

The Patriot Corridor Double-Stack Clearance Initiative Project

Winter 2021

GETTING STARTED

The Project team began by collecting data. A 360° laser scan of the entire 155-mile corridor identified obstructions that do not meet the 21-foot vertical clearance for double-stacked containers. The work also included aerial surveys, inspecting each location, and testing for shallow bedrock conditions.

The Project team identified key issues and developed recommendations for making clearance improvements at each location. The team evaluated conditions at each site and identified environmental resources such as wetlands, historic properties, and threatened and endangered species that might be affected by the Project. Any track and bridge construction activities would be limited to the 23 locations (21 bridges and 2 tunnels).



East portal of the Hoosac Tunnel today.

ABOUT THE PROJECT

The Patriot Corridor Double-Stack Clearance Initiative Project (the “Project”) is looking at the potential for operating double-stacked “domestic” railroad containers along the existing 155 mile long freight railroad corridor known as the PAS Freight Main Line (FML). Most of this corridor is owned and operated by Pan Am Southern Railroad (PAS). The Massachusetts Bay Transportation Authority (MBTA) owns a 15-mile section of the corridor between Fitchburg Station and Ayer, which carries its commuter rail service on the Fitchburg Line. PAS maintains exclusive freight rights on the MBTA Fitchburg Line.

The study identified 21 bridges and 2 tunnels on the corridor that are too low for trains to carry double-stacked containers. The Project would raise the height of bridges and tunnels or lower the railroad tracks so these freight trains can use the line. MassDOT and PAS received funding from the Federal Railroad Administration (FRA) to collect data, develop a preliminary design, and prepare and file environmental documents. At this time, funding is not identified for final design and construction. The FRA sees this Project as an investment in long-distance rail freight service in New England and New York.



Norfolk Southern train carrying double-stacked containers.

GETTING STARTED - CONTINUED

The construction would occur within the existing railroad right-of-way and on temporary construction easements. The preliminary environmental findings of the Project include:

- » Improvements to the transportation infrastructure will make freight movement by rail more efficient.
- » No property has to be purchased and no displacements are anticipated.
- » No air quality impacts are anticipated; measures would be taken to reduce pollutant emissions during construction to meet all applicable laws and regulations.
- » No anticipated impacts to wildlife and waterfowl refuges are expected.
- » No adverse impacts to threatened and endangered species are anticipated.
- » No anticipated water quality impacts to waterbodies or groundwater resources.
- » Permits may be required for work in and/or adjacent to wetland resource areas and floodplains.
- » No long-term noise or vibration impacts are anticipated; temporary construction noise and vibration will be minimized/mitigated, as required.
- » No long-term traffic effects are anticipated; temporary transportation-related impacts will be minimized/mitigated with pedestrian and vehicular detours during construction.
- » The project is not anticipated to increase railroad operations beyond what is projected today.
- » Agency consultation to assess effects to historic resources is underway.
- » No anticipated changes to socioeconomic or community characteristics.
- » No anticipated adverse impacts to public safety.

The next step is to document the environmental review. This documentation of the environmental review, called a Categorical Exclusion, is required by the National Environmental Policy Act (NEPA). MassDOT is working with the FRA to complete the Categorical Exclusion for the Project. The current Project design does not meet or exceed review levels established by Massachusetts and New York state environmental regulations, so it does not require additional review and documentation. Once the requirements of the environmental review and other regulatory processes have been met, the Project team would advance the design phases for the 23 locations. At this time, funding is not identified for final design and construction phase services.



Hoosick River Truss in Pownal, New York.

PUBLIC OUTREACH

MassDOT has informed the 14 communities along the right-of-way that construction may take place along their segment of the rail and will provide updated information on the Project website at key milestones.

For more information or to sign up for email updates, visit the Project website:

www.mass.gov/patriot-corridor-double-stack-clearance-initiative.

Email Scott Conti, Project Manager, MassDOT Rail and Transit, with questions or comments at:

Scott.Conti@dot.state.ma.us.

Proposed Work Locations and Recommendation to Achieve Clearance

Location	Location Name	Recommendation
Pownal, VT; Petersburg, NY	Hoosick River Bridge	Truss Modifications
Williamstown, MA	Route 7 (Simonds Road)	Track Undercut
North Adams, MA	Appalachian Trail (Pedestrian Bridge)	Track Undercut
North Adams, MA	Furnace Street (Pedestrian Bridge)	Track Undercut
North Adams, MA	State Street (Route 8)	Track Undercut
North Adams, MA	Little Tunnel	Track Undercut
North Adams, MA	Hoosic River Truss	Modify Bridge Deck/Floor Beams
North Adams, MA; Florida, MA	Hoosac Tunnel (West and East Portal)	Track Undercut/Crown Raise
Greenfield, MA	Conn River RR / PAR ML	Track Undercut
Montague, MA	Northfield Road Bridge (AKA Turners Falls Road)	Track Undercut
Montague, MA	NECR (CV) Railroad	Track Undercut
Montague, MA	Bridge Street Truss (AKA Hill Street)	Track Undercut
Orange, MA	South Main Street (Route 122)	Bridge Deck Replacement
Orange, MA	Brookside Road (AKA Athol Street)	Bridge Replacement
Athol, MA	Main Street (Route 2A)	Track Undercut/Bridge Modifications
Athol, MA	Chestnut Hill Avenue Bridge	Track Undercut/Bridge Reconstruction
Templeton, MA	Main Street (AKA Depot Road)	Track Undercut
Gardner, MA	Pleasant Street (AKA Jackson Street)	Track Undercut
Fitchburg, MA	Rollstone Street	Track Undercut
Fitchburg, MA	Putnam Street	Track Undercut/Bridge Modifications
Fitchburg, MA	Water Street	Track Undercut/Bridge Modifications
Leominster, MA	Harvard Street	Track Undercut
Ayer, MA	Main Street (Route 2A)	Track Undercut



Little Tunnel in North Adams, MA.



The Hoosac Tunnel: A Marvel of Engineering and Construction

One of the sites to be modified as part of the Patriot Corridor Project is more than your ordinary rail tunnel. The Hoosac Tunnel carries freight Main Line trains 4 ¾ miles through the Hoosac mountain range in North Adams and Florida, MA. The tunnel played a significant role in the history of railroad construction.

New Englanders saw the route through the Hoosac mountain range as a crucial link to the west during the country's railroad boom, but the mountain range was insurmountable by rail. That is, until Alvah Crocker, a local paper mill owner, chartered the Troy and Greenfield Railroad to take on what would become one of the most ambitious engineering feats in the country's history.

The construction of the Hoosac Tunnel began in 1851. Approximately 800 men worked in shifts around the clock. Almost every technology was used over the course of construction, including the relatively new explosive nitroglycerin. The project took a painstaking 24 years and claimed nearly 200 lives. The project posed such difficulties that the Troy and Greenfield Railroad declared bankruptcy in 1862. The Commonwealth of Massachusetts took over the project and saw it through. When the first train finally rode through the tunnel in 1875, it was the second longest tunnel in the world.

The Patriot Corridor Project avoids any alterations to the tunnel's original portal structures. Work proposed at the west portal includes replacing/modifying the metal storm doors and lowering the tunnel track. The east portal meets the necessary clearance for double-stack cars, so no changes are needed. The interior of the tunnel will be raised to increase clearance by stone grinding or drilling.

* Photo above shows the East portal of the Hoosac Tunnel circa 1915 (via Wikimedia Commons).

MassDOT is proud to honor the history of the Hoosac Tunnel by ensuring it continues to serve its purpose for years to come: transporting trains with ease and efficiency on their way through the Berkshires and across 55 miles of Massachusetts to Fitchburg.

Primary source: Reints, Renae. "TBT: The Final Blast through Hoosac Mountain." Boston Magazine. (www.bostonmagazine.com/news/2017/11/30/hoosac-tunnel/)

CONTACT US

For more information or to sign up for email updates, visit the Project website:

www.mass.gov/patriot-corridor-double-stack-clearance-initiative

For issues or comments please email:



Scott.Conti@dot.state.ma.us

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