HOUSING AND THE INTERBOROUGH EXPRESS

Tackling New York City's Housing Crisis One Stop at a Time

APPENDIX

NEW YORK BUILDING CONGRESS

New York Building Foundation

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Looking at TOD research, city agency reports, and academic literature, pairing the proposed IBX requires complementary housing policy. There must be enough population and job density near stations, combined with supportive zoning and a walkable environment, to generate the ridership levels that justify the capital investment. With IBX currently projected to exceed $5 billion in construction costs, ensuring that this infrastructure is paired with thoughtful land use strategies is a critical priority.

This section details how we conducted a station-by-station analysis of the 0.5-mile catchment area around each proposed IBX station, evaluated and mapped out on QGIS. Each station was scored on six key criteria: **zoning, population density, job accessibility, walkability, transit connectivity**, and **implementation feasibility**. These criteria were selected to reflect both TOD best practices and local NYC planning realities. Every metric is scored on a 0–6 scale, and each score is weighted according to its relative importance depending on the scenario.

SCORING CRITERIA

ZONING

To evaluate the development potential of each station area along the corridor, we developed a zoning scoring system based on the proportional breakdown of land use designations—specifically, the share of residential versus manufacturing/commercial zoning. The primary aim of this analysis is to identify areas where zoning conditions are already favorable for residential growth or where minimal regulatory shifts could unlock significant housing opportunity.

Using the NYC Zoning Resolution and PLUTO data from all the parcels within a ten-minute walkshed from each proposed IBX station, the zoning score is composed of two sub-scores: Residential zoning and another for manufacturing/commercial (M/C) zoning. Each sub-score ranges from 0 to 3, with higher values indicating a greater share of zoning aligned with residential or redevelopment-supportive uses bucketed within quartile ranges. The two sub-scores are then summed to create a composite zoning score ranging from 0 to 6.

Given our hybrid recommendation for how to approach adding housing around stations, understanding the distribution of zoning at each of the stations helps us identify which stations are the top priorities. This metric helps us understand the regulatory landscape that would either support or constrain housing development.

POPULATION DENSITY

To assess the development potential and urban form around each station, we included a scoring system based on population density and housing unit density, each calculated on a per-acre basis. These criteria help identify areas with existing concentrations of people and housing, which can signal either readiness for densification or, conversely, saturation. Our goal was to highlight areas where additional residential development could enhance neighborhood vitality and transit ridership without overwhelming existing infrastructure.

Using the University of Minnesota's Access Across America data and 2020 Census tract data, these two criteria were important to score as it highlights how this space is used:

- **Population per Acre:** Captures how intensively people are currently using the land, offering a snapshot of neighborhood activity and potential latent demand for services and housing.
- **Units per Acre:** Reflects built density and helps distinguish areas where land is underutilized versus fully built out.

Each metric is scored on a 0–3 scale, using quartile cutoffs. Each sub-score is added together for a combined score from 0 to 6, allowing us to rank stations by both their population and housing density.

JOB ACCESSIBILITY

To evaluate economic opportunity and connectivity across station areas, we developed a scoring system that incorporates both **job accessibility** and **job density**. This dual approach recognizes not only the concentration of jobs near each station but also the extent to which residents can conveniently reach jobs via transit, biking, or walking—three key modes for a transit-oriented development (TOD) strategy.

Using the University of Minnesota's Access Across America data and 2020 Census tract data, we included both **average job accessibility** and **jobs per acre as** these two perspectives provide insight into both regional access and local employment density. This allows us to capture a fuller picture of economic opportunity near each station:

- **Job Accessibility** (via transit, biking, and walking): Captures how well-connected a station area is to regional employment centers. This is a strong proxy for the quality of multimodal transportation access and the potential for reducing car dependence.
- **Jobs per Acre:** Reflects the intensity of economic activity around each station. Higher job densities can support more vibrant, mixed-use neighborhoods and may also generate higher ridership for transit services.

Each metric is scored on a 0–3 scale, using quartile cutoffs. Each sub-score is added together for a combined score from 0 to 6, allowing us to rank stations by both their surrounding job environments and the quality of access to broader job markets.

TRANSIT CONNECTIVITY

Planning housing development around transit requires a clear understanding of how well each individual station is connected within the broader transportation network. High transit connectivity supports greater development potential, as residents with efficient access to multiple transit options are more likely to choose these areas for their homes.

To measure Transit Connectivity, we developed a scoring system built around local transit connections and the related diversity of options through transit data available via MTA and DOT based on existing transportation networks within a ten-minute walkshed:

1. **Local Transit Density:** Derived from a weighted sum of transit stops — bus, subway, and LIRR — within a 0.5-mile radius of each station. Subway stops are weighted more heavily (×3), and LIRR stops even more (×4), to reflect their higher capacity and regional significance. Bus stops begin at full value but apply diminishing returns after 40 stops, recognizing that additional bus service beyond a certain point contributes less to network value.
2. **Diversity of Transit Options:** Captures whether a station area is served by multiple types of transit: bus, subway, and commuter rail (LIRR). A higher diversity score means the station is better positioned as a multimodal hub, offering more resilience and flexibility in travel options.

Each metric is scored on a 0–3 scale, using quartile cutoffs. Each sub-score is added together for a combined score from 0 to 6. This provides a balanced perspective on both service quantity and modal variety, aligning with principles of standard TOD planning.

We strongly urge future research to investigate other types of criteria including service frequency and reliability, directional connectivity, and transit accessibility.

WALKABILITY

When planning new housing near transit, walkability is essential. High walkability enables transit use, supports active transportation, and promotes access to daily services and amenities. A well-connected, pedestrian-friendly environment ensures that residents can comfortably reach transit, local shops, schools, parks, and other destinations. In this analysis, we scored walkability to identify which station areas already support a strong pedestrian experience and which may require investment to realize their potential.

To score walkability, we looked at a variety of different scoring criteria using NYC DCP BYTES data:

1. **Street Connectivity:** Evaluated on two key factors — intersection density and average block length. Intersection density allows us to measure how many intersections fall within a 0.5-mile buffer around each station. Denser networks with frequent intersections tend to allow for more route choices, easier crossings, and shorter travel paths—conditions associated with more walkable environments. Average block length measures the average linear length between intersections. Shorter blocks typically indicate a finer-grained, more navigable street network that enhances permeability and pedestrian comfort.
2. **Street Design:** We also visited each of the surrounding areas of the stations, conducting observational assessments of the street design quality and land use character in each station area. Stations with buildings that front the sidewalk, active ground-floor retail, continuous street walls, and pedestrian-scaled design scored higher. Conversely, areas with large surface parking lots, highway ramps, wide arterials, or vacant land were marked down for poor walkability context. This evaluation was used to adjust scores where data alone might not capture on-the-ground experience, providing a more nuanced understanding of walkability.

Each metric is scored on a 0–3 scale, using quartile cutoffs. Each sub-score is added together for a combined score from 0 to 6 for a total walkability score.

While walkability is influenced by many elements — such as pedestrian counts, proximity to amenities, or traffic safety — many of these were already indirectly captured in other components of our framework, such as population density and job accessibility. For simplicity and data availability, we focused on spatial form and connectivity.

We encourage future research to explore more granular data including pedestrian volumes, amenity clustering, and street safety ratings to further refine walkability scoring.

IMPLEMENTATION FEASIBILITY

While land use, density, and connectivity provide insight into physical and policy opportunity, actual implementation of housing near IBX stations depends heavily on community receptiveness. This scoring category evaluates the practical feasibility of advancing zoning reforms and development projects, based on local voting behavior and public sentiment related to housing and the IBX project.

To do this, we created an **Implementation Feasibility Score**, which incorporates a weighted set of criteria drawn from public data and community indicators. Each metric reflects the degree of support or resistance from elected officials and community boards across districts that contain one or more proposed IBX stations. This approach grounds implementation analysis in observed decision-making patterns and public statements.

The score is predicated on this set of criteria:

1. **NYHC Affordable Housing Construction Score (40%)**
   Drawn from the New York Housing Conference's "NYC Housing Tracker," this score ranks Council Members based on the volume of affordable housing developed in their districts. Higher scores signal stronger alignment with housing production goals and greater likelihood of support for upzonings.

2. **Public Stance on IBX (20%)**
   Council Members were evaluated based on public statements, letters, sign-ons, or legislative sponsorship related to the IBX. A 1-to-6 scale was used, with higher scores reflecting more proactive and vocal support. This metric captures sentiment beyond formal votes.

3. **Community Board City of Yes Vote (15%)**
   Whether the Community Board supported or opposed the "City of Yes for Housing Opportunity" zoning amendment in 2024. Supportive boards received a maximum score of 6; opposition received 0. This measure reflects neighborhood-level openness to zoning reform.

4. **Council Member City of Yes Vote (10%)**
   Council Members were scored based on their vote on the same amendment. A "yes" vote indicates a willingness to approve broad citywide housing initiatives and received the highest score.

5. **Council Member Rezoning Voting Record (15%)**
   This is a net score derived from each Council Member's past votes on local rezonings (excluding City of Yes). A higher net of "yes" votes indicates consistent support for land use change, increasing the likelihood of future cooperation on station-area rezonings.

Each of these criteria was scored on a 1-to-6 scale and weighted according to its importance in shaping housing implementation prospects.

DUAL SCORING FRAMEWORK

Based on these scores, we ranked stations through two distinct scoring models we created that balance immediate opportunities with long-term equity goals: the **quick wins** model and the **equitable impact** model.

Together, these two scoring frameworks provide a flexible, data-driven lens for identifying both low-hanging fruit and long-term opportunity zones. They serve as tools to guide near-term rezoning proposals while also shaping a more inclusive, long-range TOD vision for the IBX corridor.

QUICK WINS MODEL

The **Quick Wins** score is designed to identify station areas where conditions are already favorable for rezoning and new housing development. These are the places where housing can be unlocked soonest with the least resistance. The weighting emphasizes **zoning receptiveness**, **transit connectivity**, and **implementation feasibility**, while also giving meaningful but lower weight to population density and walkability.

Quick Wins Weights:

- Zoning: 20%
- Population Density: 20%
- Job Accessibility: 10%
- Walkability: 15%
- Transit Connectivity: 20%
- Implementation Feasibility: 15%

This model rewards station areas that are underbuilt, well-zoned, already walkable, and practically viable. These are the areas where we are likely to see the fastest and least contentious returns on housing investment and zoning reform.

EQUITABLE IMPACT MODEL

The **Equitable Impact** score prioritizes station areas that have historically been underserved or are at risk of being left behind in housing and infrastructure investments. Rather than favoring areas with high access and density, this model intentionally gives **higher scores to areas with lower current job access, less transit, and less walkability**, signaling a need for proactive investment and intervention. It also increases the weight of **implementation feasibility**, ensuring that equitable outcomes are paired with community realities.

Equitable Weights:

- Zoning: 15%
- Population Density: 15%
- Job Accessibility: 15%
- Walkability: 10%
- Transit Connectivity: 25%
- Implementation Feasibility: 20%

This model helps elevate stations in neighborhoods where new development could have the most transformative impact by improving access to opportunity, fostering ridership growth, and supporting broader goals of spatial equity and housing justice.

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The New York Building Congress, a broad-based membership association celebrating its 104th year, is committed to promoting the growth and success of the building and construction industry in New York City and its environs.

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