

**Pittsburgh Vertical Clearance Projects
City of Pittsburgh and Borough of Swissvale
Allegheny County**

**FREQUENTLY ASKED QUESTIONS
Spring 2023**

1. Why must the double-stack trains be run on this line rather than around the city as they do today?

Federal and Commonwealth policy has supported double-stack trains to meet national freight rail demand, and much of the national rail system currently accommodates double-stack trains and their more-efficient transportation model, meeting national freight as well as energy and climate policy goals. The current Norfolk Southern double-stack train route through Pittsburgh is via the Port Perry Branch and the Monongahela (Mon) Line. This route is currently at capacity, and as a result, trains frequently face congestion issues. The infrastructure and geography of the Mon Line create challenges for efficiently handling the service-sensitive intermodal freight that uses it today. The Mon Line has a 3-mile, single-tracked segment that includes a tunnel and an adjacent bridge over the Monongahela River. This 3-mile segment is the largest chokepoint on Norfolk Southern's route between Chicago and the New York metropolitan area.

Aside from the capacity constraints on the Mon Line, the topography adjacent to the railroad right-of-way for much of the distance through Pittsburgh is susceptible to landslides from Mount Washington. The slope of Mount Washington continues to shift, and each time it does, the potential exists for soil and rock to be deposited on the railroad tracks making them unable to be traversed until the debris is removed and the slide area stabilized. Aside from the significant costs incurred for cleanup, the slides create potentially hazardous conditions and routinely cause hours of delay. These landslides range from moderate to severe in nature, and the timing of the incidents is unpredictable.

The landslide problem has been such an issue in the area that Allegheny County officials announced a "Landslide Task Force" on July 3, 2018. In July 2019, Allegheny County announced via a press release that the Landslide Task Force launched a Landslide Portal for municipal leaders. The portal can be found at <https://landslide-portal-alcoqis.opendata.arcgis.com/>.

2. What is the expected increase in frequency of train traffic after the projects are completed?

Frequency is determined by interstate freight rail demand and is subject to future freight capacity needs. However, the line can accommodate approximately 70 trains per day as it currently exists. In 2019, Norfolk Southern averaged 34 freight trains per day on the Fort Wayne Line through Pittsburgh's North Side neighborhoods and 19 freight trains per day on the Pittsburgh Line through Pittsburgh's Central Business District, East End neighborhoods, and eastern suburbs.

With the proposed projects, Norfolk Southern anticipates that it would operate approximately 56 freight trains per day through the North Side area, of which about 41 would move between the Central Business District and Braddock/North Braddock. It should be noted that the additional 22 trains are currently operating over the Mon Line through Pittsburgh's South Side.

3. Why are tax dollars being used to fund this project?

The Commonwealth of Pennsylvania has determined that reinforcing its transportation infrastructure is a key priority. In 2013, the legislature passed Act 89 (HB 1060), which, among other things, provides annual funding for projects in all modes of transportation, including railroads. The legislature determined that Act 89 had significant public benefits including job creation, improving roads and bridges, ensuring economic competitiveness with neighboring states, and avoiding crippling service cuts. By approving funding for these proposed projects, the Commonwealth has determined that it will advance steps it has already taken to improve the efficiency and reliability of the Commonwealth's surface transportation system at the regional and national level, as well as increase the Commonwealth's economic competitiveness. The Pittsburgh Vertical Clearance Projects will improve the connectivity between freight modes vital to national commerce by facilitating faster, more efficient, and safer freight movement. Additionally, the projects will complete the final segment of the public-private partnership that began in the mid-1990s between the Commonwealth of Pennsylvania and Conrail to create an efficient double-stack intermodal corridor, and support state and national freight rail transportation policy goals.

4. Pennsylvania Act 120 Process

The proposed projects are early in the PennDOT/Act 120 Transportation Program Development and Project Delivery Process (i.e., preliminary engineering and environmental review process). Per PennDOT guidance, for projects where there will be no Federal-aid funding (receiving only state funding in both design and construction), National Environmental Policy Act (NEPA) regulations do not apply. PennDOT is the lead agency for the Act 120 process and will ultimately make the determination of the level of environmental document to be prepared based in part on the anticipated effects of the projects including consideration of information from citizens, public officials, stakeholders, and others.

5. Public Involvement Process

An initial public open house was held on June 26, 2018, to introduce the project to the public. A second public open house was held on January 18, 2023, to present the preferred alternatives and preliminary studies for the projects and to gather public feedback. As part of the public involvement program for these projects, all comments will be considered and included into the project's technical file. Due to the complexity of the project development process, NS and PennDOT must weigh many factors in making their decisions and it must be understood that the comments provided are for consideration purposes only and do not constitute a vote or referendum on the process.

6. Please explain Norfolk Southern’s, PennDOT’s, PA SHPO’s, consulting parties, and Michael Baker International’s roles in the Pittsburgh Vertical Clearance Projects.

Norfolk Southern: Project sponsor.

PennDOT Multimodal Office: Funding agency

PennDOT Engineering District 11-0: Reviewing agency for Act 120 and Pennsylvania History Code compliance

Pennsylvania State Historic Preservation Office (PA SHPO): Consulting party under Pennsylvania History Code

Consulting Parties: Organizations, individuals, and governmental agencies and representatives determined to have an interest in historic properties who provide input throughout the consultation process on findings, determinations of National Register of Historic Places eligibility, the project’s effects on historic properties, and measures to avoid, minimize, or mitigate any adverse effects of the project on historic properties.

Michael Baker International: Consultant to Norfolk Southern. Assists in preparation of assessments and documentation pursuant to Act 120 and Pennsylvania History Code for PennDOT review and facilitates the public involvement processes for the projects.

7. Why is Norfolk Southern holding “closed” consulting party meetings for these projects?

To be clear, consulting party meetings are held to only address potential effects of the project on historic properties. Under PennDOT guidance and a Memorandum of Understanding between PA SHPO and PennDOT, PennDOT fulfills its obligations for considering the effects of state-funded transportation projects on historic properties under the Pennsylvania History Code using the processes and procedures of Section 106 of the National Historic Preservation Act as outlined in 36 C.F.R. 800. The Section 106 regulations are specific regarding consulting parties and require that individuals and organizations must have a demonstrated interest in the project “due to the nature of their legal or economic relation to the undertaking or affected properties, or their concern with the undertaking’s effects on historic properties” (36 C.F.R. 800.2(c)(5)). PennDOT determines that demonstrated interest through an application process. Consulting parties meet to consult on the identification and evaluation of historic properties, the assessment of effects and the resolution of adverse effects on historic properties, and measures to avoid, minimize, and mitigate those effects on historic properties in meetings that are limited to those parties with demonstrated interest. Although the consultation sessions are limited to the consulting parties, all of the reports, comments, responses, and additional information provided as part of that consultation is available to the public at large on the Norfolk Southern project website: <http://www.nscorp.com/content/nscorp/en/in-your-community/pittsburgh-bridge-projects/learn-more-about-the-consulting-parties-process-for-pitts.html>

8. Is Norfolk Southern aware of the historic significance of Allegheny Commons Park?

Norfolk Southern and the project team are aware that Allegheny Commons Park is the oldest public park in Pittsburgh, is listed in the National Register of Historic Places, and is a City of Pittsburgh-designated historic district. The Act 120/Pennsylvania History Code process is considering impacts to historic properties in the environmental and historic property reviews it is undertaking for the projects and their preferred alternatives.

9. What are the anticipated noise impacts to the community? Is there a noise mitigation plan (e.g., provision of barrier walls, etc.)?

The noise analysis indicates that the proposed projects do not result in substantial increases in noise including noise related to temporary construction. Analysis was also performed to assess the potential for indirect effects relating to forecasted changes in rail traffic and effects of those changes. The results show that a noise mitigation plan and noise walls are not needed because noise levels would not increase to a level resulting in impacts at applicable thresholds. Additionally, under the preferred alternatives for the projects, auditory impacts would be less than under the No Build Alternative since more trains would be needed to carry the same amount of freight.

10. What are the expected effects on air quality from increased train traffic?

Qualitative air assessments have been performed. The projects were evaluated for emissions impacts, which were found to be below de minimis levels as defined under the general conformity rule and thus would not be subject to a conformity determination. Qualitatively, the projects will have a positive impact on regional emissions as the proposed route is shorter than the current alignment and will provide greater capacity and more reliability. Rail transport can move one ton of intermodal freight an average of 468 miles on a single gallon of fuel, and one intermodal double-stack train can remove up to 300 trucks off of congested highways. Federal regulations govern the locomotive emissions standards applicable to the locomotives in the United States; the intent of those regulations is to protect human health and the environment through emissions regulations. As regulations have been tightened over the years with the intention to reduce emissions over time as locomotives are purchased or upgraded, it is not expected that the proposed projects would lead to new or worsened air quality issues.

11. How will the Pittsburgh Vertical Clearance Projects impact the idling of Norfolk Southern trains within Allegheny Commons and the Manchester community?

The Pittsburgh Vertical Clearance Projects will have no impact on idling trains on the North Side. It should be noted, however, that with the relocation of signals in 2019 as part of the implementation of Positive Train Control in this area, the movement of trains through Allegheny Commons and Manchester is more fluid.

12. Is it possible for double-stack trains to run on non-diesel alternatives?

Freight railroads operate with diesel-electric locomotives that comply with USEPA emission standards. Non-diesel motive power with a capacity to effectively and efficiently propel and control freight trains of the type operated by Norfolk Southern in this corridor are not available

or operated by the Class I rail freight carriers on the national freight network at this time. Even if available, changing the type of motive power for brief line segments would require enormous investment in infrastructure and equipment and would cause substantial service disruption and delay to this segment of the national freight rail network.

13. Environmental Justice

While Environmental Justice (EJ) communities exist within the project area, the proposed project will not disproportionately impact EJ populations in accordance with PennDOT Publication No. 746 (Project Level Environmental Justice Guidance). Minority populations and/or low-income populations will not suffer effects due to noise or air pollution appreciably more severe or greater in magnitude than the non-minority and/or non-low-income populations. The proposed vehicular and pedestrian/bicyclist detours for the W. North Avenue and Pennsylvania Avenue bridge projects will result in the same impacts to all populations in the affected area and will not be predominantly borne by EJ populations.

14. What types of cargo will be on the double-stack trains?

A typical intermodal train carries primarily consumer products, such as clothing, food, and electronics. Less than 4 percent of the material on a typical intermodal train could be considered hazardous. These materials are often items that are typically found in retail products (e.g. paint, lubricants, etc.). The type of cargo transported in intermodal service will not change with the operation of double-stack intermodal cars.

The Pittsburgh line is an interstate freight rail line and Norfolk Southern is subject to federal common carrier obligations, federal law, and requirements applicable to freight rail in interstate commerce. Trains that currently operate over the Pittsburgh line carry hazardous materials in appropriate rail cars or tank cars, which is highly regulated under federal law. This project does not affect those types of hazardous materials transportation.

15. What precautions will be taken to mitigate the risk of derailment and other accidents?

Norfolk Southern invests more than a billion dollars annually to maintain and improve its infrastructure. This includes frequent track inspections in accordance with FRA regulations. Over the past ten years, NS has spent \$1.8 billion to install Positive Train Control, which is, among other things, designed to prevent train collisions and overspeed derailments. NS has installed PTC on this route. In addition, Norfolk Southern recently announced a six-point plan to immediately enhance the safety of its operations, including new/improved detection systems, advanced safety inspection technology, and other measures.

16. Will communities along the tracks be impacted by traffic disruptions due to construction?

How will continual emergency vehicle and public transportation access be ensured?

Construction will be temporary and a traffic plan has been developed in coordination with the City of Pittsburgh and PennDOT to provide detours to be utilized during construction to minimize traffic disruptions. These detours will be provided to emergency service providers to minimize or eliminate delays associated with construction activities. These projects will not affect or impair

access to public transportation. Any traffic disruptions will be approved by the City of Pittsburgh and PennDOT. All detours including the potential timeline for construction will be coordinated with the Police, Fire, EMS, Allegheny General, sports teams, and Pittsburgh Regional Transit so appropriate adjustments can be made for emergency and other vehicles. Ultimately, when bridges nearing end-of-life are replaced, the result is a net improvement to vehicular traffic and emergency vehicle and public transportation access.

17. Has there been any investigation into the effect of these projects on nearby property values?

Freight and passenger rail operations have existed in this area since 1851, and the number of trains per day has fluctuated over those years. The market value of real estate is a complex and ever-changing calculation that takes into account a wide range of conditions. Analysis of potential effects will be consistent with Act 120 guidance.

18. Will residents of the senior living center and other individuals with impaired mobility be able to easily navigate the new sidewalks and raised bridges?

Where the proposed projects contemplate modifying the walkways on bridge structures, Norfolk Southern will ensure ADA compliance as a part of the overall design process.

19. Will reduced sightlines along planned roadways decrease the safety of pedestrian crossings?

Pedestrian safety was a key concern as part of the responses to the June 26, 2018 Public Open House comment forms. All projects have been designed in accordance with the applicable AASHTO and PennDOT design manuals with the goal of improving pedestrian safety wherever possible.

20. Why has there been no collaboration with PWSA regarding the state of old pipelines beneath the tracks? Are the old pipes strong enough to withstand increased train load and frequency?

The team has identified locations of sewer, water, storm water and combined sewer in the vicinity of the proposed projects. The collaboration includes meetings and continued discussions with the City of Pittsburgh on these projects since December 2015. The team has met with and will continue to meet with PWSA and other utility companies that may be affected by the proposed projects or any alternatives, as well as other affected stakeholders, as part of the alternative selection process.

To the extent there are PWSA or other utilities under the current rail alignment, those utilities currently withstand the weight of a locomotive, which weighs around 240 tons. A loaded double-stack rail car weighs less than 100 tons, and has axle loading that is equal to, or lower than, other types of rail equipment currently and routinely operated on the route. While the frequency of loading may increase due to increased train volume, the point loadings imparted on the track and roadbed will not increase.

21. Why is lowering the tracks not being considered at all project locations?

The Alternatives Analysis assessed track lowering, bridge raising, and other reasonable and feasible alternatives for each of the project locations in accordance with Act 120 and PennDOT guidance. The adjustment to obtain the required minimum vertical clearance for interstate freight rail varies from 6 inches to 3 feet 9 inches depending on the specific project location. Several of these locations have infrastructure constraints, including retaining walls with adjacent sewers, parallel and perpendicular utility runs, and other adjacent building and bridge foundations, that would greatly complicate construction or even preclude track lowering.

The trough in which the railroad operates through the Allegheny Commons Park presents a particularly complex challenge in this regard for the W. North Avenue project. A track-lowering feasibility study was performed to analyze the potential effects of lowering the tracks in the trough through Allegheny Commons Park. The trough contains four active tracks, which are in daily use by both Norfolk Southern and Amtrak. Temporary (and potentially permanent) track removal would be required to facilitate any track lowering in this area and would present very real and ongoing operational challenges. Technically, the location presents significant challenges as the tracks in this area are immediately adjacent to the concrete and cut stone retaining walls and their foundations. Lowering the tracks would require the removal of up to an estimated 6 feet of existing roadbed and subgrade material adjacent to these walls and foundations, creating concerns for wall stability and increasing the potential exposure of the wall foundation to the detrimental effects of frost action.

Several major utility relocations would be required along with groundwater mitigation and abutment and wall reconstruction. The wall reconstruction would impact a large Pittsburgh Water and Sewer Authority sewer line, which would need to be relocated, resulting in temporary impacts to park property and permanent impacts to a significant number of mature trees within the park.

At several locations where track lowering presents technical or operational challenges, the overhead structures have also been deemed to be structurally deficient. It is important to note that with or without these projects, these structures will ultimately need to be replaced.

22. Why are the tracks proposed to be lowered at Washington Avenue instead of replacing the bridge?

The track lowering project at Washington Avenue is part of the Pittsburgh Vertical Clearance Projects. A bridge replacement is also being considered as a separately funded project. If it is determined that the bridge will be replaced as part of that separate project, the track lowering project at Washington Avenue will be removed from the Pittsburgh Vertical Clearance Projects.

23. Why can't all of the projects be designed to the same vertical clearance requirements?

The requirement for vertical clearance per the PUC in Pennsylvania is 22'-0". The minimum allowable vertical clearance for doublestack trains is 21'-0". The overall goal of the Pittsburgh

Vertical Clearance Projects is to satisfy the requirements of the PUC while giving consideration to adjacent infrastructure and resources. Each location was designed to provide the maximum clearance possible while minimizing impacts, so each location was evaluated based on those considerations. Most design manuals give a preferred height or width along with a minimum height or width, depending on the criteria. It is typical practice to design with a buffer, especially when approaching the minimum to allow for construction tolerances, future surfacing, etc. This will ensure that the minimum clearance is never violated.