

# Project Purpose



- To preserve the current functionality of Amtrak's Northeast Corridor service and NJ TRANSIT's commuter rail service between New Jersey and Penn Station New York by repairing the deteriorating North River Tunnel.
- To strengthen the Northeast Corridor's resiliency to support reliable service by providing redundant capability under the Hudson River for Amtrak and NJ TRANSIT trains between New Jersey and the existing Penn Station New York.
- These improvements must be achieved while maintaining uninterrupted commuter and intercity rail service and by optimizing the use of existing infrastructure.



# Need for the Project



- Both tubes of existing North River Tunnel were inundated during Superstorm Sandy and the tunnel was closed for 5 days
- The tunnel is safe for use, but storm damage continues to degrade tunnel systems



*photos courtesy of Amtrak*

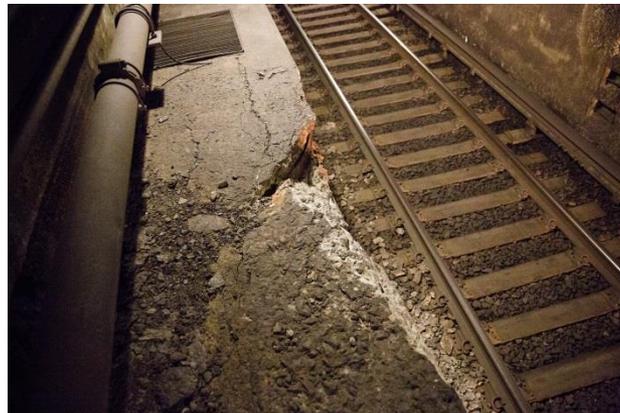
*Inundation of tunnel during Superstorm Sandy*



# Need for the Project



- The existing rail tunnel is safe for use but requires ongoing and emergency maintenance which disrupts rail service
- Long-term, the storm damage can only be addressed through a comprehensive reconstruction of the tunnel
- Existing train service (approximately 450 trains per day) must be maintained while reconstruction is under way



*Monitoring and repairs are continuously necessary*

*photos courtesy of Amtrak*



# Project Goals and Objectives



## **1: Improve service reliability and upgrade existing tunnel infrastructure in a cost-effective manner.**

- Reduce infrastructure-related delays due to poor condition of the North River Tunnel following Superstorm Sandy.
- Rehabilitate the North River Tunnel to modern system standards.

## **2: Maintain existing NEC service, capacity, and functionality by ensuring North River Tunnel rehabilitation occurs as soon as possible.**

- Optimize use of existing infrastructure.
- Use conclusions from prior planning studies as appropriate and to the maximum extent possible.
- Avoid regional and national economic impacts associated with loss of rail service.

## **3: Strengthen the NEC's resiliency to provide reliable service across the Hudson River, facilitating long-term infrastructure maintenance and enhancing operational flexibility.**

- Construct additional tracks to allow for continued Northeast Corridor rail operations during maintenance periods and unanticipated human-caused and natural events.

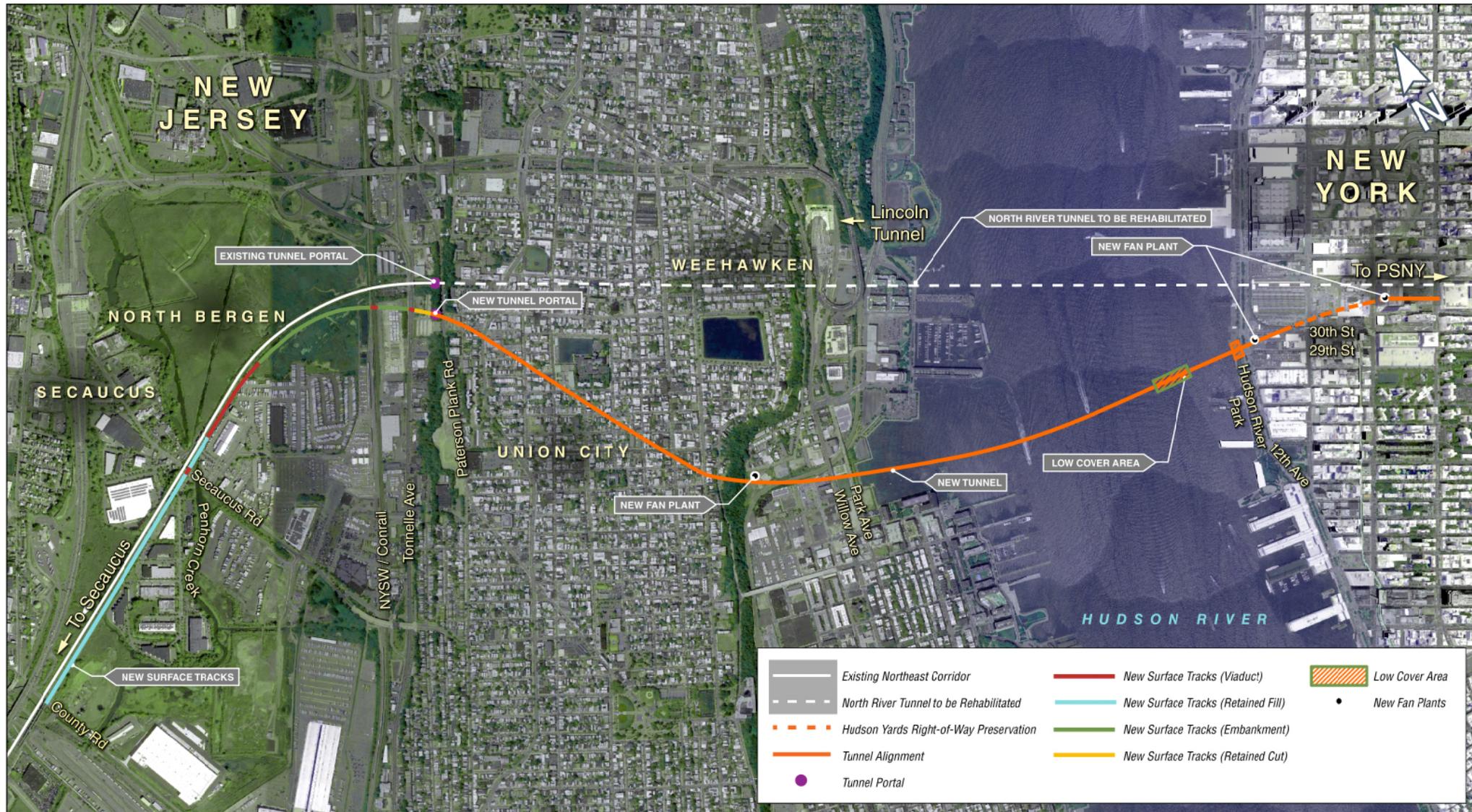
## **4: Do not preclude future trans-Hudson rail capacity expansion projects.**

- Allow for connections to future capacity expansion projects, including connections to Secaucus Junction Station in Secaucus through to the Portal Bridge over the Hackensack River, and connections to station expansion projects in the area of Penn Station NY.

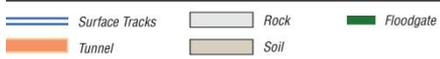
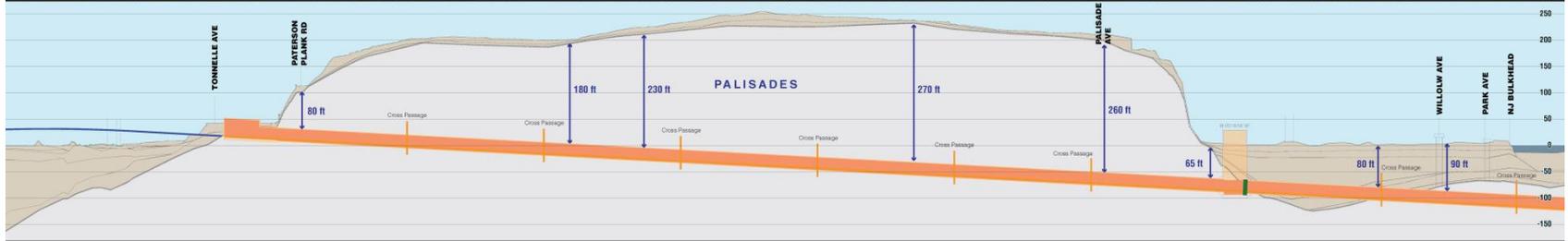
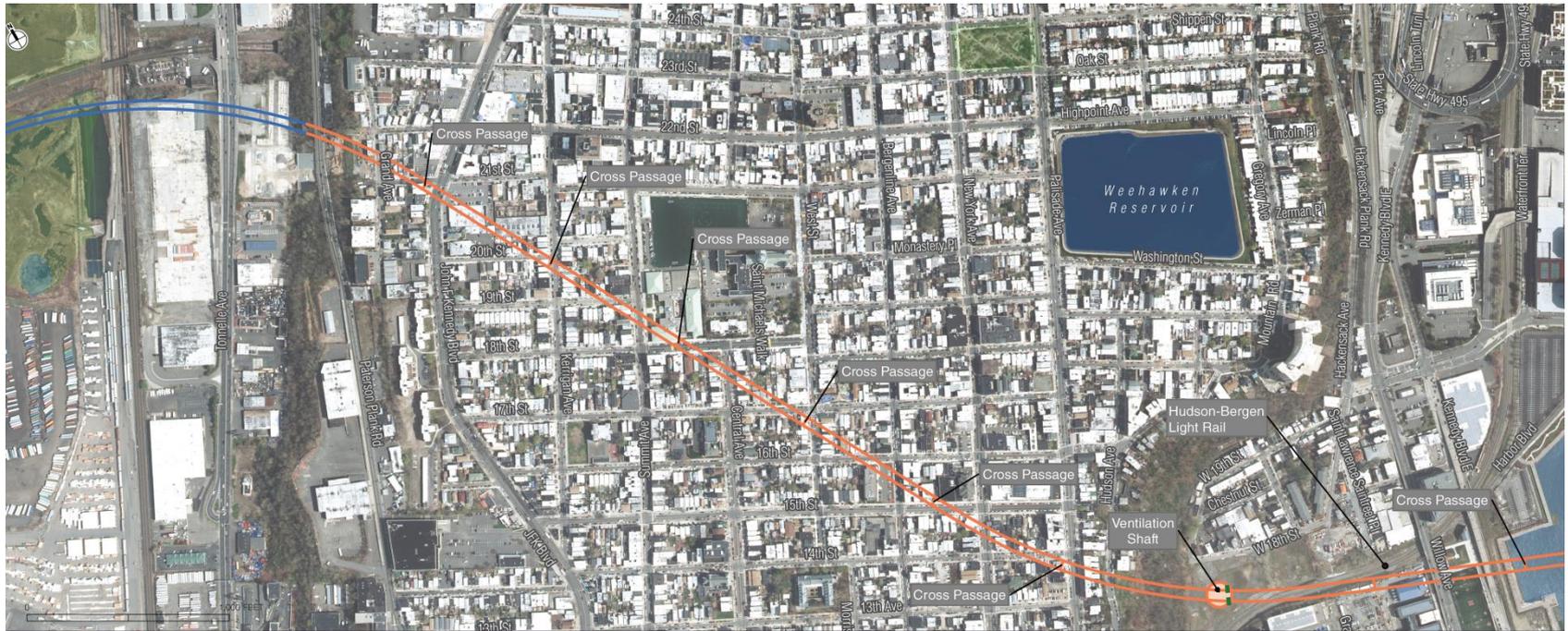
## **5: Minimize impacts on the natural and built environment.**

- Avoid/minimize adverse impacts on communities and neighborhoods.
- Strive for consistency with local plans and policies.
- Preserve the natural and built environment.

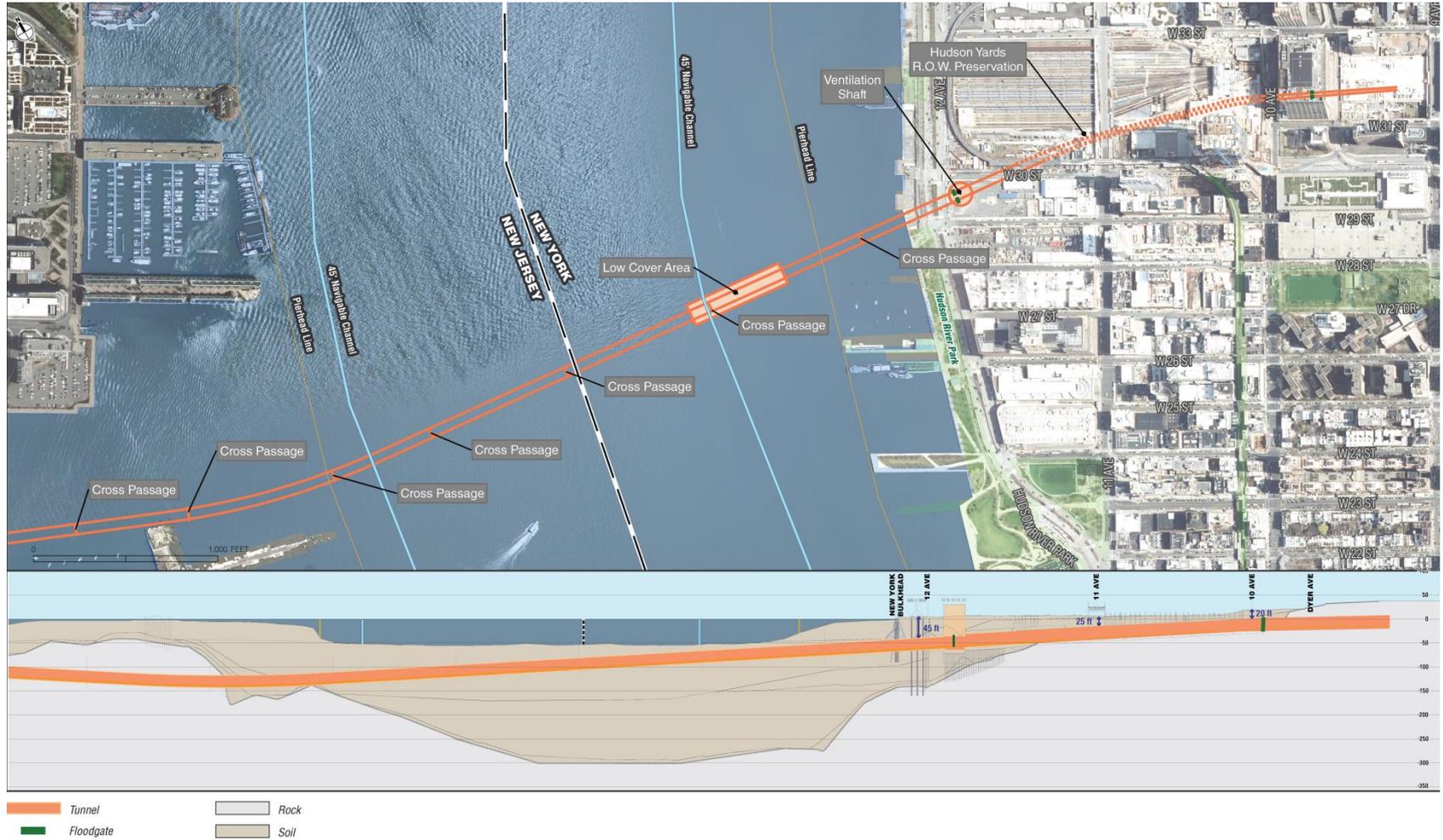
# Preferred Alternative



# New Tunnel Alignment (Plan and Profile): New Jersey



# New Tunnel Alignment (Plan and Profile): Hudson River and New York



# What is an Environmental Impact Statement?



- Document that evaluates a project's impacts on the natural and built environment
- Includes impacts of the completed project and its construction impacts
- Identifies measures to avoid and mitigate impacts
- Considers alternatives to avoid or reduce impacts
- Reflects input received through public review opportunities

## EIS ANALYSIS AREAS

- **Transportation**
- **Social & Economic Conditions**
- **Property Acquisition**
- **Parks and Recreational Resources**
- **Visual & Aesthetic Resources**
- **Historic & Archaeological Resources**
- **Air Quality**
- **Greenhouse Gas Emissions & Resilience**
- **Noise & Vibration**
- **Ecology**
- **Contaminated Materials**
- **Environmental Justice**
- **Secondary & Cumulative Effects**
- **Section 4(f) Evaluation**  
(parklands, protected wildlife areas, & historic structures/sites)

# DEIS Conclusions: Construction Impacts



- **Temporary but multi-year disruption from:** traffic, noise, visual disruption; temporary impacts to wetlands and aquatic resources
- **Measures to reduce impacts include:** Maintenance and Protection of Traffic (MPT) plans; Neighborhood outreach program to coordinate and manage disruption for affected residences and businesses; Noise mitigation



# Mitigation Measures: North Bergen and Union City



Installation of soundproof windows along truck routes



Construction complaint protocol: assure responsiveness to neighborhood concerns



Pedestrian crossings and walkways/  
construction maintenance and protection of traffic plan



Dust control



- Construction Staging Area
- Proposed Surface Tracks
- Proposed New Tunnel
- Proposed Truck Routes and Access Roads
- North River Tunnel to be Rehabilitated
- Existing Northeast Corridor



Vibration monitoring



Outreach to and coordination with local communities



Aesthetically attractive construction fencing

# Mitigation Measures: Weehawken, Hoboken, and Union City



Installation of soundproof windows along truck routes



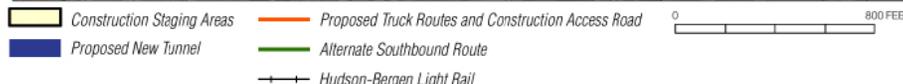
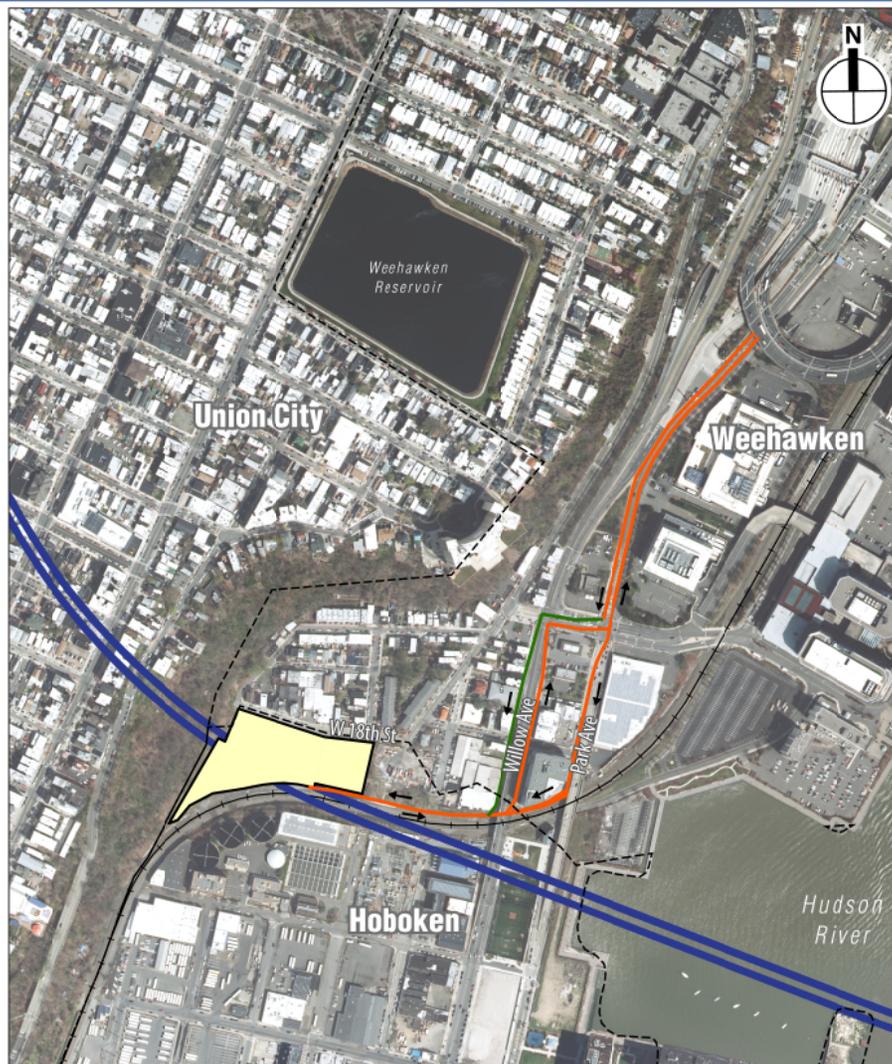
Temporary noise walls during construction



Pedestrian crossings and walkways/  
construction maintenance and protection of traffic plan



Dust control



Vibration monitoring



Construction complaint protocol: assure responsiveness to neighborhood concerns



Outreach to and coordination with local communities



Aesthetically attractive construction fencing

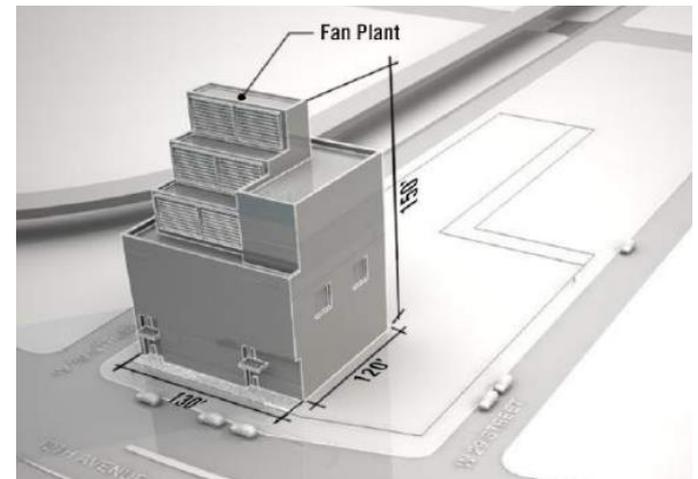
# DEIS Conclusions: Permanent Impacts



- New fan plants at Hoboken/ Weehawken border and at 12<sup>th</sup> Avenue (Manhattan)
- Permanent loss of wetland areas (Meadowlands and Hoboken)
- Measures to Reduce Impacts:
  - Fan plants to be designed to be compatible with adjacent neighborhoods in consultation with community
  - Purchase of wetland credits from a mitigation bank



Hoboken Fan Plant



12<sup>th</sup> Avenue Fan Plant

# Historic Resources/Section 106



- Adverse effects on architectural resources that are eligible for the National Register of Historic Places (NRHP):
  - Northeast Corridor and North River Tunnel
  - NY Hudson River Bulkhead
- Potential for accidental construction damage to NRHP-Eligible architectural resources
- Potential for archaeological resources to be present in construction zone that could be affected by construction
- Draft Programmatic Agreement details measures to mitigate impacts



# Section 4(f) Evaluation

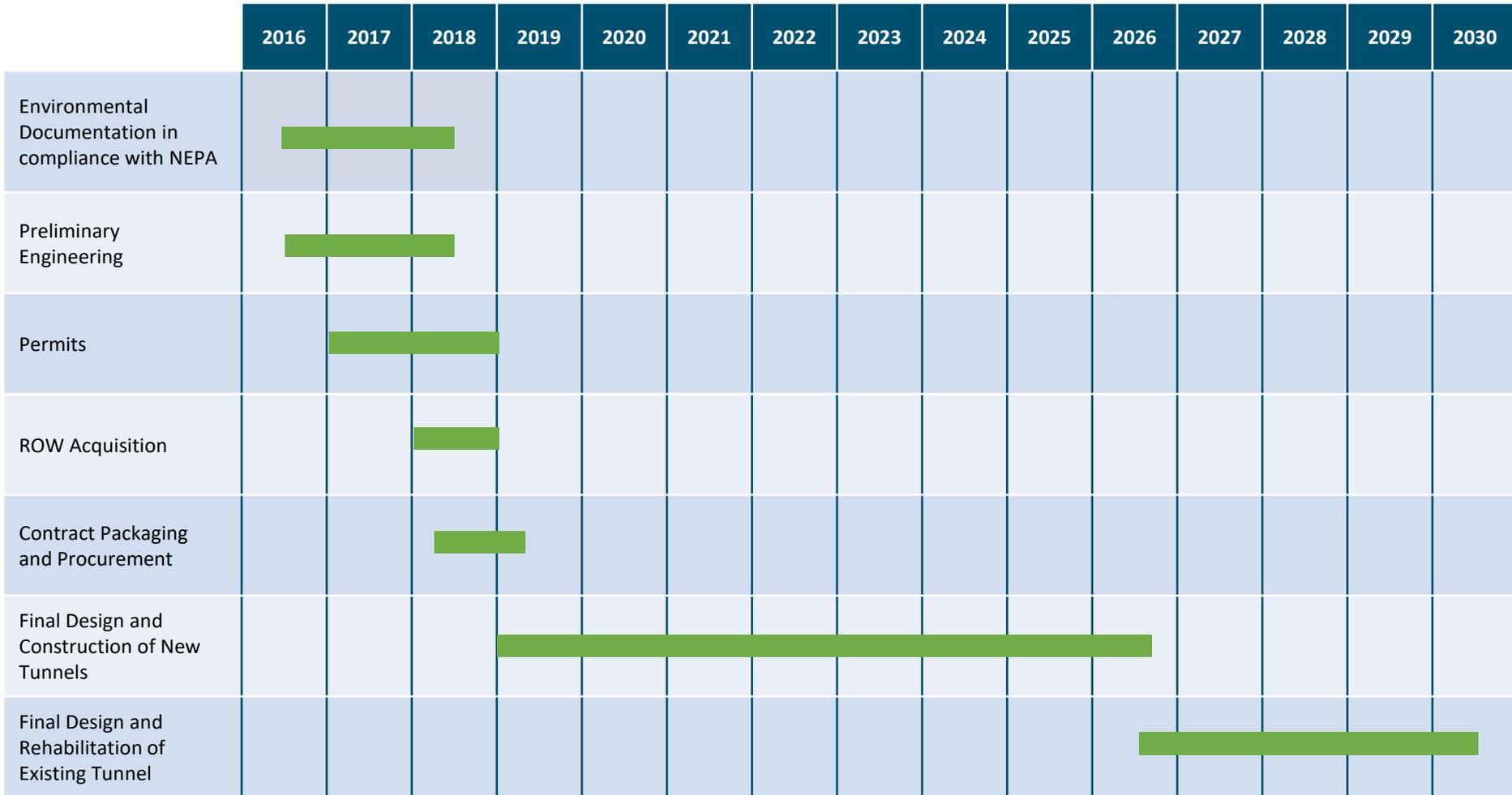


Section 4(f) regulations prohibit use of publicly owned parks, recreational areas, wildlife and waterfowl refuges, or historic sites unless there is no feasible and prudent avoidance alternative

Section 4(f) Resource	Conclusion
<b>PARKS</b>	
NJ: Parks in Weehawken and Hoboken (near construction)	No use
NY: High Line (near construction)	No use
NY: Hudson River Park (temporary construction in park)	No use
<b>HISTORIC RESOURCES</b>	
North River Tunnel and Northeast Corridor	Exempt
NY Hudson River Bulkhead	Use; no prudent and feasible avoidance alternatives; measures to minimize harm established in Draft Programmatic Agreement



# Project Schedule



# Review of DEIS



DEIS available for review on Project Website:  
[www.hudsonstunnelproject.com/deis.html](http://www.hudsonstunnelproject.com/deis.html)

Submit comments until **August 21, 2017:**

- On the Project website:  
[www.hudsonstunnelproject.com/contact.html](http://www.hudsonstunnelproject.com/contact.html)
- By email: [comment@hudsonstunnelproject.com](mailto:comment@hudsonstunnelproject.com)
- By postal mail:  
**Hudson Tunnel Project**  
c/o Fitzgerald & Halliday, Inc.  
11 Hanover Square, 3<sup>rd</sup> Floor  
New York, NY 10005

# Gateway Program



Gateway Program: A Long-Term Plan to Increase Capacity on the Northeast Corridor