# THE HUDSON TUNNEL PROJECT

## OVERVIEW

The Hudson Tunnel Project (HTP) includes three major elements to create **resiliency**, **redundancy**, and **reliability** for Amtrak's Northeast Corridor (NEC) service and NJ TRANSIT's commuter rail service between New Jersey and New York Penn Station (NYP):

1. Construction of a **new two-track Hudson River rail tunnel** from the Bergen Palisades in New Jersey to Manhattan.
2. Construction of the **third and final concrete casing at Hudson Yards**, which will preserve the right of way for the new tunnel to connect to NYP.
3. Rehabilitation of the existing **North River Tunnel**, which was severely damaged during Superstorm Sandy.


## BACKGROUND

The existing North River Tunnel (NRT), opened in 1910 by the Pennsylvania Railroad, was designed to early 20th-century standards and consists of two tracks. This "one-track-in, one-track-out" rail system between New York and New Jersey results in significant delays up and down the NEC when service incidents occur. Service reliability through the NRT, already suboptimal because of the tunnel's age and antiquated design, has been further compromised by damage caused by Superstorm Sandy in 2012.

When an incident takes one tube out of service, traffic in and out of NYP must use the one remaining NRT tube, reducing capacity by up to 75% and leading to significant delays. The 24 trains per hour that use the NRT in the peak period could drop to as few as six when just one tube is closed.

**The Hudson Tunnel Project will build two additional tracks and rehabilitate the existing two tracks, resulting in four modern tracks between New York and New Jersey** that create operational flexibility, rail network redundancy, and resiliency against future impacts to the Hudson River rail crossing.

## BENEFITS

The planned improvements to the vital 457-mile NEC between Boston and Washington, DC—America's busiest passenger railroad—will result in substantial social, economic, and environmental benefits, including:

- **Eliminating a single point-of-failure** for a regional economy that drives a sizable portion of America's Gross Domestic Product (GDP). The New York regional economy and the NEC megaregion contribute 10% and 20%, respectively, of the nation's GDP.
- Creating **95,000 direct, indirect, and induced jobs** over the Project's construction period.
- Generating **$19.6 billion in economic activity** over the Project's construction period.
- Stimulating the economy by directly spending more than **$87 million/month** on average on materials and labor over the Project's construction period.
- Utilizing **U.S. suppliers and manufacturers from around the country** through the Build America, Buy America requirement as well as the provisions regarding participation by minority- and women-owned, small, and disadvantaged businesses.

### By the Numbers

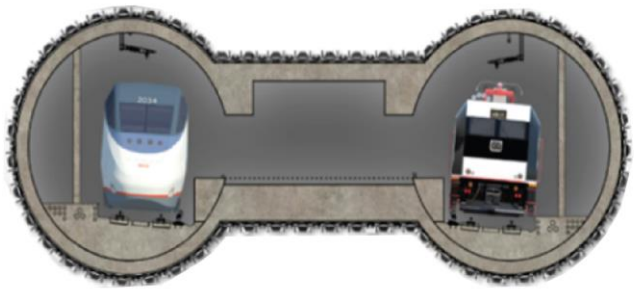
- **2** **tracks:** (1 track in separate tubes)
- **12** **years:** estimated construction duration
- **9** **miles:** new track length* (4.5 miles in either direction)
- **4.8** **miles:** new tunneling length* (2.4 miles in either direction)
- **25** **feet, 2 inches:** internal tunnel diameter*
- **28** **feet:** outside tunnel diameter*
- **20** **feet:** minimum tunnel depth below surface* (Manhattan, NY)
- **275** **feet:** maximum tunnel depth below surface* (Palisades, NJ)

*approximate

## CURRENT ACTIVITIES

In November 2023, construction launched on both sides of the Hudson River:

1. **Tonnelle Avenue Bridge and Utility Relocation Project**: Ground broke in North Bergen to facilitate a connection to the new tunnel portal and an access point for Tunnel Boring Machines.
2. **Hudson Yards Concrete Casing–Section 3 (HYCC-3)**: In Manhattan, work is underway to connect the new tunnel to NYP.
3. **Hudson River Ground Stabilization (HRGS) Project**: In May, preliminary work to fortify a section of the riverbed began. Heavy construction launched in July.



*conceptual rendering, not final design

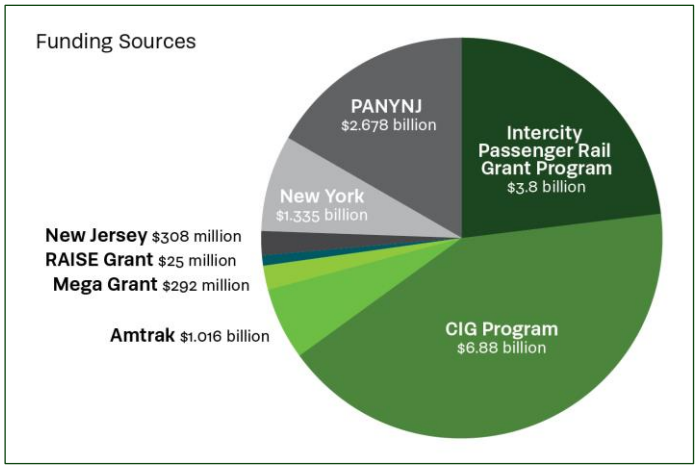
Five out of the nine packages that make up the Hudson Tunnel Project are either under construction or in procurement. In February 2024, GDC awarded its first heavy construction contract (HRGS). Contracts for the Palisades Tunnel and Manhattan Tunnel are currently in procurement and are expected to be awarded later this year.

## FUNDING

The federal funding commitment to the Hudson Tunnel Project represents the **largest federal investment in a rail transportation project in modern history**.

Altogether, GDC has $12 billion in federal commitments, with total project costs split 70-30 between federal and local partners.

In July, **GDC signed a Full-Funding Grant Agreement (FFGA) for $6.88 billion** in Capital Investment Grants (CIG) Program funding and closed on Railroad Rehabilitation and Improvement Financing (RRIF) loans from the Build America Bureau totaling $4.06 billion to fund the local share of the project.




With these actions, GDC has secured the entire $16 billion commitment needed to complete the HTP, bringing the Project to the point of no turning back.

## NEXT STEPS

GDC continues to make progress on early work packages that will bolster reliability, reduce costs, and mitigate risks to successful delivery. Heavy construction began in the Hudson River in July.

**With the FFGA finalized, major construction activity and ongoing procurements have the green light to proceed.** GDC is advancing the procurement process for civil works and surface alignment contracts, moving forward with the second phase for the HRGS contract, and preparing for Tunnel Boring Machine activity.

**The schedule anticipates a 2038 completion date for the project, with a new tunnel in-service by 2035** and a 3-year schedule for the full, top-to-bottom rehabilitation of the existing North River Tunnel. When the new tunnel is open and the rehabilitation work is ongoing, trains will be able to use 3 tubes under the Hudson River until the entire 4 tube project is complete.