

FREDERICK DOUGLASS TUNNEL PROGRAM

Pre-Construction Inspections

(including Instrumentation and
Monitoring Installation)

Overview

Construction of the Frederick Douglass Tunnel Program is not expected to impact the integrity of private properties as Amtrak's contractors will use state-of-the-art techniques designed to limit vibration and ensure protection of nearby properties. To assess the impacts of ongoing work, Program contractors are offering property owners adjacent to the new tunnel alignment an opportunity to have their property inspected prior to the start of construction to document the physical condition of the structures. For some properties closest to the construction, Amtrak is also offering an opportunity to have monitoring devices installed on the exterior of these properties to monitor for any movement.

Pre-Construction Inspections

The pre-construction inspection is a comprehensive review and assessment of the interior and exterior conditions of homes and buildings in neighborhoods adjacent to planned work. Areas of inspection include above-ground foundations, sidewalks and footways, brick, siding, wood, concrete, drywall and plaster. These inspections are conducted to:

- 🔊 Understand the conditions of the property
- 🔊 Document the existing conditions for the property owner and Amtrak
- 🔊 Provide baseline data that can be referenced during and following construction

Qualifying for an Inspection

Property owners will receive notification via FedEx or UPS if their property qualifies for an inspection. Properties are identified for preconstruction inspection based upon:

- 🔊 Depth of excavation – generally greater than 10 feet deep near the property
- 🔊 Distance of excavation from critical structures (homes, buildings, schools)
- 🔊 Proximity of excavation to property (typical radius ranging from 25 – 50 feet from excavation)

Property owners are asked to schedule an inspection between 7:00 AM-6:00 PM, Monday through Friday. Once the inspection is completed, property owners will receive a copy of the report and all associated images. ***The inspections and documentation will be provided free of charge to the property owner.***



Tilt monitoring prism

Monitoring Adjacent Properties

Program contractors will collect real-time data to measure noise and vibration leaving the construction site and entering the community. These devices will provide guidance on adjustments that can be made to mitigate any potential impacts caused by construction. Collecting this information will allow faster response to any unexpected measurements, allowing our contractors to pause and adjust work to avoid or minimize impacts to adjacent properties. To collect this data, Program contractors are requesting access from property owners adjacent to construction areas to allow them to install equipment on the exterior of homes to monitor any movements beyond approved thresholds. In special cases, contractors may also request permission to install equipment in the basement of a property.

Instruments may be placed in the following locations:

- 🚧 In ground to measure potential movement and groundwater
- 🚧 On adjacent structures (buildings) to measure settling or tilt of structure
- 🚧 On ground (sidewalk) surface to measure settling of infrastructure
- 🚧 On utilities to measure noise, vibration, or settling



Noise monitor



Installed tilt monitor



Vibration monitor

What does all of this cost?

Great news! The preconstruction inspections and installation of monitoring equipment is all being offered at no cost to property owners. It is our intention to capture this data for the protection of both the property owner and Amtrak in the unlikely event of property damage. Additionally, if the equipment installed to measure any deflections happens to be damaged, our team will be responsible for the repair of our equipment and replacement on your property if deemed necessary.

**For more information about the Program,
please visit [FDTunnel.com](https://www.fdtunnel.com)**