

# Special ACS Data Products: Patterns of Migration and Commuting

New Jersey State Data Center Network Meeting

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Alison K. Fields  
Chief, Journey-to-Work and Migration Statistics Branch  
Social, Economic and Housing Statistics Division  
U.S. Census Bureau  
[alison.k.fields@census.gov](mailto:alison.k.fields@census.gov)

Brian McKenzie  
Transportation Analyst, Journey-to-Work and Migration Statistics Branch  
Social, Economic and Housing Statistics Division  
U.S. Census Bureau  
[alison.k.fields@census.gov](mailto:alison.k.fields@census.gov)



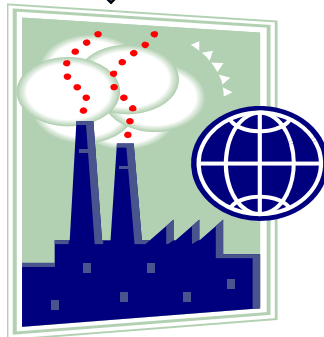
U.S. Department of Commerce  
Economics and Statistics Administration  
U.S. CENSUS BUREAU



# Geographically-Dependent Characteristics



**Commuting**



**Migration**



# Commuting Questions on the ACS

- Means of transportation
- Occupants per Vehicle
- Time leaving home for work
- Travel time to work
- Place of work
- Vehicles per household

# Existing Commuting Data Products

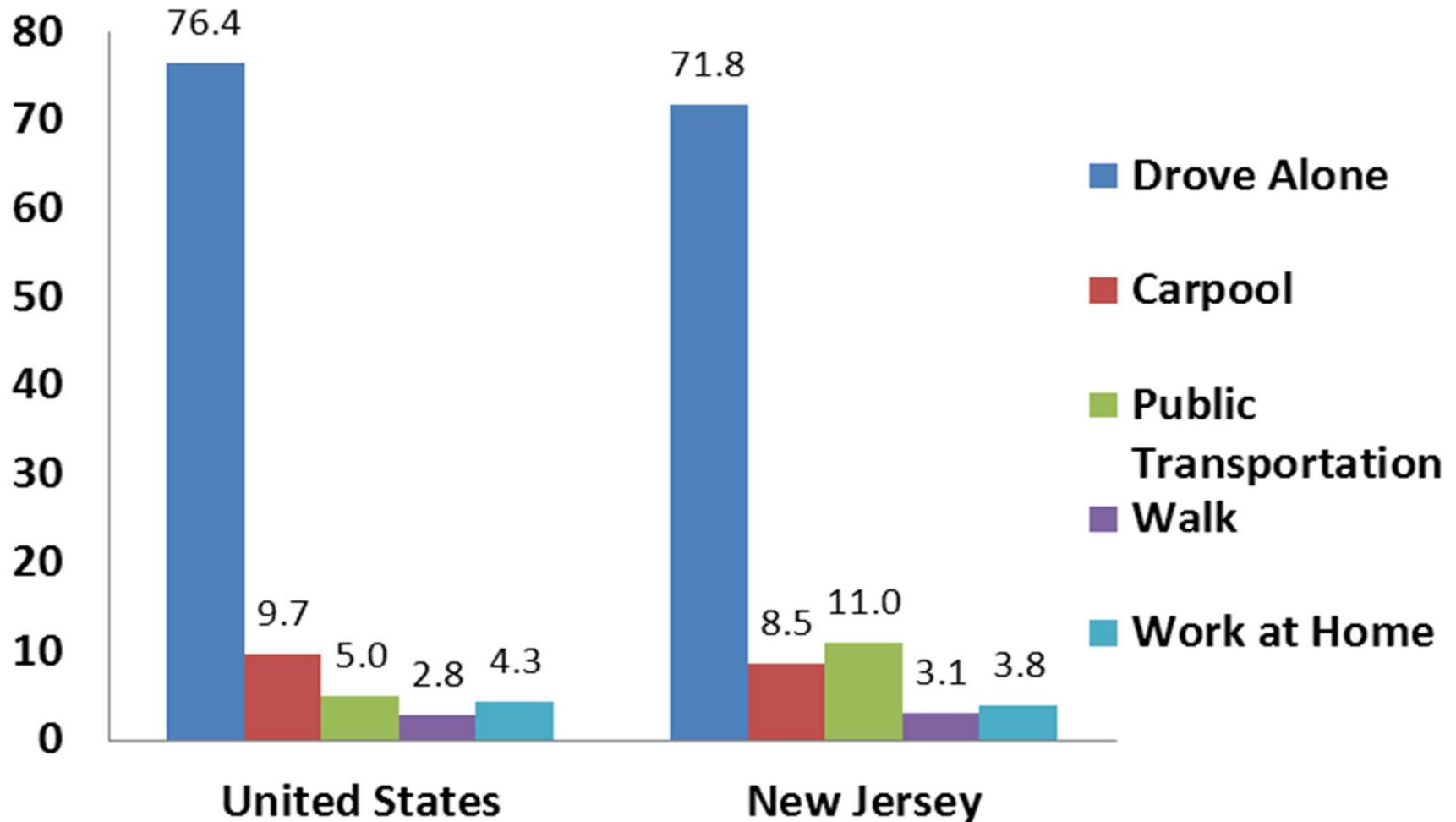
- ACS tables in American FactFinder:
  - Place of Residence and Workplace Detailed Tables
  - Place of Residence and Workplace Subject Tables
  - Ranking Tables and Geographic Comparison Tables
- Census Transportation Planning Products using 2006-2008 ACS

# March 5th Commuting Release

- Out of State and Long Commutes : 2011
- County-to-county residence-to-workplace and workplace-to-residence flows : ACS 2006-10
- Mega Commuting in the U.S., 2006-10
- Home-Based Workers in the U.S. Infographic – 2010, Report released in September 2010

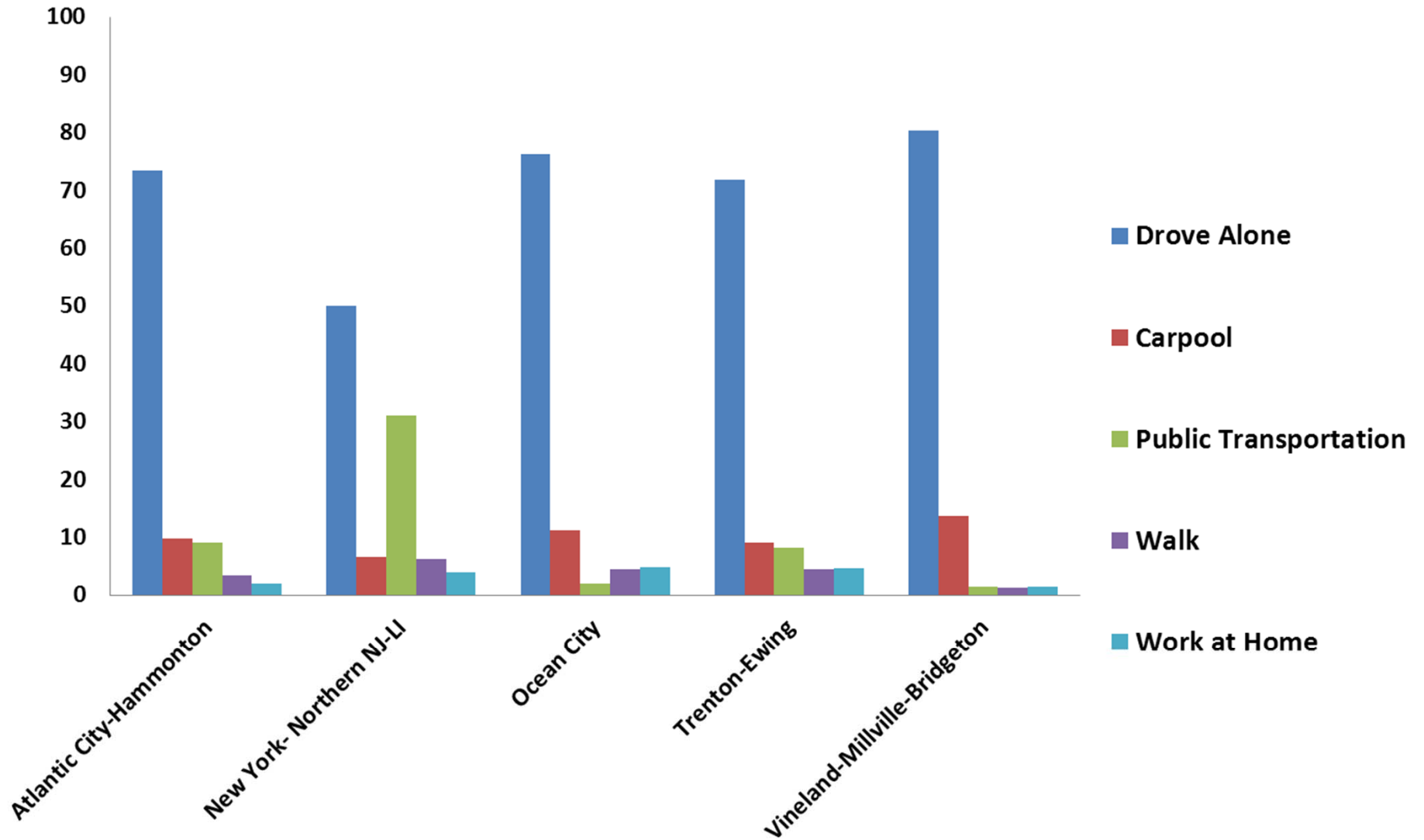
# How People Get to Work - 2011

Percent

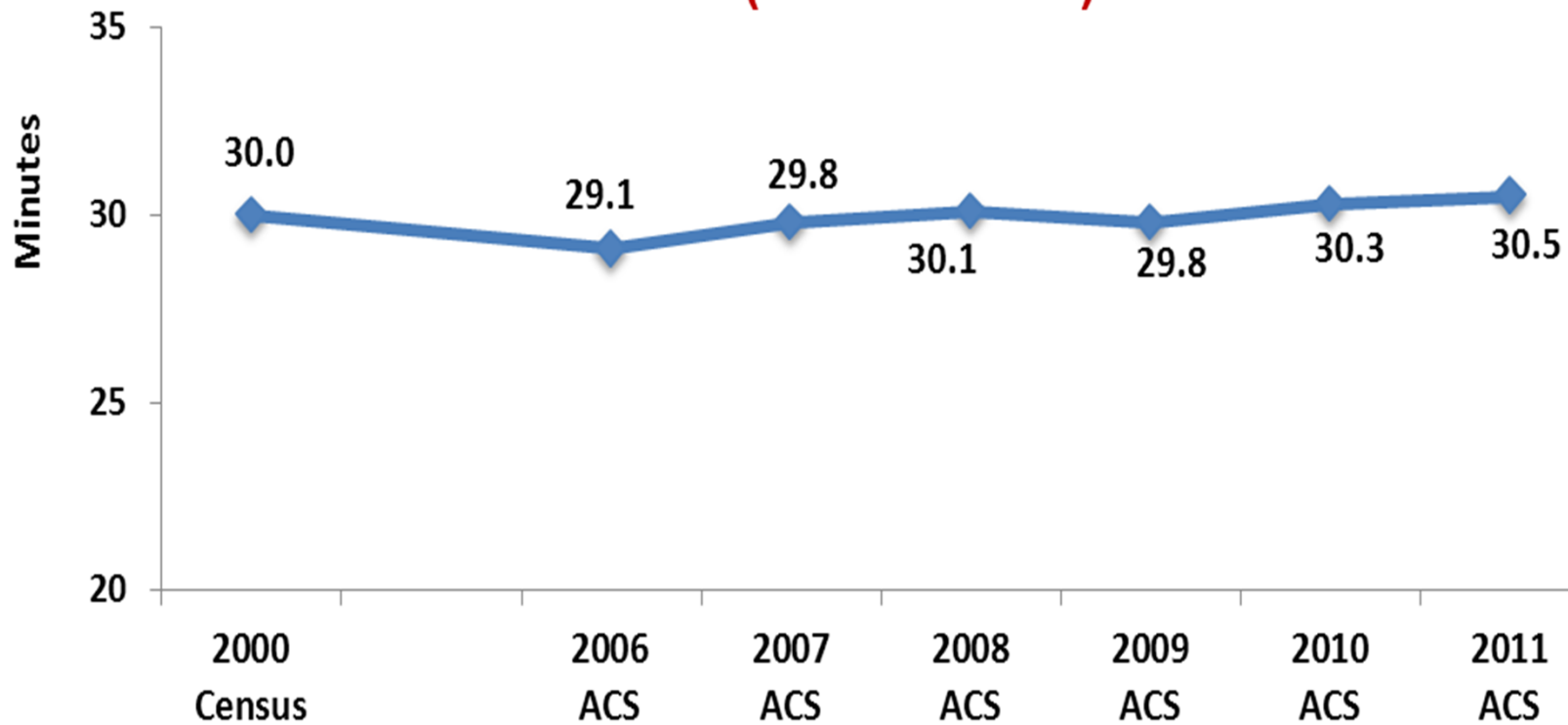


## How People Get to Work - Metro Areas: 2011

Percent



## Travel Time to Work (One Way) for New Jersey (2000 to 2011)



2011 U.S. Average = 25.5



## Top Commuting Flows from Residence State to Workplace State: 2011

(For information on confidentiality protection, sampling error, nonsampling error, and definitions, see [www.census.gov/acs/www/](http://www.census.gov/acs/www/))

Sending (residence) state	Workplace state	Number of workers	Margin of error <sup>1</sup> (±)
New Jersey	New York	396,520	11,490
Maryland	District of Columbia	330,171	10,226
Virginia	District of Columbia	226,407	9,251
New York	New Jersey	128,891	6,429
New Jersey	Pennsylvania	123,650	5,307
Pennsylvania	New Jersey	121,698	5,768
Maryland	Virginia	113,150	5,702
Missouri	Kansas	95,599	4,594
Kansas	Missouri	87,257	4,744
New Hampshire	Massachusetts	85,567	4,196
Illinois	Missouri	80,630	4,795
Washington	Oregon	73,498	4,666
Virginia	Maryland	68,236	4,840
Connecticut	New York	66,652	4,027
Indiana	Illinois	63,276	4,619

<sup>1</sup> Data are based on a sample and are subject to sampling variability. A margin of error is a measure of an estimate's variability. The larger the margin of error in relation to the size of the estimates, the less reliable the estimate. When added to and subtracted from the estimate, the margin of error forms the 90 percent confidence interval.

Source: U.S. Census Bureau, American Community Survey, 2011.

# Commuting **Into** and **Out of** Bergen County, NJ

## Commuters traveling into Bergen County, NJ – 187,706

### Top counties commuting into Bergen County, NJ

Passaic County, NJ	51,376 workers
Hudson County, NJ	29,290 workers
Essex County, NJ	18,614 workers

## Commuters traveling out of Bergen County, NJ – 194,728

### Top commuting destination counties out of Bergen County, NJ

New York County, NY	66,530 workers
Hudson County, NJ	27,002 workers
Passaic County, NJ	25,060 workers

# Commuting **Into** and **Out of** Atlantic County, NJ

## Commuters traveling into Atlantic County, NJ – 30,360

### Top counties commuting into Atlantic County, NJ

Cape May County, NJ	6,216 workers
Camden County, NJ	5,191 workers
Cumberland County, NJ	4,597 workers

## Commuters traveling out of Atlantic County, NJ – 20,773

### Top commuting destination counties out of Atlantic County, NJ

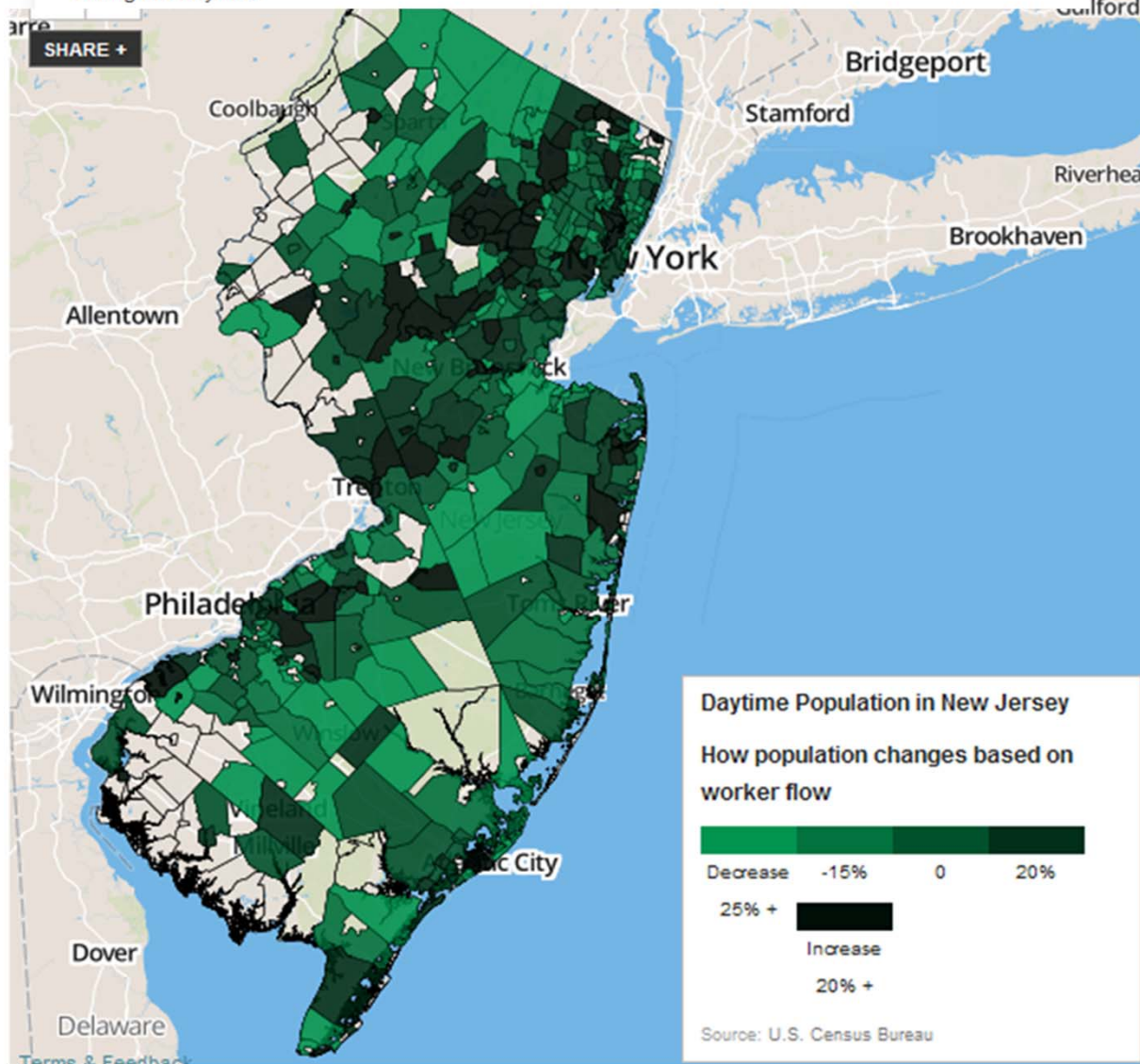
Cape May County, NJ	4,162 workers
Cumberland County, NJ	3,446 workers
Camden County, NJ	2,585 workers

# Commuter-Adjusted Daytime Population

- Released in May 2013
- Available for states, counties, MCD's and certain places from ACS 2006-10
- Captures an area's population after accounting for the inflow and outflow of workers to and from that area on a typical workday.
- Provides the following estimates
  - Total Change and % change in county pop due to commuting
  - Total # and % of workers working and living in a given geography
  - Ratio of employment to residence population

### Interactive Map: Daytime Population Growth in NJ Cities and Towns

Municipalities with shopping malls, big office buildings, and other large facilities can double in size during the daytime



# 3-Year 2006-2008 Census Transportation Planning Products (CTPP)



## Based on 2000 Geography

Nation (US Total)
State
County
MCD
Place
PUMA
POW PUMA
Metropolitan Statistical Area
MSA – EACH Principal City

## 3-Parts

Part 1- Place of Residence

Part 2- Place of Work

Part 3- Flows between Home and Work

\*Only available for areas of population 20,000 or greater

<http://ctpp.transportation.org/Pages/default.aspx>

# Forthcoming 2006-2010 5-Year CTPP

- Similar tables to the 2006-2008 3-year CTPP
  - Residence tables
  - Workplace tables
  - Residence-to-workplace tables
- Similar geographic summary levels to the Census 2000 CTPP
  - Including Transportation Analysis Districts (TADs) and Transportation Analysis Zones (TAZs) – special user-defined geographies by members of the transportation community
  - Expected release on AASHTO website- August 2013



# Migration question on the ACS

a. Did this person live in this house or apartment 1 year ago?

- Person is under 1 year old → *SKIP to question 16*
- Yes, this house → *SKIP to question 16*
- No, outside the United States and Puerto Rico – *Print name of foreign country, or U.S. Virgin Islands, Guam, etc., below; then SKIP to question 16*

- No, different house in the United States or Puerto Rico

b. Where did this person live 1 year ago?

Address (Number and street name)

Name of city, town, or post office

Name of U.S. county or municipio in Puerto Rico

Name of U.S. state or Puerto Rico

ZIP Code



# Examples of Geography Levels for Residence 1-year Ago and Workplace Flows

- U.S. Total
- All states
- Counties
- Minor Civil Divisions
- Metropolitan and Micropolitan Areas
- New England City and Town Areas (NECTA)
- NECTA divisions and Combined NECTAS
- Phased in changes since 2008 due to Migration question change – Places and Principal Cities

# Standard Migration Products in AFF

- Tables with **In-Migration** by Characteristics
  - Since 2004 ACS
  - All publishable geographies
- Tables with **Out-Migration** by Characteristics
  - Since 2007 ACS
  - Limited geographies

# Migration Flow Products

- ACS State-to-State Migration Flow Tables Published since 2005
- ACS 2005-2009 county-to-county migration (total counts only)
- ACS 2006-10 county-to-county migration crossed by
  - Age
  - Sex
  - Race
  - Hispanic Origin
- ACS Census Flows Mapper Tool – visual
  - <http://flowsmapper.geo.census.gov/flowsmapper/map.html>

<b>Top previous locations of people who moved to New Jersey (2011):</b>	
Foreign Country	56,332
New York	40,815
Pennsylvania	19,733
Florida	12,907
California	5,986
Maryland	5,335
Massachusetts	4,675
Virginia	4,458
Puerto Rico	4,312
Georgia	4,268
Texas	3,801
Arizona	3,784
Illinois	3,690
North Carolina	2,482
Washington	2,454
Total population that lived in a different <i>state</i> one year ago =140,194	
Source: ACS 2011	

## Possible Approach for Presenting Flows: Thematic Sets of Characteristics across Years

- Release new set of flow data each year based on 5-year ACS data (county-to-county, MCD-to-MCD level)
- 2005-9 only estimates
- 2006-10 – age, sex, race, and Hispanic Origin
- 2007-11 –educational attainment, individual income in the past year, household income in the past year (subject to change)
- Achieve a set of flows by multiple characteristics over the course of 5 years

# For More Information

- Journey-to-Work and Migration Statistics Branch:  
301-763-2454
- Migration Data including State-to-State Flows  
<http://www.census.gov/hhes/migration/data/acs.html>
- Commuting Data  
<http://www.census.gov/hhes/commuting/>
- Census Transportation Planning Products  
<http://ctpp.transportation.org/Pages/default.aspx>



# ACS Sample Size Increase in 2011

- Sample expanded from 2.9 million to 3.54 million addresses per year
- Sample increase began for
  - Mailout in June 2011
  - CATI in July 2011
  - CAPI in August 2011



# Reallocation of Sample to Improve Small Area Estimates

- Objective: improve the reliability of the estimates for small areas
- Increased sampling rates for small tracts and governmental units
- Slightly decreased sampling rates in larger tracts
- Began in January 2011

## Census Flows Mapper

This interactive map shows US migration patterns by county. Follow the instructions below. Hover over the results on the map for more information.

1. Choose state and county (or click the map):

New Jersey

Bergen

2. [Click to View Results](#)

3. Change type of migration flow:

Outbound  Inbound  Net

4. Choose a characteristic:

All

5. Choose a category:

All

6. Move the sliders to update the visible range. ('All' only)

Range: -894 to 2,129

Version 1.0

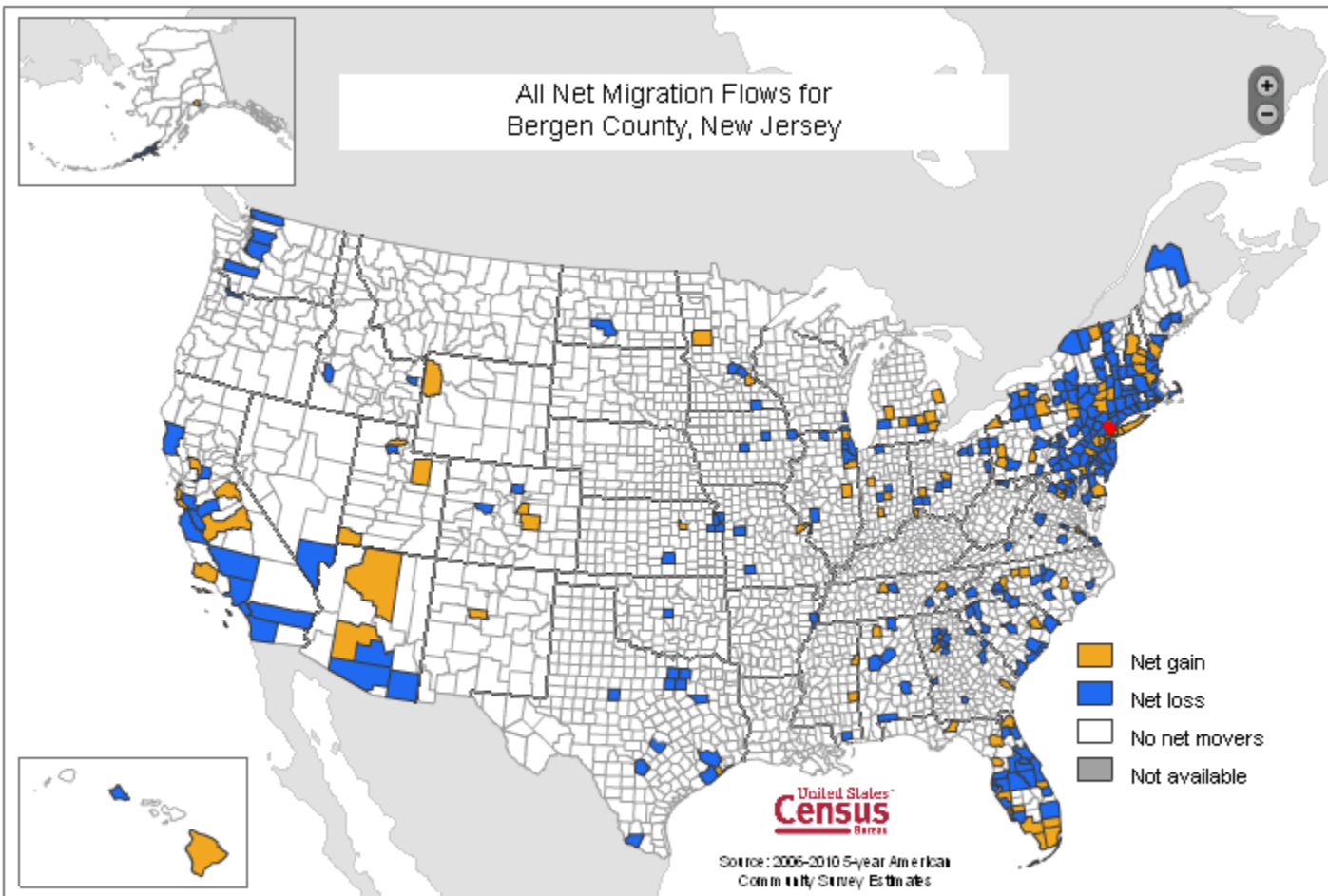
[Display Data Table](#)

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[Click to View County Statistics](#)

