THE GEOGRAPHY OF JOBS

NYC Metro Region Economic Snapshot

NYMTC PFAC Meeting
November 15, 2018

Carolyn Grossman Meagher, Director, Regional Planning Division
To make the changes we need, OneNYC recognizes that we need to reach out to our neighbors so that our whole region may thrive.

The strength of the city is essential for the strength of the region, and strong communities around the city make it more competitive nationally and globally.
The Geography of Jobs Report

• First economic report issued by NYC examining collective regional context of employment and workforce patterns

• Launch hosted by NY Building Congress & NYC, attended by +70 tri-state government, nonprofit and business stakeholders

• **Key themes**: continuing to share data, identifying synergistic industry opportunities, better understanding link between housing/workforce needs and economic development; better deploying data to plan for future scenarios.

• Commitment to continue to meet as a region
NYC captured the vast majority of post-recession economic growth, supported by strong growth of non-Manhattan boroughs. Other parts of the region lost more and were slower to rebound since 2008.

Office-based employment growth concentrated in NYC. Outside of NYC, healthcare and local services sectors drove job growth, while the industrial sector sustained job losses as a result of continued manufacturing decline.

The labor force aged 25-54 is growing exclusively in NYC, areas west of the Hudson River and along regional rail corridors, correlating with areas seeing housing development and have transit accessibility to NYC jobs.

Geographic imbalances in jobs, population and housing growth have implications for regional commuting patterns, transit infrastructure, and overall metropolitan economic performance.
Our Region Today: 9.1 Million Households

Note: Total units include vacant units, however, owner- and renter- units referred to occupied units only.
Sources: U.S. Census Bureau Decennial Census 2010; American Community Survey 5-Year Estimates 2012-2016; U.S. Census Bureau Population Estimates Program 2017
Our Region Today: 10.4 Million Jobs, 10% National GDP

Jobs per sq. mile
- < 1,000
- 1,000 – 2,500
- 2,501 – 5,000
- 5,001 – 15,000
- 15,000+

Sources: US Census Bureau Longitudinal Employer-Household Dynamics LODES Work Area Characteristics, JT00 Total Employment 2015; U.S. Bureau of Labor Statistics QCEW County High-Level NAICS-Based Data Files, Annual Average 2017
9 million private sector jobs in diverse mix of sectors

Macro sectors represent aggregations of U.S. BLS 2-digit NAICS-classified industries, mapped at U.S. Census Tract location of employment. Sources: U.S. BLS QCEW NAICS-Based Data Files, 2017 Annual Average Employment; U.S. Census Bureau LODES 2015

NYMTC REGION: 5.2M (59%)

NYC 41%
North NJ 30%
Hudson Valley 9%
Southwest CT 8%
Long Island 12%

NYC 21%
North NJ 13%
Southwest CT 24%
Hudson Valley 23%

1 Dot = 250 jobs
Office-based employment accounts for one-third of private jobs and half of the region’s $682 billion total private sector wages.

### Average Annual Private Employment (millions)

- **Office-based**: 2.73M
- **Education & Healthcare**: 2.02M
- **Industrial**: 1.70M
- **Retail, Leisure & Hospitality**: 2.10M
- **Other Services**: 0.46M

### Total Annual Private Wages ($billions)

- **Office-based**: $354.5B
- **Education & Healthcare**: $109.0B
- **Industrial**: $126.7B
- **Retail, Leisure & Hospitality**: $72.9B
- **Other Services**: $18.9B

#### Note:
Office-based employment includes Information, Financial activities, professional & business services super sectors. Other Includes other and unclassified services.

Source: U.S. Bureau of Labor Statistics QCEW County High-Level NAICS-Based Data Files, Annual Average, rounded.
Our Region Today: An Interconnected Populace

Annual Average Migration
2012 – 2016

60k/year to NYC from Region

95k/year from NYC to Region

Source: IPUMS-USA: 2016 U.S. Census Bureau ACS & PRCS 5-Year samples; Estimates represent average annual flows of all persons age one and over during the survey period (rounded).
Our Region Today: An Interconnected Populace

Commuters In- and Out- of NYC 2015

270,000
from NYC to Region

917k
to NYC from Region

Our Region Today: An Interconnected Workforce

917k commuters to NYC

21% of NYC Labor Force

Where they live

Where they work

- 1 Dot = 100 NYC In-Commuters
- Commuter Rail Lines

Source: IPUMS-USA; U.S. Census Bureau American Community Survey 5-Year Estimates 2012-2016
Our Region Today: An Interconnected Workforce

270k NYers employed outside of NYC
7% of NYC workers

Source: IPUMS-USA; U.S. Census Bureau American Community Survey 5-Year Estimates 2012-2016
The relationship between the city and suburbs is shifting.
Post-recession metropolitan growth on par with other major U.S. metros

△Total Employment Post-Recession 2008 –2017

<table>
<thead>
<tr>
<th></th>
<th></th>
<th></th>
<th></th>
</tr>
</thead>
<tbody>
<tr>
<td>US</td>
<td>141.9M</td>
<td>+9.1M</td>
<td>+1.7%</td>
</tr>
<tr>
<td>NYC Metro</td>
<td>10.3M</td>
<td>+708k</td>
<td>+0.8%</td>
</tr>
<tr>
<td>SF</td>
<td>4.2M</td>
<td>+560k</td>
<td>+1.7%</td>
</tr>
<tr>
<td>Seattle</td>
<td>2.2M</td>
<td>+244k</td>
<td>+1.1%</td>
</tr>
<tr>
<td>Dallas</td>
<td>3.6M</td>
<td>+513k</td>
<td>+1.4%</td>
</tr>
<tr>
<td>Chicago</td>
<td>4.6M</td>
<td>+150k</td>
<td>+0.4%</td>
</tr>
<tr>
<td>Detroit</td>
<td>2.3M</td>
<td>+87k</td>
<td>+0.5%</td>
</tr>
<tr>
<td>MD-D.C.-VA</td>
<td>4.7M</td>
<td>+285k</td>
<td>+0.7%</td>
</tr>
<tr>
<td>Miami</td>
<td>2.7M</td>
<td>+260k</td>
<td>+1.2%</td>
</tr>
<tr>
<td>LA</td>
<td>7.8M</td>
<td>+529k</td>
<td>+0.7%</td>
</tr>
</tbody>
</table>

NYC accounted for 75% of regional private employment gains since 2008

2008 – 2017

+778,495 Private Jobs
+1.1% annual growth

NYC
+584k jobs
+2.1% annual

Hudson Valley
+38k
+0.6%

North NJ
+82k
+0.4%

CT
+4k
+0.1%

Long Island
+71k
+0.8%

Historic balance of economic growth has shifted towards the region’s center

NY Metro Regional Employment, Indexed to 1980

- NYC
- NJ
- LI
- CT
- HV

Represents average annual employment by county, aggregated by subregion for the 31-county area; Source: U.S. Bureau of Labor Statistics Quarterly Census of Employment and Wages (QCEW) County High-Level NAICS-Based Data Files
Boroughs outside of Manhattan contributed significantly to the NYC metro region’s post-recession growth

△2008 – 2017

+778,495 Private Jobs

- Hudson Valley: +38k
- CT: +4k
- Long Island: +71k
- North NJ: +82k
- NYC: +584k jobs
- +269k
- +169k
- +98k
- +36k
- +10k

Outside of NYC, post-recession employment growth driven by healthcare and local services

△Private Employment by Macro Sector 2008-2017

<table>
<thead>
<tr>
<th>Sector</th>
<th>NYC</th>
<th>NJ</th>
<th>LI</th>
<th>HV</th>
<th>CT</th>
<th>Total</th>
</tr>
</thead>
<tbody>
<tr>
<td>Office-based</td>
<td>+155</td>
<td></td>
<td></td>
<td></td>
<td></td>
<td>+131k</td>
</tr>
<tr>
<td>Education &amp; Healthcare</td>
<td>+195</td>
<td>+52</td>
<td>+43</td>
<td></td>
<td></td>
<td>+305k</td>
</tr>
<tr>
<td>Industrial</td>
<td>-84k</td>
<td>-26</td>
<td>-14</td>
<td>-46</td>
<td></td>
<td>+362k</td>
</tr>
<tr>
<td>Retail, Leisure &amp; Hospitality</td>
<td>+194</td>
<td></td>
<td></td>
<td></td>
<td>+37</td>
<td>+12</td>
</tr>
<tr>
<td>Other Services</td>
<td>+36</td>
<td></td>
<td></td>
<td></td>
<td></td>
<td>+64k</td>
</tr>
</tbody>
</table>

Note: Office-based employment includes Information, Financial activities, professional & business services super sectors. Other Includes other and unclassified services. Source: U.S. Bureau of Labor Statistics QCEW County High-Level NAICS-Based Data Files, Annual Average, rounded.
NYC’s post-recession economy diversifying across sectors

Source: U.S. Bureau of Labor Statistics QCEW County High-Level and Industry NAICS-Based Data Files, Annual Average, rounded. Note – no change assumed for counties in which data were not disclosed in 2008 and/or 2017.
Geography of change within the region varied by sector

Office
+132k
+5%

NYC
+155k
+13%

Non-NYC
-24k
-2%

Education & Healthcare
+362k
+22%

NYC
+195k
+28%

Non-NYC
+167k
+17%

Retail, Leisure & Hospitality
+305k
+17%

NYC
+194k
+32%

Non-NYC
+111k
+9%

Note: Employment represents average annual private employment; Office includes finance, technical & business services, and information sector jobs. Source: U.S. Bureau of Labor Statistics QCEW County High-Level and Industry NAICS-Based Data Files, 2008 and 2017, rounded.
Slower wage growth outside of NYC has dampened overall value of regional economic performance

Total Annual Private Wages and Regional Share (2017 $billions)

- NYC: $179 billion, 43%
  - 1990: $179 billion
  - 2000: $264 billion, 46%
  - 2008: $303 billion, 48%
  - 2010: $280 billion, 48%
  - 2017: $346 billion, 51%
  - +31% since 2000

- North NJ: $127 billion, 30%
  - 1990: $168 billion, 29%
  - 2000: $169 billion, 27%
  - 2008: $169 billion, 27%
  - 2010: $160 billion, 27%
  - 2017: $176 billion, 26%
  - +5% since 2000

- HV: $426 billion
  - 1990: $426 billion
  - 2000: $579 billion
  - 2008: $626 billion
  - 2010: $588 billion
  - 2017: $682 billion

- LI: $426 billion
  - 1990: $426 billion
  - 2000: $579 billion
  - 2008: $626 billion
  - 2010: $588 billion
  - 2017: $682 billion

- CT: $426 billion
  - 1990: $426 billion
  - 2000: $579 billion
  - 2008: $626 billion
  - 2010: $588 billion
  - 2017: $682 billion

Metropolitan population change, 1900 to 2017

**Total Population (millions)**

- **NYC**: 8.6M
- **Suburbs**: 14.3M
- **Total**: 23M

**Pop Change by Decade (millions)**

- **NYC**
  - 1900-10: +0.5
  - 1910-20: +1.0
  - 1920-30: +1.5
  - 1930-40: +2.0
  - 1940-50: +1.5
  - 1950-60: +2.5
  - 1960-70: +3.0
  - 1970-80: +1.0
  - 1980-90: +0.5
  - 1990-2000: +0.0
  - 2000-10: +0.5
  - 2010-17: +1.0

- **Suburbs**
  - 1900-10: +0.5
  - 1910-20: +1.0
  - 1920-30: +1.5
  - 1930-40: +2.0
  - 1940-50: +1.5
  - 1950-60: +2.5
  - 1960-70: +3.0
  - 1970-80: +1.0
  - 1980-90: +0.5
  - 1990-2000: +0.0
  - 2000-10: +0.5
  - 2010-17: +1.0

Post-recession growth is concentrated in the inner ring

<table>
<thead>
<tr>
<th>Region</th>
<th>2010 – 2017</th>
</tr>
</thead>
<tbody>
<tr>
<td>Dutchess</td>
<td>-1,920</td>
</tr>
<tr>
<td>Sullivan</td>
<td>-2,060</td>
</tr>
<tr>
<td>Orange</td>
<td>+9,415</td>
</tr>
<tr>
<td>Putnam</td>
<td>-390</td>
</tr>
<tr>
<td>Westchester</td>
<td>+31,130</td>
</tr>
<tr>
<td>Fairfield</td>
<td>+33,090</td>
</tr>
<tr>
<td>New Haven</td>
<td>-2,040</td>
</tr>
<tr>
<td>NYC</td>
<td>+447,565</td>
</tr>
<tr>
<td>% Population Change 2010 – 2017</td>
<td></td>
</tr>
<tr>
<td>&lt; -2.5%</td>
<td>-2.49% – -1.0%</td>
</tr>
<tr>
<td>-0.99% – +1.0%</td>
<td></td>
</tr>
<tr>
<td>+1.01% – +2.5%</td>
<td></td>
</tr>
<tr>
<td>+2.51% – +5.0%</td>
<td></td>
</tr>
<tr>
<td>&gt; 5.0%</td>
<td></td>
</tr>
</tbody>
</table>

Source: U.S. Census Bureau Decennial Census 2010; U.S. Census Bureau Population Estimates Program 2017

+779,630 people region-wide
Labor force grew throughout the region, at pace with U.S. average

ΔLabor Force Participants, Age 16+

- 1 Dot = 50 People gained/lost

+1.5 Million region-wide

Note municipalities with no change represent statistically insignificant net change at the 90% confidence level.

Change represents change between 2000 and average of 2012-2016; Sources: Decennial Census 2000, ACS 2012-2016 5YR Estimates

North NJ
+405k
+12%

Hudson Valley
+125k
+12%

CT
+109k
+11%

NYC
+742k
+21%

LI
+132k
+10%

CT
+109k
+11%

NYC
+742k
+21%

LI
+132k
+10%

Workers Age 65+ as % of Labor Force Gain

- US
- NYC
- North NJ
- CT
- HV
- LI

15% 10% 22% 26% 27% 29%
But few areas outside NYC gained prime-age labor force.

<table>
<thead>
<tr>
<th>Region</th>
<th>Change</th>
<th>Percent Change</th>
</tr>
</thead>
<tbody>
<tr>
<td>Hudson Valley</td>
<td>-21k</td>
<td>-3%</td>
</tr>
<tr>
<td>CT</td>
<td>-23k</td>
<td>-3%</td>
</tr>
<tr>
<td>LI</td>
<td>-37k</td>
<td>-4%</td>
</tr>
<tr>
<td>North NJ</td>
<td>+44k</td>
<td>+2%</td>
</tr>
<tr>
<td>NYC</td>
<td>+439k</td>
<td>+17%</td>
</tr>
<tr>
<td>Region-wide</td>
<td>+401,000</td>
<td></td>
</tr>
</tbody>
</table>

Municipalities with no values represent net change not statistically significant at the 90% confidence level. Change represents change between 2000 and average of 2012-2016. Sources: Decennial Census 2000, ACS 2012-2016 5YR Estimates.
New housing, especially multifamily, is located in NYC & NJ

2010 – 2017

- North NJ: +151k
- Hudson Valley: +25k
- CT: +23k
- LI: +16k
- NYC: +164k
- Total Housing Permits: +378,000 units

1 Dot = 50 units permitted
- in 1-2 Unit Building
- in 3+ Unit Building

Commuter Rail

Grand Central & Penn Station travelshed*:
- within 60 min
- within 90 min

*Travel sheds represent walk & public transit trips only.
Sources: U.S. Census Bureau Building Permit Survey County and Place-level data 2010-2017; NYC Department of City Planning
Regional mismatch between jobs and housing growth


<table>
<thead>
<tr>
<th>Region</th>
<th>Jobs Gained</th>
<th>Housing Units Permitted</th>
</tr>
</thead>
<tbody>
<tr>
<td>NYC</td>
<td>+643k jobs</td>
<td>+390k units</td>
</tr>
<tr>
<td>North NJ</td>
<td>+131k jobs</td>
<td>+361k units</td>
</tr>
<tr>
<td>Long Island</td>
<td>+110k jobs</td>
<td>+60k units</td>
</tr>
<tr>
<td>Hudson Valley</td>
<td>+71k jobs</td>
<td>+84k units</td>
</tr>
<tr>
<td>Connecticut</td>
<td>-16k jobs</td>
<td>+66k units</td>
</tr>
</tbody>
</table>

**Housing Units Permitted**

- NYC: +390k units
- North NJ: +361k units
- Long Island: +60k units
- Hudson Valley: +84k units
- Connecticut: +66k units

**Jobs Gained**

- NYC: +643k jobs
- North NJ: +131k jobs
- Long Island: +110k jobs
- Hudson Valley: +71k jobs
- Connecticut: -16k jobs

**Note:**

- **253k more jobs** than units in Hudson Valley
- **49k more jobs** than units in Long Island
- **217k more units** than jobs in North NJ
- **13k more units** than jobs in Connecticut
- **83k more units** than jobs in NYC
Recent patterns – exceptional or structural?

Source: NY Metropolitan Transportation Council; U.S. Census Bureau Building Permit Survey 2008-2017; NYC Department of City Planning
Recent patterns – exceptional or structural?

Annual Rate of Employment Growth
2000 – 2016

Source: NY Metropolitan Transportation Council; U.S. Census Bureau Quarterly Census of Employment and Wages (QCEW) NAICS-based data files, County High-Level Annual Average Employment 2000 – 2016

<table>
<thead>
<tr>
<th>Region</th>
<th>2000–2016 Actual</th>
<th>2010–2050 Forecasted</th>
</tr>
</thead>
<tbody>
<tr>
<td>NYC</td>
<td>+0.9%</td>
<td>+0.4%</td>
</tr>
<tr>
<td>NJ</td>
<td>+0.2%</td>
<td>+0.5%</td>
</tr>
<tr>
<td>LI</td>
<td>+0.5%</td>
<td>+0.5%</td>
</tr>
<tr>
<td>HV</td>
<td>+0.4%</td>
<td>+0.6%</td>
</tr>
<tr>
<td>CT</td>
<td>-0.1%</td>
<td>+0.5%</td>
</tr>
<tr>
<td>Region</td>
<td>+0.5%</td>
<td>+0.5%</td>
</tr>
</tbody>
</table>
Anticipated growth patterns affect capital planning

<table>
<thead>
<tr>
<th></th>
<th>2010-2017 Employment Change</th>
<th>2010-2050 NYMTC Forecasted Employment Gain</th>
</tr>
</thead>
<tbody>
<tr>
<td>New Jersey</td>
<td>+170k 2010-2017</td>
<td>+799k jobs 2050</td>
</tr>
<tr>
<td></td>
<td></td>
<td>By 2050</td>
</tr>
<tr>
<td>NYC</td>
<td>+662k 2010-2017</td>
<td>+835k jobs 2050</td>
</tr>
<tr>
<td></td>
<td></td>
<td>By 2050</td>
</tr>
</tbody>
</table>

Source: NY Metropolitan Transportation Council; U.S. Census Bureau Quarterly Census of Employment and Wages (QCEW) NAICS-based data files, County High-Level Annual Average Employment 2010 & 2017
To explore the data further visit **NYC Metro Region Explorer**

[Image: A map of the NYC Metro Region Explorer](https://metroexplorer.planning.nyc.gov)