



## Commuter-Adjusted Daytime Population Estimates for NJ

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### The Significance of Daytime Population

The decennial Census counts people where they live. While most people spend their evenings at their home/residence, many travel during the day for various purposes including work, education, healthcare, recreation, etc., and where they spend their daytime hours could be in another town from where they live. Therefore, the daytime population could be very different from the resident population in any geographic area. Daytime population is a better indicator of a locality's economic and social activities than resident population, and daytime population estimates are essential for evaluating business development, gauging transportation and infrastructure needs, planning emergency evacuation, and other needs.

Although resident population estimates are available annually, the Census Bureau did not publish any daytime population estimates until 2004 when the nation's first commuter-adjusted day-

time population estimates were made available based on the 2000 Census long-form data. For the first time in this decade, a new set of daytime population estimates based on the 2006-2010 American Community Survey (ACS) 5-year estimates. The Census Bureau's commuter-adjusted daytime population estimates refer to the number of people who are present in an area during normal business hours, including workers. People in different locations other than their residences during the day for non work-related purposes or at non-business hours are not included.

### Journey to Work in Another State

According to the 2006-2010 ACS, New Jersey had estimated daytime population of 8,482,907 compared with a total resident population of 8,721,577. Its population decline between nighttime and daytime (-238,670) due to commut-

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States with Large Numeric or Percentage Changes in Daytime Population Due to Commuting: 2006-2010

State	Total Resident Population	Estimated Daytime Population	Daytime Population Change due to Commuting	
			Number	Percent
District of Columbia	584,400	1,046,036	461,636	79.0
New York	19,229,752	19,548,402	318,650	1.7
Massachusetts	6,477,096	6,543,487	66,391	1.0
North Dakota	659,858	677,843	17,985	2.7
Wyoming	545,579	552,983	7,404	1.4
Maryland	5,696,423	5,420,828	-275,595	-4.8
New Jersey	8,721,577	8,482,907	-238,670	-2.7
Pennsylvania	12,612,705	12,527,922	-84,783	-0.7
Virginia	7,841,754	7,761,262	-80,492	-1.0
New Hampshire	1,313,939	1,273,087	-40,852	-3.1

Source: U.S. Census Bureau, 2006-2010 American Community Survey (ACS) 5-year estimates

ing was the second highest among the 50 states and the District of Columbia (D.C.), next only to Maryland (-275,595). Other states with substantial daytime population declines include

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Pennsylvania (-84,783), Virginia (-80,492) and Indiana (-56,845). On the other hand, the District of Columbia (+461,636) and New York (+318,650) had the largest daytime population increases. Massachusetts (+66,381), Missouri (+46,135) and Oregon (+45,512) also had notable population gains during the day. Maryland's 4.8 percent daytime population decline was also the steepest in the nation, while New Jersey's 2.7 percent decline was eclipsed by New Hampshire's 3.1 percent. The District of Columbia's 79 percent spike in daytime population was by far the highest in the nation. North Dakota was a distant second with a 2.7 percent increase, followed by New York (+1.7%) and Wyoming (+1.7%).

New Jersey, New York, Pennsylvania, Maryland, Virginia and the District of Columbia (D.C.) had the most substantial changes in population between daytime and nighttime due to commuting. The largest inter-state commuting flows (with 100,000 or more workers), according to the 2006-2010 ACS, were from New Jersey to New York (384,279), Maryland to D.C. (312,355), Virginia to D.C. (210,714), New York to New Jersey (133,814), Pennsylvania to New Jersey (128,971), Maryland to Virginia (126,243) and New Jersey to Pennsylvania (120,386).

In 2000, D.C. (+410,794) and New York (+248,544) also had the largest numeric increases in daytime population due to commuting, while Maryland (-267,767) and New Jersey (-216,693) also had the most

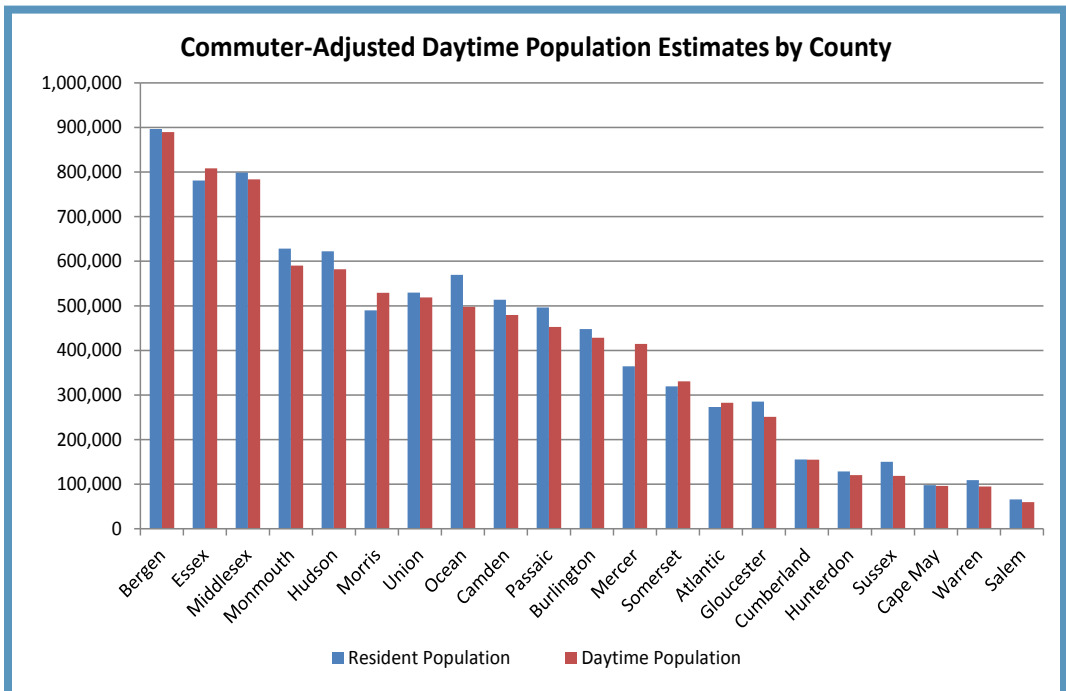
substantial decline in daytime population. D.C. (+71.8%) and Maryland (-5.1%) were also the largest percentage gainer and loser in 2000.

However, New Jersey's 2.6 percent decline in population during the day was the 4th largest percentage loss, while New York's 1.3 percent increase was the 4th largest gain, among the 50 states in 2000. Between 2000 and 2010, the interstate commuting flows from New Jersey to New York and Pennsylvania increased by 14.6 percent and 2.7 percent, respectively. Meanwhile, the flows from New York and Pennsylvania to New Jersey also increased by 6.5 percent and 15.7 percent, respectively.

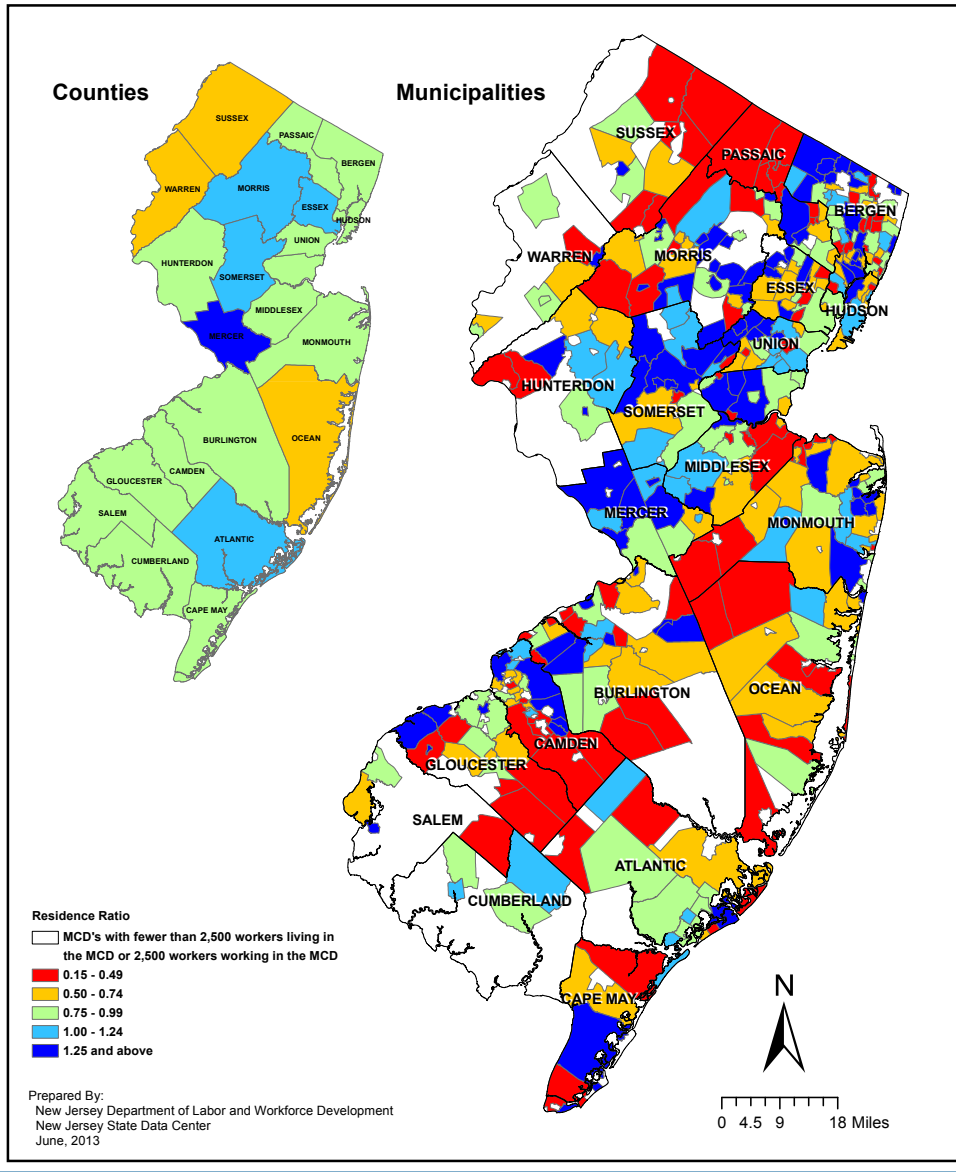
*Between 2000 and 2010 the interstate commuting flows from NY and PA to NJ increased by 6.5 percent and 15.7 percent, respectively*

### Working in One County While Living in Another County

Five of New Jersey's counties had daytime populations that were greater than the number of residents living in the county, according to the 2006-2010 ACS, led by Mercer (+49,931). As the home of New Jersey's state capital, Mercer's gain was largely due to a high concentration of state government jobs



## 2006-2010 American Community Survey Commuter Adjusted Daytime Population - Residence Ratio



Among the sixteen counties with smaller daytime populations, Ocean had the most substantial population difference (-71,821) between day and night, followed by Passaic (-43,568) and Hudson (-40,065), while the difference in Cumberland (-710) was minimal. Counties with substantial percentage changes between daytime and nighttime, due to commuting were: Sussex (-20.9%), Mercer (+13.7%), Warren (-12.9%), Ocean (-12.6%) and Gloucester (-12.1%). The percentage change was less than 10 percent in all other counties.

Major inter-county commuting flows, according to the 2006-2010 ACS, included Passaic to Bergen (51,376), Ocean to Monmouth (42,880), Camden to Burlington (35,626), Union to Essex (34,094) and Hudson to Bergen (29,290). Counties located along the Hudson River (e.g., Bergen, Hudson and Essex) had a significant number of residents

in Trenton. The four counties rounding out the list were Morris (+39,579), Essex (+27,285), Somerset (+11,293) and Atlantic (+9,587). These same five counties also had more population during the day than at night in 2000, according to the census. While Bergen, Cumberland and Middlesex counties had more daytime population than resident population in 2000, this was no longer true according to the 2006-2010 ACS.

who commuted to New York City. Likewise, a considerable number of workers from counties along the Delaware River (Camden, Burlington and Gloucester) commuted to Philadelphia.

### Intra-County Commuter and Employment-Residence Ratio

Although 87 percent of New Jersey workers both live and work in the state,

many work in a different county from which they live. For instance, only 41.8 percent of Warren County's workforce worked within the county. The percentages of people both living and working in the same county were also low (less than 45%) in Hunterdon (43.0%), Sussex (43.3%) and Somerset (44.4%) counties. Atlantic County, with major employment centers such as Atlantic City, had the highest percentage of workers who lived and worked in the county (83.5%), followed by Cape May (74.0%) and Cumberland (73.3%) counties.

The employment-residence ratio (E-R ratio) is a measure of the total number of workers working in the area, relative to the total number of workers living there. It is often used as a rough indication of the jobs-workers balance in an area. Areas with high E-R ratios (greater than 1.00) can be considered as net importers of labor, while areas with low E-R ratio (less than 1.00) are net exporters of labor. In New Jersey, the major labor-importer counties (with high E-R ratios) were Mercer (1.29), Morris (1.16) and Atlantic (1.08). Counties with low E-R ratios include Sussex (0.59), Ocean (0.70) and Warren (0.73). The state's E-R ratio was 0.94.

## Commuter Towns

In general, workers (along with their families) prefer to live close to their workplaces. However, employment centers, with a concentration of business establishments, government agencies, and/or resort facilities, etc., could easily become overcrowded, unaffordable and congested. These living conditions may drive workers out of town to live in more spacious and more affordable places within reasonable commuting distance. Hence, many suburbs of metropolitan areas may become commuter towns (or bedroom communities) that provide residences for workforce of nearby metropolitan areas. These towns tend to have substantial decreases of daytime population due to commuting.

The top five "bedroom communities" (with daytime population declines of at least 15,000) in New Jersey were Gloucester Township (Camden), Paterson (Passaic), Old Bridge Township (Middlesex), Brick Township (Ocean) and Union City (Hudson). In contrast, the state's top five "employment centers" — Newark (Essex), Atlantic City (Atlantic), Paramus Borough (Bergen), Secaucus (Hudson), and Parsippany Troy-Hills Township (Morris) — saw their daytime population rise by 20,000 or more.

Daytime population change due to commuting could be very dramatic in "small" localities, especially when there are large employers in town or nearby. For instance, Bergen County's Teterboro Borough had 97 residents, but its daytime population ballooned to 6,214 due to the Teterboro Airport being located in town. The population in Burlington County's Wrightstown Borough inflated more than eight times (from 714 to 6,053) during the day due to the presence of McGuire Air Force base and Fort Dix. The daytime population also more than tripled in Bergen County's Rockleigh Borough (+480%) and Essex County's Fairfield Township (+256%).

On the other hand, population declined by 47 percent during the day in Sussex County's Hopatcong Borough because many workers chose to live in town and commute to work in surrounding counties. Monmouth County's Bradley Beach Borough also experienced a hefty 42.5 percent daytime population decline for similar reasons. Other municipalities with sharp drops in population during the day include Ocean County's Beachwood Borough (-40.1%), Camden County's Magnolia Borough (-39.6%), and Warren County's Independence Township (-39.5%).

## Labor-Importer and Labor-Exporter Municipalities

Only four municipalities had more than one in every two workers living and working in the same town: Cape

*The state's top five "daytime employment centers" are Newark, Atlantic City, Paramus, Secaucus and Parsippany-Troy Hills*

### Municipalities with the Highest Employment-Residence Ratios, New Jersey: 2006-2010

County	Municipality	Employment-Residence ratio
Bergen	Teterboro borough	123.34
Bergen	Rockleigh borough	18.54
Burlington	Wrightstown borough	15.63
Essex	Fairfield township	6.21
Bergen	Moonachie borough	4.90
Bergen	Englewood Cliffs borough	4.54
Morris	Chester borough	4.50
Middlesex	Cranbury township	4.48
Hudson	Secaucus town	4.18
Mercer	Princeton borough	4.09

Source: U.S. Census Bureau, 2006-2010 American Community Survey (ACS) 5-year estimates

### Municipalities with the Lowest Employment-Residence Ratios, New Jersey: 2006-2010

County	Municipality	Employment-Residence ratio
Hudson	Guttenberg town	0.28
Camden	Lindenwold borough	0.28
Bergen	New Milford borough	0.27
Bergen	Dumont borough	0.25
Atlantic	Mullica township	0.23
Burlington	North Hanover township	0.22
Hunterdon	Holland township	0.21
Passaic	Prospect Park borough	0.17
Ocean	Beachwood borough	0.17
Sussex	Hopatcong borough	0.15

Source: U.S. Census Bureau, 2006-2010 American Community Survey (ACS) 5-year estimates

May City (Cape May, 76.1%), Atlantic City (Atlantic, 72.6%), Princeton Borough (Mercer, 62.9%) and Vineland City (Cumberland, 57.3%). The percentage of residents both living and working in the same area were extremely low (less than 6%) in three municipalities: Burlington County's Edgewater Township (5.6%) and Eastampton Township (4.9%), and Camden County's Magnolia Borough (4.7%).

Among New Jersey's 389 municipalities with 2,500 workers living or working there, 137 were labor-importers (with E-R ratios greater than 1.00), 251 were labor exporters (with E-R ratios less than 1.00). Camden County's Stratford Borough had a 1.00 E-R ratio.

Municipalities with the highest E-R ratios include Bergen County's Teterboro Borough (123.34), Rockleigh Borough (18.54) and Moonachie Borough (4.90), Burlington County's Wrightstown Borough (15.63), and Essex County's Fairfield Township (6.21). At the other end of the spectrum, E-R ratios were as low as 0.15 in Hopatcong Borough (Sussex), 0.17 in Beachwood Borough (Ocean) and Prospect Park Borough (Passaic), 0.21 in Holland Township (Hunterdon), and 0.22 in North Hanover Township (Burlington).

#### Footnotes:

<sup>1</sup>Workers refer to people 16 years and over who were employed and at work during the reference week. The estimate of workers includes part-time and full-time civilian personnel and people in the Armed Forces.

<sup>2</sup>The number represents the average of 2006-2010 annual population for New Jersey, based on the 2000-2010 intercensal population estimates.

#### Data Availability

The Commuter-Adjusted Daytime Population Estimates are available on U.S. Census Bureau's web page (<http://www.census.gov/hhes/commuting/data/daytimepop.html>) and the Office of Research and Information's (ORI) web site: [http://lwd.dol.state.nj.us/lpa/acs/2010/daytime\\_ndx.html](http://lwd.dol.state.nj.us/lpa/acs/2010/daytime_ndx.html). For more information regarding New Jersey population estimates, contact New Jersey Department of Labor and Workforce Development, Division of Economic and Demographic Research. Telephone: (609) 292-0076, e-mail: [sywu@dol.state.nj.us](mailto:sywu@dol.state.nj.us).

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