# **NYC Industrial Plan**

# **Draft Report**

















September 2025 nyc.gov/industrialplan



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# **EXECUTIVE SUMMARY**

As laid out by Local Law 172 of 2023, the NYC Industrial Plan brings together a range of governmental agencies to develop a planning initiative to support the growth of the industrial sector. This draft plan is the product of in-depth research, site visits to industrial areas across the city, and stakeholder engagement with hundreds of businesses, workers, residents, and civic organizations that care about and have a stake in the future of industry in New York City. The final plan, to be released at the end of 2025, will lay the foundation for strengthening and modernizing the city's industrial sector within a transparent policy framework that supports businesses, promotes job growth, and ensures the sustainable and effective use of the city's industrial areas.

Local Law 172 of 2023 outlines specific requirements and guides much of the content in this Plan. Requirements of the law include:

- Conducting research and analysis on current employment trends, land use, real estate conditions, and broader economic patterns.
- Gathering feedback through extensive engagement with industry experts, local organizations, community stakeholders, and a business survey.
- Identifying and designating Primary Industrial Areas – a new classification for predominantly industrial parts of the city with strong transportation connectivity.
- Developing recommendations for new and existing policies, incentives, programs, and land use tools.

The Plan is being led by the Department of City Planning (DCP), in partnership with the New York City Economic Development Corporation

▼ Figure 1: NineDot Energy installs a battery storage system in NYC. Source: NineDot Energy

(NYCEDC), and the Department of Small Business Services (SBS) with support from other City agencies. Development of the Plan officially began in December 2023, and this draft report represents the culmination of more than 18 months of research, stakeholder engagement. and data analysis.

## **NEW YORK CITY'S INDUSTRIAL ECONOMY REMAINS A VITAL PILLAR OF THE CITY'S OVERALL ECONOMIC LANDSCAPE**

A century ago, New York City was a manufacturing powerhouse. These were jobs that helped build the city, shaping our skyline, our neighborhoods, and our economy. The industrial sector was central to the growth of New York, but it also left a legacy of pollution and conflicts between industrial uses and the communities surrounding them.

Today, the industrial sector still plays a significant and sometimes underappreciated role in our economy. It's a crucial driver of good jobs that keep the city running: building and maintaining infrastructure, moving goods, and making things - whether it's artisanal products, advanced manufacturing, or film and media production. These industries are essential to our daily lives. They are also critical to an inclusive economy, providing opportunities for New Yorkers without a college degree.

The industrial economy includes essential functions that provide a broad range of accessible, good-paying jobs that keep the city running smoothly

New York City's industrial economy remains

a vital pillar of the city's overall economic landscape, supporting approximately 550,000 private sector jobs or approximately 15 percent of all private employment. While the sector has seen a long-term decline in employment since its peak in the 1950s, job levels have stabilized over the past two decades, reflecting the sector's ongoing relevance and adaptability. The industrial economy includes essential functions such as transportation and logistics, distribution, film and media, construction, manufacturing, and utilities. Manufacturing districts comprise 15 percent of New York City's land area, underscoring their significant role in the city's physical and economic infrastructure.

# As NYC grows and adapts in the 21st century, the industrial sector must adapt as well

As the City plans for the future of this vital sector, five key challenges have become clear over the course of months of research and interviews. These include the ongoing evolution of industrial activities; high demand for industrial space; poor conditions in the public realm; truck traffic and congestion; and the increasing threat of climate change. The NYC Industrial Plan aims to address these issues through strategic policy recommendations that support a modern, resilient, and equitable industrial economy, one that continues to serve the city's diverse workforce and critical infrastructure needs.

Based on our engagement with external stakeholders and within City government, this draft plan includes five goals, 20 strategies, and 73 ideas for improving the industrial economy of NYC. The goals include the following:

- Enable industrial businesses to evolve, innovate, and modernize by reducing red tape, investing in capacity building, workforce development programs, helping businesses adopt green technologies, and investing in innovation.
- Advance a balanced and coherent land and real estate strategy through land use policies that reinforce "Primary Industrial

Areas" and promote the inclusion of industrial uses in mixed-use projects, while reducing regulatory barriers to industrial development and investment, and modernizing City processes to make it easier to site industrial operations.

- Support modern and efficient freight movements by investing in "Blue Highways", rail freight, micromobility, and improved freight mobility.
- Promote clean and safe industrial areas by creating new design tools and partnerships to prioritize public realm management.
- Prepare industrial areas for climate threats by increasing flood preparedness and mitigating extreme heat.

As required by Local Law 172, this Draft Plan is intended for public feedback to inform the final version of the Plan, which will be released by the end of 2025. Feedback can be provided immediately via options available on the City website: nyc.gov/industrialplan.

Starting in the fall, the City will host five town hall meetings, one in each borough, to engage directly with workers, business owners, residents, and other stakeholders. These sessions are a critical opportunity to listen to public input, gather diverse perspectives, and ensure the final plan reflects the priorities and needs of communities across the city. This plan will continue to live on as its ideas are implemented, and the planning process will be repeated every eight years to ensure the City's industrial strategy continues to evolve and respond to changing economic conditions, technological advancements, business needs, and community concerns.



# **UNDERSTANDING THE CITY'S** INDUSTRIAL SECTOR

The industrial sector is the backbone of the city's economy. Construction contractors build housing, offices, and infrastructure that support the city's growth. Wholesalers supply grocery stores and restaurants with food and hospitals with medicine and equipment. The goods and packages New Yorkers purchase are stored in and delivered from warehouses in all five boroughs. Utilities provide electricity to power businesses and oil to heat homes. Manufacturers, though a small segment of the total industrial sector, serve New York City's niche clientele and play an important role in incubating new businesses.

The industrial sector, nonetheless, has experienced significant change since its midcentury peak. In the decades following World War II, New York City experienced an economic transformation from an industrial and manufacturing hub to a diversified, service sectororiented economy. In 1950, the city was still a manufacturing powerhouse, with over one million people employed in manufacturing and another 800,000 in other areas of the industrial economy.

In 1950, manufacturing still dominated the city's economy and less than half of total jobs were in non-industrial sectors. However, significant changes were looming. By the late 1950s, globalization and technological advances in production catalyzed New York City's transition away from a manufacturing-based economy.

By 2023, manufacturing employment had fallen to just 57,000 jobs, while employment in other industrial sectors declined more modestly. In contrast, over the last 70 years, non-industrial employment surged to 3.9 million jobs, signaling

▼ Figure 2: Newtown Creek Wastewater Facility – a facility critical to the city's operationality. Source: NYC **DEP** 

a broad restructuring of the city's economic base. The shift in New York City mirrored that of many other large older industrial cities in the United States and was driven by global economic trends towards lower-cost markets and technological advances in shipping and automation.

As production moved to lower-cost regions and automation reduced labor needs. New York City's economy was re-energized by an expansion of knowledge economy jobs in service, finance, healthcare, and creative industries. While the presence of goods manufacturing continued to shrink, the city's new economic strengths diversified the opportunities for industrial growth, supporting more construction, film and television production, distribution and logistics, and specialized roles relevant to decarbonization and electrification. This diversification has helped to stabilize industrial employment over the last 20 years.

At the same time, the much faster pace of nonindustrial job creation has meant that while industrial employment remained steady, its share of jobs in the overall economy declined. From 2000 to 2023, total employment in New York City grew by 31 percent, while industrial employment declined by 2 percent, a sign of stabilization after decades of steeper losses.

New York City's economy has evolved from heavy reliance on industrial activity driven by manufacturing to non-industrial activity. While manufacturing's dominance has faded and the industrial sector overall is smaller than it once was, new types of industrial activities aligned with logistics, sustainability, and creative production have emerged. These trends point to an industrial sector that, although smaller in



Figure 3: Employment dense textile work at Brooklyn Navy Yard. Source: NYC Archives

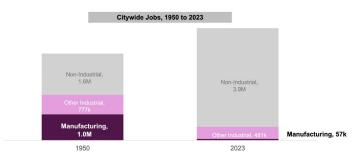


Figure 4: In 1950, the industrial sector dominated in NYC. Today's economy is bigger and more diverse. Source: NYC Planning, Jobs in Transition, 1966; NYC Planning Analysis of NYS DOL QCEW, all ownerships, annual averages, 2023.

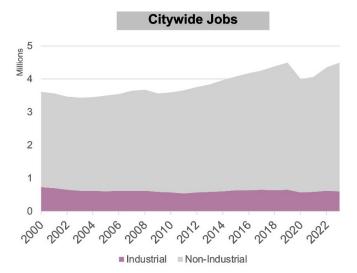


Figure 5: Industrial job declines have stabilized since 2000, while the overall economy continues to grow. Source: NYC Planning analysis of NYS DOL QCEW.

scale, is deeply supportive of other components of the city's long-term growth, including its transition to a green economy and its need for infrastructure and housing development. It also speaks to an industry whose use of space needs for business continue to evolve, as will be discussed in more detail in following sections.

## INDUSTRIAL BUSINESS IN NEW YORK CITY TODAY

Together, industrial jobs form the backbone of the city's economy, providing critical services and infrastructure support for residents, businesses, and global commerce. They constitute 15 percent of all private sector employment in the city.

The NYC Industrial Plan focuses its analysis on the 545,000 formally documented jobs within 47,000 private sector industrial businesses within the city limits, and groups them into three general categories: moving, making, and maintaining. These typologies rely on standard industry classification but were developed for the NYC Industrial Plan to group industries with similar operational practices.

### Moving



Figure 6: Baldor Distribution Center in Hunts Point.

**Businesses that move things:** This category includes 19,000 companies in the transportation, warehousing, and logistics sectors, which employ 249,000 workers. Moving businesses employ an average of 13 workers.

### **Making**



Figure 7: Maspeth Welding in Maspeth, Queens

**Businesses that make things**: This category includes 24,000 businesses in the construction (the making of buildings) and manufacturing (making of goods), and media production (making of media and film) sectors, which employ 258,000 people. Making businesses employ an average of 11 workers.

### **Maintaining**



Figure 8: Sprague Energy's terminal in Port Morris in the Bronx.

**Businesses that maintain things:** This category includes 4,000 companies in the utility services, automotive repair, and commercial sanitation sectors that support the city's essential functions. They employ 37,000 workers. Maintaining businesses employ an average of 10 workers per establishment.







249k jobs 19k businesses 258k jobs 24k businesses 37k jobs 4k businesses

Figure 9: The 545,000 private sector industrial jobs in NYC fall into three categories. Source: NYC Planning analysis of NYS DOL QCEW, private sector, Q3 2024 (preliminary).

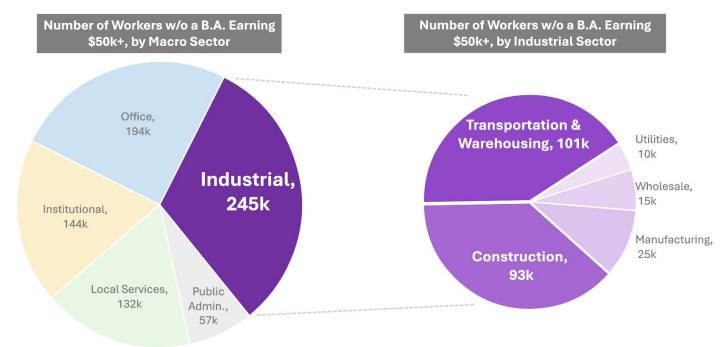
Not included in these figures are industrial occupations in non-industrial businesses, such as a janitor in a school or a stocker in a grocery store. It is estimated that there are as many as 100,000 such industrially oriented positions. These figures also do not include public sector industrial employment, of which NYC government itself estimates 40,000 jobs across sanitation, transportation, infrastructure, and building management occupations. Finally, these counts may miss informal employment that may be relevant especially in the form of construction labor or day labor, gig workers, or the self-employed.

Industrial jobs are a key source of opportunity for New Yorkers, particularly those without a four-year college degree. Although the median wage in the industrial sector of \$57,000 is lower than the citywide median of \$70,000, 70 percent of industrial jobs do not require a bachelor's degree, and within these positions, wages are slightly higher than the city average (\$48,000 vs. \$46,000). The sector also offers a significant number of good-paying jobs: 245,000 industrial workers without a college degree earn more than \$50,000 annually. Of these, about 80 percent are concentrated in transportation, warehousing, and construction, with the remainder in manufacturing, wholesale trade, and utilities.

Compared to the overall city workforce, the industrial sector is more diverse, older, and male. The sector is also an important employment base for a wide range of New Yorkers, especially those from communities that have historically faced barriers to higher education and formal career advancement pathways.

Although outpaced by overall job growth, the relative steadiness of industrial employment over the past 20 years suggests durability in the urban economy, particularly in areas like logistics, construction, and specialty manufacturing. Some element of that stability arises from their critical role in the city's ability to function. Examples of such critical activities are the purification of water, making of building materials, and the distribution of perishable goods.

New York City's industrial sector is also deeply embedded in a larger regional, national, and global context. Collectively, the New York region is the second largest industrial economy in the country, trailing only the Los Angeles metro area. The city accounts for roughly 25 percent of all industrial employment in the broader metropolitan region, which includes significant industrial hubs in New Jersey, Long Island, Connecticut, and the Hudson Valley. The connectivity of our air and seaports to



Source: U.S. Census Bureau, 2022 American Community Survey—Public Use Microdata Sample.

Figure 10: The industrial sector is an important source of good-paying jobs for workers without a college degree. Source: U.S. Census Bureau, 2022 American Community Survey – Public Use Microdata Sample.

interstate highways and rail networks, and our dense population centers that serve as massive consumer markets for goods, drive the strategic importance of our industrial market. NYC's economy benefits from access to cheaper, more truck-accessible industrial properties surrounding it. This allows businesses to build and access supply chains and interdependencies for making, moving, and storing goods outside of the confines of NYC's constrained urban spaces.

## INDUSTRIAL AREAS IN NEW YORK CITY TODAY

Today's industrial areas are shaped by historical regulations that date initially back to the early 1900s when urban reformers were grappling with how to address the effects of rapid industrialization and population growth, and later rules inspired by a mid-century vision of how to manage industrial decline. Neither of these paradigms reflect the current industrial landscape. The rules that govern what can be built in an industrial area and how businesses can operate are too rigid to meet the needs of today's evolving industry.

		NYC Workers, 2022		
		Industrial Workforce	Overall Workforce	
	% Male	80%	57%	
<b>S</b> i	w/o Bachelor's Degree	70%	45%	
***	Non-White and/or Hispanic	67%	60%	
ŝ	Median Wage	\$57k	\$70k	
<b>*</b>	Median Wage w/o Bachelor's	\$48k	\$46k	
À	% NYC Resident	76%	79%	
ĽÖ	Median Age	<b>43</b> yrs.	<b>40</b> yrs.	

Figure 11: The industrial sector is more diverse, older, and male compared to the overall city workforce. Source: U.S. Census Bureau, American Community Survey 5-year microdata, 2018 – 2022. Wage figures are 2023 dollars.

For much of New York's early history there were few formal limitations on what property owners were able to construct on their property. In the late 19th century, population growth and technological changes began to change this equation. Continued rapid growth, housing

MSA	Industrial Employment	Construction Employment	Installation, Maintenance, Repair	Production	Transportation, Material Moving	Industrial as % of Total Employment	Industrial Building Supply
Greater LA	1.7M	265k	235k	364k	785k	21.0%	1.9B
New York	1.7M	316k	324k	253k	756k	17.4%	1.1B
Chicago	1.1M	135k	145k	294k	498k	23.8%	1.3B
Dallas	939k	155k	170k	202k	412k	23.7%	1.1B
Houston	800k	177k	148k	170k	306k	25.2%	779M
Atlanta	643k	80k	110k	136k	318k	22.8%	787M
Bay Area	570k	126k	91k	137k	217k	16.0%	388M
Miami	533k	103k	112k	78k	240k	19.6%	260M
Boston	443k	99k	76k	102k	166k	16.0%	268M
Washington	409k	109k	89k	44k	166k	13.2%	210M

Figure 12: The New York region is the second largest industrial economy in the country. Source: NYC Planning analysis of 2023 BLS data and CoStar market data.

shortages, and industrial encroachment added urgency to the calls of reformers for zoning restrictions separating uses and for new and more effective height and setback controls for all buildings.

The 1916 Zoning Resolution (ZR) introduced height, setback controls, and separated residential, commercial, and unrestricted zones. Unrestricted zones had no regulations or restrictions, meaning that industrial uses could be sited alongside residential uses and vice versa.

By the late 1950s, globalization and technological advances in production had started to catalyze New York City's transition away from a manufacturing-based economy. The ZR reflected planners' thinking of the time that future job intensity would be focused primarily in dense office districts in Midtown or in farflung low-scale production in more suburban settings. As a result, the 1961 ZR subjected new construction buildings in M districts to singlestory or low-density FAR, stringent sky exposure plane requirements, high yard requirements, and high parking requirements that assumed primacy of car commuting in the future.

The 1961 ZR introduced three broad categories of land use: residential, commercial, and

manufacturing, and established specific manufacturing districts (M1, M2, and M3) to better regulate industrial activity based on intensity and potential nuisance.

Manufacturing districts were typically mapped over previous unrestricted zones and locations with a legacy of industrial activity, prohibiting new residences in these locations. Automobile parking requirements were incorporated citywide for all uses. In most instances, permitted densities would be far lower than what had previously been permitted. These reforms aimed to balance the needs of industry with the protection of neighborhoods and the environment, setting the stage for future debates and adaptations as the city's economy evolved.

The 1961 ZR significantly reduced the allowable floor area ratio (FAR) in most M zones, often at densities that were far less than the existing built context. Today, approximately 96 percent of the city's M districts are zoned for a maximum of 2.0 FAR of commercial, which significantly limits physical vertical business expansion. Approximately one in five buildings in M districts are above their allowable FAR, preventing many kinds of renovations that businesses may need to continue or expand their operations.

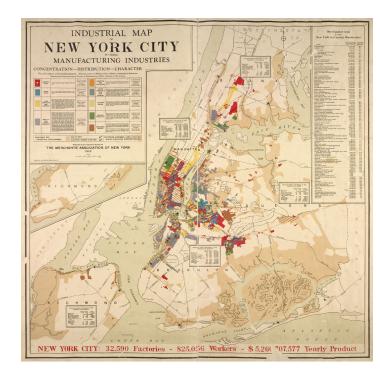


Figure 13: By the 1900s, manufacturing was concentrated in the densest parts of the city, leading to the 1916 zoning restrictions separating uses. Source: NYPL Digital Collections

Today's manufacturing zoning districts – M1, M2, M3, and MX – are designed to accommodate a range of industrial and commercial activities, with each district defined by the intensity and allowance of use and potential impact on surrounding areas.

M1 districts are the city's lightest manufacturing zones. They allow a mix of industrial, commercial, and some community facility uses with minimal noise, odor, or traffic impacts. They are often home to a range of light industrial businesses, creative industries, storage, and warehouses. Today, M1 districts cover 17,600 acres of New York City, with large clusters at the city's airports, Western Queens, Eastern Bronx, North Brooklyn, and East Brooklyn.

M2 districts serve as a buffer between light and heavy industry. They permit medium-intensity industrial uses that may produce more noise or emissions, such as waste transfer or more intensive production activities. Today, M2 districts cover 2,700 acres of New York City, with strong clusters on the West Side of Manhattan and College Point in Queens.

**M3 districts** are reserved for the most intensive

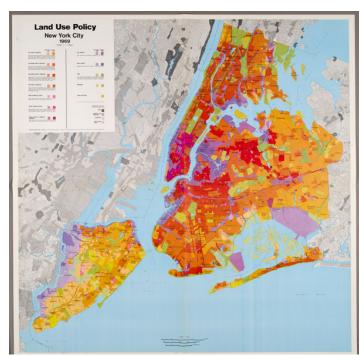


Figure 14: In the 1961 Zoning Resolution mapped manufacturing districts in locations with a legacy of industrial activity, often at densities that were less than the existing built context. Source: Plan for New York City, 1969

industrial uses. Allowable uses are activities like electrical production, waste processing, water filtering, and heavy manufacturing. These are uses which typically require separation from residential or commercial areas due to their environmental impact. Today, M3 districts cover 7,000 acres of New York City, with strong clusters along Newtown Creek, Arthur Kill, the South Bronx, and Sunset Park.

MX (Mixed-Use) districts allow new residential and non-residential uses (commercial, community facility, and light industrial) to be developed as-of-right and located side-by-side or within the same building. They were established to encourage investment in and enhance the vitality of industrial areas. Today, there are 25 official MX districts in places, primarily covering locations in the south Bronx, western Queens, and Brooklyn; colloquially several special districts with similar provisions (Hudson Square, Tribeca, Gowanus, LIC, Soho-Noho) may be considered like MX districts. Today, MX districts cover 1,200 acres of New York City.

New York City's industrial businesses are not confined to traditional industrial areas. While

many locate in M districts either because the nature of their operations prohibits them in other areas, or because other factors like location or cost have dictated their siting choice, many industrial businesses headquarter in office buildings and even residential neighborhoods. Today, 52 percent of industrial businesses are located in an M or MX district, 36 percent are located in a C district, and 12 percent are located in an R district.

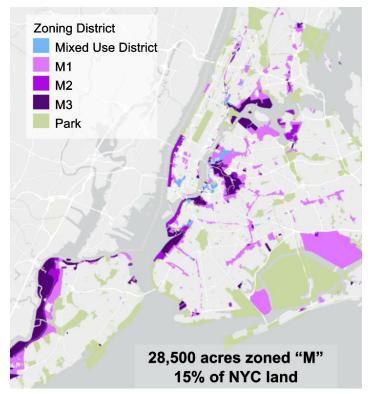


Figure 15: NYC M, MX Zoning. Source: NYC Planning analysis of Zoning Districts shapefiles (NYZD), 2023.

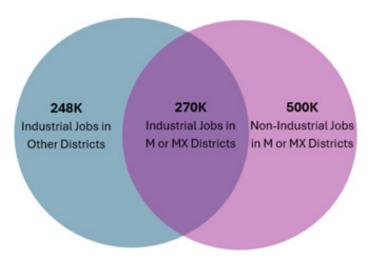


Figure 16: While most types of industrial operations must locate in M-zones, many industrial businesses are headquartered in offices and homes. Source: NYC Planning analysis of NYS DOL QCEW, 2024Q3 (preliminary); MapPLUTO 24v4.1

Manhattan was once the epicenter of manufacturing nationally and global leader in apparel production. Despite precipitous losses in manufacturing, the borough continues to host the largest number of industrial jobs, reflecting the legacy of manufacturing in the borough from the early 1900s as well as its appeal as a location for national and global headquarters.

Industrial jobs can be in both industrial and non-industrial occupations. Non-industrial occupations tend to be those that support industrial firms but do not inherently require industrial space themselves. Such occupations include administrative staff, sales teams, engineers, project managers, and designers, who can often be housed in office environments. Industrial occupations may also be in non-industrial spaces due to the nature of the geotagging of positions. Those industrial workers may be paid out of or conduct occasional visits to a workplace in a non-industrial facility and be tabulated as working there even when their primary job site may be mobile or elsewhere.

Buildings across the city that may include offices, homes, and garages may also be places of or headquarters for industrial work. Thus, while Midtown and Midtown South have a built profile of offices, those offices host many industrial sector jobs. Similar conditions can be seen throughout residential districts in South Brooklyn, Staten Island, and Eastern Queens, where contractors and home repair specialists may operate businesses from their homes while working on projects elsewhere.

## EXISTING AND ONGOING TOOLS TO SUPPORT INDUSTRIAL BUSINESSES AND AREAS

**Land Use and Zoning** 

**Industrial Business Incentive Areas** 

The Industrial Business Incentive Area (IBIA) designation is a planning mechanism



Figure 17: An office containing industrial use outside of M, a warehouse inside M, a non-industrial use inside a M. Source: Cyclomedia

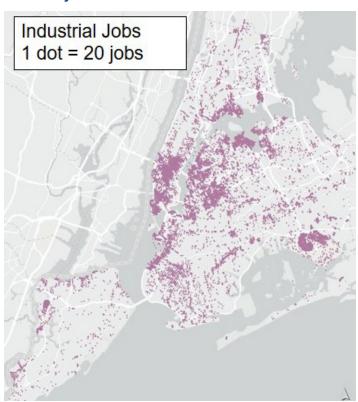


Figure 18: Location of NYC Industrial Jobs. Source: U.S. Census Bureau, LEHD Origin-Destination Employment Statistics (LODES), WAC, JT00, 2022.

established in 2016 and applied primarily in the Greenpoint-Williamsburg Industrial Business Zone (IBZ). Three projects have been developed under the program. The IBIA requires new buildings to include a minimum amount of industrial space (approximately equal to 1-2 floors) to develop larger buildings for commercial and other nonindustrial uses. The program allows for a parking waiver and a publicly accessible open space height bonus. The program requires applicants to apply for a Zoning Special Permit and to fulfill an annual reporting requirement, which adds time, cost, and an unpredictable process to development.

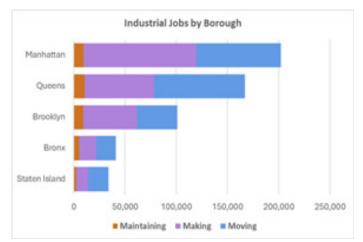


Figure 19: Industrial Jobs by NYC Borough. Source: NYC Planning analysis of NYS DOL QCEW, private sector, Q3 2024 (preliminary).

#### **Self-Storage and M1 Hotel Special Permits**

The unregulated development of self-storage in IBZs was determined to detract from the City's vision and goals for these active industrial areas. In 2017, the City made the determination to limit as-of-right development of self-storage facilities in designated industrial areas through the implementation of a special permit process.

Following a similar logic to the self-storage special permit, in 2018, the City implemented a special permit for new hotel construction in M1 districts. In the years leading up to the implementation of the special permit, the city experienced a rapid increase in hotel development in M1 districts, particularly in areas near transit. This was due to a combination of rapid growth in tourism in New York City between 2008 and 2018 and M1 zoning, which allowed hotel construction in all M1 zoned areas. Hotels may directly or indirectly detract from

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opportunities for other kinds of development, by occupying vacant or underdeveloped sites that could have been available to other uses better equipped to fulfill neighborhood development objectives and needs, or by accelerating neighborhood change with the expansion of tourism-oriented uses.

### **City of Yes for Economic Opportunity**

Recent zoning reforms under City of Yes for Economic Opportunity expanded siting opportunities for industrial businesses. These reforms allowed clean, small-scale production in storefronts and offices in C districts and introduced new M districts focused on allowing for flexibility for building design and more broadly enabling multistory industrial development.

New York City's industrial zoning went largely unchanged since 1961, limiting development to outdated building types like low-density warehouses with large parking lots. These regulations hinder the construction of jobintensive, modern industrial spaces and make iconic loft-style buildings largely unbuildable. Developers have often relied on Special Districts, rezonings or incentive programs to work around restrictive rules. City of Yes for Economic Opportunity created three new industrial zoning districts with varied densities and building types, aiming to support modern business needs through future rezonings and public review. Those districts are:

- M1A districts, which are designed for a wide range of industrial, commercial, and a limited number of community facility uses.
- M2A districts, like the M1A, are intended to support employment densification by allowing a broad mix of industrial, commercial, and limited community facility uses, and offer a FAR bonus for developments that include industrial uses to incentivize modern industrial space and sustain industrial employment.
- M3A districts, which are designed for locations with open or high-intensity industrial uses and where modest expansion

opportunities should be permitted for legacy industry and future critical infrastructure while reducing allowances for non-industrial uses.

These new zoning districts were created, but not mapped, in 2024. Their first usages are currently proposed as part of ongoing mapping actions currently in public review in Jamaica and Long Island City in Queens, and in Midtown South in Manhattan.

## **Financial and Business Support Programs**

#### **Industrial Business Zones**

Industrial Business Zones (IBZs) were established in 2005 as the locations that could best support strong industrial business districts. In addition to making tax incentives available to businesses relocating from within New York City to an IBZ, the mayoral administration at the time committed not to advance applications to rezone to allow residential use within the IBZs. Although the IBZs are officially administered as tax policy, subsequent administrations have reaffirmed the commitments not to rezone them to allow new residential use.

### **Financial Incentive Programs**

New York City offers a variety of industrial incentive programs designed to support the retention, growth, and modernization of its manufacturing and industrial sectors. Programs like the Commercial Expansion Program (CEP) and the Industrial and Commercial Abatement Program (ICAP) provide tax benefits to businesses that improve or expand industrial space, reducing the cost burden of capital investments. The Relocation and Employment Assistance Program (REAP) incentivizes job creation by offering tax credits to businesses relocating to designated areas, particularly outside Manhattan's core. Programs like the Energy Cost Savings Program (ECSP) and Business Incentive Rate (BIR) help lower utility costs for eligible industrial users, making operations more affordable and competitive in high-cost urban environments.

The New York City Industrial Development Agency (NYCIDA) supports business growth, relocation, and expansion across the five boroughs by lowering the cost of capital investment. Its programs include a property tax abatement for up to 25 years, a reduction in mortgage recording tax, and waivers for City and State sales tax on purchases of materials and equipment related to construction.

Other industrial incentive programs target innovation, sustainability, and advanced manufacturing, including:

- The Green Roof Property Tax Abatement and solar energy tax incentives encourage environmentally sustainable retrofits to industrial facilities.
- The NYC Biotechnology Tax Credit supports early-stage biotech companies through refundable credits tied to job creation and investment in research and development.
- The IBZ Tax Credit supports companies operating within Industrial Business Zones by offering a refundable credit per qualified employee.
- The New York City Industrial Development Agency (NYCIDA) offers discretionary property tax incentives to support capital investment by industrial businesses and to retain and create industrial jobs.
- ASTEP (Accelerated Sales Tax Exemption Program), a smaller offshoot of the NYCIDA, offers sales tax exemptions for eligible industrial businesses. Reduced corporate tax rates for qualified manufacturers provide long-term savings to strengthen the sector's financial resilience.

Together, these programs reflect one part of the City's commitment to nurturing a diverse, sustainable, and job-rich industrial economy.

### **Workforce Development Programs**

New York City supports industrial workforce training and job placement through a range

of targeted initiatives aimed at strengthening the city's manufacturing, transportation, logistics, and construction sectors. Programs are often designed in partnership with employers, community-based organizations, and educational institutions to ensure that training is aligned with industry needs. Small Business Services (SBS) manages a variety of occupational training courses to connect New Yorkers to jobs. SBS also funds Workforce1 Industrial and Transportation Career Centers, which provide screening, job matching, and skills development services tailored to industrial employers' hiring needs.

NYC Talent manages the City's Manufacturing and Industrial Innovation Council (MaIIC), a mayoral industry partnership that supports the sustainability and growth of New York's manufacturing and industrial sectors. NYC Talent has also produced reports like the Employee Engagement Toolkit and the Action Plan for Young Adult Career Services and administers programs like FutureReadyNYC, which connects job seekers with specialized training in fields like advanced manufacturing and skilled trades.

The City also invests in upskilling workers through workforce trainings, apprenticeships, certification programs, and sector-specific bootcamps, often targeting unemployed or underemployed New Yorkers. Additionally, for two of the New York City's major industrial hubs - Sunset Park and Hunts Point - NYCEDC recently launched Economic Mobility Networks, workforce development coalitions designed to help New Yorkers access quality jobs within these industrial sectors. These efforts not only help address skills gaps but also reinforce the City's broader goal of fostering inclusive economic growth through the industrial sector. The city's dynamic and highly skilled workforce are among the chief ways in which NYC remains a competitive industrial market.

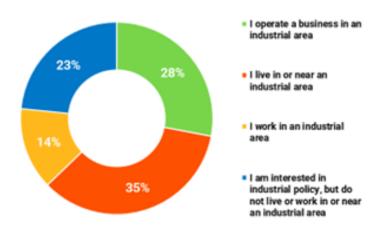


Figure 20: Share of Respondents to the NYC Industrial Plan Survey. Source: NYC EDC

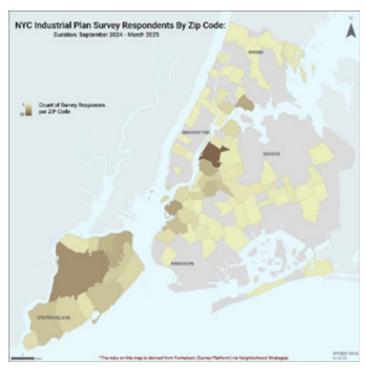


Figure 21: Geography of Survey Respondents. Source: NYC EDC



Figure 22: A word cloud of business survey respondent types. Source: NYC Planning

# RESULTS OF THE INDUSTRIAL BUSINESS SURVEY

As required by Local Law 172, a citywide survey was launched in September 2024 and remains open through the writing of this draft report. Outreach was conducted in six languages and through multiple channels, including business organizations, local industrial advocacy groups, environmental justice advocates, and City agencies.

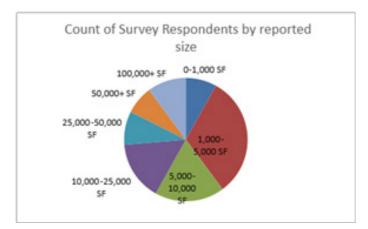
The survey has received 570 responses including from business owners, workers, residents of industrial areas, and others interested in industrial policy. This diverse pool captured a range of perspectives on the city's industrial landscape and the challenges faced by those who work, live, or operate businesses in these areas. A complete review of responses through March 2025 is available on nyc.gov/industrialplan.

Business respondents represented a wide range of business types across the industrial spectrum. Manufacturing businesses were overrepresented relative to their presence in the city, reflecting 34 percent of responses, followed by 9 percent each in construction, wholesale, and the arts; 5 percent in professional/technical services; 3 percent in transportation, retail, food services; and 25 percent in other sectors.

Businesses represented citywide geographies, with the strongest clusters in Hunts Point, Western Queens, the Brooklyn coast, and Staten Island.

Businesses represented a wide range of sizes, with most businesses surveyed occupying spaces smaller than 5,000 square feet. However, when accounting for the roughly 4 million square feet occupied by the surveyed businesses, most of the space occupied is by businesses with 50,000 sf or more (see Figure 23).

Half of respondents reported to have been in their location for more than 10 years, with the other half less than 10 years. A majority



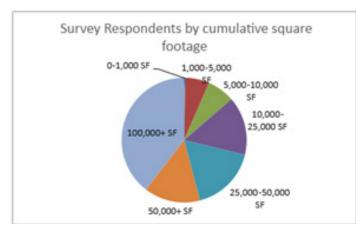


Figure 23: Most industrial businesses reported working from small spaces. However, businesses operating out of very large facilities represent the majority of the space occupied by surveyed businesses. Source: NYC Industrial Plan Survey

indicated having invested in new equipment or other forms of technological upgrades in that space in the past five years. One-third of respondents own their space, while two-thirds rent.

Businesses shared considerable detail regarding their considerations and concerns about finding adequate space. Respondents highlighted the need for adequate, modern space with heights, electrical loads, and maneuverability to support operations, at locations that were supportive of their business needs, at a price affordable to their business operations.

The cost and availability of industrial space emerged as a central issue for businesses. Most reported that they rented their facilities, paying an average of \$45 per square foot, and expressed concern over the rising costs and limited availability of appropriately equipped, modern industrial buildings.

Locational priorities for businesses included access to employees, off-street loading, and proximity to transit. About 25 percent of businesses surveyed indicated renting their space out for a secondary revenue purpose – the most common type being occasional film shoots

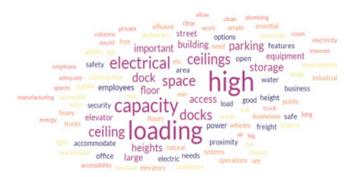


Figure 24: Survey respondents' considerations for space needs

or events. Despite high costs, the majority of respondents intend to renovate or expand. Of the 11 percent who noted the potential intention to relocate, reasons cited included the need to lower costs (rent, fees, congestion), and the need for superior or more proximate to market space. For businesses that focused on zoning and land use, responses surfaced strong divergences in perceptions of mixed use, with some businesses calling for more residential mixing, while others expressed concern for residential encroachment's effect on business operation.

Reported participation in government support programs was relatively low, largely due to a lack of awareness or difficulty meeting eligibility

"I would like to see especially delivery vehicles shifted to smaller vans, or even ebikes. Also, the greenspaces, plazas, benches, etc. are lacking in this area by the BQE - even industrial workers want places to take a break and eat lunch, and people do live in these areas who would appreciate a better public realm."

requirements. Businesses also frequently cited the fragmented nature of City support and difficulties navigating government services, as well as a desire for more accessible grant programs.

Residents and workers in industrial areas expressed concern over quality-of-life issues, particularly around pedestrian safety, traffic congestion, poor air quality, and insufficient green space. Over half of those living or working in or near industrial zones reported dissatisfaction with the conditions of their neighborhoods. Common grievances related to outdated or dilapidated infrastructure, poor lighting, inadequate sanitation, and environmental risks associated with industrial operations. Many respondents stressed the need for smarter urban design, better separation of trucks and pedestrians, and more welcoming public spaces for workers and residents alike.

Responses among those interested in industrial policy mirrored the findings of the other groups. Traffic, air quality, and pedestrian safety were their top reported priorities. Across all respondent groups, the most frequently suggested improvements were upgrades to infrastructure (like roads and lighting), better environmental conditions, enhanced public safety, and expanded public transportation. Respondents consistently identified infrastructure as the most effective lever for improving industrial areas, underscoring the intersection between economic growth and livability.

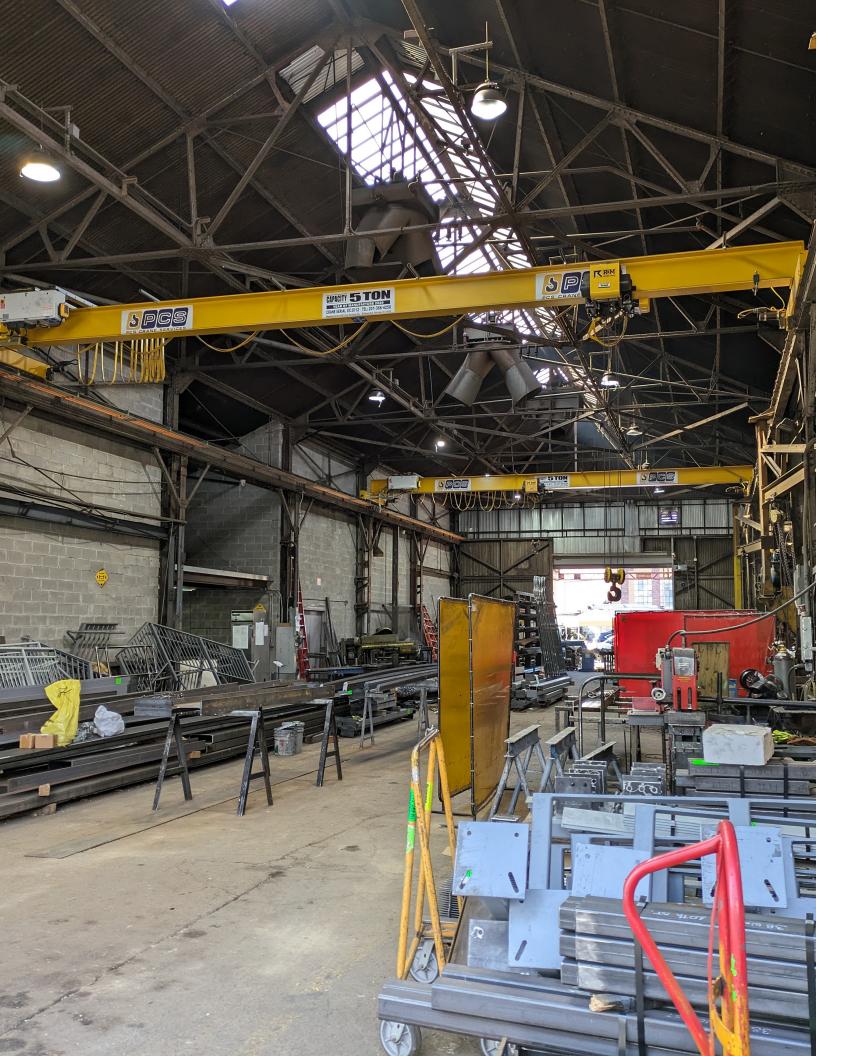
The survey results reveal both the complexity and the promise of New York City's industrial areas. While businesses face significant cost and regulatory hurdles, many remain committed to growing in the city. Meanwhile, residents and workers emphasize the need for safer, cleaner, and more accessible industrial neighborhoods. These insights have been vital to shaping the findings of the *NYC Industrial Plan*. They have specifically informed the strategies on infrastructure, performance standards, affordability, and regulatory support for businesses.

We are concerned about residential uses encroaching on the small manufacturing businesses that operate in our multi-tenanted buildings when large residential buildings are built in proximity to loading docks, etc.

Yes MIXED USE. Please stop isolating residences and industrial spaces where people work. It invariably creates no-man's land in multiple areas which is a huge security concern. If we are to boost the micro-economy, we need to be able to facilitate working and living in the same area. This allows more small businesses like restaurants and cafes to thrive without them having to depend on only one kind of customers. It puts eyes on the street, which increases public safety and allows a more cohesive neighborhood.

Figure 25: Survey respondents divergent views on mixed use





# **SUMMARY OF THE INDUSTRIAL SECTOR'S NEEDS AND CONCERNS**











Figure 26: The Five Key Issues of the Industrial Plan. Source: NYC Planning

Based on research and stakeholder interviews. five key issues were identified as most affecting New York City's industrial sector.

First, is the evolution of industrial activity, as traditional manufacturing gives way to distribution, construction, and business models that blur the lines between industrial and commercial. The second issue is related to strong demand for space driven by pressures coming from within and outside the industrial real estate market. Third, is the condition of the public realm in industrial areas. Fourth, is related to congestion and truck traffic, which are exacerbated by the growth of e-commerce and made worse by congested roadways and limited off-street parking and loading. Lastly, climate threats such as coastal and stormwater flooding and heat vulnerability disproportionately affect industrial districts, many of which lack adequate resilience infrastructure.

### **EVOLVING INDUSTRY**

Over the past century, New York City has undergone a dramatic transformation from a manufacturing powerhouse into a global hub of finance, technology, media, and culture. As these shifts have taken root, many historically industrial neighborhoods have been repurposed into vibrant, mixed-use communities. This evolution reflects broader economic changes, but it has also presented new challenges in preserving and adapting the industrial sector to meet modern needs.

Despite long-term shifts in the city's industrial economy, several segments of the industrial economy remain strong and are even growing. In recent decades, growth in construction and transportation have stabilized the industrial economy in NYC, cementing a long transition away from manufacturing. Since 2000, industrial

employment has declined by just 2 percent, a marked improvement from the steeper losses of earlier decades, even though total employment across all sectors grew by 31 percent in the same period. Key areas of employment growth in the moving sector include warehousing and storage, passenger transportation, freight transportation, and food wholesale. Collectively these subsectors saw double-digit employment growth and a net gain of 48,000 jobs. In the making sector, employment gains were driven by construction, telecommunications, and film, television and sound recording. As in the moving sector, these three subsectors collectively experienced double-digit employment growth. accounting for a net gain of 56,000 jobs over the 20-year period. Modest gains also occurred in food manufacturing, waste management, and utilities.

These healthy gains were offset by losses primarily in the making sector. The manufacturing subsector accounted for losses that were significant enough to offset the gains in other parts of the making sector like construction, film, television and sound recording, and telecommunications. Heavy manufacturing, advanced manufacturing, and consumer goods manufacturing collectively experienced a net loss of 71,000 jobs.

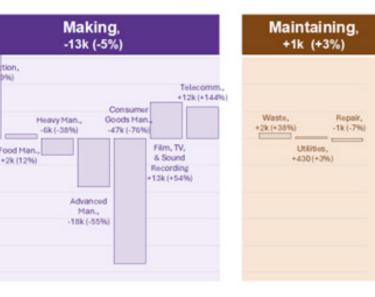
Employment gains in the moving sector were tempered by a modest decline in materials wholesale and by more significant losses in consumer goods wholesale. Taken together, these two subsectors saw employment decline by a net 20,000 jobs.

The data reflects broader economic transformations in the city's industrial landscape between 2003 and 2023. These trends highlight the shifting nature of industrial employment away from legacy manufacturing toward logistics, infrastructure, and technology-driven sectors and underscore the need for adaptive planning and policy strategies to support growing sectors while addressing the decline in traditional manufacturing.

The City has helped anchor the industrial ecosystem over this period, enabling its core components to weather change through investments in talent, affordable space. infrastructure, and incentives. In fact, one of every 12 industrial jobs outside Manhattan is located at an NYCEDC asset. At the same time, businesses report a perception of lack of support from government, particularly in navigating complex regulatory situations or accessing financial resources that might abate the high cost of operating in New York

Industrial Employment Change, 2003 to 2023





Source NYC Planning analysis of NYS DOL OCEW private sector, annual averages 2003 and 2023

Figure 27: In recent decades, growth in construction and transportation have stabilized the industrial economy in NYC, cementing a long transition away from manufacturing. Source: NYC Planning analysis of NYS DOL QCEW, private sector annual averages 2003 and 2023

City. There is a sentiment in the industrial community that the regulatory challenges and costs are particularly high for this sector, and that the government is unaware of the how the regulatory environment affects their operations.

New York City has set a target of reducing greenhouse gas emissions by 80 percent by 2050 and has subsequently advanced a series of initiatives that seek to decarbonize buildings. electrify transportation, deploy clean energy infrastructure, and modernize waste systems. The industrial sector is expected to play a key role in implementing these measures to "green" the city's economy. According to NYCEDC's Green Economy Action Plan (GEAP), by 2040, New York City could see as many as 382,000 green economy jobs, with approximately 72 percent of those roles located within the industrial sector. While the green transition presents a generational opportunity for innovation and inclusive growth across the sector, the City has also called upon industrial businesses to shift their own operations away from carbon-intensive activities to the greatest extent possible. New rules, such as Local Law 97, will prompt industrial businesses and facilities to evolve in support of the city's climate objectives.

The industrial businesses that remain in NYC continue to experience a climate of transition and adaptation. As later sections will highlight, space costs and climate vulnerability will continue to affect the physical space configurations of businesses over the next generation. The need for decarbonization may necessitate changes in capital investment or operations. Automation and AI may disrupt the nature of some business types. Regardless of the nature of the disruption, NYC businesses, especially those that are small and undercapitalized, will need government support to innovate and adapt to change.

### **GOAL: ENABLE INDUSTRIAL BUSINESSES TO EVOLVE. INNOVATE.** AND MODERNIZE

To support this vision for the future, the NYC Industrial Plan identifies its first major goal: enabling industrial businesses to evolve.

innovate, and modernize. Achieving this vision requires coordinated strategies across the tools of government, from enhancing City government's support for industrial businesses through regulatory and operational challenges, using city-owned sites to incubate innovation. and activating underutilized industrial spaces for the green transition. In parallel, the City must ensure that workforce development programs are aligned with the hiring needs of industrial businesses, particularly in emerging green sectors. By embracing these strategies, New York City can position its industrial sector as a key driver of economic resilience and sustainability in the decades ahead.

### **Strategy 1 - Improve City government's** ability to help industrial businesses navigate regulatory and resource challenges

### 1. Improve Local Law 97 compliance supports for hard-to-electrify industrial businesses

Certain types of industrial businesses rely on energy-intensive or high-temperature processes

ACCELERATOR

Figure 28: NYC **Accelerator Logo. Source: NYC MOCEJ** 

that are presently difficult to sustain absent fossil fuels due to technological limitations. Such businesses, which include iron and steel works, cement

batchers, and other building materials manufacturers, may require additional technical and financial assistance to develop and implement tailored measures that seek to meaningfully reduce their emissions, which is required for buildings over 25,000 square feet under Local Law 97. The Mayor's Office of Climate and Environmental Justice (MOCEJ) is retooling the support that it offers these industrial businesses and building owners through its NYC Accelerator program to help them set and make progress towards achievable energy efficiency and decarbonization objectives.

2. Explore the creation of alternative Local Law 97 compliance pathways that accommodate industrial businesses that are unable to

#### electrify

The operations of many "hard-to-electrify" industrial businesses remain carbon-intensive due to a lack of viable, electrified technologies that could replicate the same processes with fewer emissions. If technologically or financially feasible electric alternatives are not developed or commercialized by 2030, when any building subject to Local Law 97 must achieve significant reductions in their emissions, a "hard-to-electrify" industrial business (or a property that hosts one) would likely be unable to comply and would thus be penalized. MOCEJ and the Department of Buildings (DOB) are convening a working group that is assessing what industrial businesses and buildings may ultimately be unable to electrify, how many are subject to Local Law 97, and what alternative compliance pathways that seek to compel good faith energy efficiency upgrades and emissions reductions could look like.

# 3. Improve and streamline regulatory processes that impact industrial businesses through efforts to cut red tape

The Department of Small Business Services (SBS) has long played an essential role in collecting input from businesses regarding regulations and relaying any concerns or recommended changes to the agencies responsible. In 2022, the Adams administration established the Small Business Advisory Commission, chaired by the SBS commissioner and charged with assessing the impact of and delivering recommendations on how policies, laws, and regulations could be updated to enhance the experience of small businesses operating in New York City.

In May, the administration launched the second iteration of its Small Business Forward initiative, which calls on the Fire Department, DOB, the Department of Consumer and Worker Protection, the Department of Environmental Protection, the Department of Transportation, and the Department of Health and Mental Hygiene to review regulations with the goal of identifying reforms that could support small businesses and promote entrepreneurship. The various existing mechanisms for soliciting

feedback regarding and making improvements to regulatory and permitting processes should be leveraged to identify the unique challenges that industrial businesses face in this regard. Additional methods for systematically collecting and incorporating the regulatory concerns of industrial businesses should be explored as well.

## 4. Optimize industrial business support offered through SBS

The Department of Small Business Services (SBS) offers a variety of programs and services that help businesses cure violations, navigate regulations and permitting processes, and access capital. SBS contracts with Industrial Business Service Providers (IBSPs), not-for-profit organizations that provide industrial businesses with specialized assistance on incentives and other funding and financing opportunities, recruitment and training, regulatory challenges, and general business education, as well as referrals to other small business supports. The City is exploring how to optimize the various supports in a way that addresses the needs of industrial businesses.

# 5. Support local industrial businesses in entering the green economy through investment and technical assistance

NYCEDC is implementing We Source NYC, a technical assistance and communications program that supports local small-and mediumsized manufacturers, construction service providers, industrial equipment suppliers, and other relevant companies to capture contract opportunities in regional renewable energy supply chains.

## **Strategy 2 - Activate industrial sites in support** of the green transition

6. Maintain GEAP commitment to utilize NYC Industrial Development Agency (NYCIDA) tax incentives to activate battery storage capacity and support other green economy uses.

In 2024, NYCEDC released the Green Economy Action Plan (GEAP), a comprehensive report

that defined the "green" economy and outlined a path for New York City to seize the opportunity that it presents. The plan details 63 City commitments that collectively seek to build a sustainable, equitable green economy ecosystem. These include a commitment by NYCEDC to promote and deploy NYC Industrial Development Agency (NYCIDA) tax incentives to support the expansion of battery storage capacity and other green economy-related uses.

## 7. Convene circular economy stakeholders and facilitate resource recovery within and across industrial sectors

The Department of Sanitation's Solid Waste Management Plan (SWMP) guides the City's long-term waste planning, outlining strategies and commitments for how the city can reduce total waste generation, grow the volume (and breadth) of materials being diverted from landfills via recovery and recycling, and ensure equity in the waste management system. DSNY is currently working on updating the SWMP. with the new version set to be released in 2026. The 2026 SWMP will include measures that seek to enhance the circularity of the city's economy, identifying priority materials whose recovery and subsequent recycling or reuse present the greatest opportunities for economic and environmental impact, mapping the stakeholders involved in these priority material streams, and developing pilot programs that facilitate the establishment of new resource recovery systems around these priority materials and assess their efficacy.

# 8. Develop resources that encourage more energy storage systems to be sited in industrial areas

Battery energy storage systems (BESS) are essential complements to renewable energy resources, storing power generated by solar panels and wind turbines during sunny or windy periods and sending power back to the grid when needed. In 2023, zoning reforms called City of Yes for Carbon Neutrality modified regulations to allow BESS larger than 10,000 square feet outside of manufacturing districts and expanded rooftop and yard allowances to

more easily enable the installation of accessory BESS in commercial and residential districts. These changes have helped BESS expand and enhanced grid resiliency in residential areas, which are disproportionately impacted by outages. However, large, utility-scale BESS installations, which are essential to reducing the City's reliance on peaker plants and other fossil fuel-supported power infrastructure, are well-suited for industrial areas, which have the land, zoning, and existing infrastructure to more easily accommodate their significant footprint. Additionally, the cost-saving and resiliency benefits of BESS are maximized when these systems are co-located with solar generation capacity, another use that is optimized when installed at scale (which is most easily accomplished in manufacturing districts). MOCEJ has convened an interagency working group on solar and storage siting that is exploring potential resources that could be developed and deployed to encourage BESS developers to locate more projects in industrial areas and to co-locate BESS and solar generation capacity wherever practicable.

## 9. Promote the development of clean energy infrastructure on privately owned industrial sites

Nearly three quarters of the clean energy generation and storage capacity that has been developed in New York City is located outside of industrial areas. While this distribution demonstrates that unlike fossil fuel-based energy infrastructure, "distributed" energy resources or DERs (such as solar, etc.) can often safely locate amid commercial and residential uses, it also indicates that industrial areas' potential to support the deployment of clean energy at scale remains mostly untapped. Manufacturing districts are the only zoning districts where renewable energy infrastructure does not have size limitations or other, additional land use policy conditions. Industrial areas also typically contain larger sites (which are ideal for land-intensive uses) and transmission infrastructure from legacy power infrastructure as well.

There is also demonstrable need for additional

clean energy deployment in industrial areas, as they often have greater electricity demands due to their concentrations of energy-intensive businesses and operations. Limited grid capacity can hamper new industrial development (as well as the growth of existing activities), and grid capacity is more quickly expanded through the deployment of DER's (as compared to fossil fuel-supported power infrastructure). As a result, the City is considering new measures to incentivize the development of clean energy infrastructure as part of new industrial projects to take advantage of the opportunity industrial areas present to grow the base of clean energy generation and storage as well as preempt any issues with grid capacity that could hinder future industrial growth.

## 10. Support the development of district thermal heating systems in industrial areas

District thermal heating systems are comprised of low-carbon thermal resources such as the ground, wastewater, and waste heat, whose steady temperatures are captured and reused to provide heat in the winter and cold in the

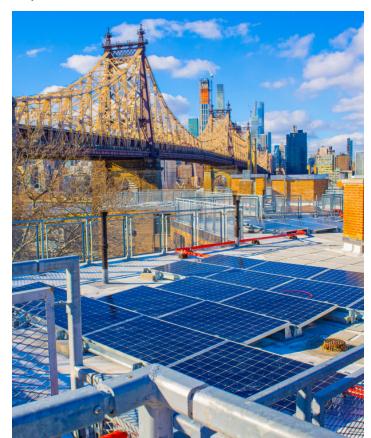


Figure 29: Solar installation at NYCHA Queensbridge Houses. Source: NYCHA

summer via a network of heat pumps and insulated pipes that distribute this heat across clusters of buildings. Industrial areas are ripe with operations that generate a significant volume of waste heat and wastewater typically lost through exhaust systems, cooling towers, and the like that could instead be used to satisfy HVAC needs. NYSERDA supports the design and implementation of such projects across New York State through its Large-Scale Thermal and Community Heat Pump Systems programs, including those associated with residential developments in New York City. MOCEJ is building on these efforts, convening an interagency working group on district thermal heating that is exploring ways to seed these networks in industrial areas.

## 11. Install climate infrastructure on all viable city-owned property by 2035

In 2023. MOCEJ released PowerUp NYC. a study that examined the city's energy system and identified initiatives to promote its longterm sustainability, reliability, and resiliency. Among these initiatives was a commitment to "install climate infrastructure on all viable cityowned property by 2035." This commitment involved identifying opportunities to co-locate climate infrastructure, reducing administrative bottlenecks for climate infrastructure siting, setting energy storage goals for city-owned lots, scaling deployment through Power Purchase Agreements (PPAs), and refining best practices for implementation. The City has made great strides towards this goal in recent years and is in the process of installing climate infrastructure on key industrial assets such as the Ward's Island Wastewater Resource Recovery Facility (WRRF), which will host 10 megawatts (MW) of solar photovoltaic (PV) capacity and 10 MW of large-scale battery energy storage, making it the largest clean energy.

The South Brooklyn Marine Terminal (SBMT) in Sunset Park is being redeveloped into a world-class offshore wind port and interconnection point for New York City's first major offshore wind project. The project, which broke ground in June 2024, is central to the City's commitment to grow the offshore wind industry and is expected



Figure 30: Brooklyn Army Terminal. Source: NYC EDC

to produce 810 MW of clean energy, enough to power approximately 500,000 homes. SBMT is also expected to create at least 1,000 construction jobs in port upgrades, onshore substation, and wind turbine staging and pre-assembly.

## 12. Explore opportunities to activate industrial sites for community solar

NYCEDC, UPROSE, and Working Power announced the development of Sunset Park Solar, a project to bring clean, reliable, and affordable solar energy to Sunset Park residents and businesses. The 725 kilowatt (kW) solar array will reduce greenhouse gas emissions, alleviate energy burdens, and protect low-income households from energy price fluctuations. Over its lifetime, the project will deliver \$1.24 million in energy bill savings to approximately 150 households. Located on the roof of Building B at the Brooklyn Army Terminal (BAT), the 45,000-square-foot installation will provide access to solar power generation for subscribing households.

# 13. Continue to advance NYCEDC's Circular Design and Construction Guidelines across the public and private sectors to reduce embodied carbon and waste in NYC's built environment

NYCEDC launched the Clean and Circular:
Design & Construction Guidelines, an
operational toolkit to reduce embodied carbon
and waste in NYC's built environment. Beginning
in 2024, the Circular Design & Construction
Guidelines are driving demand for lower carbon
construction across NYCEDC's capital portfolio

and serving as a tool for industry to chart a path forward to minimizing embodied carbon, reuse and recycle materials, and diverting waste from landfills. The Guidelines support upskilling across design and construction companies and outline a new set of standards NYCEDC will expect from partners to drive cleaner and more circular projects to completion. Positioned between public and private industry, NYCEDC is facilitating demand and building capacity for circularity and embodied carbon reductions through procurement of contractors on capital projects.

NYCEDC is also currently transforming the 20-acre Bush Terminal campus (MADE) into a modern hub for manufacturing and creative industries, an example implementing circular design and construction strategies within industrial use cases. Masonry, wood flooring, and removed wooden columns were removed. refinished, and put back into the building where able, even utilizing some of the columns for our second-floor public space seating, as well as tables and seating elements on the neighboring Pier 6. On the Site, the steel rails were removed and reinstalled as an esplanade amenity. Original cobble stone was salvaged and reused both throughout the sitework but is also being adapted into new paving elements in the upcoming construction of Pier 6.

## Strategy 3 - Use City-owned sites to incubate and grow industrial businesses

# 14. Evaluate the portfolio of City-owned land to improve efficiency and maximize opportunities for industrial siting

More than a quarter of all the land in New York City that is zoned for industrial uses is owned or leased by the City of New York. City agencies report repeatedly encountering difficulties around finding appropriate, available sites upon which to site new infrastructure or municipal service operations, and industrial businesses describe similar, persistent challenges around finding suitable spaces. It is essential to ensure that city-controlled, industrially zoned parcels are vetted to maximize opportunities. With the appropriate resources, the City could assess



Figure 31: NYPD Fleet Division Center 1 in Maspeth services vehicles from multiple city agencies. Source: Cyclomedia

its portfolio of industrial assets to identify any that are vacant or underutilized and could be activated with new industrial uses/users, whether it be through the siting of new or relocated agency operations or disposition through sale or lease. Through this effort, the City would gain a more global understanding of ways to improve efficiency or optimize the potential of the portfolio. The City could leverage its industrially zoned sites for industrial siting by assessing opportunities for co-location of compatible City operations or consolidation of certain types of City operations, which could open up additional City-owned land for potential future activation.

# 15. Utilize publicly owned industrial campuses to support the piloting of innovative climate technologies and modern industrial practices

NYCEDC is advancing the development and deployment of innovative climate technologies and modern industrial practices through various initiatives that are occurring at their assets throughout the city.

At the Brooklyn Army Terminal, NYCEDC is investing \$100 million to develop a cutting-edge climate innovation hub, BATWorks which will anchor a growing ecosystem along the New York Harbor for new climate technologists, entrepreneurs, and talent working to develop, pilot, and deploy new solutions to combat the effects of climate change. Led by LACI and

Cambridge Innovation Center (CIC), BATWorks will enable emerging market innovators, small and medium sized companies, and growth-stage and commercialization-stage companies to build and rapidly prototype products, provide business support using the fit for-purpose space, and carry out product research and development.

NYCEDC has partnered with the Trust for Governor's Island and the Brooklyn Navy Yard Development corporation to jointly invest \$725 million in the Harbor Climate Collaborative, which will activate six million square feet of space for climate research, innovation, and training. NYCEDC continues to spearhead the redevelopment of the Hunts Point Food Distribution Center, which will include a groundbreaking, freight-focused electric truck and vehicle-charging depot as well as modernized loading infrastructure and enhanced intermodal capacity.

# 16. Build a high-quality campus experience at City-owned industrial assets through sustained investment in facility infrastructure and amenities that serve businesses, workers, and local communities

NYCEDC is investing in its industrial assets, adding new infrastructure, amenities, and tenants that will further enhance these facilities' ability to serve businesses, workers. and local communities. In Hunts Point. NYCEDC is in the process of implementing over \$1 billion in projects that seek to build resiliency and improve local transportation networks, the environment, and quality of life. At the Bush Terminal Campus in Sunset Park, NYCEDC is delivering new leasable space for growing industries, supporting workforce training and other employment initiatives, and creating new, resilient waterfront public spaces. NYCEDC has also ramped up leasing activity at the Brooklyn Army Terminal, signing 17 new leases that account for over 225,000 square feet in industrial space in 2024 and at the Brooklyn Wholesale Meat Market, a 175,000 square foot processing, cold storage, and distribution facility that is now fully tenanted.



Figure 32: East End Studios in Sunnyside. Source: NYC MOMF

## **Strategy 4 - Optimize resources available to industrial businesses that seek to grow or transition**

## 17. Continue to support the New York State Film Tax Credit program

New York offers a 30 percent tax credit on labor, equipment, and other costs incurred during the production of films and television series within the state. The program has been essential to retaining and growing New York City's base of film and television production operations since its inception. The FY 2026 New York State budget, which was signed by Governor Hochul in May, expanded and enhanced the program, providing dedicated support for independent projects, covering costs associated with scoring and post-production, and offering supplemental incentives that encourage recurring business and multiple simultaneous productions. The Mayor's Office of Media and Entertainment (MOME) was one of several key advocates that helped ensure that these measures were included in the state budget.

## 18. Explore potential improvements to existing tax credits for industrial businesses

The City administers a variety of tax incentive programs that seek to support industrial businesses such as the Industrial Commercial Abatement Program (ICAP), Industrial Development Agency (NYCIDA), the IBZ

Tax Credit, and the Relocation Employment Assistance Program (REAP). Throughout the preliminary public engagement for the NYC Industrial Plan, stakeholders have expressed concerns around industrial businesses' ability take advantage of these incentives as well as their effectiveness at supporting growth, citing concerns related to geographic and other eligibility criteria, size thresholds for the investments that the incentives can be used to offset, the value of the tax credits, and what specific tax liabilities the credit can be claimed against. The City should convene an interagency working group that includes the Department of Finance, Office of Management and Budget, Department of Small Business Services, and NYCEDC, among others, to identify how these incentives could be improved to better stimulate industrial business activities.



Figure 33: Stapleton Waterfront Mass Timber Development. Source: NYC EDC

# 19. Advance the adoption of new climate technologies in the industrial sector through NYCEDC's Mass Timber Studio and Resilient Energy Studio

NYCEDC has recently launched the Mass Timber and Resilient Energy Studios, cohort-based initiatives that seek to broaden awareness and accelerate the adoption of sustainable practices and technologies such as mass timber construction and innovative energy storage concepts. These studios respectively provide technical assistance and regulatory guidance to mass timber and novel energy storage projects in the early phases of project planning and design. The projects being advanced by these studios benefit from collaboration with community organizations, energy experts,



Figure 34: An industrial street in Sunnyside with two buildings built before the 1961 zoning code. The low-rise building could be built today but the loft style building could not under current zoning. Source: Cyclomedia

leading industry stakeholders, and city regulators like DOB and FDNY.

## **Strategy 5 – Support workforce development programs**

## 20. Support workforce development and community hiring at publicly owned industrial assets

The City and NYCEDC will continue incorporating community hiring goals into all City-funded projects to maximize employment opportunities for residents.

#### 21. Support M/WBE and diverse

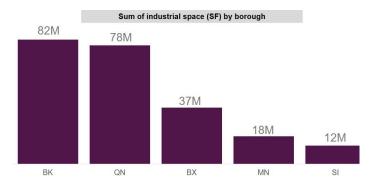


Figure 35: Small buildings comprise most of the inventory in NYC. Source: NYC Planning, PLUTO, 24v4.1

### entrepreneurship in industrial sectors

NYCEDC will continue to invest in ConstructNYC. a capacity-building program that connects Minority-and Women-owned Business Enterprises (M/WBEs) with contracting opportunities on NYCEDC projects. The program aims to increase M/WBE participation in all procurements by prequalifying trade contractors and reducing barriers to industry participation. ConstructNYC is also expanding its support for the green economy through specialized training for sustainable construction and climate-resilient infrastructure. By providing technical assistance and directly connecting participants to active projects, the program strengthens local business capacity and advances inclusive contracting within publicly owned industrial assets.

### **DEMAND FOR SPACE**

Ensuring that the city has a sufficient inventory of space to support the growth and evolution of the industrial sector is the second key issue identified in the NYC Industrial Plan. Although

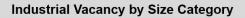
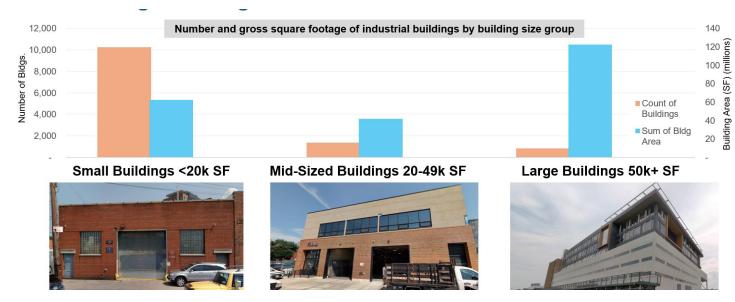




Figure 36: Industrial vacancy remains low but has risen in recent years due to the construction of large distribution warehouses. Source: NYC Planning analysis of CoStar.



businesses are optimistic about their plans to grow in NYC, surveys and interviews with industrial businesses and business support providers indicate that the availability, cost, and quality of the industrial real estate is an urgent impediment to growth.

Several factors have coalesced, contributing to increased demand for industrial space, including:

- The rapid expansion of service sector jobs outside Manhattan, which is driving the conversion of warehouses and loft buildings, The aging and shrinking inventory of warehouse space that is sufficient to meet businesses' evolving needs;
- The opportunities and imperative of

alleviating the city's urgent housing crisis through new housing near transit;

- The growth of transportation and construction sub-sectors, which drive demand for very large, highway-accessible sites to locate large distribution centers, truck fleets, and storing and staging equipment;
- The need to site or relocate City operations as the population and economy grow and some facilities have been redeveloped for housing, parks, and economic development; and
- Zoning constraints that limit the ability to redevelop or expand existing buildings to accommodate business needs.



Figure 37: Industrial asking rent per square foot by year built. Source: NYC Planning analysis of CoStar.

Despite these real estate challenges, many surveyed industrial businesses remain optimistic about their future in New York City. Survey data reveals that 81 percent expect to maintain or expand their operations in NYC over the next 5 years. This data is consistent with patterns of business creation, space absorption, and land use applications that suggest potential growth especially in logistics, construction, energy, and film spaces.

New York City currently has approximately 227 million square feet of industrial space built across 28,500 acres of industrially zoned land, with most of the industrial stock in Brooklyn and Queens.

While most industrial buildings are relatively small (under 20,000 square feet), single-tenant buildings, more than half of all industrial space exists in large-scale structures (over 50,000 square feet). Small companies (less than 10 employees) comprise most industrial business and report needing very small spaces – less than 5,000 sq. ft. – which is easier to access in multitenant industrial space.

Vacancy has risen in recent years across all property sizes, but especially in larger facilities, the one area where new supply has been strong. For small industrial businesses looking to rent, however, the market remains very tight. The vacancy rate for smaller properties remains very low at less than five percent.

However, despite these market changes and rising rents (averaging \$25 per square foot, to

over \$30 per square foot in new developments), these rents still fall short of what is needed to incentivize new construction. Developers have indicated rents well above \$30 per square foot are required to support new industrial construction, a figure that puts many industrial tenants at a competitive disadvantage to non-industrial users that can pay for new space.

Prices vary considerably by submarket, with areas like Long Island City, Red Hook, and Sunset Park, and portions of the Bronx commanding relatively higher rates due to their proximity to dense population centers and last-mile logistics demand. Even in these stronger



Figure 38: A row of small and active warehouse buildings in South Brooklyn. Source: NYC Planning.

sub-markets, average industrial rents, often ranging from \$18 to \$30 per square foot, are generally not sufficient to justify the high cost of new construction, which can exceed \$60 per



Figure 39: Lady M Bakery in Long Island City combines office and active industrial uses in one facility. Source: Cyclomedia

square foot.

The type of space that industrial businesses need is diverse and often bespoke, requiring businesses to make significant capital investments in buildings and equipment to accommodate their operations. Many industrial uses have unique siting needs, limiting the options on where they can locate.

#### **Small Warehouses**

Small warehouses typically range from 1,000 to 20,000 square feet. These facilities often host light industrial activities, construction contractors, storage, and distribution on a smaller scale. In New York City, these buildings make up a large share of the industrial stock and are generally older.

#### **Multi-tenant spaces and loft buildings**

Larger spaces can also meet the needs of very small industrial companies, which frequently locate in larger, multi-tenant buildings where they can share loading, freight elevators, and amenities with other tenants. These companies often include small-scale manufacturers, research and development firms, start-ups that need space to test and prototype products, and office space. The higher density loft buildings of Midtown, Sunset Park, and Long Island City typify this kind of space. Since these buildings typically have little off-street loading and parking, they are often located near transit and serve businesses that are not truck-dependent and whose employees primarily commute by public transportation.

#### **Large warehouses and distribution centers**

Large warehouses (over 50,000 square feet) are typically single-story buildings designed for the storage, distribution, and production of goods. These buildings are fundamental to logistics, manufacturing, and supply chain operations. They are usually located near highways, ports, railroads, or airports to facilitate efficient transportation and distribution. Common warehouse uses are logistics centers, e-commerce fulfillment, bulk material storage, or cold storage. Although multi-story warehouses have been constructed in NYC in recent years, they are not common.

#### **Open storage**

Open storage are sites are those with few built structures (defined for the purposes of this







Fleet Parking

**Concrete Batching Facility** 

**Construction Material Storage Yard** 

Figure 40: Very low built density industrial sites can still be very high in activity and delivering crucial services. Source: NYC Planninganalysis of CoStar.

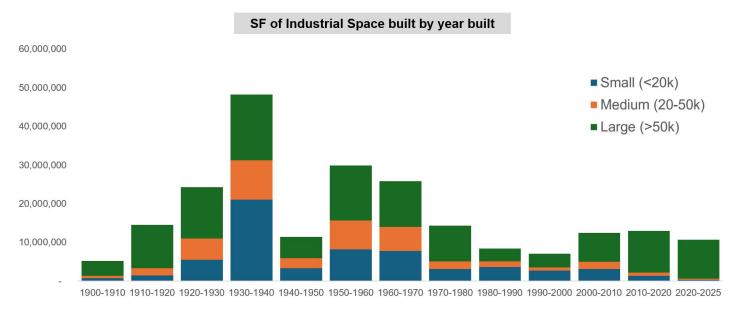


Figure 41: Square feet of industrial space built in NYC by decade. Source: NYC Planning, PLUTO, 24v4.1.

study as having a built FAR below 0.2) and which support fleet parking, material storage, unenclosed industrial activities like concrete mixing or recycling, and other critical logistics functions. Very low-density privately-owned sites like those with open storage account for 21 percent of the city's industrially zoned land.

#### Infrastructure and public facilities

Utilities, public facilities, and airports account for 51 percent of the city's industrially zoned land. These facilities are often less than 1.0 FAR. Critical infrastructure, city facilities, materials processing operations, and critical logistics facilities can be particularly challenging to site or relocate because of their locational needs. For example, a concrete batching facility must be in an M2 or M3 manufacturing district. preferably with access to an arterial highway. and within a certain distance of its customers to ensure the viability of its product. Other public and private industrial operations like fleet parking, repair garages, and storage facilities have similarly stringent siting criteria, including very large sites, high electrical capacity, and proximity to customers or service populations. The limited universe of appropriate sites that meets their criteria makes it very challenging to site or relocate these uses.

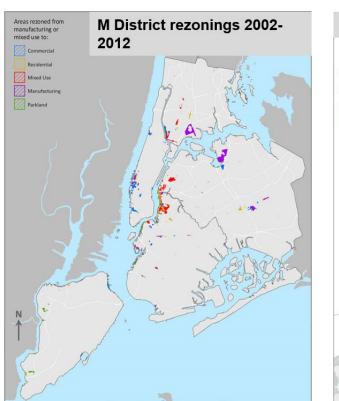
The city's industrial building stock is aging. Approximately 70 percent of the city's existing

industrial buildings pre-date the 1961 zoning changes and do not meet the needs of modern industrial businesses. Routine issues in older industrial buildings include outdated electrical systems, limited ceiling heights, inadequate loading docks, and high maintenance and insurance costs. While there has been some resurgence in industrial development since 2020, that activity has largely come in the form of large-scale projects, not the smaller, more flexible spaces that many businesses say they prefer.

Older industrial spaces, though less efficient and often lacking in modern features like high clear heights and loading dock access, remain in use because they offer lower rents that tenants can afford. The main obstacle to new industrial development is the exceptionally high land and construction costs in NYC, coupled with competition from higher value uses like residential or commercial redevelopment. As a result, despite growing demand driven by e-commerce and logistics, the rent gap between what the market can support and what is needed to make new projects financially viable continues to suppress speculative industrial construction.

#### The role of zoning

Regulatory and zoning constraints further limit the city's ability to expand industrial space. Most manufacturing zones are still governed by 1961 zoning rules that set out to reimagine the



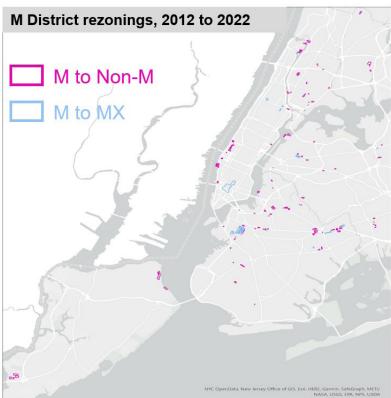


Figure 42: Rezonings of M Districts 2002 to 2022. Source: NYC Planning analysis of Zoning District shapefiles (NYZD).

city's industrial areas as low-slung industrial parks with large open parking lots. The rules significantly limit building size in most places, require high levels of off-street parking and loading, and impose stringent sky exposure planes that impede efficient building envelopes. Older buildings that once vertically integrated industrial uses are prohibited under most existing M districts, and many of the existing ones became nonconforming under the 1961 zoning. The vast majority -96 percent -of all M-zoned land is capped at 2.0 FAR, ensuring that any redevelopment is low-density and reducing the incentive to create replacement space. These rules can make it incredibly costly and difficult for businesses to expand or upgrade their buildings, limiting investment industrial areas and keeping supply artificially low and outdated.

Over time, as the number of manufacturing businesses in the city has declined, previous factory buildings have been attractive sites for the repurposing of space. The number of non-industrial jobs in industrial areas has climbed substantially, adding considerable economic growth in areas like Long Island City, but

contributing to fears of price competition from businesses that have valued the affordability of less competitive areas.

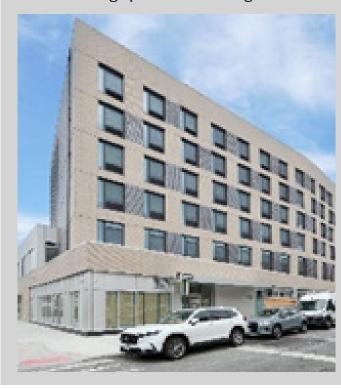
Rezonings in M districts have contributed to concerns about real estate pressure on industrial businesses. In the decade from 2002-2012, large neighborhood plans in centrally located and transit-rich areas like Long Island City and Greenpoint-Williamsburg resulted in a net conversion of 1,100 acres of industrial land to zones that permit residential use. This accounted for 5.2 percent of the city's supply of M-zoned land. Yet, these plans have been instrumental to advancing the City's housing goals. The new housing from this era developed in M zones has generated 24 percent of the new housing completions citywide, representing over 84,000 new homes, 23 percent of which are income restricted and affordable.

The rezoning of M-zoned land has slowed considerably since 2012, as the number of centrally located transit-accessible M-zoned areas has diminished. From 2012-2022, rezonings accounted for 430 acres (1.5 percent) of net loss of M-zoned land. Many of

the rezonings have been to mixed-use districts, a tool designed to meet housing needs while accommodating industrial uses. This includes ongoing changes in Jamaica, Queens, Long Island City, Midtown South, and the recently adopted Atlantic Avenue rezoning, which all benefit from the use of mixed-use zoning as a strategy for generating new market rate



Opened in September 2024, the GMDC Brownsville Industrial Center reimagines the former Fox's U-Bet's Chocolate Syrup Factory in Brownsville as 39,000 square feet of affordable, light manufacturing space. Bridge Rockaway features 174 units of affordable and supportive housing, including set-asides for formerly homeless seniors, veterans, and adults living with serious mental illness. This building is the first of its kind to construct new manufacturing space with housing in NYC.



and affordable housing in areas of historic industrial concentration. The 2024 rezoning of areas around future Metro North stations in the east Bronx neighborhoods of Morris Park and Parkchester is another example of how new transit resources change the opportunities associated with industrial areas by introducing new passenger accessibility; planned investments in Brooklyn and Queens along a future Interborough Express (IBX) corridor may present similar changes to existing conditions that will need to be studied closely to understand what land use changes are warranted.

While those rezonings contributed to a small net loss of industrial land, industrial employment during that same period still increased. This trend highlights the evolving space needs of industrial businesses.

The City has used MX (mixed-use) zoning to balance residential, commercial and industrial needs. New York City has been at the forefront of mixed-use development since the Special Coney Island Mixed Use District was created in 1975. When applied, MX areas experienced significant job and wage growth, though industrial employment declined slightly, underscoring the difficulty of maintaining productive industrial space in mixed-use environments. Currently, there are 25 special mixed-use districts in four boroughs, with the largest in Greenpoint-Williamsburg in Brooklyn and Long Island City in Queens.

Historically, MX districts have been a tool to allow for a gradual transition away from industrial uses to a greater mix of residential and commercial, rather than a tool to grow and encourage industrial use. Most use mixing occurs at the neighborhood level, or within existing buildings where residential has moved in next to existing industrial uses. Ground-up new construction of multi-story buildings where new industrial space and new residential space have been co-located in the same building has been exceedingly rare.

However, advances in technology and computerized production have enabled

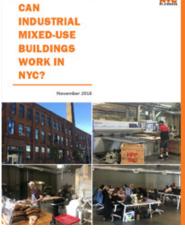


Figure 43: Can Mixed Use Buildings Work in NYC, 2018. Source: NYC Planning

some types of light industrial businesses to operate successfully in traditional commercial spaces. Light industrial uses can sometimes be safely integrated into mixed-use buildings through thoughtful design features such as soundproofing, separate loading

areas, and air and noise quality controls that minimize impacts on residential or commercial tenants. Revenue generated from non-industrial tenants, such as office or residential units, can help subsidize the cost of developing and maintaining the industrial component, making these projects more financially viable than standalone conditions.

The 2018 study "Can Mixed-Use Buildings Works In NYC," issued by the Department of City Planning, found that residential-industrial mixed-use development could be feasible, but only in very strong real estate markets and under very specific conditions. In most instances, zoning and financial incentives would be necessary to support the development.

The 2019 study suggested that there are opportunities to advance industrial mixed-use development. However, because of the physical and financial challenges associated with industrial mixed-use space, requirements for inclusion of industrial space risk slowing investment. Moreover, that study did not explore the environmental challenges to colocating industry with residences, which must be better understood.

# GOAL: ADVANCE BALANCED & COHERENT LAND AND REAL ESTATE STRATEGY

As our city continues to grow, we cannot afford

to leave our industrial areas behind, saddled by aging buildings and infrastructure. Our vision is to support a land use and real estate policy that supports economic development in our industrial areas, while recognizing both the opportunities and the limits of mixing uses. To meet the growing demands for housing, jobs, and industry, the City seeks to advance a balanced and coherent land and real estate strategy that includes both reinforcing industrial areas as centers for preserving the limited subset of uses that require segregation, while also promoting the inclusion of industrial uses in mixed-use projects, all the while reducing regulatory barriers to industrial development and modernizing city processes to make it easier to site industrial operations. Leveraging public assets, such as those managed by NYCEDC. which currently hosts one in twelve industrial jobs in the boroughs outside Manhattan, will also be critical in sustaining and growing the city's industrial base.

## **Strategy 1 - Strengthen primary industrial** areas

# 22. Establish a new land use framework to guide development and investment in manufacturing zones

The NYC Industrial Plan identifies specific geographies within its manufacturing zones with important or unique assets and infrastructure to support industrial activity and jobs. These areas will serve as the locations to advance place-based policies to preserve and grow the industrial sector; offer a more comprehensive framework for future development in M zones; and provide more real estate stability for industrial businesses seeking to make long-term investments in their assets.

The following high-level framework is proposed to advance this strategy:

Primary Industrial Areas (PIAs), which tend to have fewer non-industrial uses or pedestrian activity and large development sites, are most appropriate for the siting of core infrastructure, truck-dependent operations, and other intensive uses. Separation of uses to protect public

#### Primary Industrial Area



Predominantly industrial today and intended to be preserved as mostly industrial

safety and prevent conflicts with business operations is most critical in PIAs. Building and street design guidelines should be most responsive to truck movements and investments

in industrial infrastructure should be prioritized. Public policy should seek to preserve industrial uses within PIAs to maintain a reservoir of space within the city to support essential and difficult-to-site operations. These areas may be appropriate locations to map M3A districts, new zones that restrict certain non-industrial uses, and are not appropriate for residential rezoning.

Secondary Industrial Areas (SIAs), which tend to have a greater mix of commercial and industrial uses, are most appropriate for smaller scale, higher-performing, and less truck-dependent industry. Businesses located in SIAs may create conflicts that necessitate segregation from residential uses, but typically

### Secondary Industrial Area



Mixed tenancy and closer to residences, intended to be preserved as mixed job centers

benefit from greater proximity to transit and other businesses and can often function in smaller spaces in multi-story buildings. More employees and more customers walking through

the area mean that building and street designs need to prioritize pedestrian safety and reducing conflicts with industry. Public policy should preference industrial uses within a broad mix of commercial activity in SIAs. These areas may be appropriate locations to map M2A districts, new zones that allow for a wide range of commercial and industrial uses, but preference industrial uses by providing them with a higher FAR than other commercial uses.

**Other M-Zones** are manufacturing zones outside of Primary and Secondary Industrial Areas that have the greatest mix of uses and

Other M-Zone



Most mixed and closest to residences and transit – accommodate industrial in pedestrian prioritized environment

are closest to residences and transit. Planning should allow for the continued presence of industrial uses in an environment that prioritizes pedestrian access and supports a broad range of

uses. These areas may provide opportunities for higher density development and may be appropriate for mapping M1A districts, a new M-district that accommodates job-dense, transit-oriented commercial and industrial development. They may also be appropriate for new MX districts based on individual planning considerations, in cases where the continued mixing of uses presents opportunities for better neighborhood outcomes. Any zoning change would remain subject to the significant environmental and public reviews required by Uniform Land Use Review Procedure (ULURP). Public policy should focus on investment in environmental upgrades that allow for safe colocation with industrial uses.

Clearly articulating the City's land use goals within M zones will serve to strengthen the primary industrial areas by directing development to the appropriate locations. For details on the methodology to identify PIA and SIA boundaries and to see proposed maps, see the appendix.

# 23. Explore potential targeted changes to the current BSA special permit discretionary process for permitting schools within M zones to address conflicts with industrial activities

Schools, pre-Ks, and daycare centers are permitted in light industrial districts (M1 zones) by a Board of Standards and Appeals (BSA) special permit if there are safeguards to protect children from noise and traffic. However, as the city grows and new schools are needed.

demand for sites in M1 zones is increasing and conflicts between school populations and truck movements are becoming more common, raising safety concerns. The current BSA process should be evaluated to determine whether changes should be made to enhance school safety and minimize disruption to industrial businesses.

## Strategy 2 - Make it easier to build new industrial space & catalyze investment in industrial areas

## 24. Help businesses take advantage of City of Yes for Economic Opportunity changes

Several provisions of City of Yes for Economic Opportunity (COYEO), adopted in 2024, will make it easy to create new industrial space outside of M-zones and encourage more investment in M-zones. First, COYEO relaxed zoning to allow certain additional production activities to occur in commercial districts, significantly expanding the areas where smallscale, clean production is allowed. It also newly allowed indoor agriculture, previously limited to M-zones, to locate in commercial districts. Second, it modernized loading rules so buildings can adapt over time. Previously. loading requirements applied to enlargements and changes of use, imposing a costly physical retrofit the building user may not want or need. This change will make it easier for the city's building stock to evolve and stay occupied over time. Finally, COYEO created an opportunity for small-scale distribution centers to locate in commercial areas by creating a new "Micro-Distribution Facility" use and allowing them in commercial districts.

#### 25. Adopt ongoing Neighborhood Plans

NYC Planning is undertaking two neighborhood planning efforts in the Long Island City and Jamaica neighborhoods of Queens. The OneLIC rezoning aims to redevelop 54 blocks in Long Island City into a dynamic mixed-use neighborhood inclusive of industrial, residential, and commercial uses. The plan seeks to deliver nearly 14,700 new housing units, including 4,300 permanently affordable homes through

Mandatory Inclusionary Housing (MIH). It also creates the potential for 3.5 million square feet of new commercial and industrial space. expected to generate roughly 14,400 jobs. Zoning changes in the industrial area will lift a 2 FAR cap to allow mixed-use industrial development, significantly expanding the opportunity for job creation west of Court Square. The proposal includes a revitalized and resilient waterfront esplanade from Gantry Plaza to Queensbridge Park. Public investment will enhance open spaces, infrastructure, schools, and transit connections. As the largest housing initiative in the city in over two decades, OneLIC represents an opportunity to address housing affordability, job creation, and climate resilience and to bring new opportunity to an underutilized industrial area.

The Jamaica rezoning plan covers approximately 230 blocks in Downtown Jamaica and surrounding corridors in Queens. It aims to enable up to 12,000 new housing units, including about 4,000 permanently affordable homes, through what would be the city's largest MIH zone. The plan also supports over 2 million square feet of commercial and community facility space, along with industrial development. Zoning changes will promote denser, mixed-use growth in the downtown core and along transit corridors while modernizing industrial areas with new zones created as part of City of Yes for Economic Opportunity. The initiative is designed to support commercial, residential, and light industrial development and supports redevelopment of industrial areas.

# 26. Study parking and loading zoning requirements to identify impediments to new development

In many industrial districts, zoning requires new developments to build a significant amount of off-street parking and loading for all uses that often exceed what businesses need. In addition, it's often impracticable or infeasible to accommodate the required levels of parking and loading on all but the largest development sites, particularly for mixed-use and multi-story buildings. The result is that the rules discourage new development in many industrial areas

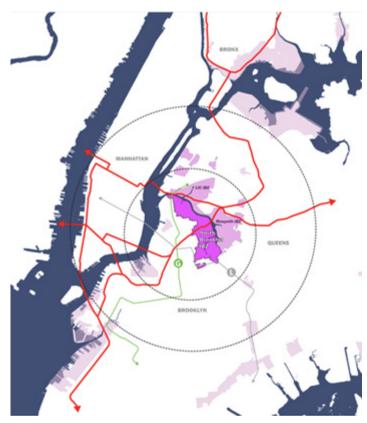


Figure 43: The North Brooklyn IBZ is in the geographic center of New York City with excellent subway and highway connections. A 2018 study proposed a land use framework for the area.

where the market can otherwise support it. NYC Planning should study possible changes to the Manufacturing District parking and loading rules to identify impediments to new development.

## 27. Identify priority areas for new industrial neighborhood studies

Many of the city's industrial neighborhoods are poised for economic growth but lack proper zoning and other place-based strategies to support it. Often, outdated zoning unnecessarily limits floor area, even near transit, placing a ceiling on potential job density and increasing pressure to convert existing warehouse space. In some cases, businesses in precarious real estate circumstances lack the stability needed to make capital investments. NYC Planning should identify priority geographies for industrial neighborhood studies to identify zoning changes and new capital investments, programs and services to address business needs and support industrial growth. This should include areas for industrial intensification, as well as locations for



Figure 44: Many industrial areas rely on private streets, such as Industrial Loop in Staten Island, which can complicate efforts to redevelop Source: Cyclomedia

encouraging mixed industrial and commercial space. It could also include currently M-zoned areas outside of primary or secondary industrial areas that may be appropriate for MX zoning.

For example, the City could explore updating and implementing the 2018 North Brooklyn Industry and Innovation Plan. The Plan, which was not implemented, proposed a land use framework for the North Brooklyn IBZ that proposed to increase space for jobs and economic activity by both supporting essential industrial businesses in an industrial core while also increasing job density in transit-accessible areas adjacent to residential neighborhoods.

# 28. Streamline the process for development on unbuilt and private streets to make it easier to develop industrial sites

New York City has many mapped but unbuilt streets ("paper streets") in industrial areas that are not likely to ever be constructed. This land would likely become sites that could be developed as-of-right but for the requirement that a developer must receive a waiver pursuant to Section 35 of the General City Laws to build in the bed of a mapped street. Examples include 180 Street in Queens and Botany Place in Staten Island.

Similarly, NYC Planning has identified growing industrial districts across the city that are not accessible by mapped streets and instead

rely on a network of record streets and private roads. Development in these areas would often occur as-of-right but for the requirement that development that does not front a mapped street must seek a waiver pursuant to Section 36 of the General City Laws (among other reviews to ensure safe access or egress). "BSA streets" are streets that are de facto created through this process.

## **Strategy 3 - Leverage mixed-use space for industrial uses**

# 29. Launch a study to develop an economically feasible and environmentally safe model for multi-story mixed industrial-residential development

The city relies on the ability to use MX zoning to achieve the multiple public policy objectives of creating housing in historically industrial areas while growing jobs. Moreover, colocating industrial uses with other types of uses could free up sites for new investment without displacing space for industry. However, ambiguity related to the enforceability and consistent interpretation of MX zoning raises important questions that may necessitate both zoning and non-zoning solutions. A study is needed to identify a model for mixed industrial development that is viable and environmentally safe to support broadly expanding its use.

# 30. Target marketing of NYCIDA incentives to encourage industrial space within mixed-use buildings

To complement new zoning regulations codified in City of Yes for Economic Opportunity, NYCEDC plans to target incentives to companies and developers investing in industrial space within mixed-use buildings. This effort will leverage the NYCIDA's authority to offer discretionary financial assistance through its active Industrial Program, which supports industrial companies and developers undertaking capital improvements to industrial properties in New York City. The program's parameters are defined in the NYCIDA's Uniform Tax Exemption Policy (UTEP). As part of this effort, NYCEDC commits to streamlining and

digitizing the application process, as well as strengthening its marketing.

## **Strategy 4 - Update city processes to make it easier to site industrial operations**

# 31. Use City reporting and tracking tools to enhance the efficiency and transparency of facility siting

To continue making City services readily available to all New Yorkers, it is important that agencies have appropriate facilities strategically located throughout the five boroughs and the region. The Statement of Needs is one of many tools that helps City agencies make effective and equitable siting decisions, and specifically covers new facilities as well as the relocation, expansion, or consolidation of existing facilities. It identifies new facilities the City plans to site and existing facilities the City plans to close, expand, or reduce significantly in size during the next two fiscal years.

The DCAS Space Request Portal (Portal) is a centralized platform used by DCAS and OMB to receive requests and track agency space needs. City agencies submit detailed space requests through the Portal, where they outline requirements such as size, location, and use. OMB evaluates these needs in collaboration with DCAS to determine whether to allocate existing city-owned space, reconfigure current assets, or pursue privately owned spaces. The system improves transparency and prioritization by tracking all requests in one place which allows for more efficient and equitable space management. The Portal is a component of the City's long-term strategic facility planning, that can help identify trends in space usage across the city's real estate portfolio. It is currently used to inform the Statement of Needs.

# 32. Identify ways to streamline the City's approval processes to make it easier to find suitable locations for critical, "hard-to-site" city operations.

The City must go through a lengthy public review process whenever it leases or acquires a site to locate city facilities or operations. This can

add significant time and cost to siting and can result in higher acquisition costs as property



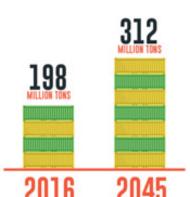


Figure 45: NYC Freight Volumes by Million Tons. Source: Freight NYC

Truck Volume Crossing

owners leasing and selling to the city face limited competition and long lead times due to City's obligations to undergo ULURP review. This creates particularly unique challenges for hard-to-site facilities, such as tow pounds, green infrastructure, sewer infrastructure. sanitation garages,

and repair facilities, which have specific siting criteria and can only locate in limited geographies that meet zoning or fair share requirements.

33. Explore changes to the environmental review process to allow for higher scrutiny of industrial business displacement within Primary Industrial Areas.

"It is important to build SMARTER roads that eliminate the conflict btw truck traffic and other road users, particularly cyclists & pedestrians.

Sometimes a land use action or rezoning can result in business displacement when a new type of development is allowed. Some businesses when displaced will have a harder time relocating than others due to regulations or other impediments. For example, concrete batching plants have greater locational needs due to both the timing of their product being only able to travel a certain distance and regulations for siting new plants. They are also limited by zoning as to where they are permitted to locate. The environmental review process should acknowledge the goals of the Industrial Plan and the purpose of Primary Industrial Areas as places to preserve and grow critical industry when considering the effects of potential business displacement from these locations.

### **CONGESTION AND TRUCKS**

High Volume Truck Crossings
1. George Washington Bridge (31,764)
2. Throgs Neck Bridge (13,929)
3. Verrazano-Narrows Bridge (12,368)
4. Kocokaráko Bridge (16,967)
5. Long Island Expressway (16,969)
6. New England Thruway (8,852)
7. Goethals Bridge (8,514)
8. Marhattan Bridge (8,514)
8. Marhattan Bridge (8,514)
9. Queens-Mictiown Tunnel (7,998)
10. Lincoin Tunnel (7,998)
11. Holland Tunnel (7,998)
12. Outerbridge Crossing (5,022)

With a population of 8.5 million residents, 4.6 million workers across 300.000 businesses, and tens of millions of tourists and visitors daily, New York City generates an enormous demand for goods. In fact, according to recent estimates.198 million tons move through the city annually, a number that is projected to grow to over 300 tons in the next two decades. An estimated 96 percent of all freight moves by truck, along a limited network of highways and designated truck routes. These routes funnel traffic through a small number of heavily used bridges and corridors, concentrating





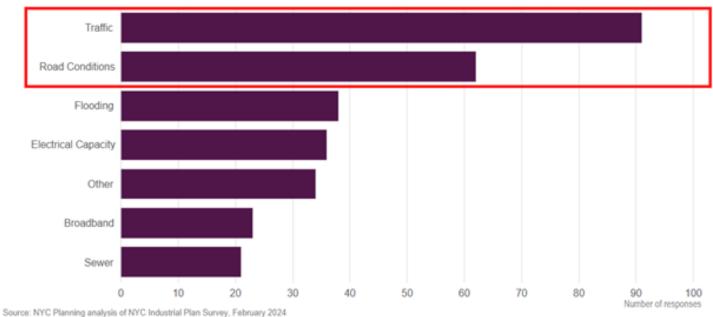


Figure 47: Infrastructure challenges cited by industrial business survey respondents. Source: NYC Planning analysis of NYC Industrial Plan Survey, February 2025.

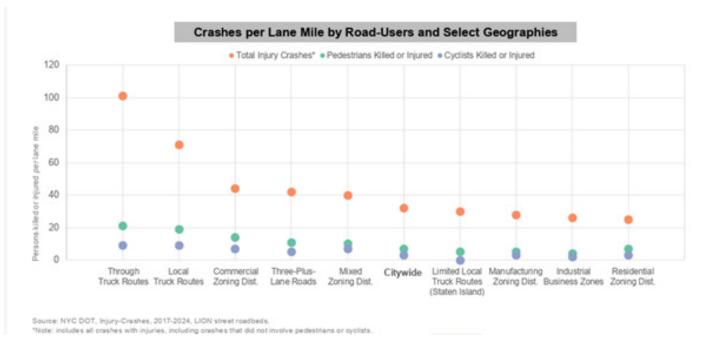


Figure 48: Crashes involving trucks are more frequent in commercial districts and along local truck routes. Sources: NYC DOT, Injury-Crashes, 2017 – 2024. Note: includes all crashes with injuries, including crashes that did not involve pedestrians or cyclists.

congestion and its associated environmental and quality-of-life impacts.

While freight movements affect the whole city, they have a unique and interconnected role with industrial businesses that generate and rely on truck movements, and the industrial areas that support the logistics of the city and cluster freight movements. Industrial areas

exist in areas historically close to a range of transportation assets, including waterfront infrastructure, highways, through and local truck routes, freight rail lines, and airports. These areas and the infrastructure supporting their connectivity generally date to the 20th century, where most freight was water or rail dependent. As these areas have adapted to today's trucking patterns, the volume of

movements can place tremendous strain on local roadways and local users of an area, particularly if the area is not well-served by highways. Additionally, industrial areas have historically been located adjacent to public or lower income housing, resulting in the burdens of concentrated truck zones being experienced inequitably by lower income communities.

Industrial businesses, workers, and residents all report that managing trucks in their area is a chief concern that affects the mobility of workers, infrastructure, safety, and perception in these areas. While businesses are reliant on goods movement and protective of the ability to continue to manage their truck-reliant operations, they also note that the chaotic and congested streets of industrial areas can be a detriment to future investment.

At the same time, data shows that the challenges of truck management are not limited to industrial areas, but follow the routes where trucks are most prevalent – particularly in areas where people and trucks have the greatest likelihoods of interaction. Data shows that crashes involving trucks are more frequent in commercial districts and along local truck routes where trucks share space with pedestrians and cyclists. While a high volume of truck activity occurs in manufacturing zones, they are often not the areas where these interactions are most dangerous, highlighting the spatial mismatch between freight routes and land use.

Trucks also have a considerable impact on both the environment and public health. Heavy-duty vehicles are responsible for roughly half of all on-road tailpipe emissions in New York City (despite representing just a fraction of total vehicle activity) and are significant producers of fine particulate matter, which contribute to respiratory disease. While City initiatives have successfully encouraged some operators to adopt low or no-emission vehicles, commercial cargo bicycles, and other sustainable delivery methods, these alternatives only support a small share of overall freight volume at present.

At the root of the challenge is an over-reliance



Figure 49: Proposed Hunts Point Marine Terminal. Source: NYC EDC

on trucks to move a high and growing volume of goods through a fundamentally limited street network. To address this challenge, the City has begun implementing initiatives aimed at reinventing the freight network for the 21st century – redistributing movements to truck alternatives where possible, while reducing the reducing negative impacts of truck movements where not.

## GOAL: SUPPORT MODERN AND EFFICIENT FREIGHT MOVEMENTS

In response to these findings, Goal 3 of the NYC Industrial Plan is to support modern and efficient freight movements. The City envisions a future where a greater share of goods moves through alternative modes such as maritime, rail, and micromobility, while truck operations are made safer, cleaner, and more efficient. Potential strategies to achieve this goal include expanding maritime and rail freight infrastructure, encouraging the use of micromobility for last-mile deliveries, optimizing truck routing and operations, and investing in the decarbonization of truck fleets. Collectively, these efforts will strengthen the freight system while mitigating the impact on neighborhoods and the environment.

## **Strategy 1 - Support the expansion of the maritime freight network**

### 34. Implement Blue Highways initiative

The Blue Highways initiative outlines how reactivating New York City's waterways for the movement of urban freight could create

approximately 8,000 net new jobs over the next decade, part of a Blue Highways workforce that could grow to up to 117,000 New Yorkers by 2035. This plan includes strategic recommendations on how to prepare the city's workforce to support the Blue Highways, while ensuring that a broad range of New Yorkers have access to the good jobs it will create.

## 35. Ensure future development can incorporate maritime access

One of the primary industrial-related changes City of Yes for Economic Opportunity made was to establish new types of job-intensive, manufacturing districts that permit higher densities, grant more flexibility around building form, and right-size parking and loading requirements. Once mapped, through both privately and publicly initiated rezonings, any waterfront developments that occur within them would be required to retain a waterfront yard that would enable sites to maintain space for potential maritime freight activation.

# 36. Encourage the maritime mode shift of freight through strategic activation of Blue Highways landings at publicly owned assets

As part of the Harbor of the Future Initiative, NYCEDC is leading the activation of multiple Blue Highway landings to begin realizing the benefits of reduced congestion, and air pollution that maritime mode shift can deliver as soon as possible.

NYCEDC and Con Agg Global announced a new waterside transloading facility at Hunts Point in partnership with EDC and the Fulton Fish Market. The Facility is expected to remove approximately 1,000 truck trips per month in the South Bronx. An initial, temporary facility will primarily move building materials, with a long-term plan to move food and beverage from Hunts Point into the Five Boroughs. NYCEDC will continue to plan for the activation of the Hunts Point Marine Terminal to move containerized and micro freight cargo by water. The City will remove the decommissioned Vernon C. Bain Correctional Center (VCBC) barge from Hunts Point and pursue an innovative Hunts Point

Marine Terminal on the site to move cargo from shipping containers onto additional barges and ferries for last-mile deliveries through New York City. The new marine terminal, which is estimated to create 400 construction jobs, 100 permanent jobs, and \$3.9 billion in economic impact over the next 30 years, would form a key connection point between ports up and down the East Coast.

NYCEDC also announced Downtown Skyport LLC as the new operator of Downtown Skyport (formerly Downtown Manhattan Heliport) in December 2024. As part of the new operating agreement, Downtown Skyport LLC will upgrade the site into a multi-modal hub of sustainable transportation, including facilitation of last-mile delivery as New York leverages its Blue Highways to deliver goods and services more sustainably and efficiently to New Yorkers.

NYCEDC is currently developing a vision for the future of the Brooklyn Marine Terminal, a 122-acre site in Red Hook and Columbia Street that is the last working port East of the Hudson River. NYCEDC is looking to modernize this port to include a Blue Highways node so that cargo coming in can get offloaded from ships, put on to smaller barges, and brought up to the Hunts Point produce center for distribution.

# 37. Assess opportunities for future maritime freight network expansion and explore potential measures to preserve strategic sites for future activation

The Waterfront Revitalization Program (WRP) requires projects in the Coastal Zone that are also within Significant Maritime and Industrial Areas (SMIA's) or Priority Marine Activity Zones (PMAZ's) to demonstrate how they would support industrial and/or waterfront industrial activities or the city's waterborne transportation network. However, the WRP only applies to projects that are also subject to City Environmental Quality Review (CEQR), leaving open the possibility that non-water dependent uses are still proliferating within these maritime preservation-oriented geographies. Given that growing the volume of goods and materials moved via waterway is a core component of the

City's long term freight strategy (per Delivering Green), there may be a need to identify sites with usable maritime infrastructure (i.e., bulkhead, etc.) and explore additional measures that prevent such sites from being redeveloped with non-water-dependent uses to ensure that the city retains enough maritime capacity to advance this goal.

## **Strategy 2 - Support the expansion of the rail freight network**

# 38. Continue to invest in City-owned rail infrastructure currently keeping trucks off the road

Another goal of Delivering Green was to shift freight from road to rail, with a particular focus on industrial businesses that transport heavier goods such as construction materials. waste, and certain bulk food products. Highway congestion, infrastructure costs, and air pollution concerns have made rail freight competitive again. NYCEDC, alongside its operating partners, is responsible for maintaining 3 active freight railroads in New York City: The Brooklyn Waterfront Rail System (BWRS), the Staten Island Railroad (SIRR), and the Hunts Point Food Distribution Center Rail spur (HPFDC Rail). Each of these railroads is critical to maintaining daily life in New York City — BWRS and SIRR respectively export tons of recycled materials and municipal solid waste each day while HPFDC Rail ensures timely delivery of fresh meat and produce. By maintaining rail corridors, the City can reduce truck traffic and resulting air pollutants.

# 39. Assess opportunities for future freight rail network expansion and explore potential measures to preserve strategic sites for future activation

While the 90 miles of freight rail lines that run through New York City stretch across the outer boroughs, there are three nodes in particular that are critical to connecting the city's rail freight to the regional and national network:

1. Fresh Pond, which is the main junction and classification yard for New York & Atlantic Railway, who operates most of the region's

freight rail; 2. The 65th Street Yard, which supports the car float that connects rail freight from points east of the New York Harbor to continental rail-connected yards in New Jersey; and 3. Howland Hook, which has maritime-rail intermodal capacity and is the only place in the city with direct access to the continental rail network via the Arthur Kill Lift Bridge. Given that growing the volume of goods and materials moved via rail is also a core component of the City's long term freight strategy (per Delivering Green), the City should explore what sites, either near these key assets or elsewhere, may be strategic to preserve for freight rail network expansion as well as potential measures that could support the future activation of such sites.



Figure 50: A NYC DOT branded cargo bike. A mode of freight movement to be encouraged. Source: NYC DOT

## **Strategy 3 - Facilitate and encourage the adoption of micromobility for cargo**

# 40. Maintain rule changes that establish new curb regulations and allow the use of pedalassist electric cargo bikes

In 2019, DOT launched the Commercial Cargo Bike pilot program, which enabled cargo bicycles from participating logistics companies to load and unload wherever commercial vehicles could. The pilot prompted a significant increase in cargo bike utilization, with cargo bikes making more than 130,000 trips, delivering over five million packages, and eliminating over 650,000 metric tons worth of carbon dioxide emissions in 2022 alone. In 2024, DOT updated traffic rules to allow pedal-assist cargo bikes to legally operate in New York City and established a permanent cargo bike program that continues



Figure 51: 21st St in Long Island City was redesigned to improve safety and freight movements. Source: NYC Planning

to support the adoption of these vehicles by providing guidance, curb access, safety education and outreach, and infrastructure improvements. Additionally, DOT has set a goal of having 25 percent of all last-mile deliveries be conducted via micromobility by 2040.

## 41. Explore new infrastructure and amenity investments to support micro-distribution

In 2021, City Council passed Local Law 166, which required DOT to issue an RFEI from entities interested in facilitating, operating, or using "micro-distribution centers," which are sites (often curbside) where goods are transloaded from larger freight vehicles to smaller, lowemission and electric vehicles or humanpowered modes such as cargo cycles or hand carts for final delivery. In April, DOT launched the "Microhub Zones" pilot program, which will establish 36 on-and off-street micro-distribution centers across the city, with each operated by an individual delivery company via an annual permit. DOT is collecting data from the first cohort of assessing what infrastructure and amenities could best support both the pilot program and micro-distribution networks, more broadly, such as electricity access for vehicle charging, safety barriers and fencing, or storage containers.

## **Strategy 4 - Maximize the efficiency of truck traffic operations**

### 42. Prioritize Street Improvement Projects

#### (SIPs) along Truck Routes

DOT regularly analyzes crash data and engages community-based stakeholders to identify rights-of-way that may warrant Street Improvement Projects (SIPs). SIPs are traffic engineering improvements that use multiple treatments (signals, markings, concrete, etc.) to better organize traffic, improve travel times, and create safe routes and crossings for both pedestrians and cyclists. DOT has executed dozens of SIPs in industrial areas. supplementing standard traffic calming measures with bespoke interventions that seek to ensure freight mobility and access while enhancing pedestrian and cyclist safety. Given that truck routes witness the highest rates of traffic crashes per lane mile, these corridors (and intersections along them) should be prioritized for future SIPs.

## 43. Explore expansion of DOT Overnight Truck Parking Pilot to all Primary Industrial Areas

DOT recently launched the Overnight Truck Parking Pilot program, which introduced a new metered parking option for commercial vehicles, including tractor trailers, in Hunts Point, Maspeth, and Flatlands/Fairfield that is available 24 hours a day. The pilot seeks to provide drivers with safe and convenient parking options during mandated rest periods and minimize overnight truck parking in residential areas. DOT is evaluating the performance of the pilot (in terms of utilization as well as user and community satisfaction), assessing the potential to add truck charging where possible, and working to identify additional neighborhoods that the pilot could be expanded to.

## 44. Implement changes to the Truck Route Network

Established in the 1970s, New York City's Truck Route Network is a system of local (for truck trips starting and ending within the same borough) and through (for truck trips that do not have the same borough origin and destination that may extend beyond City limits) routes that seek to connect major freight origins and destinations seamlessly, facilitating efficient

access to industrial and commercial areas. In 2023, the City Council passed Local Law 171, which requires DOT to redesign the Truck Route Network with a focus on enhancing safety and reducing traffic congestion while considering changes in land use, freight travel patterns, and industry trends. Truck route changes that DOT is proposing through this process seek to fill in gaps within the truck route network, provide connections between key freight generators, address changing land uses (i.e., in response to rezonings), and more generally improve the efficiency and reliability of freight movements.

# 45. Implement enhanced signage, enforcement planning, data collection, and other programmatic recommendations identified through the DOT Truck Route Network Redesign

Through the Truck Route Network Redesign process, DOT identified a series of "core commitments" that it plans to implement upon completion of the study. These include adding traffic calming measures along all new truck routes where feasible, adding new signage that further clarifies where trucks are allowed to operate, working with NYPD for additional, targeted enforcement near new truck routes, and closely coordinating with industry stakeholders to ensure truck route changes and rules are well known. Implementation of these commitments is expected to begin by Fall 2026.

## **Strategy 5 - Invest in the decarbonization of truck fleets and other freight vehicles**

## **46.** Increase participation in the Clean Trucks Program

The Hunts Point Clean Trucks Program was established in 2012 to provide incentive funding for commercial fleet operators in the South Bronx to replace or retrofit older diesel trucks with battery electric and other, lower-emission alternatives. In 2020, the program was expanded to support commercial fleet transition initiatives across all Industrial Business Zones (IBZs). Since its inception, the Clean Trucks Program has replaced approximately 700 heavy-polluting vehicles, eliminated thousands of tons



Figure 52: A sidewalk condition in Hunts Point in the Bronx. Source: NYC Planning

of pollutants, and saved nearly a million gallons of fuel each year. DOT is working to increase the uptake of the program and is reviewing program requirements that could be amended to encourage more fleets to participate.

## 47. Explore ways to encourage mediumand heavy-duty vehicle (MHDV) charging infrastructure in industrial areas

Medium-and heavy-duty vehicles (MHDV's) constitute just five percent of all vehicles on the road in the United States but are responsible for more than 20 percent of all transportation-related greenhouse gas emissions. While electric vehicle (EV) adoption is accelerating rapidly within the light duty/passenger car market, MHDV fleets have been much slower to electrify. This gap in uptake is partially attributable to the fact that there is a relative dearth in MHDV charging capacity, as charging infrastructure that can accommodate MHDV's

"Improve the infrastructure and pedestrian safety in the surrounding neighborhood. More well lit streets & well maintain landscape, less litter on the street and most importantly more security for daily commuter & customers."

"Provide better street lighting and street signs. Monitor neighboring business that conduct majority of their business out on the public street."

"Tow buses and trucks clogging the roads near our facility. It is a constant problem and has led to accidents. Tickets aren't even issued let alone towing these repeat parking violators."



Figure 53: Matrix Industrial Park in Staten Island. Source: NYC Planning

requires significantly greater electrical capacity and thus often necessitate grid upgrades that add time and cost. As a result, the City will identify "priority" geographies for MHDV charging, assess the feasibility of curbside charging infrastructure that would include MHDV's, continue to support ConEd's MHDV Make-Ready pilot program, and explore other incentives to encourage MHDV charging infrastructure development.

### **PUBLIC REALM QUALITY**

The city's most active industrial areas are largely located where industry existed at the turn of the century – along the coastal shipping ports and inland waterways and freight lines. In many cases, large scale factories, oil refineries, and distilleries operated with no environmental controls, releasing pollutants directly into the air, soil, and waterways. While all existing industrial businesses must now comply with more stringent city, state, and federal environmental regulations, public officials and environmental advocates are still working to address this legacy through remediation of brownfields and Superfund sites, as well as enforcement of environmental protection laws.

Even with these protections, however, industrial areas are still places where activities most likely to have emissions or store hazardous materials are likely to be located. The lack of tree canopy and high degree of non-porous surfaces in industrial increases the risks of flooding from

stormwater runoff. When business, particularly those that are unenclosed, do not utilize proper containment measures, pollutants can wash into the waterways that flank many of these locations. Moreover, the concentration of trucks within industrial areas is a source of mobile emissions, which contributes to poor air quality. The populations living and working in or near industrial areas, many of which are low-income communities of color, are at greater risk of exposure to poor environmental conditions.

While industrial areas are often associated with trucks and heavy equipment, they are home to a wide array of people and activities. Over 727,000 people work in and at least 177,000 people reside in M districts. These areas also include more than 250 educational facilities such as daycares, pre-Ks, and K-12 schools. This diverse user base highlights the importance of ensuring that industrial zones are not only functional for business needs but are also safe, clean, and welcoming for workers, visitors, and residents.

Overwhelmingly, input from both businesses and community members reflected strong concern about the condition of the public realm in industrial areas. Stakeholders cited specific concerns, including the poor condition of public infrastructure such as streets, basins or street furniture; inadequate sanitation services and dumping; parking on sidewalks or other public spaces; and insufficient street lighting. Others cited more generalized concerns of "feeling"



Figure 54: Newtown Creek Nature Walk. Source: NYC DEP

unsafe walking at night" or conflicts between road and pedestrian users. Still others focused on environmental justice challenges of pollution stemming from heavy industrial uses or large truck fleets. These conditions not only impact operational efficiency but also contribute to environmental degradation and diminished quality of life for those who work, visit, and live in these areas.

Community needs requests and service requests to NYC311, a public call line that brings together services from over 200 agencies and non-profits, can drive many City investments in state of good repair, sanitation, and enforcement. Most of these requests come from New York City residents. Since industrial areas have very few residents to advocate for better maintenance and sanitation, the public realm is often neglected and in need of better maintenance. Yet, many of the public realm concerns are validated by 311 data, which showed complaints related to industrial areas rose by 28 percent between 2019 and 2024, particularly in relation to illegal parking, noise, and sanitation.

Outside of NYC and in less urban environments, friction between user types is solved by creating modern buildings, typically segregated from pedestrian settings in highly truck oriented, antiurban settings. A limited number of locations in NYC can benefit from this truly "industrial campus" orientation, but most NYC industrial areas must function with the presence of older industrial buildings, often with old loading docks and equipment, cheek to jowl with a mix of other users. At the same time, good examples exist of tactical design solutions where a new development, or even a single plaza or park, has brought new comfort and amenities to an industrial area.

## GOAL: PROMOTE CLEAN AND SAFE INDUSTRIAL AREAS

To address this range of challenges, Goal 4 is to promote clean and safe industrial areas. This goal reflects a commitment to improving the overall livability and attractiveness of industrial zones.

The City envisions taking proactive steps to ensure these areas are healthier and

more appealing for workers, residents, and businesses. Proposed strategies include developing a design toolkit to manage public realm conflicts, enhancing street cleanliness and infrastructure maintenance, and improving environmental protections. These efforts aim to help industrial areas flourish not only as economic hubs but as fully integrated parts of the urban landscape.

## **Strategy 1 - Develop industrial area design toolkit to better manage public realm conflicts**

## 48. Implement Street Improvement Projects (SIPs) for industrial areas

NYCDOT has advanced several Street Improvement Projects within industrial areas to address safety, traffic flow, the impacts of trucks and efficiency of freight movements, and maneuverability. Recent projects include protected bike lanes for Grand Street and Morgan Avenue in North Brooklyn; implemented improvements for pedestrian and cyclist safety on Hunts Point Avenue; and a SIP involving safety enhancements within the Maspeth IBZ. Although not yet a SIP, the Red Hook Traffic and Truck Study is currently underway to address

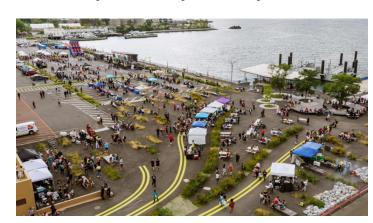


Figure 55: BAT Block Party. Source: NYC EDC

traffic and congestion due to the continued growth and changing land uses in the area.

### 49. Incorporate new strategies for freightinclusive street design in the Street Design Manual

The movement of a large volume of trucks moving through industrial areas and the

spillover of loading activity into the streets and sidewalk in industrial areas creates safety challenges for pedestrians and exacerbates traffic and parking challenges. The current version of the Street Design Manual — New York City's resource on street design policies, principles, processes, and best practices — has limited guidance on freight infrastructure that supports legal size trucks to operate safely and efficiently on city streets. Future updates should consider more robust strategies to incorporate freight infrastructure into street design.

# 50. Explore enhancements to zoning design standards within M zones to enhance the appearance of industrial areas.

Zoning design standards regulate the design of new buildings and can include measures such as screening, curb cuts dimensions, the length of street walls, street furniture, and green infrastructure. Design standards within manufacturing zones are limited compared to other districts due to operational needs of businesses. However, a more nuanced approach could be considered given the diverse character of the city's industrial areas.

## **Strategy 2 - Enhance the appearance and cleanliness of the public realm**

## **51. Support containerization of commercial** waste

Since March 2024, all businesses in NYC are required to use secure containers when setting out trash for collection. By moving the black bags off the streets and into sealed, rodent-proof receptacles, the City is seeking to reduce conditions that attract rats and detract from quality of life.

# **52.** Invest in public realm activations at Cityowned industrial campuses to establish strong connections to residential neighborhoods

NYCEDC is committed to delivering capital investments on its campuses to enhance their connections to the surrounding neighborhoods. In the Bronx, as part of the proposed Hunts Point Marine Terminal, NYCEDC will invest \$28

million to extend the existing bike network currently running alongside Food Center Drive to go along Halleck Street and expand access to the waterfront. In Brooklyn, Pier 6 at MADE will deliver five acres of public waterfront open space and provide tenants and visitors with recreational opportunities and coastal views of Lower Manhattan and Governors Island. Brooklyn Army Terminal underwent a series of wayfinding and beautification upgrades in 2024 with more on the way in 2025. In Manhattan, Sunset Pier 94 Studios is currently under construction, a first-of-its-kind space that will be home to both state-of-the-art film and production technology and impressive amenities for all New Yorkers. These include new public restrooms for Hudson River Park, an 1.850-square-foot community amenity space. 25,000 square feet of waterfront open space and pier access, and safety improvements to the bikeway.

# 53. Establish an interagency working group to develop a program of public realm improvements to address safety, sanitation, and quality of life issues.

Residents, business owners, and workers alike have expressed concerns about the condition and operational efficiency of the public realm within industrial areas. The issues raised range from inadequate lighting; challenges with illegal parking and loading; cleanliness and dumping; deferred maintenance of roadways, catch basins, and sidewalks; and a lack of tree cover, open space, and amenities for workers and visitors. A working group comprised of staff from the various operational agencies with jurisdiction over different, but overlapping, areas could most effectively address the wide range of concerns.

# 54. Explore opportunities to develop partnerships with local organizations to support marketing, public improvements, public safety, and supplemental sanitation services in industrial neighborhoods.

The City can explore opportunities to partner with local organizations in industrial areas such as merchant associations, Business Improvement Districts, and other groups to

provide supplemental sanitation, business support services, marketing, local neighborhood revitalization, and other business support and quality of life improvements.

#### Strategy 3 - Improve environmental protection in industrial areas

### 55. Complete Superfund site remediations

Superfund sites are among the country's most polluted sites. The Environmental Protection Agency (EPA) is authorized to clean up Superfund sites and force parties responsible for the pollution to pay for the remediation. There are four Superfund sites in New York City: the Meeker Avenue Plume in Greenpoint, Brooklyn; the Gowanus Canal in the Gowanus section of Brooklyn; Newtown Creek in northern Brooklyn and western Queens; and the Wolff-Alport Chemical Company in Ridgewood, Queens. The Superfund designation of these sites will allow for more resources to complete the remediation.

### 56. Continue to support brownfield cleanup

New York State and New York City both offer programs to incentivize the cleanup of "brownfields"-sites where redevelopment is complicated by the presence of potential contamination. The State Brownfield Cleanup Program is a tax incentive to encourage privatesector cleanup of brownfields and to promote their redevelopment. New York City's Voluntary Cleanup program offers participants protection from liability from additional remediation if they agree to a City-approved cleanup of their sites. They are also eligible for cleanup grants, free soil from the clean soil bank, an exemption from hazardous waste fees, and a NYC Green Property Certification.

### 57. Support emergency planning for industrial businesses to mitigate hazardous material risks in flood zones

The New York City Department of Environmental Protection (DEP) Community Right-to-Know Program (RTK) requires businesses and facilities air pollution generated by their operations. that store hazardous substances to file annual

reports detailing the quantity, location, and chemical nature of the substances stored within their facilities. In 2013, the City adopted new procedures regulating business and facilities that store hazardous substances in flood prone areas of the city. These plans take effect once a notification of a severe weather event is announced by the National Weather Service.

DEP RTK inspectors will, in addition to their routine inspections, make certain that these procedures and plans are available at those businesses and facilities designated as being in the flood zone. The filing information will be maintained in a database that is accessible to partner agencies involved in performing hazardous materials emergency response as required by US federal law designated in the Emergency Planning and Right-to-Know Act (EPCRA).

### 58. Complete EJNYC Plan

In 2024, the Mayor's Office of Climate and Environmental Justice released EJNYC: A Study of Environmental Justice Issues in New York City. Many of the Environmental Justice Areas (EJ Areas) identified in the report overlap with the city's industrial areas. The findings of the report will inform the forthcoming EJNYC Plan. The Plan will identify citywide and neighborhoodscale initiatives for promoting environmental justice, and it will outline recommendations for embedding equity into the City's decisionmaking processes.

### 59. Advance implementation of the Last-Mile **Facility Special Permit and Indirect Source** Rule

Large warehouses generate significant truck traffic, with negative impacts for air quality and health. These impacts are particularly acute in the underserved communities where large warehouses are clustered. Two current initiatives seek to address these impacts.

DEP is developing an Indirect Source Rule that would require large warehouses to reduce the The City Council held a public hearing on the

enacting legislation in the spring of 2025 and is in the environmental review process.

NYC Planning is proposing a special permit for last-mile facilities, a type of distribution warehouse that tends to create more traffic than other types of warehouses. The proposal would encourage a more sustainable freight network and the more thoughtful siting of these facilities. If approved, certain new last-mile facilities would need to undergo a substantial public review process to open. After receiving input from a wide range of stakeholders in 2024 and 2025, DCP is advancing environmental review for the proposal.

### **60.** Study updates to zoning performance standards and enclosure rules

The current M-zones rules were established in 1961, prior to when the Clean Air and Clean Water Acts established national environmental standards. Since many industrial operations at the time were inherently noisy, dirty, or noxious, the 1961 zoning attempted to implement environmental standards on industrial operations through the separation of uses and the creation of performance standards. These standards still govern in manufacturing zones. In general, the more potentially noxious uses are limited to M3 districts but may also locate in M1 and M2 districts if they comply with the higher performance standards of those districts. Additionally, more stringent standards apply to new industrial uses seeking to locate in mixed-use districts (MX), which allow residences. Zoning also attempts to reduce the environmental impact of industrial uses by requiring them to be fully enclosed within M1 districts and within 300 feet of a residence district in M2 and M3 districts. In all M districts. most storage must be enclosed within 200 feet of a residence district.

Over time, the performance standards and enclosure rules have become less relevant and less effective for several reasons:

The rules have not been updated since 1967 and are mostly, but not entirely, superseded by more stringent city, state, and federal

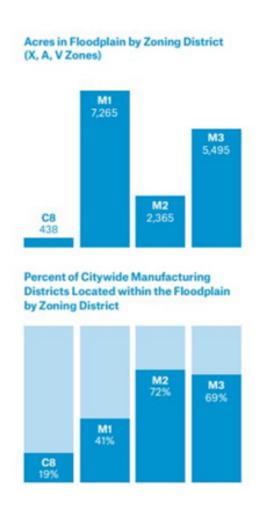
environmental regulations.

- Most contemporary businesses operate at a much smaller scale and with cleaner technology than they did in 1961 but are conservatively assumed to function to a lower standard, limiting opportunities for siting new industrial businesses, particularly in MX districts.
- Enforcement of the standards is typically complaint-based and executed by multiple agencies, including the Department of Environmental Protection, the Fire Department, the Department of Buildings, and the Department of Sanitation. Consequently, enforcement can be inconsistent and confusing, particularly for businesses that attempt to comply.
- A business may meet the higher performance standard of a higher performing district (e.g. M1) when it opens but may not meet the standard over time as operators change and equipment ages.
- As zoning district boundary lines have changed over time due to rezonings, existing open industrial uses near residence districts may continue to operate without enclosure.

NYC Planning should study potential updates to the zoning to address these issues.



Figure 57: NYC's historically maritime industrial areas. **Source: NYC Archives** 



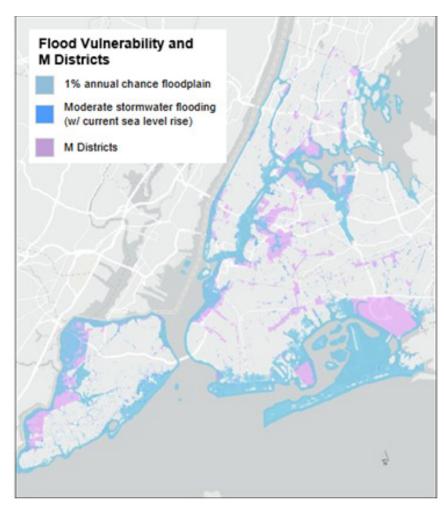


Figure 58: Flood Vulnerability and M Districts. Sources: NYC Planning Zoning Districts, PFIRM 2015 100-year, DEP stormwater flood map – moderate with current sea level rise; NYC Planning – Resilient Industry Report, 2018.

# 61. Identify clusters of non-conforming residences in manufacturing districts that should be studied for rezoning to allow new investment

There are several locations in the city with relatively large clusters of non-conforming residential uses within M-zones. The non-conforming status makes it difficult for property owners to invest in their property and the existence of M zoning risks exposing these residents to new industrial uses on adjacent properties. DCP should study targeted rezonings of non-conforming residences that would benefit existing residents with limited disruption to surrounding industrial uses.

### 62. Explore opportunities to relocate floodvulnerable residences in M zones within MOCEJ's "resilient acquisition framework"

MOCEJ is exploring a "resilient acquisition framework" that would identify where there

are major flood risks and long-term land stewards and study ways to finance a pipeline of properties. This effort would identify funding and financing, as well as how to build a pipeline of properties. Reclaimed land could be used for open space or water infrastructure or redeveloped to support a resilient and appropriate use. Flood-vulnerable residences in M-zones may be one potential location to focus this effort since owners of nonconforming residences are limited by zoning from making substantial changes to their homes.

### **CLIMATE THREATS**

As climate change accelerates, the city's industrial zones, many of which are critical to the local economy and municipal services, face increasing exposure to extreme weather events, sea level rise, and chronic heat. These threats not only endanger business continuity and



Figure 59: Industrial uses are not required to do plantings. Source: NYC Planning

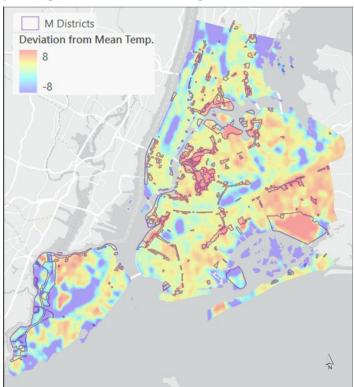


Figure 60: Deviation by Mean Temperature in NYC. Source: NYCCAS Air Pollution Rasters, predicted annual average fine particulate matter <2.5 microns, December 2021 – December 2022. Last updated April 2024.

infrastructure but also pose serious public health and environmental risks to workers and the residents of surrounding neighborhoods as well.

NYC's history as a maritime industrial center now means that a large proportion of industrial businesses are located along or near the city's 520-mile coastline and are particularly vulnerable to the effects of flooding, coastal storms, and sea level rise. Approximately half of all industrially zoned land lies within the 100-year floodplain signifying moderate to high risk of flooding. There is a greater concentration of the city's heavier industrial M2 and M3 districts in this floodplain. This means that many businesses are in areas prone to coastal and stormwater flooding, posing direct risks to their facilities and operations. Most industrial buildings in these areas were built before modern flood regulations. Single-story businesses and unenclosed uses are especially vulnerable, as they provide little opportunity to relocate equipment, inventory or production spaces in case of a flooding event.

Urban heat is one of the most acute climate-related challenges for industrial areas. Industrial zones are typically characterized by large expanses of hard surfaces, minimal vegetation, and energy-intensive operations, all of which contribute to the urban heat island effect. The New York City Construction Codes and Local Laws 92 and 94 require most new buildings or major renovations to involve "cool" roofs (consisting of reflective, white painting), green roofs, or rooftop solar arrays. However, unlike in other parts of the city, zoning does not require planting in most industrial areas, primarily due to concerns around maintenance and maneuverability.

As a result, temperatures in industrial districts can be up to eight degrees Fahrenheit higher than the citywide mean. This increased heat undermines working conditions, raises cooling costs, and can exacerbate the risk of heat-related illnesses. Further exacerbating the issue, current zoning does not require industrial users to include plantings or greenery as these may interfere with space needed for truck maneuvering or storage. This leaves little natural mitigation for heat impacts and what of it that does exist as a choice made by practitioners.

These vulnerabilities call for proactive strategies to prepare industrial areas for a changing climate. Resilience planning must address both acute risks, like storm surges and heavy rainfall, as well as chronic conditions such as rising temperatures and recurring nuisance flooding. Public and private infrastructure

improvements like elevated loading docks, permeable pavement, stormwater retention systems, and improved drainage are essential to safeguard industrial operations. At the same time, broader urban design interventions, such as shading, green infrastructure, and revised zoning standards, will be necessary to reduce long-term exposure to climate hazards.

## GOAL: PREPARE INDUSTRIAL AREAS FOR CLIMATE THREATS

Goal 5 of the City's industrial strategy is to prepare industrial areas for climate threats through a combination of policy, planning, and investment. This goal envisions a future in which the City actively assesses climate vulnerabilities across its industrial land and implements solutions that both mitigate risk and promote adaptation. Potential strategies include enhancing stormwater management systems, improving the flood resilience of businesses and critical infrastructure, and addressing heat through targeted interventions like greening and reflective materials. With climate impacts only expected to intensify, protecting the city's industrial base is not just an economic imperative, it's a critical component of a resilient and sustainable New York City.

# Strategy 1 - Promote better stormwater management in and enhance the flood resiliency of the industrial public realm

# 63. Revamp design guidelines for public realm planting in industrial areas

Additional planting in industrial areas may help mitigate coastal and stormwater flood risk by creating more permeable, absorbent surfaces in districts that are presently dominated by hardscape. However, such planting would be vulnerable to truck strikes, debris, and other damage from

industrial operations. NYC Planning should assess strategies in collaboration with other agencies to achieve goals of increased vegetation and stormwater management.

# 64. Assess the feasibility of installing green infrastructure and implementing other flood risk mitigation interventions along industrial rights-of-way

As noted above, coastal and stormwater flood risks are exacerbated by the omnipresence of impermeable surfaces in industrial areas and along industrial rights-of-way. While permeable pavement has been deployed to reduce the volume of hardscape in residential and certain commercial areas, it is not feasible in industrial areas due to the risk of compression from heavy truck traffic and the potential for sediment buildup that would obstruct draining functionality. In select locations where heavy truck traffic and other industrial operations are minimal, DEP has built infiltration basins - a form of green infrastructure designed to store rainwater beneath a surface that closely mimics its surroundings – in some industrial areas, such as Hunts Point.

DEP and DOT are assessing how to improve drainage conditions in industrial rights of way, such as traditional drainage infrastructure upgrades and alternative forms of green infrastructure. In addition to capital infrastructure investments, DEP is investing in

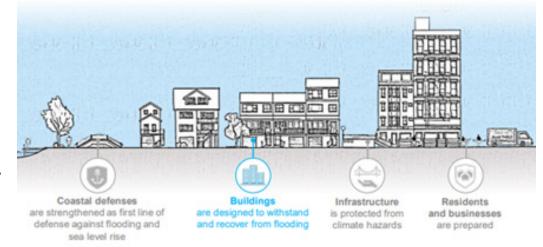


Figure 61: NYC's overall residency strategy as defined by OneNYC

catch basin and sewer cleaning programs to ensure the capacity of the system to capture stormwater is fully available during a storm.

## **Strategy 2 - Enhance flood resiliency of industrial businesses and critical infrastructure**

# 65. Implement planned coastal flood risk mitigation projects that would protect waterfront industrial sites and areas

Hunts Point is just one industrial community where New York City has made a significant investment in climate resiliency. That investment is focused on energy security and flood protection for both residents and industrial businesses. The City committed \$71 million, building on a \$20 million HUD Rebuild by Design grant with an additional \$51 million from federal and city sources, to fund a feasibility study and early design work completed in 2019. Flood resilience is being addressed through a \$14.7 million FEMA BRIC grant to dry-floodproof vulnerable facilities like the Meat Market and 600 Food Center Drive.

In 2022, the City launched the Hunts Point Forward plan, a 15-year strategy directing \$140 million toward Produce Market upgrades and shoreline improvements, including Barretto Point Park. Community resilience is also central to the effort, with local organizations like The Point CDC supporting emergency preparedness, environmental justice, and social cohesion. These initiatives represent a comprehensive strategy to protect Hunts Point from climate threats while preserving its vital economic and social infrastructure.

## 66. Promote updated zoning to support flood resilient construction on privately-owned industrial sites

Following Hurricane Sandy, the City adopted temporary, emergency zoning rules that made it easier for New Yorkers to rebuild. In 2021, the City adopted Zoning for Coastal Flood Resiliency (ZCFR), a text amendment that took the lessons from Sandy and provided property owners with rules that would enable

them to design resilient buildings that are better protected from flood risk and thus would benefit from reduced flood insurance costs. Specifically, ZCFR granted greater height allowances that could enable buildings to be elevated above projected surge levels, allowed mechanical, electrical, and plumbing to be relocated above base flood elevations, and expanded the geographies where building owners could have access to this additional flexibility to the 1 and 0.5 percent annual chance floodplains. Industrial buildings particularly benefited from ZCFR's adoption, as half of the city's industrially zoned land falls within the one percent annual change floodplain.

## 67. Continue to advance efforts to manage stormwater in industrial areas

The NYC Department of Environmental Protection (DEP) oversees multiple efforts to better manage stormwater citywide to improve the health of the local waterways and prevent flooding. In 2024, DEP released the 2024 Stormwater Analysis, which highlighted the City's challenges with managing stormwater to address flooding caused



Figure 62: MS4 Drainage Areas. Source: NYC DEP

by climate change-induced storms. As part of this effort, DEP's green and grey infrastructure teams are coordinating to develop a stormwater master plan for New York City that will lead to a more resilient system overall. In parallel, DEP is continuing with near-term actions to optimize existing infrastructure and implement capital

projects to improve capacity. These include strategic expansion of green infrastructure on public properties and on private properties through financial incentives, implementation of the Unified Stormwater Rule (USWR) which covers both public and private properties, as well as initiatives under the MS4 Stormwater Management Program Plan such as the Industrial and Commercial (I/C) Stormwater Program.

The Unified Stormwater Rule, promulgated in 2022, updates and aligns Chapters 31 (stormwater quantity and flow rate requirements) and 19.1 (construction/postconstruction permitting program water quality requirements) of Title 15 of the Rules of the City of New York. The USWR requires development projects to incorporate stormwater management measures at the site through retention and detention green infrastructure practices. By managing stormwater runoff at the source through green infrastructure, stormwater is diverted from the sewer in new or redeveloped properties which can free up drainage capacity in the sewer system and provide water quality benefits to the local waterways.

Certain industrial facilities are required to have stormwater discharge permits from the New York State Department of Environmental Conservation. Typically, these permits require businesses to have a Stormwater Pollution Prevention Plan that describes how the site will prevent pollution from stormwater runoff. Under the Industrial and Commercial (I/C) Stormwater Program, DEP conducts ongoing inspections of permitted facilities and assessments of unpermitted facilities within MS4 areas for contributions of pollutants of concern. Since the start of the I/C Program, DEP has assessed 1,451 unpermitted facilities.

# 68. Use Climate Resiliency Design Guidelines to mitigate flood risk for critical infrastructure and municipal services

In 2021, the City Council passed Local Law 41, which mandated a five-year pilot program that would ensure that new City infrastructure and public facilities are prepared for extreme weather events and can continue to provide critical services to New Yorkers decades into the future. In response to Local Law 41, MOCEJ translated cutting-edge climate projections into the Climate Resiliency Design Guidelines (CRDG's), technical guidance that goes beyond building codes and standards and is used by architects and engineers as they design roads, hospitals, sewer systems, and the like. Forty projects across 23 capital agencies are applying the CRDG's and are being advanced through the pilot program, nearly half of which will be constructed in environmental justice areas.

## 69. Continue to promote City programs that support flood resiliency upgrades for industrial businesses

The City administers a variety of programs that seek to help business and property owners make flood resiliency-related upgrades to their facilities, including DEP's Resilient NYC Partners program, SBS' Business Preparedness and Resiliency risk assessment and grant program (PREP), and FloodHelpNY. Industrial businesses are more likely to be in a flood-prone area, as most of the land that is zoned for manufacturing in New York City is within a flood plain. The agencies involved in the administration of these programs should continue to monitor use of the programs by industrial businesses.

## **Strategy 3 - Address the urban heat island effect**

#### 70. Support cool or green roofs

Within New York City's 2019 landmark climate bill, the Climate Mobilization Act, were two provisions that specifically sought to address the urban heat island effect: Local laws 92 and 94. Together, these laws require that all new buildings to install "sustainable roofing zones" that are comprised of a green roof, solar photovoltaic electricity generating system, or some combination of the two. In addition to addressing the urban heat island effect, green roofs have also been shown to reduce indoor air temperatures and thus energy demand from HVAC systems. Additionally, DEP operates a Green Infrastructure Grant Program for green roofs.

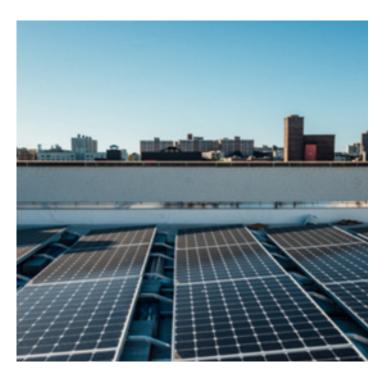


Figure 63: NYC rooftop solar installation. Source: NYC HPD

# 71. Identify opportunities for additional tree planting and stewardship in industrial areas through the Urban Forest Plan

Trees play an essential role in reducing outdoor temperatures, cooling city streets up to two degrees Fahrenheit. It is not a coincidence that industrial areas, which can be up to eight degrees hotter than the city's average temperature on any given day, have a greater dearth of tree cover than their commercial and residential counterparts. In 2024, MOCEJ launched the Urban Forest Plan, a 10-year plan to equitably expand the city's tree canopy to cover 30 percent of its land area. It is essential that some portion of the additional planting that the city undertakes to achieve this goal occurs in industrial areas, where the so-called "urban heat island effect" disproportionately affects workers and nearby residents. The Urban Forest Plan will also include measures to ensure that both new and existing trees are responsibly preserved and stewarded. These stewardship strategies should also account for the unique challenges associated with maintaining assets within the industrial public realm.

72. Evaluate potential changes to street tree planting requirements that would enable these rules to apply to more industrial projects

The Zoning Resolution currently exempts industrial use groups from street tree planting requirements and offers reduced requirements for "semi-industrial" uses such as automotive repair and storage. This policy decision, which was made as part of the 2008 zoning text amendment that established the citywide framework for street tree planting, contributes to the continued lack of tree cover (and thus the persistence of the urban heat island effect) in industrial areas. While there are valid concerns around potential damage to trees that are planted in industrial areas via truck strikes and a lack of compatibility with curb cuts, updated requirements can consider and seek to mitigate these risks. Additionally, there are special districts where industrial development projects of a certain scale must already meet tree planting requirements, such as Staten Island's Special South Richmond Development District. This example indicates that there is a way to configure planting on an industrial site or along its frontage that does not obstruct business operations or endanger trees. As a result, NYC Planning should revisit the list of industrial use groups that are exempt from street tree planting requirements and explore other potential changes that seek to increase the number of industrial developments that provide trees.

## **SUMMARY OF GOALS, STRATEGIES AND RECOMMENDATIONS**

Goal 1: Enable industrial businesses to evolve, innovate and transition to green technologies

Improve city government's ability to help industrial businesses navigate regulatory and resource challenges

- 1. Improve Local Law 97 compliance supports for hard-to-electrify industrial businesses
- 2. Explore the creation of alternative Local Law 97 compliance pathways that accommodate industrial businesses who are unable to electrify
- 3. Improve and streamline regulatory processes that impact industrial businesses through efforts to cut red tape
- 4. Optimize industrial business supports offered through SBS
- 5. Support local industrial businesses in entering the green economy through investment and technical assistance

Activate industrial sites in support of the green 6. Maintain GEAP commitment to utilize NYC transition Industrial Development Agency (IDA) tax

- 6. Maintain GEAP commitment to utilize NYC Industrial Development Agency (IDA) tax incentives to activate battery storage capacity and support other green economy uses
- 7. Convene circular economy stakeholders and facilitate resource recovery within and across industrial sectors
- 8. Develop resources that encourage more energy storage systems to be sited in industrial areas
- 9. Promote the development of clean energy infrastructure on privately owned industrial sites
- 10. Support the development of district thermal heating systems in industrial areas
- 11. Install climate infrastructure on all viable city-owned property by 2035
- 12. Explore opportunities to activate industrial sites for community solar
- 13. Continue to advance NYCEDC's Circular Design and Construction Guidelines across the public and private sectors to reduce embodied carbon and waste in NYC's built environment

Use city-owned sites to incubate and grow industrial businesses

- 14. Evaluate portfolio of city-owned land to improve efficiency and maximize opportunities for industrial siting
- 15. Utilize publicly-owned industrial campuses to support the piloting of innovative climate technologies and modern industrial practices
- 16. Build a high-quality campus experience at City-owned industrial assets through sustained investment in facility infrastructure and amenities that serve businesses, workers, and local communities

Optimize resources available to industrial businesses that seek to grow or transition

- 17. Continue to support the New York State Film Tax Credit Program
- 18. Explore potential improvements to existing tax credits for industrial businesses
- 19. Advance the adoption of new climate technologies in the industrial sector through NYCEDC's Mass Timber Studio and Resilient Energy Studio

**Expand workforce development programs** 

- 20. Support workforce development and community hiring at publicly-owned industrial assets
- 21. Support M/WBE and diverse entrepreneurship in industrial sectors

### **Goal 2: Advance a balanced and coherent land use and real estate strategy**

**Strengthen Primary Industrial Areas** 

- 22. Establish a new land use framework to guide development and investment in manufacturing zones
- 23. Explore potential targeted changes to the current BSA special permit discretionary process for permitting schools within M zones to address conflicts with industrial activities

Make it easier to build new industrial space & catalyze investment in industrial areas

- 24. Help businesses take advantage of City of Yes for Economic Opportunity changes
- 25. Adopt ongoing Neighborhood Plans
- 26. Study parking and loading zoning requirements to identify impediments to new development

	27. Identify priority areas for new industrial neighborhood studies		measures to preserve strategic sites for future activation	
	28.Streamline the process for development on unbuilt and private streets to make it easier to develop industrial sites	Facilitate and encourage the adoption of micromobility for cargo	40.Maintain rule changes that establish new curb regulations and allow the use of pedalassist electric cargo bikes	
Leverage mixed-use space for industrial uses	29.Launch a study to develop an economically feasible and environmentally safe model for vertically integrated mixed industrial-		41. Explore new infrastructure and amenity investments to support micro-distribution	
	residential development	Maximize the efficiency of truck traffic operations	42.Prioritize Street Improvement Projects (SIPs) along Truck Routes	
	30.Target marketing of IDA incentives to encourage industrial space within mixed-use buildings		43.Explore expansion of DOT Overnight Truck Parking Pilot to all Primary Industrial Areas	
Update city processes to make it easier to site industrial operations	31. Use City reporting and tracking tools to enhance the efficiency and transparency of		44.Implement changes to the Truck Route Network	
	facility siting  32.Identify ways to streamline the City's approval processes to make it easier to find suitable locations for critical, "hard-to-site" city operations		45.Implement enhanced signage, enforcement planning, data collection, and other programmatic recommendations identified through the DOT Truck Route Network Redesign	
	33.Explore changes to the environmental review process to allow for higher scrutiny of industrial business displacement within	Invest in the decarbonization of truck fleets and other freight vehicles	46.Increase participation in the Clean Trucks Program	
	Primary Industrial Areas		47. Explore ways to encourage medium-and heavy-duty vehicle (MHDV) charging infrastructure in industrial areas	
<b>Goal 3: Support Modern and Efficient Fr</b>	eight Movements			
Support the expansion of the maritime freight	34.Implement Blue Highways initiative	Goal 4: Promote Clean and Safe Industrial Areas		
network	35.Ensure future development can incorporate maritime access	Develop industrial area design toolkit to better manage public realm conflicts	48.Implement Street Improvement Projects (SIPs) for industrial areas	
	36.Encourage the maritime mode shift of freight through strategic activation of Blue Highways landings at publicly owned assets		49.Incorporate new strategies for freight- inclusive street design in the Street Design Manual	
	37. Assess opportunities for future maritime freight network expansion and explore potential measures to preserve strategic sites for future activation		50.Explore enhancements to zoning design standards within M zones to enhance the appearance of industrial areas	
		Enhance the appearance and cleanliness of the	51. Support containerization of commercial waste	
Support the expansion of the rail freight network	38.Maintain state of good repair on City-owned rail infrastructure currently keeping trucks off the road  39.Assess opportunities for future freight rail	public realm	52.Invest in Public realm activations at Cityowned industrial campuses to establish strong connections to residential neighborhoods	
	network expansion and explore potential		110151110000	

- 53.Establish an interagency working group to develop a program of public realm improvements to address safety, sanitation, and quality of life issues
- 54.Explore opportunities to develop partnerships with local organizations to support marketing, public improvements, public safety, and supplemental sanitation services in industrial neighborhoods

## Improve environmental protections in industrial areas

- 55. Complete Superfund site remediations
- 56. Continue to support brownfield cleanup
- 57. Support emergency planning for industrial businesses to mitigate hazardous material risks in flood zones
- 58. Complete EJNYC Plan
- 59. Advance implementation of the Last-Mile special permit and Indirect Source Rule
- 60. Study updates to zoning performance standards and enclosure rules
- 61. Identify clusters of non-conforming residences in manufacturing districts that should be studied for rezoning to allow new investment
- 62. Explore opportunities to relocate floodvulnerable residences in M zones within MOCEJ's "resilient acquisition framework"

### **Goal 5: Prepare Industrial Areas for Climate Threats**

# Promote better stormwater management in and enhance the flood resiliency of the industrial public realm

- 63. Revamp design guidelines for public realm planting in industrial areas
- 64. Assess the feasibility of installing green infrastructure and implementing other flood risk mitigation interventions along industrial rights-of-way

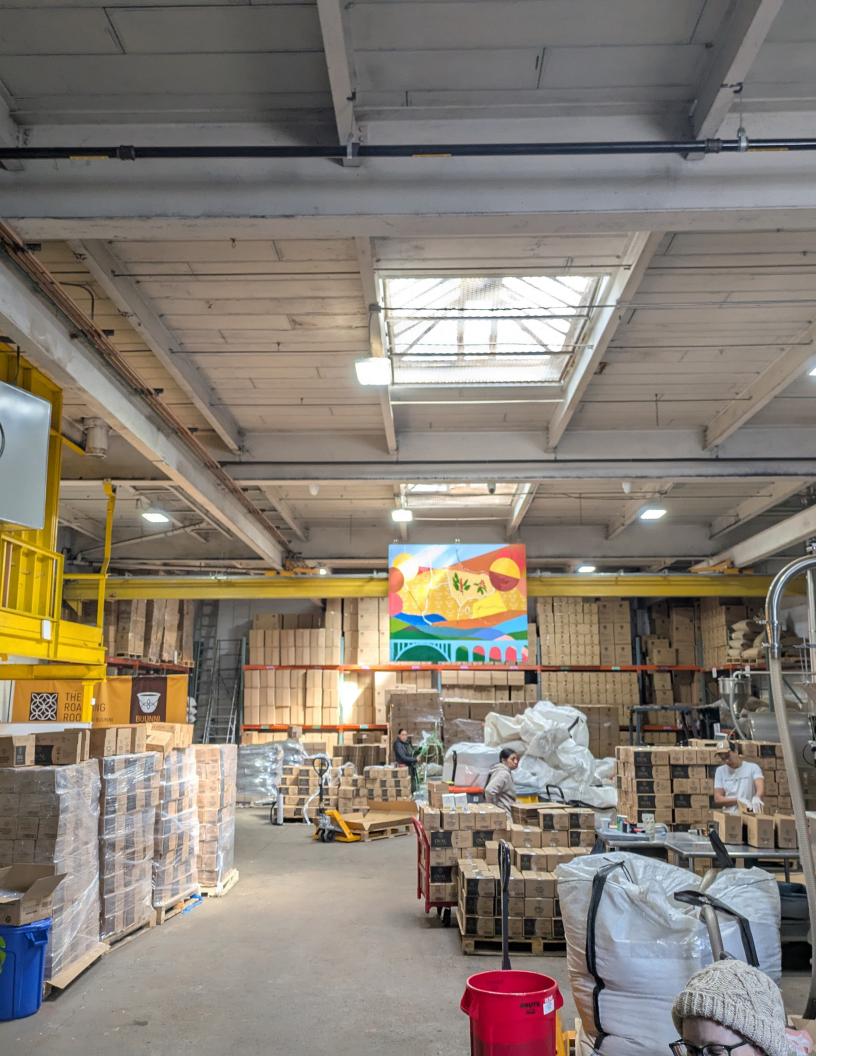
## Enhance flood resiliency of industrial businesses and critical infrastructure

- 65. Implement planned coastal flood risk mitigation projects that would protect waterfront industrial sites & areas
- 66. Use updated zoning to support flood resilient construction on privately-owned industrial sites

- 67. Continue to advance efforts to manage stormwater in industrial areas
- 68. Use Climate Resiliency Design Guidelines to mitigate flood risk for critical infrastructure and municipal services
- 69. Continue to promote City programs that support flood resiliency upgrades for industrial businesses

#### Address the urban heat island effect

- 70. Support cool or green roofs
- 71. Identify opportunities for additional tree planting and stewardship in industrial areas through the Urban Forest Plan
- 72. Evaluate potential changes to street tree planting requirements that would enable these rules to apply to more industrial projects



## 04 NEXT STEPS

As required by Local Law 172, this draft plan is delivered to the public on July 1, 2025 to receive feedback and commentary from all stakeholders. Over the summer the Department will continue engaging with stakeholders and receive feedback from the public. In fall 2025, the City will host five town hall meetings, one in each borough, to share details of the plan and garner additional formal feedback prior to the release of a final plan by the end of 2025.

## Members of the public interested in the plan can engage in the following ways:

- Via the feedback form on the project website
- Directly to the Industrial Plan team at industrialplan@planning.nyc.gov

### **TOWN HALL EVENTS**

For more information about town halls, please visit nyc.gov/industrialplan.

### Manhattan

October 9, 2025 | Borough of Manhattan Community College 199 Chambers Street New York, NY 10007

### **Brooklyn**

October 16, 2025 | NYU Brooklyn 370 Jay Street, 12th Floor, Brooklyn, NY 11201

### Queens

October 23, 2025 | CUNY School of Law 2 Court Square West, Queens, NY 11101

### **Staten Island**

October 28, 2025 | Staten Island Joan & Alan Berkinow JCC 1466 Manor Road, Staten Island, NY 10314

### **The Bronx**

November 6, 2025 | Bronx Borough Hall 851 Grand Concourse, Bronx, NY 10451

## 05 **APPENDIX**

## PRIMARY AND SECONDARY INDUSTRIAL AREA MAPS

In 2023, the New York City Council through Local Law 172 which includes a requirement that the City identify "Primary Industrial Areas". As described above under Goal 2/Strategy 1 – Strengthen Primary Industrial, NYC Planning also identified Secondary Industrial Areas (SIAs). Although not identified as priority locations preserving industry like PIAs, the SIAs are locations where public policy should preference industrial uses within a broad mix of commercial activity. These areas may be appropriate locations to map M2A districts, new zones that preference industrial use, and are not appropriate for residential rezoning.

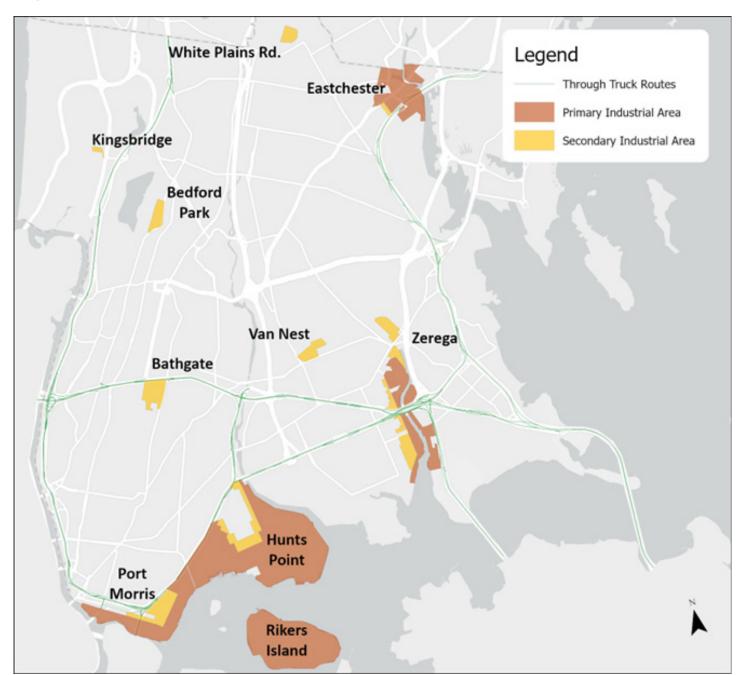
NYC Planning identified these PIA and SIA locations through a data analysis exercise and feedback from the agency's borough offices and other City agencies. The data exercise entailed the identification of blocks of predominantly M and C8 zoning and then filtering those blocks with a majority of designated industrial uses, as designated by the Department of Finance. Once

identified, transportation layers such as truck routes, industrial maritime frontage, interstate highway ramps, and freight rail frontage were added to better understand connectivity to the regional transportation network. The resultant draft data layer was then refined with localized feedback from agency partners and DCP borough offices.

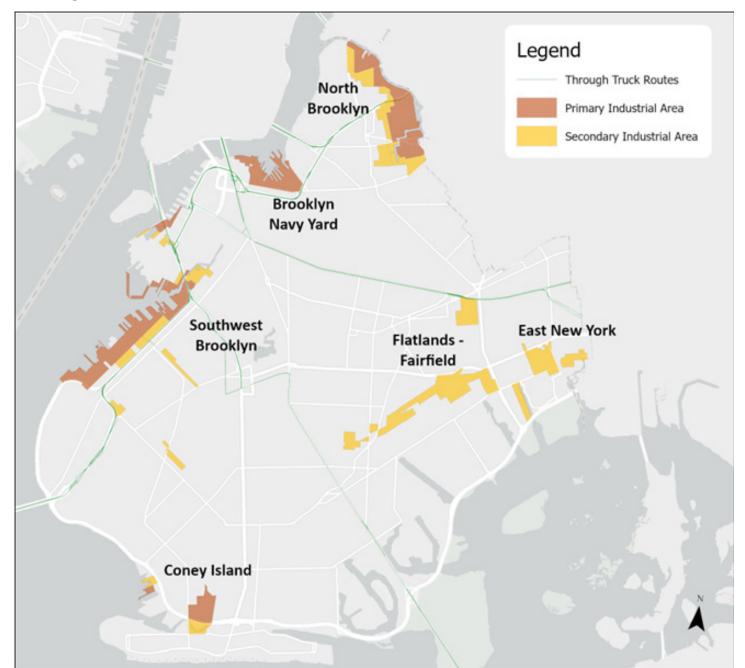
Ongoing planning efforts, such as those around Brooklyn Marine Terminal (BMT) in Red Hook, active neighborhood studies in Long Island City and Jamaica, and the future IBX corridor, were contemplated as part of inputs. The boundaries reflect current proposals, but conditions could change pending the outcome of ongoing planning and engagement, warranting changes to the designations in the final Plan. In particular, generational investment in transit infrastructure and new transit facilities — such as the new IBX corridor and station areas — represent unique and evolving conditions that will need to be re-evaluated.

### **DESIGNATED INDUSTRIAL AREA MAPS**

#### **Bronx**



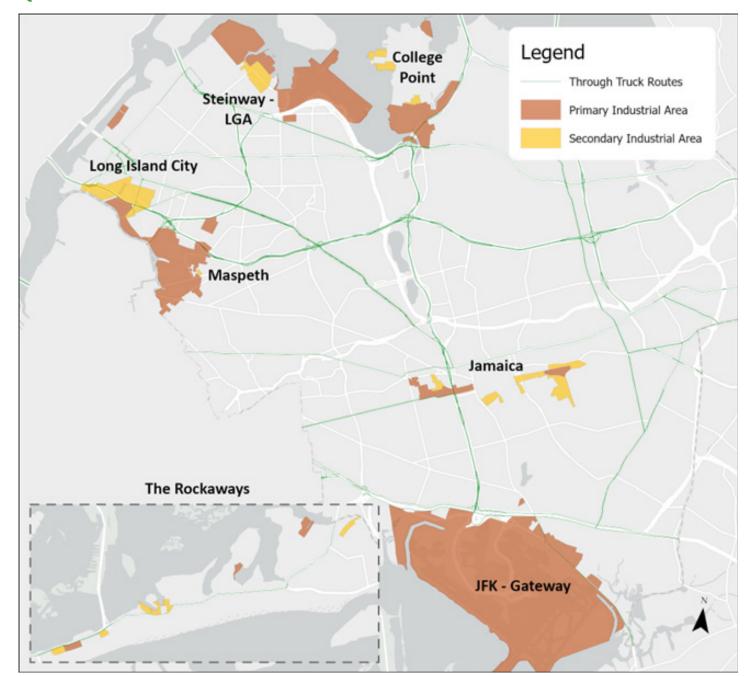
## Brooklyn



### Manhattan



### Queens



### **Staten Island**

