

THE INVISIBLE ENGINE:

The Economic Impact of New York City's Real Estate Industry



February 2014

Prepared For:

REBNY®

REAL ESTATE BOARD OF NEW YORK

Prepared By:

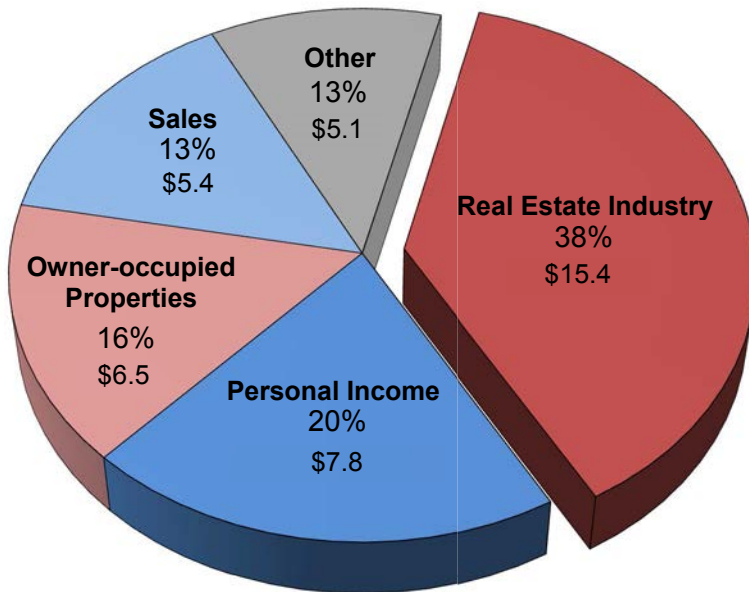
AKRF

HIGHLIGHTS FROM THE REPORT

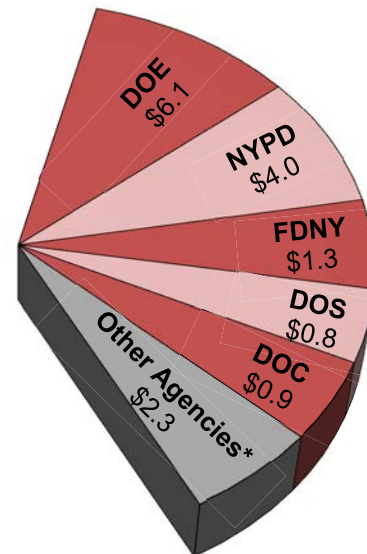
ANNUAL TAXES FROM THE REAL ESTATE INDUSTRY¹

- \$15.4 billion, which is 38% of total NYC taxes collected, is from the real estate industry, including taxes from revenue-generating properties (such as residential rental buildings, office buildings, hotels, retail stores, and utility property; it excludes property and transaction taxes from 1-3 family homes and coop and condo units) and real estate activity
- These taxes could pay the City's entire share of salaries for teachers, police officers, fire fighters, sanitation workers and corrections officers, with \$2.3B left to fully fund numerous City agencies

ANNUAL REAL ESTATE INDUSTRY SHARE OF NYC TAXES
(\$ in billions)



CITY FUNDED PAYROLL EXPENSES THAT COULD BE PAID BY REAL ESTATE INDUSTRY TAXES
(\$ in billions)



* \$2.3 billion remaining can fully fund the following agencies: Parks, Libraries, Homeless Services, Youth and Community Development, and all 5 District Attorney offices

TOTAL ECONOMIC IMPACT² OF THE REAL ESTATE INDUSTRY

- \$106 billion in total economic output
- Approximately 13% of Gross City Product (GCP)
- 519,000 total jobs—representing approximately 11% of the City's total jobs
- \$33 billion in total wages
- \$61,430 = The average salary for a worker directly employed in the real estate industry

¹ Annual taxes include real estate related taxes (property, mortgage, transfer, hotel, and commercial occupancy) from revenue generating property (all properties in Class 3- utility and Class 4- office, hotels, etc. and all residential rental buildings in Class 2; it excludes property and transaction taxes from 1-3 family homes and coop and condo units) and taxes (personal income, sales, corporate and other business taxes) generated by real estate industry activity. Activity includes individuals employed in the real estate industry (e.g. Brokers, property managers) and the goods and services this employment generates.

² Total economic impact is the combined direct, indirect, and induced effect on the local economy, including jobs, wages, and tax revenue and includes construction and non-construction real estate activities.

Executive Summary

The real estate industry is a substantial economic engine in New York City. In 2012, the real estate industry directly and indirectly supported 518,900 jobs, representing approximately 11 percent of the City's total jobs. Industry activities generated approximately \$106.2 billion worth of jobs, wages, and output, the sum of which is a measure of economic impact. This economic impact represents approximately 13 percent of the Gross City Product (GCP).¹

This report presents AKRF's estimates of the economic and tax impacts of New York City's real estate industry, which for purposes of analysis was defined, as illustrated in **Figure 1**, to include new construction and renovation, as well as the buying, selling, managing, and operating of real estate in New York City. The analysis excludes the economic and tax benefits associated with public real estate activity (e.g., roads, bridges, trains, schools) and the real estate activity of private institutions (e.g., hospitals and colleges).

Figure 1
Real Estate Industry Definition

Real Estate Industry	
Construction	Non-Construction
<ul style="list-style-type: none">• Residential builders• Industrial builders• Commercial builders• Specialty trade contractors	<ul style="list-style-type: none">• Lessors of property• Real estate agents and brokers• Property managers• Real estate appraisers• Real estate credit• Property and title insurance

Methodologies utilized in this report are provided in the appendices.

The report's organization and principal findings are as follows:

Part 1 presents tax benefits of the real estate industry.

- Excluding real estate related taxes, direct and indirect economic activity from the real estate industry generated approximately **\$1.6 billion in tax revenue** for New York City in 2012, including almost \$700 million from the construction industry and almost \$920 million from the non-construction real estate industry.
- New York City's revenue-generating properties (such as residential rental buildings, office buildings, hotels, retail stores, and utility property; it excludes property and transaction taxes from 1-3 family homes and coop and condo units) produced approximately **\$13.7 billion** in property and other real estate related taxes in 2012.² Including New York City taxes generated from construction and non-construction activity, New York City received **\$15.4 billion**,

¹ Comparison was made to New York City's GCP for Q4 2012 (\$606.7 billion), which was provided by New York City Independent Budget Office. Dollars correspond to a New York metropolitan area first half 2013 consumer price index (CPI).

² Revenue-generating properties include all properties in Class 3- utility and Class 4- office, hotels, etc. and all residential rental buildings in Class 2; it excludes property and transaction taxes from 1-3 family homes and coop and condo units.

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representing approximately 38 percent of New York City taxes (see **Figure 2**). This is greater than City-funded payroll expenses for teachers, police officers, fire fighters, sanitation workers, and correction officers, which collectively total \$13.1 billion (see **Figures 2 and 3**). There would be a remaining \$2.3 billion to fully fund numerous City agencies.

Figure 2
Annual Real Estate Industry Share
of New York City Taxes (\$ in billions)¹

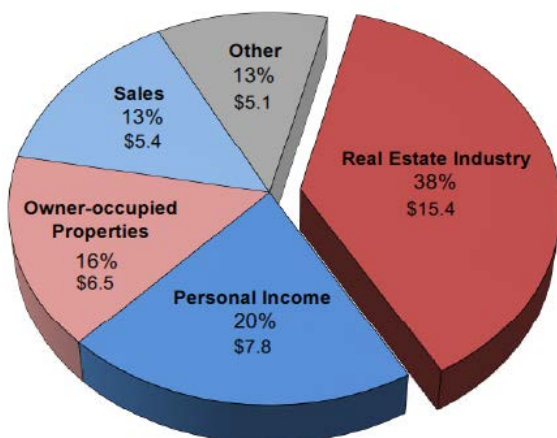
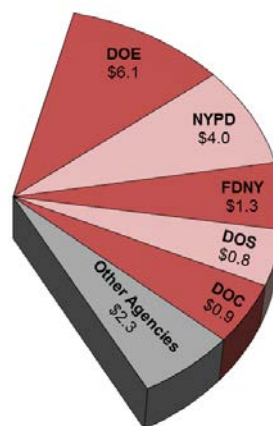


Figure 3
City Funded Payroll Expenses that
could be paid by Real Estate

Taxes (\$ in billions)²



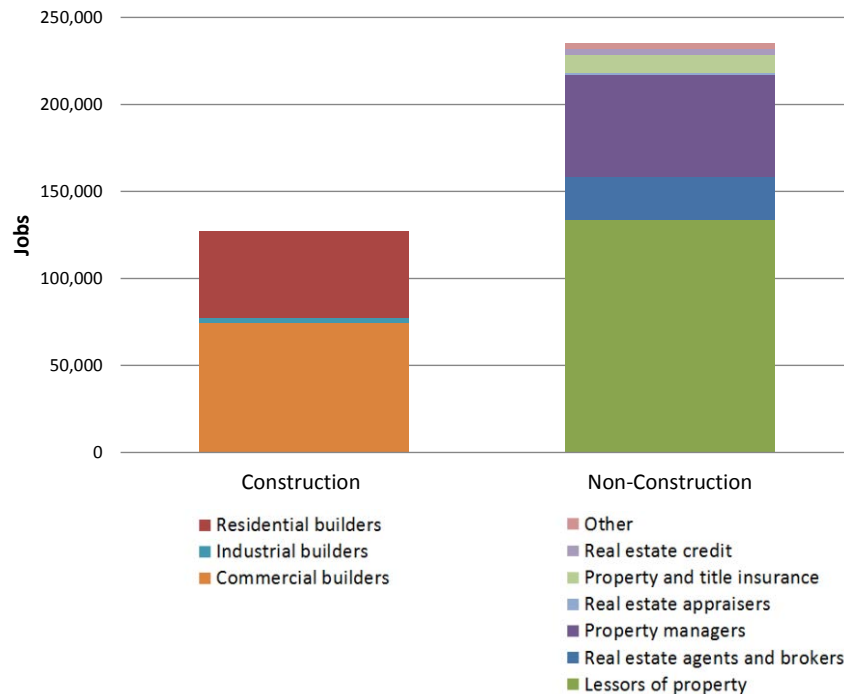
Part 2 summarizes the total economic benefits from New York City's real estate industry, including both construction and non-construction real estate activities.

- Real estate employment in New York City was estimated at **361,200 direct jobs** in 2012, including 127,300 direct jobs from construction and 233,900 direct jobs from non-construction activities (see **Figure 4**). Direct real estate employment represented approximately **7 percent of the City's total jobs** in 2012.
- The real estate industry generated an **additional 55,100 indirect jobs** and **102,600 induced jobs** within New York City. These include "indirect" jobs created through the purchase of goods and services and "induced" jobs created through increased spending of wages.
- In total, the real estate industry supported 518,900 direct, indirect, and induced jobs in New York City in 2012, representing approximately **11 percent of the City's total jobs**.

¹ Sources: City of New York Adopted Budget for Fiscal Year 2012, Expense Revenue Contract; REBNY

² \$2.3 billion remaining can fully fund the following agencies: Parks, Libraries, Homeless Services, Youth and Community Development, and all 5 District Attorney offices. Sources: City of New York Adopted Budget for Fiscal Year 2012, Expense Revenue Contract; REBNY

Figure 4
NYC Real Estate Industry Employment, 2012¹



- In 2012, direct economic activity from the real estate industry was \$81.0 billion, including approximately 10 percent of the City's GCP in 2013 dollars.² When economic activity that is indirectly generated by the real estate industry is considered, this number increases to **13 percent of GCP**.
- The average wages for direct construction and non-construction real estate employees in New York City was **\$61,430** in 2012.³
- Total economic output resulting from the real estate industry is estimated at \$108.1 billion in New York State.

Part 3 presents the economic benefits from non-construction real estate activities.

- Non-construction real estate employment in New York City was estimated at **233,900 direct jobs** in 2012, representing approximately 5 percent of the City's total jobs.

¹ Specialty trade contractors included in commercial, industrial, and residential builders categories.

² Comparison was made to New York City's GCP for Q4 2012 (\$606.7 billion), which was provided by New York City Independent Budget Office. Dollars correspond to a New York metropolitan area first half 2013 CPI.

³ Wages includes all forms of employment income, including employee compensation (pay and benefits) and proprietor income (income derived from self-employment).

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- The non-construction real estate industry indirectly generated an **additional 29,900 indirect jobs** and **58,900 induced jobs** within New York City. These include indirect jobs (e.g., a real estate brokerage firm purchases office supplies, utilities, and transportation services from other businesses within the City) and induced jobs (e.g., a property manager spends earnings on entertainment and clothing).
- In total, the non-construction real estate industry supported **322,700 jobs** within New York City, representing approximately **7 percent of the City's total jobs**.
- The average annual wage for direct non-construction real estate employees in New York City was \$51,780 in 2012.

Part 4 presents the economic benefits from construction.

- Construction employment in New York City was estimated at **127,300 direct jobs** in 2012, representing approximately 3 percent of the City's total jobs (it includes the construction of 1-3 family homes, coop, and condo units; it excludes public sector construction such as roads and bridges and institutional construction such as schools and hospitals).
- The construction industry indirectly generated an **additional 25,200 indirect jobs** and **43,700 induced jobs** within New York City. These include indirect jobs (e.g., a construction firm purchases materials and equipment from other businesses within the City) and induced jobs (e.g., a construction worker spends earnings on groceries and furniture).
- In total, the construction industry supported **196,200 direct, indirect, and induced jobs** within New York City in 2012, representing approximately **4 percent of the City's total jobs**.
- The average annual wage for direct construction employees in New York City was **\$79,175** in 2012.

Part 5 presents the distribution of New York City real estate industry employment and wages by borough.

- The majority of the direct jobs from non-construction real estate activities were in Manhattan (57 percent of jobs), followed by Brooklyn (16 percent), Queens (16 percent), Bronx (7 percent), and Staten Island (4 percent).
- Approximately 37 percent of the direct construction jobs were in Queens, followed by Brooklyn (26 percent), Manhattan (23 percent), Bronx (8 percent), and Staten Island (5 percent).
- By far, the largest share of direct wages from non-construction real estate jobs occurred in Manhattan (83 percent).
- The largest share of direct wages from construction jobs was in Queens (37 percent), followed by Manhattan (34 percent).

INTRODUCTION

The real estate industry is a key generator of tax revenue for New York City. This section presents tax benefits associated with activity presented in Parts 3 and 4. It also presents annual property taxes, mortgage and transfer tax, hotel occupancy tax, and commercial rent taxes received in New York City.

SUMMARY OF TAX BENEFITS

The real estate industry in New York City generates highly substantial direct, indirect, and induced economic activity, which translates into significant positive tax impacts for New York City, the MTA, and New York State. **Table 1-1** summarizes taxes generated for the City, the State, and the MTA from New York City real estate industry activity in 2012. For the City, total non-property tax revenues from direct, indirect, and induced non-construction real estate activity were equal to nearly \$919 million in 2012.¹ Total annual non-property tax revenues stemming from construction real estate activity were about \$698 million. In total, the real estate industry generated approximately \$1.6 billion in non-property tax revenues for New York City in 2012.

In addition, New York City received property tax and other real estate related taxes, which in fiscal year 2012 equaled \$13.7 billion for revenue-generating properties alone (such as residential rental buildings, office buildings, hotels, retail stores, and utility property; it excludes property and transaction taxes from 1-3 family homes and coop and condo units).² In total, New York City received \$15.4 billion, representing 38 percent of New York City tax revenues or 23 percent of the total City Budget in 2012.

Non-construction real estate activity and construction activity generated \$2.4 billion in taxes for New York State and \$190 million in taxes for the MTA.

¹ Non-property tax revenues (i.e., taxes exclusive of real estate related taxes) include sales tax, personal income taxes, corporate and business taxes, and numerous other taxes from direct, indirect, and induced economic activity.

² Revenue-generating properties include all properties in Class 3- utility and Class 4- office, hotels, etc. and all residential rental buildings in Class 2; it excludes property and transaction taxes from 1-3 family homes and coop and condo units.

Table 1-1
Summary of Taxes Associated with New York City Real Estate Activity,
2012¹

	Dollars in Millions
Tax Revenues, Exclusive of Real Estate Related Taxes (2013 Dollars)	
New York City²	
Non-Construction	\$919
Construction	\$698
Total	\$1,617
MTA¹	
Non-Construction	\$108
Construction	\$82
Total	\$190
New York State¹	
Non-Construction	\$1,292
Construction	\$1,074
Total	\$2,366
Subtotal: City, MTA, and State	\$4,173
Real Estate Related Taxes for Revenue-Generating Properties (Adopted Budget FY 2012)	
Property Taxes	\$11,867
Other Real Estate Related Taxes ³	\$1,874
Subtotal New York City Real Estate Taxes	\$13,741
Total Tax Revenues	\$17,914

TAX BENEFITS ASSOCIATED WITH NON-CONSTRUCTION REAL ESTATE ACTIVITY

Non-construction real estate activity, like construction activity, generates non-property taxes. **Table 1-2** summarizes taxes associated with non-construction real estate activity, exclusive of real property taxes and other real estate related taxes.

Table 1-2
Taxes Associated with Non-Construction Real Estate Activity,
Exclusive of Real Estate Related Taxes (Millions of 2013 Dollars)³

Taxes Generated From:	New York City Taxes	MTA Taxes	New York State Taxes	Total
Direct Activity	\$573.89	\$71.38	\$779.69	\$1,424.97
Indirect Activity	\$141.43	\$15.10	\$209.92	\$366.45
Induced Activity	\$203.51	\$21.74	\$302.07	\$527.32
Total	\$918.83	\$108.22	\$1,291.68	\$2,318.73

¹ Sources: See Tables 1-2 through 1-4.

² Construction and non-construction figures include direct, indirect, and induced taxes.

³ Includes mortgage recording taxes, real property transfer tax, hotel tax, and commercial occupancy tax.

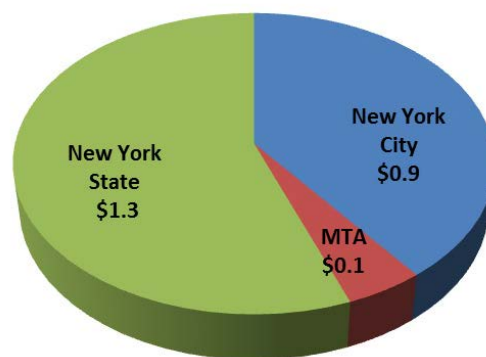
³ Sources: Based on the economic activity as determined by the IMPLAN model and applicable tax rates by jurisdiction.

As shown in the table, New York City receives taxes from the direct activity equal to about \$574 million. Including taxes from indirect and induced activity, New York City receives \$919 million. Of this amount, the largest portion comes from personal income taxes (\$196 million) and from corporate and business taxes (\$284 million).

The MTA and New York State receive an additional \$851 million in taxes from direct activity. Including taxes from indirect and induced activity, the MTA receives about \$108 million, and New York State about \$1.3 billion. Of this amount, the largest portion comes from personal income taxes (\$344 million for New York State) and from corporate and business taxes (\$259 million for New York State). Other taxes include the MTA payroll tax and utility taxes.

In total, taxes associated with non-construction real estate activity generate approximately \$2.3 billion for the City, State, and MTA (see **Figure 1-1**).

Figure 1-1
Taxes from Non-Construction Real Estate Activity in 2012
(billions of 2013 dollars)



TAX BENEFITS ASSOCIATED WITH CONSTRUCTION ACTIVITY

Tax benefits associated with construction activity include non-property taxes. Non-property taxes include sales tax, personal income taxes, corporate and business taxes, and numerous other taxes from direct, and indirect and induced, economic activity. **Table 1-3** summarizes taxes associated with construction activity, exclusive of real property taxes and other real estate related taxes.

**Table 1-3
Taxes Associated with Construction Activity,
Exclusive of Real Estate Related Taxes (Million of 2013 Dollars)¹**

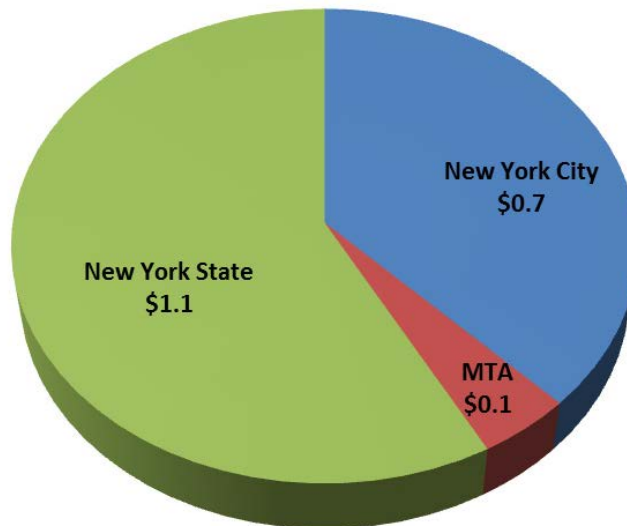
Taxes Generated From:	New York City Taxes	MTA Taxes	New York State Taxes	Total
Direct Activity	\$514.40	\$52.68	\$643.98	\$1,211.06
Indirect Taxes	\$68.47	\$12.24	\$177.17	\$257.88
Induced Taxes	\$115.58	\$17.46	\$252.86	\$385.90
Total	\$698.44	\$82.37	\$1,074.01	\$1,854.83

As shown in the table, New York City receives taxes from direct construction activity equal to about \$514 million. Of this amount, the largest portion comes from sales tax on construction material (\$286 million), and from personal income taxes (\$125 million). Including taxes from indirect and induced activity, New York City receives nearly \$700 million.

The MTA and New York State receive an additional \$697 million in taxes from direct construction activity. Of this amount, the largest portion comes from sales tax on construction material (\$24 million for MTA, and \$235 million for New York State), and from personal income taxes (\$254 million for New York State). Other taxes include corporate and business taxes. Including taxes from indirect and induced activity, the MTA receives about \$82 million, and New York State about \$1.1 billion.

In total, taxes associated with construction activity generate approximately \$1.9 billion for the City, State, and MTA (see **Figure 1-2**).

**Figure 1-2
Taxes from Construction Activity in 2012 (billions of 2013 dollars)**



¹ Sources: Based on the economic activity as determined by the IMPLAN model and applicable tax rates by jurisdiction.

REAL ESTATE INDUSTRY TAXES

Real estate industry taxes totaled \$15.4 billion in FY 2012 (see **Table 1-4**). These include real property taxes, mortgage recording tax, real property transfer tax, hotel occupancy tax, tax on commercial rents, and industry related taxes (taxes from real estate activity). The \$15.4 billion represents 38 percent of New York City tax revenues (see **Figure 1-3**). This is greater than City-funded payroll expenses for teachers, police officers, fire fighters, sanitation workers, and correction officers, which collectively total \$13.1 billion (see **Figures 1-3 and 1-4**). There would be a remaining \$2.3 billion to fully fund numerous City agencies. The \$15.4 billion also represents 23 percent of the total City Budget in 2012 (see **Figure 1-5**).

Table 1-4
Taxes from the Real Estate Industry¹

Taxes	Adopted Budget FY 2012 (in 2013 millions of dollars)
Property Taxes (revenue-generating only) ²	\$11,866.78
Mortgage Recording Taxes ³	\$329.56
Real Property Transfer Tax ³	\$510.15
Hotel Tax	\$403.28
Commercial Occupancy Tax	\$630.72
Industry Related Taxes (Taxes from Real Estate Activity in New York City) ⁴	\$1,617.27
Total Real Estate Related Taxes	\$15,357.76

¹ Dollar values have been adjusted for inflation. Source: City of New York Adopted Budget Fiscal Year 2012, Expense Revenue Contract.

² Property taxes presented in the table are 66.4 percent of total New York City property taxes.

³ Real property transfer tax and mortgage recording taxes are 65 percent of the total of such taxes in New York City.

⁴ Taxes from Direct, Indirect, and Induced Activity associated with Non-Construction Real Estate Activity and Construction Activity

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Figure 1-3
Annual Real Estate Industry Share of New York City Taxes (\$ in billions)¹

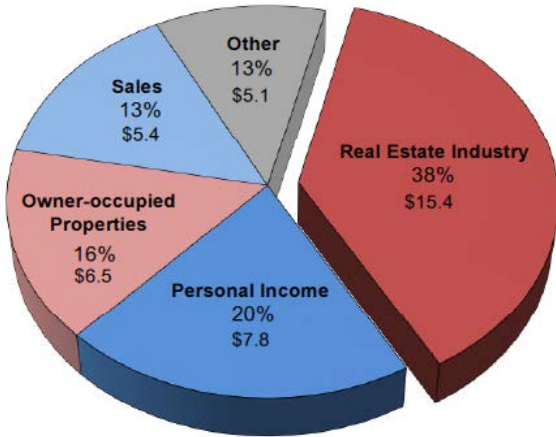


Figure 1-4
City Funded Payroll Expenses that could be paid by Real Estate Industry Taxes (\$ in billions)²

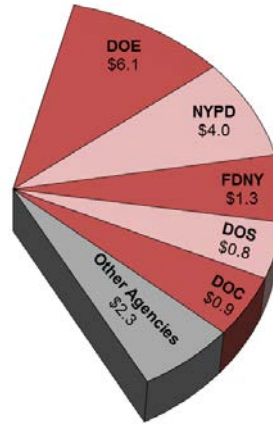
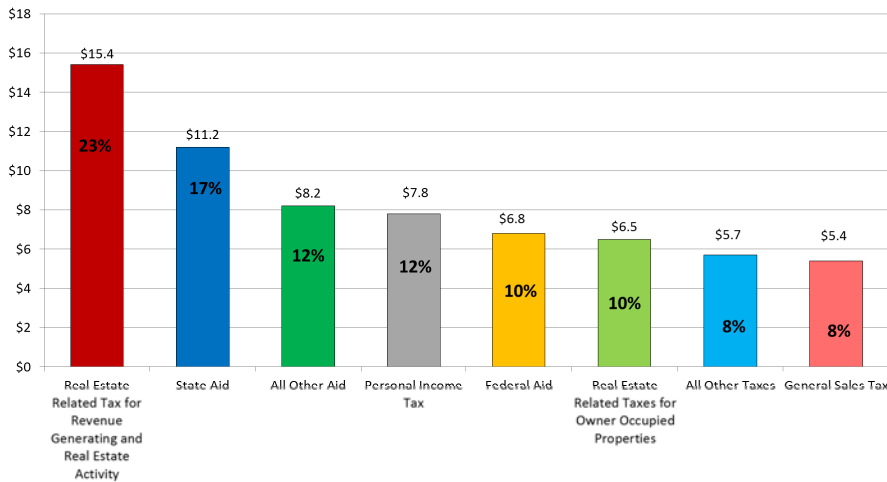


Figure 1-5
Annual Real Estate Industry Taxes as a Share of the New York City Budget³



¹ Sources: City of New York Adopted Budget for Fiscal Year 2012, Expense, Revenue, Contract; REBNY

² \$2.3 billion remaining can fully fund the following agencies: Parks, Libraries, Homeless Services, Youth and Community Development, and all 5 District Attorney offices. Sources: City of New York Adopted Budget for Fiscal Year 2012, Expense Revenue Contract; REBNY

³ Sources: The Council of the City of New York, Resolutions of the Council Fixing the Tax Rates Fiscal Year 2012, Adopted June 29, 2011; City of New York Adopted Budget for Fiscal Year 2012, Expense Revenue Contract; REBNY

OTHER TAX BENEFITS

New York City property taxes fund Business Improvement Districts (BIDs). New York City's 68 BIDs also make an important tax contribution to the City. According to the New York City Department of Small Business Services, property owners within the City's BIDs contribute \$105 million annually on services such as sanitation and maintenance, public safety, marketing, capital improvements, and beautification.¹

¹ New York City Department of Small Business Services. Site last accessed on November 27, 2013. (http://www.nyc.gov/html/sbs/html/neighborhood_development/bids.shtml)

Part 2: Total Economic Benefits from the Real Estate Industry

INTRODUCTION

This report presents AKRF's estimates of the economic and tax impacts of New York City's real estate industry, which for purposes of analysis was defined to include construction activity (including both new construction and renovation) and non-construction activity (buying, selling, managing, and operating of real estate in New York City). The analysis excludes the economic and tax benefits associated with public real estate activity such as construction or maintenance of roads, bridges or schools, and the real estate activity of private institutions such as hospitals and colleges.

As described in more detail in Parts 3 and 4 of this report, the real estate industry generates substantial employment and associated economic impacts in New York City and State. This section of the report summarizes the total economic impact of New York City's real estate industry, including both construction and non-construction activity.

EMPLOYMENT

Direct employment from the real estate industry was estimated at 361,200 direct jobs in New York City in 2012—approximately 7 percent of the City's total jobs.¹ As a result of inter-industry purchases and household spending of wages, the real estate industry generated an additional 55,100 indirect jobs and 102,600 induced jobs within New York City, bringing the total number of direct, indirect, and induced jobs from the real estate industry to 518,900 (see **Table 2-1**), representing approximately **11 percent of all jobs in New York City**. In the larger New York State economy, the real estate industry generated 168,300 indirect and induced jobs, bringing the total direct and generated jobs to 529,500 jobs, representing **5 percent of all jobs in New York State**.

¹ IMPLAN-generated employment estimates include proprietors (self-employed). While IMPLAN estimates do not provide a breakdown of self-employed jobs and wage and salary jobs, 2012 New York State data from the Bureau of Economic Analysis shows that proprietors represent 25 percent of total employment in the construction of buildings sector and 34 percent of employment in the specialty trade contractors sector. This data is not available at the county level.

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Table 2-1
Total Economic Benefits from the Real Estate Industry in New York City¹

	Portion in New York City	Total New York State
Employment		
Direct	361,200	361,200
Indirect	55,100	60,800
Induced	102,600	107,500
Total	518,900	529,500
Wages (in millions of dollars)		
Direct	\$22,190	\$22,190
Indirect	\$4,767	\$5,107
Induced	\$5,892	\$6,152
Total	\$32,849	\$33,450
Economic Output (in millions of dollars)²		
Direct	\$81,038	\$81,038
Indirect	\$9,933	\$11,062
Induced	\$15,263	\$15,962
Total	\$106,235	\$108,062

WAGES

The direct wages associated with the real estate industry were estimated at \$22.2 billion in 2012 (see **Table 2-1**).³ This equates to an average wage of \$61,430 per real estate industry employee. Total direct, indirect, and induced wages resulting in New York City from the real estate industry was estimated at \$32.8 billion. In the broader New York State economy, total direct, indirect, and induced wages from construction was estimated at \$33.5 billion.

¹ Detailed amounts may not add to totals due to rounding. Sources: U.S. Bureau of Labor Statistics' Quarterly Census of Employment and Wages, IMPLAN economic modeling system.

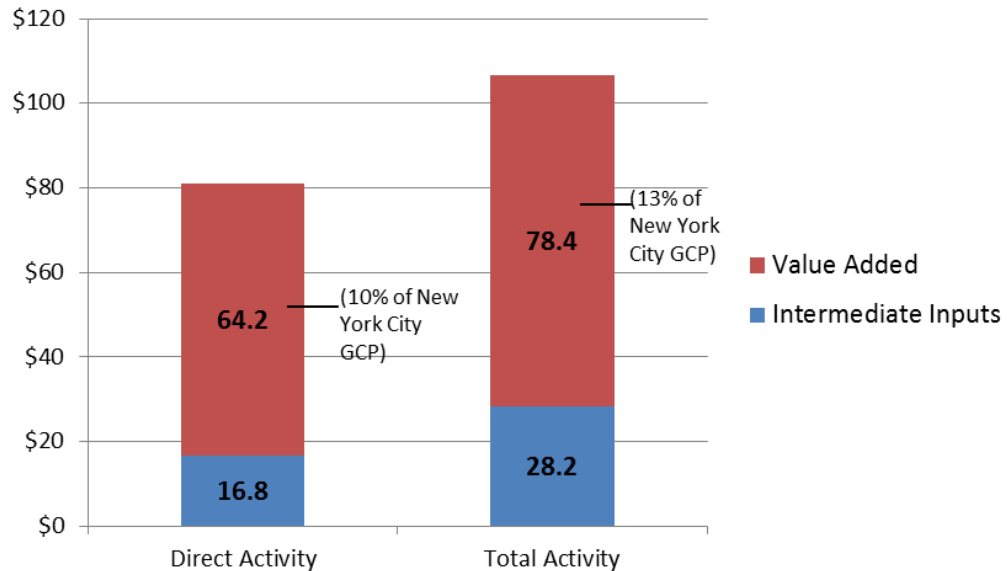
² Output is the total effect on the local economy, including the sum of the cost of goods and services used to produce a product and the associated payments to workers, taxes, and profits.

³ Wages includes employee compensation and proprietor's income.

ECONOMIC OUTPUT

Direct “output,” or business sales activity, from the real estate industry was estimated at approximately \$81.0 billion in New York City. This can be broken down into \$16.8 billion in “intermediate inputs” and \$64.2 billion in “value added,” as shown in **Figure 2-1**. Intermediate inputs are goods and services such as raw materials, utilities, and contracted services that are used for the production of other goods and services rather than for final consumption. Value added represents the increased value of goods and services created by the industry, and is a measure of contribution to the City’s Gross City Product (GCP). In 2012, the real estate industry’s \$64.2 billion in value added represented approximately 10 percent of the City’s GCP in 2013 dollars.¹ Including indirect and induced activities, total economic output resulting from the real estate industry is estimated at \$108.1 billion in New York State, of which \$106.2 billion occurred in New York City. In 2012, the total direct, indirect, and induced value added in New York City from the real estate industry comprised approximately 13 percent of GCP.

Figure 2-1
Direct and Total Output in New York City
from 2012 Total Real Estate Activity, Billions of 2013 Dollars



¹ Comparison was made to New York City’s GCP for Q4 2012 (\$606.7 billion), which was provided by New York City Independent Budget Office. Dollars correspond to a New York metropolitan area first half 2013 consumer price index (CPI).

Part 3: Economic Benefits from Non-Construction Real Estate Activity

INTRODUCTION

New York City's non-construction real estate activities have a substantial impact on the City's overall economy. In 2012, there were approximately 233,900 employees in New York City directly associated with non-construction real estate activities, defined to include all businesses specifically engaged in the buying, selling, management, financing and insurance of real estate. These include lessors of property, real estate agents, property management firms, real estate appraisers, and companies engaged specifically in real estate credit and property and title insurance. Industry sectors such as advertising and marketing, maintenance services, and legal services, which provide services to the real estate industry but also to a variety of non-real estate industries, are reflected in the estimate of indirect effects generated by direct real estate activity.

Indirect effects from the non-construction real estate industry include jobs in business establishments providing goods and services to real estate industry professionals (indirect jobs), and jobs resulting from new household spending (induced jobs). As an example of indirect effects, a real estate firm may purchase computers, office furniture, and cleaning services from local businesses, which helps to generate or support jobs at those businesses. At the same time, workers in both the real estate industry and real estate support industries earn income that their households spend on goods and services ranging from groceries to healthcare to entertainment. This income in turn supports induced jobs.

The following sections present the economic impact of non-construction real estate activities in terms of permanent employment, wages, and economic output for both the City and New York State. **Appendices A and B** include information on the methodology utilized for the non-construction real estate activity analysis, as well as additional tables detailing economic impacts by borough.

EMPLOYMENT

Direct employment in the City's non-construction real estate industry was estimated at 233,900 full- and part-time jobs in 2012—representing approximately 5 percent of the City's total jobs.

The indirect and induced employment supported by non-construction real estate activity is substantial. Indirect employment was estimated at 29,900 jobs and induced employment at 58,900 jobs in New York City, bringing the total number of jobs from the annual operation of the non-construction real estate industry to 322,700 in New York City. In addition, the industry generated 4,100 indirect and induced jobs in the New York State economy outside of New York City, bringing the **total number of jobs resulting from New York City non-construction real estate activity to 326,800 statewide.**

**Table 3-1
Total Economic Benefits from Non-Construction Real Estate
Activity in New York City¹**

	Portion in New York City	Total New York State
Employment		
Direct	233,900	233,900
Indirect	29,900	31,500
Induced	58,900	61,400
Total	322,700	326,800
Wages (in millions of dollars)		
Direct	\$12,111	\$12,111
Indirect	\$3,140	\$3,243
Induced	\$3,654	\$3,800
Total	\$18,905	\$19,154
Economic Output (in millions of dollars)²		
Direct	\$62,509	\$62,509
Indirect	\$6,291	\$6,524
Induced	\$9,127	\$9,478
Total ³	\$77,927	\$78,512

WAGES

The non-construction real estate activity in New York City generated approximately \$12.1 billion in direct wages in 2012. This equates to approximately \$51,780 in annual wages per worker.

In New York City, total direct, indirect, and induced wages from the annual non-construction real estate activity were estimated at \$18.9 billion, representing 4.5 percent of total wages in New York City. Total wages from the annual operation of the non-construction real estate industry were estimated at \$19.2 billion in the New York State economy.

ECONOMIC OUTPUT

In 2012 non-construction real estate activities generated approximately \$62.5 billion in direct output. This \$62.5 billion in output can be broken down into \$9.7 billion in intermediate inputs and \$52.8 billion in value added (see **Figure 3-1**). In 2012, the non-construction real estate industry's \$52.8 billion in direct value added represented almost 9 percent of the City's GCP in 2013 dollars.⁴

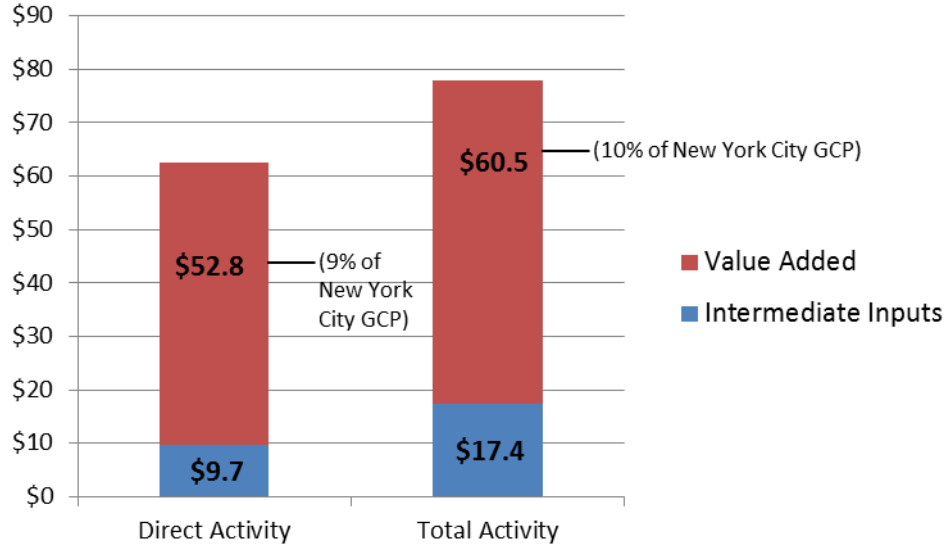
¹ Detailed amounts may not add to totals due to rounding. Sources: U.S. Bureau of Labor Statistics' Quarterly Census of Employment and Wages, IMPLAN economic modeling system.

² Output is the total effect on the local economy, including the sum of the cost of goods and services used to produce a product and the associated payments to workers, taxes, and profits

³ Indirect and induced effects associated with the real estate sector were not included in this table to avoid overstating the economic benefits from the New York City real estate industry

⁴ Comparison was made to New York City's GCP for Q4 2012 (\$606.7 billion), which was provided by New York City Independent Budget Office. Dollars correspond to a New York metropolitan area first half 2013 CPI.

Figure 3-1
Direct and Total Output in New York City from
2012 Non-Construction Real Estate Activity, Billions of 2013 Dollars



The total direct, indirect, and induced output that resulted from the non-construction real estate industry was approximately \$78.5 billion in New York State. Of that amount, \$77.9 billion occurred in New York City, including approximately \$60.5 billion in total value added, or almost 10 percent of the City's GCP.

As mentioned above, non-construction real estate activities in New York City result in a number of indirect jobs. Indirect economic activity generated by direct non-construction real estate activity totaled \$6.3 billion. Approximately 43 percent of indirect output was generated in the finance and insurance sector (\$2.7 billion). The administrative support and waste management and remediation services sector followed with approximately 15 percent of indirect economic output (\$937.7 million); this sector includes building service workers such as exterminators, janitors, landscapers, and carpet cleaners. The professional, scientific, and technical services sector also had significant indirect activity at approximately \$880.2 million or 14 percent. In addition, indirect output includes output at business associations such as the City's 68 BIDs.

Induced output totaled \$9.1 billion. Approximately 19 percent of the induced activity was in the health care and social assistance sector (\$1.8 billion). The finance and insurance sector followed with approximately 15 percent of induced economic output (\$1.4 billion). The retail trade sector also experienced significant induced activity at \$742.2 million.

INTRODUCTION

The physical development of real estate is a core economic driver of the industry, generating significant numbers of jobs and other economic benefits to New York City. In 2012, there were approximately 127,300 direct construction jobs in New York City; these include workers involved with construction of residential, industrial, and commercial buildings, as well as specialty trade contractors who are responsible for a specific activity such as roofing, pouring concrete, site preparation, plumbing, painting, or electrical work (it excludes public sector construction such as roads and bridges and institutional construction such as schools and hospitals). The estimated 127,300 construction jobs represented approximately 3 percent of total employment in New York City.

Economic activity in the construction industry indirectly generates additional jobs across a number of support industries. Indirect effects from the construction industry include jobs in business establishments providing goods and services to contractors, such as jobs at architecture and engineering firms, trucking services, law firms, and accounting firms. The construction industry indirectly generated an additional 25,200 jobs within New York City.

Induced effects from construction include jobs at businesses and institutions such as restaurants, grocery stores, hospitals, doctor's offices, and elementary schools. The construction industry generated an additional 43,700 induced jobs within New York City.

This section summarizes the direct and indirect economic benefits resulting from the construction industry in 2012 in New York City. **Appendices A and C** include information on the methodology utilized for the construction impact analysis and additional tables detailing economic impacts by borough.

EMPLOYMENT

New York City's construction industry provides significant employment opportunities. In 2012, there were an estimated 127,300 direct construction jobs in New York City—approximately 3 percent of the total employment in New York City.

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Construction also generated an additional 25,200 indirect jobs and 43,700 induced jobs within New York City, bringing the total number of jobs from construction to 196,200 jobs, which is 4 percent of the total employment in New York City (see **Table 4-1**). In the larger New York State economy, construction generated an estimated 75,400 indirect and induced jobs, bringing the total direct and generated jobs to 202,700 jobs.

Table 4-1
Total Economic Benefits from Construction in 2012 in New York City¹

	Portion in New York City	Total New York State
Employment²		
Direct	127,300	127,300
Indirect	25,200	29,300
Induced	43,700	46,100
Total	196,200	202,700
Wages (in millions of dollars)		
Direct	\$10,079	\$10,079
Indirect	\$1,627	\$1,864
Induced	\$2,238	\$2,352
Total	\$13,944	\$14,296
Economic Output (in millions of dollars)³		
Direct	\$18,529	\$18,529
Indirect	\$3,642	\$4,538
Induced	\$6,136	\$6,484
Total	\$28,308	\$29,551

WAGES

The direct wages, which include employee compensation and proprietor's income, associated with construction in 2012 were estimated at \$10.1 billion (see **Table 4-1**). This equates to approximately \$79,175 in annual wages per worker.

Total direct, indirect, and induced wages resulting in New York City from construction were estimated at \$13.9 billion, representing 3.3 percent of total wages in New York City. In the broader New York State economy, total direct, indirect, and induced wages from construction were estimated at \$14.3 billion.

ECONOMIC OUTPUT

In 2012, construction activities generated approximately \$18.5 billion in direct output in New York City. This \$18.5 billion in direct output can be broken down into \$7.1 billion in intermediate inputs and \$11.4 billion in value added (see **Figure 4-1**). In 2012, the

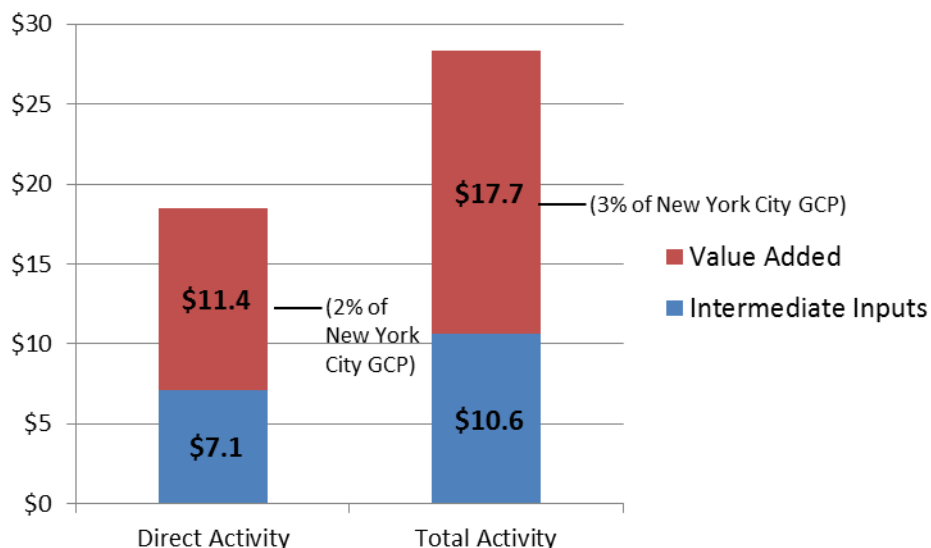
¹ Detailed amounts may not add to totals due to rounding. Sources: U.S. Bureau of Labor Statistics' Quarterly Census of Employment and Wages, IMPLAN economic modeling system.

² Part 3 of this report estimates the economic benefits of the real estate sector (IMPLAN Sector 360). To avoid overstating indirect and induced impacts, all indirect and induced employment, wages, and economic output estimated by the IMPLAN model to occur in Sector 360 was excluded from the results shown in this table.

³ Output is the total effect on the local economy, including the sum of the cost of goods and services used to produce a product and the associated payments to workers, taxes, and profits.

construction industry's \$11.4 billion in direct value added represented approximately 2 percent of the City's GCP.¹

Figure 4-1
Direct and Total Output in New York City
from 2012 Construction Activity, Billions of 2013 Dollars



Including indirect and induced activities, the total economic activity that resulted from construction was estimated at \$29.6 billion in New York State, of which \$28.3 billion occurred in New York City. This \$28.3 billion in New York City output includes \$10.6 billion in intermediate inputs and \$17.7 billion in value added. The construction industry's \$17.7 billion in total direct, indirect, and induced value added represented 3 percent of GCP in 2012.

Approximately 30 percent of indirect output (\$1.1 billion) was generated in the professional, scientific, and technical services sector. This was driven primarily by the architectural, engineering, and related services sector (\$708 million), followed by \$120 million in the legal services sector and \$43 million in the management, scientific, and technical consulting services sector. The finance and insurance sector followed with 12 percent of indirect economic output (\$437 million).

Induced economic output as a result of construction totaled \$6.1 billion. Approximately 19 percent of the induced activity was in the health care and social assistance sector (\$1.1 billion), where households tend to spend significant portions of their income. This includes approximately \$416 million in induced activity in private hospitals, \$282 million at offices of physicians, dentists, and other health practitioners, and \$150 million at nursing and residential care facilities. The finance and insurance and retail trade sectors also experienced significant induced activity at \$830 million and \$579 million, respectively.

¹ Comparison was made to New York City's GCP for Q4 2012 (\$606.7 billion), which was provided by New York City Independent Budget Office. Dollars correspond to a New York metropolitan area first half 2013 CPI.

INTRODUCTION

The following presents the distribution of New York City real estate industry employment and wages by borough. As with other sections of the report, real estate jobs are grouped by construction- and non-construction-related activities.

DIRECT ECONOMIC ACTIVITY BY BOROUGH

Table 5-1 reports the percentage of New York City real estate industry employment and wages that was directly generated in each of the City's five boroughs in 2012.

Table 5-1
Direct Economic Activity by Borough¹

Borough	Share of Direct Employment			Share of Direct Wages		
	Non-Construction Real Estate Jobs	Construction Jobs	All Real Estate Jobs	Non-Construction Real Estate Jobs	Construction Jobs	All Real Estate Jobs
Bronx	7%	8%	7%	4%	8%	6%
Brooklyn	16%	26%	20%	7%	17%	11%
Manhattan	57%	23%	45%	83%	34%	61%
Queens	16%	37%	24%	6%	37%	20%
Staten Island	4%	5%	4%	1%	4%	2%

EMPLOYMENT

As shown in **Table 5-1**, Manhattan employs the greatest share of the City's non-construction real estate employment (57 percent), and the greatest overall share of real estate jobs (45 percent). However, the greatest share of the City's construction jobs occurred in Queens, with 37 percent, followed by Brooklyn (26 percent), and then Manhattan (23 percent). Staten Island had the lowest shares of construction, non-construction, and all real estate jobs in New York City in 2012, followed by the Bronx.

¹ Percentages reflect comparisons to values for New York City as a whole. Shading denotes the largest percentages. Percentages may not add to 100 percent due to rounding. Sources: U.S. Bureau of Labor Statistics' Quarterly Census of Employment and Wages, IMPLAN economic modeling system.

WAGES

Table 5-1 also presents the distribution of wages.¹ By far, the greatest shares of direct wages associated with the real estate industry in New York City in 2012 occurred in Manhattan for non-construction (83 percent) and all real estate jobs (61 percent). And similar to employment, the greatest share of direct construction wages was in Queens at 37 percent, followed by Manhattan (34 percent), and then Brooklyn (17 percent). As with employment, in 2012 Staten Island and the Bronx had the lowest shares of construction, non-construction, and all real estate wages in the City.

¹ Wages include employee compensation and proprietor's income.

METHODOLOGY

OVERVIEW OF THE IMPLAN ECONOMIC MODEL

The principal economic model used to estimate the effect of construction on the City's economy was IMPLAN, which was originally developed by the United States Department of Agriculture Forest Service in 1979 and was subsequently privatized by the Minnesota IMPLAN Group (MIG). The model uses the most recent economic data from sources such as the U.S. Bureau of Economic Analysis, the U.S. Bureau of Labor Statistics, and the U.S. Census Bureau to predict effects on the local economy from direct changes in spending.

This analysis was conducted using a separate model for each county within New York City. Each model contains data specific to that county on 440 economic sectors, showing how each sector affects every other sector as a result of a change in the quantity of its product or service. Models were also created to trace the effects on the New York City and New York State economy. The models have been adjusted to reflect the most recent changes in the New York metropolitan area price levels.

MEASURES OF ECONOMIC IMPACT

Using IMPLAN terminology, economic impacts are broken into three components: direct, indirect, and induced.

Direct effects represent the initial benefits to the economy of a specific new investment; e.g., a construction project or changes in employment.

Indirect effects represent the benefits generated by industries purchasing from other industries as a result of the direct investment; e.g., indirect employment resulting from construction expenditures would include jobs in industries that provide goods and services to the contractors. A direct investment triggers changes in other industries as businesses alter their production to meet the needs of the industry in which the direct impact has occurred. These businesses in turn purchase goods and services from other businesses, causing a ripple effect through the economy. The ripple effect continues until leakages from the region (caused, for example, by imported goods) stop the cycle. The sum of these iterative inter-industry purchases is called the indirect effect.

Induced effects represent the impacts caused by increased income in a region. Direct and indirect effects generate more worker income by increasing employment and/or salaries in certain industries. Households spend some of this additional income on local goods and services, such as food and drink, recreation, and medical services. Benefits generated by these household expenditures are quantified as induced effects.

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DATA

The analysis was modeled based on the Bureau of Labor Statistics' 2012 QCEW wage data for each New York City county for NAICS codes specified in **Appendices B and C**.

DOLLARS

All dollar amounts included in this report are constant 2013 dollars.¹ In future years, the actual dollar amounts are expected to increase with inflation.

¹ The dollars in this report correspond to a New York metropolitan area CPI in the first half of 2013 equal to 256.130.

Appendix B: Economic Benefits from Non-Construction Real Estate Activity

METHODOLOGY

The non-construction real estate activity was modeled based on the U.S. Bureau of Labor Statistics' 2012 QCEW wage data for each New York City county for the following NAICS codes:

Finance & Insurance:

- NAICS 522292 Real estate credit (corresponds to IMPLAN sector 355)
- NAICS 524126 Direct property and casualty insurers (corresponds to IMPLAN sector 357)
- NAICS 524127 Direct title insurance carriers (corresponds to IMPLAN sector 357)

Real Estate (corresponds to IMPLAN sector 360):

- NAICS 531110 Lessors of residential buildings
- NAICS 531120 Lessors of nonresidential buildings
- NAICS 531130 Miniwarehouse and self-storage unit operators
- NAICS 531190 Lessors of other real estate property
- NAICS 531210 Offices of real estate agents and brokers
- NAICS 531311 Residential property managers
- NAICS 531312 Nonresidential property managers
- NAICS 531320 Offices of real estate appraisers
- NAICS 531390 Other activities related to real estate

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The wages for each corresponding IMPLAN sector (identified above) were tallied and converted to employee compensation using ratios derived from data from the U.S. Bureau of Economic Analysis, and converted to 2013 dollars based on the U.S. Bureau of Labor Statistics' 1st Half CPI, as shown in **Table B-1**.

Table B-1
Estimated Employee Compensation from Non-Construction Real Estate Activity¹

IMPLAN Sector		Total Employee Compensation By County (in millions of 2013 dollars)				
		Bronx	Kings	New York	Queens	Richmond
360	Real Estate	383.48	631.62	6,825.51	569.96	38.61
357	Insurance Carriers	1.39	57.93	1,783.97	30.26	3.03
355	Nondepository credit intermediation & related activities	ND ¹	13.05	400.39	16.83	3.56
TOTAL		384.86	702.60	9,009.86	617.05	45.20

Employee compensation, rather than jobs, was chosen as the most appropriate input into the model in order to capture the economic benefits generated by self-employed real estate professionals, which are not captured in the QCEW data but are included in IMPLAN's estimate of full- and part-time employees and wages, which includes employee compensation and proprietor's income.² The model estimated employment, wages, and output associated with businesses, including self-employed individuals and unincorporated business owners.

¹ Not Disclosable – data do not meet BLS or State agency disclosure standards. Sources: U.S. Bureau of Labor Statistics' 2012 QCEW adjusted to employee compensation using data from the U.S. Bureau of Economic Analysis. The dollars correspond to a New York metropolitan area CPI in the first half of 2013 equal to 256.130.

² Proprietor income consists of payments received by self-employed individuals and unincorporated business owners. This income also includes the capital consumption allowance and is recorded on Federal Tax form 1040C

Appendix B: Economic Benefits from Non-Construction Real Estate Activity

ECONOMIC IMPACT ASSOCIATED WITH ACTIVITIES IN EACH COUNTY

Table B-2

Economic Benefits from Non-Construction Real Estate Activity in the Bronx¹

	Bronx	Portion in New York City	Total New York State
Employment			
Direct (jobs in real estate industry)	15,700	15,700	15,700
Indirect (jobs in support industries)	1,400	1,900	2,200
Induced (jobs from household spending)	2,000	2,700	2,900
Total	19,100	20,300	20,800
Wages (in millions of dollars)			
Direct (earnings from real estate industry)	433.99	433.99	433.99
Indirect (earnings in support industries)	72.66	137.41	148.30
Induced (earnings from household spending)	96.59	154.38	164.03
Total	603.24	725.78	746.32
Economic Output (in millions of dollars)²			
Direct (Output from real estate industry)	3,707.17	3,707.17	3,707.17
Indirect (Output from support industries)	222.99	344.61	375.29
Induced (Output from household spending)	273.04	398.41	427.28
Total	4,203.20	4,450.20	4,509.75

Table B-3

Economic Benefits from Non-Construction Real Estate Activity in Brooklyn³

	Brooklyn	Portion in New York City	Total New York State
Employment			
Direct (jobs in real estate industry)	38,400	38,400	38,400
Indirect (jobs in support industries)	4,700	5,900	6,400
Induced (jobs from household spending)	4,700	5,400	6,100
Total	47,800	49,700	50,900
Wages (in millions of dollars)			
Direct (earnings from real estate industry)	839.70	839.70	839.70
Indirect (earnings in support industries)	222.67	383.56	404.10
Induced (earnings from household spending)	200.06	266.98	299.76
Total	1,262.42	1,490.24	1,543.55
Economic Output (in millions of dollars)⁴			
Direct (Output from real estate industry)	8,969.80	8,969.80	8,969.80
Indirect (Output from support industries)	692.17	986.05	1,046.61
Induced (Output from household spending)	616.33	755.96	852.52
Total	10,278.31	10,711.81	10,868.93

¹ Detailed amounts may not add to totals due to rounding. Sources: U.S. Bureau of Labor Statistics' QCEW data, IMPLAN economic modeling system.

² The total effect on the local economy, including the sum of the cost of goods and services used to produce a product and the associated payments to workers, taxes, and profits.

³ Detailed amounts may not add to totals due to rounding. Sources: U.S. Bureau of Labor Statistics' QCEW data, IMPLAN economic modeling system.

⁴ The total effect on the local economy, including the sum of the cost of goods and services used to produce a product and the associated payments to workers, taxes, and profits.

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Table B-4
Economic Benefits from Non-Construction Real Estate Activity in Manhattan¹

	Manhattan	Portion in New York City	Total New York State
Employment			
Direct (jobs in real estate industry)	133,100	133,100	133,100
Indirect (jobs in support industries)	14,300	15,300	15,800
Induced (jobs from household spending)	21,400	44,800	46,000
Total	168,800	193,200	194,900
Wages (in millions of dollars)			
Direct (earnings from real estate industry)	10,039.05	10,039.05	10,039.05
Indirect (earnings in support industries)	2,107.44	2,174.89	2,204.24
Induced (earnings from household spending)	1,870.33	2,918.58	2,975.29
Total	14,016.81	15,132.52	15,218.58
Economic Output (in millions of dollars)²			
Direct (Output from real estate industry)	39,293.32	39,293.32	39,293.32
Indirect (Output from support industries)	3,632.66	3,817.84	3,912.46
Induced (Output from household spending)	3,957.19	7,120.35	7,293.13
Total	46,883.17	50,231.51	50,498.90

Table B-5
Economic Benefits from Non-Construction Real Estate Activity in Queens³

	Queens	Portion in New York City	Total New York State
Employment			
Direct (jobs in real estate industry)	37,600	37,600	37,600
Indirect (jobs in support industries)	4,600	5,600	5,900
Induced (jobs from household spending)	4,200	5,400	5,700
Total	46,400	48,600	49,200
Wages (in millions of dollars)			
Direct (earnings from real estate industry)	734.95	734.95	734.95
Indirect (earnings in support industries)	248.27	372.66	412.30
Induced (earnings from household spending)	187.67	283.20	327.02
Total	1,170.89	1,390.82	1,474.27
Economic Output (in millions of dollars)⁴			
Direct (Output from real estate industry)	8,597.26	8,597.26	8,597.26
Indirect (Output from support industries)	731.40	948.35	987.98
Induced (Output from household spending)	564.45	767.30	811.12
Total	9,893.11	10,312.90	10,396.35

¹ Detailed amounts may not add to totals due to rounding. Sources: U.S. Bureau of Labor Statistics' QCEW data, IMPLAN economic modeling system

² The total effect on the local economy, including the sum of the cost of goods and services used to produce a product and the associated payments to workers, taxes, and profits.

³ Detailed amounts may not add to totals due to rounding. Sources: U.S. Bureau of Labor Statistics' QCEW data, IMPLAN economic modeling system.

⁴ The total effect on the local economy, including the sum of the cost of goods and services used to produce a product and the associated payments to workers, taxes, and profits.

Appendix B: Economic Benefits from Non-Construction Real Estate Activity

Table B-6
Economic Benefits from Non-Construction Real Estate Activity in Staten Island¹

	Staten Island	Portion in New York City	Total New York State
Employment			
Direct (jobs in real estate industry)	9,100	9,100	9,100
Indirect (jobs in support industries)	1,000	1,200	1,200
Induced (jobs from household spending)	400	600	700
Total	10,500	10,900	11,000
Wages (in millions of dollars)			
Direct (earnings from real estate industry)	62.93	62.93	62.93
Indirect (earnings in support industries)	42.69	71.33	73.58
Induced (earnings from household spending)	17.45	31.15	34.38
Total	123.07	165.41	170.89
Economic Output (in millions of dollars)²			
Direct (Output from real estate industry)	1,941.89	1,941.89	1,941.89
Indirect (Output from support industries)	138.52	193.77	201.60
Induced (Output from household spending)	54.16	84.55	94.28
Total	2,134.57	2,200.22	2,237.77

¹ Detailed amounts may not add to totals due to rounding. Sources: U.S. Bureau of Labor Statistics' QCEW data, IMPLAN economic modeling system.

² The total effect on the local economy, including the sum of the cost of goods and services used to produce a product and the associated payments to workers, taxes, and profits.

METHODOLOGY

The construction analysis was modeled based on the U.S. Bureau of Labor Statistics' 2012 QCEW wage data for each county in New York City for the below NAICS codes. Employee compensation, rather than jobs, was chosen as the most appropriate input into the model in order to capture economic benefits generated by self-employed real estate professionals, which are not captured in the QCEW data but are included in IMPLAN's estimate of full- and part-time employees and wages.

- NAICS 236115 New single-family general contractors (corresponds to IMPLAN sector 37)
- NAICS 236116 New multifamily general contractors (corresponds to IMPLAN sector 37)
- NAICS 236117 New housing for-sale builders (corresponds to IMPLAN sector 37)
- NAICS 236118 Residential remodelers (corresponds to IMPLAN sector 37)
- NAICS 236210 Industrial building construction (corresponds to IMPLAN sector 35)
- NAICS 236220 Commercial building construction (corresponds to IMPLAN sector 34)
- NAICS 238 Specialty trade contractors- Residential (corresponds to IMPLAN sector 37)
- NAICS 238 Specialty trade contractors- Non-Residential (corresponds to IMPLAN sectors 34 and 35)

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The wages for each corresponding IMPLAN sector (identified above) were tallied and converted to employee compensation using ratios derived from data from the U.S. Bureau of Economic Analysis. These dollars were converted to 2013 dollars based on the U.S. Bureau of Labor Statistics' 1st Half 2013 CPI, as shown in **Table C-1** below.

Table C-1
2012 Construction Employee Compensation¹

IMPLAN Sector		Total Employee Compensation By County (in millions of 2013 dollars)				
		Bronx	Kings	New York	Queens	Richmond
34	Construction of new nonresidential commercial and health care structures	\$256.75	\$741.17	\$2,271.89	\$2,215.24	\$194.06
35	Construction of new nonresidential manufacturing structures	\$8.23	\$77.30	\$63.23	\$40.36	\$6.22
37	Construction of new residential permanent site single- and multi-family structures	\$302.12	\$611.46	\$833.80	\$897.50	\$158.29
TOTAL		\$567.10	\$1,429.93	\$3,168.93	\$3,153.10	\$358.57

¹ Sources: U.S. Bureau of Labor Statistics' 2012 QCEW data, adjusted to employee compensation using data from the U.S. Bureau of Economic Analysis. The dollars correspond to a New York metropolitan area CPI in the first half of 2013 equal to 256.130.

ECONOMIC IMPACT ASSOCIATED WITH ACTIVITIES IN EACH COUNTY

Table C-2
Economic Benefits from Construction in the Bronx¹

	Bronx	Portion in New York City	Total New York State
Employment			
Direct (jobs in construction)	10,200	10,200	10,200
Indirect (jobs in support industries)	1,100	2,000	2,600
Induced (jobs from household spending)	3,100	3,900	4,300
Total	14,400	16,100	17,100
Wages (in millions of dollars)			
Direct (earnings from construction)	817.84	817.84	817.84
Indirect (earnings in support industries)	63.89	143.05	177.83
Induced (earnings from household spending)	157.57	223.89	240.50
Total	1,039.29	1,184.77	1,236.17
Economic Output (in millions of dollars)²			
Direct (Output from construction)	1,584.90	1,584.90	1,584.90
Indirect (Output from support industries)	157.43	312.32	434.73
Induced (Output from household spending)	445.80	587.12	637.08
Total	2,188.13	2,484.35	2,656.72

Table C-3
Economic Benefits from Construction in Brooklyn³

	Brooklyn	Portion in New York City	Total New York State
Employment			
Direct (jobs in construction)	33,700	33,700	33,700
Indirect (jobs in support industries)	5,800	7,800	8,700
Induced (jobs from household spending)	7,900	9,600	10,100
Total	47,400	51,100	52,500
Wages (in millions of dollars)			
Direct (earnings from construction)	1,687.99	1,687.99	1,687.99
Indirect (earnings in support industries)	233.34	412.75	465.64
Induced (earnings from household spending)	325.52	459.81	486.00
Total	2,246.85	2,560.55	2,639.63
Economic Output (in millions of dollars)⁴			
Direct (Output from construction)	4,083.96	4,083.96	4,083.96
Indirect (Output from support industries)	691.18	1,017.14	1,217.79
Induced (Output from household spending)	1,032.47	1,320.89	1,400.20
Total	5,807.61	6,422.00	6,701.96

¹ Detailed amounts may not add to totals due to rounding. Sources: U.S. Bureau of Labor Statistics' QCEW data, IMPLAN economic modeling system.

² The total effect on the local economy, including the sum of the cost of goods and services used to produce a product and the associated payments to workers, taxes, and profits.

³ Detailed amounts may not add to totals due to rounding. Sources: U.S. Bureau of Labor Statistics' QCEW data, IMPLAN economic modeling system.

⁴ The total effect on the local economy, including the sum of the cost of goods and services used to produce a product and the associated payments to workers, taxes, and profits.

The Invisible Engine: The Economic Impact of New York City's Real Estate Industry

Table C-4
Economic Benefits from Construction in Manhattan¹

	Manhattan	Portion in New York City	Total New York State
Employment			
Direct (jobs in construction)	29,100	29,100	29,100
Indirect (jobs in support industries)	3,400	4,000	4,700
Induced (jobs from household spending)	2,900	9,600	10,000
Total	35,400	42,700	43,800
Wages (in millions of dollars)			
Direct (earnings from construction)	3,422.91	3,422.91	3,422.91
Indirect (earnings in support industries)	380.61	421.45	463.03
Induced (earnings from household spending)	253.86	544.87	564.31
Total	4,057.38	4,389.23	4,450.24
Economic Output (in millions of dollars)²			
Direct (Output from construction)	5,116.98	5,116.98	5,116.98
Indirect (Output from support industries)	644.48	788.52	956.05
Induced (Output from household spending)	531.70	1,421.54	1,479.68
Total	6,293.17	7,327.04	7,552.72

Table C-5
Economic Benefits from Construction in Queens³

	Queens	Portion in New York City	Total New York State
Employment			
Direct (jobs in construction)	47,400	47,400	47,400
Indirect (jobs in support industries)	7,500	9,900	11,700
Induced (jobs from household spending)	15,600	18,500	19,500
Total	70,500	75,800	78,600
Wages (in millions of dollars)			
Direct (earnings from construction)	3,736.44	3,736.44	3,736.44
Indirect (earnings in support industries)	328.66	580.85	680.31
Induced (earnings from household spending)	672.90	912.38	960.18
Total	4,738.00	5,229.67	5,376.93
Economic Output (in millions of dollars)⁴			
Direct (Output from construction)	6,833.52	6,833.52	6,833.52
Indirect (Output from support industries)	906.49	1,345.78	1,717.71
Induced (Output from household spending)	2,025.27	2,525.40	2,672.80
Total	9,765.28	10,704.70	11,224.03

¹ Detailed amounts may not add to totals due to rounding. Sources: U.S. Bureau of Labor Statistics' QCEW data, IMPLAN economic modeling system.

² The total effect on the local economy, including the sum of the cost of goods and services used to produce a product and the associated payments to workers, taxes, and profits.

³ Detailed amounts may not add to totals due to rounding. Sources: U.S. Bureau of Labor Statistics' QCEW data, IMPLAN economic modeling system.

⁴ The total effect on the local economy, including the sum of the cost of goods and services used to produce a product and the associated payments to workers, taxes, and profits.

Appendix C: Economic Benefits from Construction

Table C-6
Economic Benefits from Construction in Staten Island¹

	Staten Island	Portion in New York City	Total New York State
Employment			
Direct (jobs in construction)	6,900	6,900	6,900
Indirect (jobs in support industries)	1,200	1,500	1,600
Induced (jobs from household spending)	1,800	2,100	2,200
Total	9,900	10,500	10,700
Wages (in millions of dollars)			
Direct (earnings from construction)	414.11	414.11	414.11
Indirect (earnings in support industries)	42.84	68.78	77.50
Induced (earnings from household spending)	69.97	97.02	101.28
Total	526.92	579.91	592.89
Economic Output (in millions of dollars)²			
Direct (Output from construction)	909.91	909.91	909.91
Indirect (Output from support industries)	126.86	178.59	211.50
Induced (Output from household spending)	222.20	281.06	294.26
Total	1,258.97	1,369.56	1,415.67

¹ Detailed amounts may not add to totals due to rounding. Sources: U.S. Bureau of Labor Statistics' QCEW data, IMPLAN economic modeling system.

² The total effect on the local economy, including the sum of the cost of goods and services used to produce a product and the associated payments to workers, taxes, and profits.