STRATEGIES

LAND USE & ZONING
There is a strong correlation between transit and neighborhood development. Land use strategies for TOD need to ensure the appropriate density and mix of uses around transit stations based on the existing context and level of transit access. Zoning is the primary means by which the City of New York, through the Department of City Planning (DCP), regulates land uses and building bulk. Zoning helps shape how the City develops. Zoning designations determine the location of residential neighborhoods, where local retail can support these neighborhoods and where major regional job centers are best located. Without appropriate zoning, transit-oriented development is not possible, as zoning regulations establish the basic framework as to where different uses are permitted and the intensity to which they are developed.

A zoning district designation is not a static determination. Cities are constantly changing and zoning must accordingly respond. In the past eleven years, over 38% of New York City has been rezoned, attesting to both the need for updating the regulations and the ability of zoning to be responsive to and promote community change. Even some of the most vibrant and successful areas of the City need periodic adjustments.

The Bronx is growing; from 2000 to 2010, the borough added approximately 52,000 people. The DCP projections estimate the Bronx will need to accommodate an additional 194,000 people by 2040. Because the areas around many of the Metro-North stations are underutilized, the station areas present a significant opportunity to accommodate growth in the Bronx near existing transit, without displacing current residents. The first steps that need to be taken in the station areas are to improve connections to transit. Over time, the communities will develop around their transit resources in areas where zoning allows it, or is changed to accommodate growth.

While the most basic function of zoning is regulating land uses, DCP has innovatively utilized zoning to address a number of policy objectives, neighborhood conditions and growth trends. Recent zoning initiatives have, for example, encouraged affordable housing and fresh food stores. Where unique neighborhood characteristics warrant special provisions, special purpose zoning districts have established regulations that directly address specific policy goals. The intent of special purpose districts range from preserving unique building form, such as in the Special Grand Concourse Preservation District in the Bronx; to promoting specific uses, such as in the Special Hunt Point District, which promotes food related businesses.

Many Bronx communities have density levels that support mass transit; however, this density is typically not concentrated around or even near Metro-North stations. In fact, stations are located at the periphery of many communities.

The history of the commuter rail development in the Bronx has much to do with the current configuration and location of the rail lines. The current Metro-North Harlem Line was formerly the New York and Harlem Railroad, one of the first railroads in the country (the line was built in stages from 1832 to 1852). The current Metro-North Hudson Line was formerly the Hudson River Rail Road, built in 1851 as an extension connecting New York City with Albany. Finally, the Hellgate line was built in the early 20th Century as a connector between the New Haven Railroad serving New England and the Pennsylvania Railroad serving New York and destinations to the west and south. This history is important to the current land uses as the lines predated the subway system and the development associated with it. All of the lines were conceived as serving locations beyond the Bronx and not providing transit access to the borough (two of the lines pre-date the incorporation of the borough).
For ease of construction the lines are built along the waterfront, near river beds, or along flat, low-lying land. Many of these areas were subsequently developed with industrial uses for ease of access or simply due to its location away from population centers. In 1916, when zoning was first conceived in New York City and in 1961, when the current zoning resolution was established, these areas were zoned for manufacturing, logically since industry already existed in many of these areas and rail lines were considered noisy and noxious. Recently, industry has waned in the City, prompting DCP to reexamine many former industrial areas for other uses. Additionally, train and building technologies have improved so that rail lines are not the nuisance they once were to adjacent communities.

The following strategies for zoning and land use around commuter rail stations are geared toward three different contexts. The first section addresses strategies applicable to stations located in industrial areas, which may have underutilized land or buildings. The second section describes strategies for mid-density neighborhoods with local retail and challenges of visibility and connection to the station. The third section provides strategies for stations in or near borough business districts with regional shopping and employment centers, with multiple modes of transit. Each station may have more than one of these conditions, for example the Melrose Station is adjacent to an industrial area that may provide opportunities for growth while it is close to the Bronx Civic Center an important shopping and employment area. Strategies can be mixed and matched across categories.

**FIGURE 1** | Zoning, mass transit, and development in New York City. Neighborhoods characterized by low-density residential development are often reliant upon vehicles and tend to be further from mass transit opportunities. Conversely, neighborhoods with higher density were often built because of their proximity to mass transit.
As described above, the current and proposed Metro-North lines are located in areas that historically coincide with industrial development. Over the last thirty years, the economics of industry has changed in the City as have the built form requirements of industrial uses. In some areas of the Bronx, for example Hunts Point and Bathgate, industry has flourished with high intensity uses located in new or renovated warehouse type buildings. In other areas, unfortunately, industry has lagged leaving behind vacant or underutilized lots and buildings with low employment, such as parking or self storage facilities. While the former can be an asset to a transit station raising ridership with commuters, the later is a liability, presenting blank street walls and creating an uninviting pedestrian environment.

Manufacturing zoning districts do not typically allow a wide variety of uses: residential use is not permitted, and commercial and community facility uses are limited. This protects industry from having to compete for space with large retail establishments and housing; but in areas where industry has already waned, this policy impedes viable redevelopment. Zoning changes to allow a wider variety of uses, particularly residential and commercial uses, can spur redevelopment of underutilized industrial areas.

Rezoning strategies for former industrial areas need to be carefully tailored toward existing conditions and policy goals. Special Mixed Use districts, as described in the Case Study on page 32, can strike a balance between permitting residential uses and preserving industry. They can also serve as good buffer and transition areas between active and heavy industrial uses and residential areas. In areas where industry is no longer appropriate, for example along a non-working waterfront, commercial or residential districts may be best applied. Building bulk and height are also important considerations. In general, higher bulk and density are appropriate along wide streets near transit with respect to building heights and configurations in adjacent neighborhoods.

In some areas, there are existing industrial loft buildings. This built form is no longer the ideal of modern industrial uses, which need larger floor-plates all on
a single level. These loft buildings, however are desirable for other uses. Companies, like Google and JetBlue, have re-purposed former industrial buildings in other parts of the City for high employment office uses. In the Bronx, the Bank Note Building in Hunts Point has successfully converted to office and studio space. Zoning strategies in areas with existing loft buildings suitable for conversion should consider districts with lower permitted bulk to discourage teardowns and promote conversion.

(2) MEDIUM DENSITY RESIDENTIAL & RETAIL CORRIDORS

Some of the station areas are in or near medium density residential areas with local retail corridors. In these areas care must be taken that the surrounding zoning permits the appropriate density and uses to support walkable, transit-oriented neighborhoods. While supportive retail should be considered within the stations themselves, retail in proximity to commuter rail stations provides convenience to commuters and increases the perception of safety with better lighting and street activity. In some cases, such as Fordham Road, the station is a prominent feature on a busy commercial shopping thoroughfare. Where this is not the case, paths between commercial uses and the station should be considered. To achieve this, options include extending retail to the station or allowing commercial uses closer to the station. The Melrose Station and the Morris Heights Station are two examples where this strategy is recommended. More strategies for improving walkability are discussed in the Walkability Section of this report.

Many neighborhoods in the Bronx are characterized by five to eight-story apartment buildings, a development pattern that predates World War II and has been continued since the late 1990s in places like Melrose Commons and Morrisania. This medium density development is ideal for transit-oriented development. Coupled with relatively low car ownership rates in much of the Bronx, these densities mean that a large number of people are walking to and from transit in their daily commute and while running errands. Medium density residential use should be considered in the immediate area around each of the areas studied -- in some such as University Heights it is not currently permitted.

The strategy of applying medium density residential zoning districts near transit is simply extending the

FIGURE 3 | Long Island City, Queens. This area has been widely redeveloped, emerging from its industrial past to attract large national employees and new residential developments. Jet Blue Airlines opened its new offices in April of 2012 off the Queensborough Bridge.
The Port Morris neighborhood in the Bronx was the site of the first special mixed use district (MX-1) in New York City. Port Morris lies between the Major Deegan expressway and the Harlem and East Rivers, in the South Bronx. The area was once a strong manufacturing and warehousing district specializing in furniture and piano manufacturing, but following the Great Depression little growth occurred in the neighborhood. In the 1950s, housing was cleared for the Triborough Bridge and the Bruckner and Major Deegan Expressways, leading to a gradual decline in industrial uses. Zoning in Port Morris limited permitted land uses, leaving many buildings partially or entirely vacant when industrial companies left the area. In the 1980s and 90s, the neighborhood began to transform, as industrial buildings were renovated along Bruckner Boulevard for non-manufacturing uses, and a new “Antique Row” emerged.

In 1997, DCP established the first special mixed use district along five-blocks in Port Morris as a way to revitalize this manufacturing mixed-use waterfront area and support recent changes in the neighborhood. The rezoning helped to strengthen the emerging antique business area, facilitated new ground floor retail and exhibit spaces to open, and reactivated many upper floors through the creation and renovation of 185 residential units. Overall, the zoning enlivened the old industrial neighborhood and promoted a sense of community by providing opportunities for light industrial, housing, retail and other services. The MX-1 zoning was expanded in 2005 to eleven blocks. The changes facilitated the development of additional 264 units of housing and supported new retail and restaurants in the neighborhood. Additionally, industrial businesses, like S&J Sheet Metal have remained and expanded in Port Morris.

MX districts can help manufacturing and residential uses coexist. Like Port Morris, many of the station study areas zoned for manufacturing have become inactive overtime. Establishing an MX district can promote a transition to a mix of uses, helping to foster residential growth and revitalization.

**FIGURE 4** | Port Morris, an area in the South Bronx, has recently begun to experience renewed investment and growth. (Left) New residential development. (Right) “Antique Row.”
Land Use and Zoning

While this is not a new concept in these areas, it does come with many refinements based on the local context. One such refinement is contextual building regulations, requiring that buildings meet the street line and have predictable height and setback regulations. These rules help the street feel safer by bringing eyes on the street and preserving light and air at the street level for pedestrians.

Parking is another area where a more modern and thoughtful approach is necessary. In many prewar buildings no parking is provided, but high parking requirements raise the cost of new development and can negatively affect the built form with unsightly parking lots or blank walls on structured parking. It is important that the required parking match the demand for parking in the area. This may mean selecting the correct zoning designation; it may also require DCP to examine parking requirements in certain areas based on data in the Inner Ring Parking Study.

Finally, the application of the incentive programs, such as the Inclusionary Housing and the FRESH program, is important to consider, where appropriate. These are important tools to ensure the provision of affordable housing and the availability of fresh food to residents, respectively, and many of the Metro-North Stations in the Bronx are in eligible areas (see the Case Study on Zoning Incentives, pg.34).

(3) REGIONAL TRANSIT HUBS & BOROUGH EMPLOYMENT CENTERS

In station areas, such as Fordham, that serve in a regional capacity as a Central Business District, Regional Employment Center or Transit Hub, the zoning may require evaluation to ensure that the proper mix of uses and densities are permitted. These areas differ from the local retail corridors and medium density residential areas discussed above in that they attract people from all over the borough and beyond through a combination of employment centers, commercial office or community facilities and large regional retail. They also typically have multiple modes of transit, including commuter rail, subway service and high capacity bus service, such as the Select Bus Service on Fordham Road or Webster Avenue.

Zoning strategies for these areas must account for the existing context and policy goals. If the area is experiencing demand for commercial office uses, full commercial districts that permit a range of commercial uses in a single building, as opposed to a commercial overlay, might address the area’s future growth best. It is important that if an office district and retail district overlap, that the permitted commercial FAR is large enough to comfortably accommodate both. If a hospital or other medical facility is driving growth in the area, zoning districts that favor community facilities may be appropriate. Medical facilities require a flexible building envelope to accommodate modern medical equipment with greater floor to ceiling heights. Colleges and other educational institutions may also have special needs that will vary and dialogue with these institutions is essential.

Housing is an important element in the land use mix in these areas. It supports office employers, educational institutions and medical facilities by allowing their employees, students, staff and patients to live near where they work, study or receive treatment. It keeps streets active and safe after 5:00 PM when office workers have left the area for the day. Finally, it further strengthens the retail in the area by attracting additional shoppers at varying times of the day and throughout the week. Zoning districts that permit housing at relatively high densities should be considered in Central Business Districts. Inclusionary Zoning can be an effective tool for ensuring an appropriate mix of incomes and encouraging new housing construction in highly transit-oriented, accessible and desirable areas.

Retail in high traffic regional employment centers is essential. Larger, national retailers are often attracted to these areas and they can serve as anchors for a dynamic retail environment. In New York City these regional hubs can often support second floor retail, there are several such stores around the Fordham Station. Full commercial districts need to be in place to permit this configuration. Mandatory active ground floor uses, limits on residential lobby size and glazing requirements are some of the zoning tools that can be considered in these areas. Care must be taken that the retail market is strong enough to respond to these regulations appropriately. Proven retail corridors like Fordham Road may benefit from these enhancements as the area continues to develop. Nascent retail areas like East 161st Street near the Melrose Station may require a lighter touch, with stronger incentives for retail and fewer restrictions to avoid vacant ground floor space. Parking restrictions should be limited to an appropriate amount beyond the street wall.

Balancing parking requirements in regional busi-
Zoning incentives provide a bonus to the amount of floor area a developer can build in exchange for public amenities or another desired outcome. There is typically a nexus between the additional development and the amenity being provided. There is also a geographic limit to locating the amenity, sometimes in the same building or on the same lot as the development but occasionally in a defined neighborhood. Zoning incentives can also be paired with tax incentives or special financing to further enhance their impact. New York City has a long history of zoning incentives, going back to the plaza program in the original 1961 zoning resolution. Three recent innovations are described below.

The Inclusionary Housing Program (IHP) is a zoning tool that can be applied to promote economic integration in areas of the City undergoing substantial new residential development by offering an optional floor area bonus in exchange for the preservation or creation of permanently affordable housing units, on or within one-half mile of the bonused development, principally for low-income households. In designated areas, the base FAR is lower than the FAR allowed in the same zoning district outside the designated area, which encourages the developer to contribute to the stock of affordable units. A 2009 amendment to the program established a home ownership option for residents of the affordable units, and unit values would appreciate at a fixed level, allowing low-income residents to attain equity and a stake in the future of the neighborhood.

The program has proven effective in preserving the affordability of neighborhoods and has netted 2,769 affordable housing units since 2005. IHP designated areas have been mapped in the Bronx near the East Tremont, Melrose, Williamsbridge and Fordham Metro-North stations. Its continued use in station areas will ensure that with continued neighborhood growth, current and future housing stock remains affordable to a wide range of income levels.

The Food Retail Expansion to Support Health Program (FRESH) provides development incentives for opening grocery stores in New York City communities with limited access to fresh food. The program offers zoning incentives that increase the allowable floor-area-ratio (FAR) in mixed use buildings, reduce the parking requirements, and permit larger grocery stores as-of-right in light manufacturing districts, provided that a grocery store allocates at least 6,000 square feet towards grocery products, and, of which, at least 500 square feet is dedicated to fresh produce. The program also includes significant tax incentives to FRESH stores. Much of the South Bronx is in a FRESH designated area and the Borough has seen a number of new and expanded stores because of the program.

**FIGURE 5** | Food Bazaar Supermarket, part of the FRESH zoning and tax incentive program, in the Melrose neighborhood’s Concourse Plaza. To date, the Bronx has five approved FRESH projects, three of which have opened.
ness centers is essential. As with any neighborhood, parking regulations should match demand. However, given the high levels of access to transit and to goods and services that these areas provide to residents and employees, a careful study of journey to work data and automobile usage is helpful. A resident with a car who only uses it on the weekend for errands and commutes by transit to and from work the rest of the week, or employees who car-pool, change the way parking is used. This presents both challenges and opportunities in striking the right balance on parking. Institutional uses, office buildings and anchor retail stores will often have their own parking facilities, which are not always fully utilized. Allowing accessory parking to used as shared commercial parking may be a good strategy to fully leverage parking resources in these areas.

Open parking lots are rare in these higher density districts and are now required to be planted and screened in commercial and community facilities, per a 2007 DCP zoning text amendment. Structured parking presents issues with blank walls at street level, encouraging or mandating ringing parking structures with ground floor retail, especially along major commercial corridors addresses this issue. At the very least, structured parking should be visually open, well lit and attractively designed.

FIGURE 6 | Pre-fabricated apartment units in the Inwood neighborhood of Manhattan. Designs that integrate residential and commercial uses are key in developing vibrant high-density areas.

CONCLUSION

In order to thrive as transit-oriented developments, the areas surrounding rail stations in the Bronx require zoning that supports a variety of uses. Addressing areas with underutilized land and buildings, ensuring that local retail and residential densities support transit stations, and targeting regional centers with potential for growth will allow the Bronx to better capitalize on its Metro-North commuter rail stations, as well as provide additional housing opportunities to accommodate future growth.