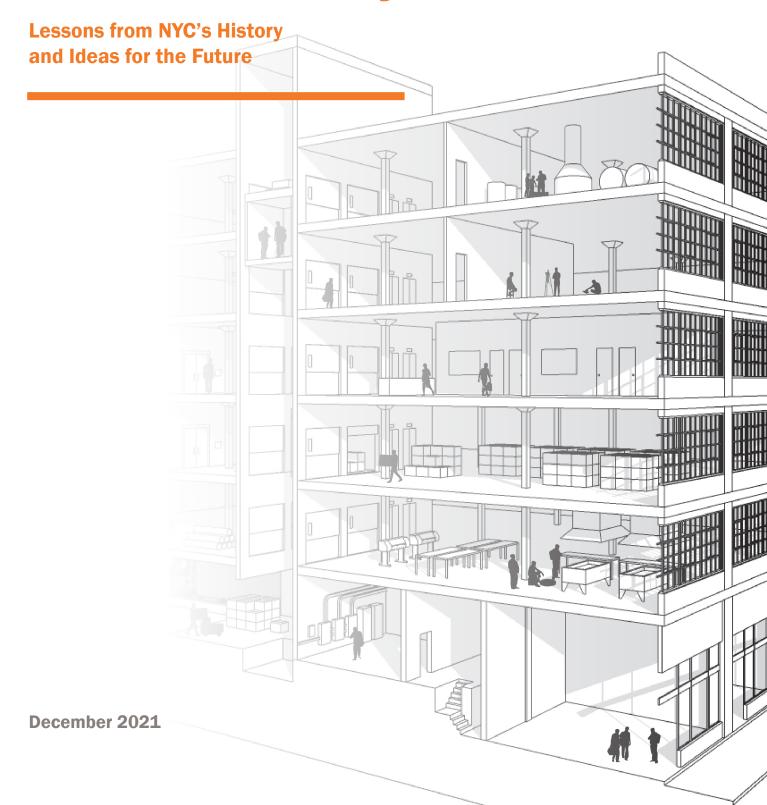


## **Zoning for a Resilient Economy**





### Introduction

Over the past several years, the Department of City Planning has studied how land use policies can better support job growth. A central finding of this work has been that many types of businesses—including light industry and offices, retail and community facilities—can often use the same types of space. Regulations that are flexible enough to allow a range of business types not only help small businesses find space, but also support broader innovation and job growth. This kind of flexibility also allows businesses and buildings to adapt quickly when unexpected economic trends or events occur, creating a more resilient economy.

The COVID-19 pandemic has emphasized the importance of flexibility. The economic disruptions caused by the pandemic have changed the trajectory of New York City's economy in ways that are still taking shape. Businesses small and large have begun to reevaluate how they use space, where they locate, and how they function in the face of changing consumer preferences. At the same time, the relationship between workers and their workspaces and home neighborhoods has shifted, altering in ways both temporary and more permanent how people shop, play, and receive service in their communities.

These effects of the pandemic have highlighted longstanding issues with land use regulations in commercial and industrial areas. This report explores innovations, best practices, and potential zoning reforms that can support the recovery and growth of small businesses across the city. Drawing from an analysis of New York City's economic success, including recent land use changes and policies that have promoted job growth and economic resilience, this report outlines several adjustments to land use policies that can support equitable and resilient job growth.

## Pre-Pandemic Space Challenges

During the decade leading up to the COVID-19 pandemic, New York City's economy grew rapidly. Between 2008 and 2019, the city gained 787,000 private sector jobs. This supported the lowest unemployment rate in decades as well as rising wages for New Yorkers. The growth also brought higher tax revenue, which the City used to reinvest in our people and infrastructure. During this period of economic expansion, which was accompanied by strong population growth, the city saw investment and employment gains in all five boroughs and growth across a diverse range of employment sectors.

Modifications to our land use regulations would help jobs grow in locations where New Yorkers can reach them This economic success also came with its own challenges. The combination of job growth in the Manhattan Central Business District and residential growth in the other boroughs added strains to core-bound transit capacity. While the core of the city provided the greatest concentration of jobs for workers with or without a bachelor's degree¹ workers living farther from the core had fewer job centers nearby, and often experienced long and often unreliable commutes.

At the same time, the limited availability of commercial space was a challenge for small businesses seeking to locate and grow in New York City. Older and more affordable office space—often referred to as Class B and C offices—had become increasingly popular with tech and other industries, causing rents for this space to approach and sometimes exceed rent for more recently constructed Class A space. This limited the availability of affordable space for nonprofits, start-ups, and other companies that couldn't afford Class A rents. Similarly, life science companies that outgrew university labs or incubator space struggled to find lab space in New York City, where they could take advantage of the rich labor pool of the city and region. This competition for affordable space led to a wider range of businesses locating in historically industrial areas where access to transit existed. The emerging job clusters in these industrial areas created economic opportunities, but increased demand for a largely static supply of space often created price pressures for industrial or other existing businesses, especially in areas with low-density regulations that harken back to a different era of industry.

At the same time, continuing technological and economic changes were increasingly at odds with land use regulations that were developed in the middle of the 20th century, exacerbating the problem of matching demand for space to supply, leaving spaces underutilized, and stifling opportunities for innovation and job growth and leaving spaces underutilized.

The growth of e-commerce reinforced a longstanding decline among dry retail businesses (shops selling non-perishable items such as hardware or electronics stores), while dining and service uses grew on many local retail streets. Despite a growing population, land use regulations often did not allow sufficient flexibility for new businesses to occupy vacant retail spaces. For example, modern businesses combining industrial and non-industrial functions struggled to navigate rules that seek to separate uses, requiring small-scale brewpubs or coffee roasters to locate in far flung manufacturing districts, rather than the neighborhoods they aimed to serve.

### The Pandemic and Economic Resilience

The COVID-19 pandemic unleashed enormous disruption to the city's economy. While the pandemic created new economic challenges, including the need to restore activity and vitality in the Central Business District, other effects accelerated trends that were already underway. For example, as store capacity was curtailed and online shopping increased, even more space previously occupied by dry retail became vacant.<sup>2</sup> Telework provides an example of how the pandemic both accelerated existing trends and created new ones. While rates of teleworking had been increasing slowly for the past couple of decades, beginning in March 2020 there was not only a dramatic increase in telework but also a jolt that continues to change the relationship between workers and the workplace. As the city continues to emerge from the most dramatic disruptions of the pandemic, some of these trends are reversing, but they are unlikely to revert to pre-pandemic conditions.

Besides disrupting our way of life, the pandemic required many businesses to change their business models practically overnight. Some industrial businesses began producing personal protective equipment and ventilators to help meet the enormous demand from hospitals and public health organizations. To stay afloat, and to support and aid their neighbors, restaurants repurposed space to create outdoor seating, expanded delivery operations, and shifted to catering to support emergency food delivery.



In some cases, regulations about the use of space had to be suspended or modified under emergency authority to allow businesses to adapt. For instance, the creation of the Open Restaurants program allowed restaurants to use portions of public streets to replace lost indoor dining space. Other regulations continue to limit flexibility, running the risk of hampering future adaptation by businesses and the city's economy. It is important to New York City's pandemic recovery and long-term economic vitality that regulations for commercial and industrial space focus on key characteristics of businesses and neighborhoods but remain flexible enough for existing businesses to evolve over time, and for new ones to find space that works for them.

The Falchi Building, a century-old loft building seeing new adaptive reuse, in Long Island City. Credit: Falchi Building

The value of sufficiently flexible regulations has been demonstrated time and again. New York City owes much of its economic success over the past century to a stock of flexible buildings that have been repurposed to meet a wide range of needs over time. Perhaps most notably, loft buildings, originally built to accommodate a flexible mix of industrial and commercial activities, have been adapted for showrooms, offices, retail, community facilities, and even residential space.

The vast majority of new businesses locate in existing space rather than in new buildings. New buildings intended for nonresidential uses should be flexible rather than purpose-built so that they can house a diverse set of business activities. Buildings constructed over the coming years will need to serve New York City for many decades to come. Rules governing the use of space should be forward looking to ensure that buildings remain occupied, active, and conducive to a wide range of businesses—some of which we have not yet imagined—that provide jobs and services in New York City.



## Doing business along NYC's retail corridors

Local neighborhood retail corridors are generally zoned for commercial use. These are typically categorized as either "C1" or "C2" districts. These districts are similar in that they both allow for one story (or in higher-density areas, two stories) of ground-floor commercial use within a building that otherwise follows the surrounding residential district's bulk regulations.

However, despite their similarities, C2 districts allow a wider range of service uses. When looking for space for a business that falls in a use groups allowed in C2 districts but not C1 districts—whether a pottery studio or guitar repair shop, a bike shop or a job training center—tenants may be surprised to find (sometimes at a late stage in their due diligence) that the space they thought was ideal for serving their customer and clients is off-limits due to its C1 zoning.

The complexity of these regulations can make it more difficult and costly for businesses to find space that meets their needs.

Local retail along Avenue U in Brooklyn, where certain retail and service uses are permitted on the south side of the street (zoned C2) but prohibited on the north (C1).

#### C1 versus C2 Districts

C1

**C2** 

UG 6

UG 6

UG 7

UG 7

UG 8

UG 8

UG 9

**UG** 9

UG 14

**UG 14** 



## Flexibility and economic resilience

to New York City's economic resilience in the 20th century

During the first half of the 20th century, the manufacturing sector was central to New York City's economy. In 1940, 60 percent of New York workers had manufacturing jobs, including major concentrations of apparel production, printing, and food preparation.<sup>3</sup> Unlike the more noxious industrial operations such as coal gasification, which generally took place along the waterfront, many of these manufacturing businesses were located in loft buildings constructed near large population centers.

But these early loft buildings were not purpose-built developments. They were generally built without a specific business in mind, with flexible space that could accommodate a range of potential tenants. For example, in the garment industry, lofts contained a mix of production space, offices, warehousing, and retail showrooms, with different activities occurring in a single building and sometimes even on the same floor. This versatility allowed for a supply of multipurpose space to meet the needs of a growing and changing mix of businesses.

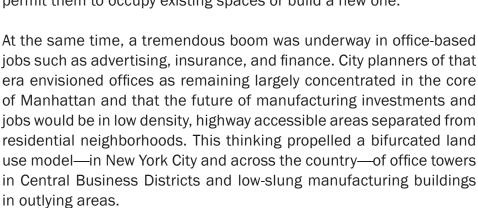
Above: a wide range of manufacturers in historic Broadway lofts, circa 1940. Credit: NYC Skyscraper Museum

Early zoning regulations acknowledged and allowed for this type of flexibility. For example, in unrestricted districts (where manufacturing was common), no regulations or restrictions were placed on mixing uses. In business and retail districts, there were allowances for light manufacturing uses at varying degrees: up to 25% of the floor area of a building in a business district or 5% of the floor area in a retail district could be light manufacturing.

This flexibility supported the intermingling of uses and allowed the growth of vertically integrated local economies. It also made New York City fertile ground for the founding and growth of small businesses, which could easily find locations where they were permitted to set up shop.

By the 1950s, however, New York City was just beginning a longterm transition away from its manufacturing economy, which would continue over decades as the city reinvented itself as a center of the global finance and information economy.

In a time before modern environmental regulations, zoning was one of the only available tools to protect residents and office workers from the impacts of heavy industry. Strictly separating industrial uses from other activities was considered to be sound planning. Under the 1961 Zoning Resolution, most light manufacturing uses were no longer permitted in commercial districts. Similarly, the zoning adopted in 1961 no longer allowed many non-industrial uses, such as educational institutions or museums, to locate in manufacturing districts. Certain commercial uses were also limited within manufacturing districts. This was a dramatic departure from the previous zoning regime, under which small businesses of all types could easily find space in "unrestricted" zones. Over time, use regulations became increasingly complex, requiring a much higher degree of technical expertise to identify where businesses of various types and sizes could locate. Today, small businesses often need to consult with land use attorneys or other technical experts to understand whether local regulations permit them to occupy existing spaces or build a new one.

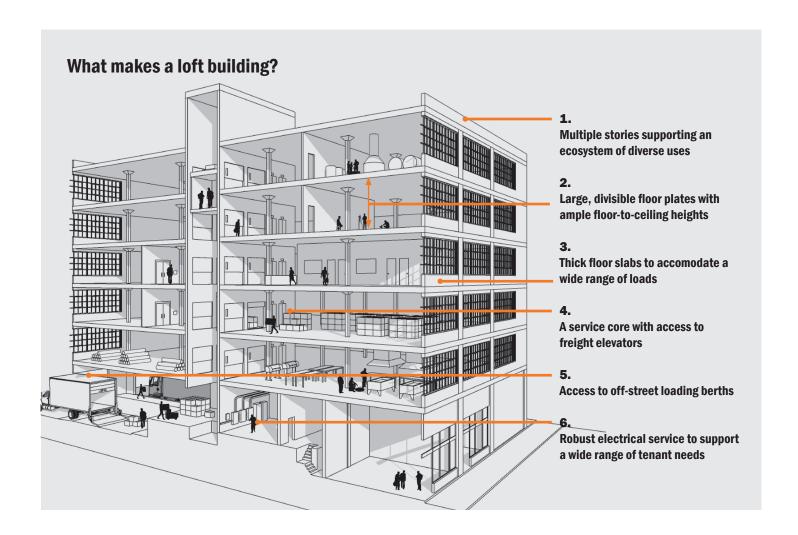




Lever House, the iconic modern office building, in 1952. © Ezra Stoller



Sperry Gyroscope Co. relocated to a modern facility, outside of NYC, during World War II. Credit: US Dept. of Defense



Over the past half-century, the city's economy has continued an evolution away from manufacturing and heavy industry and toward a range of commercial, institutional, and light industrial jobs that increasingly coexist in close proximity to one another. Loft buildings that were created for manufacturing have been converted to accommodate a range of uses. Many now contain myriad small businesses ranging from technology and media companies, medical labs, nonprofit offices, prototyping and niche manufacturing, and retail uses such as brewpubs and cafes. The ability of these buildings to accommodate a range of businesses and economic activity made the adaptive reuse of these buildings a major source of job growth in NYC. Examples of loft buildings that have evolved to include a vibrant mix of businesses can be found in many neighborhoods, such as Chelsea, Williamsburg, Hunters Point and Port Morris. The flexibility of New York City's existing building stock, when matched with sufficiently flexible building regulations, allows the emergence of small economies of scale, and enables buildings to be repurposed more quickly than would be possible with purpose-built or use-restricted buildings. The ability to repurpose buildings ensures there is space for new and growing businesses, making the city's economy more resilient and competitive.

### Policy changes underway to allow for flexibility

#### Life Science Labs

In recent years, there have been efforts to increase flexibility for businesses to occupy existing nonresidential spaces and allow enough flexibility for new construction to serve the changing needs of the city decades into the future.

With nine major research centers, over 50 hospitals, and a highly talented and diverse workforce, New York City has all of the resources to be a global leader in the life sciences industry. While life science labs have certain specific needs, such as for building ventilation systems, they often have otherwise similar space requirements to those of traditional offices. Yet language written into the zoning long ago—when life science laboratories operated differently than they do today—limits many of these uses to manufacturing districts and makes it challenging for them to co-locate with other commercial or institutional activities.

To help support this growing sector, the City has worked to unlock additional space for life science companies to grow within the city. This includes a clarification of the existing use categorization to reflect the many locations where research and development labs are permitted to locate in the city, including closer to hospitals and university research centers. This clarification has facilitated recent lab space developments in transit-rich areas close to institutional research facilities, such as a 300,000 square foot renovation of 345 Park Avenue South in Manhattan.

### Health & Fitness Facilities

In response to challenges faced by small businesses and the city's many retail corridors, the Department of City Planning has modified zoning to cut red tape for gyms, spas, and other health-related businesses, better enabling them to locate in existing retail space throughout the city. These zoning changes remove an outdated requirement for individual establishments to secure a special permit, making it easier for these small businesses to open and permitting them in many retail and community facility spaces where they previously were not allowed. At a time when dry retail businesses have been declining and vacancy rates are high along many retail corridors, the increased flexibility provided by this zoning change makes it easier for viable, neighborhood-serving businesses to occupy space.

#### Neighborhood Plans

Several recent zoning initiatives have proposed regulations that would increase use flexibility, to support the development of versatile space and the reuse of storefronts, loft buildings, and other existing spaces for a wider range of compatible, job-generating uses.



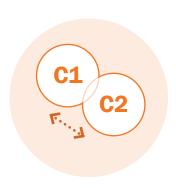
Rendering of a modern, contextual, and flexible building for job-creating uses in one of the city's Manufacturing Districts

### Looking Ahead:

## More ideas for resilience through flexibility

As the city's businesses find their footing in a changed economic environment, land use regulations can treat different job-generating uses that have similar fundamental space needs more similarly to one another, and encourage the provision of flexible space that can serve a wide range of businesses. This will help provide flexibility for new firms to find space, for existing small businesses to grow, and for New York City's economy to adapt and remain competitive.

# 1 Create flexible retail corridors



As the retail industry in New York City and across the United States confronts multiple changes in consumer behavior, e-commerce, and other factors, retail storefronts will need to accommodate a shifting range of activities that serve neighborhoods, provide jobs, and generate foot traffic and other local economies of scale. For example, over the past several years, New York City has seen growth of maker-retail spaces: retail businesses that include small-scale production of goods that are sold on-site, such as clothing and jewelry making, coffee roasters, or microbreweries. The existing zoning regulations generally describe these activities as industrial uses, limiting them to manufacturing areas far from the neighborhoods they intend to serve.

However, the premise for strict separation of uses is increasingly at odds with evolving business models and limits opportunities for economic growth and entrepreneurship. Not only has heavy industry declined within the city's borders, but health and environmental regulations have been established to address the types of conflicts that use regulations sought to address in 1961. Supporting the continuing evolution of zoning to allow flexibility for small, maker-retail businesses to locate within retail storefronts across the city can help activate retail corridors and provide additional opportunities for entrepreneurship. Similarly, other types of clean, advanced manufacturing uses, such as 3D printing, need not be limited to industrial areas.

Finally, the existing zoning regulations for service-related uses sometimes create antiquated and unreasonable divisions between activities, allowing some local services in all commercial districts while others are more limited in location, despite no apparent difference in their potential impacts on communities. For example, bicycle repair and rental businesses are not allowed in C1 local commercial districts, which are mapped widely along neighborhood retail streets across the city and permit an array of other compatible local services, such as dry cleaners and salons. These distinctions impede business investment and the availability of services in neighborhoods, and could be revamped to allow services more consistently across retail corridors.

2

## Increase flexibility for mixed-use buildings

The 2018 DCP study, "Can Industrial Mixed-Use Buildings Work in NYC?" analyzed the feasibility of different types of mixed-use buildings that include industrial space. The study found that a mix of office and industrial uses can be physically compatible, especially on larger lots.

Modern office and industrial uses frequently have similar design needs. For example, many office and industrial tenants have similar preferences for the size of each floor and the spacing of columns. However, the current zoning creates difficulties in designing space that could flexibly serve a mix of industrial and office tenants over time. Even though industrial areas currently allow both offices and industrial workspaces, there are different requirements for parking and loading for these uses, making it challenging to design and occupy work space that is not purpose-built but rather can change to meet the needs of businesses over time.

While it is often beneficial to support a mix of industrial and commercial uses at the scale of a neighborhood, the workability of combining industrial and non-industrial uses in a single building is highly dependent on the specific businesses. To avoid regulations that are challenging for small businesses to navigate, limit opportunities for business growth, or increase the costs of doing business, mechanisms can aim to allow—but not require—the mixing of industrial and non-industrial uses within a building.



DCP's 2018 report

#### **Ideas**

A comparison of community facilities allowed in non-residential districts.

D	c	M Districts
K-12 Schools & Daycare (UG 3A)	Yes	<u>No</u>
<b>Higher Education</b> (UG 3A)	Yes	<u>No</u>
Trade / Business Schools (UG 9A)	Yes	Yes

University-affiliated	3A
Hospital-affiliated	4A
Offices	6B
Research Labs	9A
Non-Research Labs	17B

Some of the zoning use groups applicable to life science spaces

# 3 Encourage services & amenities near jobs

Limitations on uses allowed in manufacturing districts have made it difficult for businesses to provide amenities and services that support workers within the district and surrounding neighborhoods. Modernizing these use regulations, such as allowing community facilities like child care and schools, would help ensure that these locations can support good jobs and attract talented workers who would benefit from these services. Recent zoning changes at the Brooklyn Navy Yard allow greater ability to locate these facilities in manufacturing districts, allowing for educational centers that serve a wide range of ages—from day care to adult vocational training and higher education—ensuring the area continues to grow as a vibrant job center.

# **Support** the growth of life sciences

The New York City metro is home to more life science jobs and a larger talent pool of workers in life science occupations than any other region in the country. However, New York City still has relatively little research and development lab space, and the space is much more expensive compared with other markets. To continue growing this industry in New York City, the City can propose to remove zoning barriers that are standing in the way of creating or converting more space for labs. By comparison, in Cambridge and Boston—hubs of life science development over the past few decades—labs are permitted by zoning anywhere that commercial offices are allowed, with a reliance on other regulations and permits to address safety and otherwise ensure that surrounding neighborhoods are not negatively impacted by labs. Land use regulations in New York City should similarly allow space to shift freely between offices, labs, and other activities that have similar space and locational needs, as well as allow companies to grow within university- or hospital-affiliated incubators without a need to relocate. To meet the physical space needs of modern life science laboratories, building envelopes should allow for floor-to-floor heights and floorplates that are large enough to efficiently accommodate the additional ventilation and mechanical equipment needed for laboratory space.

## **Modernize** the use regulations

The Zoning Resolution's use regulations were devised over 60 years ago and have been changed only incrementally since their adoption. As a result, they are often long and difficult to understand, referring to obsolete activities such as "cotton ginning" or the manufacture of "excelsior" (wood wool) or "lampblack" (soot-based pigment). At the same time, it is not easy for a business in a growing industry such as life science research, brewing, or small-scale craft manufacturing to understand where they are allowed to locate. Even uses as common as cell phone stores do not exist within the Zoning Resolution, creating challenges for entrepreneurs and small businesses trying to operate in New York City. Similarly, there is ambiguity about where many emerging or evolving business models, including many connected with e-commerce, fit within existing use regulations, such as last-mile distribution facilities, microfulfillment centers or "dark stores" (grocery or other retail stores that offer only delivery).

The last 60 years shows us that technology and trends change much more quickly than zoning regulations can. As many cities have done, in pursuing form-based codes or more modern regulatory approaches, the Zoning Resolution can be updated to define more broadly the characteristics of uses that are appropriate in locations throughout the city. Such reform would be a significant undertaking but yield significant economic benefits.

The Zoning Resolution regulates the permitted uses within a district, while the Building Code has occupancy types that specify the standards to which spaces must be built for different purposes. When these are aligned, it greatly expands the ability of businesses to find space, and buildings to find tenants. But today, this is too often not the case. For example, while the Building Code has fairly straightforward regulations governing a simple commercial storefront space, the Zoning Resolution specifies dozens of use listings for the potential businesses that might locate there, with differing regulations for different uses. This creates complications for a business owner seeking space (see page 6). If, rather than specifying eleven different use groups for "retail" uses, retail uses could be allowed based on readily definable characteristics such as their Building Code occupancy type and size, it would enhance the clarity with which an evolving mix of uses is permitted. The same logic could apply to services, distribution, manufacturing, and other categories of activities that are currently the subject of complex zoning use regulations.

Asphalt or asphalt products Beverages, alcoholic, or breweries Brick, tile, or clay Cement Charcoal, lampblack, or fuel briquettes Chemicals, including acetylene, aniline dyes, soda, cellulose, chlorine, carbon black or bor ing preparations, creosote, exterminating a industrial alcohol, potash, plastic materials yarns, or hydrochloric, picric, or sulphuric Coal, coke, or tar products Excelsior or packing materials Fertilizers Foundries, ferrous or non-ferrous Gelatin, glue, or size Glass or large glass products, including struct lar products Grain, milling or processing Graphite, or graphite products Gypsum Hair, felt, or feathers, bulk processing, wash Film, photographic Incineration or reduction of garbage, offal, or Insecticides, fungicides, disinfectants, or rela

A. MANUFACTURING ESTABLISHMENTS

A selection from the original 1961 use regulations, unchanged to this day.

Leather or fur tanning, curing, finishing, or

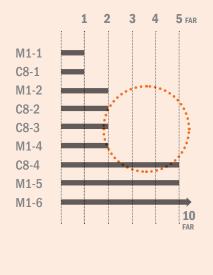
chemical compounds

#### **Ideas**

#### An example of streamlining

Example use	Use + Parking Regs.	
Eating & Drinking Establishments	6A, 6C	1: 150/300 /400/1000 sf
Refrestment Stands	7B	1: 50/100 sf
Bowling Alleys	8A	1:4/8/12/25 persons
Amusements, Food Service, Entertainm		Consistent egulations
Ambulatory Care	4A	1: 150/300 /400/1000 sf
Offices	6B	1: 150/300 /400/1000 sf
Laboratories	17B	1:1000 sf or 1/3 people
Trade Schools	9A	1: 150/300 /400/1000 sf
Offices & Institutional Uses		Consistent egulations

#### Missing-middle FARs in non-residential districts

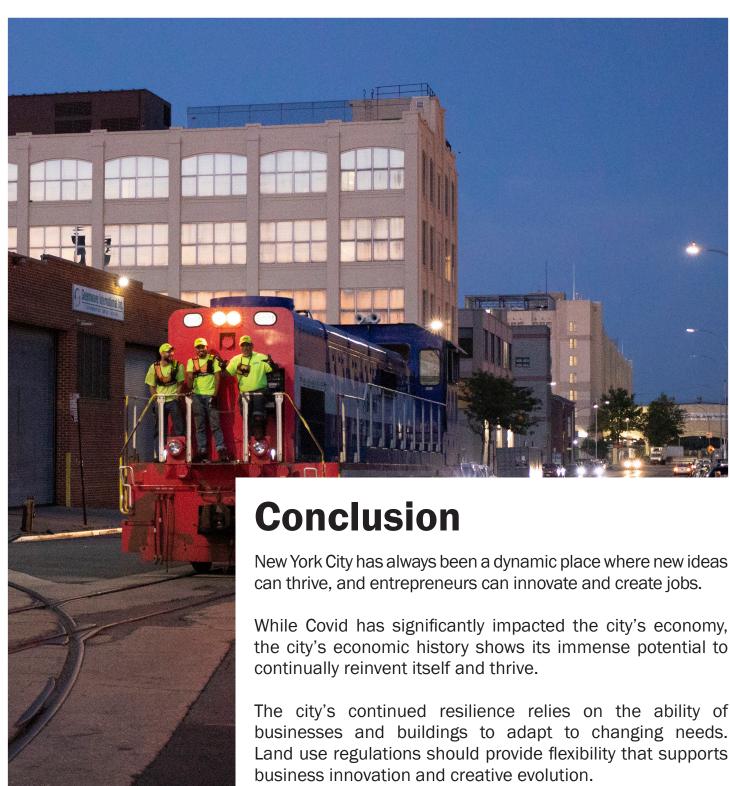


# Create consistent rules for floor area & parking

Currently, activities with similar land use characteristics sometimes have dramatically different parking, loading, or floor area ratio (FAR) regulations, depending on the use category for each activity. In addition, in many industrial districts, high parking requirements are out of step with commuters' reliance on transit, walking, or cycling. Together, these factors can make it difficult for certain types of businesses to locate in space that was originally developed for a different use, and it can also make it impossible to co-locate diverse uses within a single building, as one could find in a classic loft building. This also discourages the development of flexible, loft-style commercial or industrial buildings, and promotes purpose-built buildings that, by virtue of the parking, use, and bulk regulations that apply to a given use, are difficult to reuse. Further study can seek to identify ways to create simpler groupings of uses with similar land use characteristics, such as "office and institutional uses" or "amusements, food service and entertainment uses," and apply consistent parking, FAR, and supplemental use regulations to these categories. This would support a shift away from the development of use-specific buildings and toward a greater ability to adaptively reuse existing buildings for new uses, and thereby help make more space easily available to small businesses.

# **Create** new zoning districts for modern loft buildings

New industrial zoning districts should be explored to fill gaps in the density levels permitted by zoning. In some existing industrial districts (e.g., 1, 2, or 5 FAR), higher densities (e.g., 3 to 4 FAR, or 8 FAR) can be permitted to facilitate the sort of older buildings that often exist in these areas, containing a range of commercial, industrial, and community facility uses. Equipped with new "loft-style" zoning envelopes, these moderate-FAR districts would allow for buildings that are more akin to the multi-story lofts of New York City's past: buildings with spaces suitable to a wide variety of commercial and industrial tenants. Other areas can allow for higher density, mixed-use development that includes housing, with more flexible use regulations that enable multiple stories of nonresidential uses. These flexible use regulations would give prospective business tenants the ability to locate more freely in the types of space needed by uses including film studios, restaurants, medical offices, breweries, and more, enabling them to secure space and plan for their growth.



While Covid has significantly impacted the city's economy,

the city's economic history shows its immense potential to

The city's continued resilience relies on the ability of businesses and buildings to adapt to changing needs. Land use regulations should provide flexibility that supports

By building on historical models as well as recent efforts to promote economic resiliency, the City can continue to support the availability of space for small businesses and growth jobs that serve all New Yorkers.

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#### **Endnotes**

- https://www1.nyc.gov/assets/planning/download/pdf/planning-level/housing-economy/nyc-workers-without-bachelor-degree-info-brief.pdf
- 2 https://www1.nyc.gov/assets/planning/download/pdf/planning-level/housing-economy/retail-activity-nyc-covid-recovery.pdf
- 3 "The Labor Force in the New York Metropolitan Region, 1940. Basic Employment Supports Non-Basic." From: The Economic Status of the New York Metropolitan Region in 1944, page 7.
- 4 https://edc.nyc/sites/default/files/filemanager/Programs/LifeSci\_NYC/ClarificationMemo-LifeSciences-CommercialZoningDistricts.pdf

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