

**Green Acres Program
State House Commission Pre-application
Local Parkland – Major Diversion
Hudson Tunnel Project
Appendix A**

ALTERNATIVES ANALYSIS

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Appendix A – Alternatives Analysis**

INTRODUCTION

This appendix identifies, compares, and evaluates various alternatives to avoid the proposed major diversions, including those that were suggested during the Green Acres Scoping Hearing; alternatives suggested during the Green Acres Scoping Hearing public comment period; the No Action Alternative; an alternative to constructing the project on replacement land; alternatives involving private or other public lands; and alternatives analyzed as part of the Environmental Impact Statement (EIS) prepared pursuant to the National Environmental Policy Act (NEPA).

PROJECT DESCRIPTION

The Hudson Tunnel Project (the “Project”) will consist of the construction of two new tunnels containing one-track each, generally parallel to the existing North River Tunnel and extending from the Northeast Corridor (NEC) in Secaucus, New Jersey, beneath the Palisades (North Bergen and Union City) and the Hoboken waterfront area, and beneath the Hudson River to connect to Penn Station New York (PSNY).

The Hudson Tunnel Project will also include the rehabilitation of the North River Tunnel, so that upon completion of the Project, the NEC would have four tracks (two in the new Hudson River Tunnel and two in the North River Tunnel) between New Jersey and New York under the Hudson River. The Hudson Tunnel Project also includes the following project elements:

- Two new surface tracks parallel to the south side of the NEC beginning at a realigned Allied Interlocking in Secaucus. These tracks would be accessible for maintenance via a new access road.
- Two new tracks and associated rail systems to be added by the Project as part of the Hudson Yards Right-of-Way Preservation Project.
- An extension of the tunnel past the Hudson Yards Right-of-Way Preservation Project beneath Tenth Avenue in Manhattan to a tunnel portal east of Tenth Avenue, within the complex of tracks located beneath the existing building that spans the tracks on the east side of Tenth Avenue (450 West 33rd Street). The new tunnel portal would be near the tunnel portals for Amtrak’s Empire Line and for the North River Tunnel.
- Track connections east of Tenth Avenue to the existing approach tracks at A Yard into PSNY.
- A ventilation shaft and associated fan plant building in Hoboken, New Jersey.
- A ventilation shaft and associated fan plant building near Twelfth Avenue between West 29th and 30th Streets (Block 675) in Manhattan.
- A fan plant beneath the building at 450 West 33rd Street east of Tenth Avenue between West 31st and 33rd Streets, which sits above the rail right-of-way.

New Jersey Transit Corporation (NJ TRANSIT) is the public transportation operator that will utilize the Hudson Tunnel Project and is managing the property acquisitions and regulatory permits in the State of New Jersey. The National Railroad Passenger Corporation (Amtrak) is the intercity rail transportation operator that will utilize the Hudson Tunnel Project and will be responsible for dispatching trains through the Hudson Tunnel Project, as part of Amtrak’s Northeast Corridor. The Gateway Development Commission (GDC) is the NEPA Project Sponsor and Federal Grant Recipient for the Hudson Tunnel Project.

PROJECT PURPOSE AND NEED

The purpose of the Hudson Tunnel Project is to repair the deteriorating North River Tunnel and construct the new Hudson River Tunnel, to preserve the current functionality of Amtrak's NEC service and NJ TRANSIT's commuter rail service between New Jersey and PSNY. This Project will strengthen the NEC'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 PSNY.

The existing North River Tunnel is a critical NEC asset and is the only intercity passenger rail crossing into New York City from New Jersey and areas west and south. The existing tracks of the NEC within the Project area begin east of NJ TRANSIT's Frank R. Lautenberg Secaucus Junction Station in Secaucus, New Jersey, continue on a raised embankment through the New Jersey Meadowlands in Secaucus and North Bergen, New Jersey, and enter the North River Tunnel portal at the western face of the Palisades in North Bergen. The existing NEC passes beneath Union City and Weehawken, New Jersey and the Hudson River before emerging at PSNY in New York City. The North River Tunnel actually consists of two separate tunnels (each referred to as a tube), each accommodating a single track for electrically powered trains. This tunnel, constructed between 1904 and 1908 and opened for service in 1910, is more than 100 years old and was designed and built to early 20th-century standards. Service reliability throughout the tunnel has been compromised because of the damage to tunnel components caused by Superstorm Sandy, which inundated both tubes in the North River Tunnel with seawater in October 2012. This resulted in the cancellation of all Amtrak and NJ TRANSIT service into New York City for five days. While the tunnel was restored to service and is now safe for travel, chlorides from the seawater remain in the tunnel's concrete liner and bench walls, causing ongoing damage to various tunnel components and systems.

The North River Tunnel is heavily used, with about 450 trains carrying 200,000 passengers traveling through every day.¹ With the lack of redundant capability across the Hudson River into PSNY, any service outage, either unplanned or for planned maintenance, can substantially reduce or suspend rail service, causing delays that cascade up and down the NEC and throughout NJ TRANSIT's commuter rail system, disrupting service for hundreds of thousands of passengers. Because of the importance of the North River Tunnel to essential commuter and intercity rail service between New Jersey and New York City, rehabilitation of the existing North River Tunnel needs to be accomplished as soon as possible and without material reductions in weekday service. Redundant capability must be provided to allow for future maintenance without significant service disruption.

The western terminus of the new tunnel and related tracks and infrastructure will be at Allied Interlocking, east of County Road in Secaucus, New Jersey (just east of Secaucus Junction Station), and the eastern terminus will be at A Yard, at approximately Ninth Avenue (just west of PSNY) in Manhattan, New York. This alignment will extend for a distance of approximately 4.5 miles, with the tunnel section extending 2.8 miles.

The proposed Hudson Tunnel Project will result in the following benefits:

- Improve the physical condition and rehabilitate the existing North River Tunnel.
- Preserve existing NEC capacity and functionality during the rehabilitation of the existing North River Tunnel.
- Strengthen the NEC's resiliency to support reliable service by providing redundant capability at the critical Hudson River crossing, so as to reduce commuter and intercity rail delays caused by unanticipated events or routine maintenance.

¹ Gateway Development Commission, *Hudson Tunnel Project Fact Sheet – 2025*, https://www.gatewayprogram.org/wp-content/uploads/2025/12/HTP-Overview_December-2025.pdf. Accessed December 2025.

PRIOR STUDIES AND APPROVALS

The Federal Railroad Administration (FRA), jointly with the Federal Transit Administration (FTA), issued a combined Final Environmental Impact Statement (FEIS) /Record of Decision (ROD) and Final Section 4(f) Evaluation for the Hudson Tunnel Project in May 2021. NJ TRANSIT and the Port Authority of New York and New Jersey (PANYNJ) were joint lead agencies in the development of the FEIS. The FEIS/ROD disclose the environmental impacts of the Hudson Tunnel Project and the measures to minimize and/or mitigate the harm from these impacts that will be a requirement associated with any federal approval or funding action. The documents also include the Final Programmatic Agreement prepared pursuant to Section 106 and the Final Section 4(f) Evaluation and Determination in accordance with Section 4(f) of the U.S. Department of Transportation Act of 1966. The ROD represents the completion of the Federal environmental review process required under NEPA.

DESCRIPTION OF PROPOSED MAJOR DIVERSIONS

It is proposed that the Hudson Tunnel Project will pass underneath Green Acres encumbered parkland owned by the City of Hoboken. The Hudson Tunnel Project requires the diversion of subsurface easements measuring approximately 0.429 acres within the City of Hoboken's 1.965-acre 1600 Park (Block 256, Lot 1.01 in the City of Hoboken; Block 11, Lot 1 and 2 in the Township of Weehawken) and approximately 3.38 acres within the City of Hoboken's 25.377-acre Harborside Park (Block 265, Lot 1 and Block 269.04, Lot 1 in the City of Hoboken).^{2,3,4} Despite 1600 Park being partially located in the Township of Weehawken, the parkland is owned by the City of Hoboken and on Hoboken's Recreation and Open Space Inventory (ROSI). 1600 Park and Harborside Park are collectively referred to herein as the "Parkland."

The subsurface easements under the Parkland are required for the construction, maintenance, and operation of the new Hudson River Tunnel. The top of the tunnel structure would be permanently located approximately 90 feet underneath the surface-level parklands. The subsurface easements would allow for the creation of new railroad right-of-way and would be used for railroad related purposes. The permanent subsurface easements consist of the right in perpetuity to construct, operate, maintain, reconstruct, repair, replace and relocate subsurface rail and fixed guideway systems facilities and appurtenances. Furthermore, the permanent subsurface easement also includes the right to install and maintain for use, lease, or license; transmission, data or utility lines or any other form or mechanism of communication or transmission, whether by any existing or future means. No surface work would be undertaken on the Parkland and none of the existing recreational facilities and amenities on the Parkland will be affected by the proposed diversions. The only property interests to be acquired will be in the form of permanent easements. A fee simple interest is not being sought under the proposed diversions. Construction of Harborside Park and the New Jersey Department of Environmental Protection (NJDEP) Rebuild By Design project will not be impacted by the diversions.

ALTERNATIVES ANALYSIS

ALTERNATIVE OF CONSTRUCTING PROJECT ON REPLACEMENT LAND

The existing North River Tunnel is a critical asset along NEC. As evidenced by Superstorm Sandy, the construction of a second tunnel is needed to strengthen the NEC's resiliency between New Jersey and PSNY. The new second tunnel across the Hudson River must be located immediately adjacent to the

² Block 267, Lot 1 has been consolidated into Block 265.

³ Note: the Project applicant engaged an engineering survey firm in preparing this application. The acreages for each block and lot presented in this application are based on the firm's conclusions which use the most recent information available. However, it is noted the City of Hoboken and Township of Weehawken's tax assessor records reflect slightly different acreages for these blocks and lots. This discrepancy does not affect the total acreage of subsurface easements being diverted.

⁴ Note: Since the time of the 2022 scoping hearing, additional property surveys have been completed. The acreages presented in this application reflect the most recent information available.

existing NEC, use existing Amtrak right-of-way where possible, and connect to the NEC as close as possible to the tunnel portal while providing switches between the two existing tracks and the two new tracks for operational flexibility.

After coordination with the City of Hoboken, it was determined that there were no suitable replacement lands in Hoboken to locate the alignment of the new Hudson Tunnel tracks. Since there are no potential replacement lands in close proximity to existing railroad geometry, it would not be feasible to construct the proposed project on potential replacement lands. Therefore, this alternative was eliminated from further consideration.

NO ACTION ALTERNATIVE

Consistent with NEPA requirements, several project alternatives were analyzed in the environmental review process, including a No Action Alternative, which is an alternative to examine the conditions that would exist if the proposed action were not implemented and no new passenger rail tunnel across the Hudson River would be constructed.⁵ The No Action Alternative includes those measures that are necessary to keep the existing North River Tunnel in service and provide continued maintenance as necessary to address ongoing deterioration and maintain service. The No Action Alternative served as a baseline for comparison to the build alternatives analyzed in the EIS.

The No Action Alternative would not repair the deteriorating North River Tunnel and would not strengthen the NEC's resiliency to support reliable passenger rail service by providing redundant capability under the Hudson River. With the No Action Alternative, the existing maintenance regimen for the North River Tunnel would continue. However, this maintenance would not address the damage to the ballast and bench walls in the tunnel, which require full removal of the tracks, ties, and bench walls. The damage to the North River Tunnel caused by Superstorm Sandy would continue to degrade systems in the tunnel. This deterioration combined with the tunnel's age and intensity of use would likely lead to increasing instability of rail operations in the tunnel and may lead to its eventual closure. Although the No Action Alternative would not require disposal or diversion of Green Acres parkland, it would not meet the public need for the project and was therefore eliminated from further consideration.

ALTERNATIVES INVOLVING PRIVATE OR OTHER PUBLIC LANDS

As stated above, alternatives for the alignment of the new two-track passenger rail must be located immediately adjacent to the existing NEC, use existing Amtrak right-of-way where possible, and connect to the NEC as close as possible to the tunnel portal while providing switches between tracks for operational flexibility.

No feasible alternatives involving private or other public lands have been identified, other than those analyzed within the EIS. As described below, the three other alignment options studied as part of the EIS, which were alternatives involving private or other public lands, were eliminated from further consideration during the development of the EIS.

ALTERNATIVES ANALYZED IN THE EIS

As described above, the FRA, NJ TRANSIT, and PANYNJ prepared a FEIS and Final Section 4(f) Evaluation in May 2021 to analyze the potential environmental impacts from the Hudson Tunnel Project. The 2021 FEIS included the analysis of the proposed action to construct a new two-track passenger rail tunnel on the NEC across the Hudson River between New Jersey and New York. In compliance with NEPA and FRA regulations, FRA and NJ TRANSIT conducted a multi-step alternatives development and evaluation process to identify reasonable alternatives to proposed actions that will avoid or minimize adverse effects of these actions on the environment as well as meet the purpose and need for the Project.

⁵ Hudson Tunnel Project Final EIS, Chapter 2, "Alternatives and Preferred Alternative," May 28, 2021, <https://www.hudsonstunnelproject.com/FEIS/>. Accessed September 2025.

FRA and NJ TRANSIT's initial step in the development and evaluation of alternatives for the Project was to compile an initial list of preliminary Build Alternatives, or possible means of providing a Hudson River rail crossing. Build Alternatives were compiled based on prior studies for a new Hudson River rail crossing, including the Access to the Region's Core (ARC) Project's Major Investment Study, Draft Environmental Impact Statement (DEIS), 2017 Hudson Tunnel Project Alternatives Development Report, Supplemental DEIS, and FEIS; possible alternatives presented in the Hudson Tunnel Project's Scoping Document; and input received during the Project's NEPA scoping period. The preliminary alternatives were evaluated against a two-tiered set of criteria:

- First, each alternative was assessed for its ability to meet purpose and need, including Project goals and objectives as well as established design criteria (i.e., engineering and operational factors).
- Alternatives that were found to meet purpose and need were then assessed in terms of feasibility (i.e., whether the alternative can feasibly be constructed and operated given engineering, constructability, and rail operations considerations) and reasonableness (i.e., an alternative may not be reasonable if it would have a likelihood for substantial impacts, a protracted construction time, an unacceptably high cost or great environmental impact relative to other alternatives, or operational characteristics that are unacceptable).

The screening evaluation concluded that the only Build Alternative that meets both of the established criteria is a new two-track rail tunnel near the existing North River Tunnel, with rehabilitation of the existing tunnel.

This Build Alternative was comprised of certain reasonable and feasible components of the 15 preliminary alternatives that also met the purpose and need. FRA and NJ TRANSIT dismissed other alternatives because they did not meet the Project purpose and need or because they were found to be infeasible or unreasonable. Alternatives that did not meet the Project purpose and need had constraints related to either (1) connecting from the NEC into the existing tracks at PSNY, or (2) maintaining uninterrupted NEC service and functionality.

The single Build Alternative concept consisted of a new tunnel carrying the NEC between New Jersey and PSNY, together with rehabilitation of the North River Tunnel. To meet the Project purpose and need, the Build Alternative needed to be able to maintain current levels of train service on the NEC for Amtrak and NJ TRANSIT while the North River Tunnel is being rehabilitated. To do this, the Build Alternative alignment options had to meet the following requirements on the New Jersey side of the tunnel:

- The Build Alternative must connect to the NEC in New Jersey in a way that allows operational flexibility for trains moving between the NEC and the new tunnel.
- To provide a new route close to the NEC that maximizes the use of existing infrastructure, maintains flexible and redundant NEC rail operations for Amtrak and NJ TRANSIT, and minimizes the potential for environmental and community impact associated with new right-of-way, the Build Alternative's two new tracks should be immediately adjacent to the existing NEC, using existing Amtrak right-of-way where possible, and connect to the NEC as close as possible to the tunnel portal while providing switches between tracks for operational flexibility.
- The new tunnel must be south of the existing North River Tunnel to connect to PSNY. New approach tracks to the tunnel on the south side of the NEC in New Jersey should avoid the need for tunneling beneath or flying over the NEC to connect to the tunnel, and therefore would have fewer potential environmental impacts than new approach tracks on the north.

Multiple alignment options were deemed possible for the Build Alternative's new tunnel between its portal at the western slope of the Palisades and the Manhattan shoreline. To identify the routing that best met the Project goals and objectives, FRA and NJ TRANSIT identified four conceptual alignment options based on potential locations where a vertical ventilation shaft and associated fan plant could be sited in New Jersey. The vertical ventilation shaft must be directly connected to the tunnel at a point east of the Palisades, which is an area where few undeveloped properties exist. The location of the vertical ventilation shaft therefore

determined the tunnel alignment between the tunnel portal and the waterfront area east of the Palisades. The ventilation shaft site would also be used as a construction staging area. The four alignment options identified as part of the FEIS are illustrated in Figure 1 and the descriptions below.

- **Alignment Option 1:** This alternative included a tunnel alignment just south of the existing North River Tunnel that would pass to the south of the Lincoln Tunnel Helix and beneath the Lincoln Harbor Marina on the Weehawken waterfront in New Jersey. The ventilation shaft site would be located on a site adjacent to the south side of the Lincoln Tunnel Helix, in Weehawken that is currently occupied by an office building. The construction staging site would be located at NJ TRANSIT's Weehawken bus parking lot, requiring the relocation of buses and potentially affecting 8,000 daily commuters (based on pre-COVID estimates).
- **Alignment Option 2:** This alternative included an alignment south of Option 1, with a ventilation shaft site on a property occupied by a commercial office building and parking lot north of 19th Street near JFK Boulevard East in Weehawken. This option would require the acquisition and demolition of an existing, occupied, five-story office building.
- **Alignment Option 3:** This alternative included a tunnel alignment south of Option 2, with a ventilation shaft site south of 19th Street near the Hudson-Bergen Light Rail (HBLR) in Weehawken. One of two potential ventilation shaft sites that was identified for this alignment is on a previously vacant site on Harbor Boulevard south of 19th Street where construction of a residential development had just begun and is now completed. Utilizing this ventilation shaft site would require the acquisition of a recently constructed residential property.
- **Alignment Option 4:** This alternative included a tunnel alignment south of Option 3, with a shaft site south of 18th Street in Hoboken, New Jersey.⁶ Although this option would require the disposal or diversion of Green Acres encumbered parkland (1600 Park and Harborside Park), this alternative would require the fewest additional acquisitions and easements in the area. In addition, NJ TRANSIT has already acquired the land needed for the ventilation shaft site and staging area through the former ARC Project.

⁶ Since the time of the FEIS publication, Alignment Option #4 has been refined based on constructability and advanced engineering. The refined alignment was analyzed in a NEPA Re-Evaluation <https://www.hudsonstunnelproject.com/Library/>. Accessed September 2025.

FIGURE 1: FEIS ALIGNMENT OPTIONS (HUDSON TUNNEL FEIS, 2021)

6.16.17



Tunnel Alignment Options
Figure 2-2

The four alignment options were comparatively evaluated using a series of screening criteria developed to identify which alignment option best met the Project goals and objectives, while minimizing impacts on the environment. Project goals were established to guide the development and evaluation of alternatives that address the purpose and need. The goals related to improving service reliability and repairing the existing tunnel; maintaining uninterrupted NEC service by ensuring the Project occurs as soon as possible; strengthening the NEC’s resiliency and operational flexibility; not precluding future trans-Hudson rail capacity expansion projects; and minimizing impacts on the natural and built environment.

Each alignment option was evaluated against criteria representing components of the Project goals and objectives (see Table 1).

TABLE 1: ALIGNMENT OPTION REVIEW CRITERIA

Goals	Criteria
Improve service reliability and upgrade existing tunnel infrastructure in a cost-effective manner.	Meets design criteria.
	Minimizes the cost of acquisition to the extent practicable.
	Minimizes construction cost to the extent practicable.
Maintain uninterrupted existing NEC service, capacity, and functionality by ensuring North River Tunnel rehabilitation occurs as soon as possible.	Minimizes time required for property acquisition.
	Minimizes time required for easement acquisition.
	Minimizes time required for permitting.
	Minimizes time required for new riparian rights acquisition.
	Minimizes time required for remediating hazardous materials.
	Minimizes pre-construction schedule risk.
	Minimizes construction duration.
	Optimizes use of existing infrastructure.
Strengthen the NEC’s resiliency to provide reliable service across the Hudson River crossing, facilitating long-term infrastructure maintenance and enhancing operational flexibility.	Minimizes travel time between Allied Interlocking (Secaucus) and A Interlocking (PSNY).
	Minimizes the cost to operate and maintain the new tunnel.
	Meets design criteria.
Do not preclude future trans-Hudson rail capacity expansion projects.	Allows for connections to Secaucus Junction Station and through to the Portal Bridge.
	Allows for connections to station expansion projects in the area of PSNY.
Minimize impacts on the natural and built environment (construction-period impacts).	Avoids construction impacts to HBLR.
	Avoids construction impacts to trans-Hudson bus operations.
	Avoids construction activities near sensitive land uses where possible.
	Minimizes the number of truck trips during construction.
	Avoids traffic conflicts related to haul routes.
	Minimizes adverse construction effects relative to future plans.
	Avoids construction activities near environmental justice communities.
	Minimizes construction impacts to Waters of the United States.
Minimize impacts on the natural and built environment (permanent/operational impacts).	Minimizes displacement of active residential uses.
	Minimizes displacement of active non-residential uses.
	Minimizes adverse effects to future plans (be consistent with local plans and policies).
	Avoids impacts to HBLR.
	Avoids impacts to trans-Hudson bus operations.
	Minimizes number of adjacent historic structures.
	Avoids permanent above-ground structures near environmental justice communities.
	Minimizes permanent impacts to Waters of the United States.

Adapted from Hudson Tunnel Project Alternatives Development Report (FRA & Hudson Tunnel Project Partners, 2017)

Based on the refined screening evaluation, it was determined that Alignment Option 4 best met the Project goals and objectives. While it would have a slightly longer tunnel and therefore slightly longer construction duration and train travel times, these differences were not found to be meaningful. The tunnel construction

would be approximately 2.5 months longer; travel time would be essentially equivalent between alignment options once other factors related to congestion at and near PSNY are considered. Despite Alignment Option 4 requiring the diversion of Green Acres encumbered parklands (1600 Park and Harborside Park), overall, it had the most advantages according to the FEIS:

- Least impact related to displacement of active uses (residential, business, and future residential), since NJ TRANSIT has already acquired the properties needed for the New Jersey shaft site and staging areas.
- Least potential for delays to the Project schedule, because of the property acquisition, investigation, and remediation already conducted for the ARC Project; and
- Minimal impacts to existing transit and other transportation services

Each of the other alignment options (Alignment Options 1 through 3) were not pursued further as they were found to have one or more substantial disadvantages relative to Alignment Option 4:

Alignment Option 1: This alignment option would have a construction staging site within the Lincoln Tunnel Helix (the curving approach ramp to the Lincoln Tunnel), which would require displacement of NJ TRANSIT's existing Weehawken bus parking and staging site currently located there. The bus parking facility is used to store approximately 160 buses at a location close to the Lincoln Tunnel so that they can reliably reach the Port Authority Bus Terminal for the evening commute. Displacement of this bus parking area would result in substantial negative impacts on NJ TRANSIT's trans-Hudson bus operation serving the Port Authority Bus Terminal and providing service to thousands of commuters. Alignment Option 1's shaft site and staging area would also have the potential for major conflicts with future Lincoln Tunnel Helix reconstruction being planned by the PANYNJ. It was also determined that Alignment Option 1 would introduce delays to the Project schedule associated with the need to acquire new property for the shaft site, staging area, and area for other pre-construction activity. For these reasons, Alignment Option 1 was eliminated from further consideration.

Alignment Option 2: This alignment option would require the acquisition and demolition of an existing, occupied, multi-story office building for its shaft site and staging area, an adverse impact that would be avoided by Alignment Option 4. In addition, Alignment Option 2 would introduce delays to the Project schedule associated with the need to acquire new property for the shaft site, staging area, and area for other pre-construction activity. Alignment Option 2 has no substantial advantages over Alignment Option 4 and would not reduce potential environmental impacts relative to Alignment Option 4. For these reasons, Alignment Option 2 was eliminated from further consideration.

Alignment Option 3: This alignment option was eliminated from further consideration because it would require the use of a site along Harbor Boulevard for a shaft site, which would interfere with a new residential development at 800 Harbor Boulevard (a development that at the time of the evaluation was under construction, which was since completed in Spring 2020). This was an adverse impact that would be avoided by Alignment Option 4. Alignment Option 3 would also have the potential to introduce delays to the Project schedule associated with the need to acquire new property for the shaft site, staging area, and area for other pre-construction activity. Alignment Option 3 has no substantial advantages over Alignment Option 4. Therefore, Alignment Option 3 was not considered further.

While Alignment Options 1 through 3 would avoid the proposed subsurface Green Acres diversions, they were eliminated from further consideration based on the reasons described above. FRA selected the Preferred Alternative (Alignment Option 4) as the Selected Alternative for the Hudson Tunnel Project based

on a thorough and careful consideration of the potential short-term and long-term benefits and impacts, mitigation of those impacts, and public and agency comments.⁷

ALTERNATIVES SUGGESTED AT SCOPING HEARING

No new alternatives were suggested at the Green Acres Public Scoping Hearing.

ALTERNATIVES SUGGESTED BY PUBLIC DURING THE GREEN ACRES PUBLIC SCOPING HEARING COMMENT PERIOD

No new alternatives were suggested by the public during the Green Acres Public Scoping Hearing comment period.

CONCLUSION

Based on the above reasons, Alignment Options 1 through 3 were eliminated from further consideration. Therefore, there are no feasible, reasonable, and available alternatives to the proposed major diversions in accordance with N.J.A.C. 7:36-26.9 that would fulfill the compelling public need for or yield the significant public benefit to be derived by the Hudson Tunnel Project.

⁷ Since the time of the FEIS publication, Alignment Option #4 has been refined based on constructability and advanced engineering. The refined alignment was analyzed in a NEPA Re-Evaluation <https://www.hudsonunnelproject.com/Library/>. Accessed September 2025.