

The Dynamic Population of Manhattan

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Introduction

We cannot understand Manhattan in the 21st century by relying on conventional measures of urban activity. Simply put, Manhattan consists of much more than its residential population and daily workforce. This island, measuring just 22.96 square miles, serves approximately 4 million people on a typical weekday, 2.9 million on a weekend day, and a weekday night population of 2.05 million. Manhattan, with a residential population of 1.6 million more than doubles its daytime population as a result of the complex network of tunnels, bridges, railroad lines, subways, commuter rail, ferry systems, bicycle lanes, and pedestrian walkways that link Manhattan to the surrounding counties, cities and towns.

This transportation infrastructure, largely built during the twentieth century, is operated by the City of New York, Metropolitan Transportation Authority, and Port Authority of New York & New Jersey. The infrastructure network generates a constant flow of people who are responsible for Manhattan's emergence as a world capital for finance, media, fashion, and the arts.

The residential population count does not include the 1.6 million commuters who enter Manhattan every weekday, or the hundreds of thousands of visitors who use Manhattan's tourist attractions, hospitals, universities, and nightclubs. This report analyzes the volume of people flowing in and out of Manhattan during a 24-hour period; we provide an upper estimate of the actual number of people in Manhattan during a typical work day.

Manhattan: A city of 4 million

- **Manhattan's daytime population is approximately 3.94 million; the census-defined daytime population omits almost one-fourth of the total, or nearly 800,000 people.** The daytime population consists of approximately 1.61 million commuting workers, 1.46 million local residents, 404,000 out-of-town visitors, 374,000 local day-trip visitors, 17,000 hospital patients, and 70,000 commuting students.
- **52% of Manhattan's Census-defined daytime population consists of individuals who do not live in Manhattan and commute there for work.** Every day, 1.63 million commuters enter Manhattan for work, while 132,000 Manhattan residents commute elsewhere for work

- According to the US Census definition of “daytime population,” there are approximately **3.1 million** people in Manhattan during the work day, compared to a residential population of **1.6 million** people at night.
- **The weekend daytime population of Manhattan is approximately 2.9 million people**, with 565,000 commuting workers and 1.54 million local residents; **the weekday night time population is at most 2.05 million**, suggesting that there could be up to 471,000 more people in Manhattan at night consisting of late night workers, "night-trip" visitors from the outer boroughs and suburbs, hospital patients, and overnight visitors, in addition to the 1.58 million local residents.
- The total **number of people in Manhattan can vary dramatically at different times of the day and week**. Population estimates based on the US Census measure the residential population of each neighborhood, but the population density of key areas of Manhattan are substantially greater during the day with the inflows of commuters, and certain neighborhoods attract visitors at night in far excess of the residential population.
- Peak population events, or “day-trip” events, draw in people from across the city and region could potentially push Manhattan’s daytime population well above 4 million, perhaps even 5 million, depending on the conditions and circumstances.
- **Manhattan has the greatest increase in population during the day among all U.S. counties or administrative equivalents (+1.49 million)**, and the highest ratio between day and night population (1.92), which suggests that there are nearly double as many people in Manhattan during the day than at night during a typical work day.
- **Queens, Brooklyn, and The Bronx, in that order, have the greatest decrease in population during the day of all U.S. counties**; there are approximately 366,000 fewer people in Queens during the day than at night.
- **Four out of every five Manhattan-bound commuters from the outer boroughs and suburbs travel to work by public transit each day**: 50.1% by subway, 17.1% by rail, and 13.8% by bus. Recent trends in subway ridership indicate that the greatest increase in trips by time of day over the past decade occurred during late night hours, from 7 PM to 6 AM, and during weekends, highlighting that **population flows into, out of, and within Manhattan are no longer occurring only at peak commuting hours**.
- Manhattan’s capacity to accommodate high volumes of population flow allows it to serve as the **transaction-maximizing** place (Meier, 1968).

The Census-defined Daytime Population

The U.S. Census Bureau's definition of "total population" is based on where people live; planners traditionally analyze demographic data from the metropolitan level to the census block level based on residential population. An understanding of the actual number of people in Manhattan, or any other major commuting district, during the day is critical for planners, developers and transportation agencies. Measuring the flow of people during daytime hours in Manhattan and the actual day and night population of commuters, residents, visitors, and students is essential given the changing pattern of work and life in the 21st century. Admittedly, the U.S. Census Bureau does provide a formula used to approximate its definition of daytime population for large geographic areas:

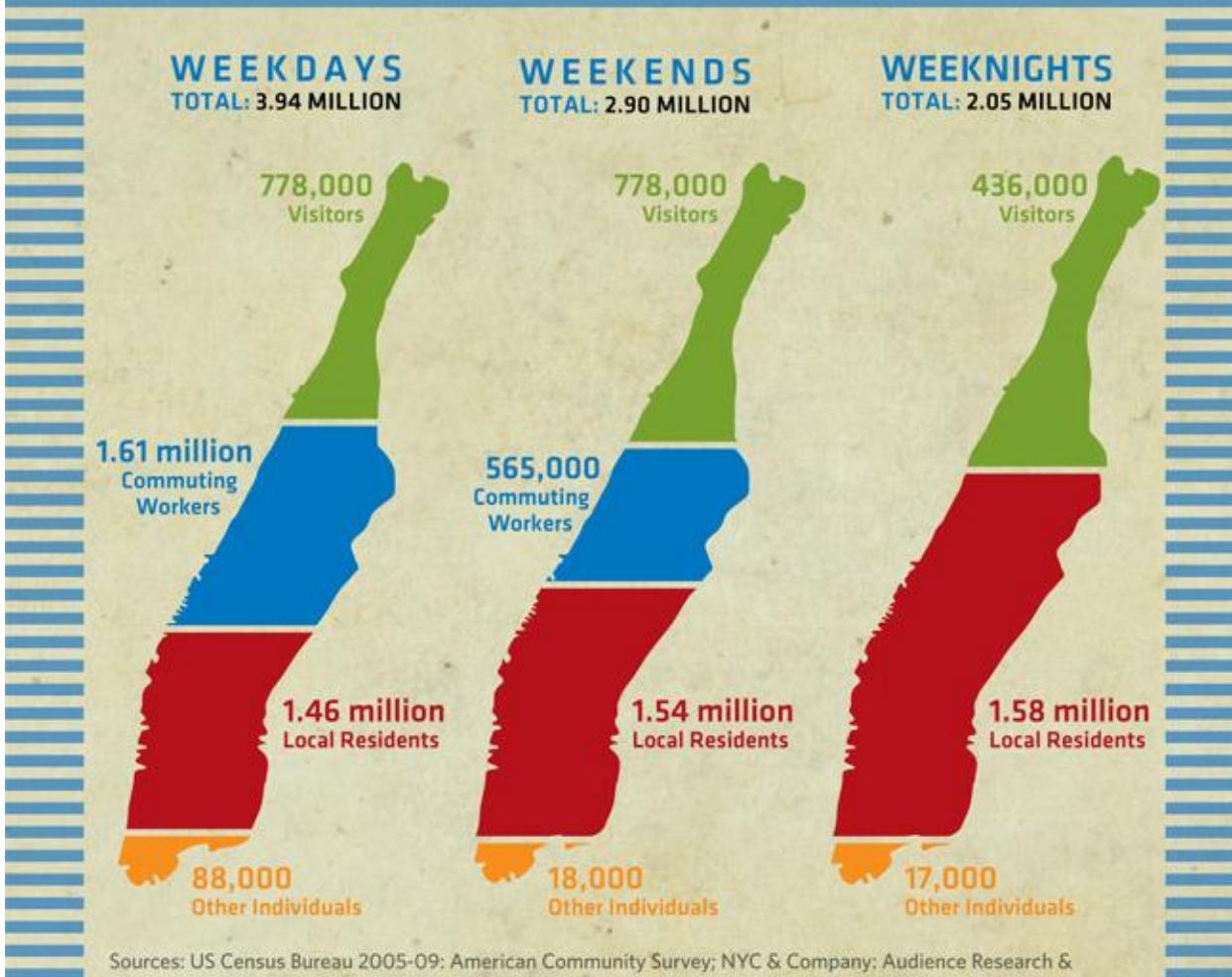
$$\begin{aligned} & (\text{Number of workers} - \text{Workers living in the area}) \\ & + \\ & (\text{Total Population} - \text{Residents working outside the area}) \end{aligned}$$

The smallest census geographies that this formula can be applied to, based on the most recent American Community Survey population and worker estimates, are counties and census-designated places (CDPs). The census-defined daytime population does not include other key segments of the population, such as commuting students and overnight and day-trip visitors to a given geographic area. It only captures the change in daytime population due to commuting for work.

Estimating the Actual Daytime Population

Manhattan's population varies by type of day and night, and encompasses far more people than those who simply live or work on this island, as the following table indicates.

MANHATTAN'S DYNAMIC POPULATION



THE NYU/WAGNER RUDIN CENTER FOR TRANSPORTATION

By measuring the actual daytime population in Manhattan, it is clear that the Census-defined daytime population ignores up to 25% of the actual population. The table below provides a more detailed summary of each group of people included in these estimates: commuting workers, local residents, out-of-town visitors, day-trip visitors, hospital patients, and commuting students.



WEEKDAY DAYTIME POPULATION, 2010

Estimate	Commuting workers	Local residents	Out-of-town visitors	Day-trip Visitors	Hospital users	Commuting students	TOTAL
Upper	1.61 million	1.46 million	404,256	374,223	18,236	70,054	<u>3.94 million</u>

Census defined daytime population = 3.07 million. Based on upper estimate, that figure is an undercount of 940,000



WEEKEND DAYTIME POPULATION, 2010

Estimate	Commuting workers	Local residents	Out-of-town visitors	Day-trip Visitors	Hospital users	Commuting students	TOTAL
Upper	564,665	1.54 million	404,256	374,223	18,236	0	<u>2.90 million</u>

Census defined weekend daytime population = 2.14 million. Based on upper estimate, that figure is an undercount of 880,000



WEEKNIGHT POPULATION, 2010

Estimate	Night-shift Commuters	Local residents	Out-of-town visitors	"Night-trip" visitors	Hospital users	Commuting students	TOTAL
Upper	17,747	1.58 million	404,256	31,863	17,260	0	<u>2.05 million</u>

Census defined nighttime population = number of local residents, or 1.62 million. Based on upper estimate, that figure is an undercount of 550,000

Sources: US Census Bureau 2010 American Community Survey, NYC & Company, Audience Research & Analysis, US News and World Report, New York University

The figures above represent the upper estimates of day, weekend, and night populations in Manhattan: recent Census data indicated that on any given day of the week, no more than 83% of workers actually commute to work. Flexible scheduling and telecommuting have made the journey to work less rigid, as the percent of the labor force at work and commuting to work have both declined nationwide during weekdays since 1996, according to the Census Bureau's Survey of Income and Program Participation. Based on the proportion of American workers at work and commuting to work for each day, the following table was generated to illustrate the fluctuations in daytime population by day of the week, peaking on Wednesday with a total of 3.685 million.

<i>Manhattan's Daytime Population by Day of the Week</i>							
Group	Sun.	Mon.	Tue.	Wed.	Thu.	Fri.	Sat.
Commuters*	219,050	1,321,118	1,338,155	1,339,683	1,332,436	1,297,815	322,172
Residents	1,568,252	1,479,596	1,478,225	1,478,102	1,478,685	1,481,470	1,559,956
Visitors	778,479	778,479	778,479	778,479	778,479	778,479	778,479
Other	18,236	88,290	88,290	88,290	88,290	88,290	18,236
UPPER ESTIMATE	2,584,000	3,667,000	3,683,000	3,685,000	3,678,000	3,646,000	2,679,000

*Estimate of commuting workers is based on the percent of U.S. workers who travel to work by day of week, according to 2008 Survey of Income and Program Participation data.

Sources: US Census Bureau 2005-09 American Community Survey, 2008 Survey of Income and Program Participation, NYC & Company, Audience Research & Analysis, US News and World Report, New York University

Daytime Population Density

An analysis of tract-to-tract worker flow data from the 2000 Census Transportation Planning Package indicates that census tracts in Midtown and Financial District (typically less than one-tenth of a square mile) have up to 70,000 commuters and residents in skyscrapers and office buildings during the day with a population density of up to 980,000 people per square mile (to achieve an equivalent level of density for all of Manhattan, the entire population of Texas would have to relocate to the borough)ⁱ. If visitors staying in hotels or touring nearby neighborhoods were included, the number of people per square mile could even exceed 1 million in several of these tracts. While density has often been cited as one of the most distinctive features of Manhattan, the actual population density of the most active neighborhoods during the day could still be many times greater when factoring in the 2.5 million total Manhattan workers and other visitors to the city inhabiting the city's offices and hotels.

The transformation of Manhattan's neighborhoods, such as Tribeca, Soho and West Chelsea, from manufacturing to residential uses has contributed to new levels of activity as bars, galleries, restaurants, and nightclubs have emerged in what were once industrial enclaves. The dispersion of a diverse range of activities across Manhattan has enabled it to attract up to 2.5 million non-residents each day.

Peak Population Events

Manhattan also hosts special events and celebrations that attract millions of additional people from across the city, region, and beyond. While the visitor counts from the figures above (pp. 4-6) are upper estimates, they only represent average counts (see Methodology, p. 18) and do not represent the peak number of visitors to Manhattan, which of course fluctuates greatly over the course of a week or month. These high-volume “day-trip” events that draw in people from across the city and region could potentially push Manhattan’s daytime population well above 4 million, perhaps even 5 million, depending on the conditions and circumstances.

A recent example of this type of event was the New York Giants ticker-tape parade in Lower Manhattan in February 2012: an estimated 1 million Giants fans from across the city and region attended the event, with an estimated one-third of them coming in from outside the city as entire families took the day off from work and school to celebrate the Giants 2012 Super Bowl victory, according to city officials. If we were to assume that:

- 1) One-third of Giants fans coming from outside the city do not work or attend school in Manhattan,
- 2) Another one-third of Giant fans were neither Manhattan residents nor Manhattan workers,
- 3) There was a normal Tuesday inflow of commuters and visitors to Manhattan and that none of these individuals attended the parade,

then the daytime population of Manhattan on February 7, 2012 was approximately 4.35 million, much more than the 3.68 million that are usually in Manhattan on a regular Tuesday. Overall, there was an overnight inflow of 2.3 million. What’s more, the daytime population density figures for census tracts along the Canyon of Heroes are among the highest in the nation with 700,000 to 1 million people per square mile, so Manhattan’s multimodal network of subways, buses, trains, ferries, and taxis was essential in accommodating huge numbers of people during one of the busiest morning commutes of the week. Events such as these serve as reminders that although the daytime population figures summarized above are considered “upper estimates,” they are only upper estimates of a regular weekday, weeknight, or weekend in Manhattan, and do not represent the absolute peak population and carrying capacity that Manhattan is capable of temporarily sustaining. The table below summarizes recent peak population events and the estimated daytime population of Manhattan using the same methodology listed above.

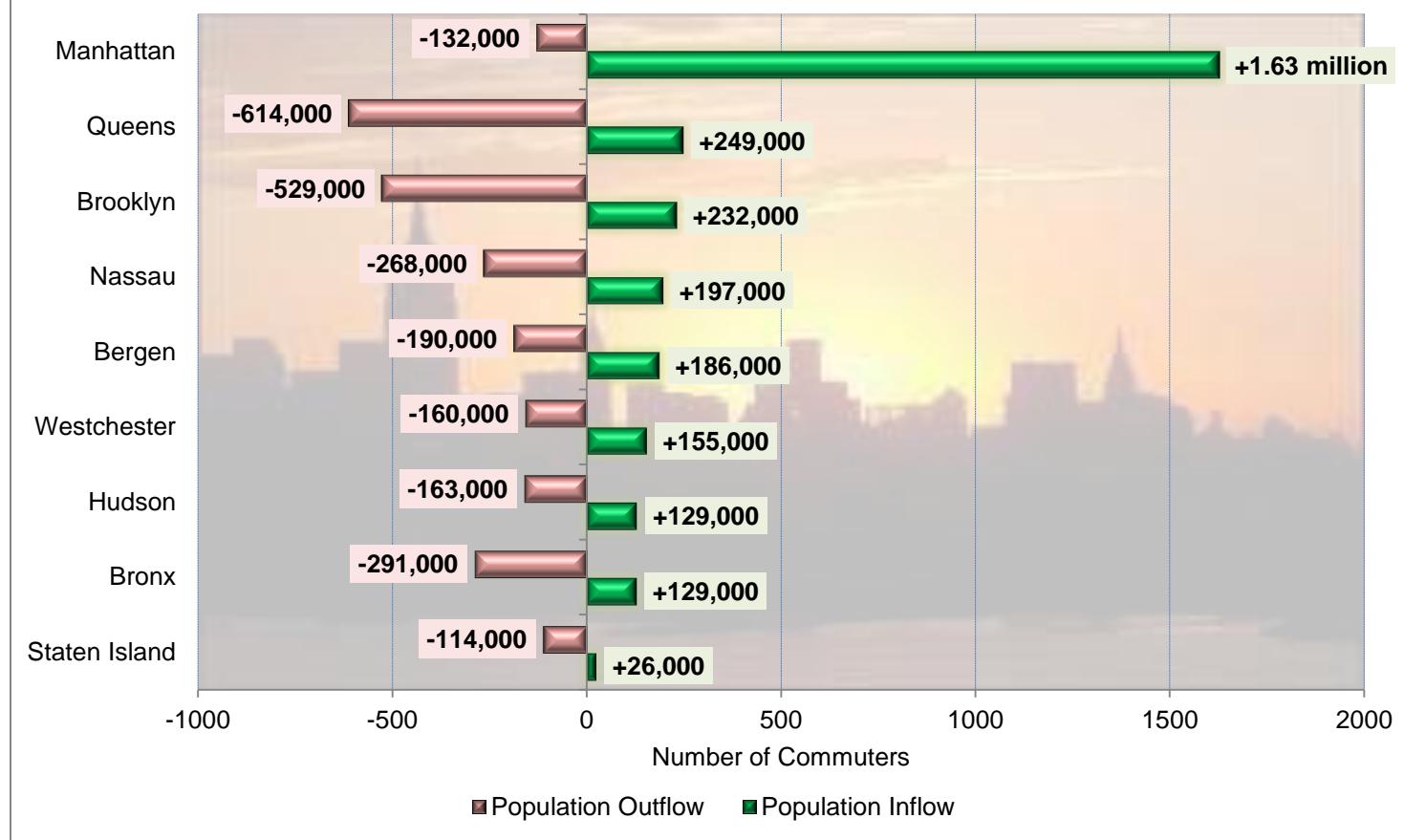
<i>Recent Manhattan Peak Population Events</i>			
<i>Event</i>	<i>Date</i>	<i>Estimated Attendance</i>	<i>Estimated Daytime Manhattan Population</i>
2012 New York Giants parade	Tue., February 7, 2012	1 million	4.35 million
2011 New Year's Eve ball drop	Sat., December 31, 2011	1 million	3.35 million
2011 Macy's Thanksgiving parade	Thu.* , November 24, 2011	3.5 million	5.01 million
2009 New York Yankees parade	Fri., November 6, 2009	1.5 million	4.65 million

*Event occurred on a holiday: treated as a Saturday instead.

Manhattan as an Urban Activity District

Manhattan's complex and extensive transportation network makes it possible for this island to overcome its geographic obstacles and to bring more than 1.5 million people to work every weekday. Population inflows in Manhattan far exceed those of other nearby counties, and as the chart below indicates, the volume of the daily inflow exceeds that of all four outer boroughs and the four additional inner-ring counties combined:

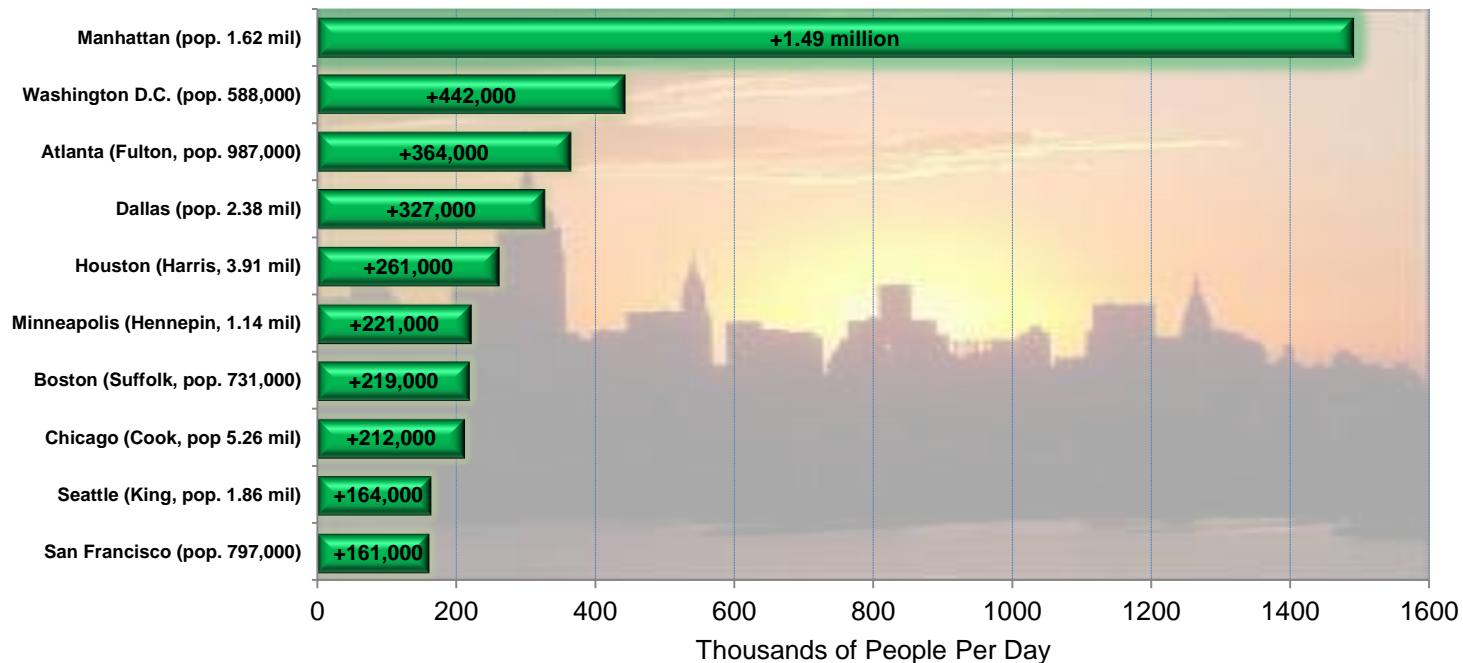
Weekday Commuting Flows by County/Borough, 2009



Source: 2005-09 American Community Survey, US Census Bureau

Manhattan's net population increases by 1.49 million people during the weekday, while New York City's outer boroughs lose hundreds of thousands of residents who are commuting into the central business districts in Manhattan every morning. In contrast, the city's inner ring suburbs experience a more balanced inflow and outflow of commuters during the day. The charts below also illustrate the magnitude of these population inflows and outflows when compared to other regions in the nation. Manhattan has a net population inflow more than three times greater than that of Washington, D.C., the county with second highest net inflow (Figure 1, Appendix). The three greatest net population outflows by county in the entire U.S. are all among the city's outer boroughs, facilitated by an extensive mass transit network that serves millions of people per day (Figure 2).

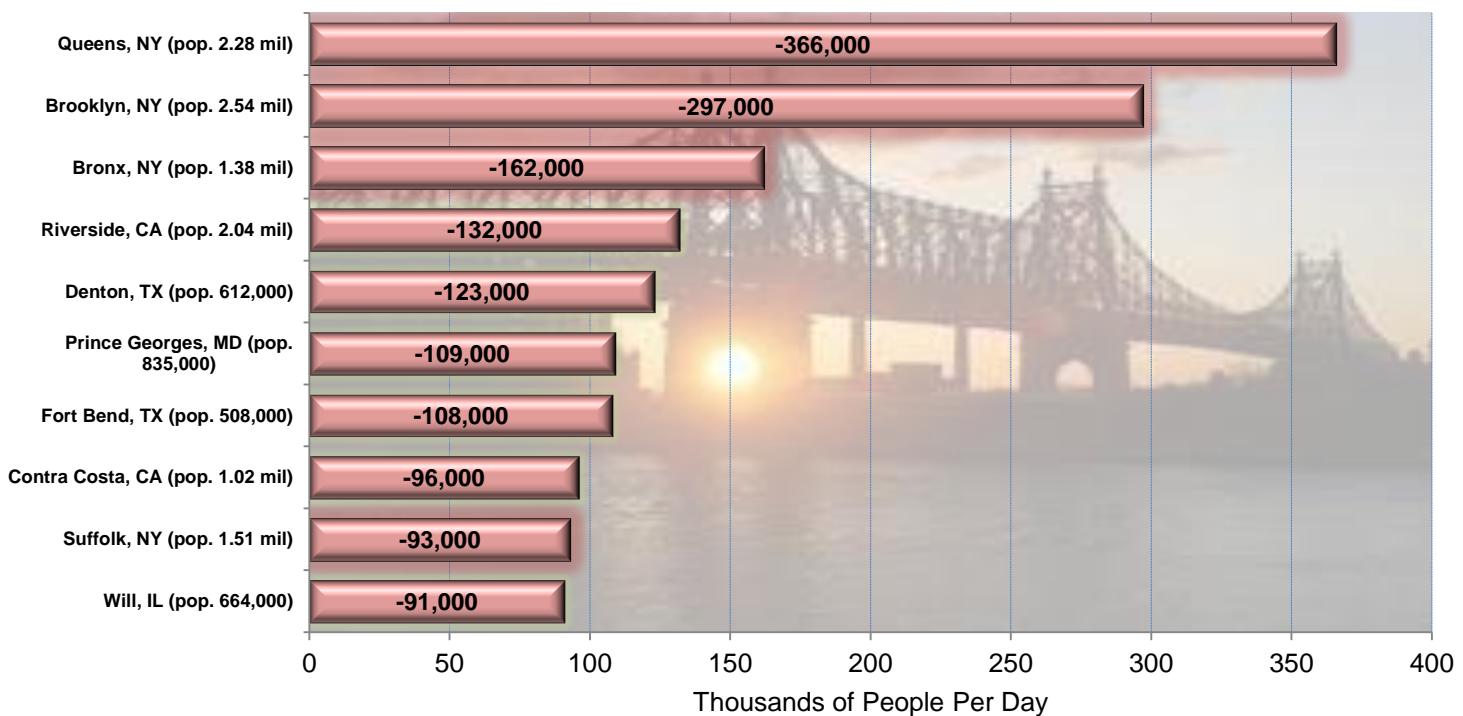
Top 10 Work Day Population Increases by County, 2009



NOTE: Population figures on Y-axis represent residential population figures.

Source: 2005-09 American Community Survey, US Census Bureau

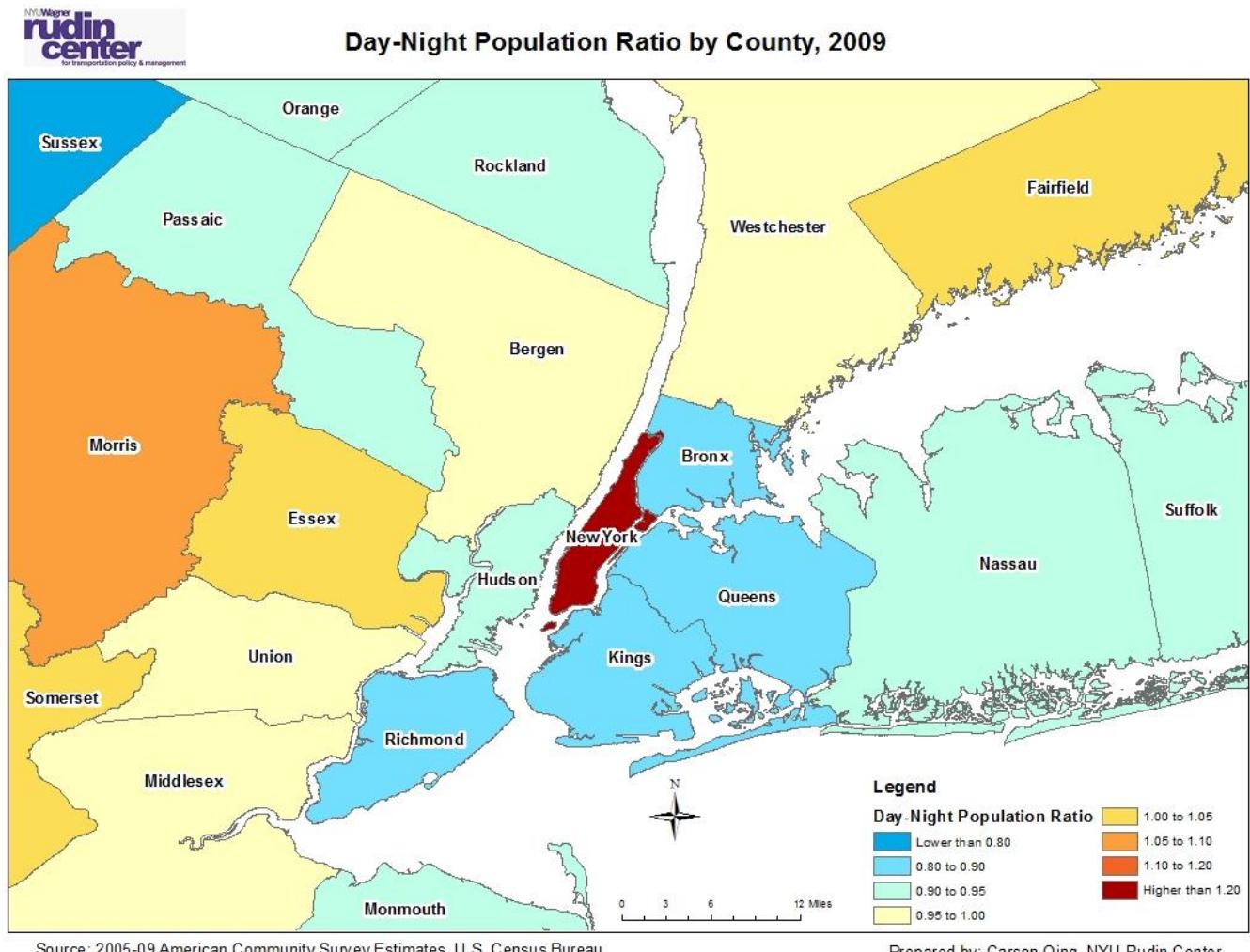
Top 10 Work Day Population Decreases by County, 2009



NOTE: Population figures on Y-axis represent residential population figures.

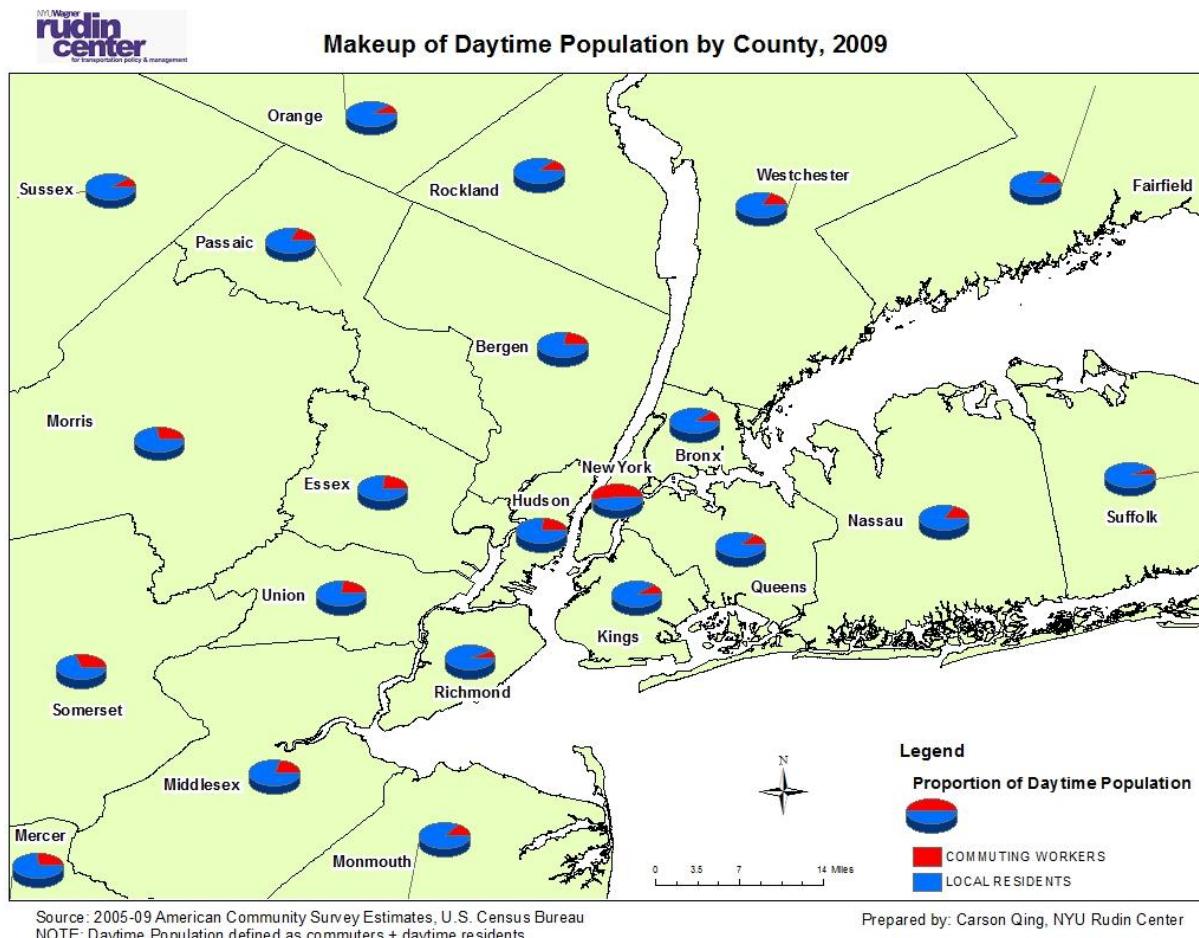
Source: 2005-09 American Community Survey, US Census Bureau

The ratio between day and night populations in Manhattan is also the highest in the nation at 1.92; its population nearly doubles after sunrise (Figure 3). The map below also shows that all but four other counties in the New York metropolitan area lose population during the day. (The exceptions are Fairfield County in Connecticut and Essex, Morris, and Somerset counties in New Jersey.)



The characteristics of Manhattan's population also change dramatically during the day, as more than half of the daytime population consists of commuters. This is not unusual, as other cities such as Washington, D.C. and Arlington, Virginia (home of the Pentagon, the largest office building in the world) have a similar share of commuting workers among the population during the day (Figure 4). However, the map below shows that Manhattan is the only part of the New

York City region that has such characteristics, as inflowing commuting workers consist of less than a quarter of the Census-defined daytime population in most other counties.

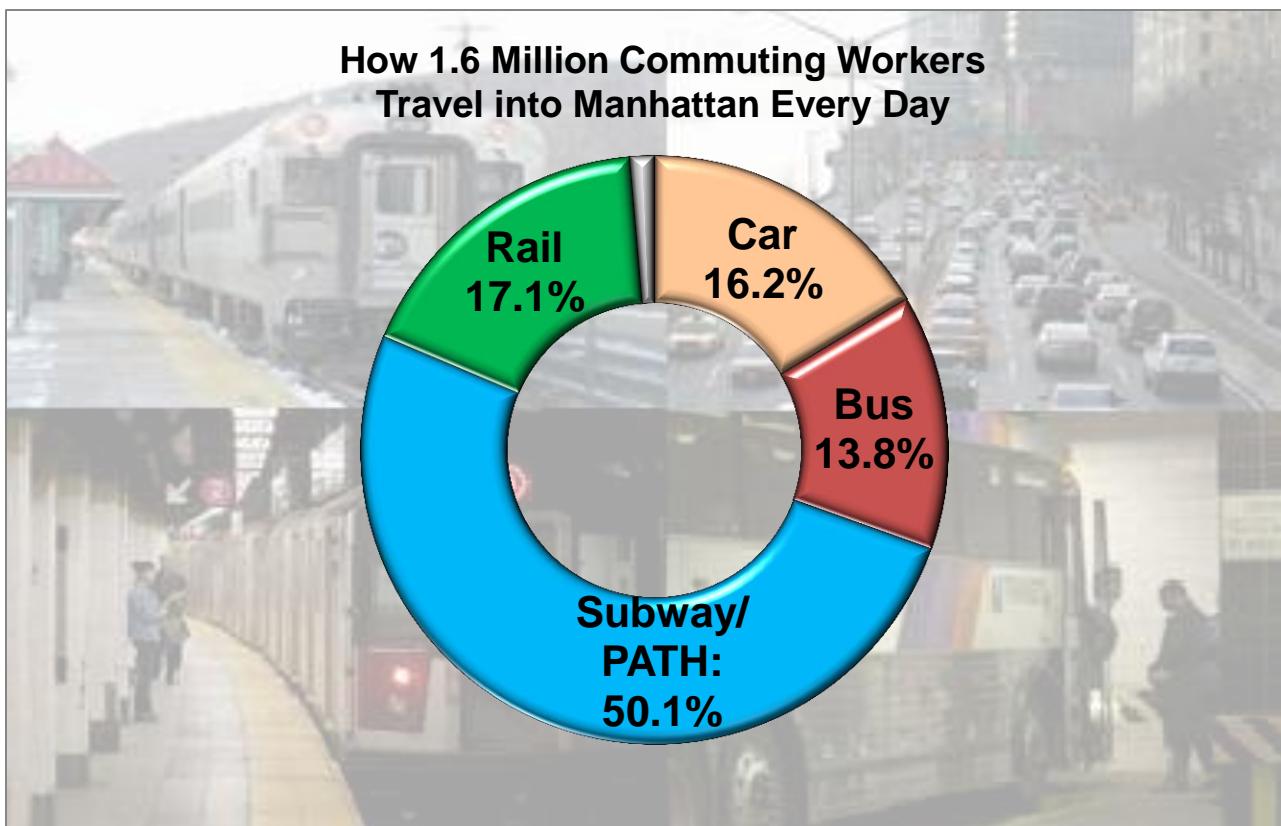


Source: 2005-09 American Community Survey, US Census Bureau

How Commuters Arrive in Manhattan

Manhattan is able to accommodate an inflow of 1.6 million commuters per day from the outer boroughs and suburbs because of the extensive transportation and mass transit network that includes bridges, tunnels, subways, trains, buses, and ferries. According to New York Metropolitan Transportation Council (NYMTC) estimates, Manhattan-bound subways carried 389,000 passengers during the peak hour of the morning commute (8:00 AM) on an average fall work day into the Manhattan central business district; roughly 6,480 commuters entered the Manhattan CBD *per minute* by subway during the peak commuting hourⁱⁱ. The chart below

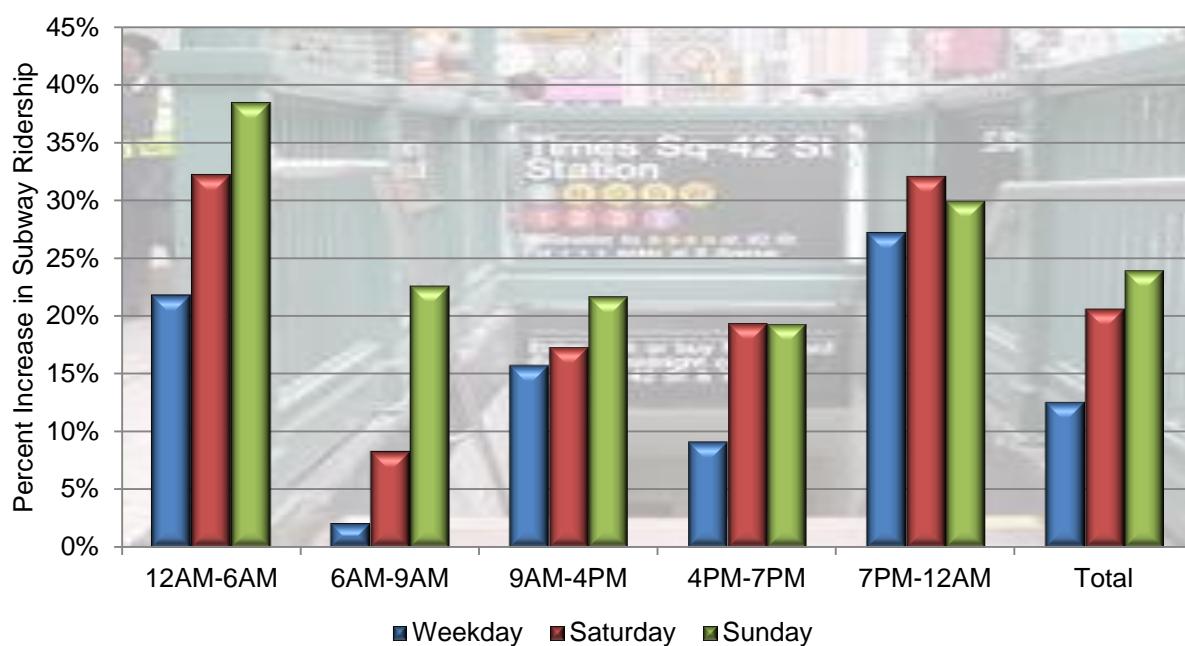
shows Census journey to work data on how the 1.6 million commuting workers who do not live in Manhattan travel into the borough: 82% of Manhattan-bound commuters take public transit to work, and 50% of inflowing commuters use the subway as their primary means of travel from the city's outer boroughs, or from Newark, Jersey City, and Hoboken via PATH. In comparison, commuting trips among Manhattan residents is more multimodal in nature, since the lengths of commutes are more manageable, and residents also have better access to the city's extensive taxi and limousine network. (About 58% of Manhattan residents travel to work regularly by mass transit, as they are more likely to walk or bike to work given their shorter commute lengths.) These figures demonstrate the vital role of commuter systems and mass transit – moving huge numbers of people from the outer boroughs and counties into Manhattan each morning and out of Manhattan each evening.



Source: 2005-09 American Community Survey, US Census Bureau
 *NOTE: Assumes that all Manhattan residents travel to jobs in Manhattan

Although rush hour subway trips still account for slightly less than half of its total weekday ridership volume, recent data from the MTA indicates that ridership during off-peak hours, particularly during late nights, is growing faster than during the day. On weekends, the greatest increase in ridership was between 7 PM and 6 AM, suggesting that the mass transit system is serving far more than the traditional weekday journey to work.

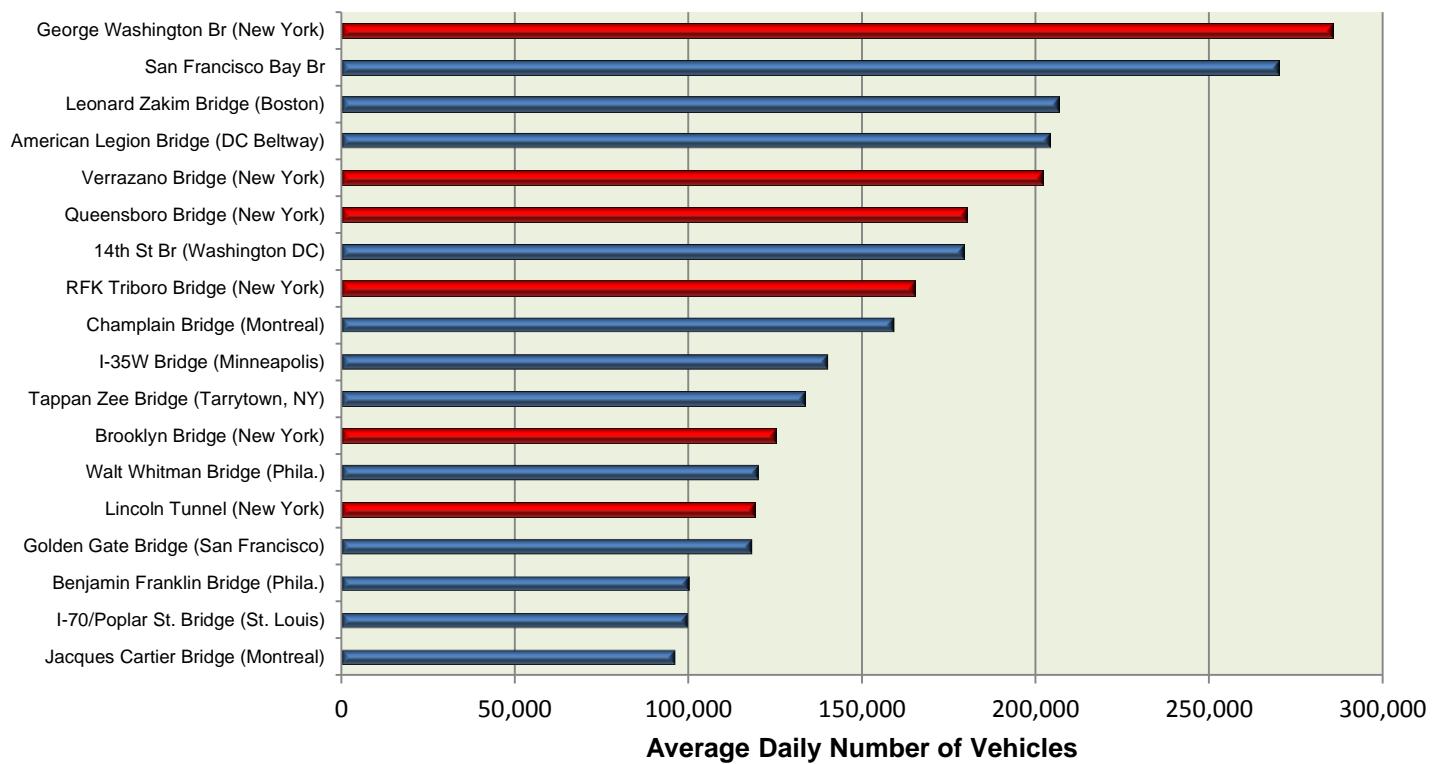
Increase in Subway Ridership by Time of Day, 2001-10



Source: Metropolitan Transportation Authority (2011)

One of every six commuting workers drives to work in Manhattan; the bridge and tunnel connections are of vital importance in serving the inflow of 1.6 million people per day; each crossing serves up to hundreds of thousands of vehicles daily. The George Washington Bridge and the Lincoln Tunnel are among the busiest bridges and tunnels in the world; the chart below compares the average daily traffic flow of major New York City bridges and tunnels to those in other North American cities.

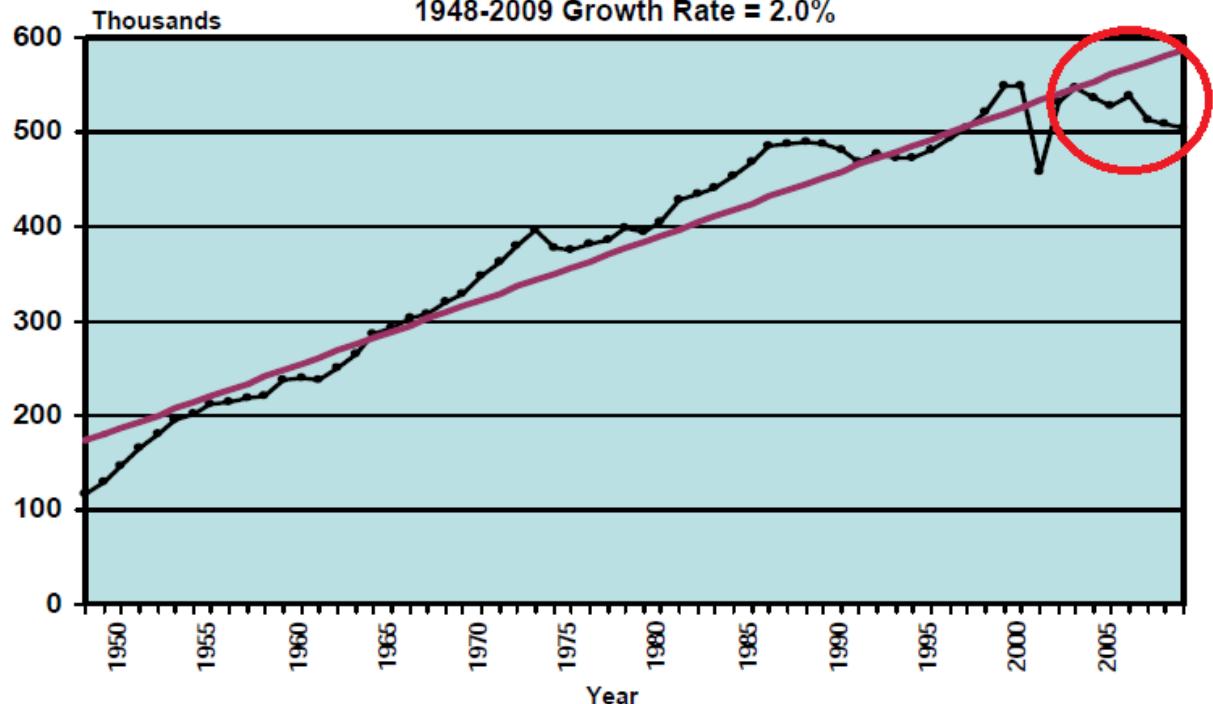
Daily Traffic on Major Bridges & Tunnels, 2009



Sources: New York State and City Departments of Transportation and Bridge Authorities

During the past decade, the daily flows of vehicular traffic have declined for most of the major bridge and tunnel crossings into Manhattan, according to the New York City Department of Transportation. In fact, while Census data has indicated the number of Manhattan-bound commuters from Northern New Jersey grew by 21% since 2002, average daily vehicular traffic flow for the Hudson River crossings actually declined over a period longer than five years for the first time since records were kept, starting in 1949. In contrast to the 5% decline in vehicular traffic, NJ Transit ridership has increased by about 24% during this same period, according to American Public Transportation Association ridership statistics. Additionally, PATH ridership reached an all-time high of 76.6 million commuter trips in 2011, according to Port Authority estimatesⁱⁱⁱ.

Average Daily Traffic Volumes Total of 3 Manhattan P.A.N.Y.N.J. Facilities



Purple line represents the best-fit line based on average daily traffic volumes in both directions for the three Port Authority-operated Hudson River crossings by year.

Source: New York City Department of Transportation 2009 Screenline Report (2010)

Manhattan as a Transaction-Maximizing Place

A city is a means of maximizing social transactions, and population density “stimulates transactions between individual actors,” (Meier, 1968). The capacity of a city to generate a high volume of transactions during short periods of time is an indicator of its power, influence, and economic vitality^{iv}. Amin and Thrift (2002) also identified the dense network of “light institutions” as important components of sustaining the volume of transactional activities in central cities^v. These light institutions include service providers, whether it be financial, professional, administrative, transportation, information, etc., that are easily accessible for firms and clients. Technology start-ups in Manhattan’s Flatiron District, for example, are within walking distance or

a short subway trip from the financial institutions and advertising and marketing firms that are concentrated in Midtown.

Another institution that serves to organize and incubate transactional activities in central cities is, according to Amin and Thrift (2002), the meeting place. This includes restaurants, hotels, convention centers, cultural institutions, and entertainment venues, and, like service providers, the spatial distribution of these amenities across Manhattan is also characterized by density and accessibility. These are hubs where millions of commuting workers, local residents, and visitors interact with each other, during the day and at night, providing the city with an energy generated from the exchange of ideas and knowledge through social interactions. Manhattan's status as transaction-maximizing place is made possible by its remarkable carrying capacity, its ability to sustain a daily inflow of millions of people who come to the city for a variety of different purposes. These underpinning theories provide the basis for this study of the volume and characteristics of the dynamic population of Manhattan.

Manhattan as a City of Diverse Flows

Manhattan's daytime population is incredibly diverse, with 40% as commuting workers, 38% as local residents, and 20% as visitors, illustrating the mixture of primary uses that the city provides. However, the weeknight population consists of not only the residential population of 1.58 million, but also an additional 550,000 people, who are primarily visitors to the city staying in hotels or enjoying the city's nightlife amenities. The nighttime population is also becoming increasingly mobile during late-night hours, as subway ridership data from the MTA has revealed that late-night, off-peak travel has increased faster than that of any other time of day over the past decade. In addition, weekend subway ridership has just reached its highest level since 1947^{vi}.

The Challenge for Future Measures of Activity

A handful of cities such as London, Tokyo, and Osaka have released detailed daytime population data, but they are the exceptions to the norm: few cities take have released such estimates to the public. As cities become centers of higher education and health care as well as office and business hubs, we must develop new ways to measure the activities that occur with

them. Clearly, the cities of the 21st century will not resemble those of the 19th and 20th century, and it is essential to recognize the need for new methods to understand the vital functions and number of people who rely on cities, even if they neither live nor work there.

Methodology

The method of developing these daytime population estimates required the following assumptions, definitions, considerations, and conditions:

Commuters and Local Residents:

1. Calculations of the upper estimate of daytime population assumed that all workers commute to work during a typical work day.
2. Local residents do not leave Manhattan during the day except those who commute to jobs elsewhere.
3. The Bureau of Labor Statistics' American Time Use Survey data revealed that 35% of Americans work at least one day on the weekend; this percentage was used to estimate the number of commuting workers during a typical weekend day.
4. 2005-09 American Community Survey estimates from the U.S. Census Bureau revealed that 1.1% of Manhattan workers arrived at work between 12:00 am and 5:00 am. These were classified as "night-shift" workers, and were used to estimate the number of commuting workers in the night population.
5. The number of commuters and local residents per day of the week was developed based on the percent of Americans who responded that they commuted to work by a given day of the week (2008 Survey of Income and Program Participation).

Visitors:

The total number of visitors was the most challenging to estimate due to limited data and information on their characteristics. Currently, NYC & Company estimates that in 2010, there were 40.8 million tourists to Manhattan. However, this excludes day-trip visitors living within a 50-mile radius of Manhattan who do not stay overnight. Currently, there is no reliable or precise measure of the number of day-trip visitors per year to New York City.

1. Upper estimates were based on the number of NYC & Company-defined visitors during peak season, and the number of day-trip visitors.

2. According to NYC & Company definitions, all “tourists” are overnight visitors or day-trip visitors who do not live within a 50-mile radius of Manhattan. NYC & Company also estimates that international visitors stay 7.3 days, on average, in New York City, and that domestic visitors stay 2.7 days on average, amounting to 148 million total person-days in 2010 among Manhattan visitors. That number was divided by 365 to determine the total number of NYC & Company-defined visitors per day in Manhattan, classified as “out-of-town visitors.”
3. The number of day-trip visitors was estimated to be 374,223, based on an Audience Research & Analysis study of New York City’s \$9 billion nightlife industry. Their study revealed that 77% of non-Manhattan resident nightlife attendees in 2004 were day-trippers from the outer boroughs and suburbs, and 23% were NYC & Company tourists from beyond the metropolitan region. Using this metric, the number of day-trip visitors was assumed to be, at most, 3.1 times greater than the number of NYC & Company-defined visitors.
4. The proportion of day-trip visitors and out-of-towners among all Manhattan visitors is likely to fluctuate during the year. Also, different attractions draw different types of audiences. The Broadway League estimates that only 30% of its theatre attendees were day-trippers, while 70% were NYC & Company tourists. However, since this study aims to provide an upper estimate of Manhattan’s daytime population, it will assume that up to 77% of leisure visitors to Manhattan are day-trippers from within a 50-mile radius of Manhattan.
5. The number of night-trip visitors was based on an estimate of the percent of non-Manhattan resident nightlife attendees who live in the outer boroughs and suburbs. For calculations of the upper estimate, the study assumed that night-trip visitors do not stay overnight, and thus are not counted as a NYC & Company-defined visitor.
6. The number of visitors in Manhattan was assumed to be evenly distributed by day of the week, due to data limitations.

College Students, Hospital Patients, etc.:

This study also developed an upper estimate of the number of hospital patients in Manhattan and college students, who attend classes in Manhattan universities, yet do not live in Manhattan.

1. It was assumed that each hospital bed can hold one person, and each outpatient procedure conducted at a hospital during the year was for an individual person.
2. At the upper estimate, all beds are filled to capacity and 75% of beds and outpatient procedures are for non-Manhattan residents
3. All individuals undergoing outpatient procedures leave the hospital and Manhattan during the night. The number of outpatient procedures is constant for all days during the year.
4. All individuals undergoing outpatient procedures or overnight stays at hospitals were assumed to be accompanied by one other individual.
5. Commuter students are defined as those living in off-campus residences outside Manhattan.
6. The proportion of commuting students who do not live in Manhattan was assumed to be 41% at the upper estimate, based on the proportion of NYU students who were classified as “commuter students.” These proportions were used to compute the number of commuter students among the 184,000 university students in all of Manhattan’s major educational institutions.
7. Commuting workers who do not arrive at work during the “graveyard shift,” day-trip visitors who are not nightlife attendees, commuting students, and non-Manhattan residents undergoing outpatient procedures during the day were assumed to be zero for night population estimates.
8. Local residents, overnight visitors, and hospital patients were assumed to be at their residences, hotels, and hospitals during nighttime hours.

Appendix: Additional Charts and Tables

FIGURE 1

<u>Top 10 Daytime Population Increases by County</u>	
County or Administrative Equivalent	Increase in Daytime Population
1. Manhattan, NY	1,490,000
2. District of Columbia	442,000
3. Fulton (Atlanta, GA)	364,000
4. Dallas, TX	327,000
5. Harris (Houston, TX)	261,000
6. Hennepin (Minneapolis, MN)	221,000
7. Suffolk (Boston, MA)	219,000
8. Cook (Chicago, IL)	212,000
9. King (Seattle, WA)	164,000
10. San Francisco, CA	161,000

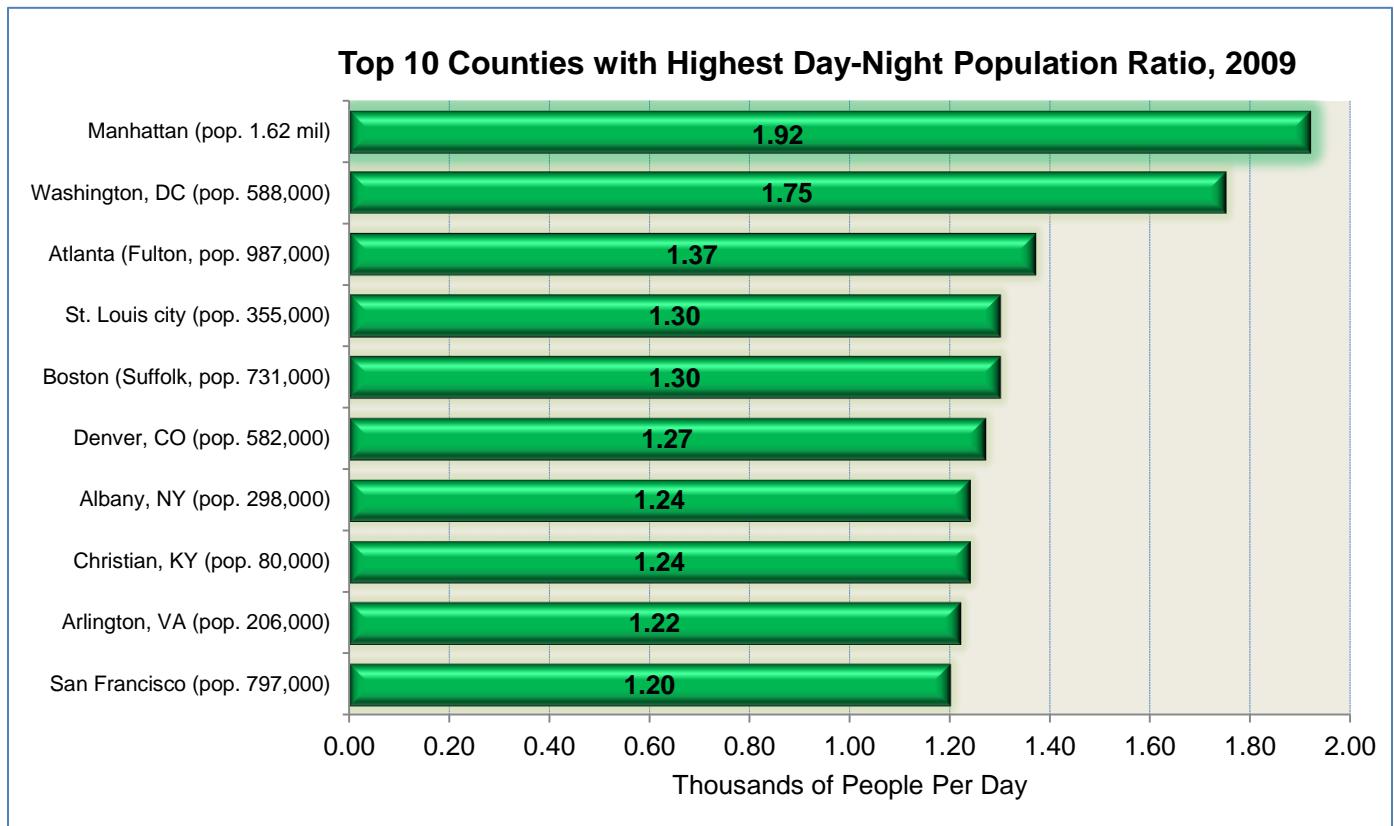
Source: 2005-09 American Community Survey, U.S. Census Bureau

FIGURE 2

<u>Top 10 Daytime Population Decreases by County</u>	
<i>County or Administrative Equivalent</i>	<i>Decrease in Daytime Population</i>
1. Queens, NY	366,000
2. Brooklyn, NY	297,000
3. Bronx, NY	162,000
4. Riverside, CA	132,000
5. Denton, TX (Dallas)	123,000
6. Prince Georges, MD (Washington)	109,000
7. Fort Bend, TX (Houston)	108,000
8. Contra Costa, CA (San Francisco)	96,000
9. Suffolk, NY	93,000
10. Will, IL (Chicago)	91,000

Source: 2005-09 American Community Survey, U.S. Census Bureau

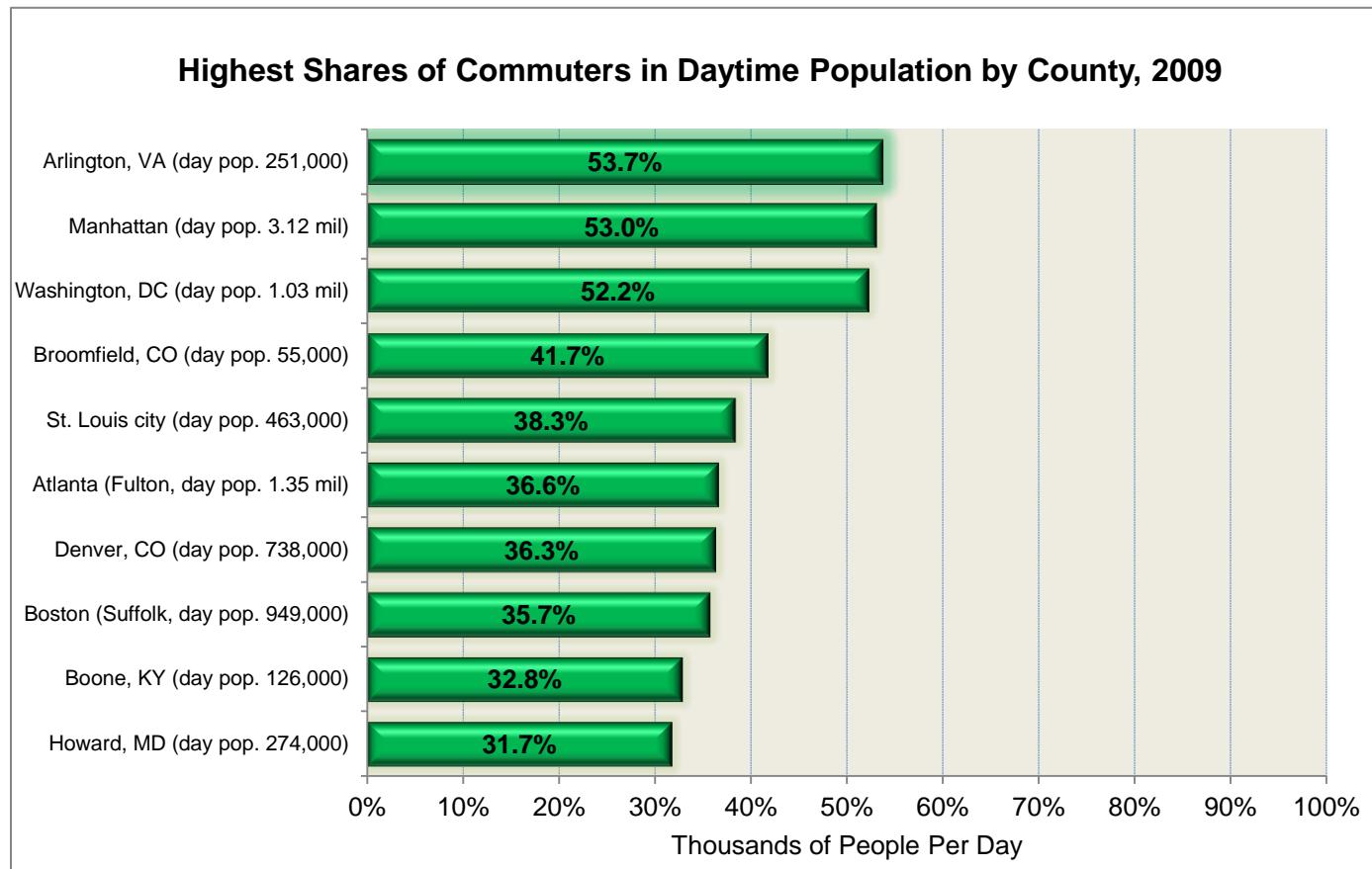
FIGURE 3



NOTE: Population figures on Y-axis represent residential population.

Source: 2005-09 American Community Survey, U.S. Census Bureau

FIGURE 4



NOTE: Population figures on Y-axis represent Census-defined daytime population.

Source: 2005-09 American Community Survey, U.S. Census Bureau

References

- ⁱ "Population: Journey to Work Tables." New York City Department of City Planning.
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