

# **How the Interborough Express Will Impact Local Populations**

# **Executive Summary**

The Interborough Express project is a proposed transit line that will connect Brooklyn and Queens, running on a right-of-way currently used for freight rail. Governor Kathy Hochul's proposal envisions a rail line offering subway-like service, with 16 stations on a route that currently requires multiple bus transfers or a detour through Manhattan.

In total, 323,786 people live within a ten-minute walk of the proposed stations. This report, prepared by the NYU Rudin Center for Transportation Policy and Management, includes six maps showing how the IBX will serve New Yorkers of diverse racial, ethnic and socio-economic backgrounds.

The connectivity benefits of the Interborough Express will flow to neighborhoods with a diversity of economic standing, with poverty rates ranging from 8% to 37.7%. In addition, frontline workers, who comprise 20.5% of working residents near some proposed stations, are frequently employed in hospitals, warehouses, and garages located in the outer boroughs. Many workers already endure commutes greater than one hour, especially in East Flatbush. The proposed IBX offers improved economic mobility by connecting New Yorkers to more work and educational opportunities.

The Interborough Express will serve a multiplicity of neighborhoods, some with 90% non-white populations, and will directly connect many racial and ethnic enclaves. Several proposed stations will connect neighborhoods with high immigrant populations; the proposed Queens Blvd station would serve a population that is 68.1% foreign-born, compared with 36.8% citywide.

The Interborough Express will help transit-underserved New Yorkers, connecting people from diverse racial, ethnic and socio-economic backgrounds to fast-growing economic opportunities in the outer boroughs.

# **How the Interborough Express Will Impact Local Populations**

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The Interborough Express project is a proposed transit line that will connect Brooklyn and Queens, running on a right-of-way currently used for freight rail. Originally proposed as the <u>Triboro RX</u> by the Regional Plan Association in 1996, Governor Kathy Hochul's proposal envisions a rail line offering subway-like service, with 16 stations from Bay Ridge in Brooklyn to Jackson Heights in Queens. The line will provide rail trips between and within Brooklyn and Queens that currently require multiple bus transfers or a detour through Manhattan; it will also be an alternative option when subways are closed for maintenance or emergencies. The IBX will run rapid transit access to neighborhoods in Central Brooklyn and Western Queens that are located far from subway lines, and will serve New Yorkers of diverse racial, ethnic and socio-economic backgrounds.

With the outer boroughs accounting for their highest share of regional job growth in at least 50 years, (Office of the New York State Comptroller, 2020), the Interborough Express will serve New York's changing commuting patterns. It will connect to 17 subway lines, including existing hubs at 62nd St/New Utrecht Ave, Junius St/Livonia Ave, East New York/Broadway Junction, and Jackson Heights/Roosevelt Ave. Whether traveling to work or school, shopping, visiting family, or exploring nightlife, the IBX will provide a convenient new way to travel through Brooklyn and Queens.

The following maps show how the Interborough Express will serve highly diverse populations, and will provide new access to opportunities for New Yorkers of many different backgrounds.



Map 1: Population Within a 10-Minute Walk

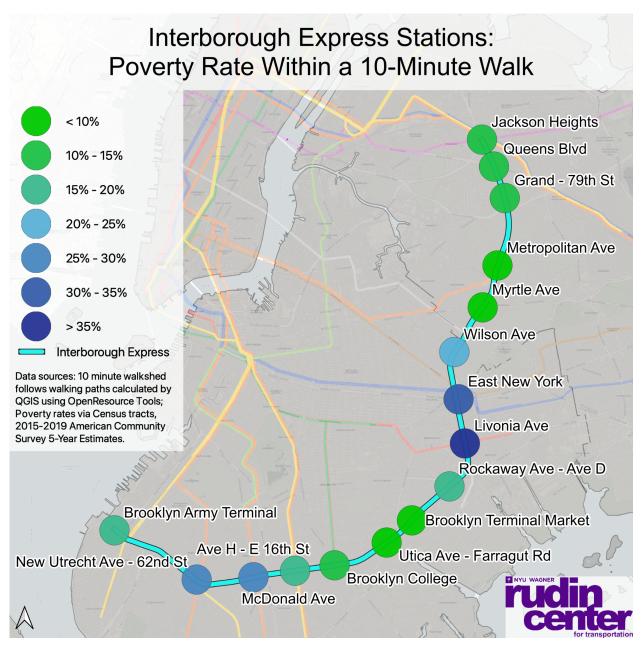


In total, 323,786 people live within a ten-minute walk of the proposed stations. The most populated station areas are at Jackson Heights (38,320) and Myrtle Avenue (31,023) in Queens, and Brooklyn College in Brooklyn (33,174). Adding Interborough Express service at these stations would connect existing subway stations with population clusters in Jackson Heights and Brooklyn College, while bringing new subway service to a densely populated area at Myrtle Ave. The line also serves more industrial, less

residential areas near Utica Ave - Farragut Rd (15,540), Brooklyn Terminal Market (14,986), Rockaway Ave - Ave D (10,786), and East New York (12,329) in Brooklyn. Additional transit service could facilitate mixed-use development in these areas. Metropolitan Ave (1,802) in Queens, the least-populated station area, has much of its surrounding land devoted to cemeteries or industrial facilities.



Map 2: Poverty Rate Within a 10-Minute Walk

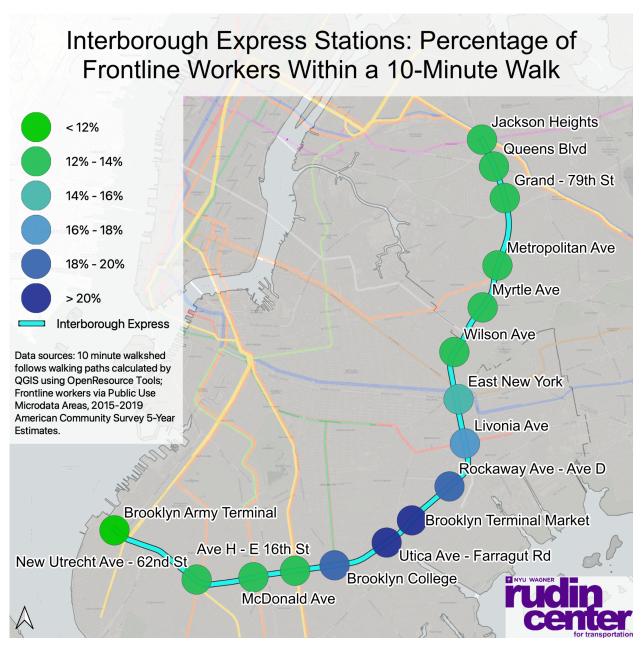


Map 2 shows the average poverty rate of all of the Census tracts within a 10-minute walk of the proposed station, weighted by their populations. The connectivity benefits of the Interborough Express will flow to neighborhoods with a mix of incomes. The areas with lowest levels of poverty along the line are in two sections: Utica Ave-Farragut Rd (8.0%) and Brooklyn Terminal Market (9.0%) in East Flatbush, Brooklyn, Myrtle Ave in Ridgewood (8.5%) and Metropolitan Ave (9.6%) in Middle Village, Queens. The highest-poverty areas along the line are found near Livonia Ave (37.7%) and East New

York (30.2%) stations in East New York, Brooklyn. The diversity of income levels served by the route demonstrates the importance of the proposed transit project as a way to improve economic mobility by connecting New Yorkers to more work and educational opportunities.



Map 3: Percentage of Frontline Workers Within a 10-Minute Walk

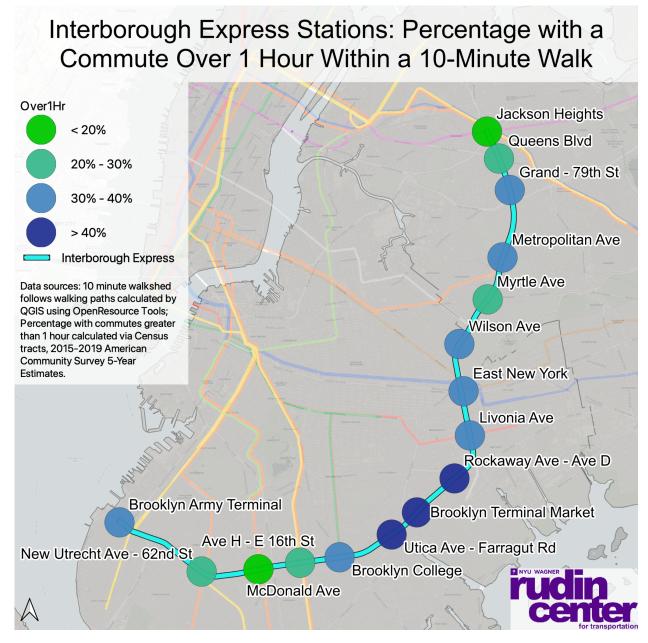


Map 3 shows the percentage of the working population of each station area that are frontline workers (as defined by the New York City Comptroller). For this measure, the station area is made up of the Community Districts that border each station. Being able to travel efficiently between the boroughs is especially important for frontline workers, many of whom work in hospitals, warehouses, and garages located in the outer boroughs. The East Flatbush section of the line houses the most frontline workers: the areas surrounding Utica Ave - Farragut Rd (20.5%), Brooklyn Terminal Market (20.5%),

Rockaway Ave - Ave D (19.5%), and Brooklyn College (18.7%) have the highest percentages. Three of these stations serve areas with limited subway access, so the Interborough Express will likely be especially beneficial. The station areas with the lowest percentage of frontline workers were Brooklyn Army Terminal (11.53%), McDonald Ave (12.0%), and Avenue H - E. 16th St (12.0%). New Yorkers working in these industries rely on mass transit at all hours of the day; they will benefit from the IBX.



Map 4: Percentage with a Commute Over 1 Hour Within a 10-Minute Walk

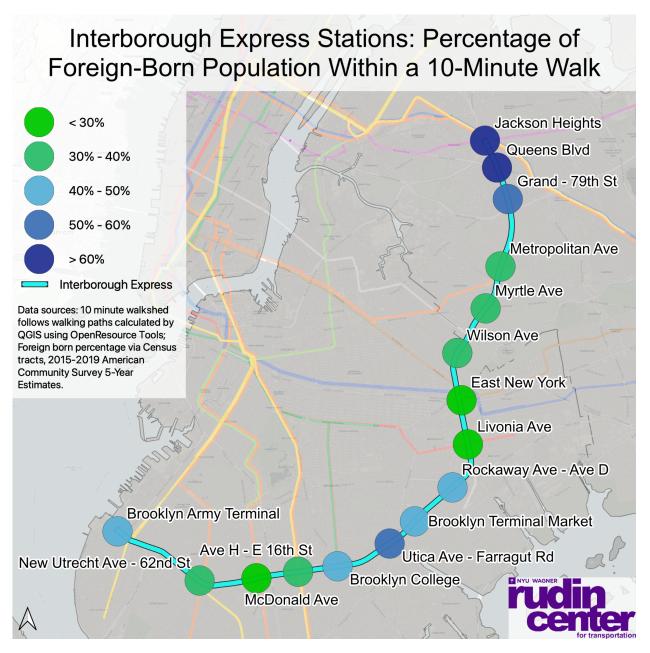


Map 4 shows the percentage of workers with commutes greater than 1 hour, most commonly at Brooklyn Terminal Market (46.4%), Utica Ave - Farragut Rd (46.1%), and Rockaway Ave - Ave D (43.2%). These stations are all in East Flatbush and lack existing subway access, with many workers crowding onto buses (the B46 along Utica Ave is one of the city's busiest routes). For these stations, the Interborough Express would play an important role not just for trips around the city, but also trips in and out of downtown that currently require a bus. The stations with the lowest fraction of long

commutes are Jackson Heights (15.6%), McDonald Ave (17.4%), and Queens Blvd (20.9%). These stations, especially Jackson Heights, tend to be at or near existing subway connections to Manhattan. For these stations, the Interborough Express will still provide the benefit of circumferential trips, while giving riders elsewhere on the line a direct transfer.



Map 5: Percentage of Foreign-Born Population Within a 10-Minute Walk

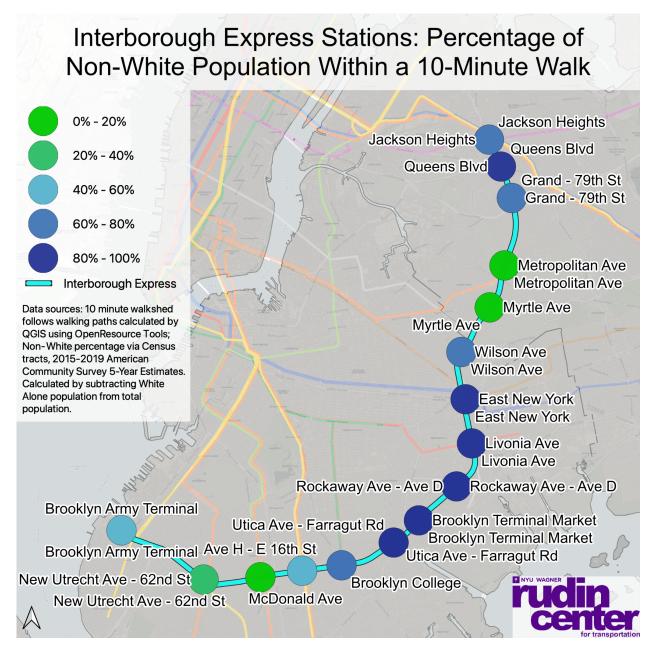


Map 5 shows the percentage of the population born outside the United States in the area within a 10-minute walk of the proposed station. The highest percentages are at Queens Blvd (68.1%), Jackson Heights (66.4%), and Grand - 79th St (51.3%) in Queens, and Utica Ave - Farragut Rd in Brooklyn (53.7%). This matches Queens' reputation as a destination for immigrants from many nations, and is much greater than the percentage of foreign-born residents in the city as a whole (36.8%). The stations with the lowest percentage of foreign-born residents are McDonald Ave (24.6%), Livonia

Ave (26.9%), and East New York (29.3%), all in Brooklyn. The Interborough Express will connect new immigrants to the fast-growing job centers in the outer boroughs.



Map 6: Percentage of Non-White Population Within a 10-Minute Walk



The Interborough Express will serve a multiplicity of neighborhoods, some with large non-white populations, and will directly connect many racial and ethnic enclaves. There are 4 stations that are more than 90% non-white: Utica Ave - Farragut Rd (96.9%), Brooklyn Terminal Market (96.9%), Rockaway Ave - Ave D (93.3%), and Livonia Ave (91.4%). The first three of these have no subway access at all and rely heavily on buses; bringing the Interborough Express to these areas would strengthen transportation equity. Within the group of stations with large non-white populations,

there are heavily Black and African-American communities in East Flatbush and East New York, along with Asian and Latino immigrant communities in Jackson Heights and Elmhurst. There are 3 station areas that are less than 20% non-white: McDonald Ave (11.8%), Metropolitan Ave (16.3%), and Myrtle Ave (17.4%). In general, the neighborhoods that will be served by the Interborough Express are highly diverse.



## Methodology

#### **Station Locations**

Station locations from the RPA's <u>Triboro proposal</u> from the Fourth Regional Plan in 2017 were used in these maps, omitting the section north of Jackson Heights that was not included in Governor Hochul's proposal. Station names have been edited for clarity, and locations were estimated where not precisely known.

#### **Census Tracts**

For each station, the relevant station area consists of all the Census tracts (2010 Census) whose centers of population lie within a 10-minute walk of the station location. The station walksheds were calculated using the OpenRouteService Tools plugin for QGIS. The ORS package estimates the walkshed taking into account the street network, and is more precise than a simple ½ mile circular radius around the station. To estimate the Census tracts covered by this walkshed, I included those tracts whose centers of population were within the walkshed polygon, but not those tracts that overlapped but whose centers were not contained in the walkshed polygon.

Demographic data were taken from the 2015-2019 American Community Survey 5-Year Estimates, and percentages represent the combined value for the station area, as a weighted average of all the relevant tracts.

Station Name	Census Tracts Within a 10-Minute Walk
Brooklyn Army Terminal	36047002200, 36047003000, 36047003600, 36047006800, 36047007000,
	36047007200
New Utrecht Ave - 62nd	36047019000, 36047019200, 36047019400, 36047021400, 36047023800,
St	36047024000, 36047024200, 36047025000

McDonald Ave	36047045000, 36047045800, 36047046201, 36047046202, 36047046400,
	36047046800, 36047047200, 36047047400, 36047047600, 36047047800,
	36047048000
Ave H - E 16th St	36047046000, 36047052800, 36047053000, 36047053200, 36047076400,
	36047076600
Brooklyn College	36047074000, 36047074200, 36047075000, 36047077000, 36047077200,
	36047077400, 36047077600, 36047078400, 36047078600, 36047078800
Utica Ave - Farragut Rd	36047072400, 36047072600, 36047083600, 36047084000, 36047084600,
	36047093200, 36047094401
Brooklyn Terminal	36047093400, 36047094401, 36047094600, 36047095000, 36047095400,
Market	36047096000
Rockaway Ave - Ave D	36047092200, 36047092800, 36047097000, 36047109800
Livonia Ave	36047091000, 36047091200, 36047091800, 36047112600, 36047113000,
	36047113200, 36047113400
East New York	36047036501, 36047036502, 36047036700, 36047114400, 36047119800
Wilson Ave	36047040300, 36047040900, 36047041100, 36047041300, 36047043700
Myrtle Ave	36081055700, 36081056500, 36081056700, 36081057700, 36081057900,
	36081058100, 36081058300, 36081058500, 36081062700
Metropolitan Ave	36081065702
Grand - 79th St	36081047900, 36081049302, 36081049500, 36081049700, 36081049900,
	36081050700
Queens Blvd	36081026500, 36081048100, 36081048300, 36081048500, 36081048900
Jackson Heights	36081024700, 36081026100, 36081026300, 36081026500, 36081026700,
	36081028900, 36081029100, 36081048300

## **Community Districts/PUMAs**

To calculate the percentage of frontline workers in each station area, Community
Districts (corresponding to Census Public Use Microdata Areas) were used rather than
Census tracts, since the ACS does not collect occupation data at the tract level.

For each station, the relevant station area includes the Community Districts (CDs) for which part of the district lies within a 10-minute walk of the station location. Using CDs offers a wider estimate of the station area than using Census tracts, and often large parts of the District area are not within a 10-minute walk of the station. Demographic data were taken from the 2015-2019 American Community Survey 5-Year Estimates, and percentages represent the combined value for the station area, as a weighted average of all the relevant Districts.

Station Name	Community Districts Within a 10-Minute Walk
Brooklyn Army Terminal	Brooklyn 7, Brooklyn 10
New Utrecht Ave - 62nd St	Brooklyn 10, Brooklyn 11, Brooklyn 12
McDonald Ave	Brooklyn 12, Brooklyn 14
Ave H - E 16th St	Brooklyn 12, Brooklyn 14
Brooklyn College	Brooklyn 14, Brooklyn 17, Brooklyn 18
Utica Ave - Farragut Rd	Brooklyn 17, Brooklyn 18
Brooklyn Terminal Market	Brooklyn 17, Brooklyn 18
Rockaway Ave - Ave D	Brooklyn 16, Brooklyn 17, Brooklyn 18
Livonia Ave	Brooklyn 5, Brooklyn 16
East New York	Brooklyn 4, Brooklyn 5, Brooklyn 16
Wilson Ave	Brooklyn 4, Queens 5
Myrtle Ave	Queens 5
Metropolitan Ave	Queens 5
Grand - 79th St	Queens 2, Queens 4, Queens 5
Queens Blvd	Queens 2, Queens 4, Queens 5
Jackson Heights	Queens 2, Queens 4

The determination of frontline worker status draws from the New York City Comptroller's definition available <a href="here">here</a>. The specific sub-groups of workers in grocery, transit, logistics, cleaning, healthcare, and social services are listed below.

Industry Group	Sub-Industry Code
Grocery, Convenience, and Drug Stores	Grocery and related product merchant wholesalers (4470), Supermarkets and other grocery stores (4971), Convenience Stores (4972), Pharmacies and drug stores (5070), and General merchandise stores, including warehouse clubs and supercenters (5391)
Public Transit	Rail transportation (6080) and Bus service and urban transit (6180)
Trucking, Warehouse, and Postal Service	Truck transportation (6170), Warehousing and storage (6390), and Postal Service (6370)
Building Cleaning Services	Cleaning Services to Buildings and Dwellings (7690)
Healthcare	Offices of physicians (7970), Outpatient care centers (8090), Home health care services (8170), Other health care services (8180), General medical and surgical hospitals, and specialty hospitals (8191), Psychiatric and substance abuse hospitals (8192), Nursing care facilities (skilled nursing facilities) (8270), and Residential care facilities, except skilled nursing facilities (8290)
Childcare, Homeless, Food, and Family Services	Individual and family services (8370), Community food and housing, and emergency services (8380), and Child day care services (8470)

### **Works Cited**

Bureau of Policy and Research. (2020, March 26). *New York City's Frontline Workers*. Comptroller.nyc.gov. Retrieved from

https://comptroller.nyc.gov/reports/new-york-citys-frontline-workers/#methodology

New York City Department of City Planning. (2021). *Community District Profiles*. NYC Planning. Retrieved from <a href="https://communityprofiles.planning.nyc.gov">https://communityprofiles.planning.nyc.gov</a>

Office of the State Deputy Comptroller for the City of New York. (2020, November). *New York City Employment Trends*. Office of the New York State Comptroller. Retrieved from <a href="https://web.osc.state.ny.us/press/docs/nyc-employment-trends-rpt11-2020.pdf">https://web.osc.state.ny.us/press/docs/nyc-employment-trends-rpt11-2020.pdf</a>

Population Division - New York City Department of City Planning. (2010). *New York City PUMAs and Community Districts*. NYC.gov. Retrieved from <a href="https://www1.nyc.gov/assets/planning/download/pdf/data-maps/nyc-population/census2">https://www1.nyc.gov/assets/planning/download/pdf/data-maps/nyc-population/census2</a> <a href="https://www1.nyc.gov/assets/planning/download/pdf/data-maps/nyc-population/census2">https://www1.nyc.gov/assets/planning/download/pdf/data-maps/nyc-population/census2</a> <a href="https://www.nyc.gov/assets/planning/download/pdf/data-maps/nyc-population/census2">https://www.nyc.gov/assets/planning/download/pdf/data-maps/nyc-population/census2</a> <a href="https://www.nyc.gov/assets/planning/download/pdf/data-maps/nyc-population/census2">https://www.nyc.gov/assets

Steven Manson, Jonathan Schroeder, David Van Riper, Tracy Kugler, and Steven Ruggles. IPUMS National Historical Geographic Information System: Version 16.0 [dataset]. Minneapolis, MN: IPUMS. 2021. <a href="http://doi.org/10.18128/D050.V16.0">http://doi.org/10.18128/D050.V16.0</a>

Regional Plan Association. (2016, May). *The Triboro*. RPA. Retrieved from <a href="https://rpa.org/work/reports/the-triboro">https://rpa.org/work/reports/the-triboro</a>

United States Census Bureau. (2010). "Centers of Population by Census Tract." *Centers of Population for the 2010 Census.* 

https://www.census.gov/geographies/reference-files/2010/geo/2010-centers-population.

United States Census Bureau. (2020). 2015-2019 American Community Survey 5-Year Estimates. Retrieved from <a href="https://data.census.gov">https://data.census.gov</a>

United States Census Bureau. (2020). *Occupation by Sex for the Civilian Employed Population 16 Years and Over* [S2401]. 2015-2019 American Community Survey 5-Year Estimates. Retrieved from <a href="https://data.census.gov">https://data.census.gov</a>