

Saving Space (And Jobs)?

An Examination Of The Industrial Program

IBO

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Summary & Acknowledgements

Summary

From 1990 through 1995, the number of manufacturing jobs in New York City fell by about 55,000 to reach 206,000. Manufacturing has been in decline since the 1950s, when the sector boasted about 1 million local jobs. To help stem this decline, the Industrial Development Agency, under the Giuliani Administration, created the Industrial Program in 1995. The program provides tax breaks, principally in the form of property tax reductions over 25 years, to encourage the preservation of industrial space in the city in order to retain and create manufacturing, warehousing, and other industrial jobs and to diversify the local economy.

To be eligible for this discretionary program, a firm needs to be acquiring, constructing, or substantially renovating a space for industrial use and make a required capital investment. Under the program, the Industrial Development Agency acquires nominal title to the site and then leases it back to the firm. Because the agency then owns the site, the firm can receive a tax break on the land and building. The firm then makes a reduced property tax payment in the form of a payment in lieu of taxes. The firm also becomes eligible for sales and mortgage recording tax breaks.

This report looks at the evolution of the Industrial Program, examining how well it has met the goal of preserving industrial space and fostering living-wage jobs over a period of about two decades. It is the second report produced by IBO under the terms of a law passed by the City Council in 2017, which turned to IBO to issue periodic evaluations of the city's economic development tax expenditure programs. The decision to examine the Industrial Program was made collaboratively with the City Council. Among our key findings:

- Since its inception in 1995, 370 projects have benefitted from the Industrial Program. In 2019, 200 projects received tax breaks, at a cost of \$31.5 million in foregone revenue for the city.
- For the first 21 years of the program, manufacturing and wholesale trade accounted for well over half of the new projects nearly every year. Since 2016, though, these two sectors have typically made up less than half of the new projects and the number of projects entering the program has been declining.
- Most of the firms receiving benefits from the program were already located in the city and had fewer than 100 employees. About 60 percent of the firms were expanding employment in the years leading up to receiving Industrial Program assistance, while around 20 percent were contracting.
- Just over half of firms (54 percent) that had employment in New York City in the year of project start expanded their employment in the three years following the completion of their capital project. Another 9 percent stayed around the same size, while about 37 percent contracted. Overall, IBO found that less than a third of these firms met or exceeded the employment goals set when they applied for the program.

- These results should be viewed in context of continuing job losses in the industrial sector. For example, over the years 2000 through 2018, manufacturing employment in the city fell by nearly 60 percent to about 70,000 jobs. During this same period, however, 45 percent of manufacturing firms that entered the Industrial Program had expanded employment three years after the deadline for completing their project and an additional 15 percent saw employment remain stable.
- In 2018, the average annual salary among Industrial Program-assisted firms was just over \$61,000, well above the living wage threshold. Still, the average wage for assisted firms has been lower than the citywide average in most sectors.
- Since the start of the program, the Industrial Development Agency terminated assistance for 154 projects before benefits were set to end. This includes 69 projects that were subject to clawback provisions requiring firms to repay benefits. These firms were billed a total of \$24.1 million in benefits and interest. Reasons for the clawbacks ranged from the firm's sale of the site receiving benefits to improper use of the location.

Has the Industrial Program met its goal of preserving industrial space in order to promote employment and diversify the local economy? Given data limitations, IBO could not create a comparison group of eligible but unassisted firms that would enable a more definitive answer to the question. But IBO did find that the majority of firms that received assistance through the program either expanded employment or stayed about the same size three years after completing the construction or renovation of their industrial space.

In addition to our inability to create a comparison group, IBO encountered several other data issues. The Industrial Development Agency could not provide detailed information on the actual capital investments at the site made by participating firms. Given that the agency recently changed the way it calculates the firm's property tax savings, which is now based on its capital investment at the site rather than on employment, this is important information to collect and report. Nor does the Department of Finance include the payments in lieu of taxes made by the firms as part of its property tax database. Routinely including data on these payments would increase transparency on the cost of this program as well as similar programs. Additionally, providing IBO with access to business tax returns would allow a better understanding of the fiscal condition of assisted and unassisted firms; state legislation granting this access was introduced in 2020 but has not been enacted.

In preparing this report, IBO coordinated with the City Council Finance Committee, chaired by Council Member Daniel Dromm, and the staff of the Council Finance Division, in particular Deputy Director and Chief Economist Ray Majewski. We appreciate their assistance.

1. Introduction

The Industrial Program of the New York City Industrial Development Agency (IDA) provides tax incentives to lower the cost of constructing, renovating, and owning industrial facilities in New York City. Since it began in 1995 about 370 projects have benefitted from the program, which offers property, mortgage recording, and sales tax breaks in an effort to preserve the city's industrial spaces and advance industrial employment opportunities in New York City. In fiscal year 2019, 200 projects received tax benefits through the program at a cost to the city of about \$31.5 million.

The Independent Budget Office has produced this report on the Industrial Program under the terms of a law passed by the City Council in 2017 that requires IBO to issue evaluations of New York City economic development tax expenditure programs. The tax expenditure studied in each evaluation is determined collaboratively with the City Council. The law calls for IBO to evaluate the effectiveness of the program in achieving its goals, the relevance of such goals going forward, and how well those goals align with current economic development policy.

This report begins by describing the Industrial Program including its history, goals, program mechanics, and how it has evolved over time. This is followed by a description of the available data, the methodology used for its evaluation, and the limitations of IBO's analysis. IBO then presents the main findings of its evaluation. The report concludes with a discussion of the project costs, of the relevance of the program going forward, and data recommendations.

2. Description of the Industrial Program

Background and History

The New York City Industrial Development Agency is a public benefit corporation created under state law in 1974. The city established the IDA after New York State passed legislation allowing localities to create industrial development agencies in an effort to retain and expand the city's industrial base at a time when many industrial jobs were leaving New York for the south and abroad. All assistance provided by the IDA is discretionary, meaning firms must apply for assistance and the IDA's Board of Directors—the majority of whom the Mayor appoints—must approve it.¹

State law requires the IDA to establish a set of rules called a uniform tax exemption policy (UTEPP) to guide its activities. The IDA's UTEPP—which has been amended and restated several times since it was first created—outlines the eligibility criteria for IDA program benefits, what factors the board must consider in awarding benefits, as well as the events that trigger the recapture, or clawback, of benefits.

For many years the primary way the IDA provided assistance was by offering industrial firms lower cost capital financing through the sale of tax-free municipal bonds (or private activity bonds).² Firms that took part in the IDA's bond financing program were also eligible for reductions in their property, sales, and mortgage recording taxes. The IDA found, however, that the relatively high transaction costs associated with bond issuance meant that smaller and mid-sized firms were not accessing their benefits.³

Program Creation. In 1995, the IDA announced a new method of financing aimed at providing tax benefits to smaller firms called the "Straight Lease Program for Industrial Projects," which would become known as the Industrial Program. Under the program, the IDA acquires nominal title to a property that an eligible firm seeks to improve—whether it is the purchase of new property or the rehabilitation of property the firm already owns—and leases the property back to the firm. Because the IDA now owns the land, the firm is eligible for the IDA's property, sales, and mortgage recording tax breaks without the issuance of bonds.

The program was announced at time when New York City's industrial sector continued to shrink. From 1990 through 1995, New York City lost 21 percent of its manufacturing jobs, going from 261,000 in 1990 to 206,000 in 1995. It was also a time when the Giuliani Administration was busy expanding other economic development programs, as well as negotiating many one-off deals to retain city employment. The New York Mercantile Exchange, Credit Suisse First Boston, and other large firms all received large corporate retention deals in the mid-1990s in exchange for promises to keep jobs in the city.⁴

About a year after the creation of the Straight Lease Program for Industrial Projects, the IDA renamed it and divided it into two programs to better market it to eligible

firms: the Small Industry Incentive Program and the Industrial Incentive Program. While the tax benefits offered through the programs were the same, firms with fewer than 100 employees and annual gross revenues of less than \$5 million applied through the Small Industry Incentive Program, and firms with more than 100 employees and annual gross revenues of \$5 million or more applied through the Industrial Incentive Program. The IDA combined the programs again in 2012 into what it now calls simply the Industrial Program. In this analysis, all predecessor programs are considered part of the same program.

Goals of the Program

According to a program description released shortly after its creation, the Industrial Program sought to provide capital assistance to industrial firms to support the IDA's core mission: "to promote and assist private sector industrial development, and thereby advance job opportunities and economic welfare to the people of New York City."⁵ Another press release announcing some of the program's early deals described it as:

"... part of Mayor Giuliani's commitment to facilitating the growth and expansion of small- and medium-size companies throughout the five boroughs... 'Under Mayor Giuliani's leadership, the IDA has reached out to manufacturers in all five boroughs, providing assistance to ensure that they remain in the City and continue to provide important jobs and products for New Yorkers.' said New York City Economic Development President and IDA Chairman Charles Millard."⁶

Since its creation, the Industrial Program survived through three mayoral administrations and changes to the IDA. The Industrial Program has evolved somewhat as well, with programmatic changes documented in various restatements of the IDA's UTEP. (IBO discusses these programmatic changes, such as changes in eligibility and program mechanics, in the next sections.)

In 2017, the IDA released its latest version of the UTEP. Included in this version was a policy objective for each of its programs. The current objective does not describe the program as focusing on small or medium-sized businesses as the program was originally framed. The policy objective for the Industrial Program included in the IDA's current UTEP is:

The [IDA] recognizes the importance of the industrial sector in New York City, by virtue of the sector's ability to create living wage job opportunities for City residents. By preserving, enhancing and building industrial space throughout the five boroughs, the Agency can diversify the City's economy, help support advanced manufacturers, incentivize and spark innovation, and create pathways to the middle class for City residents with the goal of maximizing job creation relative to the amount of Financial Assistance provided. Through the Industrial Program, the Agency will provide incentives to industrial companies and developers of industrial space in order to achieve the aforementioned goals.

Staff from the IDA report they largely see the purpose of the program as one of a preservation of industrial space: by supporting the capital investment in industrial spaces, the Industrial Program helps preserve the relatively limited space in the city for industrial uses. Given these discussions and the program's stated objective, IBO

interprets the Industrial Program's current goal to be preservation of industrial space in the city in order create and retain living-wage employment and help diversify the city economy.

How the Program Works

Eligibility Requirements. In order to be eligible for the tax incentives offered through the Industrial Program, a firm must be acquiring, constructing, or substantially rehabilitating a facility for an industrial use. Since the program's inception, eligible uses included manufacturing, assembling, processing, and warehousing and/or distributing of tangible property. Over time, recycling and disposing of tangible property, as well as the creation of intangible assets (such as patents, copyrights, formulas, or processes) were added. In 2017, the IDA also began allowing developers of industrial space to access the program's property tax benefits. Prior to 2017, developers of industrial space in certain areas of the city were eligible for sales and mortgage recording tax benefits, but not property tax reductions unless they received special approval from the IDA board (known as a deviation from the UTEP).

The IDA also requires that firms make a minimum capital investment, which is currently the greater of \$1 million or 15 percent of the combined assessed valuation of project land and existing improvements. This is an increase from a \$400,000 minimum investment for deals made prior to 2006. Minimum capital investment requirements exclude acquisition costs.

Assistance Is Discretionary. While these are the basic eligibility requirements of the program, all IDA assistance is discretionary. Therefore, even if firms meet all of the eligibility criteria, they must apply and the IDA board must approve the benefits. The IDA board considers various factors before granting assistance. The first criterion is inducement. Applicants must demonstrate that without the IDA's assistance the project would most likely not go forward, or if it does go forward it would occur at a substantially reduced level, or occur outside the state. According to the UTEP, when evaluating an applicant, the board must also consider the size of the capital investment, the number of jobs created and average wages, the nature of the businesses, the location and environmental and economic impact of the proposed project, the financial and operational viability of the firm, as well as the likelihood the project will go forward as planned.

Application Process. According to IDA staff, applications for assistance through the Industrial Program are most often prepared with the help of a consultant hired by the applicant. These consultants, who are often former IDA employees, work with banks, lenders, real estate lawyers, and brokers to publicize the program. During their search for real estate or financing, future beneficiaries typically meet with members of the real estate industry who notify them about the availability of the benefits and refer them to a consultant. The consultant helps the firm determine if it should apply for assistance through the program.

Before the firm can apply for the program, however, it must meet with IDA staff to assess whether they are eligible, can demonstrate inducement, and are likely to receive assistance. (The city's Economic Development Corporation staffs the IDA). If the IDA staff determines board approval is likely, the firm (usually with the help of the consultant) submits an application. The application includes:

- General information about the firm, its history, and
- Details on the capital project, including location, and proposed budget;
- Data on the number of New York City jobs retained by the project, and their wages. The IDA defines jobs retained as the existing jobs of the company at the time of application. These jobs may be citywide employment and some or all of the jobs may move to the new facility after completion;
- Data on the number of new jobs the firm expects to create at the project location (the location for which assistance is received) in the first three years after operation begins;
- The total number of employees the firm expects to have at the project location three years after operation begins (sum of the jobs retained and created);
- Similar employment data on tenants of the applicant to be employed at the project, if applicable;
- Data on the fringe benefits provided by the firm, such as health insurance, sick leave, etc.; and
- A signed “Inducement Letter” from the applicant that includes details on why the project would not be completed without the IDA benefits or would be completed outside of New York.

State law requires the IDA to hold a public hearing on all projects receiving IDA assistance. IDA staff must provide a copy of the application and an analysis of the city costs and city benefits associated with the project for the hearing. (Details on the IDA’s calculations are [here](#)). After a public hearing, the board votes on the application. If the board approves the project—which according to the IDA staff they usually do given the rigorous pre-screening process—the benefits provided to the firm and conditions to maintain those benefits are codified in a binding agency lease agreement signed by the IDA and the firm.

Program Benefits. As previously mentioned, the IDA offers a variety of tax benefits to firms participating in the Industrial Program. These include:

- city and state sales tax waivers for purchases of construction materials and equipment;
- reduction in the mortgage recording tax (generally a decrease from 2.8 percent to 0.3 percent of the mortgage amount);⁷ and
- a reduction in property taxes through a payment in lieu of property taxes (PILOT) for 25 years, including a phase out beginning in year 21.

The PILOT usually provides the greatest amount of tax savings and, therefore, is the largest city tax expenditure associated with the project. (The cost of the program will be discussed in detail beginning on page 35). The PILOT consists of discounted payments on the property’s building and land taxes. The building portion of the PILOT is generally the tax on the building due when the firm enters the program, i.e. the firm does pay additional property taxes on the improvements it makes as part of the Industrial Program.

For most of the program’s history, the firm’s employment level determined the land portion of the PILOT. In general, firms received a \$500 discount on their land taxes for each full-time employee they had when they entered the program. (See page 40 for more details on how this benefit has been and is currently calculated.) At the end

of 2017, the IDA changed the calculation of the land PILOT. The land PILOT is now the land tax at the time when the firm enters into a lease agreement with the IDA (known as the 'stabilized pre-improvement amount'), which can be reduced based on the amount of the firm's capital investment in the property—the greater the investment, the greater the discount.

Benefits...With Strings. Along with these benefits, come requirements for compliance. IDA programs, including the Industrial Program, come with clawback provisions and annual reporting requirements that historically have been more stringent than other city economic development tax incentives.⁸

Recapture Provisions. If the firm receiving assistance does not meet certain requirements during the first 10 years after operations at the project location begin, the IDA can terminate assistance and recapture benefits already received. After 10 years in the program, the IDA can terminate future assistance if the firm fails to meet its lease agreement requirements, but past benefits are no longer subject to recapture. Events that trigger recapture for the Industrial Program include:

- failure to complete the capital project;
- liquidation of operations;
- a substantial change in the scope and nature of operations;
- leasing the project site to tenants in violation of IDA lease agreement; or
- the relocation of operations to another site, except if the new site is within New York City and the firm maintains 90 percent of its employees at the new site.

In the case of relocation of operations to another site within the city, the IDA can still terminate future benefits, but the firm is not required to pay back past assistance. Notably, not meeting or maintaining projected employment targets is not a recapture event for Industrial Program projects. According to the IDA, this is because employment changes at small and mid-sized industrial firms can be very sensitive to the economic cycle and the IDA is hesitant to enforce recapture during an economically challenging period. The IDA has historically added a significant reduction in headcount as a trigger for recapture in its incentive agreements for larger corporate retention/growth projects, according to the agency, although these programs are less common in recent years.

The share of funds that firms must pay back under recapture has increased since the program was created. Under current rules, if a recapture event takes place before the firm has been operating for three years at the project site, it must repay 130 percent of all tax benefits received; the share paid back decreases by 10 percentage points each year until the sixth anniversary of operations. From six years of operations through the end of the recapture period, firms must repay 100 percent of the benefit received minus $1.666 \times$ the number of months since the sixth anniversary of operations.

Prior to 2017, firms were required to pay back 100 percent of the benefit if the recapture event took place in the first six years of operations; from year seven on, the share required to be repaid decreased 20 percentage points each year through the end of the recapture period. Since 2006, projects have also been required to pay interest (around 9 percent) on the funds recaptured beginning on the date that the recapture event occurs and continuing until the funds are repaid.

Annual Reporting. In addition to the possibility of recapture, like all firms receiving assistance through the IDA, Industrial Program firms are also required to submit annual compliance reports. These reports allow the IDA to collect data on its beneficiaries and complete its own annual reporting, required by both New York City and New York State law. Requirements include annual “Employment and Benefits Reports,” which provide details on the number and wages of the firm’s employees at each assisted site. If the firms have tenants, they are also required to provide data on those tenants and their employees.

Since the passage of The Fair Wages for New Yorkers Act in 2012, firms are also required to submit an annual living wage survey. (IDA projects that began receiving assistance after June 28, 2012 and receive at least \$1 million of financial assistance are required to pay a living wage unless exempt under the act). The IDA also completes annual site visits to monitor compliance with the IDA agreements.

3. Data and Methodology

In order to describe the Industrial Program, evaluate whether it is meeting its goals, and calculate its cost to the city, IBO obtained data from the IDA, the New York City Department of Finance (DOF), and the New York State Department of Labor's Quarterly Census of Employment at Wages (QCEW).

Data

IDA Data on Project Beneficiaries. IBO requested data from the IDA on all projects benefitting from the Industrial Program since its creation. The IDA was able to provide at least basic data on all projects through the end of 2019. Data that are more detailed were available for projects active in the program in fiscal year 2006 forward, including those that began receiving assistance before fiscal year 2006 and continued to receive assistance through at least 2006.⁹ The data provided by the IDA includes 19 projects that first received assistance under other IDA programs and then converted to the Industrial Program, including 16 projects that began as Manufacturing Facilities Bond Projects, two that began as Credit Enhanced Bonds, and one Commercial Developer project.

Data provided by the IDA for all projects include project name, location (including tax block and lots), and benefit start and end dates. For projects active in fiscal year 2006 forward, key data provided by the IDA include:

- Federal employer identification numbers (FEIN);
- Primary North American Industry Classification System (NAICS) industry-classification code;
- Number of jobs the firm reported retained by the project;
- Projected three-year employment growth targets;
- Mortgage recording tax waiver amounts;
- Sales tax waiver usage amounts;
- Final construction budgets for capital projects; and
- If project assistance was recaptured and the amount to be recaptured.

The IDA also provided copies of applications for projects that applied from 2012 forward.

Key variables that the IDA was unable to provide include the dates capital projects were completed and operations commenced, and actual project cost data.

Data on the annual employment of assisted firms since fiscal year 2006—collected through the IDA's annual compliance reporting and made publicly available under local law—were also available. Past IBO reports have found inconsistencies in the data, however, both in how individual firms report employment variables over time and in what is included in project employment data by different firms. (See

IBO's 2011 [report](#) for details.) The City Council has amended the legislation on reporting requirements several times in an effort to address these issues. In light of the inconsistencies in the data, IBO chose to use independent data sources on employment and wages to examine employment outcomes at assisted firms over time.

QCEW Data on Employment and Wages. IBO has access to quarterly employment and wage data for establishments located in New York City from the New York State Quarterly Census of Employment and Wages from 2000 through 2018. This dataset, which is maintained by the New York State Department of Labor, includes data on all establishments in the city that are required to pay unemployment insurance. (Data on businesses outside of New York City are not included in the QCEW data provided to IBO.) Self-employed independent contractors are not included in any QCEW data and QCEW data does not distinguish between full-time and part-time employment.

Each quarter's data includes monthly employment counts and quarterly wage data. The QCEW files also include the FEIN and location for each establishment. IBO geocoded establishment locations by tax lot so they can be matched with other citywide data, including information on property taxes from the Department of Finance, building and parcel characteristics from the Department of City Planning, etc. From each year's four quarterly files, IBO created an annual file of average annual employment and wages by establishment.

Creation of Longitudinal Data File. IBO used its annual QCEW data files to create a longitudinal firm-level database with employment and wage data for Industrial Program beneficiaries from 2000 through 2018. This database allows IBO to track the employment and wages in participating firms before, when, and after they receive assistance through the program.

IBO used the FEINs provided by the IDA to match the benefitting firms to the QCEW data. We created the database at the firm level, including all establishments for each FEIN, in order to track total changes to New York City employment for assisted firms rather than capturing movement of the same firm from one location to another.

When the FEINs provided by the IDA did not result in a match, IBO used project location data, as well as text string matches on firm name, to find Industrial Program firms within the QCEW data. When IDA-provided FEINs did not match, it was generally for one of two reasons. First, FEINs can change over time and the IDA usually only provided one FEIN for each participating firm. Additionally, if a firm used a payroll service, the FEIN of the payroll service appears in the QCEW instead of the FEIN for the firm. IBO used 81 FEINs beyond those provided by the IDA in its matching to account for these discrepancies.

In total, the IDA provided FEINs for 345 projects that received benefits through the Industrial Program since its creation. Of those projects, IBO was able to match 320 (93 percent) to QCEW data. This means IBO found at least some employment data for each of these 320 projects in at least some of the years from 2000 through 2018.

Of those 25 projects where IBO could not locate any employment by FEIN, 11 were projects led by developers of industrial space. For these projects, IBO was more interested in tenant employment at the project location than employment at the

development firm. Therefore, IBO also created a longitudinal database based on project location using tax lot data to examine outcomes for these projects.

As a matter of note, IBO's data sharing with the New York State Department of Labor requires that IBO only report on QCEW data in aggregate. Therefore, any statistics based on fewer than five observations are not reported in this analysis.

Department of Finance Data. The New York City Department of Finance is responsible for calculating, billing, and collecting IDA PILOTS, using data provided by the IDA. The department provided IBO with data on annual PILOT amounts, including details of their calculation, PILOT start and end dates, and capital project completion deadlines. IBO also has access to DOF's annual property tax databases, which include information on property tax assessments and exemptions, as well as building characteristics, such as building use classification codes.

Methodology

IBO first used data on new project starts and benefit terminations (including the recapture of assistance) to examine the extent to which firms have been participating in the Industrial Program since the program began and how that participation has changed over time.

Using data from the IDA and the QCEW, IBO then examined the characteristics of firms selected to participate in the program and tracked how the profile of program participants has evolved over time. This included examining data on the industries of firms selected to enter the program, as well as their size and average wages at the time of project start, defined as the year a firm enters a lease agreement with the IDA and benefits begin. Because IBO only has access to QCEW data from 2000 on, analysis of employment data at project start is limited to firms that entered the program since 2000.

IBO also used its longitudinal database to analyze employment trends for assisted firms in the three years *before* they enter the program. Again, because we only had access to this data from 2000 forward, analysis of pre-program employment is limited to firms that began receiving assistance in 2003 and beyond.

In order to determine whether firms participating in the Industrial Program are creating and retaining jobs, IBO examined what happened to firm employment in the years after assistance. For projects that received assistance beginning in 2000, and whose assisted projects were to be complete by 2015, we were able to compare firm-level employment in the year of project start with employment levels three years after the date their assisted capital projects were to be complete according to their lease agreements. This data also allowed us to determine if firms met the three-year employment growth targets they set when they entered the program. (More details on these measures are included in following sections.) To provide context for these outcomes, IBO examined employment trends in the industrial sectors citywide during the study period.

In order to examine if these firms were creating living wage jobs we also examined data on the average wages paid by firms receiving assistance. Additionally, IBO compared the wages paid to assisted firms to citywide industrial sector averages overall to provide context for the outcomes.

While the majority of IBO's analysis focuses on employment outcomes, we also used final construction-budget data for capital projects to examine investments made by participating firms. We also mapped project locations and used data on building use, which is a code assigned by the city's Department of Finance describing the major use of structures on the tax lot and zoning to examine where and in what types of space firms are investing through the program.

Lastly, IBO provides details on Industrial Program costs to the city and the overlap with other tax-incentive programs.

Data Limitations

Ideally, IBO would have compared data on the assisted firms with similar firms in order to isolate whether assistance in the program resulted in industrial firms being more likely to remain in the city or increase employment. Due to nature of the program's application process as well as data limitations, however, IBO was unable to create a comparison group.

Because the IDA's assistance is discretionary, an obvious choice for a comparison group would be firms whose applications were rejected. According to IDA staff, however, because firms are so highly vetted before application—first with a consultant and then with IDA staff—too few applications are rejected to form a comparison group. Even if there were enough rejections, the selective nature of the application process before a formal application is submitted would likely mean that firms whose applications were rejected would be fundamentally different from accepted applicants.

IBO also explored the possibility of isolating program effects through the use of propensity-score matching, a process that uses statistical techniques to identify firms that are similar to program participants, and then compare their employment outcomes with outcomes at firms participating in the program. Again, however, IBO was limited by the selective nature of the program's application criteria: there were no obvious cut-offs in terms of employment levels, location, or other variables that allowed us to identify similar firms.

Difficulties accessing data on firms that did *not* receive assistance from the city was another impediment to using propensity-score matching. IBO would need to be aware of firms looking to purchase or improve on their physical space and have access to information about the unassisted firms similar to what we were able to access from the IDA on participating firms. Legislation that would grant IBO access to tax return information for firms doing business in the city has been introduced in the State Legislature; the tax information could be used to build comparison groups for use in future tax expenditure evaluations. Additionally, while IBO created a longitudinal database for assisted firms from its annual QCEW files, a longitudinal dataset does not exist writ-large for city employment.¹⁰

The lack of a comparison group limits IBO's ability to show causation, that is, attribute the outcomes at assisted firms to their participation in the Industrial Program. A more descriptive analysis of a program and its outcomes, however, can be quite useful in examining the program's effectiveness.

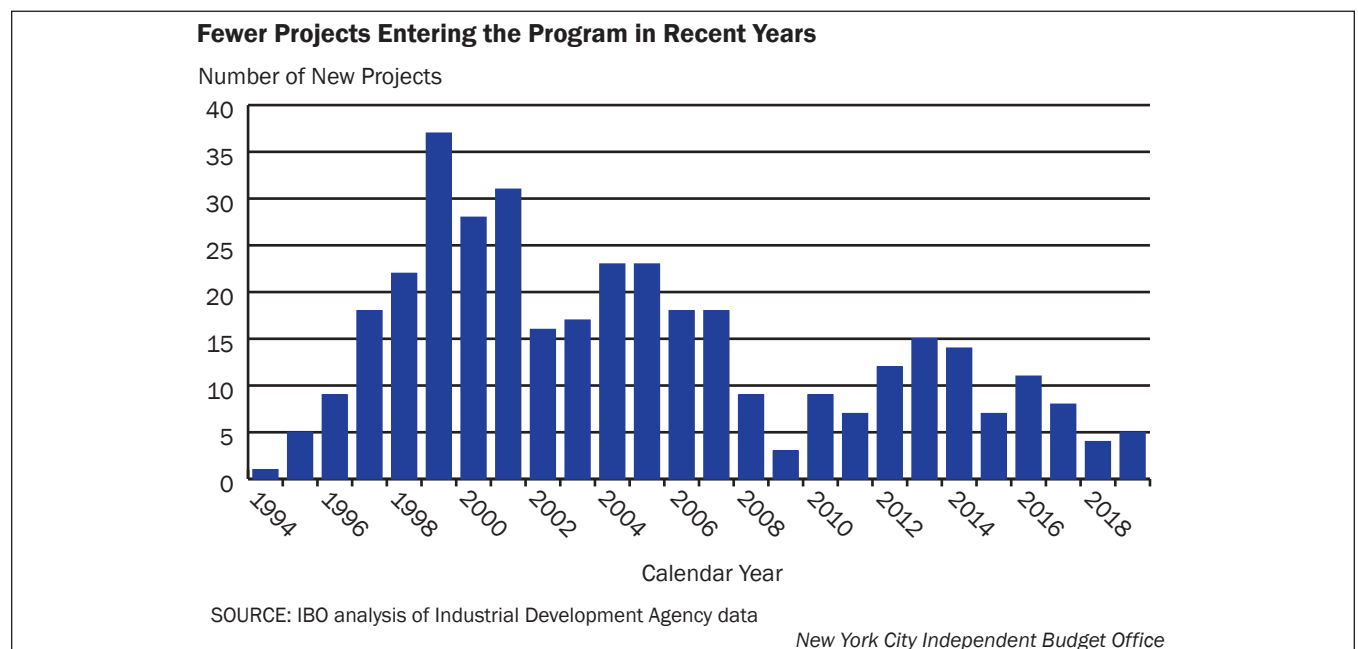
4. Key Findings: Program Participation

Fewer Projects Entering the Program in Recent Years

From its creation through the end of 2019, 370 projects have received Industrial Program tax benefits.¹¹ This includes the projects of 340 unique firms; 24 firms received assistance for more than one project through the program.¹² Far fewer projects have begun receiving assistance through the program in recent years, however, compared with those following its creation. Despite the decline in new projects, because of the 25-year length of the Industrial Program’s property tax benefit, 200 projects received benefits through the program in 2019.

Shortly after the Giuliani Administration announced the program, it charged the IDA with “aggressively marketing” it to eligible firms through outreach to commercial banks, local development organizations, industry seminars, and direct mail campaigns.¹³ Information on the date of project starts—when firms enter into lease agreements with the IDA—shows that the greatest number of projects entered the program during the Giuliani Administration. On average, 21 projects entered the program each year from 1995 through the end of the Giuliani Administration in 2001, with the program peaking in 1999 when 37 new projects entered the program.

The average number of projects entering the program annually decreased during the Bloomberg Administration to an average of 14 projects a year. There were two periods of economic contraction during the Bloomberg Administration—the first from mid-2001 through mid-2003 and then the Great Recession from mid-2008 through late 2009—that likely influenced the availability of capital financing to industrial



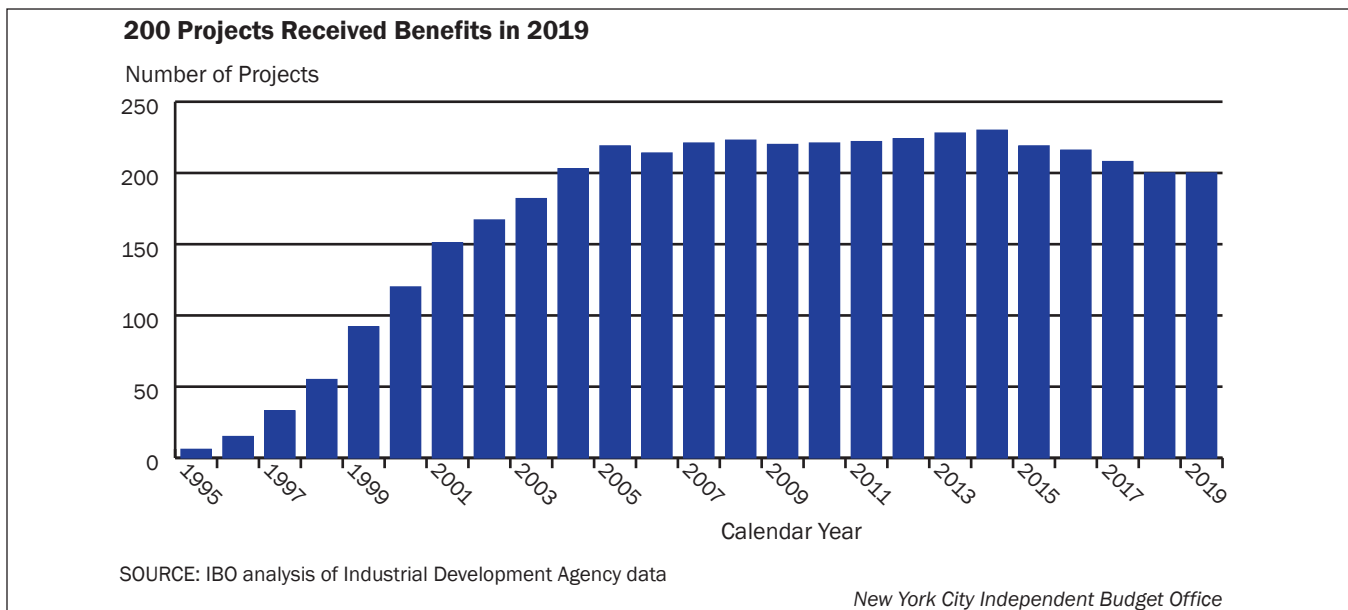
firms that might otherwise have participated in the program. While the number of project starts rebounded slightly after each recession, they never reached levels preceding those recessions or the levels seen during the Giuliani Administration.

Annual project starts have continued to decline during the de Blasio Administration—averaging only eight new project starts a year from 2014 through the end of 2019. The greatest number of new starts took place in the first year of the de Blasio Administration, when 14 projects entered the program, falling to just five new projects in 2019.

A number of factors may be affecting program participation. Without data on applications, IBO cannot determine if this is because fewer firms are applying, or if the IDA has become more rigorous in its approvals. Discussions with IDA staff, the consultants that refer firms to the program, and program beneficiaries, reveal several likely reasons for the decline in participation. Less-aggressive marketing of the program during the Bloomberg and de Blasio Administrations and more stringent recapture and reporting requirements adopted over the life of the program may have had some effect. The bigger factor, however, is likely a decline in affordable industrial space available in the city.

According to analysis by the Pratt Center for Community Development, the rezoning of land previously reserved for industrial use for other uses has driven up industrial real estate costs in recent years.¹⁴ (Each plot of land within the city has a zoning designation: residential, commercial, or manufacturing. Industrial Program projects are largely limited to the city’s manufacturing districts.) Rezoning during the Bloomberg Administration reduced the land zoned for manufacturing uses by almost 1,500 acres (around 9 percent) from 2002 through 2012, according to the Department of City Planning.¹⁵ The parcels zoned for manufacturing that remain were increasingly unaffordable for industrial firms, according to the Pratt Center analysis.¹⁶

More recently, rezonings during the de Blasio Administration undertaken as part of the Mayor’s housing plan to increase residential density have also reduced the amount of land zoned for manufacturing uses in some neighborhoods. In addition,



the cost of warehouse space has been increasing, as large logistics firms and e-commerce companies purchase sites for last-mile facilities and distribution centers in the city.¹⁷ Where in earlier years the tax incentives provided by the Industrial Program may have been able to tip the scales in terms of affordability for firms with little available capital, this appears to have become less likely over time.

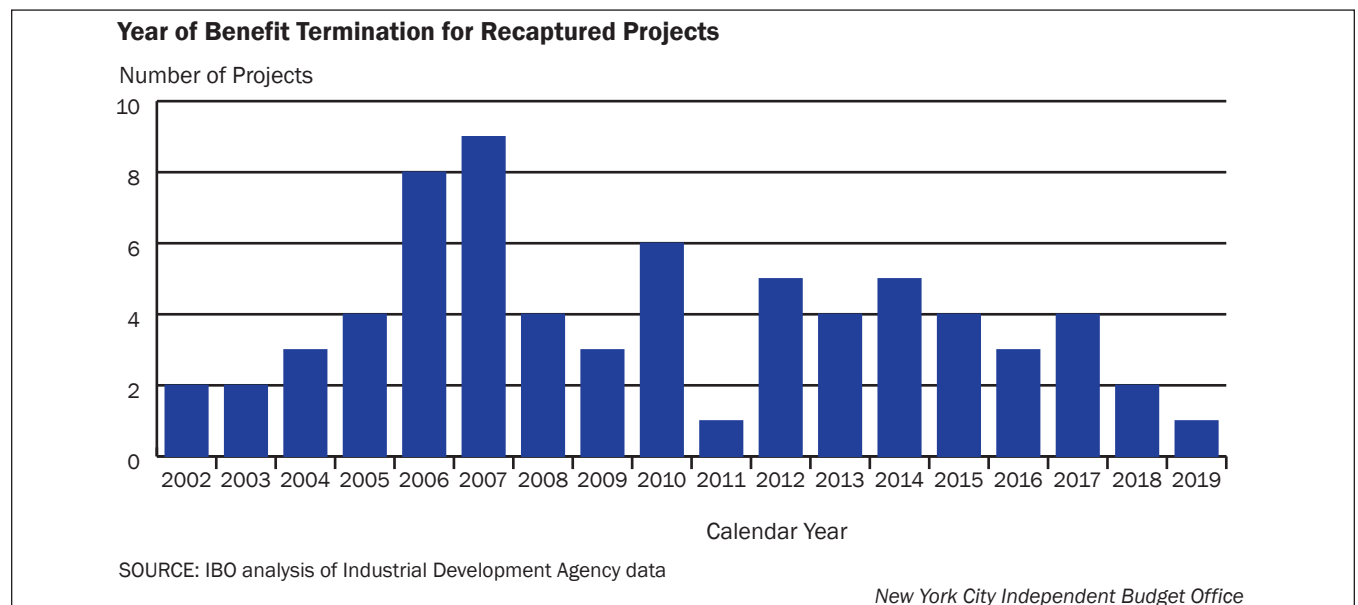
Many Projects Terminate Assistance Before Maturity

In addition to project starts, IBO also used benefit terminations to examine the extent to which firms remain in the program over time. IBO found 154 projects (41.6 percent of all projects) had their assistance terminated before reaching the maturity date outlined in their lease agreements, usually 25 years after benefits begin. Of those, 69 (or 18.9 percent of all projects) were subject to recapture. The remaining 85 left the program early, but were not subject to recapture.

Nearly 20 Percent of Projects Subject to Recapture. As described previously, firms that fail to meet prescribed criteria in the first 10 years of their benefit are subject to the clawback, or recapture, of their assistance. The average length of time between project start and benefit termination for the 69 projects where assistance has been recaptured was seven years.

The IDA provided some general reasons for why it recaptured benefits. The most common was that the firm sold the assisted location (20 projects). Other reasons include: failure to complete the project (nine projects); the project ceased operations (eight projects); over-leasing of the project facility to subtenants in violation of their lease agreement (seven projects); and use of the facility inconsistent with its intended use (six projects). Lastly, the IDA recaptured benefits for three projects that moved their employees outside of New York City. For the remaining 16 projects, detailed explanations were not available.

Since the program began, the IDA has sought to recapture \$24.1 million. This includes both city and state benefits, interest, and penalties that may be charged by the city’s Department of Finance for late PILOT payments. Although this figure



represents the amount billed, according to the IDA, they are usually successful at collecting most of the funds.¹⁸

Based on the projects for which IBO had data on the city cost of tax expenditures—a little over half of recaptured projects—we estimate that the total funds recaptured, including interest and penalties, represent roughly about 70 percent of the city assistance provided.¹⁹

Generally, assistance was recaptured fairly evenly across the life of the program; with recapture actions happening every year since 2002; data on projects recaptured earlier were unavailable. On average, there were four project terminations a year where benefits were recaptured.

Early Terminations Not Subject to Recapture. Another 85 projects had assistance that ended before maturity, but were not subject to recapture. The average time between project start and benefit termination for these projects was 13 years. According to the IDA, these firms may terminate their assistance (or have their assistance terminated by the IDA) for a variety of market conditions, some of which may be similar to the reasons for recapture—but occurring after the recapture period ends.

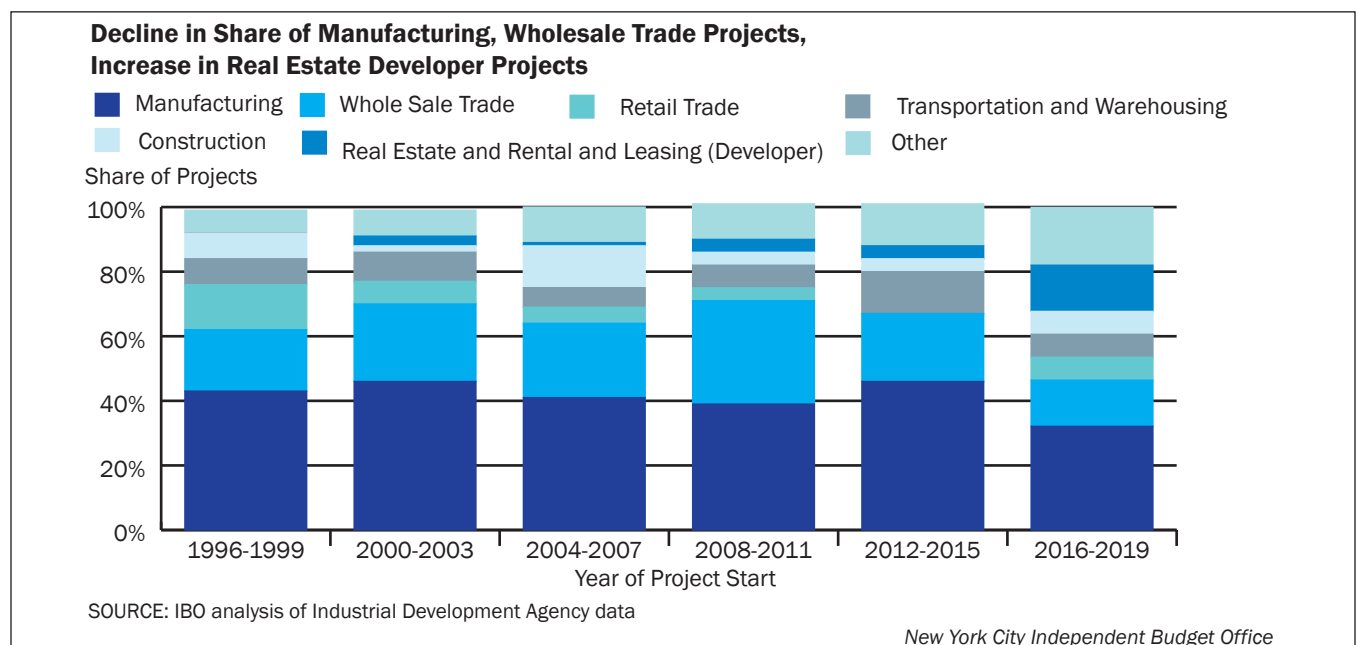
5. Key Findings: Profile of Industrial Program Beneficiaries

Change in the Mix of Industries Receiving Assistance

Manufacturing and—to a lesser extent—wholesale trade have accounted for the majority of Industrial Program projects since the program’s creation. In recent years, however, the mix of industries has begun to shift. Nevertheless, because fewer projects have entered the program in recent years, manufacturing and wholesale trade projects remain the predominant recipients over time.

Overall, 42.4 percent of projects receiving assistance through the Industrial Program since it began were led by firms in the manufacturing sector. This is followed by wholesale trade projects (22.1 percent). Smaller shares of projects are in the transportation and warehousing sector (8.4 percent), construction (7.0 percent), retail trade (6.7 percent), and real estate and rental and leasing (3.2 percent). The remaining 10.1 percent of projects reflect a variety of sectors.²⁰

The mix of industries served by the program has changed somewhat in recent years. For the first 21 years of the program’s history, manufacturing and wholesale trade accounted for well over half of projects nearly every year (on average 68.5 percent). Beginning in 2016, however, projects in these two sectors have made up a little less than half of the project starts (46 percent).



While the total number of deals in recent years is far lower than earlier years, in terms of the relative shares of project starts, there has been an increase in projects of real estate firms. These comprised 14 percent of projects from 2016 through 2019, but an average of 2 percent in earlier years. This likely reflects the expansion of property tax benefits to include developers of industrial space, who were added to the program in 2017.

Beneficiaries Are Mostly Small Firms, Already Doing Business in New York City

IBO used QCEW data to examine the employment profile of firms the year they entered the Industrial Program (project start). IBO found that the majority of firms participating in the Industrial Program already had employment in New York City at project start—and that very few firms participating in the Industrial Program were new to the city at the time assistance was awarded. Of those firms that had New York City employment, IBO found the majority had fewer than 100 employees and most were growing in the years before they entered the program.

Very Few Firms New to New York City. For the projects that entered the Industrial Program beginning in 2000 through 2018, IBO used employment data from the QCEW to examine firm size in the year they received assistance. Of the 254 owner-occupied projects that entered the program during that period, 231, or 90.9 percent, reported employment in the city the year of project start. (IBO considers the 14 developer projects that entered the program during this period in a later section on page 40.)

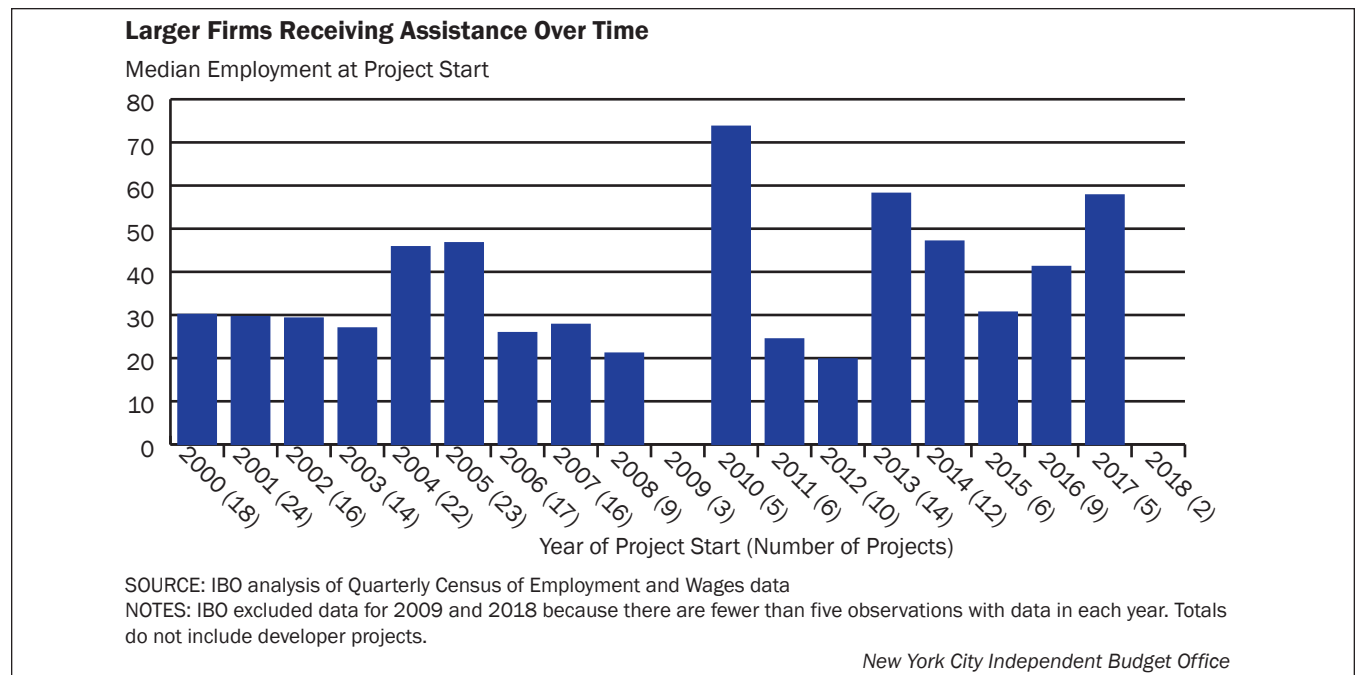
Of the remaining 23 owner-occupied projects, IBO was unable to locate employment data in the QCEW data at the time of project start for 14 of the projects. All of these 14 projects reported New York City employment to the IDA when they applied to the program and most reported at least some employment in the years before project start.²¹

Based on this information, IBO estimates only nine projects that entered the program from 2000 through 2018 (4.5 percent) were firms that were new to the city. These firms also reported no New York City employment to the IDA at application. Because there are so few projects of new firms, and in accordance with the QCEW data-sharing rules, IBO does not report on employment outcomes for these projects after they received assistance.²²

Assisted Firms Are Mostly Small or Very Small. Of the firms that had employment in New York City in the year of project start, the majority had fewer than 100 employees, reflecting the program's original intent to assist small and mid-sized firms.

Firms Receiving Assistance Are Mostly Small or Very Small		
Firm Size	Number of Projects	Share
Fewer Than 20 Employees	51	22.1%
20 to 99 Employees	131	56.7%
100 to 499 Employees	35	15.10%
500 or More Employees	14	6.1%
TOTAL	231	100%
SOURCE: IBO analysis of Quarterly Census of Employment and Wages data NOTES: Data is available for projects that entered the program from 2000 through 2018. They do not include the 14 developer projects that entered the program within that period.		
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The median firm size in the year of project start was 34 employees; the average firm size was larger (154 employees) due to a handful of larger firms pulling up the average. Overall, 22.1 percent of firms had fewer than 20 employees, 56.7 percent had 20 to 99 employees, 15.1 percent had 100 to 499 employees, and 6.1 percent had 500 or more employees. (Recall that employment data includes total New York City employment reported by federal employee identification number, or FEIN, which may include multiple establishments.)



Firm Size at Project Start Increasing Over Study Period. IBO examined the size of firms by the year IDA first awarded assistance to determine if the size of the firms selected to receive assistance has changed over time. IBO found firm size at the time of project start has increased over the study period, although participating firms are generally still small. For projects whose assistance began in the first half of the study period (2000 through 2008), the median firm size was 32 employees and for the projects whose assistance was awarded from 2009 through 2018, the median firm size was 47 employees.

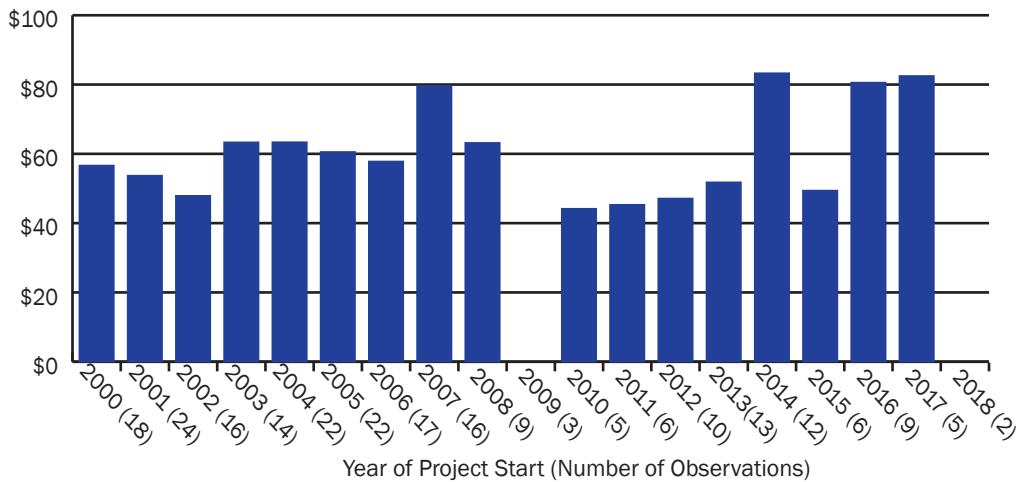
Average Wage at Project Start Increasing Over Study Period. In addition to firm size, IBO examined the average wage of project firms in the year IDA awarded assistance. Overall, for projects that entered the program from 2000 through 2018, the average wage in the year of project start was \$59,891 (inflation-adjusted 2018 dollars). IBO found the average wage of firms selected for the program has increased over the study period, particularly over the last five years.

For projects that entered the program from 2014 through 2018, the average wage was \$78,256 at project start, compared with an average wage of \$57,588 at project start for projects that entered the program from 2000 through 2014 (all wages in inflation-adjusted 2018 dollars).

Most Firms Are Expanding in Years Before Benefit. IBO used QCEW data to examine the employment trends of the firms that were already doing business in New York City in the years before they entered the Industrial Program. IBO found that the majority of firms that receive assistance through the program were adding employees in the years immediately before entering the program. This finding is not surprising as the program targets firms that are purchasing new space or are seeking to make capital improvements in their current space—likely in an effort to accommodate employee expansion. In addition, according to the IDA, a growing headcount prior to assistance can be an important factor in the IDA choosing to award assistance to the firm as it can be a sign of the firm’s viability, a consideration in awarding assistance.

Average Wage of Firms at Project Start Has Increased

Average Wage at Project Start, 2018 dollars in thousands



SOURCE: IBO analysis of Quarterly Census of Employment and Wages data

NOTES: IBO excluded data for 2009 and 2018 because there are fewer than five observations with data in each year. Totals do not include developer projects.

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For firms whose projects entered the program from 2003 through 2018, IBO examined changes in their employment in the three years prior to assistance. Of the firms whose assistance started during this period, employment data was available in all three years prior to assistance for 145 firms, or around 85 percent. (Again, this does not include projects of real estate development firms or firms new to the city, and if a firm received assistance more than once during the study period, only data as of the first project is included.)

If firms' average annual employment in those three years increased by 3 percent or more, IBO classified the firms as expanding. If the average annual employment change was between minus 3 percent and positive 3 percent, IBO classified the firm as stable. For firms where employment decreased by more than 3 percent, IBO classified the firm as contracting.

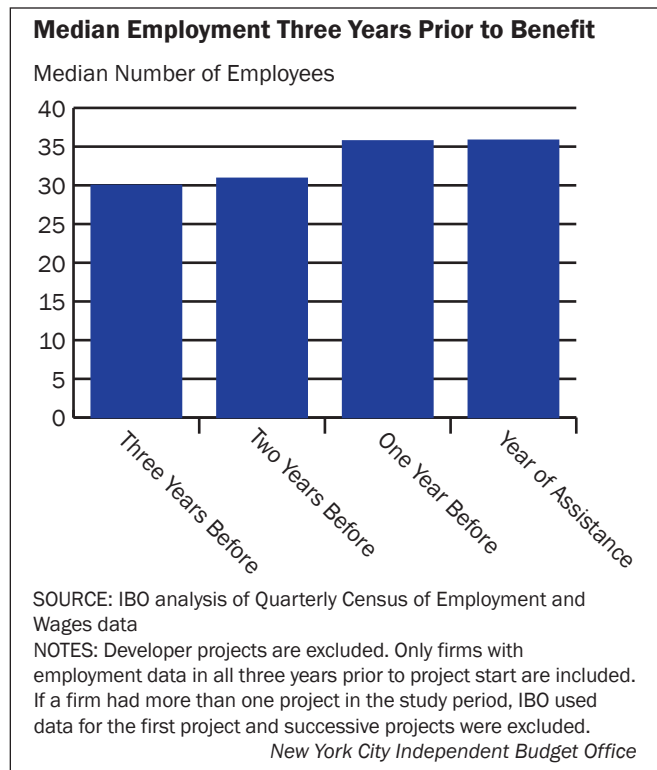
IBO found that 61.4 percent of projects were expanding before the benefit, 16.5 percent were stable, and 22.1 percent were contracting.

Majority of Firms Expanding Before Benefit		
Average Employment Change Three Years Before Start	Number of Firms	Share of Total
Expanding (Growth of more than 3%)	89	61.4%
Stable (3% loss to 3% growth)	32	16.5%
Contracting (Loss of more than 3%)	24	22.1%
TOTAL	145	100%

SOURCE: IBO analysis of Quarterly Census of Employment and Wages data
 NOTES: Developer projects are excluded. Employment change measured as the average annual change in employment in the three years prior to project start. Only firms with employment data all three years prior to project start are included. If a firm had more than one project in the study period, IBO used the data for the first project as of its closing date and excluded the successive projects.
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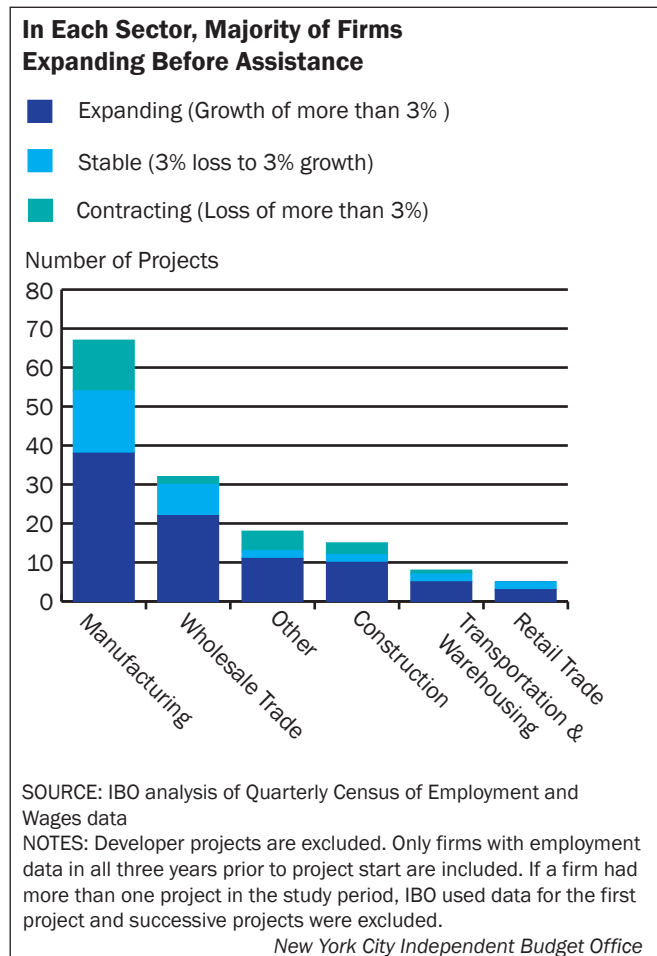
Overall, the median size of these firms was 30 employees three years before project start, increasing to 31 employees two years before start, and 36 employees in the year before the firm entered the program.

IBO found that the majority of firms across all sectors were expanding in the three years prior to project start. The sector with the greatest share of firms expanding before benefits were awarded was wholesale trade (68.8 percent). Just over half (56.7 percent) of manufacturing firms—which account for the most Industrial Program starts from 2003 through 2018—were expanding in advance of entering the program.



Firms in the other sectors were also generally expanding before receiving benefits through the Industrial Program: 66.6 percent of construction firms were expanding in the three years before the benefit; 62.5 percent of transportation and warehousing firms; 61.1 percent of “other” firms; and 60.0 percent of retail trade firms were expanding before receiving assistance.

Similarly, IBO examined changes in participating firms’ employment before the start of benefits by the year assistance was awarded and by firm size. In all but one year (2010), the majority of firms that entered the program were expanding before receiving benefits; the result for 2010 is not surprising given that the preceding years included 2008 and 2009, a period of employment contraction nationwide. In terms of firm size (classified by the number of employees in the year of project start), the majority of firms in all four of IBO’s firm size categories were expanding before benefits began.



6. Key Findings: Employment Outcomes

Just Over Half of Existing Forms Expanded Three Years After Project Completion

IBO found that just over half of firms that had employment in New York City in the year they entered lease agreements with IDA, which we refer to as project start, expanded their employment when compared with three years after the completion deadline set for their capital project. Less than a third met or exceeded the employment goals they set at application, however.

In order to examine employment outcomes for program participants, IBO compared each firm's employment in the year of its project start with its employment in the third year after its capital project was to be completed. As described previously, firms participating in the Industrial Program set job creation goals for the three years after operations begin at the project location for which the firm received assistance. Using this measure, IBO can compare actual employment outcomes with the projections that firms provide at application.²³

Although IBO requested that the IDA provide the date on which operations commenced for each project, as well as the date their capital projects were completed, they were unable to provide this data. Fortunately, however, the PILOT data provided to IBO by the New York City Department of Finance included the deadlines for capital project completion, the date by which capital construction is required to be completed according to firm's lease agreements with the IDA. IBO used this completion deadline as a proxy for the start of operations and measured employment three years later.²⁴

What Counts as Post-Deal Employment? Similar to how we measured employment at project start, IBO measured employment after the firm began receiving assistance at the firm level, including all New York City employment for an assisted firm, even if it was not at the project location. This allows IBO to measure the total change in firm employment in the city since project start, rather than capturing how jobs moved among locations. The overwhelming majority of firms participating in the Industrial Program, however, reported all of their employment at the project location. Only about a dozen firms reported employment at additional sites.

Unless the project is that of an industrial developer, IBO did not include the tenants of assisted firms in its employment counts after it began receiving assistance. (IBO analyzes employment outcomes for developer projects separately, see page 27). This is because, according to the IDA, the focus of the program is the owner-occupant. As previously described, benefits can be recaptured or reduced if too much of the project location is rented to tenants.

IBO compared employment at project start with employment three years after the capital project completion deadline for 128 of the 231 projects with employment

data at project start. There were a number of reasons why IBO did not analyze employment changes for the remaining 103 projects:

- For 38 projects the three year post-completion date is after 2018, the last year employment data is available for this analysis;
- The IDA recaptured benefits for another 37 projects. Because these projects had to repay most if not all of their benefits, IBO dropped them from this portion of its analysis;
- Assistance was terminated for five projects before they reached the three year post-completion dates, but these projects were not subject to recapture;
- Another 11 projects reported employment three years after project completion, but did not report any of that employment at the project location. IBO dropped these observations to avoid undercounting employment in case additional employment existed at the project location, but was missing from the IBO database;
- Nine projects were dropped because the associated firms received assistance for other projects earlier in the study period and employment changes for those firms were already captured; and
- Lastly, employment data in the QCEW were missing for the projects of three firms.

Employment Expanded at Just Over Half of Projects. Compared with employment at project start, IBO found that just over half (53.9 percent) of firms participating in the Industrial Program had expanded three years after their project completion deadline. (Recall that IBO classifies a firm as expanding if employment grew by 3 percent or more.) The average number of jobs added by firms that expanded was 32 and median jobs added was 9. Another 8.6 percent of firms stayed more or less the same size, growing or shrinking by no more than 3 percent. Lastly, just over a third of firms (37.5 percent) contracted, losing 3 percent or more of their employees when compared with project start. Firms that were contracting lost an average of 34 employees, with a median of 11 jobs lost.

Less Than One-Third of Firms Met Employment Goals Three Years After Completion Deadline.

IBO also compared actual employment outcomes with the goals these firms provided for their projects when they applied for the program. At the time of application, firms expected that employment would increase by an average of 22 jobs (with a median increase of 9 jobs) after three years of operation in the new facility. IBO found only 32.0 percent of firms met or exceeded their employment goals, however. Of those firms that expanded, 59.4 percent saw their goals met or exceeded; firms that expanded but did not meet their goals fell short by an average of 11 jobs, with a median shortfall of 7 jobs.

Wholesale Trade Projects Out-Perform Other Sectors.

IBO examined whether employment outcomes varied by sector. In the manufacturing sector—which accounts for the largest share of Industrial Program projects—

Just Over Half of Projects Expanded Employment Compared With Project Start				
Employment Change From Project Start To Three Years After Completion Deadline	Projects		Jobs	
	Number	Percent	Average Gained/Lost	Median Gained/Lost
Expanded (Growth of more than 3%)	69	53.9%	32	9
Static (3% loss to 3% growth)	11	8.6%	0	0
Contracted (Loss of more than 3%)	48	37.5%	(34)	(11)
TOTAL	128	100%		

SOURCE: IBO analysis of Quarterly Census of Employment and Wages data
 NOTE: Developer projects, projects that had assistance recaptured, and projects that do not report any employment at the project location are excluded. If a firm had more than one project in the study period, only the first project is included.
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just under half of firms expanded three years after their completion deadline (45.0 percent). Another 15.0 percent of manufacturing firms stayed around the same size after three years, and the remaining 40.0 percent contracted.

The sector with the greatest share of firms that expanded three years after their completion deadline was wholesale trade (74.2 percent), with the remaining firms contracting. None fell into the stable category.

Just over half (52.9 percent) of firms in the “other sectors” category expanded in the three years after their completion deadline, while 11.8 percent were stable and 35.3 percent contracted.

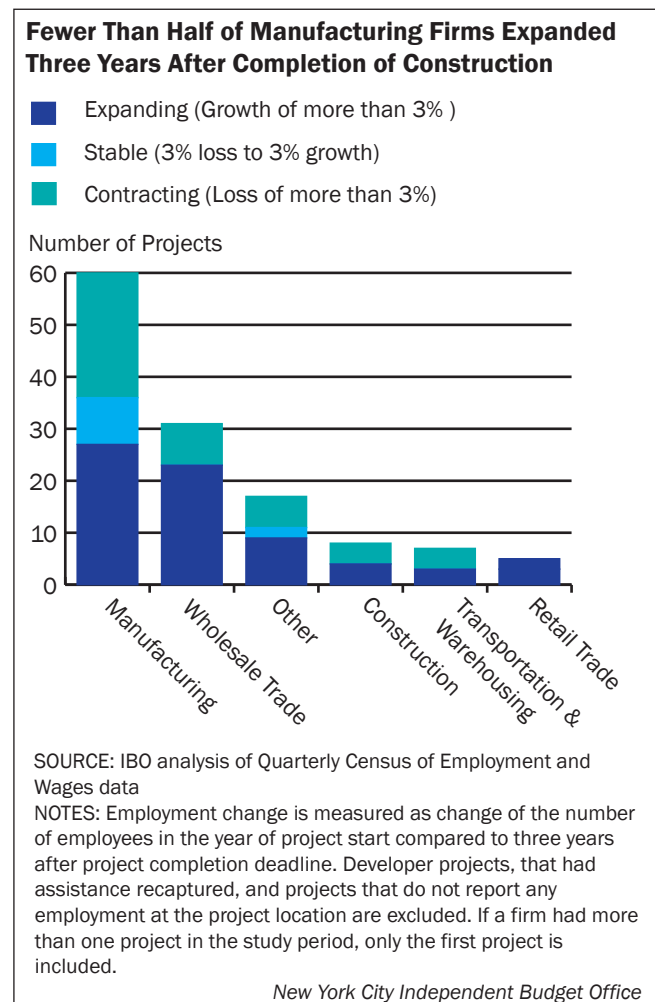
There were relatively few observations for the remaining sectors. Exactly half of the construction firms expanded and half contracted after three years. In the transportation and warehousing sector, the majority of firms, 57.1 percent, contracted. Firms in the retail trade sector fared better, with 60.0 percent expanding.

Some of the variation in employment outcomes by sector could be influenced by firm size. Overall IBO found that in terms of firm size (classified by the number of employees in the year of project start), the majority of firms in the smallest size groups expanded three years after their completion deadline.

Of the smallest firms—those with fewer than 20 employees—71.4 percent of firms expanded compared with project start, 3.6 percent were stable, and 25.0 percent contracted. Of the next smallest group, those with 20 to 99 employees, 50.6 percent of firms expanded, 7.6 percent were stable, and 41.8 percent contracted. Fewer than half of firms in the larger groups expanded. Of the firms with 100 to 499 employees, 43.8 percent of firms expanded, 25.0 percent were stable, and 31.3 percent contracted. Of the largest size group (500 or more employees), 40.0 percent of firms expanded compared with project start and 60.0 percent contracted).

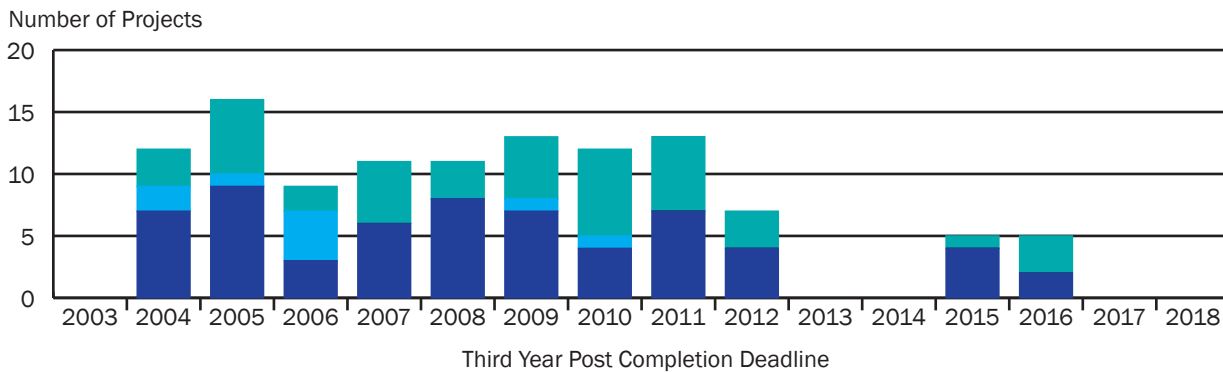
Wholesale trade firms participating in the program—which had the highest share of projects expanding, were somewhat smaller than firms in other sectors—the median number of employees in wholesale trade firms was 27 employees at project start. Manufacturing firms, by comparison, were slightly larger with a median size of 35 employees at project start. Most of the other sectors had median employment around 30 employees at project start (30 employees for the transportation and warehousing sector, 34 employees for retail trade, and 29 employees for other. Firms in the construction sector had the highest median employment at project start, 67 employees.

IBO also examined changes in participating firms’ employment by year: in what year did the firm’s third



Employment Changes by Third Year After Completion Deadline

Expanded (Growth of more than 3%) Stable (3% Loss to 3% Growth) Contracted (Loss of more than 3%)



SOURCE: IBO analysis of Quarterly Census of Employment and Wages data
 NOTES: Employment change is measured as change of the number of employees in the year of project start compared to three years after project completion deadline. Developer projects, projects that had assistance recaptured, and projects that do not report any employment at the project location are excluded. If a firm had more than one project in the study period, only the first project is included. Data is excluded in 2003, 2013, 2014, 2017, and 2018 due to fewer than five observations.

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year after completion fall. Similar to IBO’s findings on employment changes before assistance, the majority of firms whose employment outcomes were measured in 2010 contracted (58.3 percent). Again, 2010 followed a period of employment contraction nationwide. The majority of firms whose employment outcomes were measured in 2016 (60.0 percent) also contracted.

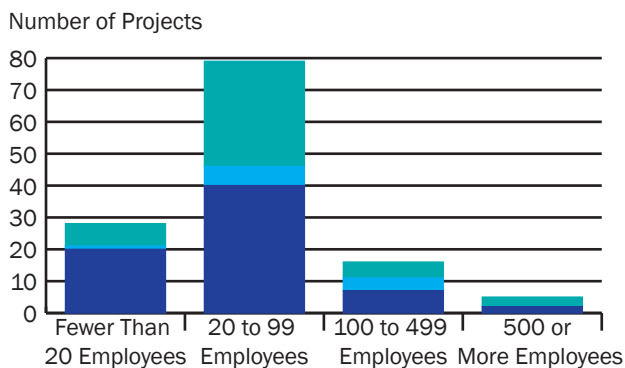
Larger Share Stable Using Annual Average Change Measure.

IBO chose to measure employment outcomes post-assistance by comparing employment at project start with employment three years after their project completion deadline. This allows IBO to compare outcomes to goals participating firms set at application and gives firms an equal amount of time after completion to expand employment. Firms also receive “credit” for expanding, no matter if they created jobs every year or just by year three.

Another way to look at employment growth is to measure the change in annual average employment in the years after project start. Using the annual average helps to smooth out big swings in employment. By this measure a higher share of firms are classified as stable when compared to just measuring the difference between the year of project start and year three post the completion deadline. For this measure, IBO examined the changes in annual average employment in the five years after project start. The average time from project start to completion deadline is 1.5 years and using five years allows for the three years post-completion to be included for most projects. Although because of differences in completion times

Smallest Firms Had Largest Share of Expanding Employment

Expanded (Growth of more than 3%) Stable (3% Loss to 3% Growth) Contracted (Loss of more than 3%)



SOURCE: IBO analysis of Quarterly Census of Employment and Wages data
 NOTES: Employment change is measured as change of the number of employees in the year of project start compared to three years after project completion deadline. Developer projects, projects that had assistance recaptured, and projects that do not report any employment at the project location are excluded. If a firm had more than one project in the study period, only the first project is included. Data is excluded in 2003, 2013, 2014, 2017, and 2018 due to fewer than five observations.

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Larger Share Stable Using Annual Average Change Measure		
Average Annual Employment Change Five Years After Project Start	Number of Firms	Share of Total
Expanding (Growth of more than 3%)	56	43.4%
Stable (3% loss to 3% growth)	46	35.7%
Contracting (Loss of more than 3%)	27	20.9%
TOTAL	129	100%

SOURCE: IBO analysis of Quarterly Census of Employment and Wages data
 NOTES: Employment change is measured as the average annual change of the number of employees in the five years after project start. Developer projects, projects that had assistance recaptured, and projects that do not report any employment at the project location are excluded. If a firm had more than one project start in the study period, only the first project is included. IBO excludes three projects whose projects were not complete five years after project start.
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some firms' projects may have been complete for all five years using this measure, while others may just have been completed in year five (IBO excludes three projects that did not have completion deadlines within five years.)

Based on the average annual employment change in the five years after project start, a smaller share of firms are classified as expanding (43.4 percent) and contracting (20.9 percent) compared with the point-in-time measure (53.9 percent and 37.5 percent, respectively). The share of firms classified as stable increases to 35.7 percent (compared with 8.6 percent).

Employment Outcomes for Developer Projects. IBO also examined employment outcomes at projects of developers of industrial space. As previously described,

developers of industrial space have been eligible for property tax benefits without special approval since 2017 and a handful of these projects are now underway, adding to the small number that had been developed earlier.

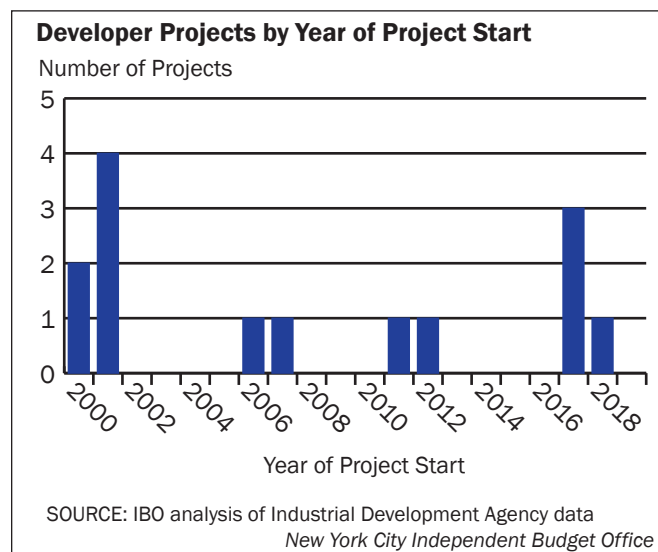
Similar to owner-occupied projects, IBO compared employment levels (if any) in the year of project start with three years after its project completion deadline. Instead of comparing firm employment, however, IBO examined tenant employment at the project location before and after assistance. Of the 14 developer projects that entered the program from 2000 through 2018, employment data before and after assistance were available for eight projects (three years post-completion deadline data was not yet available for the five projects and data was missing for one project that started in 2006).

The number of jobs at the project location expanded at all but one of the eight developer projects. On average, developer sites had 60 employees at project start increasing to an average of 118 employees three years post-completion deadline.

For the majority of projects, tenants at the project location at project start continued

to report employment at the project location three years after the project completion deadline, largely with the addition of new tenants. While an increase in employment was reported at nearly all sites, these jobs are not necessarily all new to the city. At least 40 percent of the new tenants reported some employment at other locations in the city.

The overwhelming majority of the jobs at the developer sites three years after the project completion deadline are in the industrial sector (70.5 percent). The largest share of jobs are in transportation and warehousing (57.3 percent). Of the jobs added at project locations from project start to three years post-completion, however, only about half are industrial. This is because at one of the program's early developer projects none



of the new employment was industrial. For the remaining projects, though, over 90 percent of the added employment was in the industrial sector.

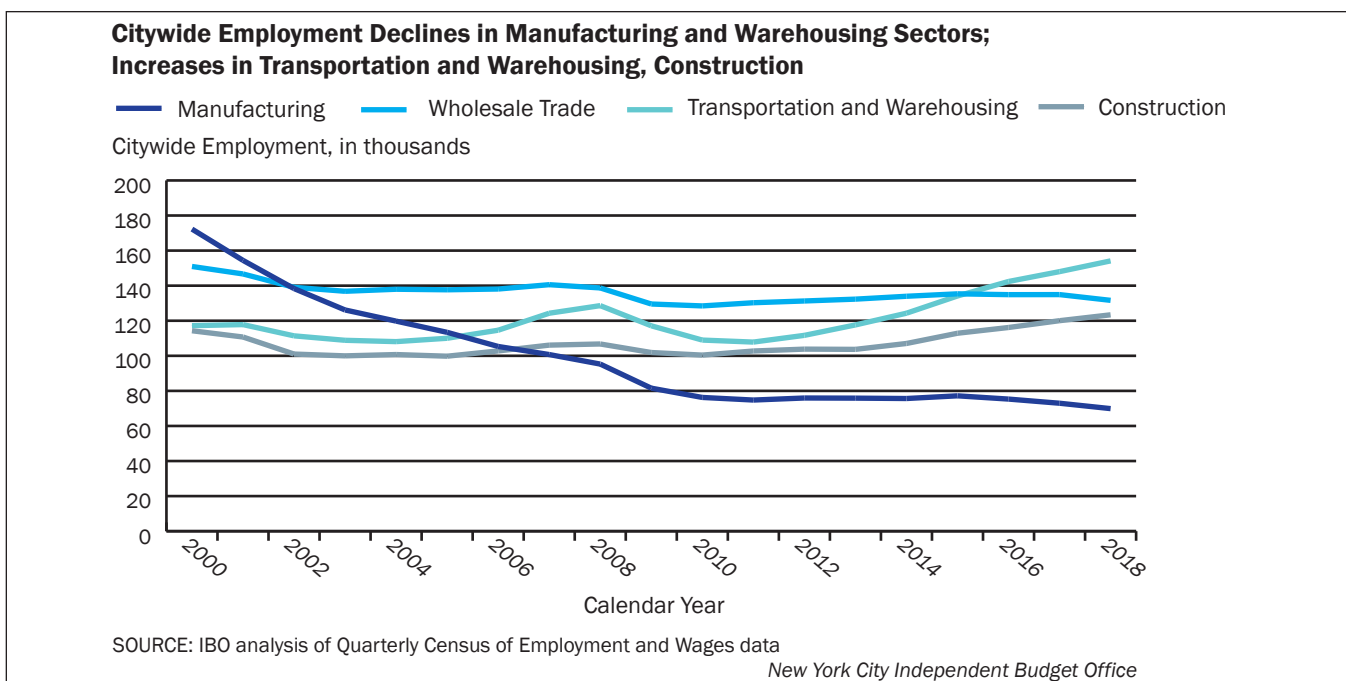
Assisted Firms Largely Outperform Sectors in Terms of Job Growth

In order to provide context for the employment changes of firms participating in the Industrial Program, IBO examined employment trends in the industrial sector citywide during the study period. While industrial jobs in the city have declined since 2000, not all sectors have been impacted similarly.

In the two main sectors assisted by the Industrial Program, the manufacturing and wholesale trade sectors, citywide employment declined over the study period. Employment grew, however, in the construction and transportation and warehousing sectors, although fewer firms participating in the Industrial Program are in these two sectors.

Manufacturing Sector. Employment in New York City’s manufacturing sector fell most precipitously over the study period, declining from 172,266 employees in 2000 to 69,833 in 2018 (59.4 percent), continuing a decades-long trend. Manufacturing sector losses were greatest in the first half of the study period from 2000 through 2009, when employment fell by an average 7.9 percent annually. The manufacturing sector stabilized somewhat during the second half of the study period with losses falling to an average of 1.7 percent a year from 2010 through 2018, as continued declines in industries such as clothing were partially offset by gains in industries such as food and furniture manufacturing.

By comparison, and as described above, the majority of manufacturing firms that entered the Industrial Program during this period either expanded three years after their completion deadline (45.0 percent) or remained around the same size (15.0 percent), even while the sector was contracting citywide during the same period.



Wholesale Trade Sector. The wholesale trade sector also contracted over the study period, but to a lesser extent. Overall, wholesale trade jobs fell from 150,948 in 2000 to 131,625 in 2018 (12.8 percent). Similar to the manufacturing sector, losses were greatest during the first half of the study period. From 2000 through 2009, wholesale trade employment in the city fell by an average 1.6 percent annually. From 2010 through 2018 the average annual change was -0.2 percent.

Assisted firms in the wholesale trade sector were more likely to increase employment than those in the manufacturing sector—the majority of wholesale trade firms that entered the Industrial Program during this period expanded jobs three years after their completion deadline (74.2 percent), even as sector jobs declined on the whole citywide.

Transportation and Warehousing and Construction Sectors. Conversely, employment in the transportation and warehousing and the construction sectors grew over the study period. Employment in the transportation and warehousing sector increased from 114,292 jobs in 2000 to 131,625 jobs in 2018 (8.0 percent). This growth has been concentrated in recent years with employment growing by an annual average of 3.5 percent from 2014 through 2018.

Construction employment also increased from 117,189 jobs in 2000 to 154,127 jobs in 2018 (31.5 percent). Most of that growth has been since 2011, with employment growing by an annual average of 5.2 percent from 2012 through 2018.

Although employment in these two sectors citywide grew from 2000 through 2018, the majority of transportation and warehousing firms that entered the Industrial Program during this period contracted three years after their capital project completion deadline (57.1 percent). Half of construction firms contracted. Again, there were relatively few firms in these sectors (just seven and eight, respectively) with three years post-completion data.

Assisted Firms Pay Living Wage, But on Average Less Than Citywide Sector Wage

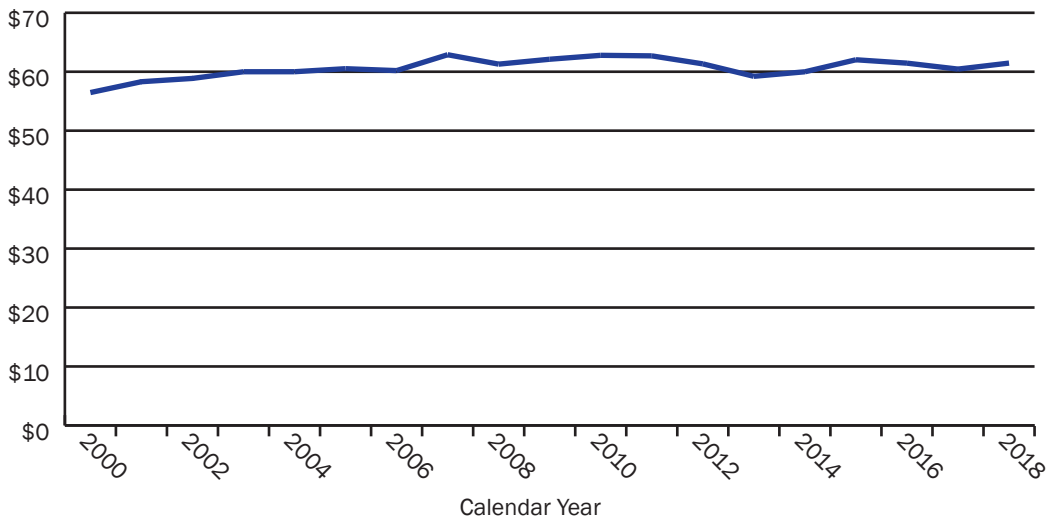
According to the objectives of the Industrial Program, the IDA supports the industrial sector because it is a source for living-wage jobs. Since 2012, firms that receive at least \$1 million in assistance from the IDA are required to pay a living wage under the Fair Wages for New Yorker Act. IBO used QCEW data to examine the average wage paid by firms participating in the Industrial Program. IBO found that the average wages are well above the city's living wage.

IBO also compared the wages of assisted firms with their sector's wages citywide. Assisted firms in the manufacturing sector, as well as the transportation and warehousing sectors, paid wages that were slightly less than the sectors' citywide averages in most years. Assisted firms in the wholesale trade sector consistently paid lower wages than the sector as a whole. Assisted firms in the construction sector paid somewhat higher wages on average than the sector overall, although construction makes up a smaller share of Industrial Program projects than manufacturing and transportation and warehousing.

Average Wage of Project Firms Greater Than Living Wage. Firms receiving assistance through the Industrial Program paid an average annual wage of \$60,635

Inflation-Adjusted Average Wage for Firms in the Industrial Program

Average Annual Wage of Active Projects, 2018 dollars in thousands



SOURCE: IBO analysis of Quarterly Census of Employment and Wages data

NOTES: Average wages shown in constant 2018 dollars based on the consumer price index deflator. Includes all projects active in the Industrial Program in each year, from the year of assistance until benefits are terminated. Projects with assistance recaptured are excluded.

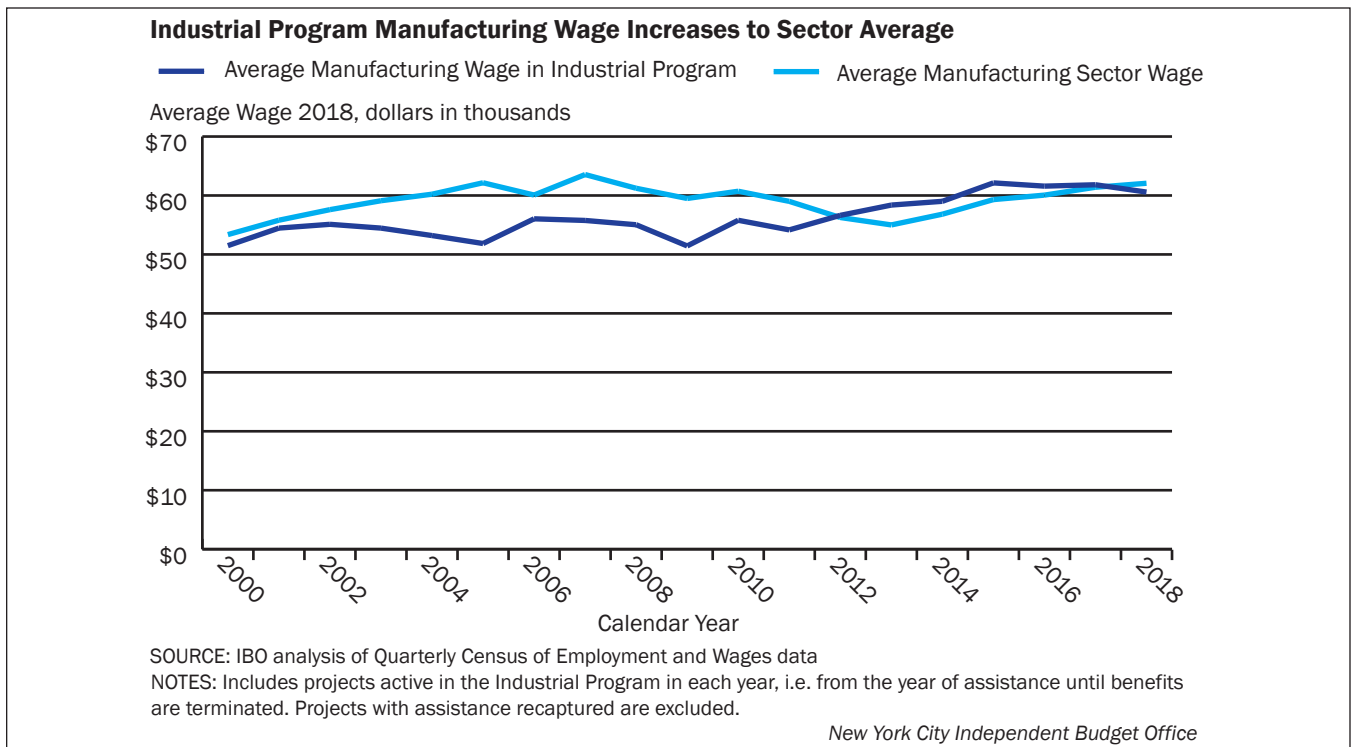
New York City Independent Budget Office

from 2000 through 2018 (All wages are in 2018 inflation-adjusted dollars.) These figures reflect the wages of all firms active in the program since the year they began receiving assistance. The average wage paid by assisted firms did increase slightly over the study period, growing from \$56,468 in 2000 to \$61,465 in 2018. In 2020, the living wage in New York City is at \$15 an hour or an annual salary of about \$31,200.²⁵

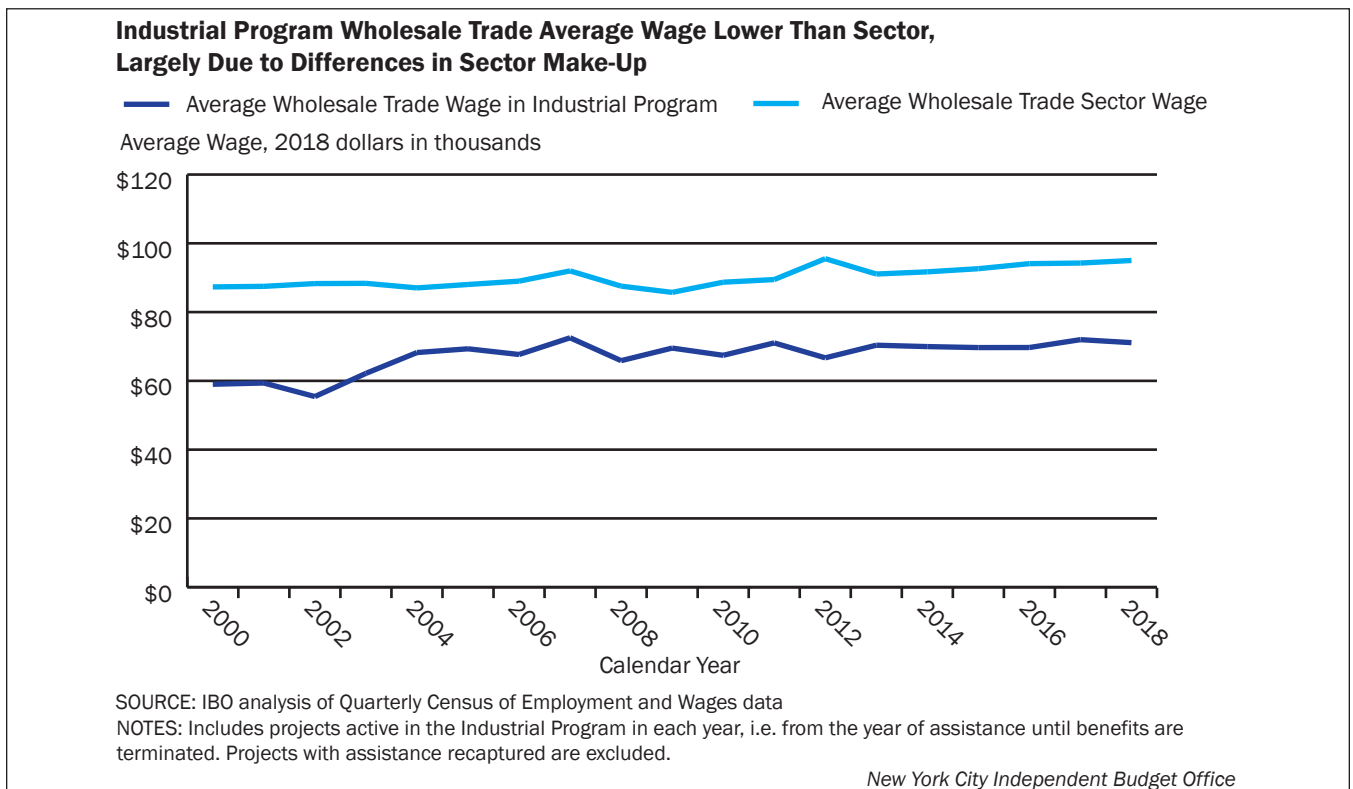
In 2017, Mayor Bill de Blasio released “New York Works.” The plan called on the city to create 100,000 “good-paying” jobs over 10 years in an effort to give New Yorkers a pathway to the middle class. The plan defined a “good paying job” as one that paid annual salaries of \$50,000 or more. The average wage paid by assisted firms therefore also meet the de Blasio Administration’s somewhat higher standard of “good paying jobs.”

Average Wage of Assisted Firms Can Be Lower Than Average of Sector. The average annual wage paid by manufacturing firms receiving assistance through the Industrial Program over the study period was slightly less (4.6 percent) than the sector average citywide. Manufacturing firms in the Industrial Program paid an average wage of \$56,384 from 2000 through 2018, while the citywide manufacturing average annual wage was \$59,118 during the same period (all wages in 2018 inflation-adjusted dollars). The difference in wages did change over the study period, however.

In the early part of the study period, from 2000 through 2011, assisted manufacturing firms paid on average 8.9 percent less than the citywide average (\$54,069 compared with \$59,360, respectively). In the latter part of the study period, however, the average annual wage paid by assisted firms increased while the sector-wide average fell in inflation-adjusted terms. During this period, assisted firms paid slightly more (2.2 percent) more than the sector average (\$60,020 compared with \$58,704, respectively).



There is a greater—and more consistent—disparity between the average annual wages for assisted firms in the wholesale trade sector compared with the sector wage citywide. From 2000 through 2018, wholesale trade firms participating in the Industrial Program paid on average \$67,200 annually. The average annual wage in the wholesale trade sector in the city writ-large over that period was \$90,170 (in 2018 inflation-adjusted dollars). The reason for *(continued on page 33)*



Capital Projects: Where and How Much?

The Industrial Program seeks to preserve the city’s industrial sector by encouraging capital investment in industrial spaces. IBO took a closer look at where these projects take place and how much firms invest in each project.

Majority of Projects Are in Manufacturing Districts in Queens and Brooklyn. The largest share of Industrial Program projects are located in Queens and Brooklyn. Since the program began in 1995, 42.0 percent of projects were located in Queens and 31.1 percent in Brooklyn. Another 17.1 percent were in the Bronx, 5.7 percent in Manhattan, and 4.1 percent in Staten Island. (About a third of Industrial Program projects involve more than one tax lot, so to calculate the distribution of projects IBO used each project’s main location, as identified by the IDA.)²⁶

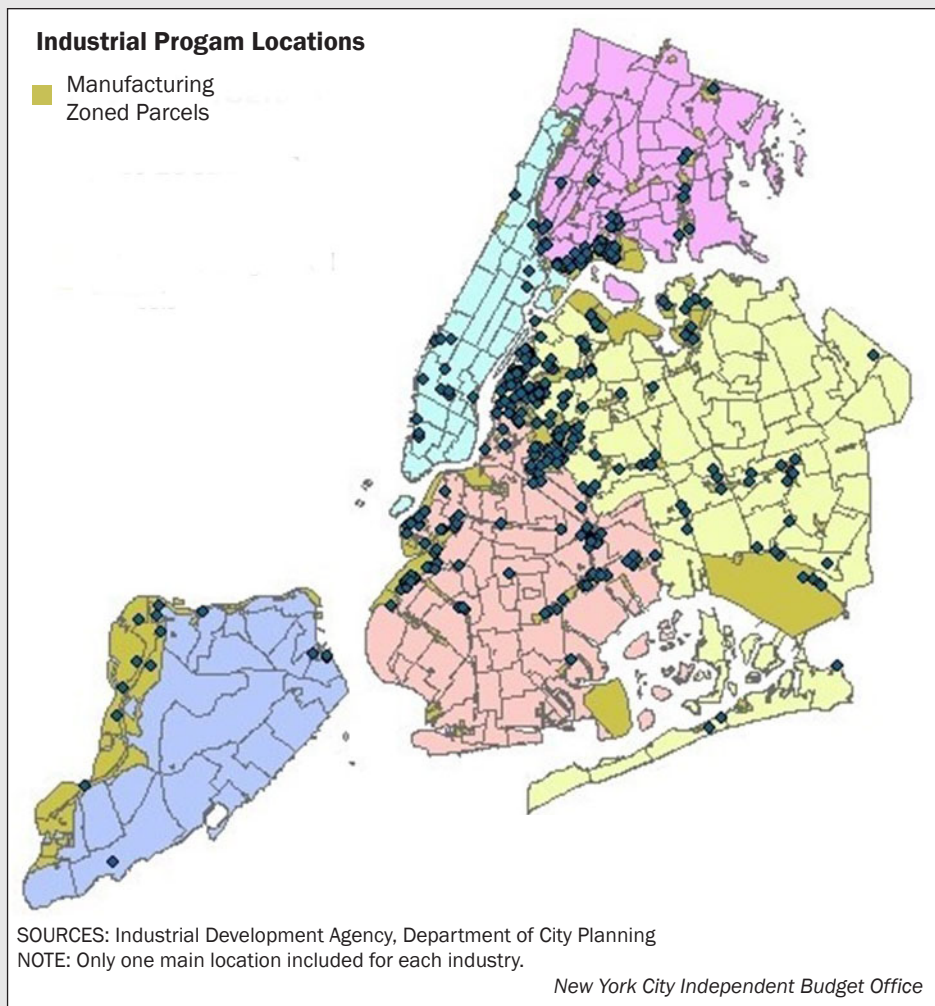
In terms of neighborhoods, Hunters Point-Sunnyside-West Maspeth in Queens had the highest share of projects (15.1 percent). This is followed by Hunts Point in the Bronx (8.0 percent), Sunset Park (6.0 percent), and East New York (5.4 percent) in Brooklyn. Another 5.4 percent of projects were located in Mott Have-Port Morris in the Bronx, with the remaining projects spread out across the city’s industrial neighborhoods.

The location of industrial projects is largely constrained by the city’s zoning system, which dictates in what areas of the city industrial building uses are permitted. Each plot of land within the city has a zoning designation: residential, commercial, or manufacturing. Industrial Program projects are largely limited to the city’s manufacturing districts, although a small share are located in commercial or residential districts.²⁷ The

map shows the locations of Industrial Projects, as well as areas of the city that are currently zoned for manufacturing uses.

Industrial Business Zones. Many Industrial Program projects in recent years are in areas called Industrial Business Zones (IBZs). IBZs are areas in Brooklyn, Queens, the Bronx, and Staten Island that are comprised entirely of manufacturing-zoned land and where the city has committed to not rezoning properties to allow residential use. IBZs were created in 2006 following the rezoning of large swaths of city’s manufacturing districts. There are currently 21 IBZs.

Of those projects that entered the program since



2006, more than 60 percent are located in a current IBZ. (Some of these projects may not have been in an IBZ at project start, as IBZ boundaries have changed somewhat over time.) Industrial Program projects located in IBZs at project start receive deeper property tax discounts (they often pay no land tax) than projects located elsewhere in the city and are eligible for other city benefits.

Majority Are Factory and Warehouse Sites. In addition to location, IBO examined the building use classifications of Industrial Program project locations at the time of project start, as well as five years later to examine if building use changed following IDA assistance.

At the time of project start, the majority of Industrial Program project locations were classified as factories (44.7 percent) or warehouses (31.3 percent). Nearly 8 percent of the project's locations were vacant at the time of project start. Another 6.4 percent were auto garages or parking lots, with the remainder split among a variety of uses including stores, office space, and other commercial uses.²⁸

For projects that started to receive assistance in 2014 or earlier, IBO compared the building use classification at the time of project start to five years later. Of those, the building classification changed for 58 projects (or 18.8 percent). This includes 18 projects where the main location was initially classified as vacant—five years later 7 were classified as warehouses, another 3 were classified as factories, 3 were classified as garages, and 3 were various other uses. Of the remaining locations whose use changed, the majority were among the three main industrial uses—factory, warehouse, or garage.

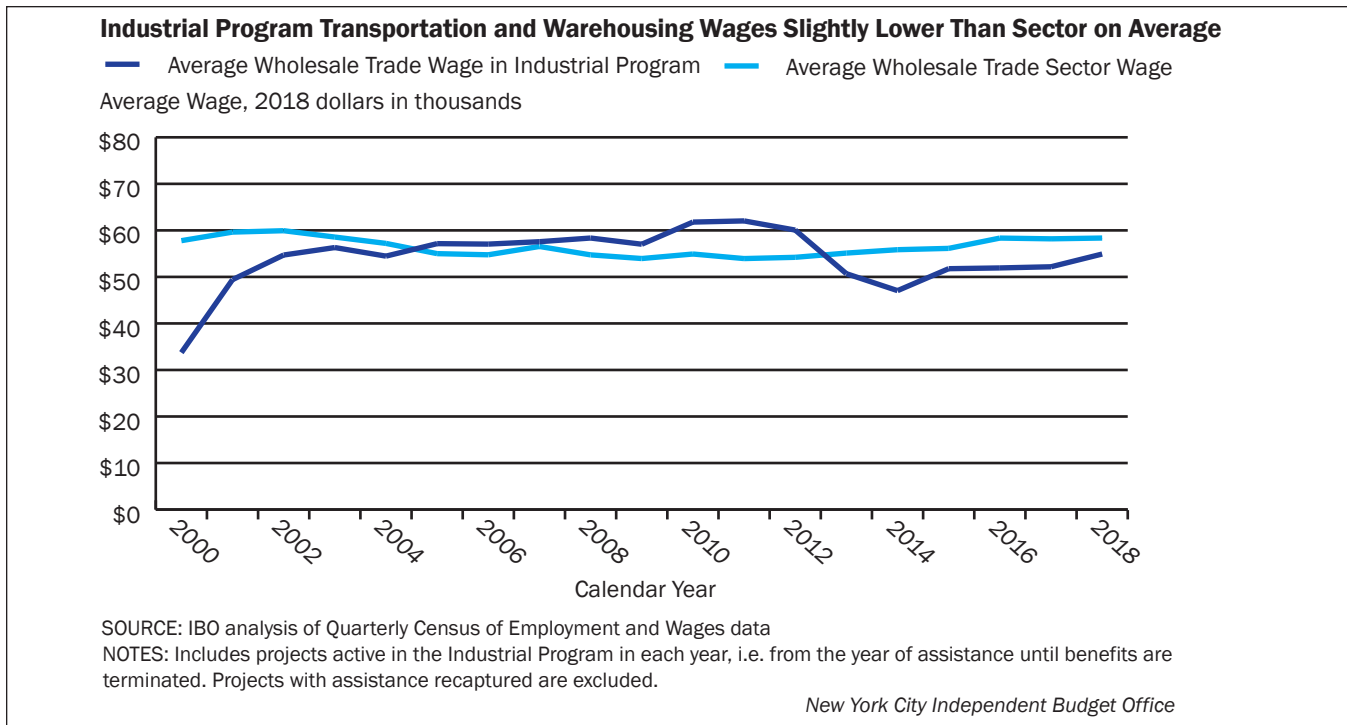
Final Construction Budgets Show Over \$3 Billion in Capital Investment. Although IBO requested actual construction costs to calculate the investment made in Industrial Program projects, the IDA was unable to provide this data. IBO instead used data from final construction budgets to estimate the capital investment in project locations. IBO found that exclusive of acquisition costs, the total investment in project locations since the program began was \$3.1 billion, according to budget data.²⁹ However, because final construction budget data were missing for 43 projects (mainly for projects early in the program's history), the total budgeted investment is higher.

IBO found that the average capital investment per project was \$9.5 million. There was a fair amount of variation among projects, however, with a median investment of \$1.1 million—just over the amount currently required for program participation.

(continued) this large difference is that a disproportionate share of employees of firms receiving assistance in the wholesale trade sector are in the grocery and related-products industry compared with the make-up of the overall wholesale sector in the city. Grocery wholesalers have the lowest average wage among the industries included in the wholesale trade sector during the study period.

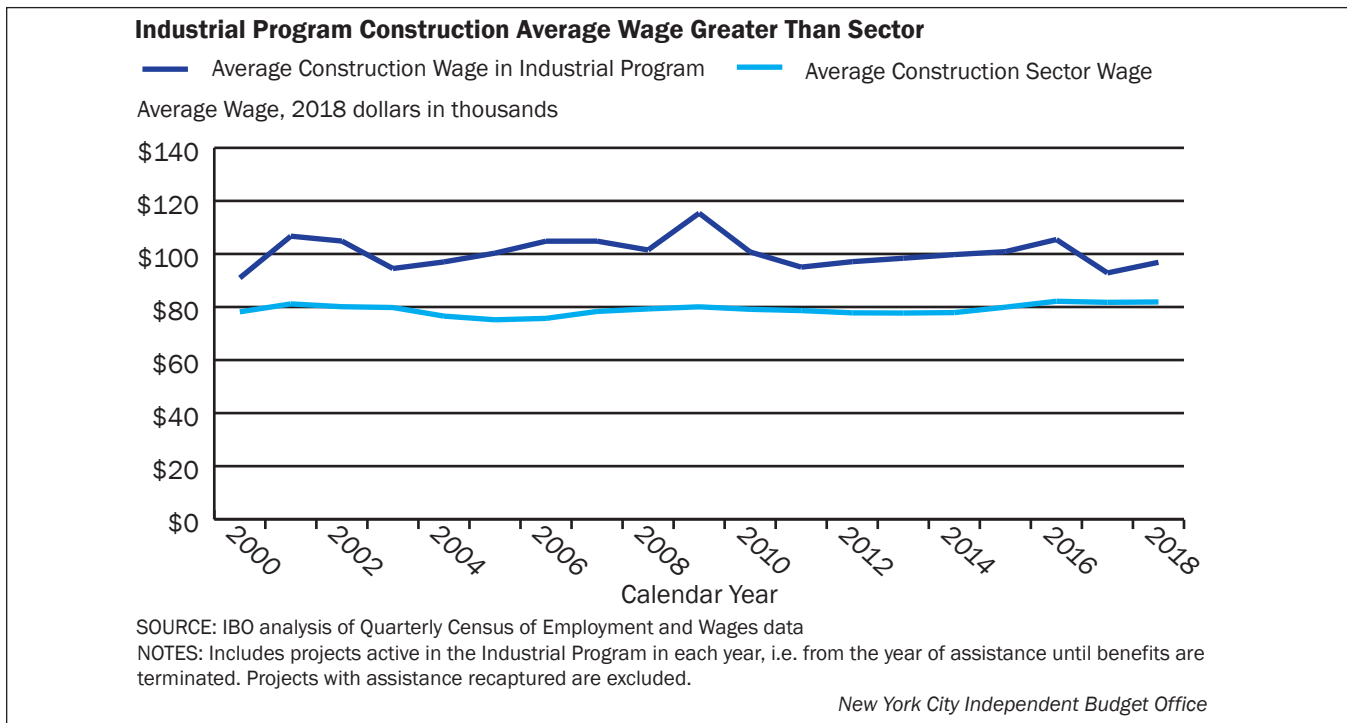
On average, 42.6 percent of the employees at assisted wholesale trade firms work in the grocery industry. Conversely, the grocery and related-products industry made up on average 17.5 percent of the city's employment in the wholesale trade sector annually during the study period. When comparing wages paid just by this industry, assisted firms still pay somewhat less than grocery wholesalers in the city overall, but the gap is much smaller—an average annual salary of \$51,738 for the employees at assisted firms compared with \$57,004 for the city overall (in 2018 inflation-adjusted dollars).

The average wage paid by assisted firms in the transportation and warehousing sector was slightly lower than the sector wage citywide. The average annual wage at



assisted firms in this sector was \$54,115 from 2000 through 2018, compared with the citywide inflation-adjusted average of \$56,418 during the same period.

Only in the construction sector was the average wage paid by assisted firms consistently greater than the sector average. After adjusting for inflation, the average annual wage at assisted firms in this sector was \$100,411 from 2000 through 2018, compared with the citywide average of \$79,016 during the same period.



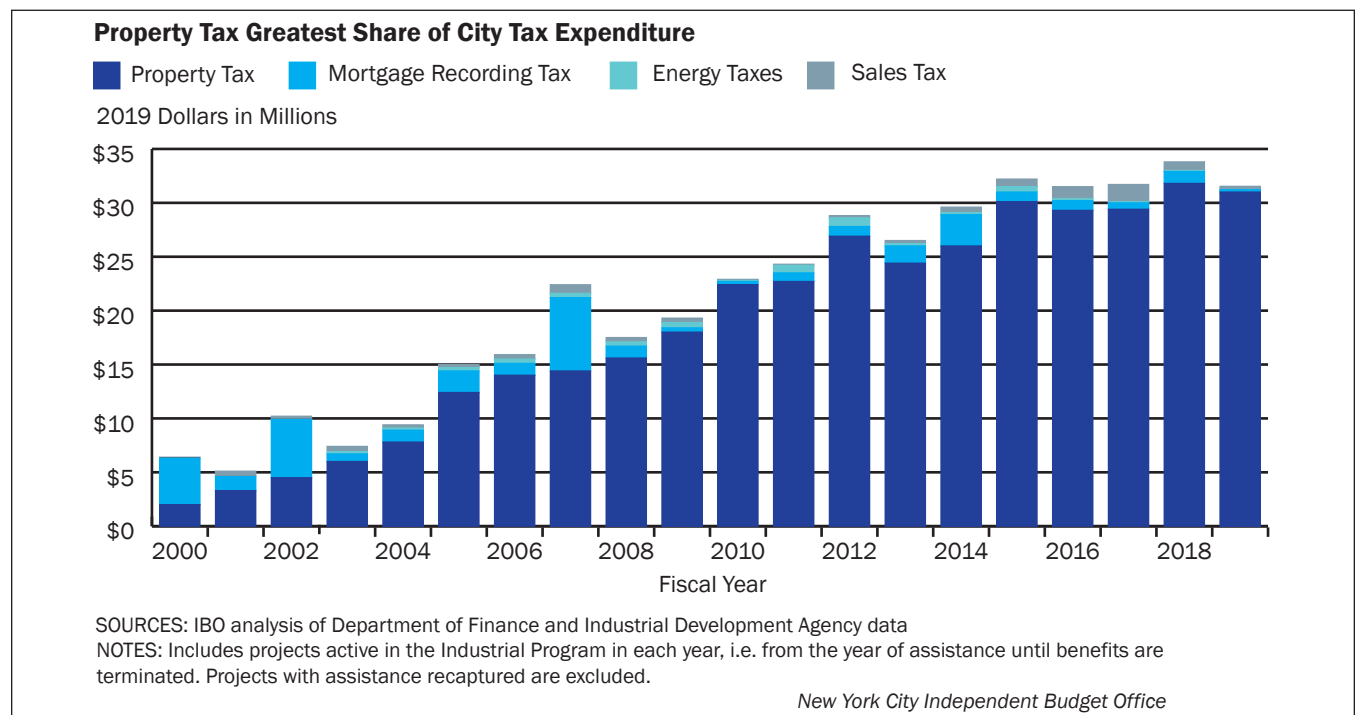
7. Program Cost To the City

Participants in the Industrial Program have access to three main tax benefits: city and state sales tax waivers for purchases of construction materials and equipment; a reduction in the mortgage recording tax; and a reduction in property taxes paid to the city through a payment in lieu of property taxes for 25 years.³⁰ In addition to these benefits, a few dozen projects also received reductions in energy taxes through a partnership between the city and Con Edison.

Property Tax Greatest Share of Tax Expenditure

Using data from the IDA and the city’s Department of Finance, IBO examined the program’s cost to the city from fiscal year 2000 through fiscal year 2019. In fiscal year 2019, the total cost to the city was \$31.5 million in forgone tax revenue, according to IBO analysis. Of that, \$31.0 million (or about 98 percent) was forgone property tax revenue. (Property tax costs for the Industrial Program are net of benefits offered through the Industrial and Commercial Incentive Program for firms participating in both. The overlap between the two programs is described below). Lost revenue due to the sales tax waiver was \$276,000, and \$205,000 was lost due to the mortgage recording tax waiver in fiscal year 2019.

On average from fiscal year 2000 through fiscal year 2019, the property tax has made up 82.8 percent of the program’s annual cost, followed by lost mortgage recording tax revenue (13.0 percent of the annual cost) and the sales tax



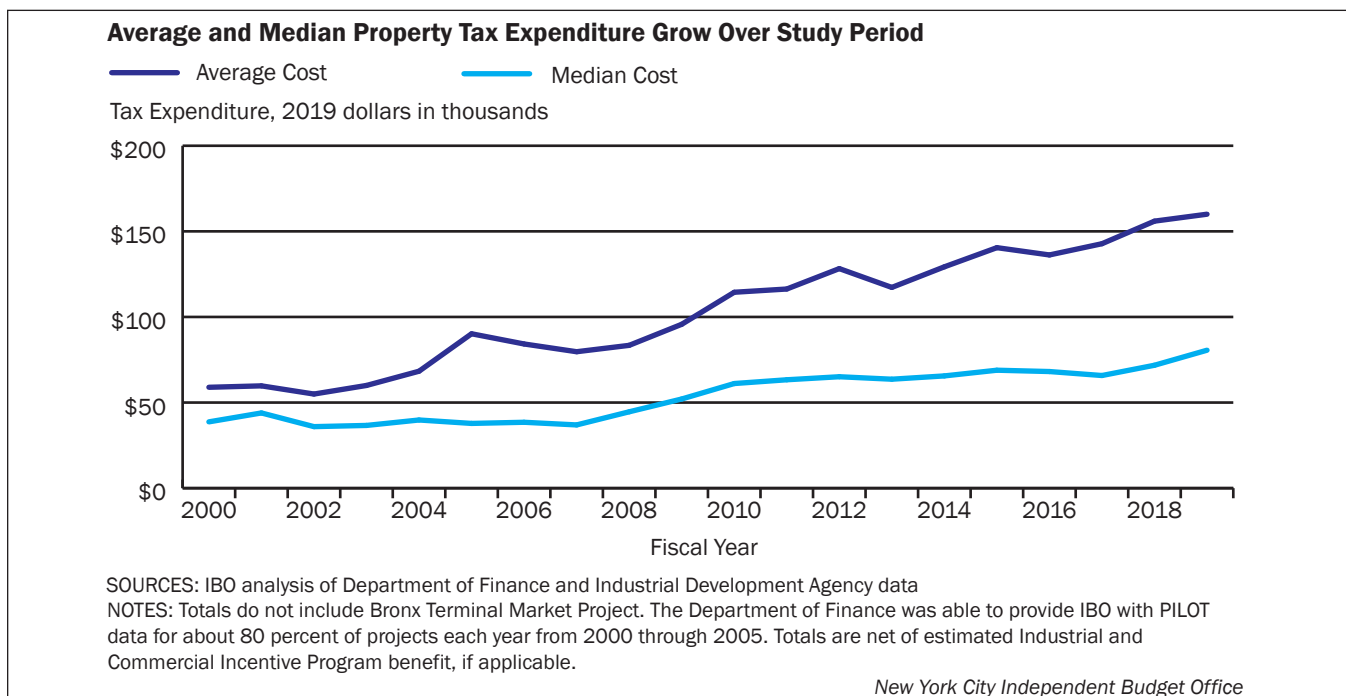
expenditure (2.8 percent). Foregone energy taxes account for just over 1 percent of the program’s annual cost, on average. Because of the long duration of the property tax benefit and the decline in the number of projects entering the program, the share of the program’s cost attributable to the property tax expenditure has grown over time.

The cost of the Industrial Program has grown almost every year since fiscal year 2000. IBO estimates the cost to the city in fiscal year 2000 was \$6.4 million. (All dollar amounts are in 2019 dollars.)³¹ This is almost certainly an underestimate, however, as data on PILOTs were missing for about 20 percent of projects from 2000 through 2005.³² In fiscal year 2006, IBO estimates that the cost to the city was \$15.8 million. Total program costs peaked in fiscal year 2018 at \$33.8 million before falling slightly to \$31.5 million in fiscal year 2019.

Property Tax Expenditure and Share of Program Cost Increases Over Time. The property tax benefit is the driver of the program’s rising costs. Since fiscal year 2000 it has grown from a cost of about \$2.0 million (again, property tax subsidies are undervalued from 2000 through 2005) to \$14.0 million in 2006 to its peak \$31.8 million in fiscal year 2018.

While the mortgage recording tax expenditure is one time per project (usually in the year of project start) and the sales tax benefit lasts a few years until project construction is complete, the property tax benefit is ongoing—as new projects are added each year, projects that entered in prior years continue to receive assistance.

In addition to the rising number of projects that receive property tax benefits each year, the value of the property tax expenditure per project also increases over time until the benefit begins to phase out. IBO found that over the length of the benefit, participating firms pay on average about a third of their annual full property taxes—the property taxes that would have been due without any reductions. In the first five years of the benefit, however, firms pay on average about 44 percent of the property



taxes due, decreasing to roughly 27 percent in years 16 through 20, the last years of full benefit before it begins to phase out.³³

This pattern is a result of the structure of the PILOT that firms pay. Property taxes are the sum of two components—the tax on the land plus the tax on the building or improvement. For most PILOTs, building taxes are stabilized at the amount due before the project improvements and a portion of land taxes are abated in each year. (See sidebar: How Are PILOTs Calculated?) For many projects, this land abatement remains constant and as a result, the land portion of the PILOT increases from year to year as the assessed value of the land rises over time. The building PILOT, however, remains the same over time—even as the amount that would be billed absent the discount increases. This leads the total PILOT to grow more slowly than the amount that would otherwise be, creating a bigger cost over time.

As a result, the average annual tax expenditure each year has grown over time. In fiscal year 2000, the average property tax expenditure was around \$60,000 per project and it increased at an average rate of about 6 percent a year. (All figures adjusted for inflation.) In fiscal year 2019, the average property tax expenditure was just over \$160,000. The median annual property tax expenditure in each year was much lower, but still grew by an average 4 percent a year from just under \$39,000 in fiscal year 2000 to about \$80,500 in fiscal year 2019. (The large difference between the median and average tax expenditure is due a limited number of projects receiving much deeper discounts, which pulled up the average.)

Mortgage Recording and Sales Tax Expenditure Fluctuate Annually. Unlike the property tax expenditure, which has grown over time, the amount of mortgage recording tax expenditures fluctuate from year to year. These tax expenditures depend on both the number of projects approved and their associated acquisition and construction costs.

The average annual tax expenditure for the mortgage recording tax was \$1.7 million from fiscal year 2000 through 2019 after adjusting for inflation, although the annual expenditure has been as high as \$6.8 million in fiscal year 2007 and as low as \$205,000 in fiscal year 2019.

The sales tax expenditure also fluctuates from year to year. The average annual tax expenditure for the sales tax was an inflation-adjusted \$489,000 from 2000 through 2019. The sales tax expenditure was greatest in fiscal year 2017 at \$1.6 million and lowest at \$70,000 in fiscal year 2010. Sales taxes data was missing for more than one-third of all projects.³⁴

Total Cost to the City per Project. For projects whose PILOTs began in fiscal year 2000 or later, IBO calculated the total cost to the city over the years in which the project received assistance.³⁵ This cost includes all tax benefits provided. For those projects whose assistance has ended, IBO calculated the actual cost per project. For projects whose benefits are ongoing, IBO used historical data to forecast the value of each project's future property tax expenditure until project maturity and added it to actual costs through fiscal year 2019.

Actual Cost for Terminated Projects. The median cost for projects that are no longer receiving benefits through the Industrial Program was \$515,000 (in 2019 dollars).

The average project cost was higher at \$994,000, which reflects that a relatively small number of projects received greater benefits.

IBO also calculated the cost for projects whose assistance had ended based on whether assistance had been recaptured or not. The median cost for projects whose assistance was recaptured was \$277,000 (the average cost was \$756,000). This amount reflects the total city cost before funds were repaid. The average time from project start to termination for recaptured projects was seven years.

As for the projects where assistance was terminated but not recaptured, the median cost was higher at \$719,000 (average \$1.1 million). By definition, firms subject to recapture receive assistance for fewer years than those that are not because projects are only subject to potential recapture for the first 10 years after project start. The average time from project start to benefit end for projects whose benefits were terminated but not recaptured was 13 years.

Estimated Cost for Ongoing Projects. For projects still receiving benefits through the Industrial Program, costs per project will be much higher than for projects whose benefits have already ended. IBO estimates the median cost to the city for active projects will be around \$1.9 million (average cost \$4.3 million) in 2019 dollars.³⁶

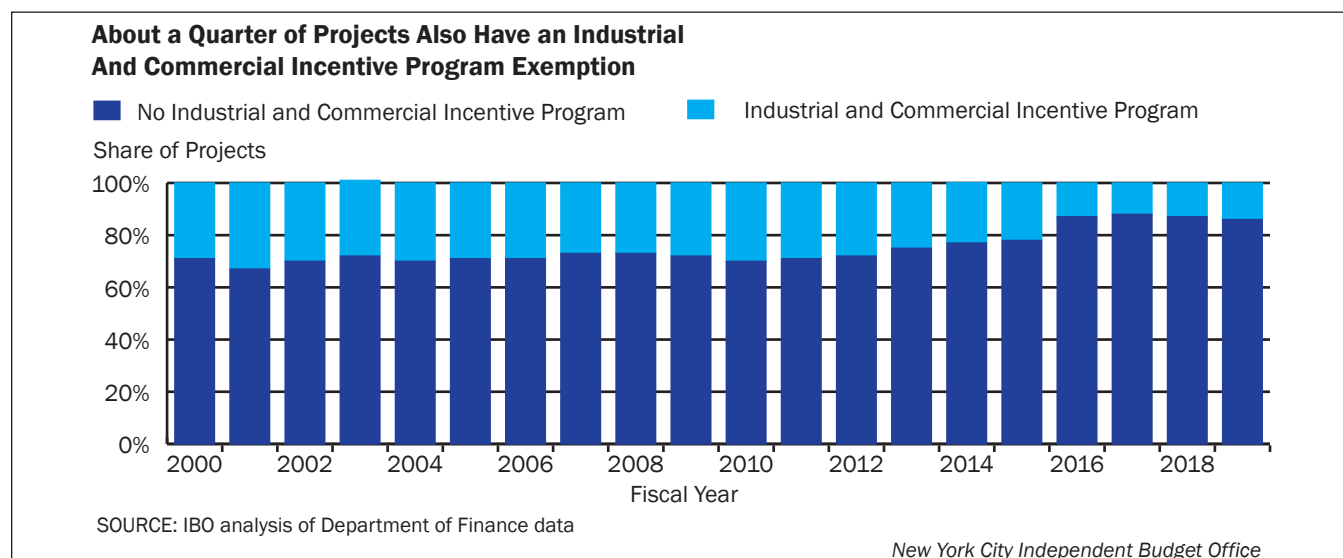
In these calculations, IBO assumes that the projects will remain in the program until maturity (usually 25 years). As described previously, we found that the cost to the city is greater in the latter years of the benefit. Therefore, even the average annual cost per project is greater for the active projects compared with the terminated projects. Given that projects do often terminate before maturity, it is unlikely all, or possibly even most, of these projects will actually reach their estimated full costs. IBO included an estimate of these costs, however, because they represent the upper limit of the revenue the city could be required to forgo.

Overlap With Other City Tax Incentives

The Industrial Program is just one of several tax incentives available to industrial firms seeking to locate or expand their businesses in New York City. Other programs include the Industrial and Commercial Abatement Program (ICAP), its predecessor, the Industrial and Commercial Incentive Program (ICIP), and the Commercial Expansion Program (CEP)—all of which provide property tax reductions. Firms can also be eligible for city business tax reductions through the Relocation and Employment Assistance Program (REAP).

Nearly One Quarter of Industrial Projects Received ICIP Exemption. The most significant program, in terms of its overlap with the Industrial Program, is ICIP. For many years (from 1984 through 2008), industrial firms in New York City were eligible for ICIP property tax exemptions and abatements for construction or rehabilitation of their facilities.

Unlike the Industrial Program, ICIP benefits were as of right—meaning that any project meeting eligibility criteria automatically received the benefit. Projects were eligible if they made a minimum required expenditure (10 percent of the property's assessed value for industrial projects) and filed applications and updates on a schedule required by the Department of Finance. Under ICIP, the increase in assessed value due to



the construction work was fully exempt for 16 years, followed by a 9-year phase-out. If their required expenditure was equal to 25 percent of the initial assessed value, industrial projects could also have qualified for a tax abatement.

Nearly a quarter of projects taking part in the Industrial Program also received the ICIP exemption at some point during their benefit period. They may have qualified for ICIP with the project improvements made as part of the Industrial Program, or—less frequently—with other improvements made before or after Industrial Program participation.

Firms that qualified for both the Industrial Program and ICIP for their Industrial Program project improvements could choose which program’s tax benefits to receive each year, presumably choosing whichever was larger. For example, if the taxes due through ICIP were less than what firms would pay through the Industrial Program’s PILOT, firms paid an “ICIP PILOT” in that year—although most often the IDA benefit is deeper than the ICIP benefit.

Beginning in 2006, Industrial Program firms could no longer chose a benefit each year, but had to decide which property tax benefit to receive at project start. The decision soon became moot, however, as the ICIP was replaced by the less generous Industrial and Commercial Abatement Program in 2008 (this program is described below).

Implications of ICIP on IDA Program Cost. Industrial Program projects receiving an ICIP exemption would have cost the city property tax revenue anyway, even without the Industrial Program. Therefore, when calculating the cost of the Industrial Program, IBO reduced the tax expenditure associated with the Industrial Program by the amount that eligible projects would have received through ICIP. IBO was limited by data availability, however. Until fiscal year 2018, data available to IBO on the ICIP exemption amount for projects also receiving an exemption through the IDA amount was spotty. IBO was able to estimate the ICIP exemption amounts for about 70 percent of projects receiving ICIP and IDA exemptions from fiscal year 2000 through fiscal year 2017.

IBO found that on average the property tax benefits offered through the Industrial Program were greater than those provided by the ICIP. *(continued on page 41)*

How Are PILOTs Calculated?

Firms participating in the Industrial Program pay reduced property taxes in the form of a payment in lieu of property taxes. The PILOT for projects participating in the Industrial Program consists of two main parts—a building PILOT and a land PILOT. Some firms may also pay a subtenant PILOT (if it is an owner-occupied project with tenants) and/or an additional improvements PILOT (if the firm makes capital improvements to the building beyond the improvements made as part of the Industrial Program).

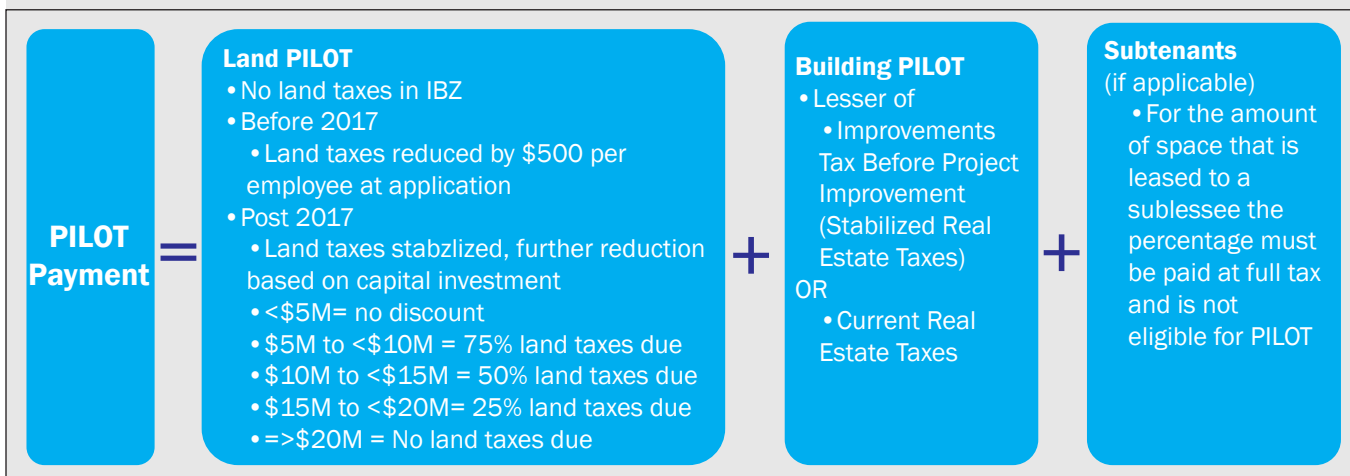
Building PILOT Calculation. The building PILOT is the lesser of the taxes on the building in the year of project start (stabilized taxes) or the current building taxes. In nearly all cases, this is the stabilized building taxes—as a result, the firm does not pay additional property taxes on the improvements it makes as part of the program. For example, if the building tax on a parcel was \$5,000 before program improvements were made, the firm will pay that amount through the life of the benefit, until the benefit begins to phase out in year 21. (It is phased out by no more than 20 percent per year until it reaches the equivalent of actual property taxes.)

Land PILOT Calculation. For most of the program’s history, the firm’s employment determined the land PILOT. Firms with employment in the city when they applied for the benefit received a land tax abatement of \$500 for every full-time employee at application. For example, if a firm had 20 full-time employees when it applied for assistance, then its annual land tax abatement was \$10,000. If \$18,000 in land taxes were due in a particular year, the firm would pay \$8,000 instead.

If a firm was new, the land tax abatement was \$500 for every employee the firm planned to hire at the project site once construction was complete. After three years, if the new firm employed fewer employees than projected, the IDA reduced the abatement amount accordingly. Beginning in 2010, the IDA added a similar adjustment in the agreements it signed with firms with employment at application—every five years the IDA adjusts the abatement amount up or down depending on current employment at the project site.

In 2017, the IDA changed the land PILOT calculation again. The land PILOT is now the land tax at the time of project start (stabilized pre-improvement amount) and can be further reduced based on the amount of the firm’s capital investment (exclusive of acquisition costs).

- Investment of less than \$5 million: no additional reduction
- Investment of \$5 million to less than \$10 million: firm pays 75 percent of stabilized land taxes
- Investment of \$10 million to less than \$15 million: firm pays 50 percent of stabilized land taxes
- Investment of \$15 million to less than \$20 million: firm pays 25 percent of stabilized land taxes
- \$20 million investment or more: firm pays no land taxes.



Currently, and for most of the program’s history, if the project is located in an Industrial Business Zone or other special zone, the project pays no land taxes.

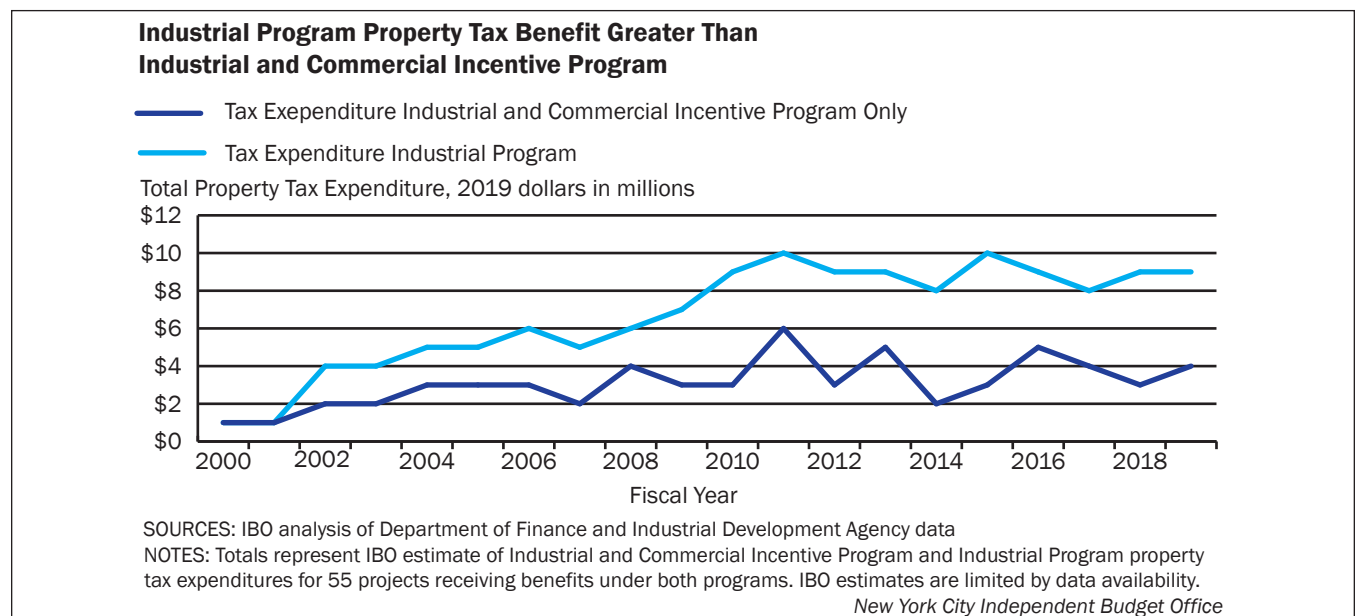
Additional and Subtenant PILOT Calculations. If a firm makes improvements on the building beyond the improvements for which it has received IDA assistance, it must pay full property taxes on that improvement. Similarly, if a firm rents out a portion of its facility to a tenant, the firm must pay full property taxes on the portion of the facility that is rented (based on square footage).

(continued) For projects that qualified for both programs, IBO estimates that if the projects had only qualified for the ICIP, the city’s annual tax expenditure for those projects would have been reduced by almost half, on average. Although the ICIP program is no longer accepting new projects, because of the length of the benefit there are still a handful of Industrial Program projects that also have the ICIP exemption.

The ICAP program replaced the ICIP program in 2008, but there is not the same overlap between it and the Industrial Program. This is because Industrial Program firms would generally have to spend more to qualify for ICAP and, depending on their projects, likely receive less in benefits.

In order to qualify for ICAP, firms must spend at least 30 percent of the site’s pre-project assessed value on improvements within three years from approval of the application. Projects only receive an abatement if the tax post-project completion exceeds the initial tax by more than 15 percent. This provision makes benefit amounts for projects other than new construction on vacant land more difficult to estimate. In addition, only the portion of the post-completion tax that exceeds 115 percent of the initial tax can be abated.

Overlap with Other Tax Benefits. A handful of Industrial Program projects also received benefits through the Relocation and Employment Assistance Program and the Commercial Expansion Program (IBO’s first report under Local 18 examined this program.)



REAP offers business income tax credits for relocating jobs from outside of the city or below 96th Street in Manhattan to one of the other four other boroughs or certain areas above 96th Street in Manhattan. REAP provides an annual refundable credit of \$1,000 or \$3,000 for each eligible employee for 12 years. (Firms receive a \$3,000 credit if they relocate to “revitalization areas,” which include areas zoned for manufacturing in the outer boroughs).

IBO does not have access to the city’s business tax return data, but since 2006 a total of 26 firms taking part in the Industrial Program have reported to the IDA that they also have received REAP, as part of their annual reporting. (An average of nine firms a year received REAP from fiscal year 2006 through fiscal year 2019.) From 2006 through 2019, the average annual REAP tax expenditure was about \$1.9 million for Industrial Program participants (in 2019 dollars).

In addition, from fiscal year 2006 through fiscal year 2019, nine projects reported receiving benefits through the city’s Commercial Expansion Program (on average two projects a year). This includes three projects that also received REAP. The CEP program provides a property tax abatement for improvements made to buildings built before 1975 that lease space to commercial and industrial tenants. The average annual CEP tax expenditure from 2006 to 2019 for Industrial Program projects was \$39,000 (in 2019 dollars).

8. Relevancy and Alignment With Current Policy Goals

The precipitous decline in the city’s manufacturing sector that began before the establishment of the Industrial Program and continued through the program’s first decade and a half stabilized somewhat in recent years. And while employment in other industrial sectors, such as the transportation, warehousing, and construction have rebounded, there are still far fewer industrial jobs in the city in 2019 than when the Industrial Program was created.

Additionally, industrial firms seeking to expand in the city are facing greater competition for affordable spaces both due to reductions in available space after rezonings and increases in logistics and e-commerce firms seeking distribution centers in the city—demonstrating that some of the problems that faced industrial firms at the creation of the program still exist today.

Industrial jobs do still tend to pay a higher wage on average than other sectors of the economy, including jobs in retail, leisure and hospitality, and education and health.³⁷ The leisure and hospitality and education and health sectors were expanding before the Covid-19 related job losses of 2020. In addition, supporting the industrial sector does appear to remain a priority for the current administration for this reason.

About a year after taking office, in 2015 the de Blasio Administration together with then-City Council Speaker Melissa Mark-Viverito announced a 10 Point Industrial Action Plan to strengthen the city’s manufacturing and industrial policy. The plan included a nearly \$450 million investment of city capital in the city-owned industrial properties, including the Brooklyn Navy Yard, Brooklyn Army Terminal, and properties in Hunts Point and Sunset Park. It also committed to not allowing residential conversions in Industrial Business Zones and limiting non-industrial uses in IBZs by creating a permitting process for self-storage facilities and hotels as a way to preserve space for manufacturing uses.

In 2017, Mayor Bill de Blasio released “New York Works.” The plan called on the city to create 100,000 “good-paying” jobs (jobs with annual salaries of \$50,000 or more) over 10 years in an effort to give New Yorkers a pathway to the middle class—goals that are similar to the policy objective of the Industrial Program. This included the creation of 20,000 industrial and manufacturing jobs.

The plan described the programs of the IDA as one of the primary tools to preserve industrial space and incentivize job creation: “The primary mechanism for the delivery of benefits is the NYC Industrial Development Agency (IDA), which encourages economic development throughout the five boroughs. IDA programs are discretionary, meaning the City can target companies that will use the benefits to further City policy goals like the creation of good-paying jobs.”³⁸

Given these plans, it appears that the goals of the Industrial Program are still in line with the current Mayor's economic development policies.

9. Conclusions & Data Recommendations

Is the Industrial Program meeting its goal to preserve industrial space in the city in order to create and retain living-wage employment, and help diversify the city economy?

In the absence of a comparison group, IBO cannot show causation—that the assistance from the Industrial Program caused industrial firms to remain in the city or have better employment outcomes than firms that did not receive assistance. IBO did find, however, that the majority of firms that received assistance through the program either expanded their employment or stayed about the same size in the three years after the completion deadline of their capital projects—even while citywide employment in the two main sectors served by the program (manufacturing and wholesale trade) were generally declining throughout the study period.

Most firms selected to receive benefits through the program were expanding prior to receiving assistance from the IDA, according to IBO’s findings. While this could indicate that the firms may have continued to expand in New York City even absent the IDA assistance, it also demonstrates that the IDA is largely selecting firms for its assistance that have a history of creating jobs in an effort to keep those expanding firms in the city.

In terms of wages, assisted firms pay well over a living wage, and with an average annual salary of just over \$61,000 in 2018, wages also meet the de Blasio Administration’s somewhat higher standard of “good paying jobs.” The average wage for assisted firms, however, has been lower than the citywide average in most sectors.

There has been substantial decline in the number of new projects entering the program in recent years, however. A number of factors may be affecting program participation, including the increased competition for limited industrial space, less-aggressive marketing of the program, and more stringent recapture and reporting requirements adopted over the life of the program. No matter what the cause, such a decline in program participation limits the program’s ability to meet its goals.

The program does come at cost to the city. IBO found that the program’s property tax benefits are both deep and long lasting. While the IDA can and does recapture benefits when projects fails to meet certain requirements, there may be other ways to make the program more cost-effective.

IBO found that benefits were terminated before maturity for nearly a quarter of the projects, even where the IDA did not recapture assistance. Because many projects terminate before the full 25 years of the tax benefit, it might make sense to reduce the term of these benefits overall. Research suggests that when making the decision on where to locate, business leaders often focus on the short-term costs. A reduction in the duration of the benefit, even by a few years, may reduce the cost

to the city for those firms that do continue in the program until maturity without affecting program participation.³⁹

Recommendations for Data Collection. Data limitations prevented IBO from creating a comparison group and doing a statistical causal analysis. If such data were available, evaluators could determine if in fact the outcomes of assisted firms were a direct result of program assistance.

The data necessary for such an analysis includes a longitudinal database of citywide employment, but perhaps more importantly data on eligible but unassisted firms—even if they never submit a formal application. Data on firms that meet the program’s basic eligibility criteria, but are ultimately unassisted would also allow evaluators to assess how selective the program is.

The IDA could put a process in place to capture this data either through the IDA consultants that advise potential projects on whether to apply or through IDA staff that meet with potential applicants before advising them not to apply.

IDA Data. In terms of data collection on projects that receive benefits, the IDA already collects a fair amount of data on its beneficiaries through its annual compliance reporting, which IDA must do to meet its own reporting obligations to both the city and state governments. This includes annual data on employment and wages. As described above, past IBO studies have found inconsistencies in the data and as a result, IBO used QCEW data to examine employment and wages at assisted firms.⁴⁰

The City Council has amended the legislation that requires this employment reporting several times in an effort to address these issues. While IBO did not complete a project-by-project comparison of QCEW data and the data included in the IDA reporting, spot checks and some basic comparisons do indicate that the data has become more reliable in recent years.

One dataset that IBO requested and that the IDA was unable to provide was the detailed actual cost data for participating firms’ capital projects. Instead, the IDA provided final construction budgets—that can differ from actual costs. Late in 2017, the IDA changed its calculation for the discount on land taxes to reflect the level of a project’s capital investment, rather than its employment. Given IDA’s increasing focus on capital spending, it seems necessary to be able to collect and report on this information.

DOF Data. Analysis of the cost of the program would have been more straightforward and more complete if IBO had better access to PILOT amounts. While the Department of Finance was able to provide spreadsheets with the PILOT amounts for most projects, this data had to be manually uploaded to match with property tax assessment data, which IBO can access directly from the city’s property tax database systems. In many cases, data on PILOTs early in the study period were missing completely.

Despite being calculated, billed, and collected by the DOF, data on PILOT payments are not included in the city’s property tax databases. Including data on PILOTs in these data systems would increase transparency on program cost, not only for this program, but also for all of the assistance provided by the IDA.

Other Data. Lastly, IBO does not have access to city business tax returns. (State legislation, which would be required to grant this access, was introduced in the State Legislature in 2020). Data provided in city business tax returns would allow for a greater understanding of the overall financial health of assisted—and possibly unassisted—firms. It would also allow IBO a better understanding of the overlap of the Industrial Program and other economic development tax-incentive programs, such as REAP.

Endnotes

¹The IDA board consists of the City Comptroller, the city administrator of the economic development administration, the Corporation Counsel, and the Chair of the City Planning Commission. The Mayor upon consultation with the economic development council, business and labor organizations, and elected officials appoints another six members and the Mayor appoints another five members upon designation by the borough improvement boards, one member from each borough.

²The IDA no longer offers bond-financing programs. In 2008, the IDA (and all IDAs across the state) lost the ability to issue private activity bonds for nonprofits. In response, the city created a local development corporation—the BUILD Resource Corporation—in 2011, which has the ability to issue private activity bonds. While the IDA never lost the ability to issue bonds for private firms, BUILD is now the exclusive issuer for New York City economic development bond deals. (See IBO’s 2015 [report](#) for more details on the evolution of the IDA and creation of BUILD.)

³Archives of the Mayor’s Press Office. (February 29, 1996.) Mayor Giuliani Declares New York City Small Business Initiatives a Success. Accessed in the collection of Giuliani Administration press releases, at the New York City Municipal Archives.

⁴“Lower Budgets Don’t Cut Flow of Tax Breaks.” Lueck, Thomas J. Section A, Page 1. The New York Times. July 5, 1995. Available: <https://www.nytimes.com/1995/07/05/nyregion/lower-budgets-don-t-cut-flow-of-tax-breaks.html>.

⁵Archives of the Mayor’s Press Office. (March 5, 1995.) New York City Industrial Development Agency. Straight Lease Program for Industrial Projects. Accessed in the collection of Giuliani Administration press releases, at the New York City Municipal Archives.

⁶Archives of the Mayor’s Press Office. (September 12, 1997.) Mayor Giuliani Announces that Two Queens Manufactures Will Remain and Expand in New York. Accessed: <http://www.nyc.gov/html/om/html/97/sp543-97.html>.

⁷Until July 1, 2017, the entire amount of the mortgage recording tax was exempted. Beginning July 1, 2017, state law required IDA beneficiaries in certain areas of the state, including New York City, pay the portion of the tax that goes to the Metropolitan Commuter District. While this reduced the benefit to the firm, it did not change city tax expenditure because this portion of the tax never flowed to the city.

⁸State legislation passed in 2020 that extended two of the city’s other economic development tax incentives, the Industrial and Commercial Abatement Program and the Relocation Employment Assistance Program, increased required reporting. Beneficiaries are now required to report either biennially (ICAP) or annually (REAP) on employment and wages. The legislation also expanded the events that trigger the suspension, termination or recovery of funds for ICAP.

⁹There are two projects that were approved in December 2019 (after IBO’s formal data request to the IDA) for which IBO only has basic data.

¹⁰Creating a citywide, firm-level, longitudinal database of annual QCEW files presents a number of challenges and while it would be a useful tool, building such a database was outside the scope of this analysis.

¹¹While the IDA included the Bronx Terminal Market (BTM Development Partners) as an Industrial Program project in the data it provided, IBO excludes it in this analysis. The project is a large shopping mall developed as a project of the New York City Economic Development Corporation. It received a mortgage recording tax waiver through the IDA.

¹²The average time between projects for firms with multiple projects is six years. Data for these projects were handled differently depending on the statistics being generated. When examining the size of the firm at project start, IBO included firms with multiple projects more than once. This most accurately describes size of the firm the IDA chooses to assist in any given year. When tracking employment changes over time, IBO analyzes data only for the first project for which employment data was available to avoid double counting employment changes for the same firm.

¹³Archives of the Mayor’s Press Office. (September 12, 1997.) “Mayor Giuliani Announces that Two Queens Manufactures Will Remain and Expand in New York.” Accessed: <http://www.nyc.gov/html/om/html/97/sp543-97.html>.

¹⁴“Making Room for Housing and Jobs.” The Pratt Center for Community Development. May 2015 Accessed: https://prattcenter.net/uploads/300003/1590011713507/making_room_for_housing_and_jobs_may_5_2015_0.pdf

¹⁵[Zoning Districts & Tools Manufacturing Districts](#): January 1, 2002 to January 1, 2012 - DCP (nyc.gov). IBO excludes land zoned for mixed-uses and airports for its totals.

¹⁶See Note 14.

¹⁷“Demand for New York City Warehouses Is Surging.” Weiss, Lois. New York Post. Jan 18, 2018. Accessed: [Demand for New York City warehouses is surging \(nypost.com\)](#). “Amazon Lifts Industrial Real Estate Market.” Small, Eddie. Crain’s New York Business. Jan. 25, 2021. Accessed: [Amazon lifts NYC’s industrial real estate market \(crainsnewyork.com\)](#)

¹⁸Enforcement of recapture provisions can involve legal action through the city’s Law Department.

¹⁹This share is based on the total recapture amount divided by the amount of the city cost. Because the recapture amount includes funds that flow back to the state or other taxing jurisdictions, as well as interest, this is not an exact amount of the share the city is repaid. However, the city portion of the tax expenditure is generally the largest component.

²⁰Sector data was missing for 26 projects, the majority of which entered the program from 1995 through 2001. Sectors in the 'other' category include: accommodation and food services; administrative and support and waste management and remediation services; arts, entertainment, and recreation; finance and insurance; health care and social assistance; information; professional, scientific, and technical services; and utilities.

²⁴For eight of the projects, IBO could not locate employment data in its QCEW data files in any year. Of the remaining six firms, four had employment in New York City in years preceding project start but not the year of start. The two without pre-deal employment first received assistance in 2000, meaning IBO did not have access to employment records in the year before project start.

²²Of the nine projects that are of firms new to the city, only four had post-assistance outcomes available. Because this is fewer than five, according to IBO's data sharing agreements with the New York State Department of Labor IBO does not report on these outcomes.

²³While IBO presents results using three years after the completion deadline as its measure of post-assistance employment, IBO also completed this analysis using firm employment one year through five years after the project's completion deadline. There was little variation in the results.

²⁴For projects where completion deadline data were missing, IBO calculated a completion date 1.5 years after the project signed its lease agreement (the average time from project start to completion deadline based on the available data). Several projects did not report employment in the QCEW at project location three years after the project completion deadline. For these projects, IBO used the year employment was first reported at the project site as the year the project was completed.

²⁵New York City enacted [The Fair Wages for New Yorkers Act](#), also known as the Living Wage Law, in June 2012. It requires certain employers that receive at least \$1 million of financial assistance from the city or a city economic development entity to pay no less than the living wage to their employees at the project site, unless the employer qualifies for certain exemptions. In 2014, Mayor Bill de Blasio signed Executive Order 7 that expanded the scope and applicability of the Living Wage Law and increased the living wage rate to \$11.50 per hour with health benefits, or \$13.13 without health benefits. The living wage rate is adjusted annually, based upon the consumer price index published by the Bureau of Labor Statistics. As of April 1, 2020, living wage rate and health benefit supplement apply: Living Wage Rate: \$15.00. Health Benefit Supplement: \$1.95

²⁶These distributions are based on the project's main location, as defined by the IDA. Since its creation, Industrial Program projects have involved 559 unique tax lots in the city. About a third of the program's projects involves more than one tax lot. There are 21 projects that had at least one tax block that was the same as the tax blocks of another project. This means after one firm's assistance terminates, a second firm receives assistance for a different capital project at the same location. On average, the time between projects was 11 years.

²⁷Data on the zoning of projects in the Industrial Program was available at the time of project start for those that began receiving assistance in 2002 forward. Of those, the majority of Industrial Program projects (62.2 percent) were in M1 districts, typically reserved for light industrial uses, such as woodworking shops, repair shops, and wholesale service and storage facilities. Another 25.7 percent of projects are in M3 areas, reserved for heavy industries that generate noise, traffic or pollutants. About 5.8 percent of projects are in parcels zoned M2, the middle ground between light and heavy industrial areas, and 2.0 percent are in C8 districts, districts that bridge manufacturing and commercial uses. The remainder are split among various commercial and residential districts.

²⁸Again, if a project has more than one associated tax lot, this data represents the building use of the tax lot associated with the project's main location.

²⁹All costs are assumed to have taken place in the year of the project start. Costs are deflated using the ENR NYC Building Cost Index.

³⁰Not all projects receive all of the tax benefits. Just over 97 percent of projects receive property tax benefits through the PILOT program, 83.4 percent receive the MRT waiver, and 90.4 percent receive the sales tax waiver.

³¹While, average wage data is presented in 2018 inflation-adjusted dollars, cost data is presented in 2019 inflated-adjusted dollars. Fiscal year 2019 includes six-months of 2018 (July through December) and six months of 2019 (January through June).

³²Some PILOT data was also missing from 2006 through 2011, although for far fewer projects. In those years, IBO had access to cost data for more than 95 percent of projects, on average.

³³Calculated as the PILOT payment as a share of the full property taxes due. For projects eligible for the ICIP benefit, the ICIP benefit is not taken into account for this calculation.

³⁴Data is missing for the city's sales tax expenditure for projects throughout the study period. The IDA reported that 312 projects were eligible for sales tax exemption over the entire study period, but data provided only included benefit amounts for 197 projects. According to the IDA, amounts may be missing for benefits less than \$1,000; if this is correct, the missing sales tax data is unlikely to have a major impact on program cost.

³⁵Data on PILOTs that began before fiscal year 2000 was unavailable.

³⁶Forecast property tax costs are based on annual assessed value growth of 6.7%. This was calculated using historical growth of similar building classes. PILOT growth by 6.1% (based on the average annual growth historically). IBO made adjustments for ICIP (where applicable) and program phase-out. Future costs assume that benefit lasts 25 years with phase out. Excludes one outlier project.

³⁷The average annual salary for the leisure and hospitality sector in 2019 was \$43,935, followed by \$44,014 in the retail sector, and \$55,509 for the health care and education sector. This is compared with \$58,354 for the manufacturing sector, \$62,073 for transportation and warehousing, \$81,876 for construction, and \$95,008 for

wholesale trade. Average salaries based on QCEW data.

³⁸[NewYorkWorks-1.pdf](#) (cityofnewyork.us)

³⁹Bartik, Timothy J. Making Sense of Incentives: Taming Business Incentives to Promote Prosperity. W.E. Upjohn Institute. Oct. 8, 2019.

⁴⁰IBO also used QCEW data so that it could examine employment at the firm level, not just the project-location level; the data reported by IDA is reported at the project-location level.



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