



# Research Brief

The Commonwealth's Official Source for Population and Economic Statistics

December 3, 2015

## 2014 ACS 5-Year Estimates Released for Pennsylvania: Dataset Marks First Non-Overlapping ACS 5-Year Estimates

PENN STATE HARRISBURG – The U.S. Census Bureau today released its annual installment of new demographic and socio-economic data for every community in the United States – the 2010-2014 American Community Survey (ACS) 5-Year Estimates. These estimates provide data for all Pennsylvania counties, municipalities, and other geographic areas down to the census block-group level. The 2014 ACS 5-Year Estimates are notable as they are the first dataset from the 5-Year ACS product series that do not overlap with a previous version and thus, allow small-area<sup>1</sup> data users to compare changes in social, economic and housing characteristics since the 5-year period from 2005-2009.

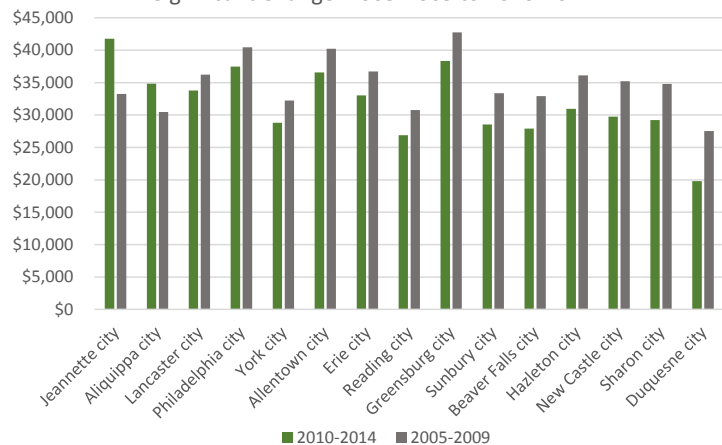
### Assessing Change over Time for Pennsylvania Cities

Analyzing change over time between two ACS estimates cannot be done by simply comparing the two estimates. Because ACS estimates are derived from a sample, assessing change over time for a specific geographic area requires consideration of the magnitude of sampling error. All ACS estimates are published with a margin of error which measures this sampling error. Failure to incorporate the sampling error of survey estimates into an analysis, could impact the conclusions drawn from the results. For instance, while all Pennsylvania cities have a published estimate for median household income for both five-year periods 2005-2009 and 2010-2014, only 15 of the 57 cities had a statistically significant change between the periods. Omitting the sampling error in this case would lead to reporting apparent household income changes in 42 cities that may have resulted from sampling variation alone. To uncover whether or not a true change has occurred, statistical testing must be undertaken.

### Income and Housing Value

Of the fifteen Pennsylvania cities reporting a statistically significant change in median household income between 2005-2009 and 2010-2014, only Jeannette in Westmoreland County and Aliquippa in Beaver County experienced an increase. Between the two five-year periods, the cities had their median household income grow by \$8,511 (20.4 percent) and \$4,369 (12.5 percent) respectively. The remaining cities with a significant change all showed a decline in median household income. Among those reporting the largest losses, were Hazleton (\$5,181), New Castle (\$5,434), Sharon (\$5,594) and Duquesne (\$7,729). Figure 1. shows the median household

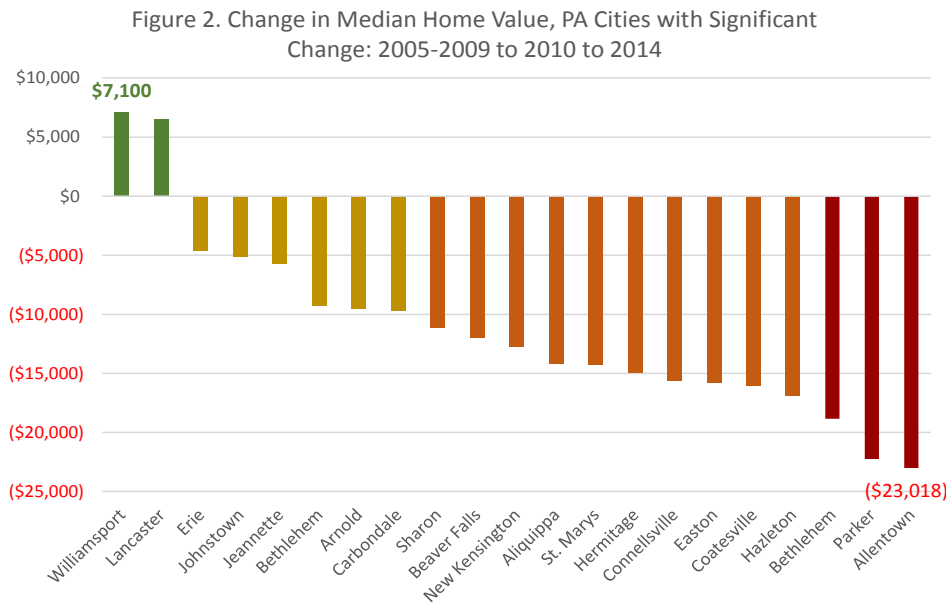
Figure 1. Median Household Income, Pa Cities with Significant Change: 2005-2009 to 2010-2014



<sup>1</sup> Geographic areas below 20,000 in population.

income in the fifteen cities with a statistically significant change between 2005-2009 and 2010-2014. Note: All dollar denominated figures have been inflation-adjusted to 2014 dollars.

Twenty-one of the state's cities showed a significant change in the median value of owner-occupied housing units from 2005-2009 to 2010-2014. Outside of Williamsport and Lancaster, which saw a \$7,100 and \$6,497 increase in median home value respectively, none of the other Pennsylvania cities with a significant change reported growth. The median value for a home in Williamsport grew from \$93,900 in 2005-2009 to \$101,000 in 2010-2014. In Lancaster, growth from \$101,403 to \$107,900 occurred between the five-year periods. In terms of median value decline, thirteen cities experienced a more than \$10,000 loss in value. Allentown experienced the largest numeric loss of any city over the time frame. The city's median home value dropped from \$151,718 in 2005-2009 to \$128,700 in 2010-2014, equating to a \$23,018 or 17.9 percent decline in value (see Figure 2.).



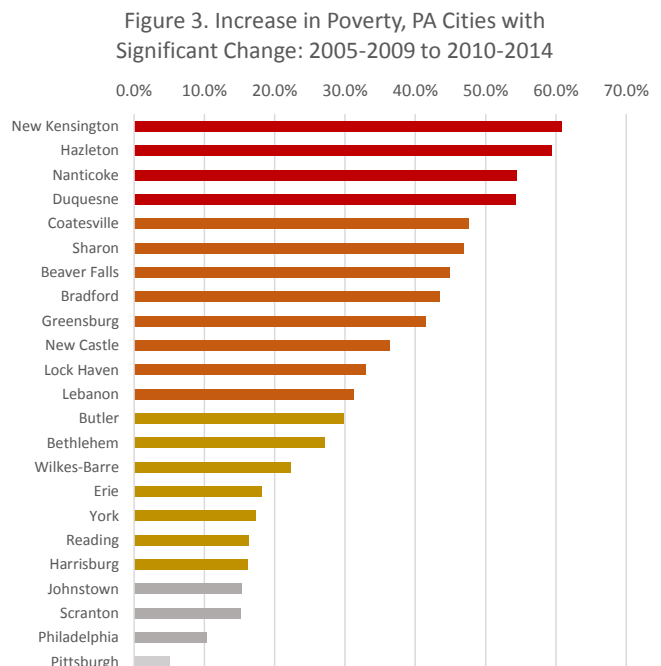
### Poverty and Food Stamps

The poverty rates in twenty-four Pennsylvania cities changed significantly between 2005-2009 and 2010-2014.

New Kensington (60.8 percent) in Westmoreland County, followed by two Luzerne County cities, Hazleton (59.4 percent) and Nanticoke (54.4 percent), reported the largest percent increases in the number of persons living below the federal poverty level. Only one city in the state had a significant decrease in the percent of residents living below poverty – Jeannette which declined by 29.8 percent during the two periods.

During the period 2005-2009, Reading city had the one of the highest poverty rate of any Pennsylvania city at 34.5 percent. This figure has increased 5.6 percentage points to the period 2010-2014 to reach 40.1 percent, ranking Reading third among cities, behind Duquesne (42.6 percent) and Lock Haven (40.7 percent) cities.

Between 2010-2014 and the previous five-year period, 38 cities in the state reported significant changes – all increases – in the number of people receiving Food Stamps/SNAP Benefits. In two Pennsylvania cities –



Coatesville and St. Mary's - the population receiving food stamps nearly doubled over the two periods. These cities had increases of 88.4 percent and 87.2 percent, respectively between the two time periods. Next, were Monongahela, Hazleton, Bethlehem, Shamokin and Beaver Falls which all had increases above 70.0 percent. In terms of numeric gains, Philadelphia (52,333), Pittsburgh (5,505) and Reading (5,110) experienced the largest growth of SNAP beneficiaries.

### Other Selected County-Level Data

Pennsylvania has seventeen counties below the population threshold for receiving estimates from the ACS 1-Year product, resulting in data users having to use the ACS 5-Year Estimates to make comparisons between all counties and over time. Below are some selected socioeconomic changes between 2005-2009 and 2010-2014 for the commonwealth's 67 counties:

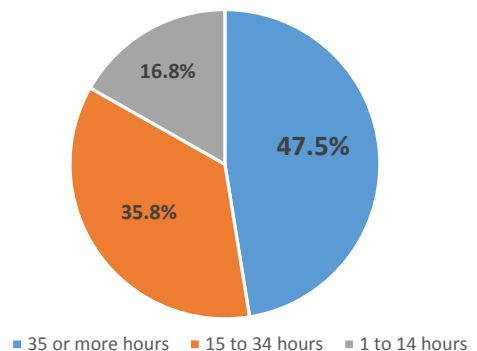
- The percent of the population with a bachelor's degree or higher increased in all 45 counties showing a statistically significant change between 2005-2009 and 2010-2014. Indiana (4.9), Butler (3.8) and Beaver (3.7) counties had the largest increases for those holding an advanced degree.
- Northern Tier counties of Bradford, Susquehanna, Tioga and Wyoming all had greater than 10.0 percent growth in median home values between the two five-year time periods. Overall, 41 of 67 counties reported a significant change in this metric. These counties were split nearly 50/50 in terms of increase or decrease with 20 counties gaining and 21 losing value. Pike and Monroe counties experienced the largest numeric decline in median housing value, losing \$43,508 and \$36,036, respectively.
- Of the 35 counties with a significant change in the number of people living in household with incomes at or below 150 percent of the poverty level, Monroe (40.3 percent), Franklin (39.4 percent) and Cumberland (35.9 percent) had the largest increases. Twenty-four counties had larger percent increases in this metric than the state overall (11.6 percent). Greene (-22.9 percent), Fayette (-7.9 percent) and Indiana (-7.5 percent) were the only counties to experience a decrease in those living at or below 150 percent of poverty over the two time periods.
- Three counties: Cumberland (138.2 percent), Franklin (115.0 percent) and Montgomery (105.4 percent) saw the number of household receiving Food Stamps/SNAP benefits more than double between 2005-2009 and 2010-2014 (see map at end of Research Brief).

### New Data Tables

As is typically the case and to meet the changing needs of data users, the 2014 ACS 5-Year Estimates contain several new tables. New for this year's edition include two new detailed tables (B05013 and B05014) on the foreign-born population, two more (B23026 and B23027) on workers by age and several new tables on health insurance – one of which (B27023) offers a look at private insurance coverage of young adults aged 19 to 25 years by school enrollment. According to this new health insurance table, Pennsylvania young adults enrolled in school during the period 2010-2014 had higher rates of private health insurance coverage than those not enrolled in school (82.9 percent compared to 59.3 percent). Overall in Pennsylvania 72.7 percent of the population carried private health insurance in 2010-2014.

Information from the previously mentioned new worker by age table reveals the work situation for the commonwealth's 65 year and older population. According to the data, almost a quarter (24.4 percent) of men and 15.1 percent of women aged 65 years and over in Pennsylvania worked in the past 12 months. During the period 2010-2014, nearly half (47.5 percent) of older Pennsylvanians that worked during the past year worked 35 hours or more per week. Another 35.8 percent worked 15 to 34 hours per week, while the remaining 16.8 percent age 65 plus workers worked 14 hours per week or less (see figure). Men were more likely than women to work 35 hours plus per week than women (52.3 percent versus 41.6 percent).

Figure 4. Usual Hours Worked Per Week for Older Pennsylvanians, PA: 2010-2014



Although men aged 65 years and over were more likely than women to work overall in Pennsylvania in 2010-2014 (54.5 percent compared to 45.5 percent), differences existed between geographic areas as indicated by Figure 5.

### Geography Notes

The Boundary and Annexation Survey (BAS) was suspended in 2014. As a result, the 2014 ACS Estimates do not reflect boundary updates from legal annexations, but new incorporations, disincorporations and legal name changes are included.

### More about ACS 5-Year Estimates

The transition from the former long-form sample to the ACS in 2010 when the 2005-2009 ACS 5-Year Estimates were released (the first ACS 5-Year product) marked a major transition for the data community. Since that time, data users have reoriented themselves to expect updated socio-economic data from the ACS on an annual basis. By providing the first set of unique socioeconomic estimates for small areas, today's release brings the promise of the ACS full circle.

ACS 5-Year estimates are derived from 60 months of data collection to provide a large enough sample size to ensure the most reliable estimates for smaller geographic areas. Currently, four modes of data collection are utilized: Internet, Mailout/Mailback, Computer Assisted Telephone Interview, and Computer Assisted Personal Interview.

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The 2010-2014 ACS Estimates aggregate the sample responses from Pennsylvania households collected from January 1, 2010 to December 31, 2014 and represent the average estimate of a population characteristic over the entire time period. For 2010, the 2010-2014 ACS estimates were based on an annual, nationwide household sample of about 250,000 addresses per month (2.5 percent of the population per year). As a result of sample size enhancements in June of 2011, the data collected in the years 2011 to 2014 were based on roughly 350,000 addresses per month, or 3.5 percent of the population per year.<sup>2</sup>

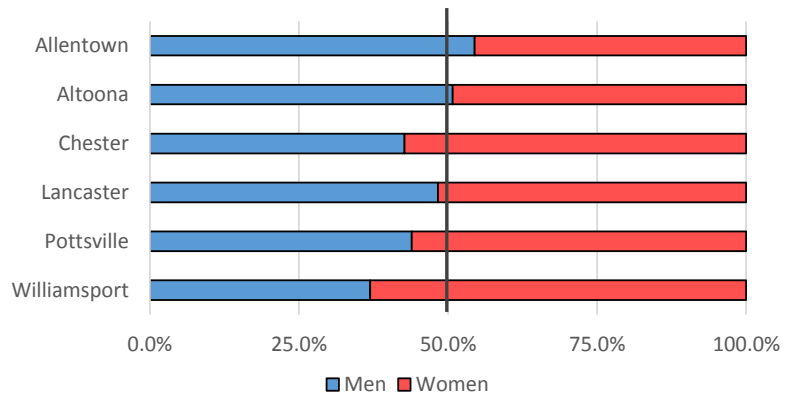
Estimates from the 2010-2014 ACS 5-Year product are available for all geographic areas in Pennsylvania, including the geographies that were included in the one-year releases. The 2014 ACS 5-Year Estimates are different from, and should not be directly compared to the 2014 ACS 1-Year Estimates. As is the case with all surveys, statistics from sample surveys are subject to sampling and nonsampling error. Margins of error have been omitted in this Research Brief for clarity, but are available for all ACS estimates from [factfinder.census.gov](http://factfinder.census.gov).

Source: U.S. Census Bureau, 2010-2014 and 2005-2009 American Community Survey 5-Year Estimates  
Release Date: December 3, 2015

The Pennsylvania State Data Center is the commonwealth's official source for population and economic statistics. It is based at Penn State Harrisburg's Institute of State and Regional Affairs. The Pennsylvania State Data Center is part of the U.S. Census Bureau's National State Data Center Program.

**Editors: For additional data, contact the Pennsylvania State Data Center's State Capital Office at 717.772.2710 or for faculty comment on this topic, contact Penn State Harrisburg's Public Information Office at 717.948.6029.**

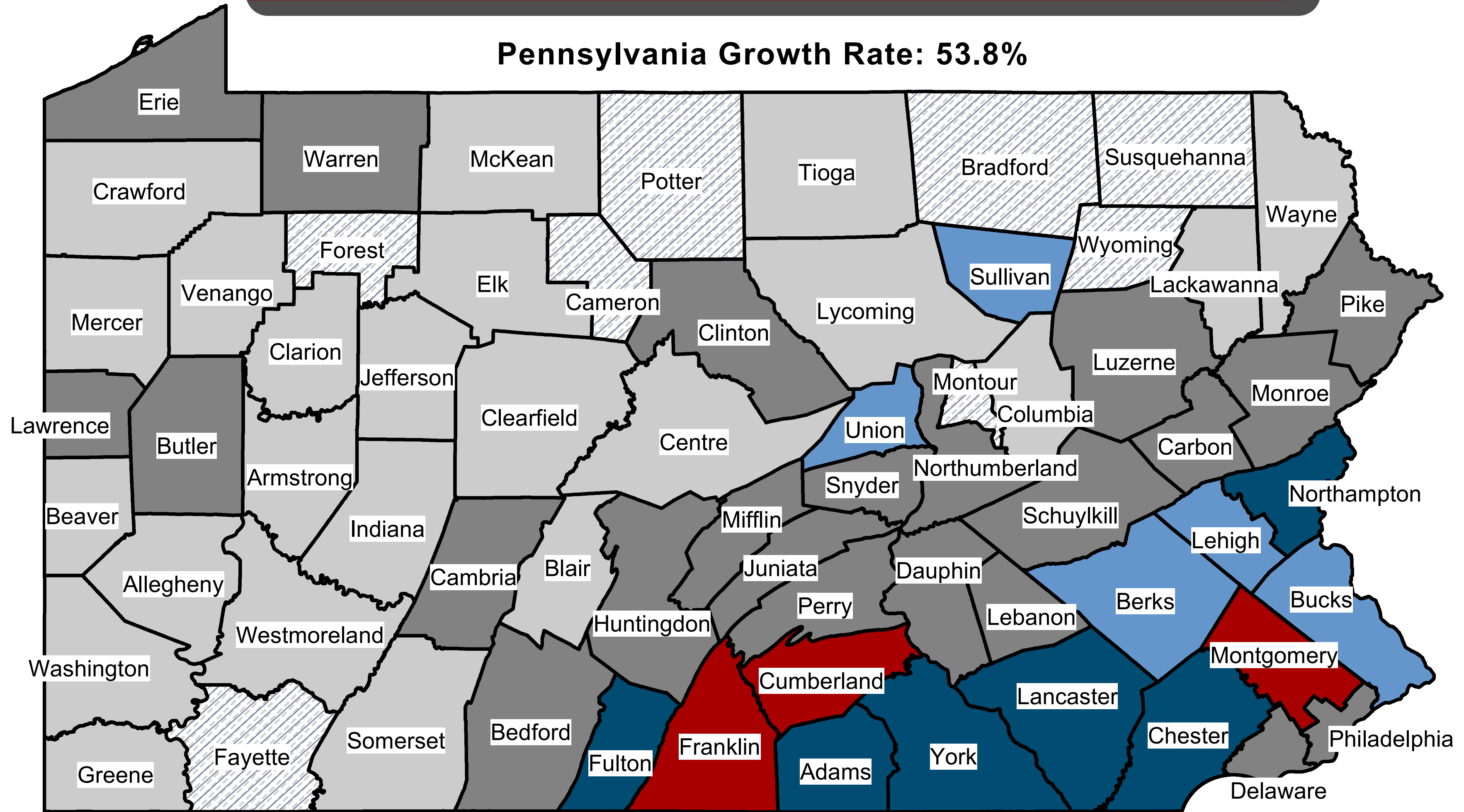
Figure 5. Sex by Older Workers, Select PA Cities: 2010-2014



<sup>2</sup> Because of the Federal Government shutdown in October 2013, the ACS did not collect data for the October panel. As a result, the 2013 sample was smaller than the 2014 sample.

# Increase in Food Stamp/SNAP Benefit Enrollees Pennsylvania Counties: 2005-2009 to 2010-2014

Pennsylvania Growth Rate: 53.8%



## Percent Increase

