



THE INTER- BOROUGH EXPRESS

Planning & Environmental
Linkages Study
Executive Summary

January 2023



Executive Summary

The Interborough Express is advancing with the selection of Light Rail as its mode.

The MTA has selected Light Rail as the mode for the IBX. This report details the analysis and planning that show that Light Rail will provide the best service for riders at the best value.

BACKGROUND

The Corridor

Hidden in plain sight, a 14-mile-long freight rail corridor runs through Brooklyn and Queens. These tracks last provided passenger rail service in 1924. Today, the corridor is one of the few remaining freight rail links in New York City. This freight corridor is comprised of the Long Island Rail Road (LIRR) Bay Ridge Branch and the CSX Fremont Secondary.

This corridor provides opportunity to better connect some of Brooklyn's and Queens' most densely populated and diverse neighborhoods. The area surrounding the corridor is home to 900,000 people and 260,000 jobs.

The Interborough Express

The Interborough Express would take advantage of that opportunity. It would add passenger service to the corridor to better connect these neighborhoods to the MTA's existing transit network, including transfers to 17 subway lines and the Long Island Rail Road. It would also connect them to each other, serving growing demand for travel within and between the vibrant Brooklyn and Queens communities.

The IBX would serve a diverse study area with significant transportation needs:



7 in 10
People of color



1 in 2
Zero-car households

3 in 10
Households below
150% of poverty line



1 in 4
Residents with limited
English fluency



THE STUDY

Announcement & Interim Report

Citing its potential to be a transformational addition to Brooklyn and Queens, Governor Kathy Hochul directed the MTA in January 2022 to initiate the environmental review process for the Interborough Express. Shortly thereafter, the MTA released an [Interim Report](#) summarizing the results of the MTA's previous efforts to evaluate potential passenger options for the corridor.

The Interim Report narrowed the project down to three potential modes:



Light Rail Transit (LRT), which uses cars smaller in stature than subway cars and can operate both along dedicated tracks and on-street,



Conventional Rail (CR), which would utilize FRA-compliant vehicles with configuration similar to a subway car, and



Bus Rapid Transit (BRT), which would feature electric buses operating along a bus-only corridor with the flexibility to operate on-street if needed.

The Planning Study

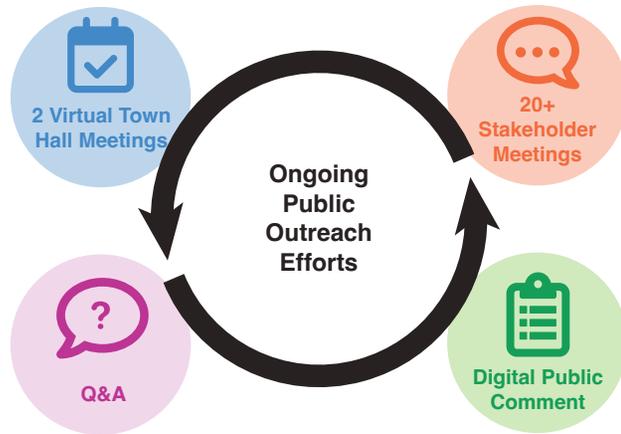
This report is the Planning and Environmental Linkages Study (the Planning Study). It represents the first formal step in the environmental review process. The Planning Study set out to select the **mode**, identify potential **station locations**, and advance **additional engineering, transit planning, and environmental evaluation**.

In this study, the MTA took a deeper dive into potential engineering, planning, and environmental issues, identifying constraints within the existing right-of-way and examining how each mode can adapt to them—and at what cost per rider. Putting these elements together, the relative costs, benefits, and therefore value of each mode could be assessed.

Public Engagement

To inform this work, public engagement was essential. More than 20 stakeholder meetings were held with partners throughout the corridor. Town hall meetings were held in May and September, 2022, and the MTA responded to a variety of questions and comments received live during these meetings. In addition, over 1000 comments were received over a six-month period through the [project page](#).

This helped inform not just the mode selection but potential station locations as well. A station location map was also featured on the project website, and the public was invited to “drop a pin” in locations where stations should be considered.



THE RESULTS

Mode

After this extensive planning, analysis, and public engagement, Light Rail was chosen because it will provide the best service for riders at the best value.

Key factors considered include:

Capacity: Light Rail’s quick acceleration and short dwell times make it the fastest of the three options. Combined with trains that can fit up to 360 people, Light Rail can fully meet demand. BRT, on the other hand, is unable to, due to passenger capacity limitations with the buses.

Reliability: Since it can operate in the cut through 96% of the corridor, Light Rail will provide reliable service. BRT risks being bogged down operationally as it turns around on crowded Jackson Heights streets.

Constructability: Light Rail’s smaller, more flexible vehicles fit within the constraints of the existing corridor. The fact that it can run on the street allows it to avoid construction of a complex and costly tunnel at a key pinch point, as would be required by Conventional Rail.

Vehicle Specialization: Light Rail vehicles can be procured “off-the-shelf” without modification and can draw on a different pool of potential suppliers than traditional MTA rolling stock. Both Conventional Rail and BRT would require more extensive modifications.

Relative Cost: Thanks to its high ridership (115,000 projected weekday riders) and relatively low construction cost (\$5.5B in 2027 \$), Light Rail offers the best value, with a cost of \$48,000 per daily rider. Conventional Rail had a much higher construction cost and bus rapid transit could not move as many riders.

Along with other technical considerations, and the fact that public input suggested strong support for a rail option, Light Rail was the clear choice as to advance for the Interborough Express.

Comparison of IBX Alternatives			
	LRT	CR	BRT
Capacity			
Reliability			
Constructability			
Vehicle Specialization			
Cost Per Rider			

Evaluation Scores:

- Positive
- Moderate
- Negative

Proposed LRT Alignment & Potential Stops



Station Locations

The study also identified potential station locations. Although stations may be added, removed, or modified as planning progresses, this preliminary list of stations would allow the IBX to connect to 17 subway lines, the Long Island Rail Road, and major bus corridors. Each station would be fully accessible. The station list also reflects a preliminary review at constructability and opportunities to support surrounding land use.

Additional Engineering, Planning, and Evaluation

Although the right-of-way already exists, this project is not so simple as laying down track and starting service. Substantial reconstruction will be necessary in order to make the Interborough Express possible while preserving vital freight connections.

Areas of focus along the corridor include over 45 overpass bridges, many of which will need to be reconstructed in order to accommodate the new service, as well as a 125-year-old tunnel that will require rehabilitation. Siting support facilities for vehicle maintenance and storage as well as power distribution, ancillary facilities, and prospective stations within or near this narrow right-of-way is also a significant challenge.

Additionally, the project is being designed to not preclude the Cross Harbor Freight Program rail tunnel project, which is undergoing its own environmental review at the Governor's direction.

PROJECT BENEFITS

Projected to transport a significant number of New Yorkers to their destinations, the Light Rail alternative would carry approximately 115,000 passengers each weekday. If built, the IBX would see higher daily ridership than nearly any new transit line built in the U.S. over the last two decades.

Travel time estimates for LRT would be 39 minutes to run from Jackson Heights to Bay Ridge. Dwell time for LRT—the length of time that a vehicle spends in a station to allow passengers to board and alight—is about 30 seconds.

This adds up to major time savings for riders, connecting neighborhoods with poor existing transit links to one another. The IBX would cut travel time significantly for many riders travelling within or between Brooklyn and Queens.

Along with its benefits for individual riders, the IBX would enhance entire neighborhoods and strengthen Brooklyn and Queens as a whole. By creating new connections to job centers like Brooklyn Army Terminal and Broadway Junction and educational insitutions like Brooklyn College, the IBX would open up new possibilities for New Yorkers all across the city.

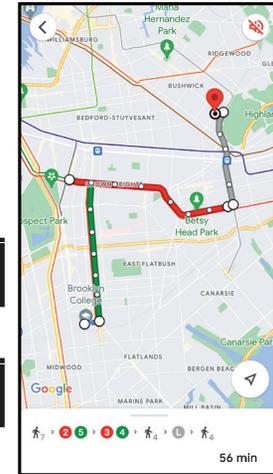
NEXT STEPS

With the Planning Study completed, the MTA will seek to begin the environmental review process and preliminary engineering in early 2023.

The IBX is one of nearly two dozen expansion projects being evaluated under the MTA's 20 Year Needs Assessment. Through this process, potential expansion projects will be assessed on a level playing field to determine which meet the MTA's strategic goals most effectively. If this project is determined to meet the MTA's strategic goals, construction funding will need to be identified before the project enters a future Capital Program. Public engagement will continue as the project progresses.

Today

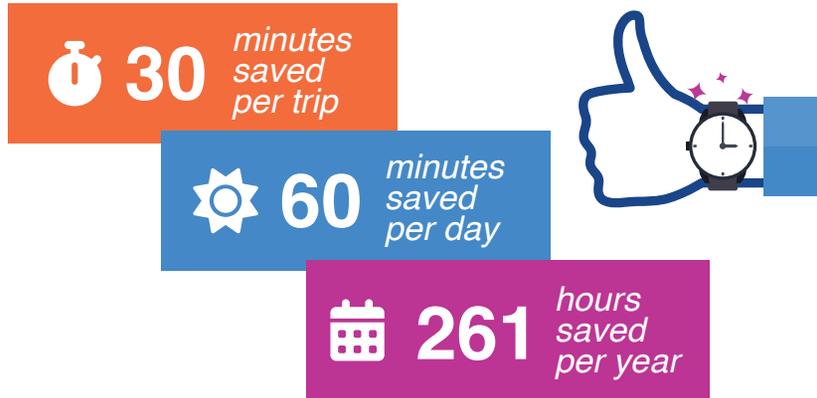
Getting from home in East Bushwick to your class at Brooklyn College could take you an hour. You're routed with 2 transfers and one is out of system!



You could have a slightly faster route... but that requires transferring to an infrequent bus.

With the IBX

With a high-frequency transit line built along the IBX, you could have a one-seat ride from home to work, eliminating the time currently spent transferring between trains and reducing time spent waiting on the platform or in motion. That's:



That's a week and a half of travel time saved!



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The Metropolitan Transportation Authority
www.mta.info