

Note on this analysis: The seven indicators examined here are listed in no particular order. Whenever possible, the analysis used the most current data; therefore, some of the data reported are preliminary and may be revised later by the reporting agency.

When comparing rural and urban Pennsylvania with rural and urban America, the analysis used the same datasets whenever possible. The Center for Rural Pennsylvania applied its definition of rural and urban, which is based on population density, to identify rural and urban counties in other states: a county was rural when the number of people per square mile was below the state's statewide population density; all other counties were urban.

During the Great Recession's 19-month run, which started in December 2007, unemployment spiked, the housing market experienced massive numbers of home foreclosures, and businesses closed their doors across the U.S. Almost a decade later, the nation and Pennsylvania have seen signs of recovery, but some effects of the recession still seem to linger.

To better understand how rural and urban Pennsylvania have fared these past nine years since the end of the Great Recession, the Center for Rural Pennsylvania examined several indicators that can be useful in measuring economic recovery and suggesting future economic changes.

Overall, the analysis found that employment, the number of businesses, and the number of housing starts in rural Pennsylvania have not returned to pre-recession levels. One bright spot in the recovery is that average weekly wages among rural workers have increased slightly from 2007 to 2017. However, while the wage gap between rural and urban workers has narrowed somewhat, urban workers still earn 28 percent more per week, on average, than rural workers.

The analysis also revealed that rural Pennsylvania is not alone in this post-recession economic languor, as rural America also continues to experience a slow economic recovery.

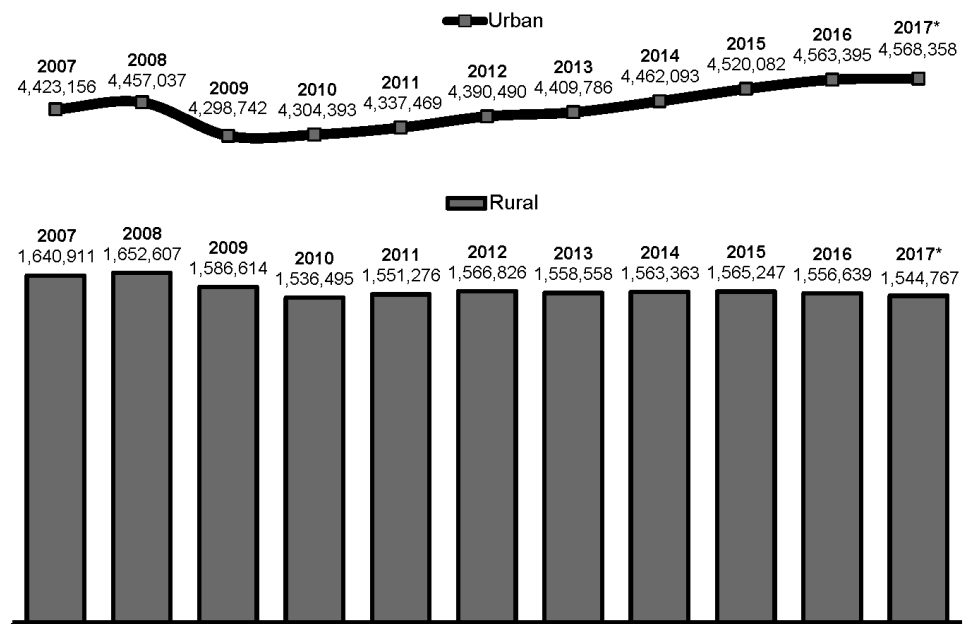
1 EMPLOYMENT

From 2007 to 2017, rural Pennsylvania lost more than 96,100 jobs. During the same period, urban Pennsylvania gained about 145,200 jobs. Among Pennsylvania's 48 rural counties, 17 had job losses of 10 percent or greater.

This trend was not unique to rural Pennsylvania. Across rural America, from 2007 to 2017, more than 654,300 jobs, or 2 percent, were lost. In urban America, there was an increase of more than 8.83 million jobs, or 8 percent.

Number of Employees in Rural and Urban Pennsylvania, 2007 to 2017*

Note: Graph not to scale.



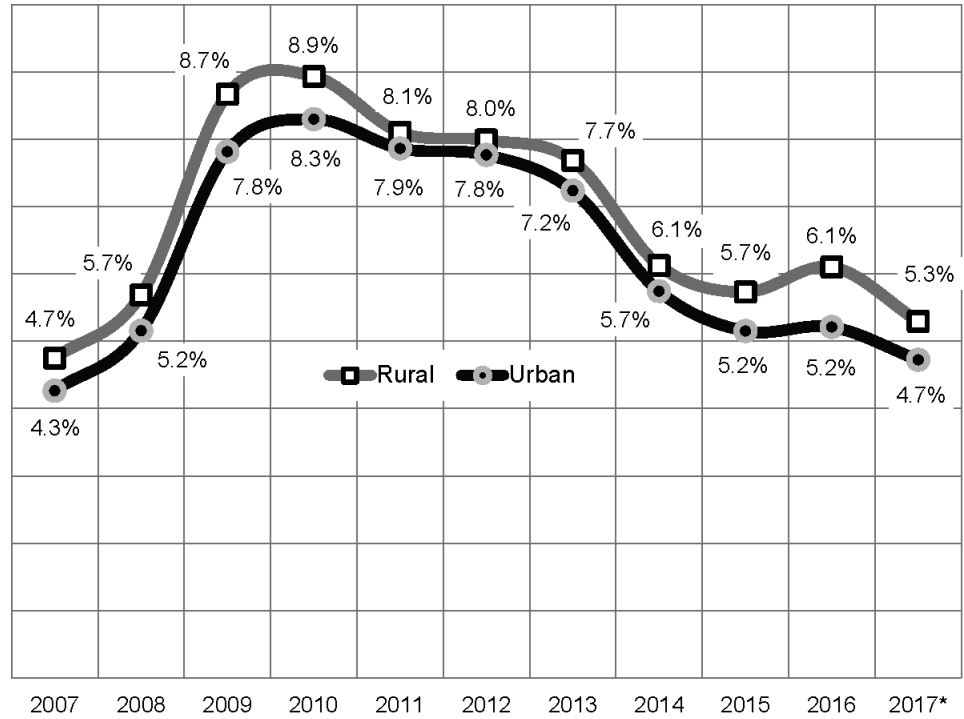
*2017 represents a 12-month average (January to December) of non-seasonally adjusted employment. Data are benchmarked to 2017. Data source: Local Area Unemployment Statistics, U.S. Bureau of Labor Statistics.

2 UNEMPLOYMENT

Unemployment in rural and urban Pennsylvania peaked in 2010, a year after the recession ended. Since then, both rural and urban Pennsylvania have seen a gradual decline in the unemployment rate. Neither rural nor urban unemployment rates have fallen below their pre-recession rates, however.

Nationwide, rural unemployment peaked in 2010 at 10 percent, and has slowly declined to the current rate of 4.9 percent, or 0.2 percentage points below the 2007 level. Urban unemployment followed this same pattern, peaking in 2010 at 9.4 percent, then declining to 4.2 percent in 2017, or 0.3 percentage points below the 2007 rate.

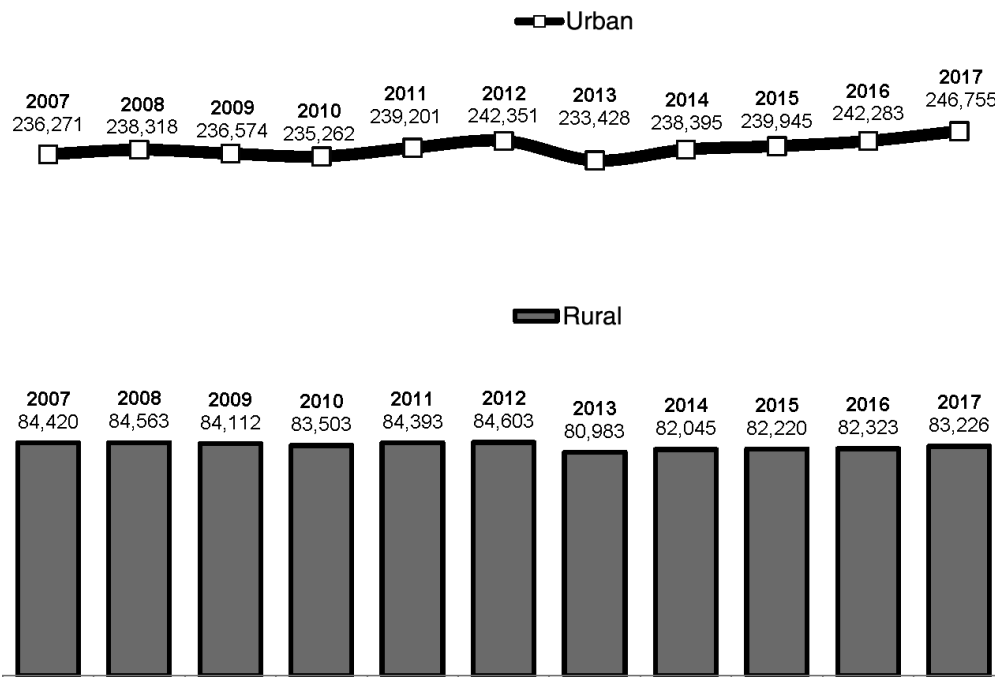
Rural and Urban Pennsylvania Unemployment Rates, 2007 to 2017*



*2017 represents a 12-month average (January to December) of non-seasonally adjusted employment. Data are benchmarked to 2017. Data source: Local Area Unemployment Statistics, U.S. Bureau of Labor Statistics.

Number of Employers in Rural and Urban Pennsylvania, Second Quarters, 2007 to 2017

Note: Graph not to scale.



Note: Analysis only included data assigned to a specific county. Data source: Quarterly Census of Employment and Wages, U.S. Bureau of Labor Statistics.

3 EMPLOYERS

From the second quarter of 2007 to the second quarter of 2017, the number of employers (establishments) in rural areas declined by 1,194, or 1 percent. During the same period, the number of employers in urban areas increased by 10,484, or 4 percent.

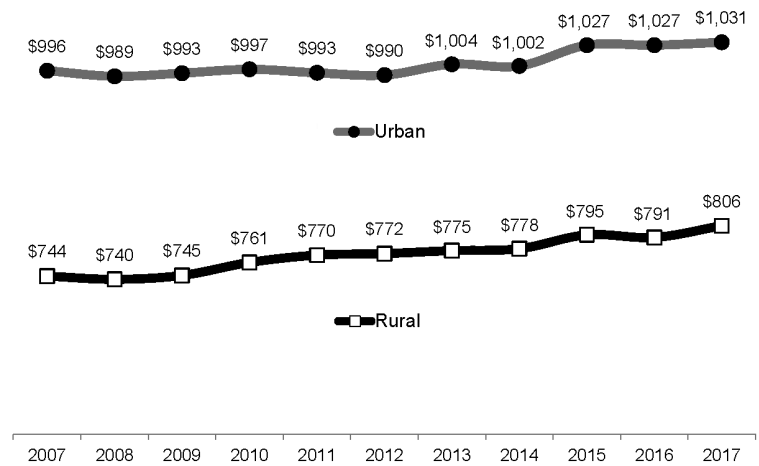
Nationwide, there was a 3 percent increase in rural employers and a 12 percent increase in urban employers from 2007 to 2017.

4 WAGES

After adjusting for inflation, the average weekly wage in rural Pennsylvania went from \$744 in 2007 to \$806 in 2017, a \$62, or 8 percent, increase. Average weekly wages in urban Pennsylvania increased from \$996 in 2007 to \$1,031 in 2017, a \$35, or 3 percent, increase. Along with the increase in rural and urban wages, there has been a slight decline in the income gap between rural and urban workers. In 2007 there was a \$252 weekly wage gap between rural and urban workers. In 2017, that gap decreased \$27, or 11 percent, to \$225.

Nationwide, average weekly wages in both rural and urban areas increased 5 percent. Like Pennsylvania, there was a significant wage gap between rural and urban areas: in 2017, the average weekly wage in rural America was \$801 while the average weekly wage in urban America was \$1,062.

Rural and Urban Pennsylvania Average Weekly Wages, Second Quarters, 2006 to 2017

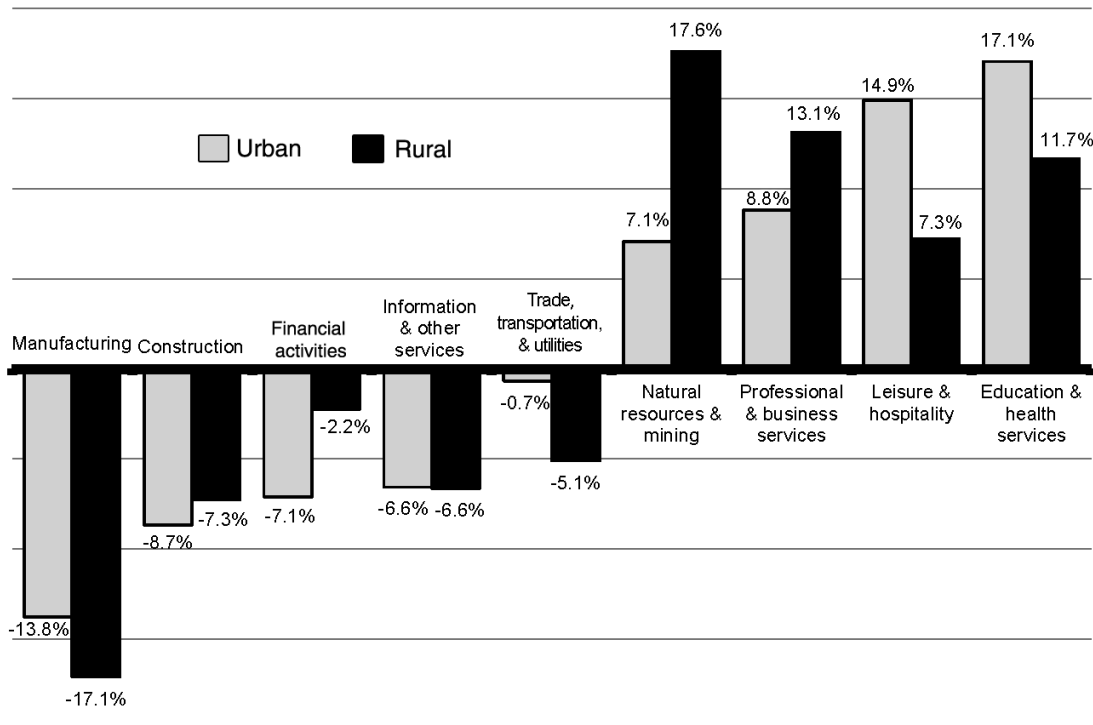


Note: Data adjusted for inflation using the CPI-U with 2017=100. Analysis only included data assigned to a specific county. Data source: Quarterly Census of Employment and Wages, U.S. Bureau of Labor Statistics.

5 EMPLOYMENT BY INDUSTRY

From 2007 to 2017, rural Pennsylvania saw overall employment increases in the service-providing industries and in the government sector. The service-providing industries include education and health services, leisure

Percent Change in Rural and Urban Pennsylvania Employment by Industry, Second Quarters, 2007 to 2017*



Note: Analysis only included data assigned to a specific county. *Figure excludes suppressed data, or data that were not reported due to confidentiality rules. Data source: Quarterly Census of Employment and Wages, U.S. Bureau of Labor Statistics.

and hospitality, and financial activities. In total, these industries experienced a 3 percent increase in employment from 2007 to 2017. Government, which includes federal, state and local, also had a 3 percent increase.

Goods-producing industries, which include manufacturing, construction, and natural resources and mining, had a 12 percent decline from 2007 to 2017. While natural resources and mining had an employment surge during this period (18 percent), this industry only accounts for 2 percent of total rural employment. Manufacturing and construction comprise 18 percent of total rural employment.

In urban Pennsylvania, from 2007 to 2017, goods-producing employment also decreased 12 percent, while service-producing employment increased 7 percent. Government employment in urban Pennsylvania declined 6 percent during this period.

Nationwide, from 2007 to 2012, employment in rural goods-producing industries declined 8 percent and in government it declined 2 percent. Rural service-producing employment increased 5 percent.

6 AGE OF LABOR FORCE

Data from the U.S. Census Bureau showed that, from 2009 to 2016, the total number of people in the rural labor force slightly increased (0.2 percent). During this period, the total number of people in the urban labor force increased 5 percent. The labor force is comprised of people who are employed and those who are unemployed and looking for work.

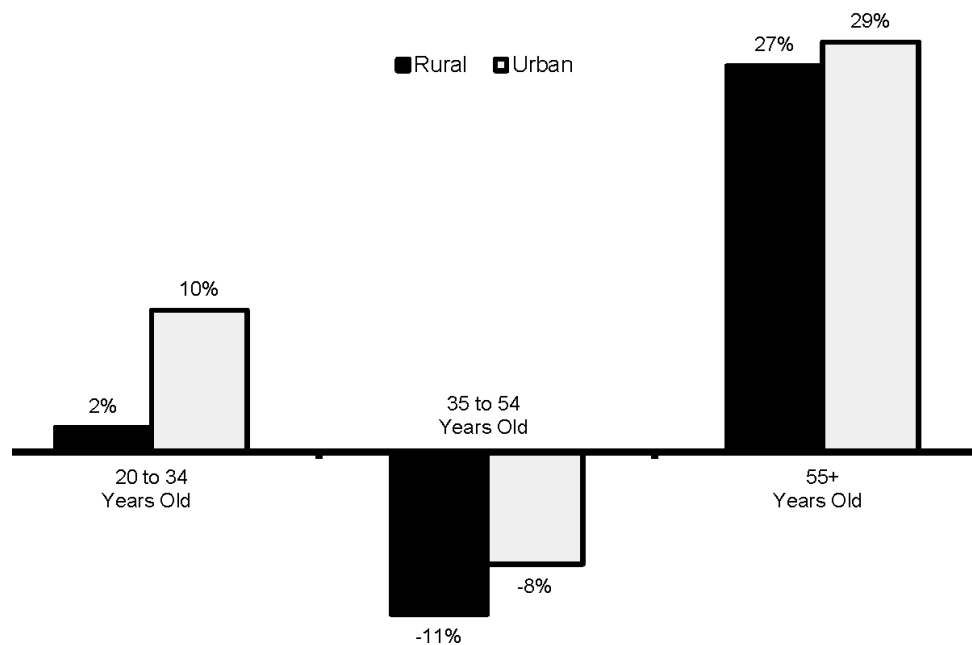
In rural Pennsylvania, there was a slight increase (2 percent) in young adults (20 to 34 years old) in the labor force from 2009 to 2016. The total rural population aged 20 to 34 during this period increased 3 percent. In urban Pennsylvania, there was 10 percent increase in young adults in the labor force. The total urban population aged 20 to 34 during this period also increased 10 percent.

Among middle-aged adults (35 to 54) in both rural and urban areas, there was a decline in the number of people in the labor force. This decline was greater in rural areas (11 percent) than in urban areas (8 percent). From 2009 to 2016, the total number of people aged 35 to 54 decreased 10 percent in rural and 8 percent in urban Pennsylvania. However, this age cohort makes up the largest portion of the labor force at 45 percent.

Finally, both rural and urban areas saw a significant increase in older adults (55 years old and older) in the labor force. Rural areas had a 27 percent increase and urban areas had a 29 percent increase in adults in that age cohort. These increases were much faster than the population change: from 2009 to 2016, the number of people age 55 years old and older increased 15 percent in rural and 16 percent in urban Pennsylvania. This indicates that Pennsylvania has an aging workforce and may experience labor shortages in the future.

Across rural America, the number of young adults in the labor force increased 3 percent. Among middle-aged adults, there was a 9 percent decline, and among older adults, there was a 24 percent increase.

Percent Change in Rural and Urban Pennsylvania Labor Force, by Age Cohorts, 2009 to 2016



Data source: 2009, 5-year average, and 2016, 5-year average, American Community Survey, U.S. Census Bureau.

7 HOUSING

In 2004, three years before the Great Recession, housing starts (permits) in rural Pennsylvania hit their peak at 16,292. From 2004 to 2011, the number of new housing starts in rural Pennsylvania declined and hit bottom at 4,233 in 2011. While there has been a slight increase since 2011, new housing starts have not bounced back to even pre-recession levels.

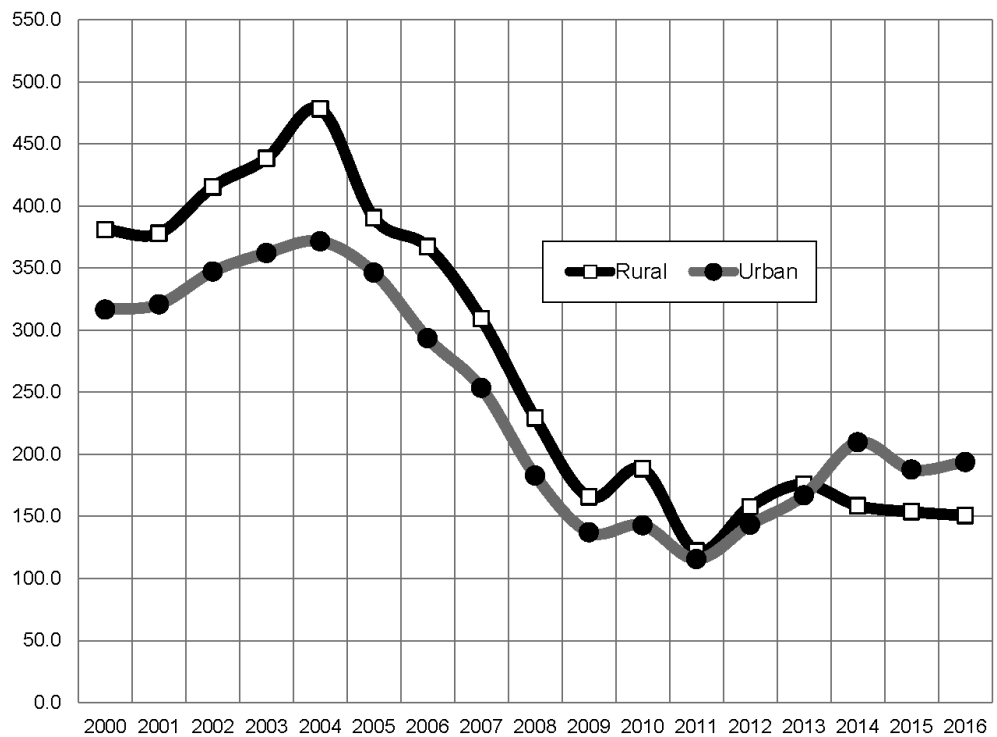
New housing starts in urban Pennsylvania followed a similar pattern, with a peak in 2004 at 33,373 and a bottoming out in 2011 at 10,734.

Along with a decline in the number of housing permits, there was a decline in housing values. From 2009 to 2016, Census data show that rural home prices (adjusted for inflation) declined 2 percent, on average, from \$162,500 in 2009 to \$159,400 in 2016. In urban areas, housing prices had an even steeper decline of 8 percent, on average, from \$247,600 in 2009 to \$228,700 in 2016.

Homeownership also decreased in rural and urban areas. In 2009, Census data indicated that 75 percent of rural and 70 percent of urban occupied units were owner-occupied. In 2016, the rural homeownership rate decreased 1 percentage point to 74 percent and the urban homeownership rate declined 3 percentage points to 67 percent.

In rural America, new housing starts in 2016 were 34 percent below 2007 housing starts. In urban America, housing starts in 2016 were 8 percent below 2007 levels. In addition, in both rural and urban America, 2016 housing values were each more than 10 percent lower than the 2009 values, and the 2016 homeownership rates were more than 2 percentage points lower than the 2009 rates.

**Number of Housing Permits per 100,000
Rural and Urban Pennsylvania Residents, 2007 to 2016**



Data source: U.S. Census Bureau.

Conclusions

Rural Pennsylvania is Still Recovering from the Great Recession

The analysis shows that, nine years after the Great Recession ended, rural Pennsylvania is still in recovery mode. Most of the economic indicators examined here have not returned to their pre-recession levels, including the unemployment rate, the number of business establishments, and the number of new housing starts. The one bright spot in this recovery is average weekly wages. On average, rural workers were

earning more in 2017 than they were earning in 2007. This good news, however, is tempered by the fact that there are fewer rural workers and employers now than there were in 2007.

Economic Gap between Rural and Urban Pennsylvania is Growing

There has always been an economic gap between rural and urban Pennsylvania. This gap, however, has grown since the Great Recession. Urban areas have seen gains in employment, new businesses, and hous-

ing starts, while rural areas have seen either very little change or decreases. This gap threatens to leave rural Pennsylvania further behind, and may contribute to an increase in out-migration as workers leave to find economic opportunities elsewhere. As mentioned earlier, the one bright spot is average weekly wages. The wage gap between rural and urban workers has narrowed by about \$27 per week, but urban workers still earn 28 percent more per week, on average, than rural workers.

Pennsylvania's Rural Economy Faces Long-Term Challenges

The long-term growth of rural Pennsylvania faces many challenges, including an aging labor force, lower educational attainment levels, and limited broadband access. In the short-run, the aging labor force may cause some industries to experience labor shortages as older workers are not replaced by younger workers. In the long-run, however, this shortage may cause businesses to move outside of rural Pennsylvania to find workers. Other factors, such as lower educational attainment levels and limited broadband access, may have the same long-term effects as an aging labor force, as businesses will move or grow elsewhere to take advantage of a workforce that is better trained or prepared and infrastructure that meets consumer demands.

Rural Pennsylvania is Not Alone

Rural Pennsylvania is not alone in its post-recession economic inertia. Rural America is also experiencing a slow economic recovery, as employment has decreased, unemployment has only gradually decreased, and the number of businesses has increased only slightly.

Similar to rural and urban Pennsylvania, the economic gap between rural and urban America has increased, making future growth more challenging.

By recognizing the challenges that rural Pennsylvania and rural America face, and recognizing the economic gaps that exist between rural and urban areas, state and federal policy makers can consider policies and programs that benefit all.

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