



# DELAWARE VALLEY DATA

DELAWARE VALLEY REGIONAL PLANNING COMMISSION

## ANALYTICAL DATA REPORT

**The American Community Survey**

**No. 15  
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The Delaware Valley Regional Planning Commission (DVRPC) is an interstate, intercounty, and intercity agency serving the Philadelphia-Camden-Trenton metropolitan area. As the region's metropolitan planning organization (MPO), the Commission provides technical assistance and services to its member state and local governments. *Delaware Valley Data* is our periodic series of free data bulletins and analytical data reports. This analytical data report discusses the United States Census Bureau's new American Community Survey (ACS), and based on this survey, reviews demographic changes in the Delaware Valley between 2000 and 2006. The DVRPC region includes Bucks, Chester, Delaware, Montgomery and Philadelphia counties in Pennsylvania; and Burlington, Camden, Gloucester, and Mercer counties in New Jersey.

### Background

The American Community Survey (ACS) is a continuous household survey conducted by the Census Bureau that will replace the long-form of the traditional decennial Census. The goal of the ACS is to provide descriptions of the characteristics of every community in the nation annually (regardless of size and type), rather than once every ten years. This information will be used by federal and state agencies to evaluate federal programs and allocate federal funding (including housing and transportation funds), as was the traditional long-form Census. The Census Bureau will continue to undertake a decennial census, to obtain a 100% population count that can be used for apportioning seats in the United States House of Representatives as mandated by the Constitution. The Bureau's Population Estimates Program will also continue to annually produce and disseminate official municipal-level population estimates as well as annual estimates of total housing units and population by age, sex, race, and Hispanic origin for other selected geographies.

The ACS began with a demonstration project conducted in selected counties between 1996 and 2004, and was implemented in every county in the United States beginning in January 2005. Like the decennial Census long-form, the ACS asks detailed questions about characteristics such as age, sex, race, ethnicity, income, educational attainment, household relationships, languages spoken at home, employment, housing, and commute to work habits (see Appendix A for a complete list of ACS variables). Unlike the traditional Census, ACS results are rolling estimates based on responses from a small sample collected monthly and then averaged over a three to five year time period (depending on the geography). Whereas traditional Census data is based on a sample of one in six households at a single point in time (April 1<sup>st</sup>), ACS results are based on monthly surveys completed by approximately 1 in 40 addresses annually and then compiled over a multi-year time period to produce a statistically valid sample.

The ACS is authorized under Title 13 of the United States Code (Sections 141 and 193), and people who receive a survey are required by law to answer all of the questions to the best of their ability. Because of the small sample size, obtaining statistically valid results is dependent on receiving clear responses from nearly every address to which a survey is randomly sent, and residents who are mailed a survey and do not complete and return it (or return it incomplete or unreadable) are contacted by telephone and, if necessary, in person.

Although the ACS will eventually provide annual estimates of population and employment characteristics for small geographies, data is currently only available for counties and census-designated places with 65,000 or more residents. In the Delaware Valley, ACS estimates are now available for the region's nine counties and six of the region's 352 municipalities: Camden City, Cherry Hill Township, and Gloucester Township (Camden County); Hamilton Township and the City of Trenton (Mercer County); and Upper Darby Township (Delaware County). Estimates for places with 20,000 or more residents are scheduled to be released by the Census Bureau in late 2008, and data for other census geographies (including smaller municipalities, census tracts, block groups, and blocks) is scheduled for release in late 2010, based on responses collected over the previous five years. Once the estimates for any given geography are released, they will be updated annually based on the most recent three or five year set of responses.

### **Comparing the 2000 Census to the ACS**

Because of differences between the decennial Census and the ACS in terms of methodology, sample size, and wording of the questions, comparisons between ACS data and other data sets, including the 2000 decennial Census, should be made with caution. Issues which should be considered when using ACS data include the following:

- The decennial Census is based on a larger sample size than is the ACS, with many of the questions asked of every household (referred to as the 100% count) and others asked of one in six households (about 17%). In comparison, approximately 3 million addresses complete ACS surveys each year throughout the United States and Puerto Rico, equaling approximately 2.5% of the nation's households annually or 12.5% when aggregated over a five year period (one in eight households). Some experts have concluded that obtaining a sample size comparable to that of the decennial Census in less than five years would require a sampling rate of over 5% annually (rather than the current 2.5%), and that, given a sampling rate of 2.5%, small geographies would require samples averaged over eight to ten years to get "reasonably precise" estimates<sup>1</sup>.
- Early versions of the ACS (2002, 2003, 2004, and 2005) were limited to the household population only, and exclude people living in group quarters (such as prisons, institutions, and dormitories). Although this difference does not affect most housing characteristics (occupancy and tenure, for example), data users should be cautious when comparing population characteristics from earlier versions of the ACS to the 2006 ACS (which includes group quarters), especially in places known to have a large group quarter population (places with dormitories, nursing homes, or prisons, for example). Variables that are impacted include, for example, age, sex, race, ethnicity, educational attainment, and commute-to-work information. Beginning with the 2006 ACS, the group quarter population is included in the ACS, allowing reasonable comparisons of population characteristics between the 2006 ACS estimates and data from the 2000 Census. Guidance on comparing ACS data to other data sets, including the 2000 decennial Census, is available from the United States Census Bureau.<sup>2</sup>
- ACS results are rolling estimates based on data collected monthly over a three to five year time period, whereas the Census is a point-in-time survey distributed to everyone at the same time and referenced to one specific date (April 1) in any given decade. This difference impacts the wording and resulting responses to several questions. For income, for example, the ACS asks for the respondent's income over the previous twelve months, whereas the traditional Census question refers to the person's income during the previous calendar year (January 1<sup>st</sup> through December 31<sup>st</sup>). Because the traditional long-form Census questionnaire asked for the respondent's income as of the previous calendar year and was completed around the same time as the IRS filing deadline of April 15<sup>th</sup>, responses to the ACS questions on income may be less accurate, and are certainly not directly comparable. In a comparison study between Census 2000 income data and the 2000 ACS, income data from the 2000 Census was

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<sup>1</sup> Wombold, Lynn. *Sample Size Matters*, from ArcUser Online, [www.esri.com/news/arcuser/0408/samplesize.html](http://www.esri.com/news/arcuser/0408/samplesize.html).

<sup>2</sup> See <http://www.census.gov/acs/www/UseData/compACS.htm>.

found to be about 4 percent higher than that in the 2000 ACS. This difference in the reference period impacts a number of income-related variables, including poverty status, per capita income, and income sources.

- Similarly, ACS questions on employment refer to the respondent's employment during the previous twelve months, while the decennial Census referred to their employment during the previous calendar year. Thus, ACS estimates related to employment (including employment status, daily work hours, and weeks worked) will not be directly comparable to earlier decennial Census results, including the 2000 Census.
- The ACS refers to the respondent's "current residence", while the decennial Census refers to the "usual residence". Again, this may result in differences in some survey results.
- In areas that experience large demographic or socioeconomic changes in a short time period (New Orleans after Hurricane Katrina, for example) and in areas with large seasonal populations, the ACS estimates will differ significantly from those obtained from the traditional Census, since ACS data will be based on the average characteristics of the population over the entire year, rather than the population as of April 1<sup>st</sup>.
- In some cases, the questions on the ACS differ from the decennial Census questions and cannot therefore be compared. In the case of migration, for example, the ACS asks for the respondent's place of residence 1 year ago, whereas the 10-year Census asks for the place of residence 5 years ago. Questions on disability substantially differ in the ACS, and cannot be compared to 2000 Census results. Other ACS questions (on fertility and food stamp benefits, for example) were not included in the 2000 Census, and will only be comparable to future ACS estimates.
- In their ongoing effort to improve the quality of the ACS estimates, the Census Bureau adjusted their weighting methodology for household information in 2006 to ensure consistency between the estimates of householders, households, and occupied housing units. This modification makes comparisons of household characteristics such as household type, family structure, and marital status between 2006 and earlier versions of the ACS unreliable, but will improve future ACS results and allows reasonable comparisons between the 2000 Census and the 2006 ACS.

### **ACS Estimates for the Delaware Valley**

Appendix B provides available estimates of selected population, housing, and commuting characteristics between 2002 and 2006 for the Delaware Valley region's nine counties and six largest municipalities. As the ACS process evolves, however, early ACS results are often not comparable to each other, as described above. Because of the inclusion of the group quarter population and changes in the weighting methodology for households in the ACS 2006, most comparisons in the following discussion are made between 2006 ACS estimates and 2000 Census data (rather than earlier versions of the ACS). The exceptions are the comparisons of owner and renter housing costs and affordability, since differences in the universes used in the 2000 Census and the ACS invalidate comparisons between the two but allow comparisons between different versions of the ACS.

Table 1 illustrates changes in the total population, median age, and the percent minority between 2000 and 2006 for the region's nine member counties and the region's six largest municipalities. Based on ACS estimates, the population of the region's nine member counties grew by approximately 2% between 2000 and 2006, from approximately 5.4 million to just over 5.5 million. The fastest growing counties in the nine county DVRPC region between 2000 and 2006 were Chester County (where the population increased by 11 percent) and Gloucester County, New Jersey (also with an 11 percent increase). With the exception of Philadelphia, all of the region's counties gained residents between 2000 and 2006. ACS data confirms that the region's population is aging, with Bucks County realizing the greatest increase in median age. Bucks County's

increasing median age is likely related both to residents aging in place and the construction of new age-restricted housing developments.

Minority populations in the region continue to increase. Philadelphia is a “majority-minority” city, with 61 percent of its population being of minority race and/or Hispanic as of 2006. The percentage minority increased in every county in the region between 2000 and 2006, with 2006 percentages in the region’s suburban counties ranging from 36 percent in Camden County to 11 percent in Bucks County. Much of this growth in the minority population is attributable to growth in the numbers of Asians and Hispanics.

County/municipality	Population			Median age			Percent minority population	
	2000 Census	2006 ACS	Percent change	2000 Census	2006 ACS	Percent change	2000 Census	2006 ACS
Burlington County	423,394	450,627	6%	37.1	38.6	4%	24%	28%
Camden County	508,932	517,001	2%	35.8	37.0	3%	32%	36%
<i>Camden City</i>	79,904	73,838	-8%	27.2	27.7	2%	93%	96%
<i>Cherry Hill Township</i>	69,965	71,621	2%	41.8	41.9	0%	17%	n/a
<i>Gloucester Township</i>	64,315	71,042	10%	34.6	35.7	3%	19%	n/a
Gloucester County	254,673	282,031	11%	36.1	37.5	4%	14%	17%
Mercer County	350,761	367,605	5%	36.0	36.9	3%	36%	41%
<i>Hamilton Township</i>	87,254	90,072	3%	39.1	42.1	8%	17%	n/a
<i>Trenton City</i>	85,258	85,581	0%	32.2	32.5	1%	75%	n/a
Bucks County	597,635	623,205	4%	37.7	40.2	7%	9%	11%
Chester County	433,501	482,112	11%	36.9	38.2	4%	13%	15%
Delaware County	550,864	555,996	1%	37.4	38.8	4%	20%	26%
<i>Upper Darby Township</i>	81,821	84,113	3%	35.3	34.5	-2%	23%	n/a
Montgomery County	750,097	775,688	3%	38.2	40.1	5%	15%	17%
Philadelphia County	1,517,550	1,448,394	-5%	34.2	35.4	4%	57%	61%

Sources: United States Census Bureau, *American Community Survey (2006)*; *2000 Census of Population and Housing (2000)*. ACS estimates are based on a rolling average of the sample data collected over the most recent three years. "Minority population" includes people who are not White and non-Hispanic. Data on the 2006 Hispanic population (and therefore the overall minority population) in Cherry Hill Township, Gloucester Township, Hamilton Township, Trenton City, and Upper Darby Township was not yet available because the sample size was too small. June 2008.

Table 2 describes the number of households and the median household income by county and municipality, where available. The largest percent increases in the number of households between 2000 and 2006 were in Chester and Gloucester counties, mimicking changes in population. At first glance, it appears that the median household income increased in every area between 2000 and 2006. For comparison purposes, however, the 2000 median household incomes were adjusted to 2006 dollars based on information from the Bureau of Labor Statistics, as recommended by the Census Bureau. Based on these adjusted 2000 medians and 2006 estimates from the ACS, the median household income increased in Gloucester County, New Jersey, by 2% between 2000 and 2006, but declined in every other county in the region, as inflation outpaced income growth.

Table 3 compares the 2006 ACS estimates of total housing units and housing tenure with 2000 Census data. Based on ACS results, Chester and Gloucester counties realized the largest increases in the total number of housing units, with smaller gains in other suburban counties and losses of units in Delaware and Philadelphia counties. This trend mimics the population trends identified in Table 1. The region’s supply of rental units continues to decline. In suburban counties such as Gloucester and Chester, gains in owner-occupied housing were off-set by losses in renter-occupied units. Only in Camden City, the City of Trenton, and Philadelphia was the change in renter-occupied units greater (meaning a lower loss or higher gain) than the relative change in owner-occupied units.

**Table 2: Households and household income, 2000-2006**

County	Households			Median household income			
	2000 Census	2006 ACS	Percent change	2000 Census	2000 (adjusted)*	2006 ACS	Percent change
Burlington County	154,371	163,226	5.7%	\$58,608	\$70,919	\$68,090	-4%
Camden County	185,744	189,498	2.0%	\$48,097	\$58,200	\$56,913	-2%
<i>Camden City</i>	24,177	24,271	0.4%	\$23,421	\$28,341	\$25,961	-8%
<i>Cherry Hill Township</i>	26,227	26,752	2.0%	\$69,421	\$84,003	\$81,289	-3%
<i>Gloucester Township</i>	23,098	24,377	5.5%	\$54,280	\$65,682	\$63,453	-3%
Gloucester County	90,717	99,275	9.4%	\$54,273	\$65,673	\$66,759	2%
Mercer County	125,807	127,216	1.1%	\$56,613	\$68,505	\$65,305	-5%
<i>Hamilton Township</i>	33,505	31,886	-4.8%	\$57,110	\$69,106	\$66,574	-4%
<i>Trenton City</i>	29,455	27,288	-7.4%	\$31,074	\$37,601	\$32,548	-13%
Bucks County	218,725	227,329	3.9%	\$59,727	\$72,273	\$70,406	-3%
Chester County	157,905	173,033	9.6%	\$65,295	\$79,010	\$77,570	-2%
Delaware County	206,320	204,568	-0.8%	\$50,092	\$60,614	\$55,005	-9%
<i>Upper Darby Township</i>	32,551	30,813	-5.3%	\$41,489	\$50,204	\$49,111	-2%
Montgomery County	286,098	297,532	4.0%	\$60,829	\$73,606	\$71,180	-3%
Philadelphia County	590,071	554,048	-6.1%	\$30,746	\$37,204	\$33,229	-11%

Sources: United States Census Bureau, American Community Survey (2006); 2000 Census of Population and Housing (2000). ACS estimates are based on a rolling average of the sample data collected over the most recent three years. June 2008.  
 \* For comparison purposes, the 2000 median household incomes have been adjusted to 2006 dollars by the CPI-U-RS adjustment factors published annually by the Bureau of Labor Statistics (BLS), as recommended by the Census Bureau.

**Table 3: Housing tenure, 2000-2006**

County/municipality	Total occupied units			Owner-occupied units			Renter-occupied units		
	2000	2006	Percent change, 2000-2006	2000	2006	Percent change, 2000-2006	2000	2006	Percent change, 2000-2006
Burlington County	154,371	163,226	6%	119,500	128,053	7%	34,871	35,173	1%
Camden County	185,744	189,498	2%	130,007	134,155	3%	55,737	55,343	-1%
<i>Camden City</i>	24,177	24,271	0%	11,118	10,814	-3%	13,059	13,457	3%
<i>Cherry Hill Township</i>	26,227	26,752	2%	21,751	22,330	3%	4,476	4,422	-1%
<i>Gloucester Township</i>	23,098	24,377	6%	17,102	18,717	9%	5,996	5,660	-6%
Gloucester County	90,717	99,275	9%	72,482	81,394	12%	18,235	17,881	-2%
Mercer County	125,717	127,216	1%	84,235	87,262	4%	41,482	39,954	-4%
<i>Hamilton Township</i>	33,505	31,886	-5%	25,170	25,113	0%	8,335	6,773	-19%
<i>Trenton City</i>	29,455	27,288	-7%	13,401	12,157	-9%	16,054	15,131	-6%
Bucks County	218,725	227,329	4%	169,177	176,174	4%	49,548	51,155	3%
Chester County	157,905	173,033	10%	120,500	134,823	12%	37,405	38,210	2%
Delaware County	206,320	204,568	-1%	148,293	149,241	1%	58,027	55,327	-5%
<i>Upper Darby Township</i>	32,551	30,813	-5%	20,287	19,436	-4%	12,264	11,377	-7%
Montgomery County	286,098	297,532	4%	210,237	225,929	7%	75,861	71,603	-6%
Philadelphia County	590,071	554,048	-6%	349,651	322,725	-8%	240,420	231,323	-4%

Sources: United States Census Bureau, American Community Survey (2006); 2000 Census of Population and Housing (2000). ACS estimates are based on a rolling average of the sample data collected over the most recent three years. June 2008.

Tables 4 and 5 compare housing costs and affordability in the Delaware Valley since 2002. As noted earlier, differences in the universes used in developing the ACS estimates differ from those used in the 2000 Census, invalidating comparisons between the two. Comparisons are therefore instead made between the 2002 and 2006 ACS estimates. Table 4 compares the value and affordability of owner-occupied housing between 2002 and 2006. The highest median housing values in 2006 were in Bucks and Chester counties in Pennsylvania and Mercer County, New Jersey, all of which have median housing values over \$300,000. The largest percent increases in median value were realized in Bucks County, followed by Philadelphia, Camden and Gloucester counties. The percent of income spent on housing increased in every county in the region between 2002 and 2006, ranging from a high of 25.1% in Burlington County to 21.8% in Chester County.

<b>Table 4: Value and affordability of owner-occupied housing units, 2002-2006</b>					
<b>County/municipality</b>	<b>Median value of owner-occupied housing</b>			<b>Median selected housing costs as a percent of household income</b>	
	<b>2002</b>	<b>2006</b>	<b>Percent change, 2002-2006</b>	<b>2002</b>	<b>2006</b>
Burlington County, New Jersey	\$157,431	\$259,300	65%	20.7%	25.1%
Camden County, New Jersey	\$120,200	\$208,600	74%	21.8%	24.6%
<i>Camden City</i>	<i>n/a</i>	<i>\$77,100</i>	<i>n/a</i>	<i>n/a</i>	<i>21.1%</i>
<i>Cherry Hill Township</i>	<i>n/a</i>	<i>\$301,700</i>	<i>n/a</i>	<i>n/a</i>	<i>23.4%</i>
<i>Gloucester Township</i>	<i>n/a</i>	<i>\$226,700</i>	<i>n/a</i>	<i>n/a</i>	<i>26.1%</i>
Gloucester County, New Jersey	\$132,026	\$226,900	72%	20.5%	25.0%
Mercer County, New Jersey	\$185,275	\$314,300	70%	20.8%	23.7%
<i>Hamilton Township</i>	<i>n/a</i>	<i>\$270,400</i>	<i>n/a</i>	<i>n/a</i>	<i>23.0%</i>
<i>Trenton City</i>	<i>n/a</i>	<i>\$126,300</i>	<i>n/a</i>	<i>n/a</i>	<i>25.1%</i>
Bucks County, Pennsylvania	\$187,430	\$330,500	76%	21.3%	23.3%
Chester County, Pennsylvania	\$205,013	\$328,400	60%	19.7%	21.8%
Delaware County, Pennsylvania	\$136,737	\$216,900	59%	21.0%	22.9%
<i>Upper Darby Township</i>	<i>n/a</i>	<i>\$149,600</i>	<i>n/a</i>	<i>n/a</i>	<i>22.6%</i>
Montgomery County, Pennsylvania	\$182,619	\$292,600	60%	20.5%	22.5%
Philadelphia County, Pennsylvania	\$66,226	\$115,500	74%	18.8%	22.0%

**Source: United States Census Bureau, American Community Survey. Estimates (in real dollars) are based on a rolling three-year average. Sub-county estimates were not available in 2002. June 2008.**

Table 5 compares the median monthly gross rent (contract rent plus utility costs) and rental housing affordability between 2002 and 2006. The highest median rent in the region was in Burlington County (\$988), followed by Mercer County. The highest percent increase in monthly rents between 2002 and 2006, however, was in Camden County, where the median rent increased by 22% over the four year period. The percent of household income spent on housing by the region's renters increased in every county in the region. The highest percentages are paid in the region's core cities of Philadelphia, Trenton, and Camden, where the median percent of income spent on housing costs by renter-occupied households is almost 35%.

Table 6 describes changes in the number of workers and their commuting modes between 2000 and 2006. As in the case of population and households, the Census Bureau recommends comparing the 2006 ACS estimates to the 2000 Census rather than earlier ACS estimates, because of the exclusion of the group quarter population in earlier American Community Surveys. As is the case with population, the largest percent increase in resident workers between 2000 and 2006 occurred in Chester County, Pennsylvania, and Gloucester County, New Jersey. In six of the region's counties (Burlington and Mercer counties in New Jersey; and Chester, Delaware, Montgomery, and Philadelphia in Pennsylvania) the number of workers who drove alone or carpooled did not increase as much as the total number of workers (or in the case of Philadelphia, declined by a larger percentage) with larger corresponding increases in other modes (including public transportation).



**Table 5: Median monthly rent and rental housing affordability, 2002-2006**

County	Estimated median gross rent			Rent as a percent of household income	
	2002	2006	Percent change, 2002-2006	2002	2006
Burlington County, New Jersey	\$829	\$988	19%	25.9	30.9
Camden County, New Jersey	\$669	\$814	22%	27.5	29.9
<i>Camden City</i>	<i>n/a</i>	\$636	<i>n/a</i>	<i>n/a</i>	37.7
<i>Cherry Hill Township</i>	<i>n/a</i>	\$1,123	<i>n/a</i>	<i>n/a</i>	28.8
<i>Gloucester Township</i>	<i>n/a</i>	\$864	<i>n/a</i>	<i>n/a</i>	21.0
Gloucester County, New Jersey	\$707	\$828	17%	24.1	28.2
Mercer County, New Jersey	\$795	\$958	21%	28.9	30.1
<i>Hamilton Township</i>	<i>n/a</i>	\$881	<i>n/a</i>	<i>n/a</i>	26.1
<i>Trenton City</i>	<i>n/a</i>	\$851	<i>n/a</i>	<i>n/a</i>	34.7
Bucks County, Pennsylvania	\$796	\$931	17%	25.6	29.9
Chester County, Pennsylvania	\$838	\$929	11%	23.3	27.0
Delaware County, Pennsylvania	\$719	\$812	13%	24.5	30.2
<i>Upper Darby Township</i>	<i>n/a</i>	\$799	<i>n/a</i>	<i>n/a</i>	27.9
Montgomery County, Pennsylvania	\$832	\$947	14%	26.5	26.4
Philadelphia County, Pennsylvania	\$640	\$746	17%	31.0	34.4

Source: United States Census Bureau, *American Community Survey*. Estimates are based on a rolling average of the sample data collected over the most recent three years. "Median gross rent" includes the contract rent plus utility costs. Sub-county estimates were not available in 2002. June 2008.

**Table 6: Means of transportation to work, 2000-2006**

County	Total workers age 16 and older			Drove alone or carpoled			Public transportation, taxi, motorcycle, bicycle, or other means			Walked or worked at home		
	2000	2006	Percent change	2000	2006	Percent change	2000	2006	Percent change	2000	2006	Percent change
Burlington County, New Jersey	207,471	218,153	5%	190,782	198,094	4%	7,587	9,168	21%	9,102	10,891	20%
Camden County, New Jersey	230,408	242,976	5%	196,682	208,007	6%	22,483	22,193	-1%	11,243	12,776	14%
<i>Camden City</i>	22,161	n/a	n/a	15,012	n/a	n/a	5,067	n/a	n/a	2,082	n/a	n/a
<i>Cherry Hill Township</i>	33,758	n/a	n/a	29,567	n/a	n/a	2,458	n/a	n/a	1,733	n/a	n/a
<i>Gloucester Township</i>	32,287	n/a	n/a	29,161	n/a	n/a	2,306	n/a	n/a	820	n/a	n/a
Gloucester County, New Jersey	122,267	140,069	15%	112,378	130,122	16%	4,284	4,250	-1%	5,605	5,697	2%
Mercer County, New Jersey	163,257	171,453	5%	137,680	141,577	3%	13,067	16,290	25%	12,510	13,586	9%
<i>Hamilton Township</i>	43,955	n/a	n/a	41,187	n/a	n/a	1,575	n/a	n/a	1,193	n/a	n/a
<i>Trenton City</i>	31,364	n/a	n/a	24,869	n/a	n/a	4,162	n/a	n/a	2,333	n/a	n/a
Bucks County, Pennsylvania	303,586	318,862	5%	277,271	290,796	5%	10,444	10,232	-2%	15,871	17,834	12%
Chester County, Pennsylvania	218,153	242,616	11%	194,801	215,003	10%	7,134	9,215	29%	16,218	18,398	13%
Delaware County, Pennsylvania	253,922	255,335	1%	216,034	214,894	-1%	21,747	23,523	8%	16,141	16,918	5%
<i>Upper Darby Township</i>	39,249	42,792	9%	31,960	33,753	6%	5,099	6,094	20%	2,190	2,945	34%
Montgomery County, Pennsylvania	379,832	391,060	3%	337,317	345,687	2%	19,015	19,050	0%	23,500	26,323	12%
Philadelphia County, Pennsylvania	569,761	550,988	-3%	353,471	336,284	-5%	153,974	157,607	2%	62,316	57,097	-8%

Sources: United States Census Bureau, *American Community Survey* (2006); *2000 Census of Population and Housing* (2000). ACS estimates are based on a rolling average of the sample data collected over the most recent three years. June 2008.



## Conclusion

Differences between the traditional decennial Census and ACS will clearly make comparing the two and utilizing the ACS data difficult for some users, including GIS analysts, population forecasters, and transportation modelers. Utilizing ACS estimates will require analysts who require precise data to consider and incorporate into their analysis standard error estimates or margins of error provided by the Census Bureau. Decisions will necessarily have to be made as to whether some apparent changes represent actual shifts or are simply related to sampling error. Given the small sample size, obtaining reliable data for small geographies may be particularly difficult.

Shifting to the ACS as opposed to the traditional decennial Census, however, will enable the Census Bureau to eventually provide current information on an annual basis for all geographies, rather than once each decade. Recent revisions to the ACS (including the addition of group quarters and changes to the weighting methodology in 2006) have improved the survey process and enabled users to reasonably compare 2006 ACS estimates to 2000 Census data, and future iterations of the ACS will allow reasonable comparisons on an annual basis. Although experts disagree on the overall reliability of the ACS estimates (especially given the survey's small sample size), the availability of current socioeconomic estimates will be invaluable to users who are more concerned with identifying trends than analyzing precise data, including policy planners, economic development officials, and other decision-makers.

This report has provided information on the American Community Survey and the benefits and challenges associated with its use, and reviewed some of the estimates currently available for the region's nine counties and six largest municipalities. The ACS process is continuously evolving, as the Census Bureau works to improve its reliability and value. Additional information on the ACS is available from the Census Bureau at <http://www.census.gov/acs/www/>. For additional information on this analytical report or other DVRPC data reports and bulletins, contact:

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**Appendix A: Topics included in the  
American Community Survey**



## Appendix A: Topics included in the American Community Survey

### **Demographic characteristics:**

Age  
Sex  
Race  
Hispanic or Latino Origin

### **Social characteristics:**

Ancestry  
Citizenship Status  
Year of Entry (if foreign born)  
Nativity  
Place of Birth  
Residence 1 year ago (Migration)  
Children and Relationship to Householder  
Grandparents as Caregivers  
Household/Family Type  
Fertility  
Type of School & School Enrollment  
Educational Attainment  
Ability to Speak English  
Language Spoken at Home  
Disability status  
Veteran Status  
Period of Military Service  
Food Stamp Benefit

### **Economic characteristics**

Household and Family Incomes  
Sources of Income (households)  
Per Capita Income and Earnings  
Poverty Status  
Employment Status

### **Economic characteristics (continued)**

Hours Worked  
Weeks Worked  
Class of Worker  
Industry & Occupation  
Place of Work  
Means of Transportation to Work  
Private Vehicle Occupancy  
Time Leaving Home  
Travel Time to Work  
Vehicles Available

### **Housing characteristics**

Units in Structure  
Value of Property  
Year Moved In  
Year Structure Built  
Number of Rooms  
Bedrooms  
Occupants per Room  
Cost of Utilities  
House Heating Fuel  
Kitchen Facilities  
Plumbing Facilities  
Real Estate Taxes  
Telephone Service  
Vacancy Status  
Tenure  
Selected Monthly Owner Costs  
Owner Costs as a % of Household Income  
Mortgage Status  
Monthly Rent  
Contract and Gross Rent  
Gross Rent as a % of Household Income

Source: United States Census Bureau, *2006 Data Users Handbook: The American Community Survey*. Available on-line at <http://www.census.gov/acs/www/Downloads/Handbook2006.pdf>.



**Appendix B: Estimates of selected characteristics from the  
American Community Survey, 2002-2006**





**Appendix B: Estimates of selected characteristics from the American Community Survey, 2002-2006**

2006	New Jersey counties and municipalities									Pennsylvania counties and municipalities					
	Burlington County	Camden County	Gloucester County	Mercer County	Camden City, Camden County	Cherry Hill Township, Camden County	Gloucester Township, Camden County	Hamilton Township, Mercer County	Trenton City, Mercer County	Bucks County	Chester County	Delaware County	Montgomery County	Philadelphia County	Upper Darby Township, Delaware County
<b>POPULATION</b>															
Total population	450,627	517,001	282,031	367,605	73,838	71,621	71,042	90,072	83,581	623,205	482,112	555,996	775,688	1,448,394	84,113
Median age	38.6	37	37.5	36.9	27.7	41.9	35.7	42.1	32.5	40.2	38.2	38.8	40.1	35.4	34.5
Percent minority	28%	36%	17%	41%	96%	n/a	n/a	n/a	n/a	11%	15%	26%	17%	61%	n/a
<b>HOUSEHOLDS</b>															
Total households	163,226	189,498	99,275	127,216	24,271	26,752	24,377	31,886	27,288	227,329	173,033	204,568	297,532	554,048	30,813
Average household size	2.76	2.73	2.84	2.89	3.04	2.68	2.91	2.82	3.06	2.74	2.79	2.72	2.61	2.61	2.73
Median household income	\$68,090	\$56,913	\$66,759	\$65,305	\$25,961	\$81,289	\$62,453	\$66,574	\$32,548	\$70,406	\$77,570	\$55,005	\$71,180	\$33,229	\$49,111
<b>HOUSING</b>															
Total units	172,352	204,596	105,502	139,888	30,775	28,005	24,697	34,659	32,675	239,273	181,523	220,472	311,763	660,389	33,740
Occupied units	163,226	189,498	99,275	127,216	24,271	26,752	24,377	31,886	27,288	227,329	173,033	204,568	297,532	554,048	30,813
Owner-occupied units	128,053	134,155	81,394	87,262	10,814	22,330	18,717	25,113	12,157	176,174	134,823	149,241	225,929	322,725	19,436
Renter Occupied units	35,173	55,343	17,881	39,954	13,457	4,422	5,660	6,773	15,131	51,155	38,210	55,327	71,603	231,323	11,377
Vacant units	9,126	15,098	6,227	12,672	6,504	1,253	320	2,773	5,387	11,944	8,490	15,904	14,231	106,341	2,927
Percent vacant	5.3%	7.4%	5.9%	9.1%	21.1%	4.5%	1.3%	8.0%	16.5%	5.0%	4.7%	7.2%	4.6%	16.1%	8.7%
Median value owner-occupied housing	\$259,300	\$208,600	\$226,900	\$314,300	\$77,100	\$301,700	\$226,700	\$270,400	\$126,300	\$330,500	\$328,400	\$216,900	\$292,600	\$115,500	\$149,600
Median selected housing costs as a % of median income:	25.1	24.6	25.0	23.7	21.1	23.4	26.1	23.0	25.1	23.3	21.8	22.9	22.5	22.0	22.6
Median gross rent	\$988	\$814	\$828	\$958	\$636	\$1,123	\$864	\$888	\$851	\$931	\$929	\$812	\$947	\$746	\$799
Median rent as a % of median income	30.9	29.9	28.2	30.1	37.7	28.8	21	26.1	34.7	29.9	27.0	30.2	26.4	34.4	27.9
<b>COMMUTE TO WORK</b>															
Total workers age 16 years and older	218,153	242,976	140,069	171,453	n/a	n/a	n/a	n/a	n/a	318,862	242,616	255,335	391,060	550,988	42,792
Mode of transportation to work															
Drove alone	179,487	181,732	119,686	125,112	n/a	n/a	n/a	n/a	n/a	264,050	195,229	191,065	316,673	279,650	28,387
Carpooled	18,607	26,275	10,436	16,465	n/a	n/a	n/a	n/a	n/a	26,746	19,774	23,829	29,014	56,634	5,366
Public transportation (excluding taxicab)	6,867	19,330	3,586	12,954	n/a	n/a	n/a	n/a	n/a	8,297	6,029	20,802	15,216	145,634	5,156
Walked	4,656	5,247	2,145	7,676	n/a	n/a	n/a	n/a	n/a	6,875	5,837	9,747	11,597	44,102	1,664
Taxicab, motorcycle, bicycle, or other means	2,301	2,863	664	3,336	n/a	n/a	n/a	n/a	n/a	1,935	3,186	2,721	3,834	11,973	938
Worked at home	6,235	7,529	3,552	5,910	n/a	n/a	n/a	n/a	n/a	10,959	12,561	7,171	14,726	12,995	1,281

**Appendix B: Estimates of selected characteristics from the American Community Survey, 2002-2006**

2006	New Jersey counties and municipalities									Pennsylvania counties and municipalities					
	Burlington County	Camden County	Gloucester County	Mercer County	Camden City, Camden County	Cherry Hill Township, Camden County	Gloucester Township, Camden County	Hamilton Township, Mercer County	Trenton City, Mercer County	Bucks County	Chester County	Delaware County	Montgomery County	Philadelphia County	Upper Darby Township, Delaware County

**Travel time to work  
(workers not working at home)**

Less than 5 minutes	3%	3%	5%	3%	n/a	n/a	n/a	n/a	n/a	4%	3%	3%	4%	1%	4%
5 to 9 minutes	9%	10%	15%	9%	n/a	n/a	n/a	n/a	n/a	12%	10%	11%	9%	4%	17%
10 to 14 minutes	16%	13%	17%	13%	n/a	n/a	n/a	n/a	n/a	15%	12%	14%	11%	8%	18%
15 to 19 minutes	14%	16%	16%	16%	n/a	n/a	n/a	n/a	n/a	17%	12%	16%	12%	11%	18%
20 to 24 minutes	15%	16%	12%	14%	n/a	n/a	n/a	n/a	n/a	14%	14%	14%	14%	13%	8%
25 to 29 minutes	7%	8%	6%	6%	n/a	n/a	n/a	n/a	n/a	6%	6%	7%	6%	6%	4%
30 to 34 minutes	12%	14%	11%	13%	n/a	n/a	n/a	n/a	n/a	11%	14%	11%	14%	17%	12%
35 to 39 minutes	3%	3%	2%	3%	n/a	n/a	n/a	n/a	n/a	3%	4%	3%	4%	4%	1%
40 to 44 minutes	5%	4%	4%	4%	n/a	n/a	n/a	n/a	n/a	4%	6%	5%	6%	6%	2%
45 to 59 minutes	8%	6%	5%	10%	n/a	n/a	n/a	n/a	n/a	7%	10%	8%	11%	13%	7%
60 to 89 minutes	6%	6%	4%	7%	n/a	n/a	n/a	n/a	n/a	5%	7%	5%	8%	12%	5%
90 or more minutes	2%	1%	1%	3%	n/a	n/a	n/a	n/a	n/a	2%	2%	2%	2%	4%	3%

**Source:** United States Census Bureau, 2006 American Community Survey. Estimates of the commute to work variables were not yet available for Camden City, Cherry Hill Township, Gloucester Township, Hamilton Township, or Trenton City as of 2006, but are available for Upper Darby Township.

**Appendix B: Estimates of selected characteristics from the American Community Survey, 2002-2006**

2005	New Jersey counties and municipalities									Pennsylvania counties and municipalities					
	Burlington County	Camden County	Gloucester County	Mercer County	Camden City, Camden County	Cherry Hill Township, Camden County	Gloucester Township, Camden County	Hamilton Township, Mercer County	Trenton City, Mercer County	Bucks County	Chester County	Delaware County	Montgomery County	Philadelphia County	Upper Darby Township, Delaware County
<b>POPULATION</b>															
Total population	436,706	507,843	271,709	345,118	73,305	73,543	68,957	88,362	77,471	612,210	458,141	531,609	753,046	1,406,415	85,038
Median age	38.7	36.6	37.2	37.6	27.4	41	33.8	39.5	32.6	40	38.8	39.8	39.9	35.3	33.8
Percent minority	26%	35%	n/a	41%	n/a	n/a	n/a	n/a	83%	10%	14%	25%	17%	61%	n/a
<b>HOUSEHOLDS</b>															
Total households	164,046	190,659	98,334	127,125	26,397	26,799	24,558	33,810	27,075	227,605	171,439	203,312	292,254	565,433	31,282
Average household size	2.66	2.66	2.76	2.71	2.78	2.74	2.81	2.61	2.86	2.69	2.67	2.61	2.58	2.49	2.72
Median household income	\$69,042	\$53,511	\$64,484	\$64,657	\$18,007	\$75,560	\$58,980	\$63,713	\$34,356	\$64,346	\$72,690	\$55,630	\$68,210	\$32,573	\$45,145
<b>HOUSING</b>															
Total units	171,133	203,760	103,137	138,901	30,428	27,362	25,625	35,990	33,187	237,546	178,778	220,114	308,738	659,769	33,596
Occupied units	164,046	190,659	98,334	127,125	26,397	26,799	24,558	33,810	27,075	227,605	171,439	203,312	292,254	565,433	31,282
Owner-occupied units	129,201	130,576	80,615	88,365	10,726	22,010	16,917	26,292	11,372	176,434	133,635	145,995	220,504	320,641	19,260
Renter Occupied units	34,845	60,083	17,719	38,760	15,671	4,789	7,641	7,518	15,703	51,171	37,804	57,317	71,750	244,792	12,022
Vacant units	7,087	13,101	4,803	11,776	4,031	563	1,067	2,180	6,112	9,941	7,339	16,802	16,484	94,336	2,314
Percent vacant	4.1%	6.4%	4.7%	8.5%	13.2%	2.1%	4.2%	6.1%	18.4%	4.2%	4.1%	7.6%	5.3%	14.3%	6.9%
Median value owner-occupied housing	\$237,100	\$184,700	\$195,600	\$277,700	\$63,800	\$256,900	\$198,000	\$244,500	\$112,100	\$285,800	\$295,600	\$198,500	\$263,800	\$100,200	\$130,800
Median selected housing costs as a % of median income:	22.8	23.4	23.6	23.4	24.8	22.2	24.3	22.8	21.5	23.2	22.2	22.2	21.2	21.9	23.2
Median gross rent	\$918	\$776	\$813	\$929	\$681	\$913	\$886	\$859	\$813	\$866	\$936	\$806	\$889	\$725	\$787
Median rent as a % of median income	30.8	30.3	29.3	29.7	41.5	27.5	24.2	29.1	33.3	30.4	27.7	29.1	28.4	34.0	28.5
<b>COMMUTE TO WORK</b>															
Total workers age 16 years and older	217,834	237,417	133,039	167,386	n/a	n/a	n/a	n/a	n/a	306,589	231,853	252,234	386,088	537,233	n/a
Mode of transportation to work															
Drove alone	179,007	175,457	114,196	124,057	n/a	n/a	n/a	n/a	n/a	254,847	189,821	186,963	309,494	276,103	n/a
Carpooled	19,939	27,895	10,208	16,388	n/a	n/a	n/a	n/a	n/a	25,444	18,067	22,097	32,674	53,656	n/a
Public transportation (excluding taxicab)	5,888	19,428	2,042	13,903	n/a	n/a	n/a	n/a	n/a	8,516	5,776	24,334	17,313	139,247	n/a
Walked	2,674	5,890	2,710	4,804	n/a	n/a	n/a	n/a	n/a	5,230	4,919	8,937	8,764	43,259	n/a
Taxicab, motorcycle, bicycle, or other means	1,639	2,483	1,058	2,918	n/a	n/a	n/a	n/a	n/a	2,157	2,320	1,893	4,448	10,809	n/a
Worked at home	8,687	6,264	2,825	5,316	n/a	n/a	n/a	n/a	n/a	10,395	10,950	8,010	13,395	14,159	n/a

**Appendix B: Estimates of selected characteristics from the American Community Survey, 2002-2006**

2005	New Jersey counties and municipalities					Pennsylvania counties and municipalities									
	Burlington County	Camden County	Gloucester County	Mercer County	Camden City, Camden County	Cherry Hill Township, Camden County	Gloucester Township, Camden County	Hamilton Township, Mercer County	Trenton City, Mercer County	Bucks County	Chester County	Delaware County	Montgomery County	Philadelphia County	Upper Darby Township, Delaware County

**Travel time to work  
(workers not working at home)**

Less than 5 minutes	3%	3%	5%	2%	n/a	n/a	n/a	n/a	n/a	4%	3%	3%	3%	1%	n/a
5 to 9 minutes	11%	11%	14%	8%	n/a	n/a	n/a	n/a	n/a	11%	11%	11%	9%	4%	n/a
10 to 14 minutes	13%	13%	19%	12%	n/a	n/a	n/a	n/a	n/a	16%	14%	15%	12%	7%	n/a
15 to 19 minutes	14%	16%	17%	14%	n/a	n/a	n/a	n/a	n/a	18%	13%	15%	12%	11%	n/a
20 to 24 minutes	15%	14%	13%	16%	n/a	n/a	n/a	n/a	n/a	13%	13%	14%	13%	13%	n/a
25 to 29 minutes	8%	7%	6%	6%	n/a	n/a	n/a	n/a	n/a	6%	7%	6%	7%	6%	n/a
30 to 34 minutes	12%	15%	12%	13%	n/a	n/a	n/a	n/a	n/a	12%	12%	13%	15%	18%	n/a
35 to 39 minutes	3%	3%	2%	4%	n/a	n/a	n/a	n/a	n/a	2%	4%	3%	4%	3%	n/a
40 to 44 minutes	3%	5%	2%	5%	n/a	n/a	n/a	n/a	n/a	3%	5%	4%	5%	6%	n/a
45 to 59 minutes	9%	7%	6%	10%	n/a	n/a	n/a	n/a	n/a	7%	10%	8%	11%	14%	n/a
60 to 89 minutes	7%	5%	3%	8%	n/a	n/a	n/a	n/a	n/a	5%	7%	6%	7%	11%	n/a
90 or more minutes	2%	2%	1%	3%	n/a	n/a	n/a	n/a	n/a	2%	2%	2%	3%	4%	n/a

Source: United States Census Bureau, 2005 American Community Survey.

**Appendix B: Estimates of selected characteristics from the American Community Survey, 2002-2006**

2004	New Jersey counties and municipalities									Pennsylvania counties and municipalities					
	Burlington County	Camden County	Gloucester County	Mercer County	Camden City, Camden County	Cherry Hill Township, Camden County	Gloucester Township, Camden County	Hamilton Township, Mercer County	Trenton City, Mercer County	Bucks County	Chester County	Delaware County	Montgomery County	Philadelphia County	Upper Darby Township, Delaware County
<b>POPULATION</b>															
Total population	435,483	505,876	266,605	344,179	n/a	n/a	n/a	n/a	n/a	608,486	450,433	531,191	751,097	1,414,245	n/a
Median age	38.5	36.2	36.3	37.1	n/a	n/a	n/a	n/a	n/a	39.3	38.3	39.4	39.1	35.2	n/a
Percent minority	25%	35%	16%	40%	n/a	n/a	n/a	n/a	n/a	10%	13%	24%	16%	61%	n/a
<b>HOUSEHOLDS</b>															
Total households	164,743	187,700	96,532	128,341	n/a	n/a	n/a	n/a	n/a	222,573	163,920	210,334	297,811	579,749	n/a
Average household size	2.64	2.70	2.76	2.68	n/a	n/a	n/a	n/a	n/a	2.73	2.75	2.53	2.52	2.44	n/a
Median household income	\$68,045	\$54,651	\$59,796	\$58,351	n/a	n/a	n/a	n/a	n/a	\$66,707	\$72,288	\$53,650	\$64,190	\$30,631	n/a
<b>HOUSING</b>															
Total units	169,905	202,772	101,285	137,573	n/a	n/a	n/a	n/a	n/a	235,423	175,474	219,732	306,687	658,799	n/a
Occupied units	164,743	187,700	96,532	128,341	n/a	n/a	n/a	n/a	n/a	222,573	163,920	210,334	297,811	579,749	n/a
Owner-occupied units	135,245	131,661	74,957	85,835	n/a	n/a	n/a	n/a	n/a	177,743	129,149	150,885	231,764	337,513	n/a
Renter Occupied units	29,498	56,039	21,575	42,506	n/a	n/a	n/a	n/a	n/a	44,830	34,771	59,449	66,047	242,236	n/a
Vacant units	5,162	15,072	4,753	9,232	n/a	n/a	n/a	n/a	n/a	12,850	11,554	9,398	8,876	79,050	n/a
Percent vacant	3.0%	7.4%	4.7%	6.7%	n/a	n/a	n/a	n/a	n/a	5.5%	6.6%	4.3%	2.9%	12.0%	n/a
Median value owner-occupied housing	\$201,366	\$154,584	\$169,956	\$235,902	n/a	n/a	n/a	n/a	n/a	\$245,468	\$246,726	\$178,925	\$230,491	\$87,236	n/a
Median selected housing costs as a % of median income:	23.1	23.1	23.6	24.7	n/a	n/a	n/a	n/a	n/a	22.7	21.1	21.3	20.9	20.5	n/a
Median gross rent	\$921	\$739	\$783	\$827	n/a	n/a	n/a	n/a	n/a	\$797	\$887	\$728	\$875	\$657	n/a
Median rent as a % of median income	26.8	30.2	27.1	33.9	n/a	n/a	n/a	n/a	n/a	29.0	23.9	29.5	26.7	32.4	n/a
<b>COMMUTE TO WORK</b>															
Total workers age 16 years and older	210,093	235,011	134,763	158,919	n/a	n/a	n/a	n/a	n/a	297,481	228,464	249,879	376,027	512,614	n/a
Mode of transportation to work															
Drove alone	176,530	169,755	115,311	119,597	n/a	n/a	n/a	n/a	n/a	247,544	186,276	184,266	305,275	262,863	n/a
Carpooled	17,588	26,544	9,780	14,748	n/a	n/a	n/a	n/a	n/a	21,683	14,485	26,843	30,091	57,517	n/a
Public transportation (excluding taxicab)	7,024	23,403	2,738	14,353	n/a	n/a	n/a	n/a	n/a	9,449	5,720	20,943	17,459	138,304	n/a
Walked	1,616	5,370	3,370	2,924	n/a	n/a	n/a	n/a	n/a	6,266	4,379	6,577	8,596	33,364	n/a
Taxicab, motorcycle, bicycle, or other means	1,954	2,331	1,376	1,419	n/a	n/a	n/a	n/a	n/a	1,293	2,929	2,323	1,914	10,958	n/a
Worked at home	5,381	7,608	2,188	5,878	n/a	n/a	n/a	n/a	n/a	11,246	14,675	8,927	12,692	9,608	n/a

**Appendix B: Estimates of selected characteristics from the American Community Survey, 2002-2006**

2004	New Jersey counties and municipalities									Pennsylvania counties and municipalities					
	Burlington County	Camden County	Gloucester County	Mercer County	Camden City, Camden County	Cherry Hill Township, Camden County	Gloucester Township, Camden County	Hamilton Township, Mercer County	Trenton City, Mercer County	Bucks County	Chester County	Delaware County	Montgomery County	Philadelphia County	Upper Darby Township, Delaware County

**Travel time to work  
(workers not working at home)**

Less than 5 minutes	1%	5%	6%	2%	n/a	n/a	n/a	n/a	n/a	4%	3%	3%	2%	2%	n/a
5 to 9 minutes	12%	11%	18%	8%	n/a	n/a	n/a	n/a	n/a	10%	10%	10%	8%	4%	n/a
10 to 14 minutes	14%	14%	18%	15%	n/a	n/a	n/a	n/a	n/a	16%	12%	14%	12%	8%	n/a
15 to 19 minutes	15%	16%	18%	18%	n/a	n/a	n/a	n/a	n/a	18%	12%	19%	13%	10%	n/a
20 to 24 minutes	15%	12%	11%	13%	n/a	n/a	n/a	n/a	n/a	13%	16%	16%	14%	14%	n/a
25 to 29 minutes	8%	6%	3%	6%	n/a	n/a	n/a	n/a	n/a	6%	5%	5%	7%	6%	n/a
30 to 34 minutes	10%	15%	9%	12%	n/a	n/a	n/a	n/a	n/a	10%	12%	12%	13%	17%	n/a
35 to 39 minutes	1%	2%	4%	2%	n/a	n/a	n/a	n/a	n/a	4%	3%	3%	4%	3%	n/a
40 to 44 minutes	4%	3%	3%	5%	n/a	n/a	n/a	n/a	n/a	3%	6%	3%	6%	6%	n/a
45 to 59 minutes	9%	8%	7%	10%	n/a	n/a	n/a	n/a	n/a	8%	11%	11%	9%	15%	n/a
60 to 89 minutes	8%	5%	3%	7%	n/a	n/a	n/a	n/a	n/a	6%	8%	3%	8%	10%	n/a
90 or more minutes	1%	2%	1%	2%	n/a	n/a	n/a	n/a	n/a	2%	1%	1%	3%	5%	n/a

Source: United States Census Bureau, 2004 American Community Survey.



**Appendix B: Estimates of selected characteristics from the American Community Survey, 2002-2006**

2003	New Jersey counties and municipalities									Pennsylvania counties and municipalities					
	Burlington County	Camden County	Gloucester County	Mercer County	Camden City, Camden County	Cherry Hill Township, Camden County	Gloucester Township, Camden County	Hamilton Township, Mercer County	Trenton City, Mercer County	Bucks County	Chester County	Delaware County	Montgomery County	Philadelphia County	Upper Darby Township, Delaware County
<b>POPULATION</b>															
Total population	430,454	503,503	261,761	340,889	n/a	n/a	n/a	n/a	n/a	604,070	442,235	530,962	748,780	1,423,538	n/a
Median age	38.4	36.1	36.7	37.4	n/a	n/a	n/a	n/a	n/a	38.8	37.9	38.6	39.1	35.5	n/a
Percent minority	24%	34%	15%	38%	n/a	n/a	n/a	n/a	n/a	9%	12%	22%	15%	60%	n/a
<b>HOUSEHOLDS</b>															
Total households	164,063	184,762	97,166	125,111	n/a	n/a	n/a	n/a	n/a	225,020	164,742	202,971	290,001	580,784	n/a
Average household size	2.62	2.73	2.69	2.72	n/a	n/a	n/a	n/a	n/a	2.68	2.68	2.62	2.58	2.45	n/a
Median household income	\$62,025	\$52,379	\$58,214	\$54,637	n/a	n/a	n/a	n/a	n/a	\$60,723	\$65,598	\$54,718	\$59,706	\$33,062	n/a
<b>HOUSING</b>															
Total units	168,869	201,867	99,922	136,986	n/a	n/a	n/a	n/a	n/a	233,541	173,285	219,883	305,601	659,260	n/a
Occupied units	164,063	184,762	97,166	125,111	n/a	n/a	n/a	n/a	n/a	225,020	164,742	202,971	290,001	580,784	n/a
Owner-occupied units	126,994	131,252	77,152	82,970	n/a	n/a	n/a	n/a	n/a	174,669	123,525	145,728	209,978	349,179	n/a
Renter Occupied units	37,069	53,510	20,014	42,141	n/a	n/a	n/a	n/a	n/a	50,351	41,217	57,243	80,023	231,605	n/a
Vacant units	4,806	17,105	2,756	11,875	n/a	n/a	n/a	n/a	n/a	8,521	8,543	16,912	15,600	78,476	n/a
Percent vacant	2.8%	8.5%	2.8%	8.7%	n/a	n/a	n/a	n/a	n/a	3.6%	4.9%	7.7%	5.1%	11.9%	n/a
Median value owner-occupied housing	\$177,412	\$136,167	\$155,323	\$197,851	n/a	n/a	n/a	n/a	n/a	\$215,312	\$223,498	\$161,138	\$202,909	\$72,716	n/a
Median selected housing costs as a % of median income:	22.4	22.3	21.8	20.5	n/a	n/a	n/a	n/a	n/a	21.5	20.3	20.5	20.7	19.1	n/a
Median gross rent	\$843	\$762	\$730	\$780	n/a	n/a	n/a	n/a	n/a	\$835	\$870	\$781	\$816	\$667	n/a
Median rent as a % of median income	26.5	28.2	28.0	28.7	n/a	n/a	n/a	n/a	n/a	25.9	28.2	25.3	28.0	32.3	n/a
<b>COMMUTE TO WORK</b>															
Total workers age 16 years and older	211,138	232,504	127,353	161,339	n/a	n/a	n/a	n/a	n/a	299,355	223,284	243,092	374,353	551,632	n/a
Mode of transportation to work															
Drove alone	172,784	168,176	105,153	126,724	n/a	n/a	n/a	n/a	n/a	255,265	184,111	178,264	306,219	284,782	n/a
Carpooled	18,988	24,561	15,003	15,010	n/a	n/a	n/a	n/a	n/a	19,680	12,503	27,024	23,175	63,872	n/a
Public transportation (excluding taxicab)	4,824	23,995	2,429	10,835	n/a	n/a	n/a	n/a	n/a	5,323	5,015	20,306	21,591	144,719	n/a
Walked	2,540	7,013	1,674	4,303	n/a	n/a	n/a	n/a	n/a	3,517	7,404	7,189	5,919	37,942	n/a
Taxicab, motorcycle, bicycle, or other means	2,665	2,486	547	1,319	n/a	n/a	n/a	n/a	n/a	2,853	1,427	2,529	2,001	12,646	n/a
Worked at home	9,337	6,273	2,547	3,148	n/a	n/a	n/a	n/a	n/a	12,717	12,824	7,780	15,448	7,671	n/a

**Appendix B: Estimates of selected characteristics from the American Community Survey, 2002-2006**

2003	New Jersey counties and municipalities									Pennsylvania counties and municipalities					
	Burlington County	Camden County	Gloucester County	Mercer County	Camden City, Camden County	Cherry Hill Township, Camden County	Gloucester Township, Camden County	Hamilton Township, Mercer County	Trenton City, Mercer County	Bucks County	Chester County	Delaware County	Montgomery County	Philadelphia County	Upper Darby Township, Delaware County

**Travel time to work  
(workers not working at home)**

Less than 5 minutes	3%	3%	3%	4%	n/a	n/a	n/a	n/a	n/a	3%	4%	2%	3%	2%	n/a
5 to 9 minutes	11%	12%	14%	9%	n/a	n/a	n/a	n/a	n/a	10%	10%	10%	9%	5%	n/a
10 to 14 minutes	12%	12%	12%	13%	n/a	n/a	n/a	n/a	n/a	15%	13%	12%	14%	9%	n/a
15 to 19 minutes	16%	14%	11%	15%	n/a	n/a	n/a	n/a	n/a	13%	15%	14%	15%	13%	n/a
20 to 24 minutes	14%	12%	14%	17%	n/a	n/a	n/a	n/a	n/a	14%	13%	14%	11%	16%	n/a
25 to 29 minutes	7%	7%	6%	6%	n/a	n/a	n/a	n/a	n/a	5%	6%	6%	6%	5%	n/a
30 to 34 minutes	12%	14%	12%	13%	n/a	n/a	n/a	n/a	n/a	13%	13%	14%	13%	20%	n/a
35 to 39 minutes	4%	2%	4%	4%	n/a	n/a	n/a	n/a	n/a	4%	4%	5%	3%	4%	n/a
40 to 44 minutes	4%	5%	5%	2%	n/a	n/a	n/a	n/a	n/a	4%	6%	6%	6%	5%	n/a
45 to 59 minutes	9%	10%	10%	6%	n/a	n/a	n/a	n/a	n/a	10%	9%	12%	12%	11%	n/a
60 to 89 minutes	4%	6%	8%	6%	n/a	n/a	n/a	n/a	n/a	6%	6%	4%	5%	7%	n/a
90 or more minutes	3%	2%	2%	5%	n/a	n/a	n/a	n/a	n/a	3%	2%	2%	2%	3%	n/a

Source: United States Census Bureau, 2003 American Community Survey.

**Appendix B: Estimates of selected characteristics from the American Community Survey, 2002-2006**

2002	New Jersey counties and municipalities									Pennsylvania counties and municipalities					
	Burlington County	Camden County	Gloucester County	Mercer County	Camden City, Camden County	Cherry Hill Township, Camden County	Gloucester Township, Camden County	Hamilton Township, Mercer County	Trenton City, Mercer County	Bucks County	Chester County	Delaware County	Montgomery County	Philadelphia County	Upper Darby Township, Delaware County
<b>POPULATION</b>															
Total population	423,709	501,551	256,848	338,371	n/a	n/a	n/a	n/a	n/a	601,357	435,104	531,048	743,177	1,436,694	n/a
Median age	37.6	36.6	37.1	37.9	n/a	n/a	n/a	n/a	n/a	38.6	38.5	38.2	39	35.1	n/a
Percent minority	24%	33%	14%	38%	n/a	n/a	n/a	n/a	n/a	9%	13%	22%	15%	60%	n/a
<b>HOUSEHOLDS</b>															
Total households	159,097	191,018	94,341	127,338	n/a	n/a	n/a	n/a	n/a	227,382	164,321	207,389	288,251	586,402	n/a
Average household size	2.66	2.63	2.72	2.66	n/a	n/a	n/a	n/a	n/a	2.64	2.65	2.56	2.58	2.45	n/a
Median household income	\$61,240	\$48,939	\$55,658	\$60,752	n/a	n/a	n/a	n/a	n/a	\$64,175	\$68,807	\$49,684	\$61,919	\$31,340	n/a
<b>HOUSING</b>															
Total units	166,648	200,934	98,198	135,770	n/a	n/a	n/a	n/a	n/a	230,876	170,150	219,262	303,322	660,450	n/a
Occupied	159,097	191,018	94,341	127,338	n/a	n/a	n/a	n/a	n/a	227,382	164,321	207,389	288,251	586,402	n/a
Owner-occupied	120,493	130,392	75,052	81,399	n/a	n/a	n/a	n/a	n/a	181,483	124,033	150,308	217,840	338,896	n/a
Renter-occupied	38,604	60,626	19,289	45,939	n/a	n/a	n/a	n/a	n/a	45,899	40,288	57,081	70,411	247,506	n/a
Vacant	7,551	9,916	3,857	8,432	n/a	n/a	n/a	n/a	n/a	3,494	5,829	11,873	15,071	74,048	n/a
Percent vacant	4.5%	4.9%	3.9%	6.2%	n/a	n/a	n/a	n/a	n/a	1.5%	3.4%	5.4%	5.0%	11.2%	n/a
Median value owner-occupied housing	\$157,431	\$120,200	\$132,026	\$185,275	n/a	n/a	n/a	n/a	n/a	\$187,430	\$205,013	\$136,737	\$182,619	\$66,226	n/a
Median selected housing costs as a % of median income:	20.7	21.8	20.5	20.8	n/a	n/a	n/a	n/a	n/a	21.3	19.7	21.0	20.5	18.8	n/a
Median gross rent	\$829	\$669	\$707	\$795	n/a	n/a	n/a	n/a	n/a	\$796	\$838	\$719	\$832	\$640	n/a
Median rent as a % of median income	25.9	27.5	24.1	28.9	n/a	n/a	n/a	n/a	n/a	25.6	23.3	24.5	26.5	31.0	n/a
<b>COMMUTE TO WORK</b>															
Total workers age 16 years and older	216,479	231,431	122,641	169,132	n/a	n/a	n/a	n/a	n/a	304,328	229,702	249,512	370,152	561,869	n/a
Mode of transportation to work:															
Drove alone	187,611	186,216	103,883	122,491	n/a	n/a	n/a	n/a	n/a	262,911	190,239	199,668	310,589	295,559	n/a
Carpooled	11,236	16,652	9,148	25,280	n/a	n/a	n/a	n/a	n/a	20,646	16,260	17,977	25,425	53,520	n/a
Public transportation (excluding taxicab)	8,355	16,912	2,913	10,837	n/a	n/a	n/a	n/a	n/a	5,453	3,923	20,678	11,773	150,899	n/a
Walked	2,437	5,817	943	3,119	n/a	n/a	n/a	n/a	n/a	5,029	5,237	4,352	6,348	44,854	n/a
Taxicab, motorcycle, bicycle, or other means	2,740	3,042	3,187	1,618	n/a	n/a	n/a	n/a	n/a	1,469	2,419	2,338	4,453	5,470	n/a
Worked at home	4,100	2,792	2,567	5,787	n/a	n/a	n/a	n/a	n/a	8,820	11,624	4,499	11,564	11,567	n/a

**Appendix B: Estimates of selected characteristics from the American Community Survey, 2002-2006**

2002	New Jersey counties and municipalities									Pennsylvania counties and municipalities					
	Burlington County	Camden County	Gloucester County	Mercer County	Camden City, Camden County	Cherry Hill Township, Camden County	Gloucester Township, Camden County	Hamilton Township, Mercer County	Trenton City, Mercer County	Bucks County	Chester County	Delaware County	Montgomery County	Philadelphia County	Upper Darby Township, Delaware County

Travel time to work (workers not working at home)

Less than 5 minutes	4%	2%	4%	4%	n/a	n/a	n/a	n/a	n/a	3%	4%	3%	3%	1%	n/a
5 to 9 minutes	8%	9%	10%	12%	n/a	n/a	n/a	n/a	n/a	9%	9%	9%	11%	6%	n/a
10 to 14 minutes	13%	12%	12%	14%	n/a	n/a	n/a	n/a	n/a	14%	12%	12%	14%	8%	n/a
15 to 19 minutes	14%	14%	11%	17%	n/a	n/a	n/a	n/a	n/a	15%	16%	13%	12%	14%	n/a
20 to 24 minutes	13%	16%	15%	15%	n/a	n/a	n/a	n/a	n/a	12%	14%	16%	13%	14%	n/a
25 to 29 minutes	8%	8%	9%	6%	n/a	n/a	n/a	n/a	n/a	7%	8%	7%	6%	6%	n/a
30 to 34 minutes	13%	16%	14%	8%	n/a	n/a	n/a	n/a	n/a	13%	15%	15%	13%	18%	n/a
35 to 39 minutes	6%	2%	2%	3%	n/a	n/a	n/a	n/a	n/a	3%	2%	4%	4%	4%	n/a
40 to 44 minutes	5%	5%	6%	4%	n/a	n/a	n/a	n/a	n/a	4%	5%	6%	6%	6%	n/a
45 to 59 minutes	9%	11%	9%	6%	n/a	n/a	n/a	n/a	n/a	10%	9%	8%	9%	12%	n/a
60 to 89 minutes	5%	5%	7%	9%	n/a	n/a	n/a	n/a	n/a	7%	4%	5%	6%	7%	n/a
90 or more minutes	3%	2%	1%	3%	n/a	n/a	n/a	n/a	n/a	3%	2%	1%	2%	3%	n/a

Source: United States Census Bureau, 2002 American Community Survey.

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Analytical report #15 is the latest in a series of bulletins designed to complement our traditional data releases. For more information on analytical data reports, regional data bulletins, or data snapshots, please visit the Delaware Valley Regional Planning Commission's website ([www.dvrpc.org](http://www.dvrpc.org)) or contact DVRPC at the telephone number below.

The Delaware Valley Regional Planning Commission was established in 1965 by interstate compact between Pennsylvania and New Jersey to plan for the orderly growth and development of the region, and to provide a variety of planning and technical assistance services responding to regional issues. DVRPC maintains a significant database for twenty-eight counties encompassing New Jersey, Delaware, Pennsylvania and Maryland. Included in the database are data profiles at the regional, county, and municipal levels and for other census geographies, as requested. DVRPC produces a diverse range of services, including demographic and economic data and projections; mapping and aerial photography; computer assisted mapping; geographic information systems; impact studies; and policy and program development.

DVRPC fully complies with Title VI of the Civil Rights Act of 1964 and related statutes and regulations in all programs and activities. DVRPC's website may be translated into Spanish, Russian, and Traditional Chinese online by visiting [www.dvrpc.org](http://www.dvrpc.org). Publications and other public documents can be made available in alternative languages or formats, if requested. For more information, please call (215) 238-2871.

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