Hudson Tunnel

Secaucus, New Jersey to New York City, New York

New Starts Engineering

(Rating Assigned June 2023)

The project is a joint intercity rail and public transportation project, with an overall project cost of $17.177 billion. The rating reflected in this profile is based only on the public transportation component of the overall project as required by 49 U.S.C § 5309(q). The Engineering approval letter notified the Gateway Development Commission (GDC) that the maximum amount of Capital Investment Grants funding FTA will provide to the project should a Full Funding Grant Agreement be awarded is $6.880 billion rather than the amount requested and shown in the rating information below.

Summary Description	
Proposed Project:	Commuter Rail 6.5 Miles, 1 Station
Total Capital Cost ($YOE):	$15,649.01 Million (Includes $2,504.3 million in finance charges)
Section 5309 CIG Share Requested ($YOE):	$7,408.98 Million (47.3%)
Annual Operating Cost (opening year 2035):	$2.41 Million
Current Year Ridership Forecast (2019):	189,000 Daily Linked Trips 53,306,500 Annual Linked Trips
Horizon Year Ridership Forecast (2030):	210,400 Daily Linked Trips 59,322,800 Annual Linked Trips
Overall Project Rating:	Medium-High
Project Justification Rating:	Medium-High
Local Financial Commitment Rating:	Medium-High

Project Description: The Gateway Development Commission (GDC) in cooperation with the Port Authority of New York and New Jersey (PANYNJ), New Jersey Transit Corporation (NJ TRANSIT) and the National Railroad Passenger Corporation (Amtrak), propose the construction of a new two-track heavy rail tunnel along the Northeast Corridor from the Bergen Palisades in New Jersey to Manhattan that will directly serve Penn Station New York. The project consists of three elements: construction of a new Hudson Tunnel, the rehabilitation and modernization of the existing North River tunnel, and Long Island Railroad (LIRR) Emergency Services Building (ESB) Utility Relocation Early Work associated with the separately funded Hudson Yards Concrete Casing Section 3 project. The project is part of the Northeast Corridor Gateway Program, a series of strategic rail infrastructure investments designed to improve current service and create new capacity. Transit service on the project is planned to operate 24-hours a day, seven days a week, with trains every three minutes during peak periods, every nine minutes during off-peak periods, and every 10 minutes during evenings and weekends.

Project Purpose: The existing 110-year old North River tunnel is owned by Amtrak. NJ TRANSIT and Amtrak operate approximately 425 trains each weekday through the tunnel that carry over 200,000 daily passenger trips. The North River tunnel presents reliability challenges due to damage from Superstorm Sandy in 2012, as well as the overall age of the tunnel and the intensity of its current use. Significant delays to trains occur when problems arise. The project is planned to improve the reliability of service in the corridor by addressing the deterioration of the existing North River tunnel. The project is also intended to preserve the current functionality of Amtrak's Northeast Corridor service and NJ TRANSIT's commuter rail service and strengthen the reliability of service by providing operational flexibility for trains under the Hudson River that are traveling between New Jersey and New York.

Project Development History, Status and Next Steps: The project entered New Starts Project Development in July 2016, with the PANYNJ as the project sponsor. A locally preferred alternative was adopted into the New Jersey and the New York fiscally constrained long-range transportation plans in November 2017 and August 2018, respectively. FTA issued a Categorical Exclusion for the Hudson Yards right-of-way preservation project element in November 2019. The PANYNJ completed the environmental review process in May 2021, when FTA and the Federal Railroad Administration issued a Record of Decision. The GDC became the official project sponsor in September 2022. FTA approved the project into Engineering in June 2023. The GDC anticipates receipt a Full Funding Grant Agreement in 2024.

Significant Changes Since Last Evaluation (November 2019): The CIG project cost increased from $12,685.49 million to $15,649.01 million, due to advancement of the design, cost escalation, additional contingency, and revised financing charges. The scope was reduced by removing the Hudson Yards Concrete Casing Phase 3 work that is now being funded through a separate U.S.DOT Mega grant. The amount of CIG funds being requested increased from $5,582.61 million to $7,408.98 million, changing the CIG share request from 44.0 to 47.3 percent.

Locally Proposed Financial Plan		
Source of Funds	**Total Funds ($million)**	**Percent of Total**
Federal:		
Section 5309 CIG	$7,408.99	47.3%
State:		
RRIF Loan repaid by New York State (NY) Payments to GDC	$3,145.54	20.1%
RRIF Loan repaid by State of New Jersey (NJ) Payments to GDC	$2,319.27	14.8%
NY Payments to GDC	$155.11	1.0%
NJ Payments to GDC	$115.35	0.7%
Local:		
RRIF Loan repaid by PANYNJ Payments to GDC	$2,339.30	14.9%
PANYNJ Payments to GDC	$165.45	1.1%
Total:	**$15,649.01**	**100.0%**

NOTE: The financial plan reflected in this table has been developed by the project sponsor and does not reflect a commitment by DOT or FTA. The sum of the figures may differ from the total as listed due to rounding.

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New Starts Project Development
(Rating Assigned November 2020)

LAND USE RATING: High

The land use rating reflects population density within one-half mile of the proposed station, employment served by the line, and the share of legally binding affordability restricted (LBAR) housing in the station area compared to the share in the surrounding county.

- The population density in the Penn Station area is about 50,800 persons per square mile, corresponding to a High rating according to FTA benchmarks. Total employment served is about 338,400 jobs, corresponding to a High rating. Parking costs in the Manhattan central business district (CBD) are over $20 per day, corresponding to a High rating. The ratio of station area to county LBAR housing is 2.16, corresponding to a Medium rating but the rating increases to a Medium-High because over five percent of housing units in the county through which the project travels are LBAR.
- The Penn Station area is one of the densest commercial and residential locations in the United States. The station provides access to numerous intra-city and inter-city rail services and supports more than 650,000 visitors and commuters per day. Most buildings are greater than 20 stories, going as high as 102 stories, with minimal building setbacks.
- The station area has a grid structure and wide sidewalks.

ECONOMIC DEVELOPMENT RATING: Medium-High

Transit-Supportive Plans and Policies: Medium

- *Growth Management:* The primary guide for regional growth management is the nonprofit Regional Plan Association's *The Fourth Regional Plan* (2017), an advisory strategic plan. New York City's citywide strategic plan targets development, including a major expansion in the city's housing supply, in transit-accessible corridors. Various other state and regional agencies and collaborations have developed voluntary plans and tools to help support regional growth management.
- *Transit-Supportive Corridor Policies:* Around Penn Station, five small-area planning efforts have supported higher-density rezonings. The City's street and development design guidelines support pedestrian- and transit-friendly development.
- *Supportive Zoning Regulations Near Transit Stations:* Zoning for the Penn Station area generally allows densities rating High by FTA benchmarks for a CBD, as well as mixed uses. Many portions of the station area are exempt from parking requirements.
- *Tools to Implement Land Use Policies:* Programs include density bonuses, transfer of air and development rights, district improvement bonus mechanisms, and tax incentives.

Performance and Impacts of Policies: High

- *Performance of Land Use Policies:* The Hudson Yards project, currently underway, includes the redevelopment of 28 acres of underutilized land into a high-density, mixed-use environment with up to 12,600 new housing units and 29.6 million square feet of commercial space. The area has twenty high-rise buildings recently completed and 12 are planned or under construction, mainly mixed-use residential and office towers exceeding 35 stories.
- *Potential Impact of Transit Investment on Regional Land Use:* The Penn Station area still has some underutilized land that could be redeveloped at the high densities permitted by zoning. Despite being densely developed, population and employment in the station area are expected to grow further given the area's access to intra-city and inter-city rail services and its strong market.

Tools to Maintain or Increase Share of Affordable Housing: High

- New York City targeted the construction of 300,000 new affordable housing units over the 2015-2024 period and has financed over 135,000 units between 2014 and 2019. The City has adopted inclusionary zoning requirements, in-lieu fees, and affordable housing density bonuses. Financial tools include tax-exempt bonds issued by the Housing Development Corporation and increased capital contributions by the city. In the Penn Station area, 600 units of affordable housing were recently completed and the Hudson Yards development will create up to 5,000 affordable units.

NJ, Secaucus, Hudson Tunnel Project
(Rating Assigned June 2023)

Factor	Rating	Comments
Local Financial Commitment Rating	**Medium-High**	
Non-Section 5309 CIG Share	**+1 level**	Federal Public Transportation Law, 49 USC 5309(q)(3), requires FTA to evaluate the proposed share from sources other than the Section 5309 Capital Investment Grants (CIG) program based on the unified finance plan for the entire joint public transportation and intercity passenger rail project. The CIG share of the entire project is 43.1 percent.
Project Financial Plan	**Medium**	
Current Capital and Operating Condition (25% of local financial commitment rating)	Medium	• The average age of the New Jersey Transit (NJT) bus fleet is 8.1 years, which is older than the industry average. • The Gateway Development Corporation has no bond ratings. • NJT's current ratio of assets to liabilities as reported in its most recent audited financial statement is 1.33 (FY2022). • There have been no NJT cash flow shortfalls in recent years (pre-pandemic). • There have been no NJT service cutbacks in recent years (pre-pandemic).
Commitment of Capital and Operating Funds (25% of local financial commitment rating)	Medium	• Approximately 30.4 percent of the non-CIG capital funds are committed or budgeted, and the remainder is planned. Sources of funds include PANYNJ funds already expended on design work, PANYNJ funding committed to repay a Railroad Rehabilitation and Improvement Financing (RRIF) loan, NY general funds, and NJ Turnpike Authority (NJTA) funds. • Approximately 44 percent of the funds needed to operate and maintain the transit system in the first full year of operation are committed or budgeted, and the rest are considered planned. Sources of funds include Federal Section 5307 Urbanized Area Formula Program funds and Section 5337 State of Good Repair funds used for preventive maintenance, NJ operating assistance from the general fund, casino revenues, NJTA revenues, New Jersey Transportation Trust Fund revenues, and passenger fares and other sources of system-generated operating revenues.

Reasonableness of Capital and Operating Cost Estimates and Planning Assumptions/Capital Funding Capacity (50% of local financial commitment rating)	Medium-Low	• Assumed growth in NJT system-wide capital revenues is reasonable compared to recent historical experience. • The capital cost estimate is reasonable. • Regarding assumed growth in operating revenue assumptions, farebox collections are reasonable and operating assistance is reasonable compared to recent historical experience. • Operating cost estimates are reasonable compared to recent historical experience. • GDC has not identified access to funds via additional debt capacity, cash reserves, or other committed funds to cover unexpected CIG capital cost increases or funding shortfalls. NJT has access to funds via additional debt capacity, cash reserves, or other committed funds to cover one month (0.8 percent) of annual system wide operating expenses.

5.17.21

Existing Northeast Corridor

North River Tunnel to be Rehabilitated

Hudson Yards Right-of-Way Preservation

Tunnel Alignment

Tunnel Portal

New Surface Tracks (Viaduct)

New Surface Tracks (Retained Fill)

New Surface Tracks (Embankment)

New Surface Tracks (Retained Cut)

New Fan Plants

HUDSON TUNNEL PROJECT

Preferred Alternative

Figure S-3