Canarsie Line Power and Station Improvements
New York, New York
Core Capacity Engineering
(Rating Assigned November 2016)

Summary Description	
Proposed Project:	Heavy Rail Capacity Improvement 6.0 Miles, 2 Stations
Core Capacity Capital Cost ($YOE):	$408.26 Million (Includes $31.0 million in finance charges)
Section 5309 Core Capacity Share ($YOE):	$130.00 Million (31.8%)
Annual Operating Cost (opening year 2020):	$1.10 Million
Existing Ridership in the Corridor:	346,700 Daily Linked Trips 106,093,300 Annual Linked Trips
Existing Useable Space per Passenger:	5.0 Square Feet
Overall Project Rating:	Medium-High
Project Justification Rating:	Medium-High
Local Financial Commitment Rating:	Medium-High

Project Description: The Metropolitan Transportation Authority (MTA) proposes to implement capacity improvements to the Canarsie L Line, which operates between South Brooklyn and Manhattan. Improvements include three new power substations, contact rail, circuit breaker houses, and other upgrades needed to increase capacity on the line. The proposed project also includes enhanced and improved station access at the Bedford Avenue and First Avenue Stations. MTA estimates that when the project is complete, it will increase capacity in the corridor by 10 percent, which meets the requirement in law for Core Capacity projects.

Project Purpose: The Canarsie L Line has an average weekday ridership of 400,000. Ridership on the line has increased by over 300 percent since the 1970s, largely due to population growth and changing commute patterns in the neighborhoods served by the line. MTA completed installation of a new signal system and a communications-based train control system in 2007, which allows MTA to operate the current 20 trains per peak hour on the Canarsie L Line. However, MTA cannot add further trains due to traction power constraints. Severe crowding occurs during peak hours at the Bedford Avenue and First Avenue stations, which results in longer dwell times as large volumes of customers enter and leave the trains. The Core Capacity project includes traction power improvements that will allow two additional trains per hour, reduce passenger congestion on board trains, and improve service reliability. The project also includes station improvements that will result in better access, more evenly loaded trains, fewer train delays due to long dwell times and less platform crowding.

Project Development History, Status and Next Steps: The project entered Core Capacity Project Development in December 2014. MTA selected the locally preferred alternative and had it adopted into the region's fiscally constrained long-range transportation plan in September 2015. The project completed the environmental review process with FTA's approval of a documented Categorical Exclusion in August 2016. FTA approved the project into Engineering

in June 2017. MTA anticipates receipt of a Full Funding Grant Agreement in mid-2017, and completion of the project in 2020.

Significant Changes Since Last Evaluation (November 2015): The total project cost increased from $273.64 to $408.26 million. The design advanced from the conceptual stage to 100 percent, resulting in additional costs for the Bedford Avenue station improvements and the three power substations. As a result of the cost increase, the finance charges associated with the project increased from $11.1 to $31.0 million. MTA also increased its requested amount of Section 5309 Core Capacity funds from $100.00 to $130.00 million. The Core Capacity funding share decreased from 36.5 percent to 31.8 percent.

Locally Proposed Financial Plan		
Source of Funds	**Total Funds ($million)**	**Percent of Total**
Federal: Section 5309 Core Capacity	$130.00	31.8%
Local: MTA Bond Proceeds and/or Other MTA Generated Revenues	$247.23	60.6%
MTA Operating Revenues	$31.03	7.6%
Total:	**$408.26**	**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.