The following treatments are considered applicable only to trail crossings with a high-speed crossed road:

- Painting the "standard" pattern (has less paint compared to other patterns) for the crosswalk (Treatment PMS-06) is only appropriate for high-ADT crossed roads as recommended by the Florida's Trail Crossing Design Handbook [6].
- Refuge islands (Treatments RI-01 through RI-03 and TRSS-10) are only necessitated by high travel speed or high traffic volume on the crossed road [17, 46]. Therefore, refuge islands are recommended only for trail crossings with high-speed or high-ADT crossed road.
- Pedestrian/bicycle signals (Treatment TSGB-01 and TRSS-06) are only recommended for installation at midblock trail crossings with a high-ADT crossed road [6, 71], as low-ADT roads usually do not require signals. The final recommendation should be based on the result of the signal warrant analysis.
- HAWK signals (Treatments TSGB-07 and TRSS-09) are only recommended for installation at midblock trail crossings with a high-ADT crossed road per Association of Pedestrian and Bicycle Professionals [71].
- RRFB and yellow flashing beacon related treatments (Treatments TSGB-06, TSGB-08, TRSS-11, TRSS-12, and TRSS-14) are only recommended for installation at trail crossings with a high-ADT crossed road per Association of Pedestrian and Bicycle Professionals [71].

http://www.dot.state.mn.us/research/TS/2013/201323.pdf

The requirement for extra warning time for pedestrians and motorists at grade crossings of high-speed rail operations is emerging as an additional issue for safety upgrades at such crossings. Currently, the typical warning time at crossings where pedestrians may be present is between 20 and 30 seconds for conventional-speed trains. In an environment with 110-mph hour trains, there would be a need to provide confirmation signals to the train crew and the onboard computer that the crossing is clear, which would likely require a warning time of at least 80 seconds. The question about how pedestrians will react to such extended warning times at pedestrian crossings remains to be determined. This is because, currently, most of the warning time is built into the time that the train occupies the crossing. When high-speed trains begin to operate, most of the warning time is going to be built into the time for the train approaching the crossing. Therefore, an extended warning time would be necessary when the crossing remains unoccupied and a high-speed train could not be seen on the horizon. This situation will require reeducation of the public, especially in areas where crossings are very near to each other.



https://www.americantrails.org/files/pdf/FHWA-ICT-rail-path-crossing.pdf (pg15)

Germantown/Empire Corridor South Amtrak Fencing Articles
https://www.hudsonvalley360.com/article/town-supers-call-suspend-amtrak-fencing-public-comment-period

https://theotherhudsonvalley.com/2018/04/15/amtrak-fences/

https://www.hudsonvalley360.com/article/amtrak-fence-opponents-rally-germantown

University of Memphis Railroad Right of Way to Become Safer, Greener
https://www.memphisdailynews.com/news/2016/jul/9/storied-university-of-memphis-railroad-right-of-way-to-become-safer-greener/

Florida's new high-speed train - 4th death so far
https://wtop.com/travel/2018/01/man-hit-by-floridas-new-high-speed-train-4th-death-so-far/
BOYNTON BEACH, Fla. (AP) — Bells clang and lights flash 15 seconds before the high-speed train zips through the crossing where Jeffrey King died. Five seconds later, Florida's new Brightline train is gone. Train travels at more than 70 mph through Boynton Beach.

Race Street Pedestrian Schuylkill River Trail Crossing
Schuylkill Banks/City of Philadelphia Parks & Recreation. At grade rail pedestrian electric gate rail crossing to reach river side that has boat launch and kayaks.
https://www.schuylkillbanks.org/landmarks/race-st-crossing

Railroad Pedestrian Crossings, University of Memphis
◆2017 ACEC Tennessee Small Projects Honoree ◆
As the University grew, so did its footprint which now includes buildings and parking on the south side of the Norfolk Southern Railway and Southern Avenue. With more than 3,000 parking spaces on the south side of the tracks and street and with classrooms on the north side, thousands of students are required to cross the rails by foot daily.

The University of Memphis wanted to make much safer, more attractive pedestrian crossings for the active railroad dividing the campus. The project created three pedestrian crossings, and the design included passive gates, pedestrian signals to flash and sound warnings of an approaching train, solar-powered lights to illuminate the crossings at night, and a sidewalk running parallel to Southern Avenue and the tracks. They have solar-powered lighting and flashing crossing lights and audible signals as a train approach. The crossings meet Americans with Disabilities Act standards, and they have gates designed to make pedestrians think before they cross.
Allen & Hoshall Engineers-Architects-Surveyors, (2016). *Railroad Pedestrian Crossings, University of Memphis.*
http://www.allenhoshall.com/portfolio/railroad-pedestrian-crossing-improvements-university-of-memphis/

Trimet Installs Swing Gates & Fenced Switchbacks

Portland's regional transit agency has installed swing-out gates that biking advocates say will force people on bikes and trikes to stop or dismount in order push gates open to cross its new MAX tracks at SE 11th Avenue.

The city's Bicycle Advisory Committee later expressed its opposition to swing gates. The Pedestrian Advisory Committee did, too, because of the difficulty of getting through the gates while using a wheelchair or other mobility device. After that response, TriMet changed its plans at the 8th Avenue crossing and built fenced switchbacks. It also added a triangular concrete island placed on the south side of light rail tracks west of 12th. TriMet spokeswoman Mary Fetsch said in an email that those are "to help orient riders to look both ways before crossing.

Andersen, M. (2015, 12 23). *TriMet installs Swing-gates at 11th Ave. Rail Crossing.* https://bikeportland.org/2015/12/23/171072-171072

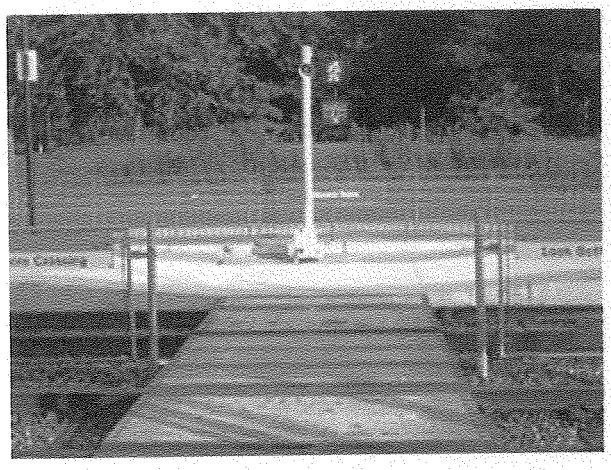
USDOT/FHWA – Safety: Pedestrian Safety Guide for Transit Agencies

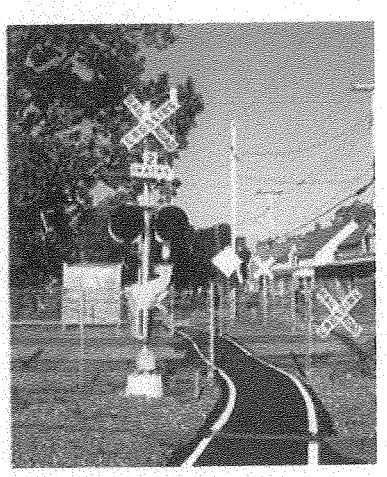
Pedestrian Crossings of Rail Systems

In some areas, pedestrians may need to cross railroad or light rail tracks to access a transit station or stop. The design of these crossings is critical, as pedestrian/train collisions typically result in severe or fatal injuries. While most current standards and requirements for railroad at-grade warning systems are tailored to motor vehicle traffic, the Federal Highway Administration's *Railroad-Highway Grade Crossing Handbook*[44] provides guidance about pedestrian crossings. Additional guidance is provided by the MUTCD (see Part 8 and Part 10),[45] American Railway Engineering and Maintenance of Way Association (AREMA) *Signal Manual* (see Volume 1, Section 3),[46] and Code of Federal Regulations 49 (see Part 234).[47] Different standards apply to at-grade crossings of light rail tracks which often have no gates or warning devices.

Railroads shall provide a minimum of 20 seconds of warning time, with the active devices (bells, flashing lights, barricades, etc.) fully deployed five seconds before the arrival of a transit vehicle.[45] This gives a pedestrian a minimum of 15 seconds to complete crossing the tracks. Longer crossings may necessitate additional warning time built into the train detection system. In addition to time, the type of surface material used at the rail crossing must be designed in accordance with the ADAAG.

At-grade crossings with multiple tracks can present additional dangers to pedestrians who may assume that a warning has been deployed for a train that is currently stopped on one of the tracks, when in reality a second train is also coming on another track. Separate warnings may be necessary for these locations to help alert pedestrians of the full extent of the danger of the at-grade rail crossing.



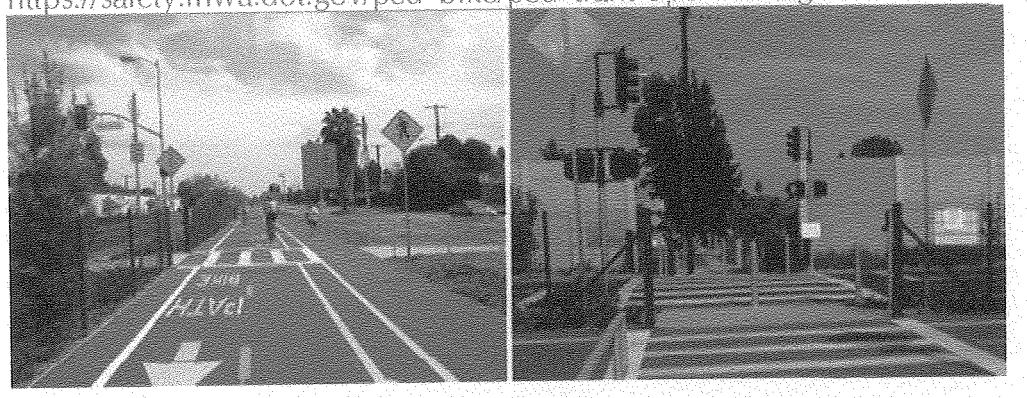


Safety treatments that can be used at rail locations include:

- *Traditional gate/flasher/bell assemblies*—These devices are useful for warning pedestrians of oncoming vehicles, but all of should be considered "supplemental" and are typically deployed as part of an engineering decision or a diagnostic team review. While these traditional devices have been reliable and effective in the past, newer devices are entering the marketplace, such as digital voice announcements and strobe lights.
- *Active or Passive Warnings*—Active warnings, such as bells or whistles mounted near the crossing or on the train, are recommended at pedestrian at-grade crossings. Passive warnings, such as signs, can also be used.
- *Fencing*—Fences and other visible demarcations like landscaping, curbing and/or signage can be used to discourage pedestrians from crossing rail tracks in undesignated locations. Fencing in places such as Orange County's Metrolink Line, University of Memphis in Tennessee, and in Portland, Oregon has been installed at heights as low as 4 ft to 5 ft.
- *Grade-separated crossing* —Railroad tracks with high-speed and high-frequency train service may require pedestrian tunnels or overpasses to ensure the safety of crossing pedestrians.
- *Surveillance, education, and enforcement*—Enforcement can help reduce the number of pedestrians trespassing (e.g., walking on railroad tracks).

When considering what, if any, pedestrian warning is to be deployed, a thorough review of the environment around the crossing is recommended. This includes evaluating the frequency of rail service and number of tracks that are present. It is also important that the assessment include land uses and frequently-used pedestrian pathways in the vicinity of the railroad track. Railroads near schools, playgrounds, hospitals, retail centers and other major pedestrian generators may have a much greater need for safety treatments than a railroad track in a rural setting.

https://safety.fhwa.dot.gov/ped_bike/ped_transit/ped_transguide/ch3.cfm

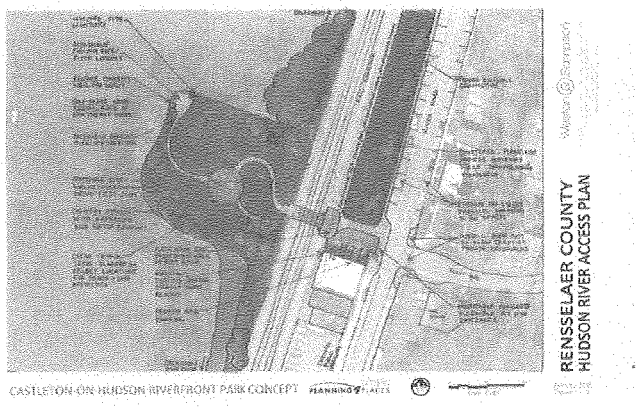


Public Access to the Hudson River in the Village of Castleton-on-Hudson

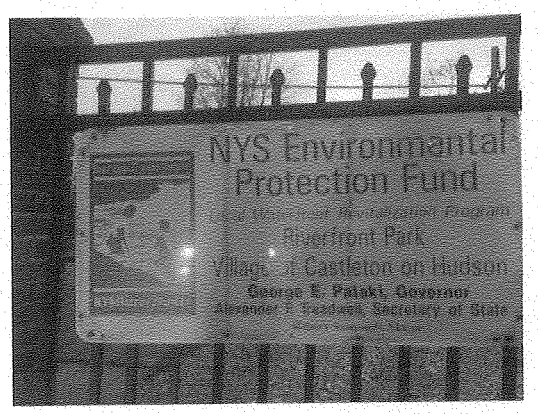
Gina Giuliano, PhD

Every community on the east bank of the Hudson between Rensselaer and New York City has public access to the river, except for the Village of Castleton-on-Hudson, despite the Hudson being navigable-in-law. "The majority rule, the general rule in New York, applies the trust doctrine at waters which are navigable in fact, to all tidal waters, and to the lands under tidal waters" (Atkinson, 1996, "On the Wrong Side of the Railroad Tracks: Public Access to the Hudson River," Pace Environmental Law Review, Volume 13 Issue 2, p. 769-770).

In 2018, the Rensselaer Land Trust's Estuary-funded Hudson River Access Study designated Riverfront Park in the Village of Castleton-on-Hudson as one of 17 high priority sites (out of 44 total) for river access and selected it as one of three for an architectural sketch.



According to NYS DEC (1991 & 2011), the public right of navigation is rooted in English common law and has been recognized by New York courts for more than 200 years (Public Rights of Navigation and Fishing, Section III.A). "The inalienable right of the general in public to use coastal and navigable waters is the essence of the public trust doctrine... The public trust doctrine applies to the public's right to access the Hudson River" (Atkinson, p. 767).



In 1994, the only public access point to the Hudson River at Scott Avenue (150) and Main Street (9J), was closed, in exchange for a piece of land to make the future Riverfront Park, and within a year, a pedestrian tunnel or bridge under or over the railroad tracks to access it. The land was transferred, but the tunnel or bridge never happened, and Amtrak/CSX put up locked gates (where there is safety equipment from when it was an open

crossing), and eventually, a fence blocking access over the tracks to the shore (constructing, north of the locked gates, an intentional three-foot gap in the fence where there is no safety equipment). They also put up three No Trespassing signs, in conflict with the NYS EPF sign proclaiming Riverfront Park. The only access is illegal, by using the gap.

Amtrak has submitted a proposal to NYSDOS to reduce access to the Hudson River from Stuyvesant to Rhinecliff. Although the plan does not appear to eliminate public access, it does reduce access, by fencing along the railroad tracks between access points. The Village of Castleton-on-Hudson serves as a cautionary tale for our neighbors to the south. The Village has tried to negotiate with NYS DOT, Amtrak and CSX for over two decades without success.

Last year, the Village stopped begging for a costly and pedestrian bridge, and started to focus on advocating to Open the Gate and allow people to walk across the tracks to Riverfront Park and the shore, as they do in Stuyvesant and other communities. More than 450 people have signed a petition demanding public access. The notion that opening the gate would be dangerous is ironic, when just north of the locked gate with working arms and signals is the gap in the fence with no safety equipment at all. This is how people access the shore now, by scrambling over rocks and the tracks at the illegal gap, instead of pavement, as there is behind the locked gates. This is far more dangerous than opening the locked gates. Safety could be further enhanced by replacing the current equipment with state-of-the-art magnetic pedestrian gates.

In the Village of Castleton-on-Hudson / Town of Schodack LWRP (1995), Policy 20 is based on the New York State Coastal Management Policy 20 and concerns access to the Hudson River: "Access to the publicly-owned foreshore and to land immediately adjacent to the foreshore or the water's edges that are publicly-owned shall be provided, and it shall be provided in a manner compatible with adjoining uses. Such lands shall be retained in public ownership. Explanation of policy: In addition to active recreation facilities, access to the publicly- owned land of the coast should be provided, where appropriate, for numerous activities and pursuits which require only minimal facilities for their enjoyment. Access would provide for walking along the waterfront or to a vantage point from which to view the water. Activities requiring access would include bicycling, birdwatching, photography, nature study, beachcombing, fishing and hunting" (Section III-21).

Access to the Village-owned land on the Hudson River would spark small business on Main Street and enrich the lives of residents and tourists alike. In 2014, Chris Churchill wrote in the Times Union, "When I asked about river access, Janke offered to show me the hidden (and unauthorized) way. We slid through a gap in an iron fence, darted over the railroad tracks and

made our way to a spot that Janke described as excellent for catching striped bass. There was garbage and glass at our feet, but the views up and down the water were inspiring. If the Village could only take better advantage of this, I thought, all those storefronts might not be empty. It seems so obvious: In Castleton-on-Hudson, shouldn't it be easier to get from Castleton to the Hudson? The river that made the Village could remake its future" (More than Just a Store Set to Close in Castleton, 24 October 2014).

It is our steadfast belief that access to the Hudson River within the Village is the right of residents and visitors, and an essential ingredient in Castleton-on-Hudson's revitalization. Unlike many communities with grade-level crossings on the east bank of the Hudson, we do not desire vehicle or boat-trailer traffic -- just the freedom to walk to the river, fish and enjoy the view.

Considering the Village's proximity to downtown Albany (10 miles), its geographical location on the Hudson River, its significance to both indigenous and Colonial history, and that its downtown is urban surrounded by pristine rural rather than suburban sprawl, it has the potential to routinely draw visitors from all over the Capital Region and Hudson Valley, and to be (at least) a regional tourist destination.

In 2018, we have the seeds of an economic recovery on Main Street that includes a community garden, a farmers' market, Repair Cafe, and new private investment. The Store and Hudson River Foods opened. Several Main Street buildings are being renovated, two dangerous derelict buildings were razed, and entrepreneurs are committing to Castleton-on-Hudson. However, this rebirth will not be sustainable without public access to the Hudson River and Riverfront Park at 1 North Main Street (Scott Avenue and Main Street).

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AGING
COMMITTEE MEMBER
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CULTURAL AFFAIRS, TOURISM, PARKS AND RECREATION
EDUCATION
HIGHER EDUCATION
INSURANCE
JUDICIARY
MENTAL HEALTH & DEVELOPMENTAL DISABILITIES

THE SENATE
STATE OF NEW YORK

SUSAN SERINO
Senator, 41ST District

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September 4, 2018

Paul A. Karas
New York State Department of Transportation, Commissioner
50 Wolf Rd
Albany, New York 12232

Re: Orphan Bridges

Dear Commissioner Karas:

It has been brought to my attention that there are a number of bridges throughout the state, sometimes referred to as "orphan bridges," that do not have a clear record of ownership, resulting in serious concerns regarding their maintenance and safety. Recently, constituents have reached out to my office to inform me of a situation in my Senate District where there is one such bridge leading to the docks of a popular boat club and area residences, which emergency vehicles apparently will not cross due to safety concerns.

As I am sure you are aware, in December of 2012 the Governor announced a long-term lease agreement between CSX Corporation and Amtrak regarding control of the Hudson Line between Schenectady and Poughkeepsie. The release noted the importance of access to the Hudson River, and therefore the need to ensure safe crossings over the rail tracks for vehicles and pedestrians. However, it is my understanding that there are a lack of identifying markers as to who owns and is responsible for the safety and maintenance of several bridges over the tracks, and as a result, no entity has taken accountability for their care.

New Yorkers rely on the state to ensure the safety of the roads and bridges they drive over every day, and uncertainty regarding the condition of any of these "orphan bridges" poses an imminent public safety concern. I am sure you understand the severity of this situation and share in my concern for the safety of those utilizing these bridges. Inaction is simply not an option.

On behalf of my constituents, as well as New Yorkers and visitors from across the world who travel on our roads and bridges every day, I request that the Department of Transportation take immediate action to begin resolving this urgent matter. I respectfully request a meeting with you and your team to discuss how we can work together to ensure an effective solution that works for all stakeholders is arrived at as soon as possible.

I appreciate your time and consideration on this matter, and look forward to your reply.

Sincerely,

Sue Serino

Senator Sue Serino
41st District

CC:
Ronald Epstein, Assistant Commissioner of Policy & Planning Division, DOT