ROUTE 1 &9 OVER NYS&W RAILWAY CONCEPT DEVELOPMENT PHASE - PUBLIC INFORMATION CENTER TRANSCRIPT

Slide 1 - Introduction

0:00

Welcome to the virtual public information center for the Route 1 and 9 over New York Susquehanna and Western Railway Bridge Replacement, Safety and Operational Improvements project. The majority of the project is located in the Bergen County Borough of Fairview, with a short section of the southerly portion of the project located in North Bergen Township in Hudson County.

The New Jersey Department of Transportation (NJDOT) is committed to providing transportation improvements that best balance transportation needs, the environment, community concerns, and costs. This Virtual Public Information Center is intended to share information about this project, the current status of the project, and solicit feedback from the public.

Slide 2 - Agenda

00:52

We will be covering the following topics during this Virtual Public Information center:

- A general overview of the NJDOT Project Delivery Process
- The project study area and existing conditions
- A summary of the substandard design elements within the project limits
- The project Purpose and Need and project Goals and Objectives
- Alternatives Studied
- A description of the Preliminary Preferred Alternative, referred to as the PPA
- An outline of the anticipated Construction Sequence and Staging for the PPA
- The project schedule and next steps
- And finally, at the end of the presentation, you will be provided information on how to submit comments and ask questions about the project.

Slide 3 - NJDOT Project Delivery Process

01:49

This project is in the Concept Development, or CD phase, in the NJDOT Project Delivery Process. This phase includes evaluating existing conditions, screening for environmental impacts, developing alternatives, engaging the community, and selecting a Preliminary Preferred Alternative. The current phase is expected to be completed by the end of 2022.

In the next project phase, Preliminary Engineering, the PPA is further refined and right of way and environmental impacts are quantified and the Environmental Document is approved.

Slide 4 - Project Study Area

02:30

The Route 1 and 9 over New York Susquehanna and Western Railway Bridge Replacement project is located approximately 3 miles north of Route 495 and approximately 1 and a half miles south of Route 46. Route 1 and 9 is a heavily traveled corridor for both commuters and local residents that acts as the main connector roadway from Route 46 to Route 495 and to New York City.

Slide 5 - Project Study Area
Slide 6 - Project Study Area
03:02

The project begins at 91st Street in North Bergen in Hudson County and extends to Fairview Avenue in Fairview Borough in Bergen County. There is an existing traffic signal at each end of the project.

The project area is heavily developed with commercial and industrial businesses on both sides of the highway.

The posted speed limit is 35 miles per hour, north of Division Street. The speed limit is 40 miles per hour south of Division Street

Slide 7 - Project Study Area
Slide 8 - Project Study Area
03:39

A closer look at the southern section of the project shows the Fairview Cemetery is located just to the east of the bridge and is bifurcated by the New York Susquehanna and Western Railway right of way. The Waste Management transfer facility is located just north of the bridge on the west side of Route 1 and 9.

The roadway alignment has a sharp substandard horizontal curve located just north of the bridge.

Slide 9 - Project Study Area
Slide 10 - Project Study Area
Slide 11 - Project Study Area
04:10

At the north end of the project, the existing roadway alignment consists of another substandard horizontal curve located at West Prospect Avenue.

Sedore Avenue is a one-way roadway in the southerly direction that connects to Route 1 and 9 at a skew angle just north of Prospect Avenue.

Slide 12 - Existing Roadway Conditions
04:32

Route 1 and 9 consists of four 10-foot wide through lanes, two in the northbound direction and two in the southbound direction. Lanes widen to 12 feet wide at the approaches to the bridge.

There are no shoulders present within the project limits.

The roadside border area consists of varying width sidewalks on both sides of the roadway with utility poles and driveways that access the adjoining properties.

Slide 13 - Existing Roadway Information
05:05

There are no dedicated lanes to make left turns from Route 1 and 9 onto the adjacent side streets.

Variable height concrete walls are located along the west side of Route 1 and 9 from Division Street to the Waste Management property at the Private Road.

Slide 14 - Traffic Volumes
05:25

Peak hours along Route 1and 9 occur from 7 am to 8 am and from 5:30 pm to 6:30 pm, with the evening peak being the busiest hour of the day. Traffic volumes are heavy in both directions, with slightly more vehicles traveling northbound during the evening rush hour. The intersections of Route 1 and 9 and 91st Street and Route 1 and 9 and Fairview Avenue operate with generally acceptable traffic conditions. There is limited excess capacity on Route 1 and 9, therefore two travel lanes in each direction are necessary to maintain acceptable traffic conditions.

Slide 15 - Traffic
06:08

A traffic signal warrant study evaluation was performed at the junction of Route 1 and 9 and the Private Road to the Waste Management Facility. The study concluded that the intersection does not warrant the installation of a traffic signal. The Traffic Signal Warrant Analysis will be revisited in the Preliminary Engineering phase of the project.

Slide 16 - Crash Data
06:33

The New Jersey Department of Transportation's Bureau of Traffic Engineering and Safety Programs provided crash data along Route 1 and 9.

The 2018 to 2020 Actual Crash Rate was 7.27 Crashes per million vehicle miles, which is slightly less than the 2019 Statewide Crash Rate of 7.82 Crashes per million vehicle miles.

2019 is being used as a reference year due to the COVID-19 pandemic and changes in travel patterns resulting from statewide shutdowns.

One hundred and twenty-nine crashes were reported within the project limits from 2018 to 2020. A detailed evaluation shows that a majority of the crashes occurred at the signalized intersections. No crashes occurred at the curve just north of the bridge or at the Private Road.

Slide 17 - Existing Utilities
07:35

Aerial utilities consisting of electric, phone and cable lines are supported on wooden utility poles located on both sides of Route 1 and 9. There is an existing sanitary sewer system that runs under Route 1 and 9 that is in poor condition with evidence of infiltration and potential broken sections of pipe. Water and gas facilities also exist within the project limits.

Slide 18 - Existing Bridge Conditions
08:04

The Route 1and 9 over New York Susquehanna and Western Railway bridge consists of three spans of concrete encased steel girders that was originally built in 1927 and was reconstructed in 1942.

The bridge provides 19 feet of vertical clearance over the inactive railroad tracks, which is less than the NJDOT Standard of 23 feet of vertical clearance. The bridge is in overall fair condition; however, the concrete deck is in poor condition. The bridge also has a substandard roadway width.

Slide 19 - Existing Bridge Conditions
08:41

The Route 1and 9 bridge has two 12 foot lanes in both the northbound and southbound direction separated by a 2 feet wide concrete median barrier.

There is an existing 4 feet 10 inch wide sidewalk on the easterly side.

Several underground utilities are supported on and are located below the existing bridge.

Slide 20 - Existing Bridge Conditions
09:07

The concrete deck is in poor condition as demonstrated by the visual repair patches as shown on the photo from under the bridge to the right.

Wide cracks can be observed on the existing piers and abutments.

Slide 21 - Existing Bridge Conditions
09:23

An existing concrete drainage flume and culvert are under the southerly span and will need to be maintained during the bridge reconstruction.

Slide 22 - Existing Retaining Walls
09:33

Existing concrete retaining walls support Route 1 and 9 along the west side of the highway.

These walls allow for the access driveway to the self-storage property.

Slide 23 - Substandard Design Elements
09:46

The following substandard design elements have been identified within the project area:

- Route 1and 9 consists of four 10 foot wide through lanes, though 11 feet wide lanes are the minimum required, while 12 foot wide lanes are preferred.
- No shoulders are present within the project limits. And 8 foot wide shoulders are required.
- There is a substandard stopping sight distance on the vertical crest of the bridge curve

The existing condition is good for 25 miles per hour while the design speed is 40 miles per hour.
- Horizontal radii of curves are below standards.
- The vertical clearance over the railroad is 19 feet, while 23 foot is the NJDOT standard over an active rail line.
- And, the bridge roadway width is also substandard.

Slide 24 - Environmental
10:50

The Environmental conditions of the site can be summarized as follows:

State Historic Preservation Office coordination will be needed as this bridge is over the National Register Individually Eligible New York Susquehanna and Western Railroad Tunnel and Cut.

There is a high Minority population and a significant Low Income population in the project area.

This project is in a Maintenance area for both fine particulate matter PM 2.5 and Carbon Monoxide. However, Due to the nature of the project, it is unlikely there will be any impacts to air quality.

Within the project area there are several sites with New Jersey Department of Environmental Protection cases and a rail line that introduce a potential for involvement with regulated material or contaminated sites.

Slide 25 - Environmental
11:47

Wolf Creek Tributary is located under the bridge, just south of the railroad at mile post 60.70

Wolf Creek tributary is classified as state open water, and the existing ditch located at the northeast side of the bridge is classified as an ordinary resource value wetland.

Slide 26 - Purpose
12:12

The purpose of the Route 1 and 9 over New York Susquehanna and Western Railway project is to replace the existing bridge (Structure No. 0201-150) and culvert, and improve safety (including pedestrians), roadway geometry, and the traffic operations in the section of Route 1and 9 from mile post 60.58 in North Bergen Township, Hudson County to mile post 61.10 in Fairview Borough, Bergen County.

Slide 27 - Goals and Objectives
12:50

The goals and objectives of the project are to:
- Minimize or eliminate substandard design elements such as vertical and horizontal sight distance and lane widths.
- Minimize construction impacts to the vehicle and pedestrian movements.

- Minimize the impacts to right-of-way and access driveways.
- Minimize impacts to businesses and properties along Route 1 and 9 and side streets.
- Maintain sidewalks along Route 1 and 9 along with ADA curb ramps for pedestrian crossings.

Slide 28 - Alternative Analysis
13:30

The following alternatives were evaluated during the Concept Development phase:

Alternative 1 - No Build:
This alternative assumes no improvement to Route 1and 9 over New York Susquehanna and Western Railway bridge and approach roadway, which is used as a baseline to compare the other alternatives.

Alternative 2 - New Bridge with 14 Feet Vertical Clearance:
This alternative would improve the horizontal and vertical alignment and construct a new single span bridge and lower the existing vertical clearance from 19 feet to 14 feet to reduce right of way impacts while still providing vehicular access under the bridge. However, the New York Susquehanna and Western Railway did not approve of this alterative.

Alternative 3 - New Bridge with 17.5 Feet Vertical Clearance:
This alternative would improve horizontal and vertical alignment and construct a new single span bridge and lower the existing vertical clearance from 19 feet to 17 and a half feet. The New York Susquehanna and Western Railway suggested and has approved of this alterative.

Alternative 4 - New Bridge with 19 Feet Vertical Clearance:
This alternative would construct a new single span bridge that matches the existing vertical clearance of 19 feet. However, this was a higher cost option resulting in the most right-of-way impacts. Reconstructing the bridge with a standard 23 feet vertical clearance was not feasible due to significant right-of-way impacts and project costs.

Alternative 5 – Superstructure Replacement of the Existing Bridge with Bridge Widening:
This alternative considered replacing the existing superstructure and maintaining the existing abutments and piers, and maintained the current substandard horizontal and vertical alignment. This option does not allow for adequate travel lanes during construction.

Slide 29 - Preliminary Preferred Alternative
15:48

Based on consultation with NJDOT, local officials and New York Susquehanna and Western Railway, Alternative 3 has been chosen at the Preliminary Preferred Alternative, as shown on this plan.

Slide 30 - Preliminary Preferred Alternative
16:05

A closeup view of the southerly section of the project shows that

- The bridge over the New York Susquehanna and Western Railway will be totally replaced with a new structure that provides 17 and a half foot vertical clearance over the inactive railroad.

- The horizontal curve will be flattened at the Fairview Cemetery while shifting the alignment toward the west away from the cemetery.

- New retaining walls will be constructed along the west side of the roadway to limit impacts to the adjacent properties.

- A partial building demolition is required at Division Street and for the building closest to Route 1and 9 on the Waste Management property. A residential house and the office building on the self storage property will also be impacted by the project.

Slide 31 - Preliminary Preferred Alternative
16:56

- The approach roadway will have a full depth pavement replacement and will be widened to 11 foot inner and 12 foot outer lanes in each direction, with no shoulders.
- A left turn lane will be provided at the Private Road to the Waste Management facility.
- A 10 foot-wide sidewalk will be provided on both sides of the roadway
- New drainage and sanitary sewer systems will be constructed throughout.

Slide 32 - Preliminary Preferred Alternative
17:29

The northerly section of the project shows that

- Sedore Avenue will be realigned to meet Route 1 and 9 at a right angle.
- The traffic signal at Fairview Avenue will be modified.
- ADA upgrades will be provided at intersections and driveways, as needed.

Slide 33 - PPA Roadway Profile
17:47

The roadway profile will be designed to provide 17 and a half foot vertical clearance over the railroad right of way as requested by New York Susquehanna and Western Railway. The northern section of the project will maintain the existing roadway grades.

Slide 34 - PPA Roadway Profile
18:05

The roadway profile will be raised from three to five feet at the bridge approaches to provide for the standard stopping sight distance for the 40 mile per hour design speed.

Slide 35 - PPA Drainage / Permits
18:17

There are significantly large offsite drainage areas discharging to this section of Route 1and 9 and the drainage area land use is mostly fully developed with a large area occupied by the existing Fairview Cemetery.

The project is subject to the NJDEP Stormwater Management Rules based on exceeding one acre of land disturbance despite an overall reduction in impervious cover.

The NJDEP permits required for the project include Flood Hazard Area and Freshwater Wetlands, along with Storm Water Management compliance.

However, we do not anticipate the need for Storm Water Management facilities for this project.

Slide 36 - Stage Construction
19:07

Bridge construction will be completed in two stages while maintaining two Northbound lanes and one southbound lane of Route 1 and 9 traffic at all times.

Due to the close proximity of the traffic signal at 91st Street, maintaining only one lane in the northbound direction would result in significant traffic delays.

A Pre- Stage 1 construction stage will be necessary to relocate underground and aerial facilities outside of the proposed roadway and bridge footprint.

Slide 37 - Stage 1 Construction
19:41

In Stage 1 traffic will be maintained on the easterly portion of the existing bridge while the westerly portion of the existing bridge is demolished. Pedestrian traffic will be maintained on the east side of the bridge.

Slide 38 - Stage 1 Construction
19:58

During Stage 1, the westerly portion of the proposed bridge would be constructed wide enough to accommodate three lanes of traffic in the next stage.

Slide 39 - Stage 2 Construction
20:10

In Stage 2, the two northbound lanes and the one southbound lane of traffic will be shifted to the portion of the bridge built in Stage 1. A five foot wide sidewalk will be provided on the west side of the bridge.

The easterly portion of the remaining bridge will be demolished.

Slide 40 - Stage 2 Construction
20:30

During Stage 2, the easterly portion of the proposed bridge will be constructed.

Lastly, the westerly bridge sidewalk will be constructed to the full 10 foot wide width and will be open to pedestrian traffic.

Slide 41 - Project Schedule

20:47

The next steps and anticipated project schedule are as follows:

- This Virtual Public Information Center.
- The Concept Development Report, outlining and summarizing the work completed in the Concept Development phase, will be prepared, and the Concept Development phase will be completed in the Winter of 2022.
- The next phase of work will be the Preliminary Engineering phase, in which the Preliminary Preferred Alternative will be further refined, and Environmental Documentation will be prepared, the Preliminary Engineering phase is expected to start in the Spring of 2023.
- The Final Design and Construction phase schedule has yet to be determined.
- The current approximate Construction Cost of the Preliminary Preferred Alternative is $31.3 Million, excluding right of way acquisition costs.

Slide 42 - Feedback

21:47

Thank you for taking the time to review this presentation on the Concept Development Phase for the Route U.S. 1 and 9 over New York Susquehanna and Western Railway Bridge Replacement, Safety and Operational Improvements project.

Please return to the website to complete the project survey and provide your comments about the project. If you have project specific questions or comments about the project, you may submit them as part of the survey to the project team using the comment fields on the survey form.

General questions can also be submitted via email to Meredith Hammond from the New Jersey Department of Transportation Office of Community and Constituent Relations at Meredith.Hammond@dot.nj.gov.

The New Jersey Department of Transportation appreciates your participation and comments. Thank you.