

An Assessment of the Dynamics of the

GREENE COUNTY HOUSING MARKET

A report prepared for the Greene County Board of Commissioners

SEPTEMBER 2014







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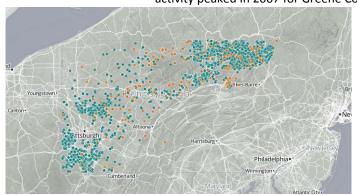
Introduction

Greene County, Pennsylvania (County) is home to approximately 38,686 residents. It is located in the southwestern corner of Pennsylvania. Greene County, also known as the "cornerstone of the keystone state," is 89.2% rural and is bordered by the Monongahela River to the east, separating it from Fayette County; Washington County to the north; Monongahela and Wetzel Counties to the south in West Virginia; and Marshal County, Ohio, to the west. Greene County is known for its rural character and natural beauty with rolling farmland in the summer, fall foliage in the fall, and snow-covered hills in the winter.

The County comprises 26 municipalities, including 20 townships and 6 boroughs. The largest municipality is Franklin Township with a population of 7,280, followed by Cumberland Township (6,565), and Waynesburg Borough (4,184). Developable land in the townships is limited by the lack of public infrastructure. Like many rural counties, the majority (63%) of the County's housing stock is owner-occupied, although there are available rentals in the County.

In the past few years, a number of changes have taken place in Greene County's housing market, which has likely been due to three primary factors — the global economy, demographic and social changes, and the emergence of the natural gas industry. The national economy has felt the effects of the Great Recession, a downturn in the global economy that began in 2007 and took a sharp downward turn in 2008. This economic recession is considered to be the worst in the nation since the Great Depression and resulted in widespread unemployment throughout the country at rates that doubled from 5% to more than 10%. During that downturn, would-be home owners found it difficult, if not impossible, to secure mortgages, which further slowed economic recovery. While Greene County's coal mining industry remained strong during the recession, some of the County's base industries declined due to the recession.

The natural gas industry in Pennsylvania first began around 2005 when the energy industry converged on the Marcellus Shale formation. Public officials and residents alike learned that the shale formation spanned below the majority of the region. The Marcellus Shale drilling activity peaked in 2007 for Greene County, with the drilling of 336 wells in one year. As the



SOURCE: ADAPTED FROM STATE IMPACT PENNSYLVANIA (HTTP://STATEIMPACT.NPR.ORG/PENNSYLVANIA/DRILLING/COUNTIES/)

industry grew, property owners began to benefit from royalties paid by gas companies leasing mineral rights. In addition, the industry brought new workers to the region as natural gas and well service companies began to set up drilling rigs and began the drilling process. While some of the Region's new workforce was permanent, the majority of the workforce consisted of the transient workers who moved with the drilling rigs or the pipelines. The workers who were not previously

residents of the Region began looking for housing. With the law of supply and demand at work, the cost of living in Greene County began to increase. Because of the rich deposits of natural gas in the Region, it is anticipated that the natural gas industry will continue as a major economic driver in the foreseeable future. Early estimates predicted that industry activity in Pennsylvania would last for 15 to 20 years; however, as more information is discovered about the various shale formations and the volume of natural gas beneath the surface, industry experts at the Pennsylvania College of Technology now suggest that it could be 80 to 100 years before the supply of natural gas is depleted.

In 2012, Greene County was one of the top seven Counties in Pennsylvania receiving Act 13 funds, receiving \$2,906,300. Cumberland Township in Greene County received \$787,151 in 2012, which was the second-largest amount compared with other municipalities in the State. **Figure 1** shows the number of unconventional wells that were eligible for the fee. Greene County had the fifth-largest number of eligible wells in 2012 (511).

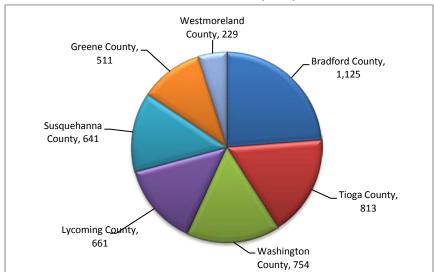


FIGURE 1 - ACT 13 ELIGIBLE WELL COUNT BY COUNTY (2012)

SOURCE: PENNSYLVANIA PUBLIC UTILITY COMMISSION

The Greene County Commissioners (Commissioners) are proactively taking steps to harness the economic opportunities that exist, and to understand and mitigate any negative impacts the natural gas industry may have on the County's residents. In 2010, the Green County Housing Team (the Housing Team) was established to prioritize and address unmet housing needs in the County. In addition to the Commissioners, the Housing Team consists of key housing officials from the County Departments of Human Services, Aging and Adult Services, Economic Development, the Housing Authority, and the Redevelopment Authority.

In late 2013, the Commissioners engaged Delta Development Group, Inc. (Delta), a community and economic development consulting firm headquartered in Mechanicsburg, Pennsylvania, to conduct a quantitative assessment of the dynamics of the County's housing market. With a better understanding of the changes in the housing market and the factors that have influenced the changes, the Commissioners will be better informed to make decisions that best serve the residents of Greene County.

The objectives of the study were to provide the following information:

- Identify, quantify, and measure the changes (impacts) that are being experienced in Greene County's housing market, and identify the primary drivers of these impacts
- Determine whether the impacts are a result of growth in the Marcellus Shale gas industry, general economic trends, social trends, or other local economic factors
- Provide County officials with the quantitative research necessary to accurately identify and prioritize the County's most critical needs related to housing
- Conduct one-on-one interviews with a wide variety of local industry experts, employers, and residents in order to secure local knowledge and data to support the quantitative research
- In close collaboration with the Commissioners, outline a plan for addressing the County's most critical needs related to housing

This report outlines the findings of the study. The supporting statistical data that was used to measure the extent of the impacts is included in Appendix A. Demographic data used in the analysis was obtained from the U.S. Census Bureau's 2012 American Community Survey (ACS) to ensure that the study findings and recommendations are based on the most recent data available. Started after the 2000 Census, the ACS is an ongoing annual survey that provides a continuous stream of reliable and timely data for state and local areas. To gather the qualitative local perceptions, Delta also conducted interviews with local industry experts, employers, municipal officials, and residents.



EXECUTIVE SUMMARY

The housing market dynamics in Greene County are complex, and are driven by a range of physical, social, and economic events and conditions in the County and in the Region. Delta conducted extensive research into the changing housing market in the County, and the results of that research are presented in this report. The following Executive Summary interprets these findings to draw meaningful conclusions and recommendations for future policy decisions that are grounded in defensible data and analysis. The summary is designed to answer three critical questions:

- 1. What conclusions can be drawn from the results of the research and data analysis regarding changes in the County's housing market, and to what factors can these changes be attributed?
- 2. What do these conclusions mean for the future of Greene County?
- 3. How can Greene County leaders maximize housing market strengths and mitigate market challenges?

The approach that was used to answer these questions is described below (see also Figure 2 for an illustrative overview of the approach):

- First, the demand for housing in Greene County is estimated and described based on conclusions drawn regarding the drivers (or causes) of changes in the market and household economics.
- Second, the unmet need for housing and gaps in the County's housing supply are
 estimated and described based on the law of supply and demand, to include
 discussions of the physical, economic, and social dynamic factors that influence
 absorption and displacement, and to what extent the supply of housing in the
 County meets the demands of the market.
- Building on the above discussions, the summary concludes with a discussion of the role that County leadership can play in maximizing the strengths of the County's housing market, and mitigating challenges to housing development.

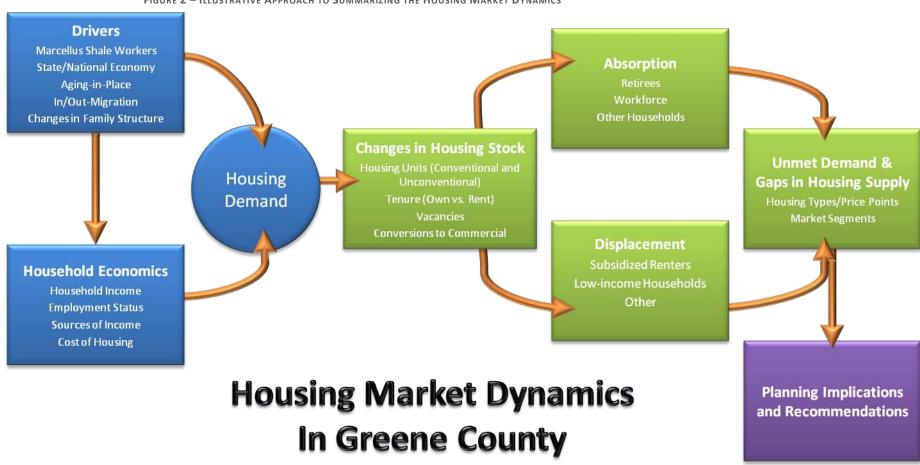
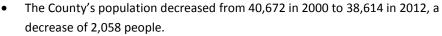


FIGURE 2 – ILLUSTRATIVE APPROACH TO SUMMARIZING THE HOUSING MARKET DYNAMICS

THE GREENE COUNTY HOUSING MARKET - OVERVIEW OF KEY FINDINGS

Greene County's population declined by just over 2,000 people between 2000 and 2012, which led to a significant increase in the number of vacant housing units in the County.



• During this timeframe, the overall number of housing units in Greene County decreased by 167. The number of owner-occupied housing units decreased by 865, the number of rental units decreased by 76, and the number of vacant units increased by 774. An estimated 47% of vacant units in Greene County in 2012 included units such as recent foreclosures, housing units owners or renters have "walked away from", or housing units where the owners have not yet determined if they plan to sell or rent. Another 38% of vacant units were for seasonal, recreational, or occasional use, with the remaining 15% comprised of units for rent or for sale.

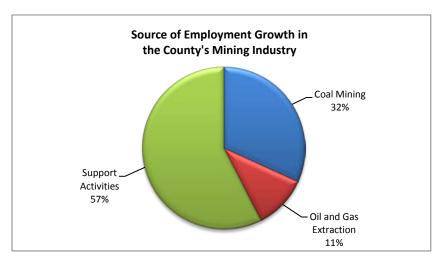
GREENE COUNTY HOUSING TENURE					
Owner- Renter- Occupied Occupied Year Total Units Units Units Vaca					
2000	16,678	11,159	3,901	1,618	
2012	16,511	10,294	3,825	2,392	
	(167)	(865)	(76)	774	

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

There are seven hotels in Greene County with an estimated 380 hotel rooms, 144 of
which were added since January 2010. Twelve hotels with 1,036 rooms have been
added in neighboring Washington County since 2009. Another four hotels with 434
rooms are currently under construction in Washington County.

The County's economic base has changed, which has led to a net increase in jobs in the County, and an increase in temporary workers who are looking for housing.

- There was a net increase of 1,791 jobs in the County from 2005 to 2013.
- The mining industry in Greene County increased by 1,306 jobs from 2005 to 2013.
 The extraction and support activities sector accounted for 68% of this increase, while the coal mining industry accounted for the remaining 32%.



- The greatest gains in employment were experienced in sectors that support the
 natural gas industry such as the construction industry (+783); transportation and
 warehousing (+160); professional, scientific, and technical services (+210); and the
 accommodations and food services industry (+175).
- The greatest loss in employment was in the educational services industry, with a loss
 of 612 jobs. There has been a decline in student enrollment from the 2005 school
 year through the 2013 school year of approximately 786 students, which decreased
 the demand for teachers/educational services.
- The County's manufacturing industry lost 295 jobs and the health care and social assistance industry lost 351 jobs.
- Despite high unemployment rates throughout the country, Greene County's unemployment rates have remained consistently lower than state and national rates.
- As many as 2,188 workers associated with the natural gas industry are likely working
 in Greene County. If 39% of these workers already live in the County, the remaining
 1,334 workers would likely need some type of housing accommodations in or within
 close proximity to the County.
- The increased demand and lack of available rental housing has driven increases in rental rates in the County by as much as 65%.
- An estimated 40.75% of renters in Greene County were considered to be cost burdened in 2011.

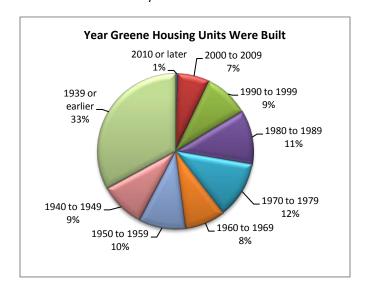


Despite an increase in the number of jobs in Greene County, the County's population is aging, and young families are not moving into the County.

- An estimated 16% of Greene County's population is age 65 and over.
- The County's population between the ages of 20 and 54 decreased by approximately 2,429 between 2000 and 2012 the age group that represents a large protion of the County's workforce. The population between 54 and 74 increased by approximately 1,854 during that time period.
- Nearly 8,000 workers who hold jobs in Greene County live outside the County and commute in to the County to work.

The age, condition, and size of the County's current housing stock are likely contributing factors to population decline.

- Only 8% of the houses in Greene County have been built since 2009, with 1% built in 2010 or later
- 33% of the houses in the County were built 1939 or earlier
- 27% of the houses in the County were built between 1940 and 1970



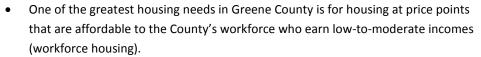
- The availability of adequate housing stock has been an ongoing issue in Greene
 County, and the growth in natural gas drilling has magnifed the issue.
- Even with increased pressure demand for housing with the emergence in the natural gas industry, there was a steady decline in the annual number of new homes built in Greene County between 2005 and 2013.



The lack of public infrastructure, specifically water and sewer infrastructure is one of the greatest challenges to housing development in Greene County.

- Developable properties within the county are not attractive to developers because of the lack of public infrastructure.
- Communities with water and sewer infrastructure are concentrated in the eastern portion of the County. Most of the western portion of the County does not have access to public water and sewer.
- Most of the existing public water and sewer infrastructure that exists in the County is old and in need of repairs.

One of the greatest needs for housing in Greene County is quality market-rate housing stock at price points that are aligned with the household incomes in the County and configured to attract young adults and families, as well as older adults who are looking to downsize.



- The median household income in Greene County in 2012 was \$42,837, which is estimated to be approximately \$3,570 per month.
- Assuming that households spend 30% of their income on housing, the average household in Greene County could afford a monthly mortgage payment (including escrow) of approximately \$1,000.
- Assuming current mortgage interest rates of approximately 4.25% for a 30-year mortgage, an affordable home for the average resident in Greene County would range between \$150,000 and \$200,000. Only six houses within that price range were listed for sale in Greene County in June 2014.

Homes for Sale in Greene County – June 2014					
Price Range (\$000)	Number of Listings	Average List Price			
<\$50	9	\$31,454			
\$50–\$75	9	\$62,833			
\$75–\$100	7	\$90,943			
\$100-\$150	6	\$139,717			
\$150-\$200	6	\$174,700			
\$200-\$250	2	\$242,450			
\$250-\$400	9	\$311,122			
\$400+	4	\$544,500			

With competitive amenities and new housing options at competitive price points,
 Greene County could potentially attract people who work in Washington County to purchase homes in Greene County.



There is a need for additional housing in Greene County that is subsidized by the U.S.

Department of Housing and Urban Development (HUD), as well as housing for individuals and families who are transitioning from HUD subsidized housing

- Waiting lists for subsidized housing in Greene County suggest a need for onebedroom subsidized housing units for the elderly and disabled, and two-bedroom units for families and individuals.
- There is also a lack of housing in the County with price points that are affordable to people who are transitioning to market rate housing from public housing.



PLANNING IMPLICATIONS AND RECOMMENDATIONS

The key findings of this provide a better understanding of the dynamics of the housing market in Greene County, and of the factors that influence the housing market. Based on these findings, the following section provides recommendations for a general plan of action that County officials can take that will (1) improve the housing options and conditions in Greene County; and (2) ensure an economic future that will sustain investment in improving the housing options and conditions in the County. The recommended action steps are outlined in the following sections.

HOUSING CONDITIONS AND OPTIONS

Even though the economy in Greene County is growing and a significant number of new jobs have been created in the County over the past few years, the County's population has declined and a significant number of people who work in the County live outside the County and commute in to work. A portion of the population decline is due to natural causes as the population ages; however, statistics indicate that the younger population is leaving the County.

Information obtained from interviews suggests that one of the key reasons that people choose to live outside the County and commute in to work is because of the lack of options for housing that can compete in the market with housing outside the County. As in rural areas throughout the country, Greene County's younger population is likely leaving the area in pursuit of careers in more urban settings where they can find a variety of job opportunities and enjoy the urban amenities. Although the younger population may initially leave the area, they often seek jobs in suburban or rural areas when they start a family. If a young person leaves the County for urban jobs and amenities and then decides to return, the housing options and conditions in the County could force them to move elsewhere.



In addition, there is a shortage of housing for individuals and families in the County with low incomes and/or disabilities, as well as options for individuals who are transitioning from public housing to market rate housing.

As shown in the chart to the left, all of these issues point to the need to improve housing conditions and options in the County. The following is a recommended plan of action to achieve this objective.

1. Provide infrastructure in targeted areas for new market rate housing development.

Needed infrastructure to support market rate housing development could include water and sewer, roadways, and communications. The following strategies can be implemented by the County to provide needed infrastructure that can lead to new housing development.

- o Identify and designate specific areas within the County for future economic growth (see strategies for Economic Diversity).
- o Prioritize areas in the County for future development.
- Determine optimal potential development configuration and mix of uses,
 and identify the infrastructure necessary to support new development.
- Develop strategies to for funding/financing infrastructure costs.
- Consider implementing traffic impact fees in likely growth areas to help offset infrastructure costs.
- Develop a marketing/branding strategy to promote Greene County as a great place to live, work, and play (see strategies for Economic Diversity).
- Develop a marketing campaign aimed at attracting former residents to come back and see the "new" Greene County, explore its new opportunities, and encourage them to move back "home" (see strategies for Economic Diversity)
- Assist in soliciting interest from developers to develop new housing in Greene County
 - Senior housing
 - Workforce housing
 - Single family housing
 - Condos/townhomes
- Encourage housing development/redevelopment in existing residential neighborhoods in the County's more densely populated boroughs and townships.

One of the greatest barriers to the development of new housing in the County is the lack of public water and sewer. Many of the County's more densely populated boroughs and townships have water and sewer infrastructure in place, and also likely have areas of their residential neighborhoods that are blighted, with housing conditions that lend themselves to redevelopment. The following strategies can be implemented by the County to encourage development/redevelopment in these areas.

- Assist in developing funding strategies to extend the reach of water and sewer infrastructure in the County, and to make needed repairs to existing water and sewer infrastructure.
- Work with municipal officials who are interested in new development to identify specific neighborhoods and/or infill sites that are candidates for development/redevelopment.
- Explore opportunities for development of a variety of housing types, including both conventional construction and manufactured housing



- Consider opportunities for replacing aging mobile homes with new manufactured housing
- Assist with identifying funding strategies to offset the cost of development/redevelopment.
- Consider options for providing local incentives to encourage housing development/redevelopment.
- o Provide support as needed for public funding applications.
- Assist and/or advise municipal officials in assembling parcels, if needed, for development/redevelopment projects – consider land banking if appropriate and needed.
- Assist in soliciting interest from developers/investors in priority development/redevelopment projects.
- Provide regulatory assistance as appropriate to expedite the development/redevelopment process (e.g., zoning, permitting, etc.).
- 3. Encourage more home ownership and home improvement/repairs by homeowners

In many cases, especially with the recent increases in rental rates, a household or family could be making a mortgage payment just as easily as paying rent. In addition, a homeowner who occupies a house is more likely to invest in improving the home than would a landlord. A single homeowner making home improvements can influence surrounding homeowners to improve their homes as well, sometimes having far-reaching effects on an entire neighborhood. The following strategies can be implemented by the County to encourage more home ownership and home improvement/repairs by homeowners.

- Work with local banks and financial institutions to provide financial incentives for home ownership and home improvements
- Consider partnering with municipalities to establish revolving loan funds to provide capital for home improvements at low interest rates to homeowners
- Work with local municipalities to sponsor "how to" seminars in home improvements and repairs
- o Encourage local municipalities to sponsor municipal-wide "clean-up" days to encourage maintenance of both owner occupied and rental housing units
- 4. Support the Greene County housing team in providing additional subsidized housing units to meet the needs of the County residents with low incomes and/or disabilities.

The following strategies can be implemented by the County to support the Housing Authority in this effort.

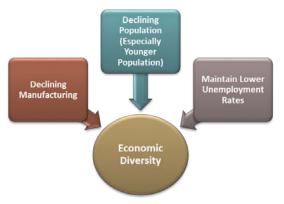
- Provide assistance and support as needed in preparing and submitting applications for funding for proposed subsidized housing development projects.
- Identify underutilized buildings in the County that could be repurposed for subsidized housing, and assist in soliciting investors/developers as partners in implementation.



 Assist in exploring additional opportunities to attract a senior housing provider to the County to develop affordable units specifically for seniors and help to coordinate/provide local incentives for development. A development such as this could free existing subsidized units for younger individuals and/or families, and could also free existing market rate housing units for rent or sale.

ECONOMIC DIVERSITY

While the primary focus of this assessment is the Greene County's housing market, a sustainable, growing economy is critical to ensuring support for investment in the housing market. Historically, the County's coal mining industry has been its key economic driver, and



much of its recent economic growth in the County has been related to the Marcellus Shale industry, and the new economic growth has brought lower-than-average unemployment to the County during some of the worst economic times in recent in our nation's recent history. While these economic pillars provide stability in today's economy, both are based on natural resources that will eventually be depleted. At the same time, the County's manufacturing industry is declining, along with its younger population, which represents the County's future workforce. Although the depletion of the County's natural resources may be far beyond the lifetime of today's residents in the County, now is

the time to plan for the economy of future generations. It will be much easier to be proactive today to create a stable, thriving economy, than to be reactive to potential economic crises that could arise if no action is taken. The following strategies can be implemented by the County to achieve this objective.

- 1. Develop a county-wide economic development strategy that includes specific goals and implementation strategies that address the following:
 - a. Priority locations for economic development, including greenfield and brownfield sites (see strategies for Housing Conditions and Options).
 - b. Target industry sectors for recruitment/expansion, such as
 - i. Niche manufacturing
 - ii. "Reshoring" opportunities (bringing well-paying manufacturing jobs that were moved abroad back to the United States)
 - iii. Expansion of existing business and industry clusters
 - iv. Entrepreneurship
 - v. Attractive consumer amenities
- 2. Develop a workforce strategy that focuses on providing training to local residents in skills that align with current and targeted industry needs, as well as training in soft skills that can increase the attractiveness of the County's workforce to businesses considering location or expansion in the County.
- 3. Develop a business recruitment and retention strategy around focused on the County's target industries.
- 4. Develop a marketing/branding strategy to promote Greene County as a great place



- to live, work, and play (see strategies for Housing Conditions and Options).
- 5. Develop a marketing campaign aimed at attracting former residents to come back and see the "new" Greene County, explore its new opportunities, and encourage them to move back "home" (see strategies for Housing Conditions and Options).
- 6. Provide infrastructure to targeted areas for business/industrial development (see strategies for Housing Conditions and Options).
- 7. Explore options for local distribution of natural gas to targeted locations in the County that would provide low-cost energy as an incentive for businesses to locate or expand in the County.

ASSESSMENT OF THE HOUSING MARKET DYNAMICS

The housing market dynamics in Greene County are complex, and are driven by a range of demographic, social, physical, and economic events and conditions. The following pages present an overview of these changes and how each has impacted the County's housing market.

DEMOGRAPHIC AND SOCIAL CHANGES

Similar to many of its rural counterparts in Pennsylvania, between 2000 and 2012, the population of Greene County has decreased by approximately 2,058. As shown in **Figure 3**, the increase in population has been largely among individuals between the ages of 55 to 74. The decrease in population has largely been among the individuals under the age of 54. This shows that Greene County is losing its younger population, which comprises a large portion of the workforce. Part of the change in these age groups is simply related to the aging of existing residents in the County and not attracting as many new (younger) residents.

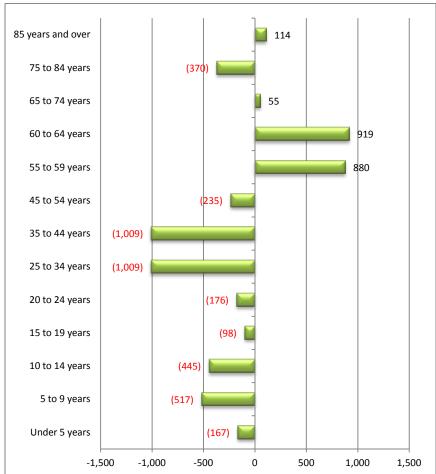


FIGURE 3 - CHANGES IN AGE DISTRIBUTION IN GREENE COUNTY (2000-2012)

SOURCE: U.S. CENSUS BUREAU, AMERICAN COMMUNITY SURVEY

CHANGES IN HOUSEHOLD INCOME

Between 2000 and 2012, the median household income in Greene County increased by 41% - a rate that was higher than both Pennsylvania (30%) and the United States (26%). This means that the standard of living increased for many of the households in the County. However, while Greene County's median household income increased by 41%, it is still approximately \$10,000 less than Pennsylvania and the United States in 2000 and 2012 (see Table 1).

TABLE 1 - COMPARATIVE TRENDS IN MEDIAN HOUSEHOLD INCOME

	2000	2012	% Change 2000 to 2012
Greene County	\$30,352	\$42,837	41%
Pennsylvania	\$40,106	\$52,267	30%
United States	\$41,994	\$53,046	26%

SOURCE: U.S. CENSUS BUREAU, AMERICAN COMMUNITY SURVEY

The median household income in Greene County in 2012 was estimated to be \$42,837. The median household income simply means that the total income in half of the households in the County is more than the median, and half of the households are less than the median. Consequently, while the standard of living may have increased for those households that were able to take advantage of the new job opportunities, other households felt the effects of the layoffs and wage reductions.

The higher-than-average increase in household income is reflective of higher wages in the County. Overall wages in Greene County increased by 58% between 2000 and 2012, compared with a statewide increase of 41% (see **Table 26**). Industry sectors experiencing the greatest wage increases in Greene County included real estate and rental and leasing (353%), utilities (126%), transportation and warehousing (122%), and management of companies and enterprises (98%). The mining, quarrying, and oil and gas extraction industry had a wage increase of 60%.

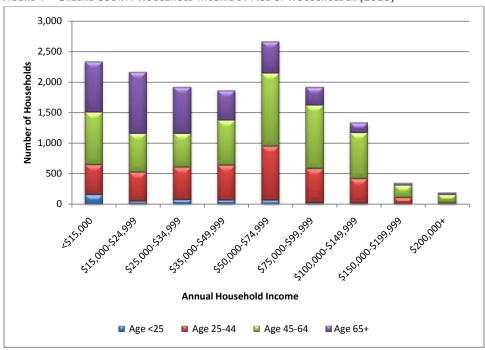


FIGURE 4 - GREENE COUNTY HOUSEHOLD INCOME BY AGE OF HOUSEHOLDER (2013)

SOURCE: U.S. CENSUS BUREAU, AND ESRI ESTIMATES FOR 2013

According to information obtained from ESRI, householders aged 45 to 64 and aged 65 and older made up the largest segments of low-income households in Greene County in 2013.

Nearly 15% of Greene County's population lived in households that were at or below poverty level in 2012, compared with 13% statewide. An estimated 939 families in Greene County had incomes at or below poverty level in 2012, representing a 33% decrease (454 families) since 2000. The decrease in the number of families living in poverty is likely related to the increase in job opportunities and the increase in wage rates in the County. As shown in Figure 5, more than half of the families with incomes at or below poverty level were headed by females with no husband present.

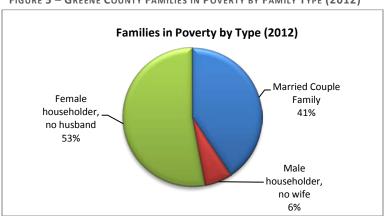


FIGURE 5 - GREENE COUNTY FAMILIES IN POVERTY BY FAMILY TYPE (2012)

Source: American Community Survey

Table 2 shows trends in the sources of income for households in Greene County. Wage and salaries income source increased from 2000 to 2012. There were also notable increases in Social Security income and retirement income. Social Security income increased approximately \$25,900,000 from 2000 to 2012 and retirement income increased approximately \$15,700,000 over the same timeframe. These two categories are influenced by the aging population that Greene County is home to. Public assistance income and interest, dividends, and net rental income were the only two income sources to decrease from 2000 to 2012.

TABLE 2 - GREENE COUNTY INCOME BY SOURCE

Income Type	2000	2012
Wage and Salaries	69.8%	72.3%
Non-Farm Self Employment	4.6%	4.1%
Interest, Dividends, and Net Rental Income	4.7%	2.8%
Social Security	9.5%	10.2%
Supplemental Security	1.2%	1.1%
Public Assistance	0.3%	0.1%
Retirement	6.9%	7.0%
Other	3.0%	2.3%
Total Aggregate Income	\$584,588,300	\$794,195,900

Source: PolicyMap

CHANGES IN THE ECONOMIC BASE

There was a net increase of 1,791 jobs in Greene County from 2005 to 2013 (see **Figure 6** on page 20 and **Table 27** on page 48). The County's mining industry gained 1,306 employees during this time period. In addition, several industry sectors that support the natural gas industry also experienced gains in employment, such as the construction industry (+783); transportation and warehousing (+160); professional, scientific, and technical services (+210); and the accommodations and food services industry (+175).

The greatest loss in employment was in the educational services industry, with a loss of 612 jobs. This loss was likely driven by a decline in student enrollment between the 2005 school year and the 2013 school year of approximately 786 students, which decreased the demand for teachers and educational services.

Between 2005 and 2013, the County's manufacturing industry lost 295 jobs and the health care and social assistance industry lost 351 jobs.

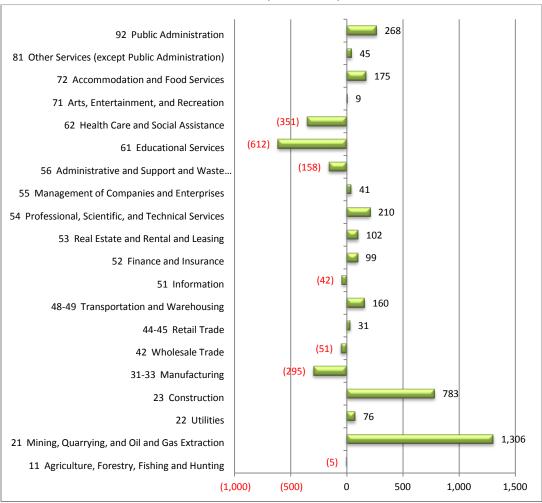


FIGURE 6 - CHANGES IN GREENE COUNTY EMPLOYMENT (2005 - 2013)

Source: Local Employment Dynamics

Figure 7 and **Table 3** show the unemployment rates for Greene County, Pennsylvania, and the U.S. Greene County's unemployment rate was higher than the state and national averages from 2002 to 2007. The gas industry peaked in 2007, which was likely a factor in keeping the unemployment rate below the state and national levels from 2008 to present.

FIGURE 7 - COMPARATIVE UNEMPLOYMENT TRENDS

Source: US Bureau of Labor Statistics

TABLE 3 - COMPARATIVE UNEMPLOYMENT RATE TRENDS (% UNEMPLOYED)

	2002	2003	2004	2005	2006	2007	2008	2009	2010	2011	2012
Greene County	6.2	6.7	6.6	6.3	5.7	5.0	5.8	7.3	7.5	6.8	6.6
Pennsylvania	5.7	5.6	5.5	5.0	4.7	4.4	5.3	8.1	8.5	7.9	7.9
U.S.	5.8	6.0	5.5	5.1	4.6	4.6	5.8	9.3	9.6	8.9	8.1

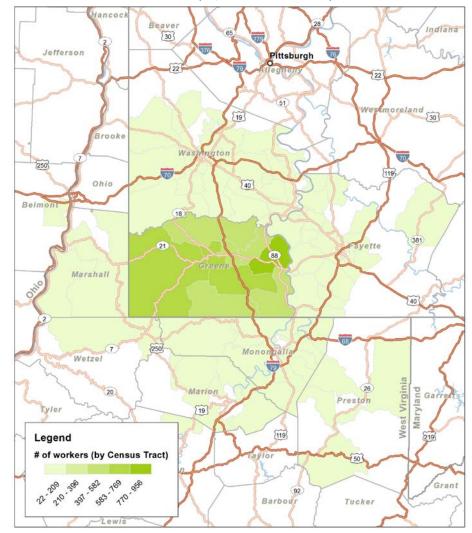
Source: US Bureau of Labor Statistics

COMMUTING PATTERNS OF GREENE COUNTY WORKERS

According to the Local Employment Dynamics (LED), 39% of the jobs in the County were held by County residents. Sixty-one percent of the jobs were held by residents in the surrounding areas. Also in 2011, an estimated 8,842 travelled outside the County for work. Companies in Greene County employ a large percentage of outside-County employees (see Map 1).



MAP 1 - WHERE GREENE COUNTY WORKERS LIVE (13,016 WORKERS IN 2011)



Source: Local Employment Dynamic

NATURAL GAS ACTIVITY IN GREENE COUNTY

Unconventional natural gas drilling began in Greene County in 2006. At its peak in 2011, 120 unconventional wells were drilled in the County. Drilling activity slowed slightly in 2012, and then increased to 117 in 2013. **Figure 8** shows the level of Marcellus Shale drilling activity (unconventional wells) in Greene County from 2006 through 2013.

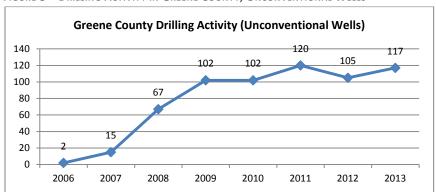


FIGURE 8 - DRILLING ACTIVITY IN GREENE COUNTY, UNCONVENTIONAL WELLS

Source: Pennsylvania Department of Environmental Protection

In addition to unconventional wells, Greene County has also had conventional gas drilling activity. Conventional activity started in the County in 2000 and peaked in 2007 with 259 conventional wells drilled. As shown in **Figure 9**, conventional drilling slowed significantly as unconventional drilling began in the County.

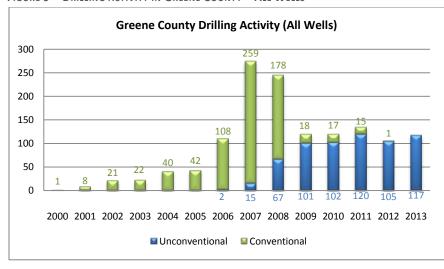


FIGURE 9 - DRILLING ACTIVITY IN GREENE COUNTY - ALL WELLS

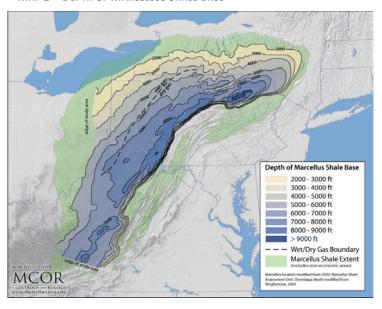
Source: Pennsylvania Department of Environmental Protection

The top five municipalities in the County where unconventional well drilling has occurred are Cumberland, Center, Morris, Washington, and Dunkard Townships. Cumberland Township has had the most drilling activity in the County with 394 wells drilled since 2000, 126 of which were unconventional wells. **Table 21** on page 42 and **Table 22** on page 43 provide detailed

listings of all conventional and unconventional gas wells drilled in Greene County municipalities between 2000 and 2013.

Greene County has both wet and dry gas. **Map 2** shows the depth of the Marcellus Shale base, along with a dotted line that shows the dividing line for wet gas and dry gas.

MAP 2 - DEPTH OF MARCELLUS SHALE BASE



Source: Marcellus Center for Outreach & Research (MCOR)

According to the Marcellus Center for Outreach and Research (MCOR), "natural gas is known as being dry or wet, with dry gas being more thermally mature and consisting primarily of methane, whereas wet gas is less thermally mature and may contain 'natural gas liquids' including ethane, butane, propane, and pentane. These natural gas liquids need to be separated from the methane to ensure the natural gas sent to consumers has a consistent BTU content. Wet gas is currently considered to be more valuable in the marketplace as the natural gas liquids have inherent value as a commodity." As natural gas prices dropped in 2012, natural gas companies shifted drilling activity from areas with dry gas to areas with wet gas to maximize value from the natural gas liquids. Because Greene County has

both wet gas and dry gas, drilling activity in the County remained relatively stable in comparison to areas of the state that have dry gas only.

NATURAL GAS WORKERS IN GREENE COUNTY

The addition of 1,306 jobs in the County's mining industry between 2005 and 2013 brought the total employment in the industry to approximately 4,203; however, this statistic portrays only part of the story. Since employment data is tracked by the physical location of the employer, the data doesn't necessarily indicate where a company's employees are working. For instance, a drilling company could be located in a neighboring county, or even out of state, and its employees would be counted in the employment statistics for that county and/or state. However, the company's drilling crew could actually be deployed in Greene County.

While there is no single statistical data source to capture the number of workers physically working in the County, the number can be estimated using workforce statistics for the industry. According to a workforce model developed by the Marcellus Shale Education and Training Center (MSETC Model) in Williamsport, Pennsylvania, between 9.46 and 12.9 workers (average 11.18 workers) are required to prepare and drill a natural gas well, depending upon whether a single well is being drilled, or if multiple wells are being drilled at a single pad site. This estimate includes workers for drilling and for pipeline construction. These workers move with drilling rigs, and unless their employer is physically located in the County, they are not counted in the County's employment. In addition to the workers who move with



the drilling rigs, each well drilled will require 0.39 permanent workers for production and processing throughout the production period.

After peaking in 2007 at 337 wells, drilling activity has stabilized over the past five years, with an average of 120 wells drilled each year. Using the MSETC Model estimates, at an average efficiency of 11.18 workers per well, 1,342 workers would be required to drill 120 wells if all 120 wells were drilled at the same time; however, drilling activity typically occurs at varying levels throughout the year. The MSETC Model estimates that the typical time frame for drilling a well ranges from 30 to 45 days. Using the monthly drilling activity in the County in 2011 as an example (see Table 4 on page 26) and assuming a 45-day drilling cycle, we estimate that at any given time during that year, drilling was in progress for between 23 (average) and 47 (maximum) natural gas wells. This means that between 257 and 525 workers could be working at well sites in the County at any given time.

Using the high-end estimate of 525 workers, as many as 689 ripple-effect workers would be required to support this new economic activity, for a total of 1,214 workers. Approximately 185 of these ripple-effect jobs are a result of business-to-business spending, and the remaining 504 are a result of the dollars that are spent by the new workers and their households.

The ripple-effect jobs were estimated using the IMPLAN (IMpact analysis for PLANning) inputoutput model and represent statewide ripple effects; however, to the extent that businesses exist in and around Greene County to fill the demand for the required goods and services to support the new economic activity, the effects of the spending will be experienced locally.

In addition to the workers who move with the drilling rigs, the MSETC Model also estimates that each dry natural gas well drilled will require .19 permanent workers for production throughout the production period. Wet natural gas wells are more labor intensive because of additional processing during production and require an estimated .39 permanent workers throughout the production period. An estimated 60% of wells drilled in southwest Pennsylvania are wet gas wells. Applying these benchmarks to the 1,359 natural gas wells drilled to date in the County, we estimate that up to 421 permanent workers have been hired since 2000 for production and processing associated with Greene County wells. As estimated using the IMPLAN model, as many as 553 ripple-effect jobs would be required to support the new economic activity associated with these new, permanent jobs, for a total of 974 new jobs. Approximately 149 of these ripple-effect jobs are a result of business-to-business spending, and the remaining 404 are a result of the dollars that are spent locally by the new workers and their households for things such as food, clothing, dining out, and lodging.

Considering the 1,214 workers associated with the new economic activity from the drilling process and the 974 workers associated with the economic activity from the new, permanent jobs associated with production and processing, up to a total of 2,188 workers could be working in Greene County at any given time because of the natural gas industry. Assuming that 39% of those workers live in the County (as suggested in Map 1 on page 22), the remaining 1,334 workers would likely seek some type of housing accommodations in or in close proximity to the County, which would increase the demand for housing. Because of the transient nature of the jobs at the well sites (525), these workers typically stay in mobile



units provided by employers at drilling sites (commonly referred to as "man camps"), in local hotels, in RVs, or in local rental housing.

TABLE 4 - DRILLING ACTIVITY IN GREENE COUNTY BY MONTH (2011)

2011				
Month	Number of Wells Drilled			
January	8			
February	8			
March	10			
April	7			
May	15			
June	5			
July	30			
August	17			
September	9			
October	7			
November	6			
December	13			
Total	135			

Source: Pennsylvania Department of Environmental Protection

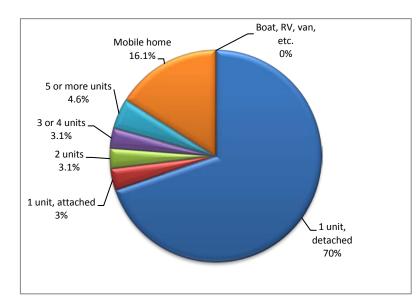
CHANGES IN HOUSING STOCK

Information gathered through phone interviews revealed that potential new Greene County residents have not been able to find housing that meets their needs. The workers are generally looking for housing that is move-in ready and requires little renovation. The majority of the housing stock in Greene County is older and would need renovations. Also, many properties, especially properties in the western portion of the County, do not have access to public water and sewer. The lack of public water and sewer is a barrier to new housing development in Greene County.

Greene County's population decreased by 2,058 residents from 2000 to 2012. Over that same time period, the number of housing units decreased by 167 units. The number of households also decreased from 15,081 in 2000 to 14,724 in 2010, a decrease of 357 households.

One trend that was noted during phone interviews was the increase in the number of RV camps. The pipeline workers are usually the ones moving into the RV camps because they follow the pipeline jobs from town to town. Private property owners were able to capitalize on this, renting their properties to RV camps. The RV camp trend has slowed in the past year, leaving vacant land that was stripped for the RV camps.





The workers at natural gas drilling sites are transient and generally stay in hotels, motels, or in rental homes in the surrounding area. Although some workers stay in RV camps or in RVs on private property, these RVs are considered temporary and are therefore likely not included in the Census Bureau's housing counts.

According to the 2012 U.S. Census Bureau's American Community Survey (ACS), the housing stock in Greene County consists primarily of 1-unit detached homes (69.8%) and mobile homes (16.1%). The remaining 14% of the housing stock comprises multiunit homes and attached single-unit homes.

ACS also estimates that 33% of Greene County's housing stock was built prior to 1940. Housing construction has remained relatively consistent in the decades since 1940. The number of housing units built since 1940 is distributed with relative consistency across the decades, ranging from 7% in the 2000s to a high of 12% in the 1970s (see Figure 11).

2010 or later 2000 to 2009 7% 1990s 9% 1939 or earlier 33% 1980s 11% 1970s 12% 1940s 9% . 1960s 1950s 10%

FIGURE 11 - YEAR GREENE COUNTY HOUSING UNITS WERE BUILT

Greene County offers tax abatements to homeowners for construction and renovations, and this data can also be used to measure new housing construction and building and renovation activity in the County. Between 2005 and 2013 there were 1,410 abatements awarded, with 50% (704) awarded for new housing units. As shown in Figure 12, between 2005 and 2008, the total number of abatements for new housing awarded each year ranged between 75 and 106. Beginning in 2009, however, there was a notable decrease in the annual abatements awarded, with annual awards for new housing ranging between 32 and 66. An estimated 75% of new homes that received abatement awards were traditional construction, with the remaining 25% split almost equally between new mobile homes and new manufactured/modular homes. Cumberland and Franklin Townships had the most new housing activity during this time period with 147 and 145 new housing units, respectively.

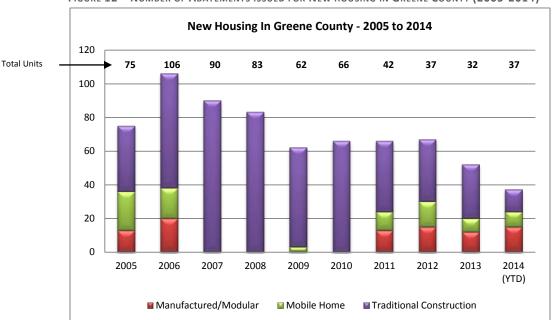


FIGURE 12 - NUMBER OF ABATEMENTS ISSUED FOR NEW HOUSING IN GREENE COUNTY (2005-2014)

Source: Greene County (January 1, 2005 to June 12, 2014)

CHANGES IN HOUSING TENURE

As of the 2010 U.S. Census, 72% of the occupied housing units in the County were owner-occupied, 27% were renter-occupied. Fourteen percent of the total housing units were vacant. The total number of units in the County decreased over the past 12 years from 16,678 in 2000 to 16,511 in 2012. The number of vacant units increased by 774 units from 2000 to 2012, while the number of owner-occupied units decreased by 865 units. **Table 5** shows the changes in housing tenure from 2000 to 2012.

TABLE 5 - CHANGES IN HOUSING TENURE 2000 TO 2012

Year	Total Units	Owner- Occupied Units	Renter- Occupied Units	Vacant Units
2000	16,678	11,159	3,901	1,618
2012	16,511	10,294	3,825	2,392
Change	(167)	(865)	(76)	774

SOURCES: U.S. CENSUS BUREAU, AMERICAN COMMUNITY SURVEY

While owner-occupied units decreased Countywide between 2000 and 2012, not all municipalities had a decrease of owner-occupied units (see **Table 23** on page 44). Six municipalities experienced an increase (or no change) in the number of owner-occupied units,



with Cumberland Township having the largest increase of owner-occupied units, with an increase of 167 units. Cumberland Township also experienced the greatest increase in vacant units, with an increase of 246. Fourteen municipalities had an increase in renter-occupied units. Morgan Township had the greatest increase in rental units, with an increase of 68 units. Only three municipalities (Clarksville Borough, Greene Township, Washington Township) experienced a growth in both owner-occupied units and renter-occupied units.

According to the American Community Survey, 47% of vacant units in Greene County in 2012 were categorized as "other vacant" (see **Figure 13**). Housing units in this category may include units such as recent foreclosures, housing units owners or renters have "walked away from", or housing units where the owners have not yet determined if they plan to sell or rent. The number of housing units in this category increased by 48% between 2000 and 2012. Housing units for seasonal, recreational, or occasional use comprised 38% of Greene County's vacant units in 2012, increasing by 47% between 2000 and 2012. For rent and for sale units comprised the remainder of vacant units in the County in 2012, both of which decreased between 2000 and 2012 by 37% and 175%, respectively.



FIGURE 13 - VACANT HOUSING UNITS IN GREENE COUNTY BY TYPE (2012)

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

During the height of the natural gas drilling, properties were bought, turned into apartments, and rented to gas workers for higher rents, displacing local renters. According to interviews, many of these properties were not maintained, and now will now not pass HUD inspections.

CHANGES IN RENTAL RATES AND THE IMPACTS TO COUNTY RESIDENTS

There is no local source for obtaining rental rate data in Greene County that is sufficient for statistical analysis; therefore, the only data available for measuring trends in rental rates is through sources such as the U.S. Census Bureau and the U.S. Department of Housing and Urban Development. While the number of rental units decreased by 79 units from 2000 to 2012, the median gross rent increased by \$239, representing a 65% increase (see **Table 6**).

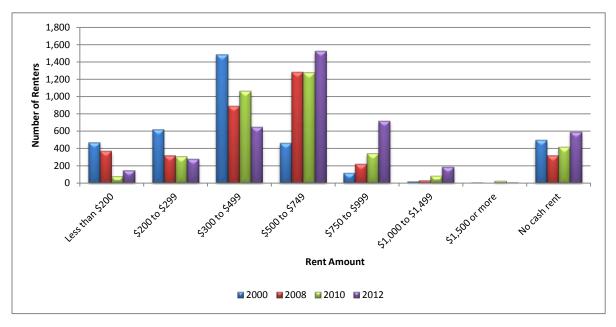
TABLE 6 - MEDIAN GROSS RENT FOR GREENE COUNTY

Year	Median Rent
2000	\$367
2008	\$497
2010	\$515
2012	\$606

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

Figure 14 shows the number of renters in Greene County, divided into categories by the amount of rent they pay. As seen in this chart, there was a dramatic shift between 2000 and 2012 in the rental rate range for the majority of renters in the County. In 2000, the majority of renters (70%) paid less than \$500 per month. In 2012, the majority of renters (55%) paid between \$500 and \$1,000 per month for rent.

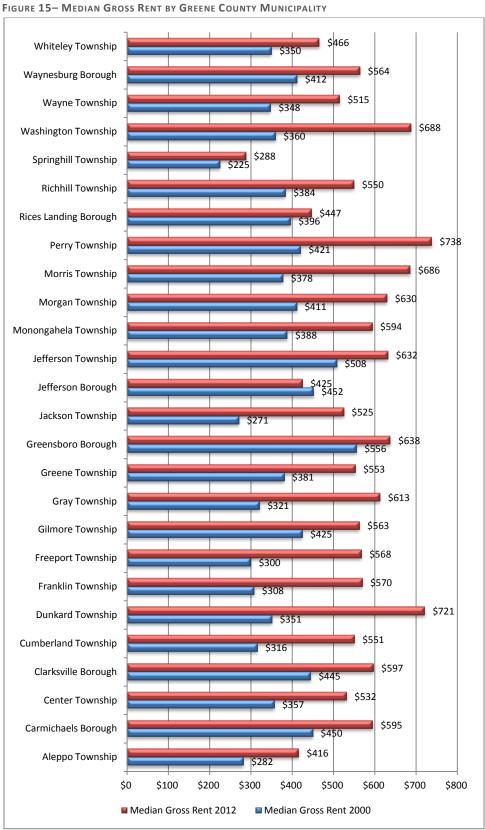
FIGURE 14 - NUMBER OF RENTERS AND RENT AMOUNTS FOR GREENE COUNTY



U.S. Census Bureau, American Community Survey

Figure 15 on page 31 and Table 24 on page 45 show the breakdown of median gross rent in Greene County municipalities in 2000 and 2012. More than half (56.5%) of the rental units in Greene County are located in Waynesburg Borough and in Cumberland and Franklin Townships. Rental rates increased by 75% in Cumberland Township and by 85% in Franklin Township between 2000 and 2012; however, rental rates during that time period in Waynesburg Borough only increased by an estimated 37%.

The median gross rental rate in Greene County of \$606 in 2012 means that half of the County's renters paid less than \$606 per month for rent and half pay more than \$606 per month for rent. This number is relatively consistent with HUD's fair market rates as shown in **Table 7** on page 32.



SOURCE: U.S. CENSUS BUREAU, AMERICAN COMMUNITY SURVEY

Another source of data for measuring trends in rental rates is HUD's Fair Market Rental Rates. Each year, HUD publishes Fair Market Rent data for local areas that serves as the basis for how much program administrators will subsidize housing units in a given geographic area. These figures vary based on a number of determining factors, such as local economic conditions and housing demand.

Table 7 shows the trends in HUD's fair market rates for Greene County between 2005 and 2014. The highest increases in HUD rates between 2005 and 2014 were for 3-bedroom and 4-bedroom units, with increases of 39% and 45%, respectively.

TABLE 7 - TRENDS IN HUD'S FAIR MARKET RENTAL RATES

Year	Efficiency	1 Bedroom	2 Bedroom	3 Bedroom	4 Bedroom
2014	\$453	\$509	\$623	\$776	\$833
2013	\$423	\$476	\$582	\$725	\$778
2012	\$461	\$491	\$555	\$663	\$683
2011	\$482	\$513	\$580	\$693	\$714
2010	\$475	\$506	\$572	\$684	\$704
2009	\$460	\$490	\$554	\$662	\$681
2008	\$448	\$477	\$540	\$645	\$664
2007	\$424	\$452	\$511	\$611	\$629
2006	\$403	\$430	\$486	\$581	\$598
2005	\$387	\$412	\$466	\$557	\$573
Increase 2005 to 2014	17%	24%	34%	39%	45%

SOURCE: U.S. DEPARTMENT OF HOUSING AND URBAN DEVELOPMENT (UNADJUSTED)

It was noted during phone interviews that many available rental units within the region are being filled by natural gas workers. The increase in demand for rental housing has encouraged landlords to increase rental rates. Although not yet reflected in HUD's fair market rates, It was also noted in telephone interviews that as drilling activity has decreased, rental rates have started to decrease as well.

As rental rates have increased in Greene County, the number of renters who are considered to be cost-burdened is also increasing. Cost-burdened renters are defined as households with gross rent that is greater than 30% of the household income. According to PolicyMap, 40.75% of renters in Greene County were considered to be cost-burdened in 2011. Twelve municipalities in Greene County experienced an increase in the percentage of renters that were cost-burdened. Gray Township experienced the largest increase of 27.11%, followed closely by Cumberland Township (26.94%), and Wayne Township (25.15%). Thirteen municipalities experienced a decrease in the percentage of renters who were considered to be cost-burdened. Freeport Township had the largest decrease of 22.12%. Other municipalities that experienced similar decreases were Jefferson Township (19.73%), Monongahela Township (15.54%), and Aleppo Township (13.65%). See **Table 28** for the cost-burdened renters by municipality. An estimated 36.39% of the County's renters in 2011, aged 65 or older, were considered to be cost-burdened.

CHANGES IN THE FOR-SALE HOUSING MARKET

According to information obtained through PolicyMap, home sales in Greene County are significantly lower than in its two neighboring counties in Pennsylvania. **Table 8** shows the number of residential homes sold per year for Greene County, Washington County, and Fayette County. Home sales in all three counties dropped significantly during the economic downturn in 2008, but rebounded in 2009 and 2010 before dropping again in 2011. Sales in Washington County increased significantly in 2012, while sales in Greene and Fayette Counties continued to drop.

TABLE 8 - NUMBER OF RESIDENTIAL HOMES SOLD

Number of Residential Homes Sold						
Year	Washington County	Greene County	Fayette County			
2006	4,318	536	2,105			
2007	4,124	536	2,044			
2008	3,456	373	1,627			
2009	3,384	381	1,708			
2010	3,468	396	1,631			
2011	3,284	368	1,517			
2012	3,681	356	1,229			

SOURCE: POLICYMAP

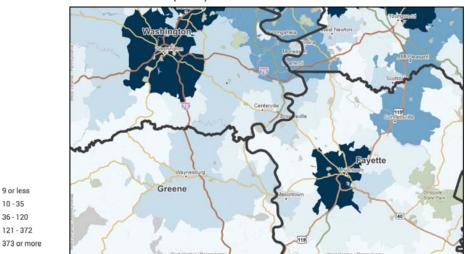
Table 9 shows trends in the average annual sales prices in Greene County, Washington County, and Fayette County. Home sale prices in Washington County are over 66% higher than sale prices in Greene and Fayette Counties. **Table 10** shows the aggregated home sales in Greene County by zip code for the year 2012. Zip code 15370 (which includes the Waynesburg area) accounts for 41% of the aggregated sales.

TABLE 9 - AVERAGE ANNUAL HOME SALES PRICES (2006 - 2012)

Annual Aggregated Residential Home Sale					
Year	Washington County	Greene County	Fayette County		
2006	\$127,304	\$64,246	\$74,990		
2007	\$133,954	\$68,593	\$79,491		
2008	\$125,010	\$67,088	\$82,704		
2009	\$134,458	\$72,179	\$82,136		
2010	\$135,586	\$79,226	\$80,288		
2011	\$138,012	\$89,427	\$80,923		
2012	\$151,646	\$90,690	\$91,183		

SOURCE: POLICYMAP AND CONSULTANT CALCULATIONS

As shown in Map 3, home sales activity in the region in 2012 was concentrated in the areas surrounding Washington and Uniontown.



Map 3 - Regional Home Sales by Zip Code (2012)

SOURCE: POLICYMAP

Table 10 - Aggregated Residential Home Sales for Greene County in 2012

Aggregated Residential Home Sales Amount in 2012	
Zip	Amount
15370	\$13,352,666
15320	\$3,994,500
15322	\$1,735,000
15341	\$1,528,075
15357	\$981,500
15337	\$905,000
15344	\$628,500
15349	\$617,500
15380	\$537,000
15338	\$499,400
15352	\$280,000
15362	\$196,000
15364	\$110,000
15346	\$92,500
15327	\$60,000

Source: PolicyMap

A search of local real estate listings in Greene County in June 2014 returned an estimated 52 homes on the for-sale market. The greatest number of listings was in Waynesburg, with 15 listings. Franklin Township and Rices Landing each had five listings. The greatest number of listings were priced either below \$100,000 or above \$250,000.

Price Range (\$000s)	Number of Listings	Average List Price
<\$50	9	\$31,454
\$50–\$75	9	\$62,833
\$75–\$100	7	\$90,943
\$100–\$150	6	\$139,717
\$150-\$200	6	\$174,700
\$200-\$250	2	\$242,450

9

4

TABLE 11 - REAL ESTATE LISTINGS IN GREENE COUNTY IN JUNE 2014

Source: www.century21.com, June 20, 2014

CHANGES IN THE SUBSIDIZED HOUSING MARKET

Greene County's Housing Program, operating under the Department of Human Services, provides housing services to the homeless and persons at risk of homelessness, persons with behavioral health issues (e.g., mental health and drug/alcohol), low income families and individuals, families involved with children and youth, persons with special needs and/or disabilities, seniors, youth in transition, persons involved in the criminal justice system, and veterans. The Housing Program's continuum of services includes the following:

Outreach

\$250-\$400

\$400+

- Intake and Assessment
- PATH Services
- Homeless Prevention
- Rapid Rehousing

• Emergency Shelter

\$311,122 \$544,500

- Shelters
- Transitional Housing
- Permanent Housing
- Support Services

The Greene County Housing Authority currently owns and manages 284 public housing units in eight facilities in the County, and its Section 8 program manages 30 vouchers. Seven of its eight housing facilities are located in Waynesburg, and one is located in Carmichaels. Only three of the eight facilities have housing units designated for older adults (see **Table 12**).

TABLE 12 - PROPERTIES OWNED MANAGED BY THE GREENE COUNTY HOUSING AUTHORITY

		Older		Persons with a
	Adults	Adults	Families	Disability
Avalon Court - Waynesburg	✓	✓	✓	✓
Grandview Apartments - Waynesburg			✓	✓
Liberty Avenue - Waynesburg	✓		✓	
Thompson Gardens - Waynesburg	✓	✓		✓
Southside - Waynesburg	✓		✓	
Wayne Village - Waynesburg	✓		✓	✓
Woodland Avenue Apartments - Waynesburg			✓	✓
Woodside Manor - Carmichaels		✓	✓	✓

SOURCE: GREENE COUNTY WEBSITE

In addition to the Housing Authority's public housing units there are several privately owned housing facilities that provide subsidized housing options to Greene County residents (see **Table 13**).

TABLE 13 - PRIVATELY OWNED SUBSIDIZED HOUSING UNITS IN GREENE COUNTY

	Adults	Older Adults	Families	Persons with a Disability
Bridge Street Commons - Waynesburg		✓		✓
Carmichaels Arbors - Carmichaels		✓		
Cedarwood Apartments - Carmichaels	✓		✓	✓
Mountainview Gardens - Waynesburg	✓		✓	✓
Parkview Knoll - Carmichaels			✓	
Waynesburg House - Waynesburg		✓		✓

SOURCE: GREENE COUNTY WEBSITE

Greene County's public housing units are currently at 100% occupancy, with 78 individuals and/or families on the waiting list for housing as of June 16, 2014 (see **Table 14**).

TABLE 14 - WAITING LIST SUBSIDIZED HOUSING IN GREENE COUNTY

Unit Type	Number on Waiting List
1 bedroom for single individual	10
1 bedroom for Elderly/Disabled	31
2 bedrooms	21
3 bedrooms	14
4 bedrooms	2
Total	78

Source: Greene County Housing Authority

The waiting list above suggests that the greatest need for subsidized housing in Greene County is for one-bedroom units for the elderly and disabled, and two bedroom units for families and individuals. Housing Authority representatives indicated that one of the greatest needs in the County is for market rate housing at price points that are affordable for individuals and families who are transitioning out of public housing.

A 52-unit apartment building for seniors 62 and older is currently being developed in Waynesburg by PIRHL Developers and Waynesburg Prosperous and Beautiful. These affordable units, ten percent of which will be handicapped accessible, will help to meet the need for affordable housing for seniors.

The need for housing for persons with disabilities in Greene County is due in part to a higher-than-average concentration of people with disabilities within the County. As shown in **Table 15**, 17.5% of Greene County's residents had one or more disabilities compared with 13.2% of the residents in Pennsylvania. The concentration of people with disabilities is also higher in Greene County than in all of its neighboring counties with the exception of Fayette County, which has a concentration of 18.8%.

TABLE 15 - ESTIMATED PERCENT OF PEOPLE WITH ONE OR MORE DISABILITIES (BETWEEN 2008-2012)

	Percentage of people with disabilities
Fayette County, PA	19.76%
Greene County, PA	17.53%
Marshall County, WV	16.54%
Wetzel County, WV	15.36%
Washington County, PA	14.66%
Monongalia County, WV	11.74%
Pennsylvania	13.18%

SOURCE: POLICYMAP

Housing Authority representatives indicated that although there was a pre-existing need for additional subsidized housing in Greene County, the growth in the natural gas industry has impacted subsidized housing services in the County. For instance, when shelters are full, hotels are used as emergency shelters. Due to the influx of the gas workers, there are no available hotel rooms to use as emergency shelters. The Greene County Human Services funds cover two nights in a hotel; however, with Greene County hotels being booked, the funds are sometimes used to transport people to Washington County to find emergency shelter.

The Housing Authority also provides rental assistance through the Housing Assistance Program (HAP). HAP provides funds for first month's rent, back rent, and essential utilities. From 2012 to 2013, 391 clients walked in the door in hopes of utilizing these services (see **Table 16**). Of those 391 clients, nearly one third (127) were denied services due to (1) insufficient income; (2) their utilities were already shut off; or (3) they were unable to find a rental unit.

Table 16 - Persons Served by Housing Assistance Program (HAP) in 2012-2013

Category	Persons
Helped	242
Seniors	101
Families	97
Single Adult	44
Denied	127
Total	391

Source: Greene County Housing Authority

During interviews, it was noted that there was an increase in the number of children Greene County who are in foster care due to inadequate housing. Parents who are in shelters have their children removed to foster care. While the total number of children in foster care in Greene County only increased by 12% between 2009 and 2013, the percentage of children in foster care due to inadequate housing more than doubled during that time period, increasing from 15.2% in 2009 to 40.4% in 2013.

Table 17 - Number of Children in Foster Care in Greene County, PA, Due to Inadequate Housing

Dates	Children in foster care	Children in foster care for reason of "inadequate housing"	Percentage of children in foster care due to "inadequate housing"
4/1/08-3/31/09	79	12	15.2%
4/1/09-3/31/10	73	26	35.6%
4/1/10-3/31/11	71	24	33.8%
4/1/11-3/31/12	84	27	32.1%
4/1/12-3/31/13	89	36	40.4%

Source: Measuring the Costs and Benefits of Natural Gas Development in Greene County, Pennsylvania: A Case Study, p. 15

CHANGES IN UNCONVENTIONAL HOUSING

Currently there are seven hotels In Greene County with a total of 380 rooms, 144 of which were added since January 2010. Twelve hotels with a total of 1,036 rooms have been added in neighboring Washington County since 2009. Another four hotels with a total of 434 rooms are currently under construction in Washington County.

TABLE 18 - HOTEL ROOMS IN GREENE COUNTY

Hotel Name	Number of Rooms	Open Date
Hampton Inn Waynesburg	80	Apr-13
Holiday Motel	28	
Buddys Hotel	24	Jun-73
Super 8 Waynesburg	56	Jan-90
Comfort Inn Waynesburg	71	Aug-97
Microtel Inn & Suites by Wyndham Waynesburg	64	Jan-10
EconoLodge Waynesburg	57	Jun-84

Source: Smith Travel Research, Inc.

It was noted during interviews that when drilling began to increase, there was a significant increase in the number of RV parks in the County. The RV parks generally followed the construction of pipelines, and the workers are a transient population. Many private landowners would rent spots for RVs on any available land they had. The number of RVs in the County has decreased, however, with tighter regulations from the Department of Environmental Protection.

RECENT INVESTMENTS IN GREENE COUNTY HOUSING

Since its establishment, the Housing Team has been proactive in securing funding to meet the unmet housing needs in Greene County. The following are examples of recent awards through PHFA.

TABLE 19 - RECENT GREENE COUNTY PHFA FUNDING AWARDS

Year/Amount/Program	Description
Year: 2012 Amount: \$250,000 Housing Rehab & Development	This program involves the rehabilitation of vacant residential properties for sale or rent, as well as the acquisition of vacant land for affordable housing development. There are 23 parcels identified for which the Redevelopment Authority will complete 13 housing projects in six municipalities across Greene County.
Year: 2012 Amount: \$150,000 Human Services - Rental Assistance	This program provides assistance for people who have resided in Greene County for at least 60 days and includes (1) homelessness prevention assistance to households who would otherwise become homeless; (2) assistance to rapidly re-house persons who are homeless; and (3) financial assistance, housing relocation and stabilizations services to eligible individuals and families who are homeless or near homeless.
Year: 2012 Amount: \$200,000 Rental Rehab (Similar to HOME Grants)	This program provides for homeowner-occupied rehabilitation to help maintain safe housing (50% PHARE funds to assist households 50% or under the County's median area income; 50% PHARE funds to assist households 51 %-80% of the County's median area income).
Year: 2013 Amount: \$600,000 Housing Rehab & Development	This program involves the rehabilitation of vacant residential properties for sale or rent as well as the acquisition of vacant land for affordable housing development. There are 23 parcels identified for which the Housing Authority will complete 13 housing projects in six municipalities across Greene County.
Year: 2013 Amount: \$514,164 Accessible Dreams - Quad	Accessible Dreams, together with the Housing Authority, will develop four living units at 1392 and 1394 Jefferson Road in Jefferson Borough, Greene County, Pennsylvania. The new four unit structure will contain two full accessible two bedroom units on the ground floor for persons with mobility impairments, and two additional two bedroom units on the second floor for individuals needing affordable rental housing.

APPENDIX A – STATISTICAL MARKET INDICATORS AND DRIVERS

TABLE 20 - GREENE COUNTY POPULATION TRENDS

Geographic Area	2000	2012	Change 2000 to 2012	Percentage Change	
Aleppo Township	597	536	-61	-10%	
Carmichaels Borough	556	344	-212	-38%	
Center Township	1,393	1,255	-138	-10%	
Clarksville Borough	234	292	58	25%	
Cumberland Township	6,564	6,596	32	0%	
Dunkard Township	2,358	2,245	-113	-5%	
Franklin Township			-470	-6%	
Freeport Township	7,694 302	7,224 297	-470	-2%	
Gilmore Township	295	266	-29	-10%	
Gray Township	236	214	-22	-9%	
Greene Township	445	526	81	18%	
Greensboro Borough	295	236	-59	-20%	
Jackson Township	516	414	-102	-20%	
Jefferson Borough	337	294	-43	-13%	
Jefferson Township	2,528	2,382	-146	-6%	
Monongahela Township	1,714	1,576	-138	-8%	
Morgan Township	2,600	2,603	3	0%	
Morris Township	1,040	837	-203	-20%	
Perry Township	1,720	1,634	-86	-5%	
Rices Landing Borough	443	485	42	9%	
Richhill Township	1,062	857	-205	-19%	
Springhill Township	476	333	-143	-30%	
Washington Township	1,106	1,112	6	1%	
Wayne Township	1,223	1,117	-106	-9%	
Waynesburg Borough	4,184	4,162	-22	-1%	
Whiteley Township	754	777	23	3%	
Greene County	40,672	38,614	-2,058	-5%	
Pennsylvania	12,281,054	12,699,589	418,535	3%	

SOURCE: PENN STATE DATA CENTER AND U.S. CENSUS BUREAU

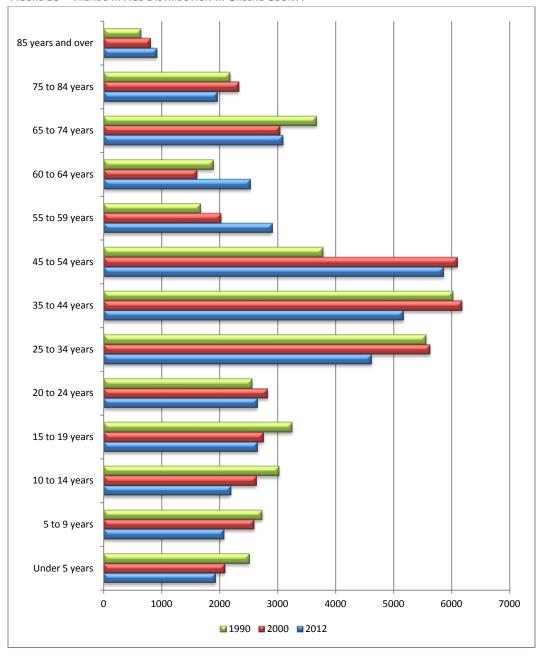


FIGURE 16 - TRENDS IN AGE DISTRIBUTION IN GREENE COUNTY

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

TABLE 21 - DRILLING ACTIVITY IN GREENE COUNTY BY MUNICIPALITY (2006 TO 2013) - UNCONVENTIONAL WELLS

Municipality	2006	2007	2008	2009	2010	2011	2012	2013	Total
Aleppo Township			1		3	3	3		10
Center Township		1	9	14	6	13	48	21	112
Cumberland Township	2	4	31	29	22	20	9	9	126
Dunkard Township		8	5	11		2	3	14	43
Franklin Township				1	6	11	5	6	29
Gilmore Township				2		2		6	10
Gray Township						2			2
Greene Township		1	6	6	1	1	3	3	21
Jackson Township					1	11	3	10	25
Jefferson Township			7	5	7	3	1		23
Monongahela Township		1	6	4	4	1			16
Morgan Township				7	20	19	8	5	59
Morris Township			2	21	30	29	11	3	96
Richhill Township					1		1		2
Springhill Township							2		2
Washington Township						3	8	40	51
Whiteley Township				1	1				2
Total	2	15	67	101	102	120	105	117	629

Source: Pennsylvania Department of Environmental Protection

TABLE 22 - DRILLING ACTIVITY IN GREENE COUNTY BY MUNICIPALITY (2006 TO 2013) - CONVENTIONAL WELLS

	2000	2004	2002	2002	2004	2005	2005	2007	2000	2000	2010	2011	2042	Grand
Municipality	2000	2001	2002	2003	2004	2005	2006	2007	2008	2009	2010	2011	2012	Total
Aleppo Township			1		2	1			4	1	2	1		12
Center Township		1	1	3	14	3	2	2	3	3	4	2		38
Cumberland Township		3	6	7	9	24	51	114	48	2	1	3		268
Dunkard Township						2	19	40	19	1	3			84
Franklin Township	1	1	1	2					1			1	1	8
Gilmore Township		1					14	5	2					22
Greene Township			5	5	9	1	8	22	14	1				65
Jackson Township							1		2	2	2	2		9
Jefferson Boro							2							2
Jefferson Township							2	43	31	1		2		79
Monongahela Township			2		3			3	31		1			40
Morgan Township						1		4	3					8
Morris Township		1	1	1		1		2	2	1	1			10
Perry Township								5	8	1	1	2		17
Richhill Township		1			2	6	5	3			2	2		21
Washington Township								1	7	2				10
Wayne Township							2	4	1	3				10
Whiteley Township			4	4	1	3	2	11	2					27
Total	1	8	21	22	40	42	108	259	178	18	17	15	1	730

Source: Pennsylvania Department of Environmental Protection

TABLE 23 - TRENDS IN HOUSING UNITS AND TENURE (OCCUPANCY) IN GREENE COUNTY

	2000				2012			
Municipality	Total Housing Units	Owner- Occupied Units	Renter- Occupied Units	Total Housing Units	Owner- Occupied Units	Renter- Occupied Units	Owner Occupied Change	Renter Occupied Change
Aleppo Township	282	178	55	304	162	52	(16)	(3)
Carmichaels Borough	255	155	77	200	101	55	(54)	(22)
Center Township	566	396	121	598	381	127	(15)	6
Clarksville Borough	90	61	17	109	63	32	2	15
Cumberland Township	2,893	1,971	688	3,301	2,138	683	167	(5)
Dunkard Township	1,073	780	187	1,043	748	153	(32)	(34)
Franklin Township	2,291	1,427	730	1,829	1,042	669	(385)	(61)
Freeport Township	142	91	24	140	64	33	(27)	9
Gilmore Township	153	94	20	143	94	16	0	(4)
Gray Township	105	60	35	121	41	40	(19)	5
Greene Township	203	157	23	234	160	47	3	24
Greensboro Borough	140	97	20	130	77	18	(20)	(2)
Jackson Township	228	154	38	192	97	43	(57)	5
Jefferson Borough	147	111	28	145	94	26	(17)	(2)
Jefferson Township	1,087	862	154	1,120	806	175	(56)	21
Monongahela Township	726	574	103	714	503	126	(71)	23
Morgan Township	1,117	889	136	1,178	833	204	(56)	68
Morris Township	375	259	79	415	248	51	(11)	(28)
Perry Township	771	550	133	725	527	136	(23)	3
Rices Landing Borough	190	154	25	218	166	25	12	0
Richhill Township	518	296	106	434	258	71	(38)	(35)
Springhill Township	224	132	37	213	126	24	(6)	(13)
Washington Township	435	360	49	461	364	52	4	3
Wayne Township	536	375	90	525	349	100	(26)	10
Waynesburg Borough	1,811	747	872	1,686	644	808	(103)	(64)
Whiteley Township	320	229	54	333	208	59	(21)	5
Total	16,678	11,159	3,901	16,511	10,294	3,825	(865)	(76)

Source: U.S. Census Bureau

Table 24 - Change in Median Gross Rent (2000 to 2012)/Number of Rental Units/Median Household Income

Municipality	Rental Units 2000	Rental Units 2012	Change in Number of Rental Units	Median Gross Rent 2000	Median Gross Rent 2012	Change in Median Gross Rent	Median Household Income (2012)
Aleppo Township	55	52	(6)	\$282	\$416	\$134	\$51,667
Carmichaels Borough	77	55	(22)	\$450	\$595	\$145	\$35,000
Center Township	121	127	6	\$357	\$532	\$175	\$55,313
Clarksville Borough	17	32	15	\$445	\$597	\$152	\$47,548
Cumberland Township	688	683	(5)	\$316	\$551	\$235	\$34,792
Dunkard Township	187	153	(34)	\$351	\$721	\$370	\$43,233
Franklin Township	730	669	(61)	\$308	\$570	\$262	\$43,384
Freeport Township	24	33	9	\$300	\$568	\$268	\$31,382
Gilmore Township	20	16	(4)	\$425	\$563	\$138	\$42,500
Gray Township	35	40	5	\$321	\$613	\$292	\$40,625
Greene Township	23	47	24	\$381	\$553	\$172	\$57,361
Greensboro Borough	20	18	(2)	\$556	\$638	\$82	\$39,531
Jackson Township	38	43	5	\$271	\$525	\$254	\$36,250
Jefferson Borough	154	175	21	\$508	\$632	\$124	\$47,351
Jefferson Township	28	26	(2)	\$452	\$425	(\$27)	\$37,500
Monongahela Township	103	126	23	\$388	\$594	\$206	\$43,427
Morgan Township	136	204	68	\$411	\$630	\$219	\$39,093
Morris Township	79	51	(28)	\$378	\$686	\$308	\$51,750
Perry Township	133	136	3	\$421	\$738	\$317	\$48,464
Rices Landing Borough	25	25	0	\$396	\$447	\$51	\$45,208
Richhill Township	106	71	(35)	\$384	\$550	\$166	\$48,750
Springhill Township	37	24	(13)	\$225	\$288	\$63	\$30,577
Washington Township	49	52	3	\$360	\$688	\$328	\$55,000
Wayne Township	90	100	10	\$348	\$515	\$167	\$44,844
Waynesburg Borough	872	808	(64)	\$412	\$564	\$152	\$38,224
Whiteley Township	54	59	5	\$350	\$466	\$116	\$62,054
Greene County	3,901	3,825	(79)	\$367	\$606	\$239	\$42,837

Source: U.S. Census Bureau and PolicyMap

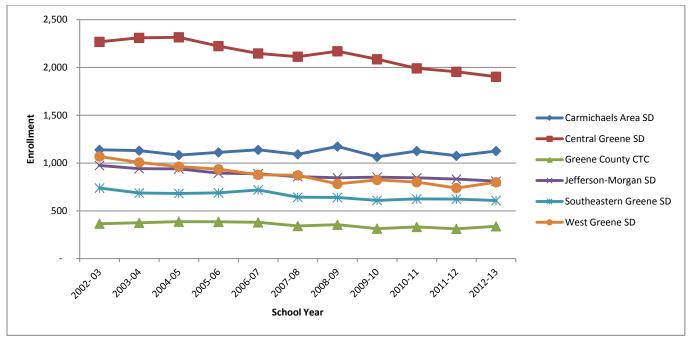
= Top Three in Each Category

TABLE 25 - GREENE COUNTY PUBLIC SCHOOL ENROLLMENT TRENDS BY SCHOOL DISTRICT

School District	2002- 2003	2003- 2004	2004- 2005	2005- 2006	2006- 2007	2007- 2008	2008- 2009	2009- 2010	2010- 2011	2011- 2012	2012- 2013
Carmichaels Area SD	1,139	1,130	1,084	1,112	1,138	1,091	1,173	1,065	1,126	1,076	1,126
Central Greene SD	2,268	2,310	2,316	2,224	2,147	2,113	2,170	2,086	1,991	1,955	1,903
Greene County CTC	366	375	387	385	380	342	355	314	332	312	339
Jefferson-Morgan SD	975	942	939	895	888	858	846	853	845	832	810
Southeastern Greene SD	739	687	682	688	719	643	640	610	625	623	608
West Greene SD	1,069	1,007	963	936	878	872	782	824	800	739	799
Total	6,556	6,451	6,371	6,240	6,150	5,919	5,966	5,752	5,719	5,537	5,585

SOURCE: PENNSYLVANIA DEPARTMENT OF EDUCATION

FIGURE 17 - GREENE COUNTY PUBLIC SCHOOL ENROLLMENT TRENDS BY SCHOOL DISTRICT



SOURCE: PENNSYLVANIA DEPARTMENT OF EDUCATION

TABLE 26 - COMPARATIVE TRENDS IN WAGES BY INDUSTRY SECTOR

		Greene Cou	nty	Pennsylvania		
Industry Sector		2012	% Change 2000 to 2012	2000	2012	% Change 2000 to 2012
Total all Sectors	\$2,951	\$4,668	58%	\$2,810	\$3,962	41%
11 – Agriculture, Forestry, Fishing and Hunting	\$840	\$606	-28%	\$1,749	\$2,491	42%
12 – Mining, Quarrying, and Oil and Gas Extraction	\$4,926	\$7,898	60%	\$3,451	\$6,596	91%
22 – Utilities	\$2,944	\$6,658	126%	\$4,900	\$8,443	72%
23 – Construction	\$2,133	\$4,066	91%	\$2,887	\$4,143	44%
31-33 – Manufacturing	\$2,108	\$3,378	60%	\$3,418	\$4,802	40%
42 – Wholesale Trade	\$3,375	\$3,836	14%	\$3,674	\$5,650	54%
44-45 – Retail Trade	\$1,360	\$2,248	65%	\$1,764	\$2,256	28%
48-49 – Transportation and Warehousing	\$2,092	\$4,650	122%	\$2,683	\$3,336	24%
51 – Information	\$2,393	\$3,960	65%	\$3,921	\$5,207	33%
52 – Finance and Insurance	\$2,585	\$4,350	68%	\$4,319	\$6,565	52%
53 – Real Estate and Rental and Leasing	\$1,481	\$6,715	353%	\$2,551	\$4,166	63%
54 – Professional, Scientific, and Technical Services	\$5,885	\$7,090	20%	\$4,164	\$6,557	57%
55 – Management of Companies and Enterprises	\$4,567	\$9,043	98%	\$4,155	\$7,085	71%
56 – Administrative and Support and Waste Management and Remediation Services	\$2,761	\$2,859	4%	\$2,073	\$2,816	36%
61 – Educational Services	\$2,658	\$3,445	30%	\$2,844	\$3,871	36%
62 – Health Care and Social Assistance	\$1,952	\$2,601	33%	\$2,549	\$3,612	42%
71 – Arts, Entertainment, and Recreation	\$530	\$960	81%	\$1,456	\$2,027	39%
72 – Accommodation and Food Services	\$724	\$1,238	71%	\$1,030	\$1,365	33%
81 – Other Services (except Public Administration)	\$1,934	\$2,976	54%	\$1,689	\$2,418	43%
92 – Public Administration	\$2,703	\$3,717	38%	\$2,830	\$3,806	34%

SOURCE: LOCAL EMPLOYMENT DYNAMICS

TABLE 27 - COMPARATIVE EMPLOYMENT TRENDS 2005 TO 2012 (GREENE COUNTY, COMPARING FIRST QUARTERS)

	2005	2006	2007	2008	2009	2010	2011	2012	2013	Change from 2005 to 2013
11 – Agriculture, Forestry, Fishing, and Hunting	5	11	10	11						(5)
21 – Mining, Quarrying, and Oil and Gas Extraction	2,897	3,006	2,979	3,075	3,142	3,112	3,780	3,072	4,203	1,306
22 – Utilities	142	128	159	140	151	165	210	189	218	76
23 – Construction	478	577	566	679	686	825	783	957	1,261	783
31-33 – Manufacturing	662	500	541	520	421	413	444	486	367	(295)
42 – Wholesale Trade	337	319	209	239	254	251	333	278	286	(51)
44-45 – Retail Trade	1,157	1,250	1,229	1,196	1,100	1,032	1,130	1,144	1,188	31
48-49 – Transportation and Warehousing	397	392	415	453	426	451	547	693	557	160
51 – Information	87	81	83	87	77	66	68	39	45	(42)
52 – Finance and Insurance	320	333	315	402	410	384	378	371	419	99
53 – Real Estate and Rental and Leasing	40	31	73	74	39	169	102	158	142	102
54 – Professional, Scientific, and Technical Services	237	211	213	269	327	299	357	409	447	210
55 – Management of Companies and Enterprises	5		444	466	502	575	634		46	41
56 – Administrative and Support and Waste Management and Remediation Services	238	209	214	215	196	98	125	79	80	(158)
61 – Educational Services	1,267	1,449	1,574	1,539	1,079	1,251	983	1,185	655	(612)
62 – Health Care and Social Assistance	1,219	1,303	1,442	1,556	1,415	1,500	1,660	1,089	868	(351)
71 – Arts, Entertainment, and Recreation	9	18	18	14	10	23	7	17	18	9
72 – Accommodation and Food Services	486	490	550	530	587	625	639	647	661	175
81 – Other Services (except Public Administration)	424	391	475	381	450	489	544	466	469	45
92 – Public Administration	655	649	516	239	485	455	428	975	923	268
Total	11,062	11,348	12,025	12,085	11,757	12,183	13,152	12,254	12,853	1,791

SOURCE: LOCAL EMPLOYMENT DYNAMICS

Table 28 - Percentage of Greene County Renter Households Considered to be Cost-Burdened

Municipality	2000 (%)	2011 (%)	% Change 2000 to 2011
Gray Township	31.71%	58.82%	27.11%
Cumberland Township	42.45%	69.39%	26.94%
Wayne Township	15.25%	40.40%	25.15%
Carmichaels Borough	26.76%	48.28%	21.52%
Washington Township	27.50%	45.83%	18.33%
Waynesburg Borough	32.26%	46.23%	13.97%
Franklin Township	27.40%	40.79%	13.39%
Rices Landing Borough	17.39%	25.00%	7.61%
Morris Township	27.12%	31.48%	4.36%
Richhill Township	23.08%	23.73%	0.65%
Springhill Township	21.74%	22.22%	0.48%
Dunkard Township	40.66%	40.80%	0.14%
Clarksville Borough	33.33%	33.33%	0.00%
Morgan Township	19.51%	16.67%	-2.84%
Center Township	26.97%	23.68%	-3.29%
Gilmore Township	16.67%	13.33%	-3.34%
Greensboro Borough	21.74%	17.65%	-4.09%
Whiteley Township	43.48%	37.25%	-6.23%
Greene Township	20.00%	12.90%	-7.10%
Jefferson Borough	34.48%	25.93%	-8.55%
Jackson Township	36.84%	28.13%	-8.71%
Perry Township	28.68%	18.71%	-9.97%
Aleppo Township	46.34%	32.69%	-13.65%
Monongahela Township	34.09%	18.55%	-15.54%
Jefferson Township	38.35%	18.62%	-19.73%
Freeport Township	37.50%	15.38%	-22.12%

Source: PolicyMap