

Beaver County Data Analysis: 2025 Update

Economic decline in Beaver County continues as Pennsylvania and the US see continued growth.

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Photo: Mark Dixon, [Flickr](#)

Introduction

It's been more than twelve years since Shell announced plans to construct a massive petrochemical facility in Beaver County, Pennsylvania, assuring everyone from local community members to the governor that the state-of-the-art ethane cracker would spur economic growth. According to project backers and a study commissioned by professors at Robert Morris University (RMU) in 2014, the facility would create between 5,300 and 6,700 new direct, indirect, and induced jobs, renew business investment, and maybe even touch off a resurgence in local manufacturing. So appealing were the promises that, in order to convince Shell to locate in Pennsylvania rather than somewhere else, state lawmakers enacted the largest-ever subsidy in state history, a tax break valued at \$1.65 billion.¹

Beaver County is an excellent case study in the local economic impacts of petrochemical development. The Ohio River Valley Institute has been tracking economic data from Beaver County and comparing the county's track

record to that of Pennsylvania and the rest of the United States. What the data reveal is that Shell's claim that the plant would be a "windfall" to the economy has utterly failed to materialize.

To the contrary, **by nearly every measure of economic activity, today Beaver County is worse off than it was before the Shell plant was announced in 2012.** Today, Beaver County has fewer jobs, fewer businesses, and fewer residents. In fact, after adjusting for inflation, Beaver County's annual GDP has contracted 12% from its 2012 levels, rather than grown.

What's worse, the facility exceeded its allotted air pollution limits for volatile organic compounds (VOCs)—many of which are linked to cancer and other chronic health conditions—carbon monoxide, nitrogen oxides and hazardous air pollutants within just six months of operating.^{2,3} Repeated flaring has sparked air quality and health concerns for nearby residents.⁴

This brief is the second update of a report first published in November 2021, with the first update published in June 2023. This latest update includes new data points from the time since Shell completed construction and became operational in late 2022, and demonstrates a continuation of the trends ORVI identified in previous reports. In fact, Beaver County struggled economically during the pandemic and has still not recovered to the extent that the rest of the state and country has. Not only has Beaver County's GDP declined, by every measure there are fewer jobs and businesses today than when the Shell plant was announced in 2012, contradicting the central selling point of the Shell plant's backers.

For context, the economic performance data reported in this research brief are shown in comparison to the state of Pennsylvania and the United States. The economic trends are pegged to zero in 2012, when Shell first announced plans to build in Beaver County, with subsequent years shown as percentage change from that starting point. All the figures in this report are publicly available online from US government agencies, such as the Census Bureau, the Bureau of Labor Statistics, and the Bureau of Economic Analysis.

GDP

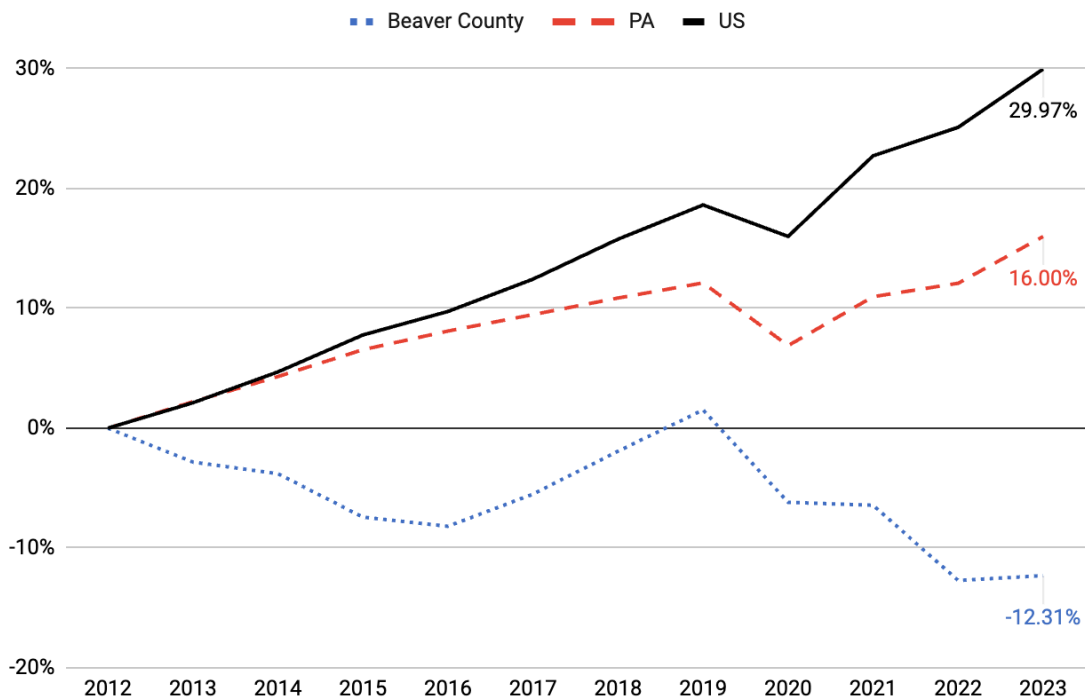
Gross domestic product (GDP) is a measurement of total economic activity, including consumption, investment, government spending, and net exports. It is, in short, an estimate of all the final goods and services produced in an area and is commonly used to compare the size and growth of economies.⁵ The metric is adjusted for inflation, calculated from thousands of data points, and reported frequently by the Bureau of Economic Analysis (BEA) and has been updated with revised estimates since the last report.⁶

GDP Dashboard	
GDP (2012-2023):	
▼	Beaver: -12.3%
▲	Pennsylvania: +16.0%
▲	US: +29.3%

Between 2012 and 2023, GDP grew statewide (PA) and nationally, apart from a brief decline during 2020 as a result of the onset of the COVID-19 pandemic. Meanwhile, over the same period Beaver County GDP fell by nearly 12.3%. Revised estimates from the BEA reveal a bleaker picture in Beaver County since ORVI's last update, particularly since 2019. While Beaver County experienced a brief period of GDP growth between 2017 and 2019, the county struggled economically during the pandemic and has still not recovered to the extent that the rest of the state and country has. As Beaver County continued its economic decline, Pennsylvania and the US experienced overall strong and consistent growth in GDP (apart from 2020), adding 16% and nearly 30% to their economies, respectively.

Figure 1: Beaver County GDP Declined as State and National GDP Grew Consistently

Percent change in real GDP, 2012-2023

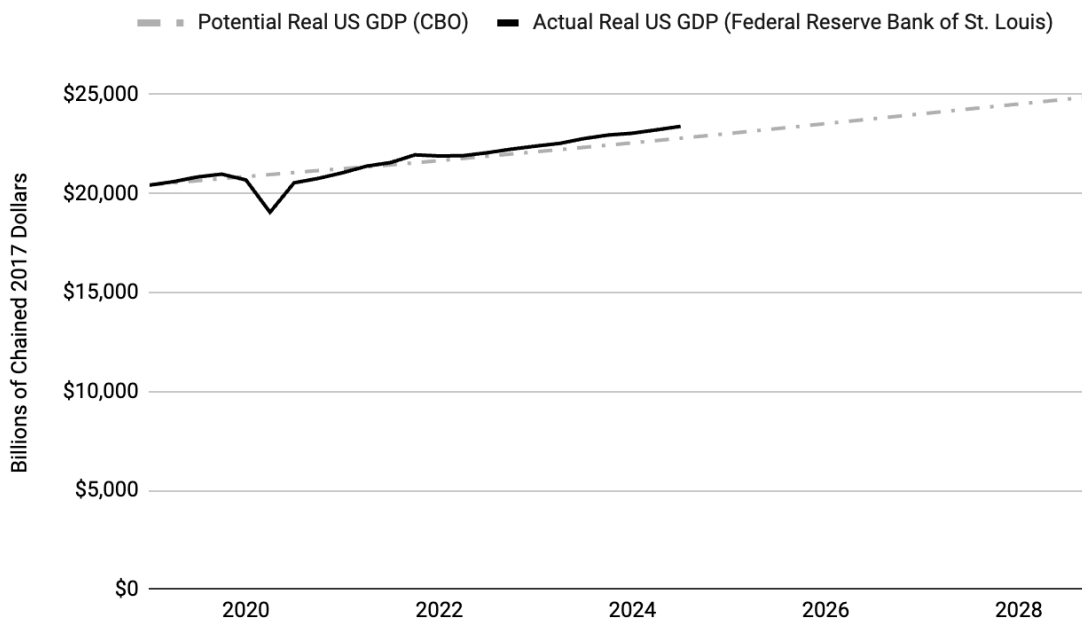


Source: US Bureau of Economic Analysis

In fact, it is important to note that as Beaver County continued to decline even after the Shell plant opened, the US economy has bounced such that national GDP now exceeds pre-pandemic economic projections. The Congressional Budget Office (CBO) produces an annual 10-year projection, or prediction, of the country’s potential GDP, which guides federal officials to anticipate future revenues and expenditures.⁷ Comparing 2019-2024 real GDP to what the CBO forecast for GDP in 2019 (prior to the COVID-19 pandemic), it is clear that the US economy has not only recovered but has grown by more than anyone had anticipated, even before the COVID-19 pandemic. Despite widespread national narratives about a “slow economy,” by 2023 and early 2024 US real GDP exceeded the forecast produced by the CBO back in 2019. Unfortunately, despite large promises from the ethane cracker plant, Beaver County has not felt the positive effects of economic recovery.

Figure 2: National GDP Exceeds Pre-Pandemic Economic Projections

Projected US real GDP vs actual real US GDP, pre- and post-pandemic



Source: US Congressional Budget Office and US Federal Reserve Bank of St. Louis, Ohio River Valley Institute

Population

Since the Shell project was announced in 2012, the Census Bureau reports that the US population has grown steadily, adding more than 21 million people, a 6.7% increase.⁸ Pennsylvania also saw growth in its population since 2012, adding nearly 200,000 people, a 1.5% increase. Meanwhile, Beaver County actually lost residents.

Population Dashboard
Population (2012-2023):
▼ Beaver: -2.7%
▲ Pennsylvania: +1.6%
▲ US: +6.7%

The components of population change offer insight into the causes of population growth or decline. The US Census Bureau determines population change as the sum of natural change (that is, births and deaths) and migration. Between 2010 and 2023, migration out of Beaver County contributed to 21% of average annual population decline in the county, as reported by Headwaters Economics.⁹ On average, since 2010 Beaver County has lost 655 people a year due to outward migration.¹⁰ That more people moved out of Beaver County than moved into the county stands in stark contrast to the promises made by supporters of the Shell facility.

Not only has Beaver County's population shrunk, it is now older than it was a decade ago. Headwaters Economics reports on data published in the US Census Bureau's American Community Survey. From 2010 to 2022, the age category with the largest estimated increase was 65 and over, whereas the under 18 category shrunk.¹⁰

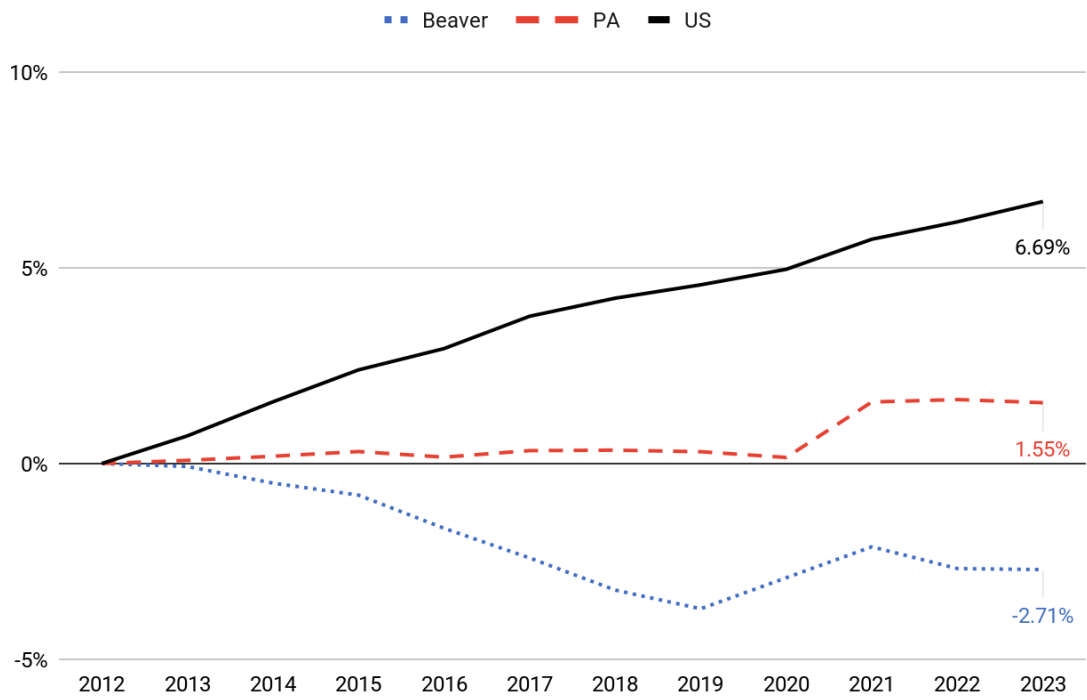
Beaver County Chamber of Commerce President Jack Manning told the press in 2016 that "We don't just want jobs, we want the families behind those jobs" and that improving the county's amenities and quality of life for residents is a goal.¹¹ So far, the Shell petrochemical plant has had the opposite effect; there are nearly 5,000 fewer people living in Beaver County today than when the Shell project was announced in 2012.¹²

In reality, the Shell plant is the cause of major environmental and health concerns among nearby families. Within months of operation, the facility exceeded its annual pollution limits; many families in the area have since fled because of the plant due to concerns about the consequences of the plant's air, water, light, and noise pollution.¹³ A nearby resident filed a class-action lawsuit against Shell, alleging the company had "wrongfully and tortiously released substantial and unreasonable noxious odors, fugitive dust and light emissions" that "invaded nearby properties and caused damages."¹⁴

¹ According to the US Census Bureau, average annual natural population change attributable to births and deaths has also contributed to population decline in Beaver County.

Figure 3: Population in Beaver County Declined as PA, US Grew

Percent change in population, 2012-2023



Source: US Census Bureau, American Community Survey

Employment

The US government measures local employment in three different ways. The Bureau of Labor Statistics publishes a business survey, the “Quarterly Census of Employment and Wages,” that tracks jobs covered by unemployment insurance.¹⁵ The QCEW employment count is based on employer-reported data as part of state unemployment insurance programs.

The Bureau of Labor Statistics also publishes “Local Area Unemployment” statistics, which track monthly state model-based estimates built primarily on data from the Census Bureau’s Current Population Survey, a survey of households.¹⁶

Previous versions of this report also drew on employment data from the Bureau of Economic Analysis, however the agency no longer tracks job count data at the county-level data. Until 2023, the BEA tracked full-time and part-time jobs in US counties.¹⁷

Shell claimed the Shell plant would lead to at least 10,000 construction jobs, 400 direct plant jobs, and approximately 17,000 jobs in associated industries that would emerge to support and take advantage of the plant’s operations. **By all counts, there are fewer jobs in Beaver County today than there were in 2012, despite the unprecedented investment in Shell’s petrochemical plant.**

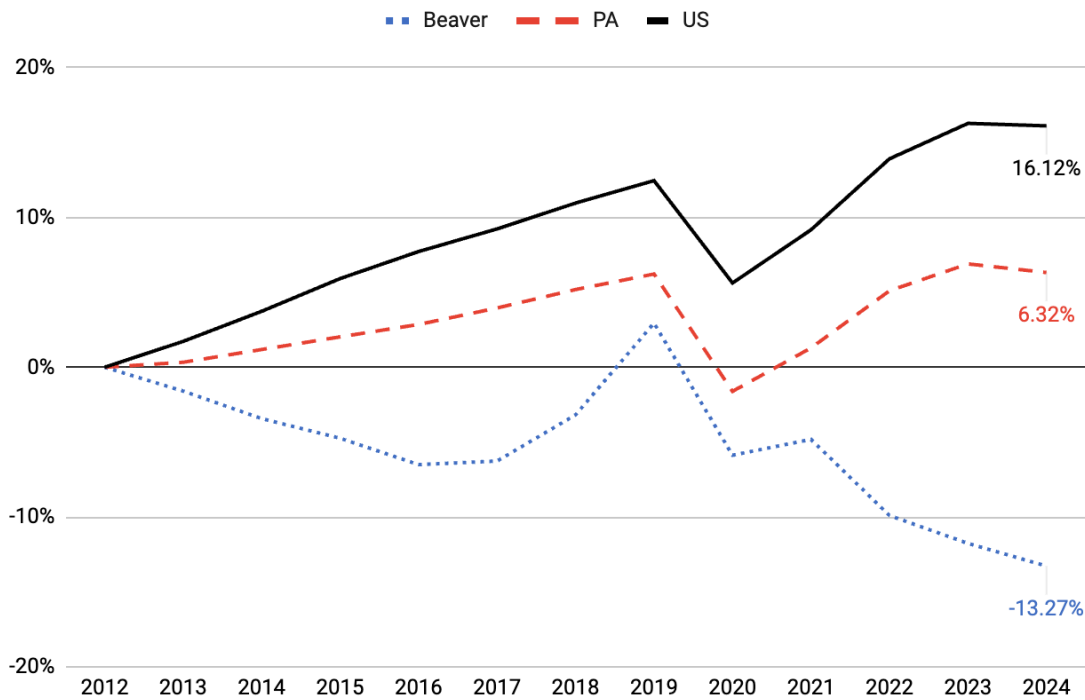
While employment rose slightly between 2017 and 2019, by both BLS counts Beaver County did not see the dramatic job growth promised by project backers. What’s more, when the COVID-19 pandemic rocked the economy in 2020, Beaver County did not see the same rate of recovery as did Pennsylvania and the US, where job growth rebounded at faster pace. The influx of temporary construction workers may have boosted job numbers in 2017-2019 relative to 2012, however it was never enough to make up the gap with the state’s performance. What’s more, the predictions of job growth in industries that would emerge to support and take advantage of the plant’s operations did not come true.

I. US Bureau of Labor Statistics, Quarterly Census of Employment and Wages (QCEW)

Federal Labor Statistics data is available through the first quarter of 2024, nearly two years after the Shell plant became operational. By this measure, there are over 7,200 fewer employed people in Beaver County in 2024 than in 2012, a 13% decline, whereas the number of employed people grew statewide and nationally, 6% and 16 percent respectively.¹⁸

Employment Dashboard
QCEW (2012-2024):
▼ Beaver: -13.3%
▲ Pennsylvania: +6.3%
▲ US: +16.1%
LAUS (2012-2024):
▼ Beaver: -1.4%
▲ Pennsylvania: +6.4%
▲ US: +13.3%

Figure 4: Federal Labor Statistics Show Beaver County Losing Jobs as PA and US Gained
 Percent change in employment (QCEW), 2012-2024

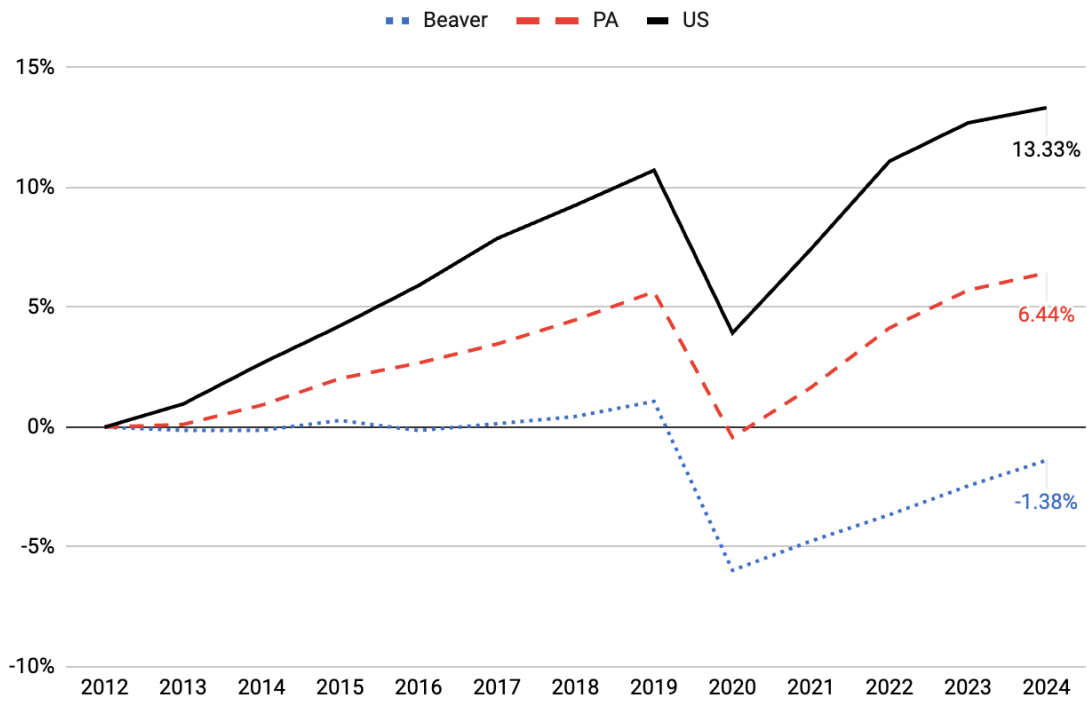


Source: US Bureau of Labor Statistics, Quarterly Census of Employment and Wages

II. US Bureau of Labor Statistics, Local Area Unemployment Statistics (LAUS)

The US Bureau of Labor Statistics publishes its Local Area Unemployment Statistics. This dataset shows a slightly different picture, showing negligible change in employment between 2012 and 2019 after which employment plummeted due to the pandemic. While this measure shows Beaver County gaining jobs lost during the pandemic, there are still fewer employed people in Beaver County in 2023 than there were in 2012. This trend is continuing based on data available from the first quarter of 2024.¹⁹

Figure 5: Federal Labor Statistics Show Declining Employment in Beaver County, Underperforming PA and US
Percent change in employment, 2012-2024



Source: US Bureau of Labor Statistics, Local Area Unemployment Statistics

Number of Businesses

The federal government tracks the number of businesses in American geographies in a number of ways. In this report we examine the figures published by the Census Bureau and the Bureau of Labor Statistics. In its “Statistics of US Businesses,” the Census Bureau tracks “firms,” businesses consisting of one or more domestic establishments in the same geographic area and industry, as well as “establishments,” a single physical location at which business is conducted.²⁰ The Bureau of Labor Statistics’ Quarterly Census of Employment of Wages (QCEW) also tracks annual data on the number of businesses at the county, state, and national level.

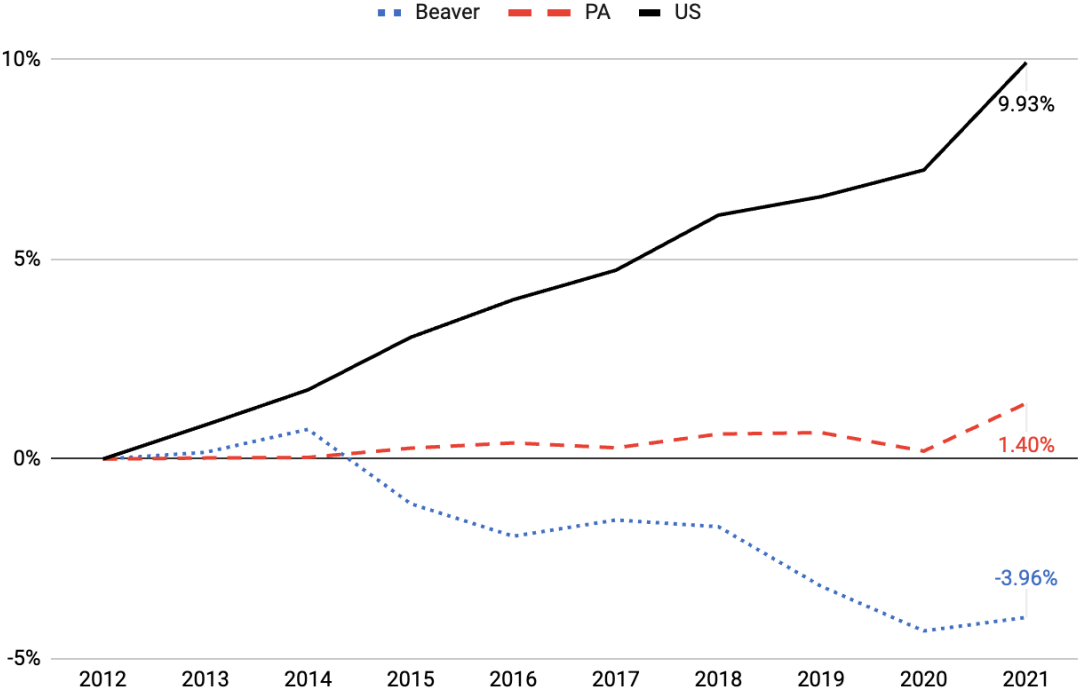
One of the central selling points pitched by Shell and its investors was that the petrochemical plant would spur a “windfall of economic opportunity” in part because of the jobs and businesses generated as support industries moved in.²¹ Shell says there are approximately 600 jobs on site. The company also claimed that for each of those 600 jobs, 18 indirect jobs are created in the surrounding community, according to research from Robert Morris University Study, findings that have since been cast into doubt.

In reality, the exact opposite has occurred. By every measure, Beaver County lost businesses, while the number of businesses grew across the state (PA) and nationally.

Businesses Dashboard
SUSB Firms (2012-2021): <ul style="list-style-type: none">▼ Beaver: -4.0%▲ Pennsylvania: +1.4%▲ US: +9.9%
SUSB Establishments (2012-2021): <ul style="list-style-type: none">▼ Beaver: -2.7%▲ Pennsylvania: +2.6%▲ US: +9.7%
QCEW Establishments (2012-2023): <ul style="list-style-type: none">▼ Beaver: -4.0%▲ Pennsylvania: +10.7%▲ US: +30.1%

Since the Shell cracker plant was first announced in 2012 until 2021, the most recent year for which data are available, the number of business firms grew by more than 9% nationally, as the country added over 568,000 firms, and by almost 1% statewide, adding 3,207 firms, according to the US Census Bureau. Despite this statewide and national growth, Beaver County lost 117 firms, falling from 2,952 firms to 2,835.

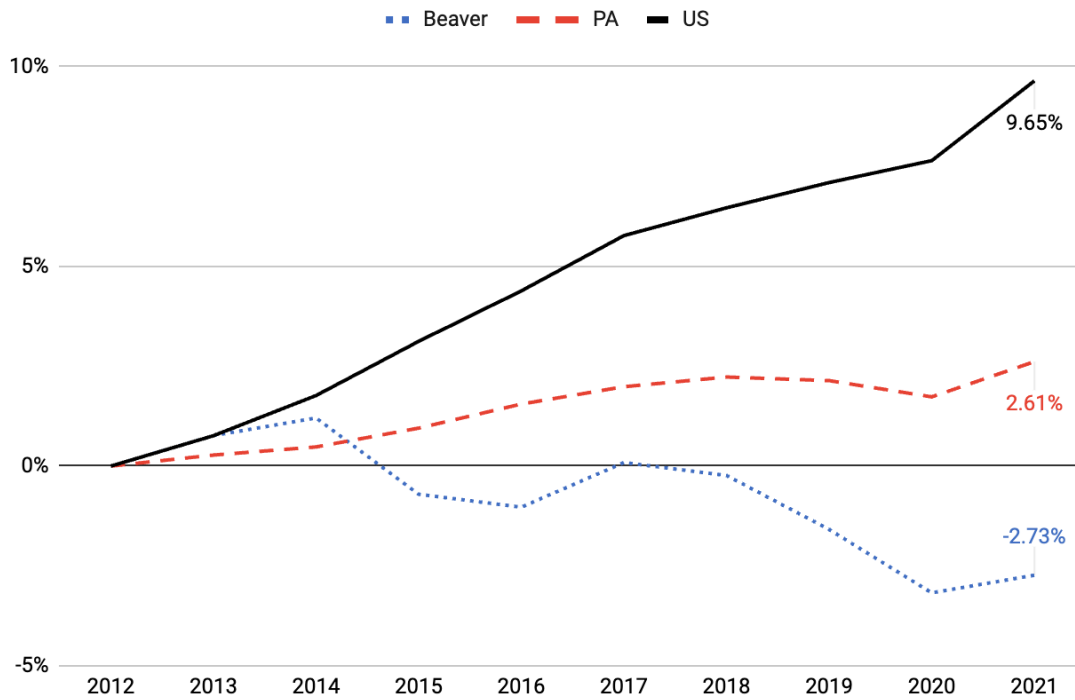
Figure 6: Beaver County Lost Business Firms Despite Statewide and National Growth
Percent change in number of firms, 2012-2021



Source: US Census Bureau, Statistics of US Businesses

The Census Bureau's count of business establishments tells a similar story. From 2012 to 2021, the number of establishments grew nearly 10% in the US and 3% in Pennsylvania, while Beaver County's number of establishments decreased. By 2021, the county had fewer establishments than it did when the Shell cracker was announced.²²

Figure 7: Beaver County Lost Business Establishments Despite Growth across PA and US
Percent change in number of business establishments, 2012-2021

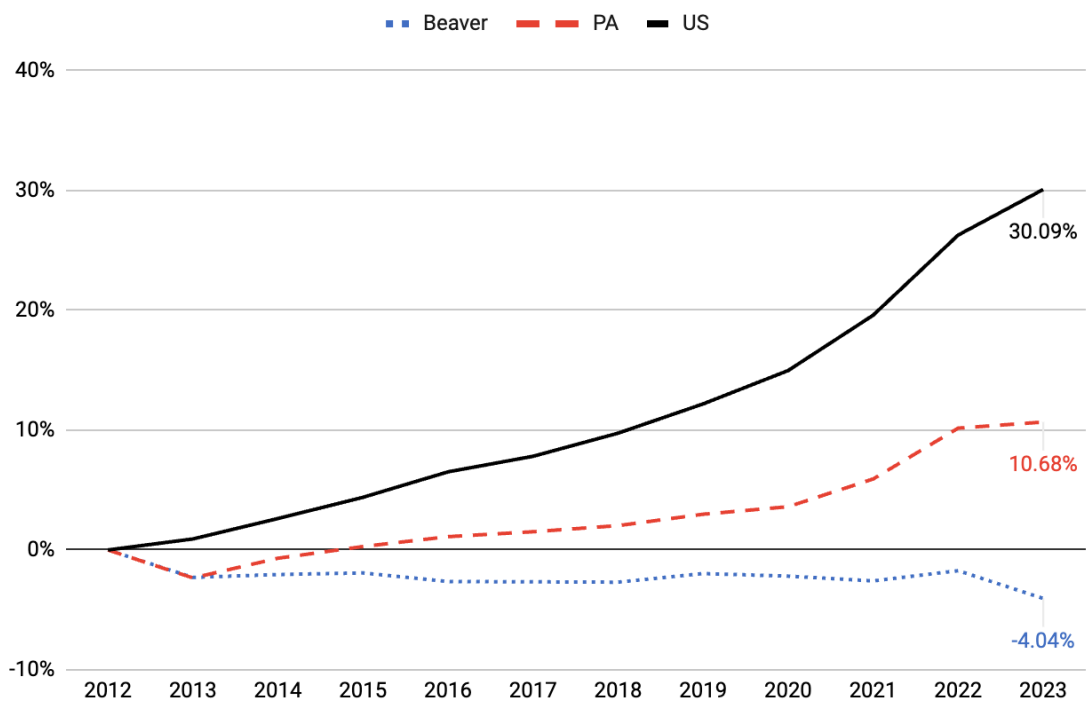


Source: US Census Bureau, Statistics of US Businesses

The Bureau of Labor Statistics' Quarterly Census of Employment and Wages (QCEW) tells a similar story. The number of establishments grew steadily in Pennsylvania and the US, while growth remained inconsistent and ultimately elusive in Beaver County.²³

Figure 8: As PA and US Gained Business Establishments, Beaver County's Number Fell

Percent change in number of business establishments (QCEW), 2012-2023



Source: Bureau of Labor Statistics, Quarterly Census of Employment and Wages

Even the county's existing petrochemical industry has not been buoyed by the new Shell plant. In late 2024, the owners of a local polystyrene manufacturer announced plans to close the business in January 2025, which will result in an estimated 140 layoffs.²⁴

Poverty

Economic performance often has serious consequences for low-income people. The Census Bureau tracks poverty and child poverty rates in local areas in two principal ways: through the Small Area Income and Poverty Estimates (SAIPE) program and through the American Community Survey (ACS). The poverty rate is the percentage of people earning less than the federal poverty line, which is set at \$15,060 annually for one person or \$31,200 for a family of four in 2024 dollars and is adjusted annually for inflation.²⁵ The child poverty rate is the share of children living in households below the federal poverty line.²⁶

At the national and state level, poverty rates have been slowly declining for more than a decade, and Beaver County is no exception to this positive trend.

Poverty Dashboard

SAIPE Poverty Rate (2012-2023):

- ▼ Beaver: 10.4%
- ▼ Pennsylvania: 11.9%
- ▼ US: 12.5%

SAIPE Child Poverty Rate (2012-2023):

- ▼ Beaver: 12.7%
- ▼ Pennsylvania: 15.5%
- ▼ US: 16.0%

ACS Poverty Rate (2012-2023):

- ▼ Beaver: 9.7%
- ▼ Pennsylvania: 12.0%
- ▼ US: 12.5%

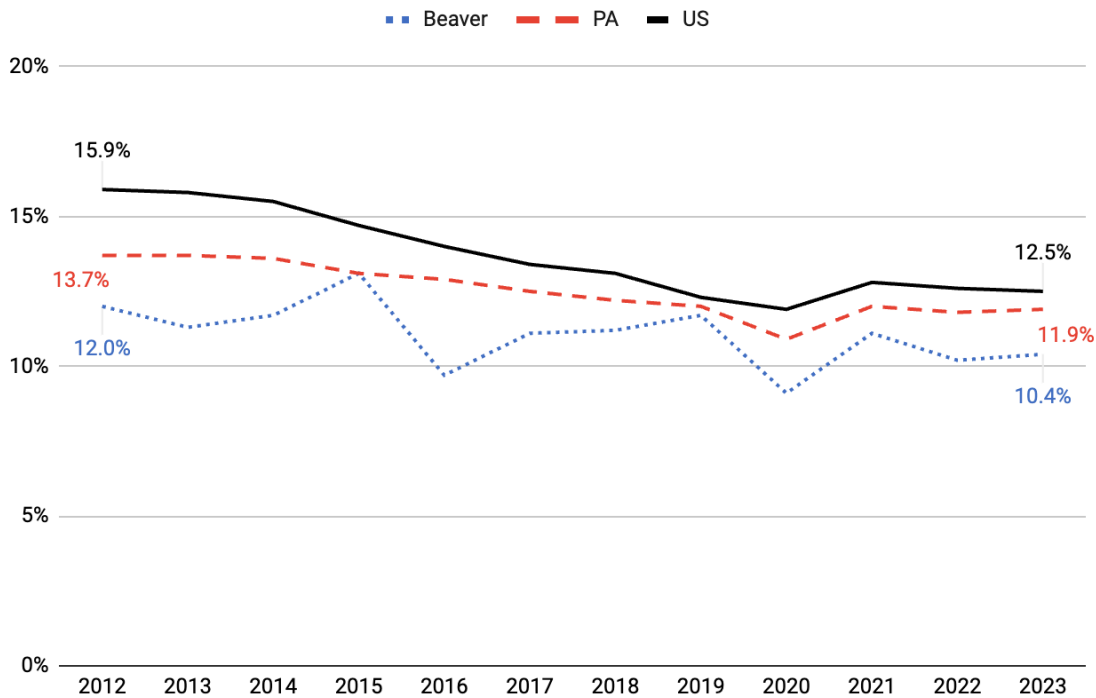
ACS Child Poverty Rate (2012-2023):

- ▼ Beaver: 9.6%
- ▼ Pennsylvania: 15.7%
- ▼ US: 16.0%

I. SAIPE (Census) Poverty & Child Poverty

From 2012 to 2023, the most recent year for which SAIPE data are available, poverty and child poverty rates dropped in Beaver County, mirroring US and statewide trends.²⁷ The drop in child poverty rate observed in 2020 likely speaks to the success of pandemic-era benefit programs, including stimulus checks and child income tax credits.

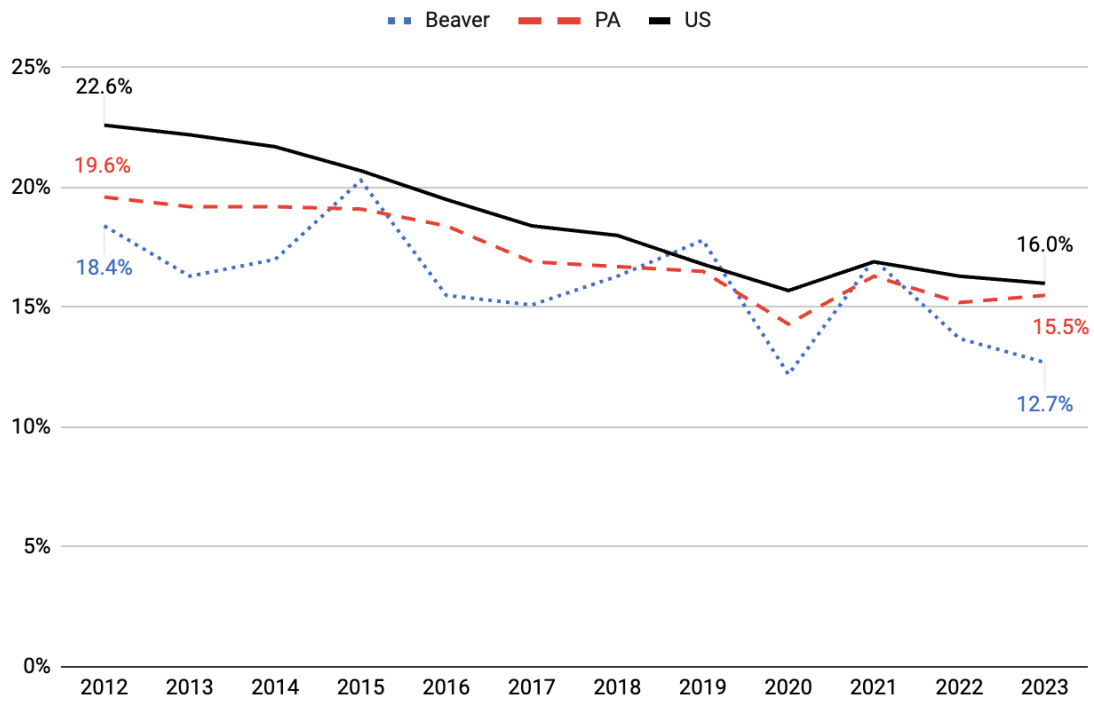
Figure 9: Poverty Rates in PA, US Fell Consistently, Whereas Beaver County Saw Modest Drop
Percent change in poverty rate, 2012-2023



Source: US Census Bureau, Small Area Income and Poverty Estimates Program (SAIPE)

Figure 10: Child Poverty Rate falls across Beaver County, PA and US

Percent change in child poverty rate, 2012-2023



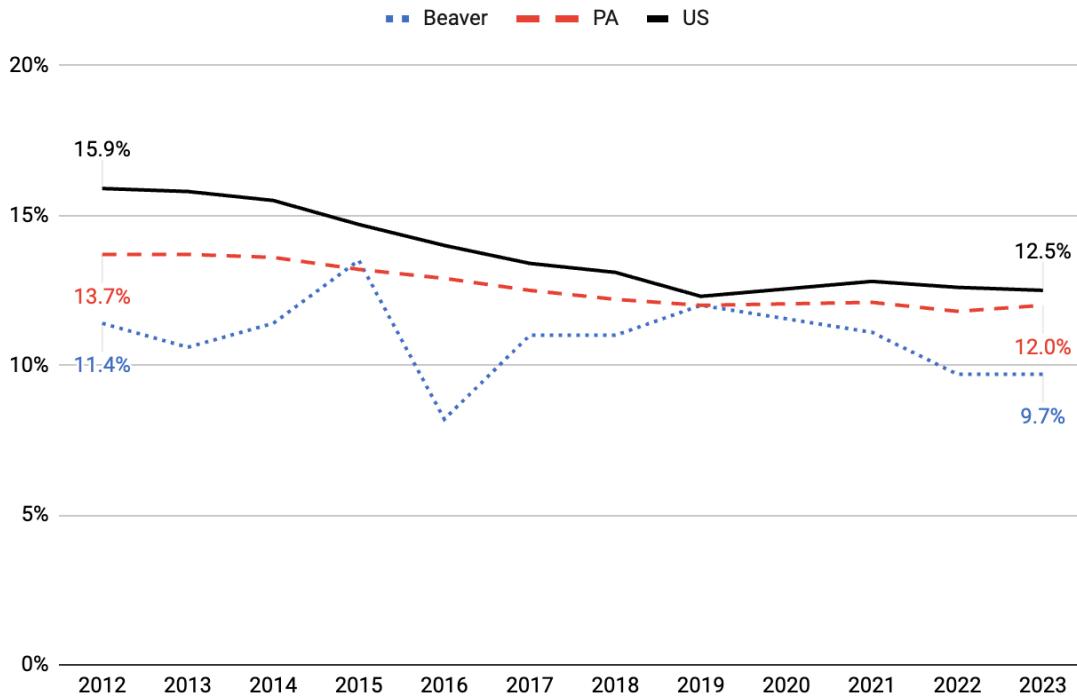
Source: US Census Bureau, Small Area Income and Poverty Estimates Program (SAIPE)

II. ACS (American Community Survey) Poverty & Child Poverty

Data from the American Community Survey corroborate these findings. According to ACS statistics, the poverty rate saw a modest decline in Beaver County between 2012 and 2023, falling from 11.4% to 9.7% in 2023. At the same time, it fell at a steady rate at the state and national level.^{28 29}

Figure 11: Poverty Rates in Beaver County, PA and US Show Long-Term Decline

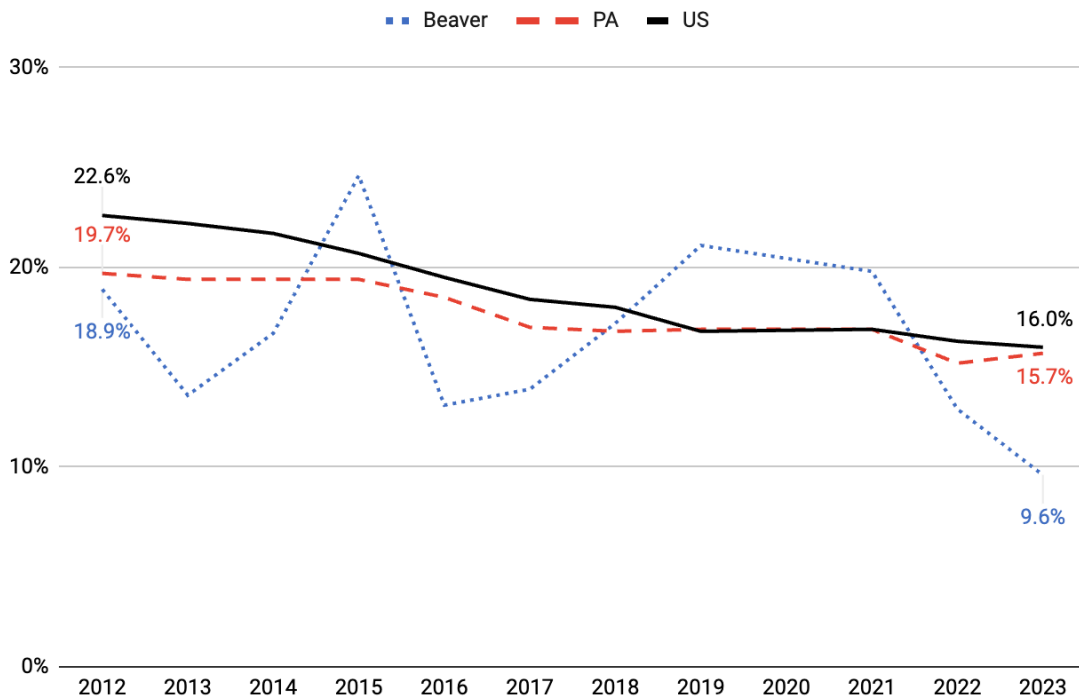
Percent change in poverty rate, 2012-2023



Source: US Census Bureau, American Community Survey

According to the Census’s American Community Survey, child poverty in Beaver County fluctuated between 2012 and 2023, with the rest of the state and US experiencing a gradual decline in child poverty. When the Shell project broke ground in 2016, the child poverty rate rose annually until 2020; in 2019, the rate of child poverty in Beaver County was over 4% higher than the rest of the state and US.³⁰

Figure 12: PA and US See Modest Decline in Child Poverty Rate, While Beaver County is Inconsistent
Percent change in child poverty rate, 2012-2023



Source: US Census Bureau, American Community Survey

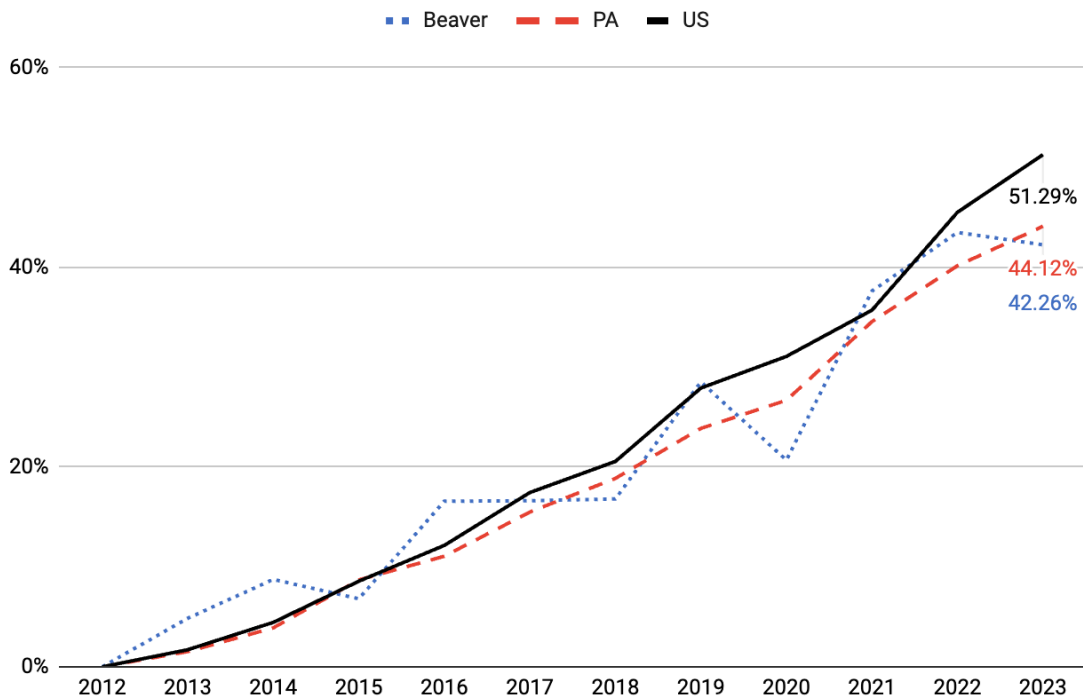
Income

Another way to track economic performance is by looking at income and wages. The Census Bureau tracks median income through its SAIPE program. The median income is the midpoint of all the income-earning households in a given geography.³¹

From 2012 to 2022, the nominal median income (that is, not adjusted for inflation) in Beaver County grew at more or less the same rate in the US and the state of Pennsylvania. However, in 2023, the most recent year for which data are available, the median income in Beaver County was less than it was in 2022, falling from \$67,350 in 2022 to \$66,768 in 2023. Meanwhile, the median income continued to grow steadily in PA and the US.

Income Dashboard
Median Income (2012-2023): <ul style="list-style-type: none">▲ Beaver: 42.3%▲ Pennsylvania: 44.1%▲ US: 51.3%
ACS Per Capita Income (2012-2023): <ul style="list-style-type: none">▲ Beaver: 55.4%▲ Pennsylvania: 53.4%▲ US: 58.6%
BEA Per Capita Income (2012-2023): <ul style="list-style-type: none">▲ Beaver: 46.8%▲ Pennsylvania: 51.1%▲ US: 57.8%
Market Income Per Capita (2012-2023): <ul style="list-style-type: none">▲ Beaver: 41.4%▲ Pennsylvania: 47.8%▲ US: 55.8%

Figure 13: Beaver County's Median Income No Longer Keeping Pace with PA and US
 Percent change in median income, 2012-2023



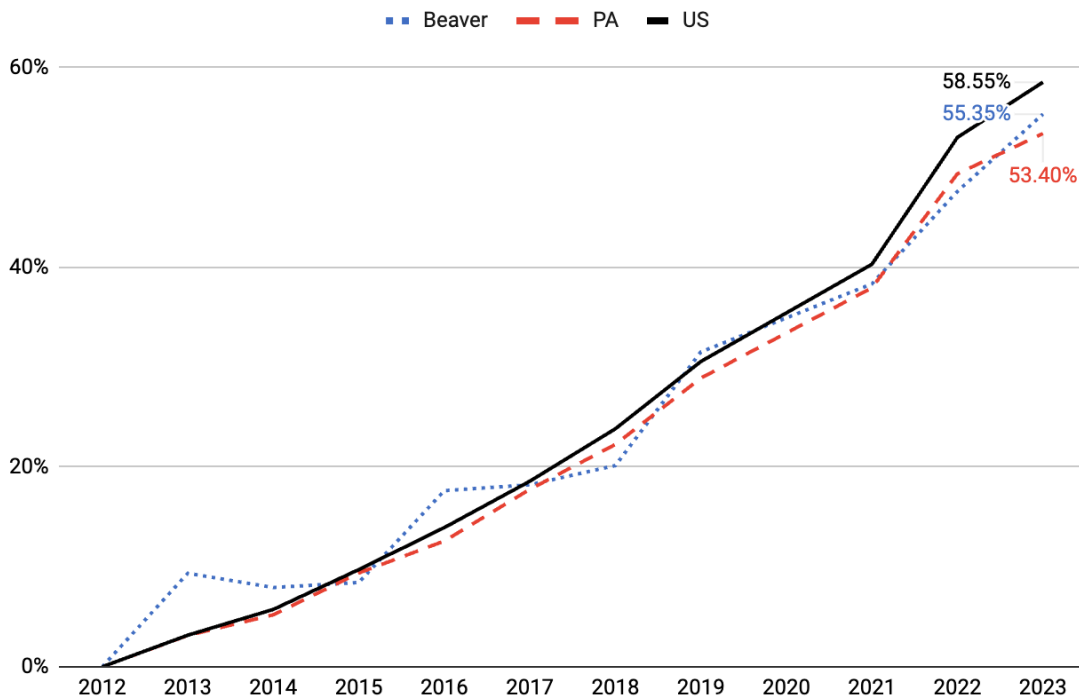
Source: US Census Bureau, Small Area Income and Poverty Estimates Program (SAIPE)

The Census Bureau’s American Community Survey measures per capita income, adjusting for inflation. Inflation-adjusted income rose at nearly the same rate in Beaver County as in Pennsylvania and the rest of the US, growing around 55% between 2012 and 2023. Pennsylvania’s per capita income grew by 53% while the US grew by a slightly faster rate, at around 58% over the same period.^{32, 2F}

² The Census Bureau will not release its standard 2020 ACS 1-year estimates because of the impact of the COVID-19 pandemic on data collection. Some experimental estimates, developed from 2020 ACS 1-year data are available, however, not for the percentage of families and people whose income in the last 12 months is below the poverty line. There is experimental data from 2020 for raw data, but no percentages. (See: [ACS Experimental Data page](#))

Figure 14: Beaver County's Per Capita Income Kept Pace with PA and US

Percent change in per capita income, 2012-2023



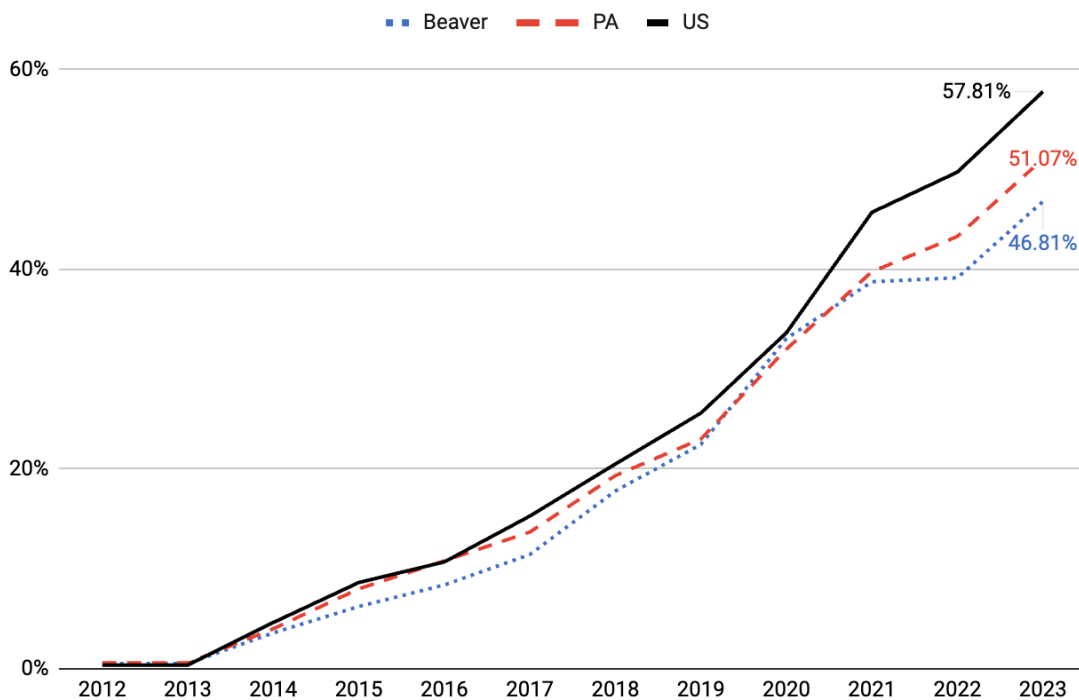
Source: US Census Bureau, American Community Survey

The Bureau of Economic Analysis also tracks per capita personal income by counting wages, salaries, government benefits, dividends, interest, business income, and other sources of income. This composite is considered the most complete measure of how much income is being generated per person.³³

Similar to measurements from the Census Bureau's American Community Survey, data published by the BEA shows Beaver County's per capita personal income lagging behind Pennsylvania and the US. While Beaver County's per capita personal income grew at around the same rate between 2012 and 2021, the rate of growth has not kept pace with the state of Pennsylvania and the US. By 2023, the per capita personal income in Beaver County had grown by nearly 47%, whereas it grew by 51% in Pennsylvania and nearly 58% in the US.

Figure 15: Per Capita Income Growth in Beaver County Lagging behind PA and US

Percent change in per capita personal income (not inflation adjusted), 2012-2023



Source: US Bureau of Economic Analysis

Income Alone Does Not Tell the Whole Story

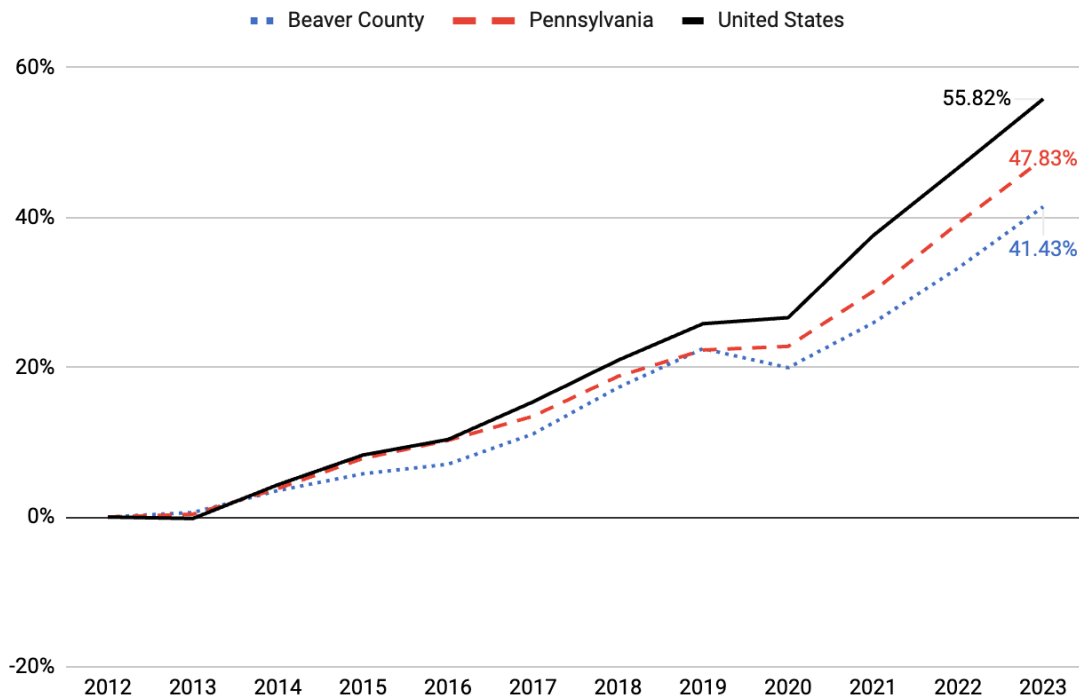
Although at face value Beaver County’s personal income per capita kept pace with Pennsylvania and the US, this does not tell the entire story. Personal income includes wages and salaries as well as other sources of income such as investment income like stock dividends and capital gains, as well as what are known as government transfers. Government transfers—income that is not tied to work, such as social security benefits, unemployment benefits, welfare programs, Medicaid payments, and veterans benefits—nearly doubled during the COVID-19 pandemic due to large-scale government stimulus programs and temporary increases to unemployment benefits during economic shutdowns.³⁴

For this reason, it may be more informative to examine what economists call **market income**, which subtracts away government payments to individuals and households. That is to say, market income measures what people earn from working jobs and from their personal investments.

As the figure below shows, market income per capita in Beaver County still significantly lags Pennsylvania and the US in dollar terms and the gap has widened over time.

Figure 16: Beaver County's Market Income Per Capita Falls Behind PA and US

Percent change in market income per capita, 2012-2023



Source: US Bureau of Economic Analysis (BEA), Ohio River Valley Institute.

Note: Market income per capita is calculated by subtracting total government transfer payments from total non-farm personal income and adjusting for population.

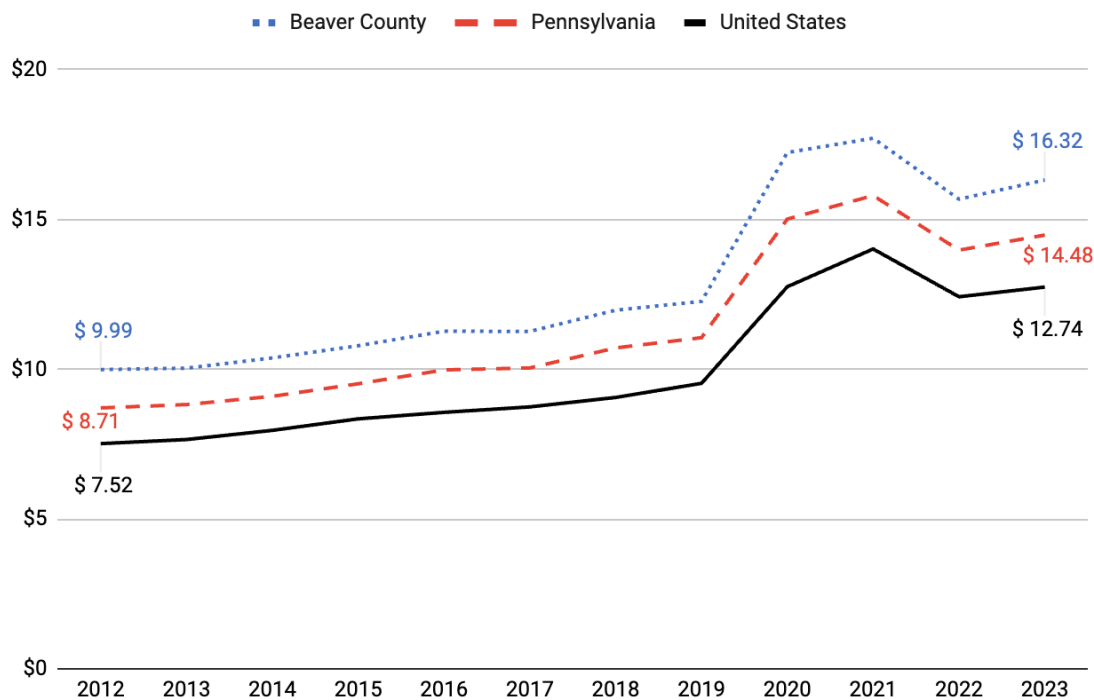
In fact, Beaver County's market income has fallen further behind than when the ethane cracker plant was first analyzed by RMU's economic researchers in 2014. Back then, Beaver County market income per capita was 80.3% of the state's market income per capita and 80.6% of the US market income per capita. In 2023, after the Shell ethane cracker commenced operations and following years of construction, Beaver County market income per capita was only 77% of Pennsylvania's and only 73.7% of the US.

Government transfers per capita data can help reveal more about the forces influencing the widening market income gap. Have investments and reliance on Shell to create jobs been a bad economic development strategy or do Beaver County residents now rely more on government assistance, Social Security, and veterans' benefits?

The figure below shows that Beaver County's government transfers per capita, while still higher than Pennsylvania and the US, have tracked the state and nation through the last decade. In fact, the 2023 spread between Beaver County, Pennsylvania and the US is almost identical to 2014. In 2014, Beaver County government transfers per capita were 114% and 130% of the state and country while in 2023 they were 112% and 128%—a very slight relative decline. It is important to further note that prior to the COVID-19 pandemic, which saw unprecedented expansion of unemployment benefits and government assistance nationwide, Beaver County's government transfers outgrew both Pennsylvania and the US between 2012-2020.

Figure 17: Growth in Government Transfers in Beaver County Tracks PA and US

Change in government transfers per capita, 2012-2023



Source: US Bureau of Economic Analysis (BEA)

Note: Government transfers per capita appear as small dollar amounts because they are divided by the total population to allow for standardized comparisons between the county, state, and nation. In reality, not all houses receive government transfers and those that do receive a larger value than the per capita dollar amount.

It is also important to note that while this data illustrates that *growth* in government transfers has slowed in Beaver County relative to Pennsylvania and the US, the county began the decade with a higher dollar value of government transfers per capita. That is, it started higher and still increased over the decade, but by slightly less than the state and country. In dollar terms, it remains higher than Pennsylvania and the US in 2023, with government transfers per capita roughly \$2.00 higher compared to Pennsylvania and nearly \$4.00 higher than the US. **This suggests that the county is still more reliant on government transfers than the state or nation.**

This helps to reveal two truths: first, **Beaver County residents, per capita, were and still are more reliant on government transfers than the rest of the state and the nation.** This was true both before and after the construction and operation of the Shell plant and before and after the pandemic. Second, the state of Pennsylvania and the US have still managed to increase market income per capita relative to Beaver County since 2012. This means that while the data above may suggest that Beaver County’s total personal income per capita may appear to be “keeping pace” with Pennsylvania and the US, Pennsylvania and the US have pursued more successful strategies in the last decade to increase *market income per capita* from jobs than Beaver County, which has actually fallen further behind and remained relatively more reliant on government transfers. Since these comparisons are made on a per capita basis (dividing by population), it is even more alarming to see such a gap emerge, considering that Beaver County has lost population over the time frame while Pennsylvanian and the US grew.

Conclusion

One of the central selling points pitched by Shell and its backers was that the new petrochemical plant would spur a “windfall of economic opportunity” in the region in part because of the jobs and businesses generated as support industries moved in.³⁵ Yet more than a year since the Shell plant commenced full operations, Beaver County has yet to see the economic growth promised by project-backers. To the contrary, nearly every economic indicator analyzed in this report reveals that Beaver County is worse off than before the Shell plant was announced back in 2012: there are fewer jobs and businesses and the county lost residents. In fact, Beaver County’s annual GDP is actually substantially smaller today than it was in 2012.

To many, these unfortunate economic trends may come as a shock because the locals were promised something entirely different. A July 2021 study published by Robert Morris University contended that the facility would add nearly \$4 billion to the Pennsylvania economy annually, including hundreds of millions of dollars in Beaver County alone, along with hundreds of millions more in state tax revenue.³⁶ But as Ohio River Valley Institute research has documented extensively, that report was deeply flawed, using inappropriate methodologies to spin out a form of wishful thinking that was used to justify hundreds of millions of dollars in taxpayer subsidies for Shell.³⁷ The evidence now shows that those subsidies were a bad bet for Pennsylvania.

The economic indicators contained in this report do not reflect the environmental and health impacts on the surrounding community – at least not directly. But it is notable that within the first few months of operating, Shell blew past its allotted air pollution limits and residents have since filed a class-action lawsuit against the company for the negative impacts on nearby community members.

These concerns about pollution have real-world economic impacts for Beaver County, which may outweigh any benefits the plant may have brought, even causing some families to move from the area. Following concerns over malodorous air contaminants wafting over her home and children’s elementary school after the plant’s startup in 2021, Jackie Shock-Stewart and her family finally decided to move out of the state in 2022.³⁸ Shock-Stewart told *InsideClimate News* that two other families also moved away because of the plant.

Although it appears that Pennsylvania was persuaded by Shell to make a bad bet – offering public subsidies to a large corporation to generate economic growth that never materialized – the Keystone State is hardly alone. The US fossil fuel industry has successfully leveraged a range of public subsidies to the detriment of taxpayers. In 2022 alone, fossil fuel subsidies in the US totaled \$757 billion, according to the International Monetary Fund, exceeding revenue from natural gas and petroleum by \$2.1 billion – a net loss for taxpayers.³⁹

Time will tell how the Shell plant continues to impact the community in Beaver County, but it remains crucial for the public and policymakers to track the region’s real-world economic performance and compare it to the industry’s projections. As officials weigh their support for a potential buildout of hydrogen and carbon capture infrastructure in the region, the facts from Beaver County should encourage state lawmakers to pause before extending future tax subsidies.

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