

Second Avenue Subway Phase 2
New York, New York
New Starts Engineering
(Rating Assigned January 2022)

Summary Description	
Proposed Project:	Heavy Rail Transit 1.76 Miles, 3 Stations
Total Capital Cost (\$YOE):	\$6,948.74 Million <small>(Includes \$659.3 million in finance charges)</small>
Section 5309 New Starts Share (\$YOE):	\$3,404.88 Million (49%)
Annual Operating Cost (opening year 2028):	\$91.80 Million
Current Year Ridership Forecast (2017):	111,500 Daily Linked Trips 32,951,600 Annual Linked Trips
Horizon Year Ridership Forecast (2035):	123,000 Daily Linked Trips 36,340,100 Annual Linked Trips
Overall Project Rating:	Medium-High
Project Justification Rating:	Medium-High
Local Financial Commitment Rating:	Medium-High

Project Description: The New York Metropolitan Transportation Authority (NYNYMTA) proposes to extend heavy rail subway service along the East Side of Manhattan with the Second Avenue Subway Phase 2 project. The project is the second of four planned sections of the Second Avenue Subway and will connect the northern end of Phase 1 at 96th Street to the Lexington Avenue Line at 125th Street. The project includes three new stations, power substations, signal and communications systems, and car cleaning facilities. In the opening and horizon year, service is planned to operate every three minutes during weekday peak periods and every five minutes during weekday off-peak periods and every six minutes on weekends. The service is planned to operate 24 hours a day, seven days a week.

Project Purpose: The Second Avenue Subway is intended to provide much needed transit access in Manhattan to East Side residents, workers, and visitors; reduce crowding on the nearly 100-year old Lexington Avenue Subway Line; and improve mobility for all New Yorkers. The added capacity provided by the Second Avenue Subway is meant to improve service for passengers traveling on the existing parallel Lexington Avenue Line, which currently provides the only north-south rapid transit subway service on the East Side to Lower Manhattan. MTA believes the project will result in greater accessibility to East Side neighborhoods and visitors and workers traveling to and from other parts of New York City. A new connection at Metro-North's Harlem-125th Street Station is planned to improve regional access to the East Side and Lower Manhattan for commuters entering and leaving Manhattan from New York and Connecticut suburbs located north of Manhattan.

Project Development History, Status and Next Steps: The Locally Preferred Alternative for all four phases of the alignment was selected in May 2001 and was adopted into the region's fiscally constrained long-range transportation plan in September 2003. The NYMTA completed the environmental review process with a Record of Decision in July 2004. The Phase 1 project received a Full Funding Grant Agreement in November 2007 and opened for revenue service in November 2007. The Phase 2 project entered New Starts Project

Development in December 2016. The NYMTA completed an environmental reevaluation when FTA issued a Finding of No Significant Impact in November 2018. The NYMTA expects to receive a Full Funding Grant Agreement in 2022, and open for revenue service in 2029.

Significant Changes Since Last Evaluation (November 2019): The capital cost estimate increased from \$6,390.31 million to \$6,948.74 million due to an increase in unallocated contingency to account for identified project risks.

Locally Proposed Financial Plan

<u>Source of Funds</u>	<u>Total Funds (\$million)</u>	<u>Percent of Total</u>
Federal: Section 5309 CIG	\$3,404.88	49.0%
Local: NYMTA Bond Proceeds and/or Other NYMTA Generated Revenues	\$2,884.51	41.5%
NYMTA Operating Revenue	\$659.35	9.5%
Total:	\$6,948.74	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.

NY, New York, Second Avenue Subway Project, Phase 2
Rating Assigned August 2019

Factor	Rating	Comments
Local Financial Commitment Rating	Medium-High	
Non-Section 5309 New Starts Share	+1 level	The New Starts share of the project is 31.3 percent.
Project Financial Plan	Medium	
Current Capital and Operating Condition (25% of local financial commitment rating)	Medium	<p>The average age of the bus fleet is 7.0 years, which is in-line with the industry average.</p> <p>The most recent bond ratings for the New York Metropolitan Transportation Authority (MTA), issued in May 2019, are as follows: Standard & Poor's A, Moody's Investor Service A1, and Fitch AA-.</p> <p>MTA's current ratio of assets to liabilities as reported in its most recent audited financial statement is 0.89 (FY2018).</p> <p>There have been no recent service cutbacks or cash flow shortfalls.</p>
Commitment of Capital and Operating Funds (25% of local financial commitment rating)	Medium	<p>Approximately 35.8 percent of the non-Section 5309 Core Capacity funds are committed or budgeted. Sources of funds are provided entirely by MTA, and would be blended from bonds and MTA-generated revenues.</p> <p>Approximately 55.9 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 revenues from dedicated state taxes, fares, other operating revenues, and local operating assistance.</p>

<p>Reasonableness of Capital and Operating Cost Estimates and Planning Assumptions/Capital Funding Capacity (50% of local financial commitment rating)</p>	<p>Medium-Low</p>	<p>Growth in capital revenue assumptions is optimistic compared to recent historical experience. The capital cost estimate is (will update when PMOC report is available). Regarding growth in operating revenue assumptions, farebox collections are reasonable and tax revenues are optimistic compared to recent historical experience. Operating cost estimates are optimistic compared to recent historical experience. Sponsor has access to funds via additional debt capacity, cash reserves, or other committed funds to cover cost increases or funding shortfalls equal to at least 50 percent of estimated project cost and zero percent of annual system wide operating expenses.</p>
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**Second Avenue Subway Phase 2
New York City, New York
New Starts Project Development
(Rating Assigned June 2019)**

LAND USE RATING: High

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

- The population density in the proposed station areas is 74,800 persons per square mile, which corresponds to a High rating according to FTA benchmarks. Total employment served is over 1.5 million, 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 proportion of LBAR housing units is 2.64, rating High.
- The East Harlem neighborhood is mostly residential, with a mix of housing types including public housing complexes, high-and-mid-rise apartment buildings, lower (story) residential buildings, and community amenities. The neighborhood is built on a grid of streets with most development, except some high-rise housing, built to the street line. Ground-floor neighborhood retail uses are located in buildings along major streets.
- All streets have sidewalks on both sides, typically 10 to 15 feet wide.

ECONOMIC DEVELOPMENT RATING: High

Transit-Supportive Plans and Policies: Medium-High

- *Growth Management:* The primary guide for regional growth management is the nonprofit Regional Plan Association's Regional Plan for New York, an advisory strategic plan. Various other state and regional agencies and collaborations have developed voluntary plans and tools to help support regional growth management.
- *Transit-Supportive Corridor Policies:* The *East Harlem Neighborhood Plan (2017)* calls for allowing increased density in select places to create more affordable housing and spaces for jobs. It identifies areas for upzoning or mixed-use zoning and contains recommendations to improve urban design and reduce or eliminate parking requirements in rezoned areas.
- *Supportive Zoning Regulations Near Transit Stations:* Zoning districts in East Harlem allow floor area ratios (FAR) generally rating High by FTA guidelines, with base FARs of 3.0 to 4.6 in most residential districts, and as high as 10.0 in some; commercial overlays and districts add FARs of 2.0 to 3.4 or higher to the residential zoning. Parking requirements range from none to low (e.g., less than 0.5 space per dwelling unit) depending on the type and size of use.
- *Tools to Implement Land Use Policies:* The neighborhood plan was developed through a comprehensive public process. Citywide tools include density bonuses, transfer of air and development rights, district improvement bonus mechanisms, and tax incentives.

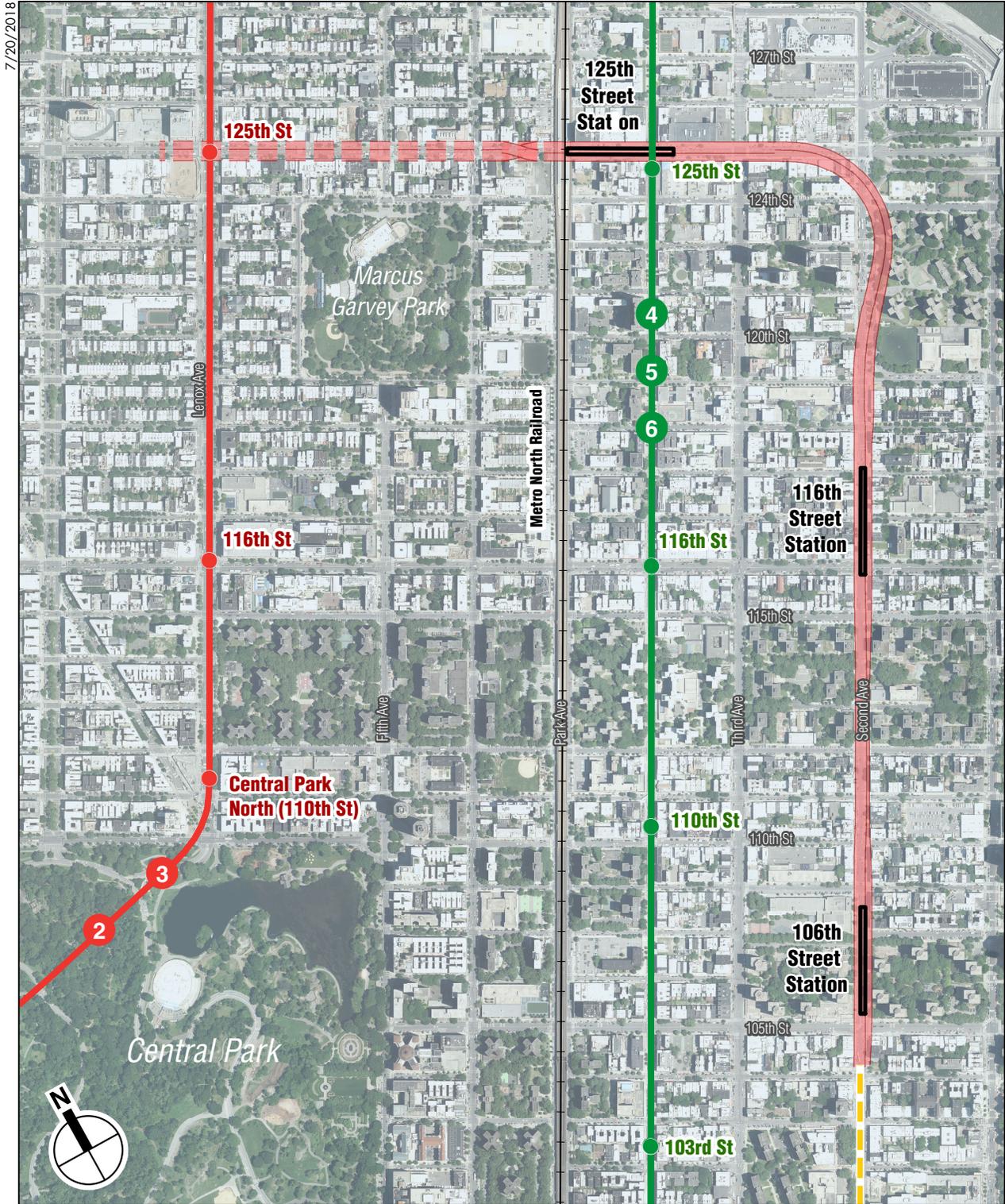
Performance and Impacts of Policies: High

- *Performance of Land Use Policies:* Thirteen projects were identified as under construction or recently completed in the proposed station areas, with another eight planned. These are typically mid to high rise projects (eight stories or more), primarily residential but many with retail, commercial, or community space. They total 3,700 residential units and 700,000 square feet of other space.
- *Potential Impact of Transit Investment on Regional Land Use:* By 2027, the recent East Harlem rezoning and other planned projects are expected to result in an increase of approximately 5,000 dwelling units and 700,000 square feet of retail and office space, adding over 3,000 jobs. Extremely high residential and commercial rents and low vacancy rates in the City appear to be driving new development.

Tools to Maintain or Increase Share of Affordable Housing: High

- New York City targets the construction of 300,000 new affordable housing units between 2014 and 2024. The City has adopted inclusionary zoning requirements, in-lieu fees and affordable housing density bonuses into its zoning ordinance. Financial tools include tax-exempt bonds issued by the Housing Development Corporation and proposed increased capital contributions. The *East Harlem Neighborhood Plan* identified the need for 12,000 additional affordable units in the neighborhood and emphasized affordable housing preservation and creation. A recent rezoning included mandatory inclusionary housing districts that apply to the majority of the new development. As a result, around half of the recently constructed, underway, and planned units are set to be offered at various affordability levels, with many of these units meeting FTA affordability guidelines, and some including provisions for very low income and/or permanent affordability.

Second Avenue Subway Phase 2 Project Map



- Proposed SAS Phase 2 Alignment
- Proposed SAS Phase 2 Tail Tracks
- Proposed Station
- SAS Phase 1 Limits
- Existing Stations
- Existing Subway Lines
- Existing Subway Lines 2, 3
- Existing Subway Lines 4, 5, 6

0 1,000 FEET

Proposed Second Avenue Subway - Phase 2
Figure 1

7/20/2018