



NEW YORK CITY COMPTROLLER
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Bureau of Policy and Research



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The New Geography of Jobs: A Blueprint for Strengthening NYC Neighborhoods



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Executive Summary

For generations, Manhattan’s commercial core has served as the business epicenter of New York and the nation. But the city’s economic landscape has evolved in recent years, with more and more businesses opening in neighborhoods outside of Manhattan. While this diffusion has been a boon to many communities, it signals the need for a more collaborative and community-centric workforce and business development strategy—one that engages neighborhood businesses and connects residents with local job and entrepreneurship opportunities, and provides them the resources they need to thrive in their communities and move up the economic ladder.

These challenges are most apparent in lower income areas. While these neighborhoods have enjoyed the fastest rates of business growth, they continue to endure the highest rates of youth and adult unemployment. From Bushwick to Port Morris, Harlem to Brownsville, connecting residents to local jobs and business opportunities will help them build careers and mitigate their rising rent burdens. Doing so will also strengthen neighborhood businesses and build stronger, more inclusive communities.

This study, by New York City Comptroller Scott M. Stringer, analyzes neighborhood-level business growth between 2000 and 2015 and offers a series of recommendations on how to harness economic growth for the benefit of local residents. Specifically, the report’s findings include:

- From 2000 to 2015, the number of businesses in New York City grew from 203,698 to 237,198. Business growth was especially pronounced outside of the Manhattan core, leading to a dramatic dispersion of economic activity within the city. Over this period, the share of businesses located in the Downtown and Midtown Central Business Districts (CBDs) fell from 39 percent to 31 percent.¹
- Over this same time period, entrepreneurial activity in New York’s 22 lower income communities boomed. These neighborhoods experienced a 41 percent increase in business establishments from 2000 to 2015—far outpacing the 12 percent jump in the city’s 33 higher income districts.²
- Employment and business growth spanned a variety of industries in these lower income neighborhoods—including several high- and middle-income fields. From 2000 to 2015, lower income neighborhoods saw the number of Professional and Technical Services businesses grow by 100 percent, Information businesses by 97

percent, Transportation and Warehousing businesses by 55 percent, and Finance and Insurance businesses by 45 percent. In these neighborhoods, over 50 percent of businesses are in industries where the average wage exceeds \$40,000 in the boroughs outside of Manhattan.³

- While 82 percent of business establishments in lower income neighborhoods have fewer than ten employees, these neighborhoods are delivering important job opportunities, especially for younger New Yorkers—many of whom struggle to gain a foothold in the workforce.⁴ In 2014, businesses in lower income neighborhoods employed 113,420 workers below the age of 30, a 31 percent increase from 2002.⁵
- In the city’s 15 gentrifying areas—as identified by the NYU Furman Center—business growth was even more pronounced.⁶ In 2000, there were 29,132 businesses in these neighborhoods. By 2015, there were 42,261, a 45 percent jump.⁷ Of the ten neighborhoods with the fastest business growth in the city, nine were classified as gentrifying.

Strong business growth in gentrifying and lower income neighborhoods offers an extraordinary opportunity for those looking to enter the workforce, advance in their careers, and counteract the forces of displacement. As new businesses open their doors and search for qualified employees, it is essential that local residents have the resources and guidance to seize these opportunities.

To ensure that these opportunities accrue to long-time, local residents, the City should:

- 1) **Fund a Network Coordinator in Every Community District To Strengthen The Pipeline Between Local Businesses And Residents And Improve Collaboration Among Workforce Development Providers.** To help local workforce development providers coordinate business recruitment, locate job opportunities for their clients, and build new training programs based on employer needs, the Mayor’s Office of Workforce Development should help develop and fund a Network Coordinator in community districts throughout the city. The Coordinator would serve as the primary point of contact for neighborhood businesses. To build out this model, the City should look to the East Harlem Talent Network and the Lower East Side Employment Network for inspiration. LESEN—a partnership of seven veteran workforce development providers and Community Board 3—centralizes business outreach for its members and helps local employers recruit, hire, and retain quality candidates, access available subsidies and tax incentives, and develop customized training for new and existing employees.⁸

- 2) **Create A Uniform Assessment Tool To Ensure There Is “No Wrong Door” to the Workforce Development System.** When a New Yorker enters the office of a local workforce development provider, it should be an entryway into the City’s vast array of counseling, training, entrepreneurship, job placement, union apprenticeships, and income support services. They should receive a one-time, uniform assessment to document their work, training, and educational history and identify any barriers to entering and advancing in the labor market. An appropriate service plan should be determined and, if services are not available in-house, referrals should be made. Whichever organization administers the assessment would be expected to follow-up on referrals and be compensated for their efforts.
- 3) **Leverage Data to Connect with Local Businesses.** To improve outreach to local businesses and increase job placements, workforce development organizations should make strategic use of publicly-available government data. Network Coordinators should receive automated alerts when the Department of Buildings issues a permit for street signage or for commercial renovation within their district, from the Department of Consumer Affairs when it issues a sidewalk café or business license, or from the Department of Finance when small commercial properties change hands—all signaling a new tenant or the expansion of an existing business. By strategically reaching out to business owners before they open or expand, there will be a higher likelihood of immediate employment opportunities. Moreover, alerting local businesses to available subsidies and referring them to SBS Business Services can fortify their continued growth and ensure future job openings.
- 4) **Restore Federal Funding for Workforce Development.** Federal support for workforce development has plummeted in recent years. From 2002 to 2016, its allocation to New York State under the Workforce Investment Opportunity Act (WIA/WIOA) fell 45 percent, from \$231.6 million to \$127.7 million, inflation adjusted.⁹ The new president of the United States has promised to increase job opportunities for all Americans, particularly those who feel left behind by the modern global economy. Increasing WIOA funding would be a good place to start. Meanwhile, to more strategically allocate these federal dollars, New York State should allow “Dislocated Worker” funding to be used for foreign-trained immigrants facing barriers to employment.¹⁰
- 5) **Help entrepreneurs graduate to storefronts.** The City should target corridors with high vacancy rates and provide short-term subsidized rents to the most promising startups at SBS, CUNY, EDC, and NYCHA entrepreneurship programs. Space can also be made available to existing business-owners, who often have

multiple business ideas and have the requisite entrepreneurial know-how. The City can also assist budding entrepreneurs by enabling more pop-up markets in pedestrian plazas, empty lots, and school blacktops.

- 6) **Assist with Business Succession for Retiring Entrepreneurs.** In the New York City metro area, nearly half of business-owners are over 55 years old and 76 percent are over 45.¹¹ When these entrepreneurs retire, many of their businesses will close, putting thousands of jobs in jeopardy. To help these companies transfer ownership and preserve jobs, the City should follow the lead of Catalonia, Spain, and Quebec, Canada, creating an online marketplace for selling small and mid-sized businesses and assisting with this succession.
- 7) **Help Solo Entrepreneurs Scale Up.** The majority of businesses in New York City are “non-employers”—often freelancers or home-based businesses that are unincorporated. From 2004 to 2014, the number of solo entrepreneurs in New York City grew steadily, from 677,436 to 877,029.¹² Nearly 57 percent were minorities, compared to 34 percent of business-owners who maintain a payroll.¹³ The City should partner with Freelancers Union and other service providers to improve outreach to these solo entrepreneurs and to develop a Business Acceleration unit dedicated to helping them expand.

In this report, we document business and employment outcomes at the neighborhood-level. We also provide an action plan for a more accessible, collaborative, and inclusive workforce and business development strategy that continues to benefit New Yorkers of all ages, ethnicities, and neighborhoods.

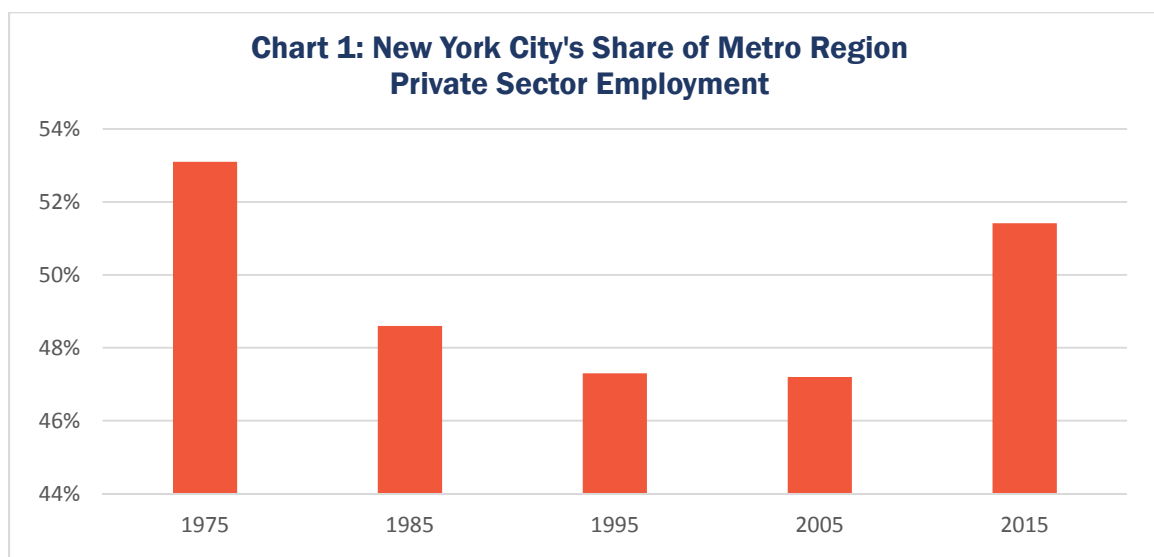
The New Geography of NYC Businesses

New York City has experienced an economic renaissance in recent years. Decades of suburban sprawl have slowly reversed course, giving way to an urban population boom that is drawing consumers, entrepreneurs, and a highly educated workforce back to the city.

In the mid-20th century, bustling commercial corridors were a staple of every New York City neighborhood. Shopping was conducted close to home and many worked in retail, professional, and industrial jobs within their borough.¹⁴

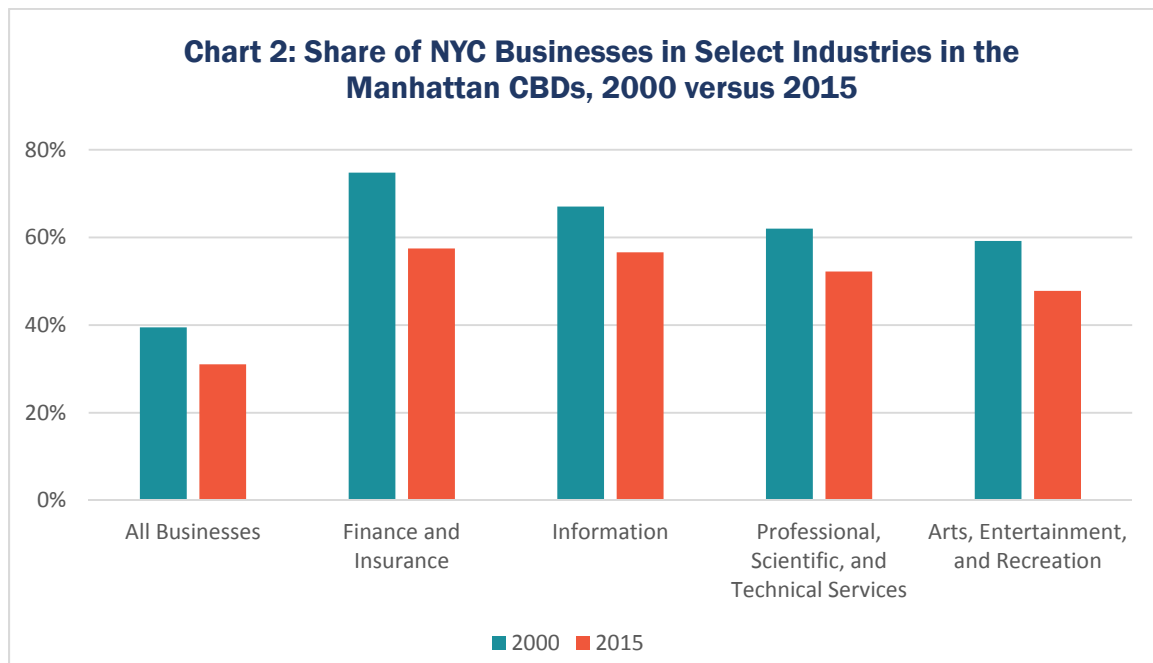
Middle-class flight and automobile-oriented shopping centers quickly thinned out these local business districts. As retail, factories, and offices migrated to the suburbs, remaining employment opportunities concentrated in the Manhattan Central Business Districts, increasing the overall share of city jobs and businesses in Downtown and Midtown.

Both of these trends—suburban job sprawl and the concentration of business activity in the Manhattan CBDs—have been reversed in recent years. Chart 1 graphs New York City’s share of metro region employment over the last four decades. In 2005, 47.2 percent of metro area jobs were located in New York City. In the last decade, however, business has migrated back toward the city, accounting for 51.4 percent of regional employment in 2015.¹⁵



*The 17-County Metro Region includes Bergen, Bronx, Essex, Hudson, Kings, Middlesex, Morris, Nassau, New York, Passaic, Putnam, Queens, Richmond, Rockland, Suffolk, Union, and Westchester Counties.
Bureau of Labor Statistics and Center for an Urban Future*

As business and consumer activity re-concentrated within the larger metro area, it deconcentrated within the city. In 2000, nearly 40 percent of New York’s private sector businesses were located in the community districts encompassing the Downtown and Midtown Central Business Districts. By 2015, that share had fallen rapidly, to 31 percent (see Chart 2).¹⁶



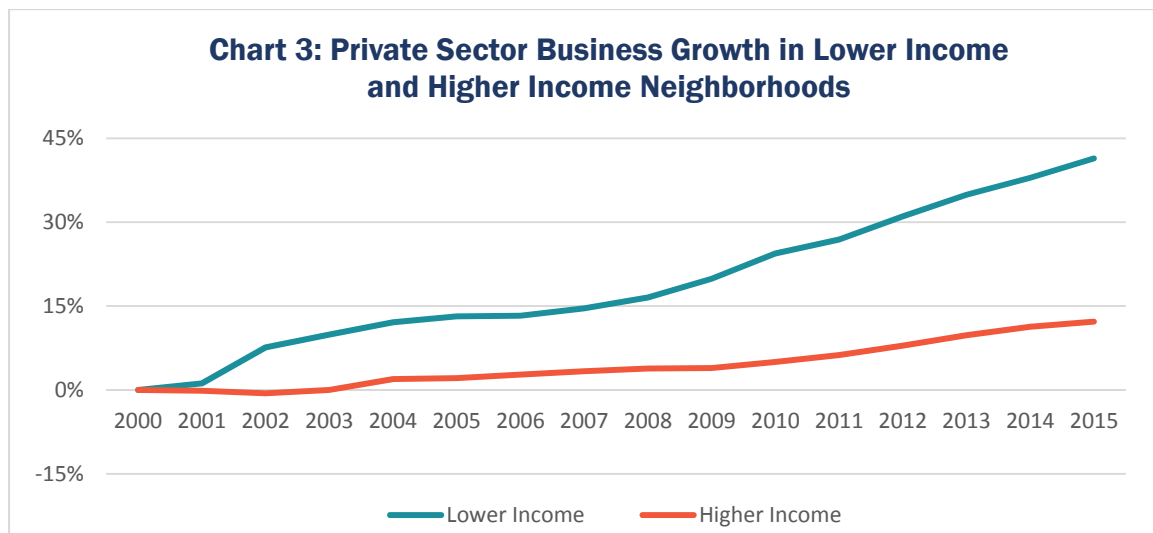
United States Census Bureau. "Zip Code Business Patterns." 2000-2015.

Notably, it was the middle- and high-wage industries that experienced the most pronounced de-concentration of business enterprises. Between 2000 and 2015, the share of the city’s Information businesses located in the Manhattan CBDs fell from 67 percent to 57 percent; the share of Professional and Technical Services from 62 percent to 52 percent; Arts, Entertainment, and Recreation from 59 percent to 48 percent; and Finance and Insurance from 75 percent to 57 percent.¹⁷

The decentralization of business activity was both propelled and enabled by the construction of new office and retail space. From 2002 to 2016, the number of tax lots outside the CBDs devoted to office buildings increased by 14 percent (from 3,779 to 4,292), standalone stores and shopping centers by seven percent (16,727 to 17,931), and mixed-use residential by eight percent (43,770 to 47,241).¹⁸

Business Outcomes in Lower Income and Higher Income Neighborhoods

As businesses spread throughout the city, neighborhoods in every borough experienced a significant uptick in commercial activity. The city's 22 lower income neighborhoods, in particular, saw rapid business growth. From 2000 to 2015, the number of private sector businesses in these districts grew 41 percent (from 29,444 to 41,640), compared to just 12 percent in the city's 33 higher income areas (174,254 to 195,558).¹⁹



United States Census Bureau. "Zip Code Business Patterns." 2000-2015.

While this flurry of business activity was most prominent in the relatively low-wage Accommodations and Food Services industries, which grew by 128 percent from 2000 to 2015, there was significant expansion in high-wage industries as well (see Table 1). Professional and Technical Services businesses, with average wages of \$56,666 in the boroughs outside Manhattan, grew 100 percent (from 992 to 1,987); Information businesses, with average wages of \$73,062, grew 97 percent (from 278 to 547); and Finance and Insurance, with average wages of \$86,634, grew 45 percent (from 702 to 1,016).²⁰

These neighborhoods saw rapid growth in middle-class industries as well. The number of Construction businesses grew by 931, Transportation and Warehousing businesses by 380, and Wholesale Trade by 222.

Table 1: Business Growth in Lower Income Neighborhoods

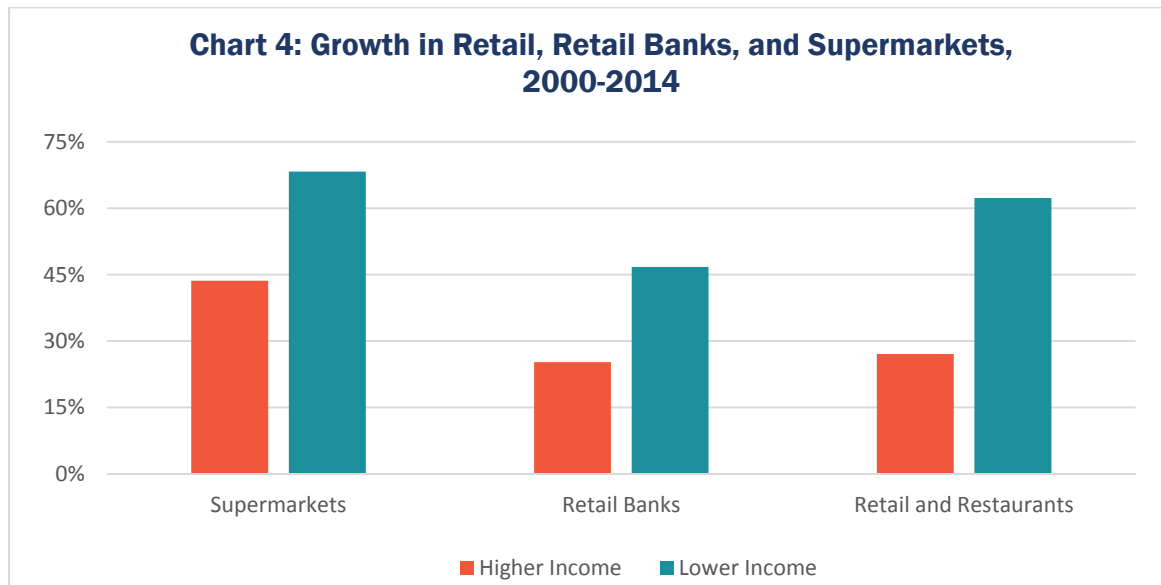
	Number of Businesses in 2000	Number of Businesses in 2015	Growth	Average Wages in Non-Manhattan Boroughs in 2015
Accommodation and Food Services	2,008	4,580	128%	\$21,538
Professional and Technical Services	992	1,987	100%	\$56,666
Arts, Entertainment, and Recreation	225	443	97%	\$54,378
Information	278	547	97%	\$73,062
Educational Services	428	756	77%	\$43,909
Construction	1,651	2,582	56%	\$67,729
Transportation and Warehousing	690	1,070	55%	\$52,914
Retail Trade	6,703	9,762	46%	\$29,574
Finance and Insurance	702	1,016	45%	\$86,634
Health Care and Social Assistance	3,429	4,927	44%	\$43,143
Administrative and Waste Services	842	1,074	28%	\$34,413
Real Estate and Rental and Leasing	3,755	4,567	22%	\$44,791
Wholesale Trade	1,756	1,978	13%	\$57,114
Manufacturing	1,334	988	-26%	\$45,519
All Other	4,651	5,363	15%	\$39,477
Total	29,444	41,640	41%	\$44,250

Source: Business establishment data from U.S. Census "Zip Code Business Patterns," 2000-2015.

Wage data from New York State Department of Labor "Quarterly Census of Employment and Wages," 2015.

Beyond entrepreneurship and employment opportunities, business growth has provided essential resources to lower income communities. For years, advocates and scholars have documented the dearth of grocery stores and commercial banks in these neighborhoods.²¹ The effects of these disparities are grave, leading to high rates of obesity and an overreliance on alternative financial businesses, such as check cashers, loan sharks, and pawnbrokers.

While too many neighborhoods in New York City have limited access to large supermarkets with fresh vegetables, New York’s lower income neighborhoods did see improvements from 2000 to 2015 (see Chart 4). The number of supermarkets—defined as grocery stores with 10+ employees—rose 68 percent (from 189 to 318), retail banks 47 percent (from 199 to 292), and retail and restaurants 62 percent (from 10,562 to 17,144).²² In East New York and Starrett City, the number of supermarkets jumped from 7 to 29; in Bedford Park, Fordham North, and Norwood from 17 to 31; and in Crown Heights North and Prospect Heights from 6 to 17.²³



United States Census Bureau. “Zip Code Business Patterns.” 2000-2015.

And yet, while these disparities between higher and lower income neighborhoods have improved, they do remain. In 2015, there were 14 supermarkets and 36 retail banks per 100,000 residents in higher income neighborhoods. In lower income neighborhoods, there were 10 and 9, respectively (see Table 2).²⁴ While this is partially due to the tourists and non-city labor force that higher income areas serve, the scale and persistence of these disparities is disconcerting.

Table 2: Number of Businesses per 100,000 Residents

	Supermarkets	Retail Banks	Retail & Restaurants
Higher Income Neighborhoods	14	36	1,026
Lower Income Neighborhoods	10	9	525

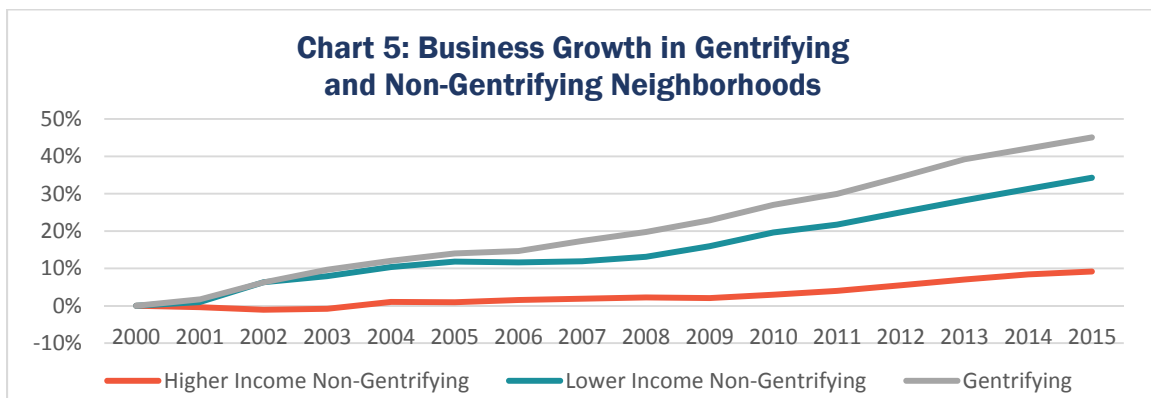
Source: United States Census Bureau. “Zip Code Business Patterns.” 2000-2015.

Gentrifying Neighborhoods

Over the last decade, gentrification has dominated the political discourse. Its effects on neighborhood demographics and affordability have inspired countless conversations, editorials, and demonstrations. For the most part, these discussions have focused on housing prices and the displacement of long-time residents, with less attention on gentrification’s impact on the character and dynamics of local commercial corridors.

Yet business activity provides, perhaps, the clearest visual marker of neighborhood change. While a surge in economic activity can provide important employment opportunities and consumer amenities, it can also be a source of distress. Residents in gentrifying neighborhoods will often view the influx of boutiques, bars, cafes, wine stores, and galleries as a harbinger of their eventual displacement. As new, higher income residents take “symbolic ownership” over the local retail corridor, some long-time residents feel excluded and unwelcome.²⁵

In New York City, gentrification is clearly associated with an uptick in economic activity. In 2000, there were 29,132 businesses in the city’s 15 gentrifying neighborhoods. By 2015, there were 42,261, a 45 percent jump (see Chart 5). This exceeded business growth in non-gentrifying neighborhoods, including those that are higher income (9 percent) and lower income (34 percent).²⁶



United States Census Bureau. “Zip Code Business Patterns.” 2000-2015.

In fact, of the ten New York neighborhoods experiencing the fastest business growth between 2000 and 2015, all but one was a gentrifying neighborhood (see Table 3). The biggest increases were in Central Harlem (99 percent), Crown Heights North & Prospect Heights (94 percent), Crown Heights South, Prospect Lefferts, & Wingate (80 percent), and Greenpoint & Williamsburg (70 percent).²⁷

Table 3: Ten NYC Neighborhoods with the Fastest Business Growth

Neighborhood	Status	Businesses 2000	Businesses 2015	'00-'15 Growth
Central Harlem	Gentrifying	614	1,223	99%
Crown Heights North & Prospect Heights	Gentrifying	1,014	1,971	94%
Crown Heights South, Prospect Lefferts & Wingate	Gentrifying	417	750	80%
Greenpoint & Williamsburg	Gentrifying	3,132	5,338	70%
Bedford-Stuyvesant	Gentrifying	850	1,421	67%
Bushwick	Gentrifying	1,489	2,433	63%
Park Slope, Carroll Gardens & Red Hook	<i>Higher Income</i>	2,135	3,474	63%
Brownsville & Ocean Hill	Gentrifying	781	1,247	60%
Sunset Park & Windsor Terrace	Gentrifying	2,462	3,925	59%
East Harlem	Gentrifying	1,081	1,710	58%

Source: Business establishment data from U.S. Census "Zip Code Business Patterns," 2000-2015.

Within the city's gentrifying neighborhoods, business growth spanned low-, medium-, and high-wage industries (see Table 4). Overall, Arts, Entertainment, and Recreation was the fastest growing field, with the number of establishments rising 258 percent (from 351 to 1,256). It was followed by a 120 percent jump in Accommodation and Food Services businesses (2,533 to 5,576), a 117 percent uptick in Information businesses (454 to 985), and a 100 percent increase in Professional and Technical Services businesses (1,590 to 3,176).

Table 4: Business Growth in Gentrifying Neighborhoods

	Number of Businesses in 2000	Number of Businesses in 2015	Growth	Average Wages in Non-Manhattan Boroughs in 2015
Arts, Entertainment, and Recreation	351	1,256	258%	\$54,378
Accommodation and Food Services	2,533	5,576	120%	\$21,538
Information	454	985	117%	\$73,062
Professional and Technical Services	1,590	3,176	100%	\$56,666
Educational Services	375	717	91%	\$43,909
Finance and Insurance	631	983	56%	\$86,634
Health Care and Social Assistance	2,671	3,849	44%	\$43,143
Real Estate and Rental and Leasing	2,949	4,175	42%	\$44,791
Retail Trade	5,824	8,213	41%	\$29,574
Transportation and Warehousing	591	829	40%	\$52,914
Construction	1,893	2,529	34%	\$67,729
Administrative and Waste Services	874	1,129	29%	\$34,413
Wholesale Trade	2,307	2,455	6%	\$57,114
Manufacturing	1,907	1,244	-35%	\$45,519
All Other	4,182	5,145	23%	\$39,477
Total	29,132	42,261	45%	\$44,250

Source: Business establishment data from U.S. Census "Zip Code Business Patterns," 2000-2015.

Wage data from New York State Department of Labor "Quarterly Census of Employment and Wages," 2015.

Across these industries, growth was largely driven by small businesses. In 2015, 80 percent of establishments in gentrifying neighborhoods had fewer than ten employees, up from 78 percent in 2000.²⁸

These small businesses have filled retail and office vacancies in gentrifying neighborhoods and spurred new commercial construction. From 2002 to 2016, the number of tax lots devoted to office buildings increased by 34 percent (from 628 to 844) and mixed-use residential by 12 percent (14,754 to 16,481). In comparison, the number of office lots grew by 10 percent and mixed-use by nine percent in the remainder of the city.²⁹

Who's Being Left Out

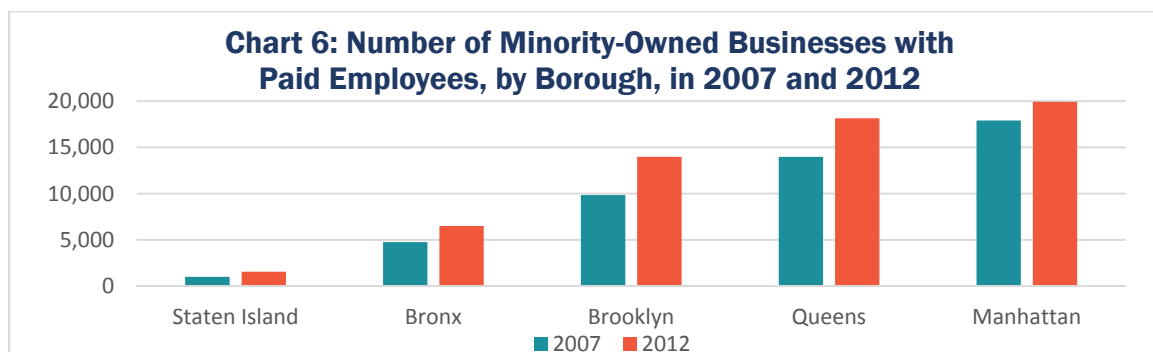
While economic activity and employment are expanding throughout the five boroughs, the benefits of this growth have been uneven. Disparities in employment and business ownership by race, ethnicity, age, and geography persist—and, in some instances, have been aggravated in recent years, particularly since the Great Recession. As commercial activity becomes more diffuse and local customer bases change, accessing jobs and maintaining businesses can be a challenge.

In the following section, we examine the effects of New York's changing business geography on both entrepreneurship and employment patterns. Special attention is paid to ethnic and racial disparities.

Minority-Owned Businesses

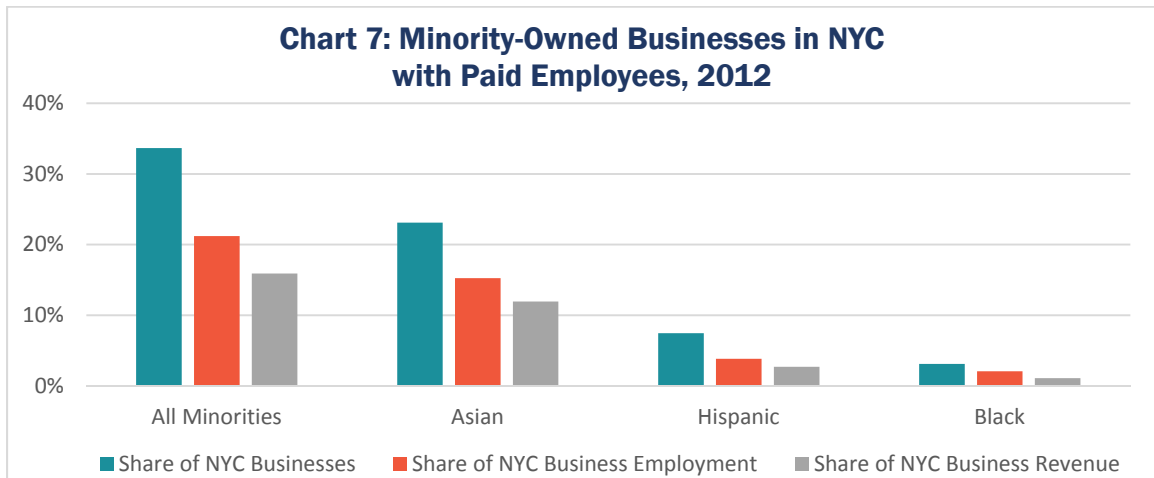
New York's diversity is most apparent in its commercial corridors. The culinary, cultural, and intellectual heritage of every race and nation is on display in its bookstores, theaters, restaurants, and markets. These businesses serve as a magnet and welcome mat for new émigrés and are a living testament to the city's vitality, opportunity, and inclusivity.

In recent years, these commercial corridors have grown increasingly diverse, with New York City experiencing an uptick in minority-owned business ownership. From 2007 to 2012—when the Census' most recent quinquennial Survey of Business Owners was conducted—the number of minority-owned businesses rose in every borough. Queens added 4,172 minority-owned businesses over this period, Brooklyn added 4,127, and Manhattan 2,020 (see Chart 6).³⁰ Meanwhile, the number of minority “non-employers”—often freelancers or homebased businesses that are unincorporated—rose 34 percent across the city, from 356,360 to 479,394.



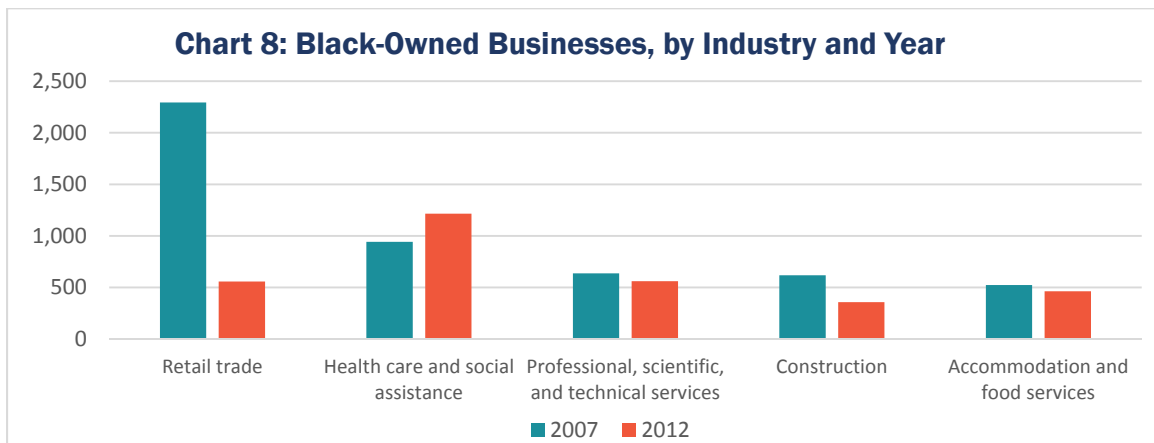
United States Census Bureau. "Survey of Business Owners." 2007 and 2012.

But while the *number* of minority-owned businesses in the city is impressive, their *share* of employment and revenue is quite small. Though minorities own 34 percent of all city businesses with employees, these establishments account for only 21 percent of business employment and 16 percent of revenue (see Chart 7).³¹



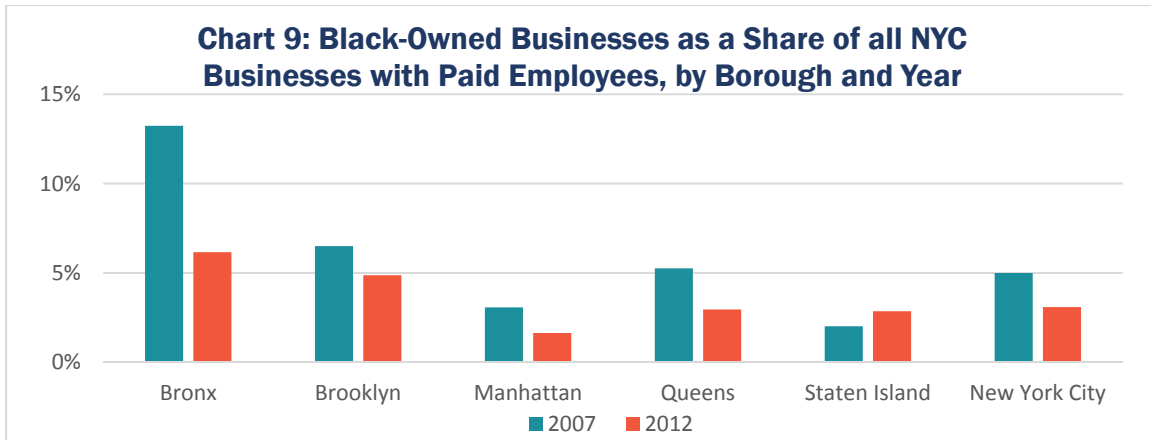
United States Census Bureau. "Survey of Business Owners." 2012.

Blacks, in particular, are significantly underrepresented. While accounting for 22 percent of the city's population, they own only three percent of local businesses (see Chart 8). Over the last five years, these numbers have grown steadily worse, with the exception of health care and social-assistance related businesses.³²



United States Census Bureau. "Survey of Business Owners." 2007 and 2012.

From 2007 to 2012, the number of Black-owned retail businesses fell from 2,294 to 558 and Accommodations and Food Services businesses from 524 to 463 (see Chart 8). In 2007, Black-owned businesses represented 13 percent of all businesses in the Bronx and 5 percent in Queens. By 2012, those figures had plummeted to 6 percent and 3 percent, respectively (see Chart 9).³³



United States Census Bureau. "Survey of Business Owners." 2007 and 2012.

The decline in Black-owned businesses is connected to both their declining share of the city population and their heavy presence in the retail sector, which experienced significant business turnover, particularly during the Great Recession. However, the trajectory of Black-owned businesses in New York runs counter to national trends. Among the 25 largest cities in the United States, thirteen had over 500 Black-owned businesses with paid employees. All but three saw their numbers rise between 2007 and 2012 (see Table 5). Nationally, the number of Black-owned businesses grew by 2.4 percent, from 106,556 to 109,137.

Table 5: Black-Owned Businesses in America's 25 Largest Cities (with at least 500 Businesses)

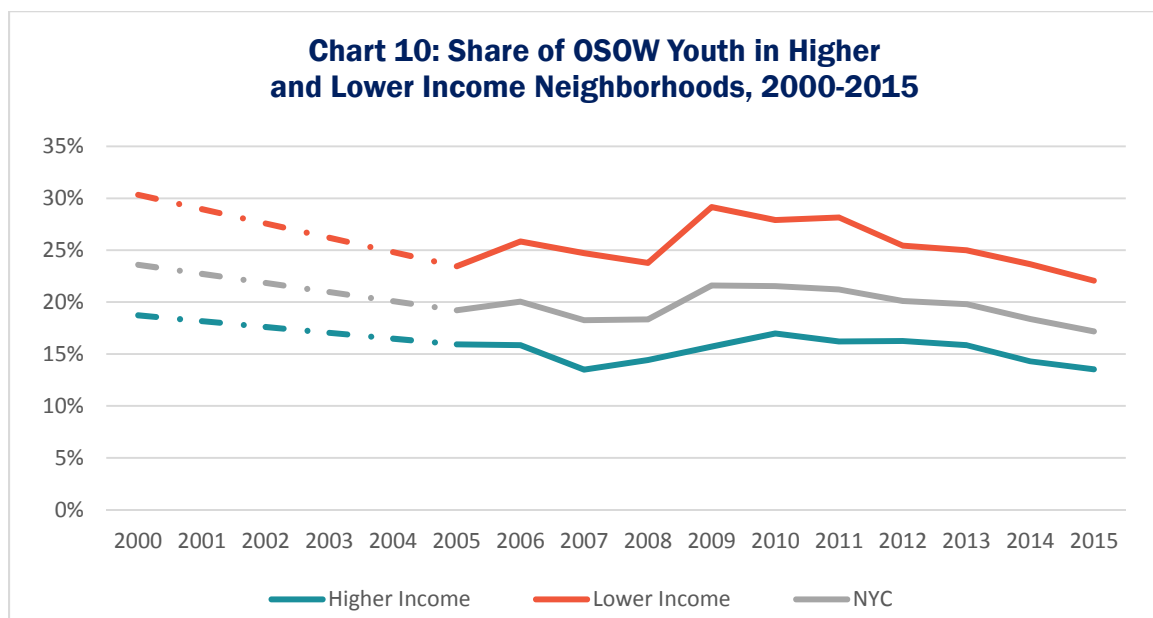
	2007	2012	Change
Charlotte	605	964	59.3%
Columbus	443	604	36.3%
Houston	1,757	1,985	13.0%
Memphis	737	798	8.3%
Dallas	770	820	6.5%
Chicago	1,946	2,056	5.7%
Philadelphia	1,136	1,148	1.1%
Washington	1,425	1,439	1.0%
Los Angeles	2,073	2,081	0.4%
Indianapolis	520	521	0.2%
Jacksonville	650	648	-0.3%
Detroit	968	765	-21.0%
New York	8,067	5,532	-31.4%
United States	106,566	109,137	2.4%

Source: United States Census Bureau. "Survey of Business Owners." 2007 and 2012.

Young Adults in Lower Income Neighborhoods

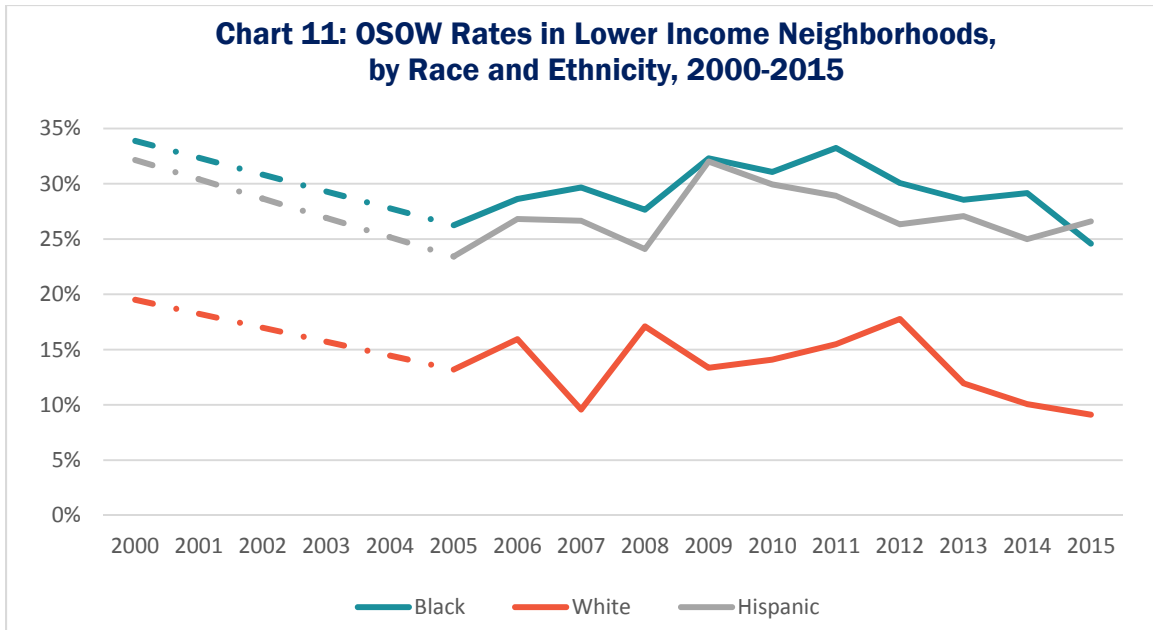
Despite rapid business growth in lower income neighborhoods, many residents in these communities remain disconnected from the labor market. This is particularly true among young people, many of whom are both Out-of-School and Out-of-Work (OSOW). While employment and education outcomes have significantly improved for the city's youth, large geographic and racial disparities persist.

From 2000 to 2015, the rate of OSOW youth fell from 23.6 percent to 17.2 percent across the city. And while the Great Recession had a dramatic effect on youth employment, by 2014 these OSOW rates had returned to pre-recession levels in neighborhoods throughout New York (see Chart 10). What remained, however, was a large disparity between higher and lower income areas. Though the city's youth have clearly benefitted from employment and business growth, well over a fifth of 18-24 years olds in lower income neighborhoods were OSOW in 2015. This compares to just 13.5 percent in higher income areas.³⁴



United States Census Bureau. 2000 Census and American Community Survey 2005-2015.

Within lower income neighborhoods, education and employment outcomes are tightly intertwined with racial disparities. From 2000 to 2015, the OSOW rate among White youth fell dramatically in lower income areas, from 20 percent to 9 percent. Outcomes for Blacks and Hispanics, on the other hand, improved at a much slower pace. As of 2015, 27 percent of Hispanics and 25 percent of Black youth in lower income neighborhoods were OSOW (see Chart 11).³⁵



United States Census Bureau. 2000 Census and American Community Survey 2005-2015.

These racial and geographic variations are particularly distressing given 1) the tremendous business growth in lower income and gentrifying neighborhoods and 2) that this business growth was fastest in industries with disproportionately high youth employment, like the arts, accommodations, and food services.

Undoubtedly, businesses in lower income communities are hiring youth at a much higher rate than in years prior. Businesses in lower income neighborhoods had 113,420 employees aged 29-And-Under in 2014, up 31 percent from 2002. Over the same period, youth employment in higher income neighborhoods grew by only 9 percent.³⁶

There is, however, clearly more work to be done. While employees 29-and-under held 22 percent of all jobs in lower income neighborhoods, they accounted for less than 18 percent of employment in Healthcare, Wholesale Trade, Construction, and Transportation and Warehousing—all middle-income, growing industries (See Table 6).³⁷

Table 6: Private Sector Employment in Lower Income Neighborhoods

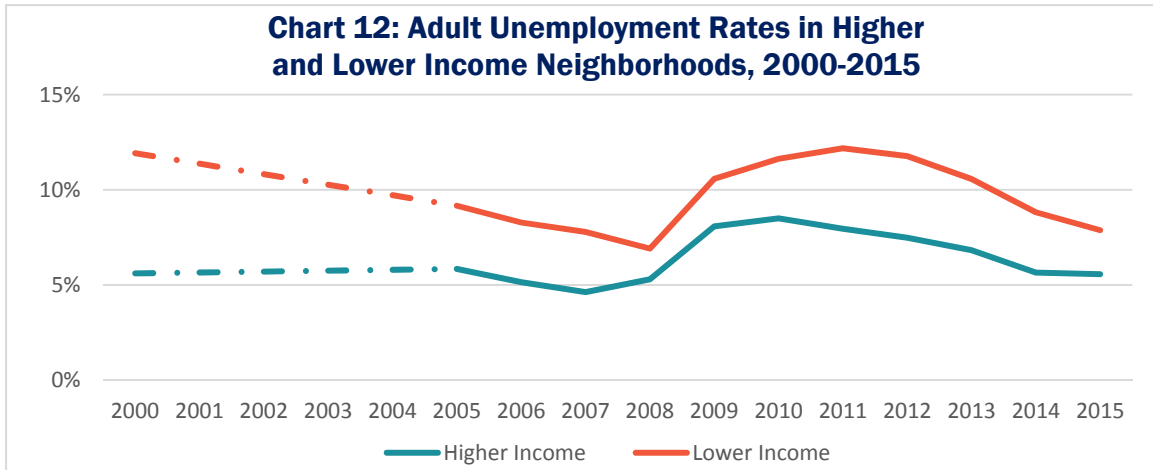
	Total Employment	29-and-Under Employment	Average Wages in Non-Manhattan Boroughs in 2015	Youth Share
Accommodation and Food Services	36,471	12,874	\$21,538	35.3%
Retail Trade	70,683	23,818	\$29,574	33.7%
Arts, Entertainment, and Recreation	6,494	1,973	\$54,378	30.4%
Educational Services	35,443	10,069	\$43,909	28.4%
Professional and Technical Services	12,562	3,155	\$56,666	25.1%
Finance and Insurance	8,295	2,058	\$86,634	24.8%
Administrative and Waste Services	16,575	3,716	\$34,413	22.4%
Information	5,879	1,046	\$73,062	17.8%
Wholesale Trade	20,963	3,665	\$57,114	17.5%
Health Care and Social Assistance	198,669	34,680	\$43,143	17.5%
Construction	18,644	3,070	\$67,729	16.5%
Manufacturing	15,822	2,330	\$45,519	14.7%
Real Estate and Rental and Leasing	17,461	2,433	\$44,791	13.9%
Transportation and Warehousing	26,007	3,519	\$52,914	13.5%
Total	516,428	113,420	\$44,250	22.0%

Source: United States Census Bureau. "Longitudinal Employer-Household Dynamics Origin-Destination Employment Statistics," 2014.

Working-Age Adults in Lower Income Neighborhoods

Employment patterns among adults also vary by race, ethnicity, and geography. While job opportunities have become more plentiful in lower income neighborhoods, unemployment in these areas remains a significant problem, particularly within communities of color.

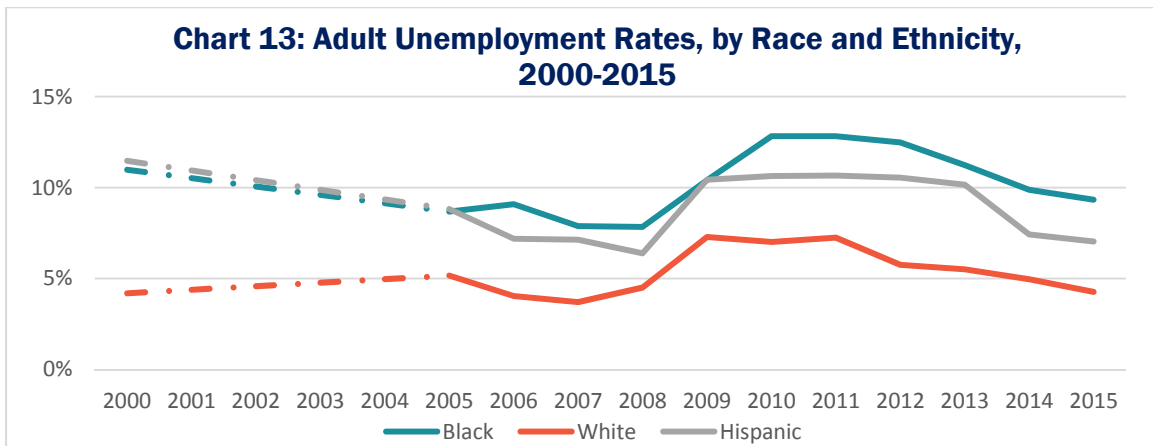
Prior to the Great Recession, unemployment rates in higher and lower income neighborhoods had begun to converge. From 2000 to 2008, the unemployment rate among adults (aged 25-65) fell from 11.9 to 6.9 percent in lower income areas, while remaining steady in the rest of the city (see Chart 12).³⁸



United States Census Bureau. 2000 Census and American Community Survey 2005-2015.

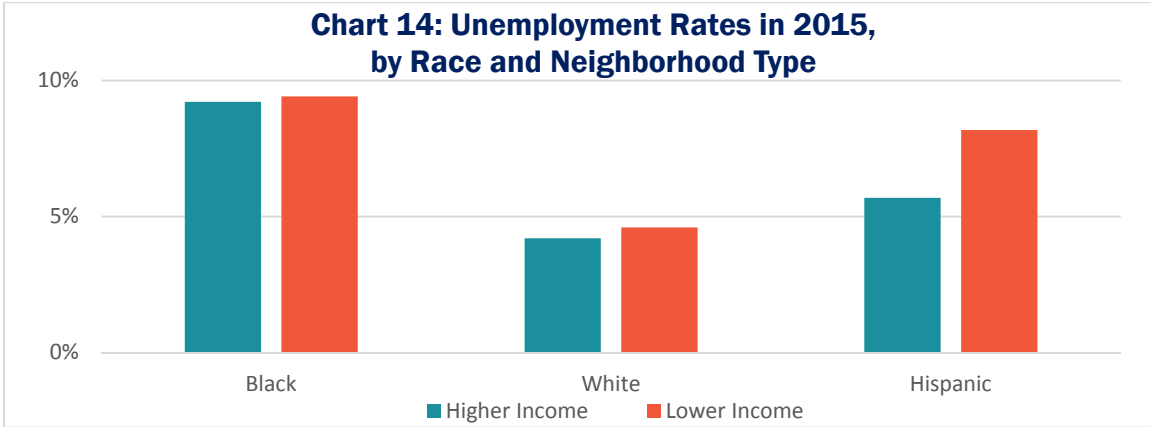
These gains have been partially reversed in recent years, although residents of lower income neighborhoods continue to feel the effects of the Recession. In 2015, the unemployment rate stood at 7.9 percent in these communities, while returning to pre-recession levels in higher income areas.³⁹

These neighborhood disparities are closely tied to racial and ethnic disparities. City-wide, the rate of unemployment among Blacks (9 percent) is more than twice that of White New Yorkers (4 percent). Hispanics, too, suffer from higher unemployment rates (7 percent), though they have made important strides in recent years (see Chart 13).⁴⁰



United States Census Bureau. 2000 Census and American Community Survey 2005-2015.

One might expect these racial disparities to be less severe *within* neighborhoods, where job opportunities and transit access are held relatively constant. This is not the case. Nearly nine percent of Blacks and eight percent of Hispanic adults were unemployed in New York’s lower income neighborhoods, compared to just five percent of Whites (see Chart 14).⁴¹



United States Census Bureau. 2000 Census and American Community Survey 2005-2015.

Education levels, too, cannot fully explain unemployment disparities. Among college graduates, only 3.5 percent of Whites were unemployed in 2015, compared to 6.4 percent of Blacks and 4.4 percent of Hispanics.⁴²

Towards a More Collaborative, Community-Centric Workforce Development Strategy

For many New Yorkers, finding a job and building a career is a challenge. Barriers to entry and advancement are myriad. Some lack basic language and literacy skills. Others need more industry-specific training or experience. Some are held back by childcare responsibilities, health issues, or transportation gaps. Others simply need help writing a resume, preparing for an interview, or searching for job openings. To assist these New Yorkers, cultivate a high-skilled labor force, and propel local businesses, the City's workforce development system offers a broad array of targeted services.

For decades, this “system” has been criticized for being fractured and siloed. Funding is derived from federal, state, city, and philanthropic sources with often inconsistent directives and divided among numerous City agencies. Post-secondary education, workforce training, and job placement services are too often poorly integrated and, because employers were rarely engaged, these programs were not responsive to current and evolving industry needs. Overall, the system favored rapid attachment to low-wage jobs rather than skills-building and career development.⁴³

Under Mayor de Blasio, important reforms have been initiated. The Office of Workforce Development was created to help coordinate planning, develop common performance metrics across programs, and improve collaboration between City agencies, educational institutions, philanthropic partners, and business leaders. Industry partnerships have been developed or planned in healthcare, technology, manufacturing, construction, retail, and food services to better orient job training and education to employer needs. More funding has been devoted to educational attainment, training, and entrepreneurship, with the system's overarching goal now centered on career advancement.⁴⁴

While these initiatives have lent internal coherence to planning and programming and addressed important gaps in service, for the New Yorkers actually seeking these services, the City's workforce development system remains opaque and disjointed.⁴⁵

This inaccessibility is derived, in part, from the City's method of program delivery. Job placement, training, retention, and educational services are rarely provided by government agencies themselves. Instead, the City relies on a vast array of non-profit and for-profit organizations to bid on City contracts and deliver front line services. Throughout the five boroughs, hundreds of organizations are eligible to apply for these contracts, having demonstrated the necessary competence and experience. In total, there are 433 organizations “prequalified” to bid on City contracts in “Work Readiness,” 341 in “Job/Vocational Training,” and 290 in “Job Placement” services (see Table 7).⁴⁶

Table 7: Number of Providers Pre-Qualified for Select Workforce, Skills Development, and Financial Empowerment Services

	Number of Local Providers
Work Readiness	433
Entitlements Assistance	341
Job/Vocational Training	314
Job Placement Services	290
Language Skills	263
Financial Counseling	186
Diploma/HSE Training	144

Source: New York City Open Data, "HHS Accelerator Prequalified Providers."

While the City benefits from this dense network of high-quality social service organizations, it offers little guidance to everyday New Yorkers on how to navigate the system or identify the provider best positioned to meet their needs.⁴⁷ Exacerbating this issue, relationships between providers are “geared more toward competition than collaboration.”⁴⁸ Because City contracts have no mechanism for rewarding referrals and partnerships, providers tend to offer clients only the services they have available, without necessarily addressing their full range of needs.⁴⁹ In addition to this misalignment of incentives, providers have scant information on what services their peers are offering or where they are located.

This fragmentation and competition is also present on the demand-side of the workforce equation. While providers are expected to develop relationships with businesses and help them find qualified applicants, this is rarely done in a coordinated fashion. They will often approach and compete for the same large employers, duplicating efforts and overlooking the small and mid-size companies that are prevalent outside of the Manhattan CBDs.⁵⁰

To create a more collaborative and accessible workforce development system, help disadvantaged New Yorkers obtain jobs and advance in their careers, connect businesses to high-skilled employees, and strengthen entrepreneurship training, the New York City Comptroller provides a broad range of recommendations in the following section.

Workforce Development System

The New York City “Workforce Development System” is comprised of a broad array of services administered by 18 different City agencies. According to a 2014 report by the NYC Office of Human Capital Development, a precursor to the Office of Workforce Development, these services can be broadly defined as:

Education

Adult basic education, adult secondary education, high school equivalency preparation, adult literacy, English for speakers of other languages, and/or career & technical education

Training

Occupational skills training

Employment

Job search training, recruitment, and placement, work readiness, and/or career counseling/advisement

Subsidized Employment

Subsidized work experience, in the form of employment or internships, which may also include the employment services listed above

Work Support

Support services aimed at reducing barriers to employment, such as transportation or health issues

Miscellaneous

Service coordination, central administrative costs, or employer support services, such as assistance with acquiring financing and licenses

Recommendations

1. Designate a Network Coordinator in Every Community District to Facilitate Business Recruitment among Workforce Providers

To strengthen the pipeline between local businesses and residents and improve collaboration among workforce development organizations, the City should fund a Network Coordinator in community districts throughout the city. The Coordinator would work in partnership with local workforce development organizations, locating job opportunities for their clients and helping them develop new training programs based on employer needs. It would serve as the primary point of contact for neighborhood employers, helping them fill full-time, part-time, summer, and after-school job openings and access appropriate tax credits. It would collaborate with local BIDs, development corporations, chambers of commerce, and Community Boards to obtain referrals and build a wide-ranging employer list.

To build out this model, the City should look to the East Harlem Talent Network and the Lower East Side Employment Network for inspiration. LESEN, a partnership of seven veteran workforce development providers in lower Manhattan, was formed in 2007 to connect local job seekers to new businesses and avoid antagonistic and duplicative business recruitment efforts. LESEN streamlines business outreach and helps local employers recruit, hire, and retain quality candidates, access available subsidies and tax incentives, and develop customized training for new and existing employees.

LESEN's Coordinator is responsible for building relationships with employers and managing their job orders. Its seven members are responsible for filling these orders and preparing local candidates for the positions. LESEN works in close collaboration with Manhattan Community Board 3 and its Economic Development Committee to identify and assist new and growing businesses. It also works with the local BID and is partnering with the Economic Development Corporation to manage job orders for the Essex Crossing project as part of the City's HireNYC program.

The Mayor's Office of Work Development should convene CBOs in every community district to help build partnerships and cultivate a collaborative business recruitment model that suits the needs and resources of individual neighborhoods. With a Network Coordinator in every district, the City will take a definitive step toward a more robust, integrated, and inclusive local economy.

2. A Uniform Assessment for all Job Seekers

When a New Yorker enters the office of a local workforce development provider, it should be an entryway into the City’s vast array of counseling, training, entrepreneurship, job placement, and income support services. They should receive a one-time, uniform assessment to document their work, training, and educational history and identify any barriers to entering and advancing in the labor market. An appropriate service plan should be determined and, if services are not available in-house, referrals should be made.

Developing this uniform assessment tool is an important step toward improving service delivery and contracting. The assessment tool would draw data from HHS Accelerator—the City’s centralized contracting portal—to identify which providers are offering needed services, where they are located, and automatically generate appropriate referrals.

Whichever organization administers the assessment would be expected to follow-up on referrals and be compensated for their efforts. The assessment would also identify clients with higher barriers to employment and provide commensurate compensation for successful service provision.

3. Leveraging Data to Connect with Local Businesses

To improve outreach to local businesses and increase job placements, workforce development organizations should make strategic use of publicly available government data. Network Coordinators could receive automated alerts when the Department of Buildings issues a permit for street signage or for commercial renovation, from the Department of Consumer Affairs when it issues a sidewalk café or business license, or from the Department of Finance when small commercial properties change hands—all signaling a new tenant or the expansion of an existing business.

Targeted outreach will be particularly helpful in recruiting small and medium-sized businesses into the workforce development system. In the past, cultivating and maintaining relationships with small businesses has been very time consuming for workforce providers and, because they have so few positions available, not always worth the effort. But, by strategically reaching out to business owners before they open or expand, there will be a higher likelihood of immediate employment opportunities. Moreover, alerting local businesses to available subsidies and referring them to SBS Business Services can fortify their continued growth and ensure future job openings.

4. Restore Federal Funding for Workforce Development and Redefine “Dislocated Workers” to Help Immigrant Workers

Federal support for workforce development has plummeted in recent years. From 2002 to 2016, its allocation to New York State under the Workforce Investment Opportunity Act (WIA/WIOA) fell 45 percent, from \$231.6 million to \$127.7 million, inflation adjusted. New York City’s share of this allocation dropped even more steeply, from \$132.6 million to \$65.4 million.⁵¹

The new President has promised to increase job opportunities for all Americans, particularly those who feel left behind by the modern global economy. Increasing WIOA funding, which has a special outlay for “Dislocated Workers,” would be a good place to start.

Meanwhile, New York State should honor the NYC Office of Workforce Development’s request to allow “Dislocated Worker” funding to be used for foreign-trained immigrants facing barriers to employment. Immigrants who earned their college degrees abroad are twice as likely to be under-employed than those with U.S. degrees. Helping foreign born New Yorkers transfer and recertify their credentials and providing them with industry-specific language training is essential to their future success.⁵²

5. Adequate Funding for Workforce Development Contracts

In recent years, New York has shifted to a more industry-focused, skills-building “Career Pathways” model. As part of this restructuring, the City is requiring workforce development contractors to provide more thorough and holistic services. This can include career counseling, financial empowerment, training and educational services, job placement, and post-employment supports.

While these higher-touch services are valuable, they are also expensive. If the City expects contractors to deliver them effectively, it will have to provide sufficient compensation. Thus far, this has not been the case.

According to a recent report from the Center for an Urban Future, for instance, RFPs for two new Human Resource Administration programs—Career Advance and YouthPathways—would cover less than half of the true costs of these programs.⁵³

In order to attract high-quality contractors and provide high-quality programs, providers must be fully compensated for their services.

6. Helping Solo Entrepreneurs Scale Up

While this report analyzes companies that maintain a payroll, the majority of businesses in New York City are “non-employers”—often freelancers or home-based businesses that are unincorporated. From 2004 to 2014, the number of solo entrepreneurs in New York City grew steadily, from 677,436 to 877,029.⁵⁴ Nearly 57 percent were minorities, compared to 34 percent of business-owners who maintain a payroll.⁵⁵

Though a majority of these sole proprietors have no intention of expanding, studies have found that 5 percent will become an employer business or will be acquired by one.⁵⁶ Still others are poised for growth, but are deterred by the increased regulations, responsibilities, and paperwork required to bring on a first employee.⁵⁷ Helping solo entrepreneurs overcome these hurdles to expansion is a promising strategy for boosting New York’s economy and diversifying the business landscape.

While SBS and EDC do offer a number of high-quality business assistance programs, the majority of these focus on entrepreneurs starting new businesses, not solo entrepreneurs looking to scale up.⁵⁸ The City should partner with Freelancers Union and other service providers to improve outreach to these solo entrepreneurs and to develop a Business Acceleration unit dedicated to helping them expand. The City should also work with micro-lenders and credit unions to guarantee small loans for sole proprietors looking to make their first hire—as well as for purchasing equipment and obtaining affordable workspace. A revolving loan fund and granting program should also be considered.

7. Business Succession for Retiring Entrepreneurs

In the New York City metro area, nearly half of business-owners are over 55 years old and 76 percent are over 45.⁵⁹ When these entrepreneurs retire, many of their businesses will close, putting thousands of jobs in jeopardy. To help these companies transfer ownership and preserve jobs, the City should follow the lead of Catalonia, Spain, and Quebec, Canada, creating an online marketplace for selling small and mid-sized businesses and assisting with this succession.

In Catalonia, home to Barcelona, the Reempresa program connects existing business owners to aspiring entrepreneurs. Financial advisors rigorously evaluate both the fiscal health of the companies and the qualifications of the “re-entrepreneurs” before they are granted access to the online marketplace. When a match is made, these advisors help manage the transfer and provide business training for new owners.⁶⁰

In Quebec, too, the provincial government is working with business-owners to develop sales plans in advance of retirement. As part of this effort, they are funding the Quebec Company Transfer Center, an agency that helps match buyers and sellers.⁶¹

Small Business Services should explore a similar program in New York City. They can partner with local chambers of commerce and BIDs to survey business-owners and encourage them to prepare succession plans. They can also develop an online marketplace similar to Reempresa and leverage their suite of financial and entrepreneurial services to assist with these business transfers. Special assistance should be provided to women and minority re-entrepreneurs as well as worker cooperatives and CUNY MBAs, in order to ensure the city's business owners reflect the diversity of the city's residents.

8. Helping entrepreneurs graduate to storefronts.

While business is booming throughout the five boroughs, empty storefronts are still prevalent along a number of retail corridors. The average ground floor vacancy rate within Business Improvement Districts, for instance, is 8.3 percent, and BIDs in Prospect Heights, Bedford Stuyvesant, Long Island City, Jackson Heights, and East Williamsburg all have vacancy rates in excess of ten percent.⁶²

In order to fill these spaces, the City should invest in pop-up shops. Select graduates from NYCHA, EDC, and CUNY business incubators and SBS entrepreneurship programs would receive short-term subsidized rents with the option to extend at market rate thereafter. In certain locations, multiple craft, design, and food entrepreneurs could be sited in a single store. The program would be administered by local BIDs or Community Development Corporations, who would be responsible for identifying spaces and negotiating with landlords.

Space could also be made available to existing neighborhood business owners, encouraging them to open a second establishment. Entrepreneurs often have multiple business ideas and those who already own a store have the requisite business know-how. Furthermore, helping existing store owners grow will ensure that as retail corridors change, long-time residents continue to be served and represented.

Outside of brick and mortar stores, the City should support more outdoor pop-up markets, as the EDC does in Brownsville and East New York. Activating pedestrian plazas, empty lots, and school blacktops in the summertime will enliven neighborhoods and provide more opportunities for aspiring business owners.

Street vending, too, is an important pathway to entrepreneurship. The City could better integrate its Vision Zero and business development goals, providing vendor licenses to local residents when sidewalks are widened in connection to street safety improvements.

Conclusion

New York City’s economic landscape has shifted in recent years, with more and more businesses opening in neighborhoods outside of Manhattan. This diffusion has been a boon to many communities, especially those that are lower income or gentrifying, where business growth has been the most dramatic. Yet it also signals the need for a more collaborative and community-centric workforce and business development strategy—one that engages neighborhood businesses and connects area residents with local job and entrepreneurship opportunities, and provides them with the resources they need to thrive in their communities and move up the economic ladder.

While this economic expansion is evident across the five boroughs, it is also true that the benefits of this growth have been uneven. Disparities in employment and business ownership by race, ethnicity, age, and geography persist—and, in some instances, have been aggravated in recent years, particularly since the Great Recession. As commercial activity becomes more diffuse and local customer bases change, accessing jobs and maintaining businesses can be a challenge.

As part of a broad re-examination of its workforce development strategies aimed at addressing these disparities and strengthening neighborhoods, the City should look to the privately funded Lower East Side Employment Network for inspiration. LESEN, a partnership of seven veteran workforce development providers in lower Manhattan, connects local job seekers to new businesses by streamlining business outreach and helping local employers recruit, hire, and retain quality candidates, while also accessing available subsidies and tax incentives.

The City should establish a Network Coordinator in every community district to help build partnerships and cultivate a collaborative business recruitment model that suits the needs and resources of individual neighborhoods.

Additionally, every New Yorker seeking workforce development services should receive a one-time, uniform assessment to document their work, training, and educational history and identify any barriers to advancing in the labor market. Where services are not available in-house, providers should be compensated for making successful referrals.

Taking these steps will strengthen neighborhoods, help long-time residents stay in their communities, and move the city toward a more robust and inclusive economy.

Acknowledgements

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Endnotes

- ¹ United States Census Bureau. “ZIP Code Business Patterns.” 2000-2015.
The Midtown and Downtown Manhattan business districts are represented by the 120 zip codes located in U.S. Census defined “Public Use Micro Areas” 3807, 3808, and 3810. These PUMAs roughly track Community Boards 1, 2, 4, 5, and 6 in Manhattan.
- ² U.S. Census “ZIP Code Business Patterns.” 2000-2015.
The 55 New York City “neighborhoods” are derived from U.S. Census defined “Public Use Micro Areas.” Business data from the Census ZBP is tracked by zip code, which was then converted to PUMAs using a crosswalk developed by Frank Donnelly, Geospatial Data Librarian at Baruch College.
<https://www.baruch.cuny.edu/confluence/display/geoportal/NYC+Geographies>
- ³ Business establishment data from US Census ZBP. Wage data from New York State Department of Labor “Quarterly Census of Employment and Wages,” 2015.
- ⁴ U.S. Census ZBP, 2000-2015.
- ⁵ United States Census Bureau. “Longitudinal Employer-Household Dynamics Origin-Destination Employment Statistics,” 2002 and 2014.
- ⁶ NYU Furman Center. “State of New York City’s Housing and Neighborhoods in 2015.” June 2016.
In its analysis, the Furman Center examined the city’s 55 “sub-borough areas”—Census-defined districts which closely align with Community Board boundaries. Of these “neighborhoods,” twenty-two were classified as “lower income” because their average income was in the bottom 40 percent of city neighborhoods. The remaining 33 were classified as “higher income.”
The Furman Center report also looked at “gentrifying” neighborhoods, which they defined as those that a) were lower income in 1990 and b) have experienced rent increases exceeding the median neighborhood. Of the 15 neighborhoods identified, ten remained lower income in 2014 while five had graduated to higher income.
These 15 neighborhoods included Astoria & Long Island City, Bedford-Stuyvesant, Belmont, Crotona Park East & East Tremont, Brownsville & Ocean Hill, Bushwick, Central Harlem, Chinatown & Lower East Side, Crown Heights North & Prospect Heights, Crown Heights South, Prospect Lefferts & Wingate, East Harlem, Greenpoint & Williamsburg, Hamilton Heights, Manhattanville & West Harlem, Hunts Point, Longwood & Melrose, Sunset Park & Windsor Terrace, and Washington Heights, Inwood & Marble Hill.
- ⁷ U.S. Census ZBP, 2000-2015.
- ⁸ Fischer, David. “Innovations in the Field: Lower East Side Employment Network,” JobsFirst NYC. May 2015.
- ⁹ Allocations to Local Workforce Development Boards from
<https://labor.ny.gov/workforcenypartners/lwda.shtm>
Inflation adjustment using United States Bureau of Labor Statistics, “CPI: New York-Northern New Jersey-Long Island, NY-NJ-CT-PA.”
- ¹⁰ NYC Office of Workforce Development. “New York City’s Comments on the New York State Workforce Innovation and Opportunity Act (WIOA) Four Year Combined State Plan (Program Years 2016-2019),” February 2016.

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- ¹¹ United States Census Bureau. “Annual Survey of Entrepreneurs,” 2014.
- ¹² United States Census Bureau. “Nonemployer Statistics,” 2004 and 2014.
- ¹³ United States Census Bureau. “Survey of Business Owners,” 2012.
- ¹⁴ Chapple, Karen and Rick Jacobus (2009). “Retail Trade as a Route to Neighborhood Revitalization.” *Urban and Regional Policy and its Effects*. Ed. Nancy Pindus, Howard Wial, and Harold Wolman. Brookings Institution Press.
- ¹⁵ US Bureau of Labor Statistics, Quarterly Census of Employment and Wages. Center for an Urban Future, “New York’s Decentralized Economy?” October, 2008.
- ¹⁶ U.S. Census ZBP, 2000-2015. See endnote 2.
- ¹⁷ Ibid
- ¹⁸ Department of City Planning. “Primary Land Use Tax Lot Output.” 2002a and 2016v2. For Mixed-Use Residential, DCP Land Use Category 04. For Office Buildings, DCP Building Class Codes 01-07 and 09. For Standalone Retail, DCP Building Class Codes K1-K9.
- ¹⁹ U.S. Census ZBP, 2000-2015.
- ²⁰ Business establishment data from U.S. Census ZBP, 2000-2015. Wage data from New York State Department of Labor “Quarterly Census of Employment and Wages.”
- ²¹ Powell L., et. al. 2007. Food Store Availability and Neighborhood Characteristics in the United States. *Preventive Medicine* 44(3): 189-195. Alwitt, L. and T. Donley. 1997. Retail Stores in Poor Neighborhoods. *Journal of Consumer Affairs* 31: 139-164.
- ²² U.S. Census ZBP, 2000-2015. Grocery Stores classified under NAICS code 44511. Commercial Banks classified under NAICS code 5221. Retail and Restaurants classified under NAICS codes 442, 443, 444, 445, 446, 448, 451, 452, 453, 532, 722, 811, and 812.
- ²³ Ibid
- ²⁴ Ibid
- ²⁵ Zukin, Sharon. “New Retail Capital and Neighborhood Change: Boutiques and Gentrification in New York City.” *City & Community*. March 2009.
- ²⁶ U.S. Census ZBP, 2000-2015.
- ²⁷ Ibid
- ²⁸ Ibid
- ²⁹ Department of City Planning. “Primary Land Use Tax Lot Output.” 2004c and 2016v2.
- ³⁰ U.S. Census. “Survey of Business Owners,” 2007 and 2012.
- ³¹ U.S. Census. “Survey of Business Owners,” 2012. Calculations exclude the small share of companies that are “Equally minority/nonminority” as well as “publicly held and other firms not classifiable by gender, ethnicity, race, and veteran status.”
- ³² U.S. Census. “Survey of Business Owners,” 2007 and 2012.
- ³³ Ibid. Calculations exclude the small share of companies that are “Equally minority/nonminority” as well as “publicly held and other firms not classifiable by gender, ethnicity, race, and veteran status.”
- ³⁴ United States Census Bureau. 2000 Census and American Community Survey 2005-2015.
- ³⁵ Ibid
- ³⁶ United States Census Bureau. “Longitudinal Employer-Household Dynamics Origin-Destination Employment Statistics,” 2002 and 2014.
- ³⁷ Ibid
- ³⁸ United States Census Bureau. 2000 Census and American Community Survey 2005-2015.
- ³⁹ Ibid
- ⁴⁰ Ibid
- ⁴¹ Ibid

-
- ⁴² United States Census Bureau. “American Community Survey,” 2015.
- ⁴³ The City of New York. “Career Pathways: One City Working Together.” November 2014.
- ⁴⁴ González-Rivera, Christian. “Building the Workforce of the Future,” Center for an Urban Future. July 2016.
- ⁴⁵ New York City Workforce Strategy Group. “Re-Envision the New York City Workforce Development System.” March 2013.
- ⁴⁶ New York City Open Data, “HHS Accelerator Prequalified Providers.”
- ⁴⁷ New York City Workforce Strategy Group. “Re-Envision the New York City Workforce Development System.”
- ⁴⁸ Fischer, David. “Innovations in the Field: Lower East Side Employment Network.”
- ⁴⁹ González-Rivera, Christian. “Building the Workforce of the Future.”
- ⁵⁰ Fischer, David. “Innovations in the Field: Lower East Side Employment Network.”
- ⁵¹ Allocations to Local Workforce Development Boards from <https://labor.ny.gov/workforcenypartners/lwda.shtm>
- Inflation adjustment using United States Bureau of Labor Statistics, “CPI: New York-Northern New Jersey-Long Island, NY-NJ-CT-PA.”
- ⁵² NYC Office of Workforce Development. “New York City’s Comments on the New York State Workforce Innovation and Opportunity Act (WIOA) Four Year Combined State Plan (Program Years 2016-2019),” February 2016.
- ⁵³ González-Rivera, Christian. “Building the Workforce of the Future.”
- ⁵⁴ U.S. Census Bureau. “Nonemployer Statistics,” 2004 and 2014.
- ⁵⁵ U.S. Census Bureau. “Survey of Business Owners,” 2012.
- ⁵⁶ National Research Council. (2007). Understanding Business Dynamics: An Integrated Data System for America’s Future. Panel on Measuring Business Formation, Dynamics, and Performance. J. Haltiwanger, L.M. Lynch, and C. Mackie, eds. Committee on National Statistics, Division of Behavioral and Social Sciences and Education. Washington, DC: The National Academies Press. Page 132.
- ⁵⁷ Kolson Hurley, Amanda. “What Should Cities Make?” CityLab. February 20, 2017.
- ⁵⁸ Messina, Judy. “Breaking Through,” Center for an Urban Future. March 2016.
- ⁵⁹ U.S. Census. “Annual Survey of Entrepreneurs,” 2014.
- ⁶⁰ Kleinman, Neil and Tom Hilliard. “Innovation and the City,” Center for an Urban Future. November 2016.
- ⁶¹ Rastello, Sandrine and Frederic Tomesco. “Startups Are Great, But Baby-Boom Businesses Need Nurture Too,” Bloomberg. March 15, 2017.
- ⁶² NYC Small Business Services. “Business Improvement District Trends Report: Fiscal Year 2015.”





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