

# WHEELING AREA ECONOMIC OUTLOOK 2019-2023



#### Wheeling Area Economic Outlook

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## Executive Summary

The Wheeling Area's economy emerged from recession in late-2016 and has experienced a surge in job growth over the last several quarters thanks to a rebound in natural gas production and natural gas pipeline construction activity. In this report, we present a detailed discussion of the Wheeling Area economy along with our forecast for regional economic conditions for the next five years.

Several key facts behind the Wheeling Area's recent economic performance are as follows:

- **Employers in the Wheeling Area shed roughly 2,500 jobs during the region's economic downturn. Payroll growth has surged in the past year as nearly half of those jobs have been recovered since late-2017.**
  - Marshall County has endured the greatest amount of volatility over the past few years, accounting for a disproportionate share of the area's gains and losses.
  - **The energy sector has been the primary source, both direct and indirect, of job gains and losses, thanks to rising natural gas and coal output as well as a surge in natural gas pipeline construction activity.**
  - **Coal production in Marshall and Ohio counties reached an all-time annual high in 2017;** however, mined tonnage has slipped in the past year as area mines have been hurt by the retirement of US coal-fired power plants.
  - Natural gas payrolls have increased at a double-digit pace over the past several quarters, with the strongest growth occurring in Belmont County due to highly-productive wells in the Utica Shale.
  - **Measured unemployment in the region has been volatile in recent years, but has shown mostly consistent improvement in the past two years.**
  - **The region has suffered some degree of labor force attrition in recent years.** Overall, the area's work force shrunk by 2,500 people percent since 2014.
  - **Per capita income has grown well above state and national averages in recent years.** Ohio County residents have the highest income levels in the state.
- Our forecast calls for the Wheeling Area to continue to rebound from its recent economic downturn. The region is expected to see uneven gains over the next couple of years before settling into an above-average pace of growth during the latter half of the outlook period. Key aspects of our forecast are as follows:
- **Employment is expected to increase 0.7 percent per year in the region through 2023.** Job growth will be volatile over the next year or so as natural gas pipeline construction winds down.
  - **The region's overall economic outlook is positive, yet could surpass expectations pending PTT Global Chemical's decision on the ethane cracker and which projects come from China Energy's memorandum of understanding with the state.**
  - **Natural resources & mining is expected to lead the way in terms of job during the outlook period, with a forecast gain of nearly 6.0 percent per year.** Professional and business services will also record growth that well exceeds the overall regional average.
  - The manufacturing sector is expected to see solid job growth after enduring large losses in recent decades.
  - **Unemployment is expected to decline moderately over the next five years,** but the jobless rate will likely remain above state and national averages.
  - **Inflation-adjusted per capita income is expected to rise at an annual average rate of 1.6 percent over the next five years.** Both wage and nonwage sources of income will increase at healthy rates.
  - **The rate of population losses in the region accelerated since 2012 as death rates and the number of residents leaving the area increased.**
  - **Population losses are expected to continue in the area during the outlook period, but declines will generally be smaller compared to the past few years.**
  - The Wheeling Area will need a significant positive economic shock to end the region's long-term trend of population declines.

## Recent Economic Performance

The Wheeling Area<sup>1</sup> economy has registered strong growth over the past year or so, with most of this growth attributed to resurgence in the region’s natural gas industry. Indeed, along with rapid growth in Marcellus and Utica Shale gas production, exploration and development throughout much of the four-county area, the region is located at the epicenter of the Appalachian Basin’s massive build-out of natural gas pipeline infrastructure. Overall, total payrolls in the Wheeling Area have increased by more than 1,200 over the past year, helping the region to recover nearly half of the jobs it lost over the previous three years.<sup>2</sup>

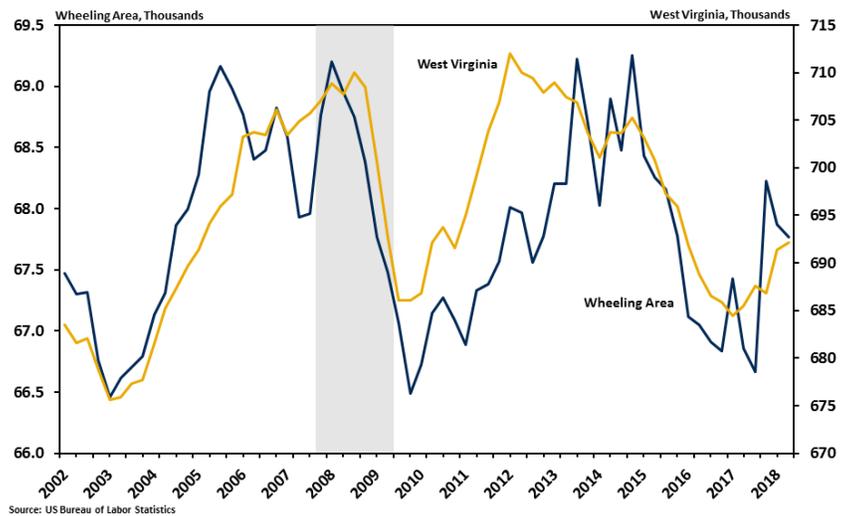
**PERFORMANCE BY COUNTY** While each of the Wheeling Area’s four counties struggled in some capacity between late-2014 and mid-2017, the magnitude of losses differed greatly over this time. In addition, growth over the past year has occurred in a relatively uneven fashion as well. Ohio County, which contains the region’s namesake principal city of Wheeling, accounts for the largest share of jobs in the area. Ohio County’s payroll levels have generally trended lower since the beginning of 2008 but did see a one-time jump in employment at the end of 2017 thanks to the re-location of The Health Plan from its St. Clairsville, Ohio, location into a newly-constructed building in downtown Wheeling.

Belmont County, Ohio, which contains the largest number of residents and a sizable portion of employment in the region, has registered an appreciable degree of job losses over the past three years. After adding roughly 1,500 jobs between mid-2012 and late-2014, county employers have gone onto surrender more than two-thirds of those gains, which includes the Health Plan’s move to a new location across the Ohio River in Downtown Wheeling. The natural gas industry has become an increasingly important segment of the county’s economy in just the past few years and

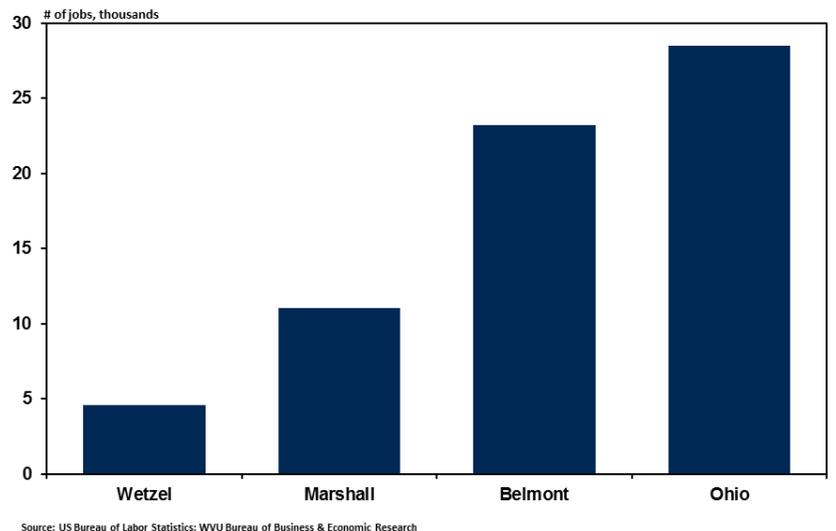
accounts for the bulk of overall energy production as several coal mining operations have closed in the past six years. Indeed, while the county’s overall level of employment has trended lower since late-2014, aggressive development of Utica Shale assets has helped to bolster natural gas payrolls by nearly 500 jobs since the first quarter of 2017.

Marshall County, though containing just 15 percent of the area’s employment base, has accounted for a

**Figure 1: Total Employment**



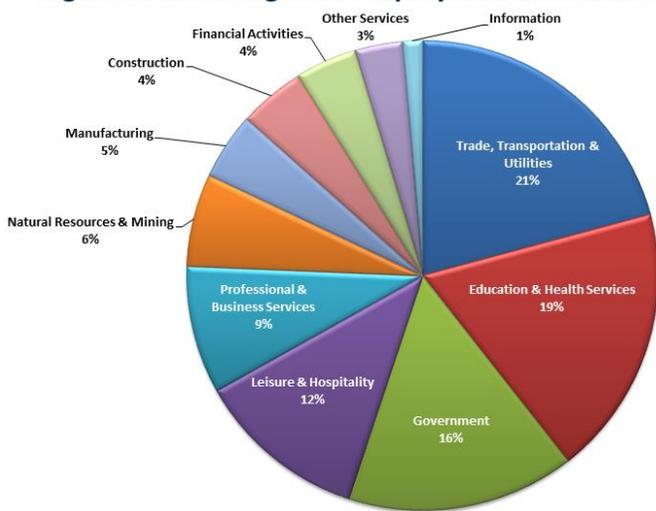
**Figure 2: Total Employment by County (2017)**



<sup>1</sup> For the purposes of this report, The Wheeling Area is comprised of four counties: Marshall, Ohio and Wetzel counties in West Virginia plus Belmont County, Ohio.

<sup>2</sup> Sources for historical information are noted in each figure.

**Figure 3: Wheeling Area Employment Distribution by Sector**



Source: US Bureau of Labor Statistics; 2017 data.

disproportionate share of the area’s volatility over the past couple of years. Just as in other parts of the region, losses have been mostly associated the energy sector’s downturn. Indeed, coal and natural gas companies cut payrolls by nearly 1,400 workers while business services firms that support energy companies (legal, accounting, contract labor) were also hurt by the energy sector’s woes over that time period. Since late-2016, however, total payrolls in the county have rebounded to their pre-2014 levels thanks to surging natural gas production and the significant amounts of pipeline capacity and other midstream facilities being installed in the county and broader tri-state region.

Wetzel County has recorded moderate declines in total employment since 2012, but at the same time the county has recorded steady job gains in the natural gas industry and has witnessed a large jump in construction sector payrolls due to the Mountaineer XPress and Mountain Valley Pipeline projects, as well as the Rover Pipeline’s Sherwood Lateral.

**ENERGY SECTOR** The Wheeling Area is unique in comparison to other economic regions in West Virginia as the region possesses both large reserves of coal and natural gas. Marshall and Ohio counties rank highest and fourth-highest in overall coal production within West Virginia and accounted for 23 percent of the coal tonnage produced in the state during the first half of 2018—all from only a few mining operations. Marshall County’s production reached 17.7 million short tons during 2017, marking a record high level in output. Through the first half

of 2018, countywide coal tonnage has declined just over 3 percent. Ohio County coal production also reached an all-time high at nearly 7 million short tons, but production has fallen off by more than 12 percent between the first six months of 2017 and 2018 as two FirstEnergy power plants in Ohio that purchased more than 1.2 million tons of coal from the Tunnel Ridge Mine closed in mid-2018.

Mine payrolls have increased over the past two years, but due to the highly-productive nature of these operations, coal employment has grown at a much slower pace than mine output so far. In contrast to the fairly solid performance of coal production in Marshall and Ohio counties, Belmont County coal mine output has been on a downward trend since 2009. Moreover, the late-2016 closure of the Powhatan #6 mine due to depleted reserves means the Rice #1 strip mine is the only actively-producing mine left in the county and its output is much smaller—totaling just 400 thousand short tons during 2017.

In addition to the region’s coal industry, the Wheeling Area’s economy has grown into a major player in natural gas production thanks to its location in the heart of the Utica and Marcellus Shale plays. Wetzel, Marshall and Ohio counties ranked 2<sup>nd</sup>, 5<sup>th</sup> and 7<sup>th</sup> in terms of statewide natural gas production in 2017 and their recorded withdrawal volumes accounted for roughly one-fourth of the state’s output. Belmont County ranks as Ohio’s leading natural gas-producing county, accounting for than 40 percent of the state’s overall gas volume in mid-2018.

Production volumes have increased markedly over the past two years throughout the Wheeling Area as firms are responding to moderately higher prices, growth in pipeline infrastructure and rising end-market demand. Rig counts have actually declined in the area since the beginning of 2018, but newly-drilled wells in Belmont County have been highly productive. Natural gas industry payrolls have increased at a double-digit rate over the past year, though remain roughly 25 percent below peak levels in late-2014.

In addition to the activity associated with drilling and wellhead output, the Wheeling Area has also seen a dramatic increase in midstream facilities over the years. Indeed, Belmont, Marshall and Wetzel counties each contain several large different types of midstream natural

gas assets, including cryo-processing and fractionation capacity. Moreover, the area has witnessed a surge in natural gas pipeline construction as the Mountaineer XPress, Rover and Mountain Valley Pipeline all lie within the area’s geographic footprint. In addition to the pipelines, the projects all include the installation of several \$100+ million compressor stations.

In terms of development of downstream gas utilization, beyond natural gas-fired power plants the Mid-Atlantic Region is still in its earliest stages. Indeed, the Shell ethane cracker under construction in nearby Beaver County, PA, remains the most noteworthy development at this time; however, PTT Global Chemical continues to evaluate a Belmont County property as an option to build the region’s second ethane cracker.

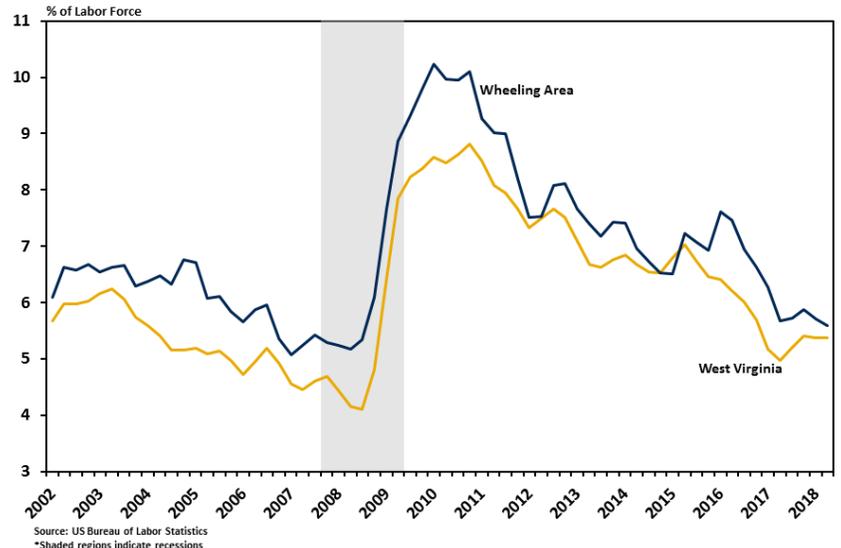
**MANUFACTURING** Although its dominance has declined over the years, the Wheeling Area contains a sizable concentration of manufacturing activity, particularly chemicals, plastics and metals manufacturing. Overall, the sector has lost roughly 900 jobs since the beginning of 2012 (or an 18 percent decline), though most of those losses stem from a couple of chemical plant consolidations that occurred a few years ago. The plastics, food processing and a few miscellaneous manufacturing subsectors have managed to add a moderate number of jobs over the past two years.

The shale gas boom throughout the region has generated some measurable benefits for the Wheeling Area’s manufacturing base, most notably chemicals and plastics producers, which rely heavily on natural gas and by-products from shale deposits as feedstock for their production processes. Furthermore, some new companies have opened in the region over the past few years that manufacture pipe fittings, controls and other components for wellpads, pipelines, and substations.

**SERVICE SECTORS** Energy production and manufacturing activity play an above-average role in the Wheeling Area’s economy, but private service-providing sectors still account for the wide majority of jobs in the region. Trade, transportation and utilities ranks as the largest source of private sector employment in the Wheeling Area. In general, the sector as a whole has experienced relatively

limited job losses over the past several years, ranging from the Kammer Power Plant’s closure in mid-2015 to several retail store closures, though these have been driven by broader trends affecting retailers nationally (e.g. “the Amazon effect”). The major bright spot for the sector over the past couple years has been transportation and warehousing payrolls, which have increased rapidly since late-2016 due to field services firms that supply brine, sand and other materials to well sites.

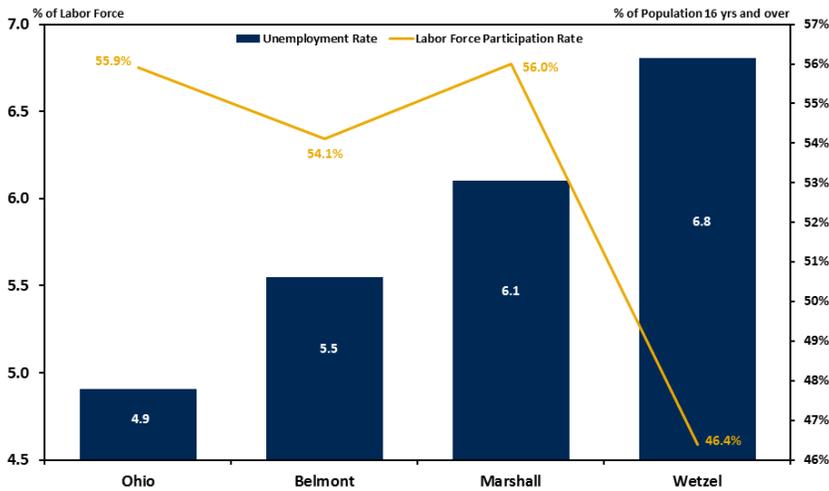
**Figure 4: Unemployment Rate**



Education and health services contains nearly one-in-five of the region’s jobs, and reflecting broader national trends this sector has generally been a source of steady growth over the past decade. Leisure and hospitality accounts for an above-average share of the region’s economy, due primarily to the presence of the Wheeling Island Hotel-Casino-Racetrack. While area payrolls in this sector have been buoyed by hotels, restaurants and other companies ramping up hiring to meet demand growth created by an influx of pipeline workers, the sector as a whole has lost jobs on net over the past five years or so as Wheeling Island faced growing competition from new gaming venues in neighboring states. However, the recent introduction of sports betting in West Virginia does offer some upside potential for the sector going forward.

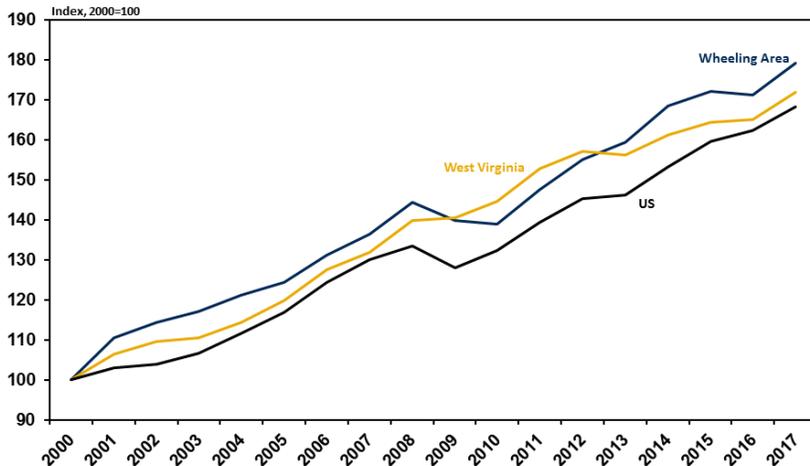
**UNEMPLOYMENT** The Wheeling Area’s unemployment rate climbed rapidly during the Great Recession, peaking at just above 10 percent in 2010. Although the jobless rate has generally been on a downward trend since then, periods of volatility in the energy sector caused the rate to bounce between 6.5 and 7.5 percent from late-2014 to

**Figure 5: Unemployment and Labor Force Participation by County**



Source: US Bureau of Labor Statistics; US Census Bureau  
 Note: Unemployment rate and labor force participation represent 2018q2 averages

**Figure 6: Per Capita Personal Income**

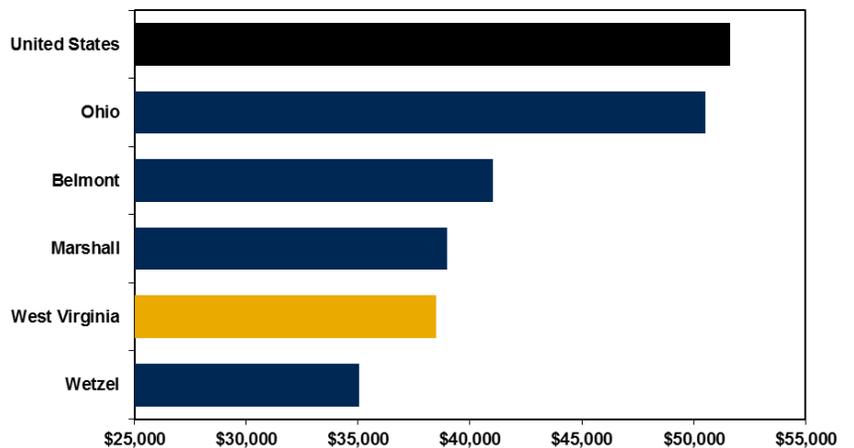


Source: US Bureau of Economic Analysis  
 \*Note: The 2017 figure for the Wheeling Area is an estimate.

recorded some labor force attrition over the past several years. Overall, the region’s workforce has declined by nearly 5 percent (2,500 people) since the beginning of 2014. Wetzel County has a low rate of workforce participation among its adult-age population (~45 percent), but Wheeling Area’s other counties have labor force participation rates that surpass many parts of West Virginia, particularly among cohorts in the prime working-age years of 25-54.

**INCOME** Per capita personal income for the Wheeling Area is estimated at approximately \$42,700 during calendar year 2017, which equals a 4.6 percent increase from the previous year. Overall per capita income for the region is 21 percent above 2011 levels (not adjusting for inflation, as presented in Figure 6), surpassing income growth at both the state and national levels over this time period. Even after adjusting for inflation, residents in the Wheeling Area, on average, have enjoyed a gain in real purchasing power over the last six years as real per capita personal income in the region has increased by nearly 13 percent. Over the past decade, per capita income growth in the four-county region has surpassed both state and national averages due to strong wage growth and rising royalty income paid to mineral rights owners.

**Figure 7: Per Capita Personal Income by Area (2017)**

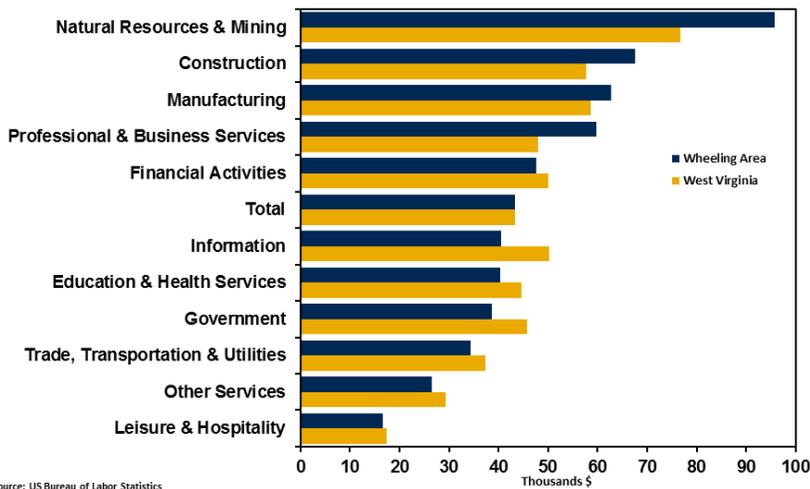


Source: US Bureau of Economic Analysis.

mid-2016. Since the second quarter of 2016, the regional unemployment rate has fallen nearly two full percentage points, declining from a seasonally-adjusted average of 7.6 percent down to 5.6 percent in mid-2017 and has remained at that level since then. This marks the region’s lowest jobless rate since late-2008. Unemployment rates vary widely within the region, ranging from a low of roughly 4.9 percent in Ohio County to a high of 6.8 percent in Wetzel County based on preliminary data for the second quarter of 2018.

**LABOR FORCE** Reflecting a combination of the area’s economic volatility and underlying demographic trends, the Wheeling Area has

**Figure 8: Average Annual Salary by Major Sector (2017)**



average share of personal income in the Wheeling Area, though this is attributable to the region’s high share of elderly residents.

**POPULATION** The Wheeling Area’s resident population totals have declined in a fairly steady fashion over the past few decades. Indeed, the region’s population numbers have shrunk by roughly 19,000 since the mid-1990s. Each county in the region has lost residents, although Belmont has been the most stable county in the region, with a net population decline of 2.5 percent in the past decade. Wetzel County saw the largest percentage decline in population in recent years, with the number of residents shrinking by nearly 8 percent since 2017.

Ohio County residents received income levels of \$50,500 per person during 2017, ranking it as West Virginia’s highest-income county at nearly one-third higher than the statewide average. In addition, Ohio County is the only county in the state that has a per capita income level that nearly matches the national average. The region’s three remaining counties have appreciably lower per capita levels by comparison, ranging between \$35,000 and \$41,000 in 2017. Per capita incomes in the region are boosted by high wages paid by the coal and natural gas industries as well as portions of the area’s manufacturing and business services sectors. Moreover, in the addition to the wages paid to workers, residents in the area that hold mineral rights have seen their incomes boosted by the shale gas boom. Transfer payments account for an above-

**DEMOGRAPHIC CHARACTERISTICS** Just as with the rest of the state, the Wheeling Area’s population has been negatively affected by deaths consistently outnumbering births. Part of this is due to the area’s larger-than-normal share of elderly residents, but causes of death from a host of issues ranging from heart disease to drug overdoses help explain the region’s high mortality rate. Finally, the four-county area lags both state and national averages in measures of educational attainment among the adult population. Just over 19 percent of residents aged 25 years and older possess at least a bachelor’s degree.

**Figure 9: Summary Population Profiles**

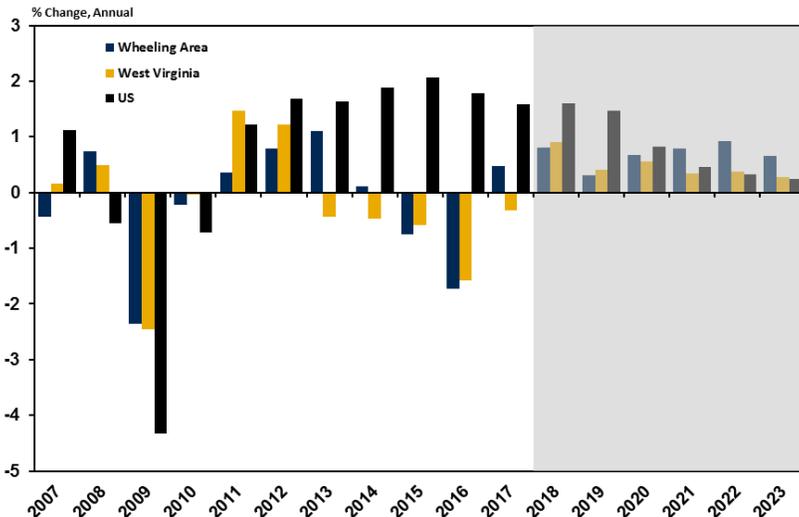
	Wheeling Area	West Virginia	United States
<b>Total Population (2017)</b>	<b>156,691</b>	<b>1,815,857</b>	<b>325,719,178</b>
<b>% Population Under 18 (2017)</b>	<b>19.3%</b>	<b>20.4%</b>	<b>22.6%</b>
<b>% Population 65 Years + (2017)</b>	<b>21.0%</b>	<b>19.4%</b>	<b>15.6%</b>
<b>Population with Less than High School Diploma (2016, 25 yrs. +)</b>	<b>10.4%</b>	<b>14.7%</b>	<b>13.0%</b>
<b>Population with High School Diploma, No College (2016, 25 yrs. +)</b>	<b>41.7%</b>	<b>40.5%</b>	<b>27.5%</b>
<b>Population with Some College (2016, 25 yrs. +)</b>	<b>28.5%</b>	<b>25.3%</b>	<b>29.1%</b>
<b>Population with Bachelor's Degree or Higher (2016, 25 yrs.+)</b>	<b>19.4%</b>	<b>19.6%</b>	<b>30.3%</b>
<b>Median Age (2017)</b>	<b>44.6</b>	<b>42.5</b>	<b>38.0</b>
<b>Mean Household Income (2016)</b>	<b>\$58,899</b>	<b>\$57,779</b>	<b>\$77,866</b>
<b>Average Household Size (2017)</b>	<b>2.34</b>	<b>2.50</b>	<b>2.71</b>

Source: US Census Bureau

# Economic Outlook

Expectations for the West Virginia and US economy during the 2018-2023 forecast horizon will have a significant impact on the performance of the Wheeling Area going forward.<sup>3</sup> The forecast calls for the region to remain on a path of economic growth that will surpass the statewide average and fall roughly in line with the nation as a whole over the next five years.

**Figure 10: Employment Growth Forecast**



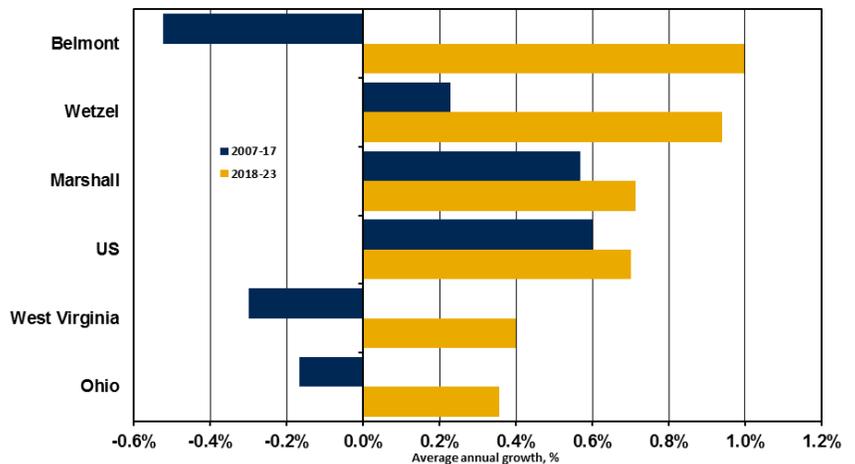
Source: US Bureau of Labor Statistics; WVU BBER Econometric Model; IHS Markit  
 \*Note: Wheeling Area and WV use covered employment; Shaded region represents the forecast period

Overall, we anticipate total employment will increase by 0.7 percent annually through 2023. Some uncertainty exists with regards to how the region’s growth will occur over the next year or so. Recent court-ordered delays for the Mountain Valley Pipeline and regulatory reviews of the Rover Pipeline’s Majorsville Lateral could cause job growth to be shifted by several quarters as companies work to meet compliance with erosion control and other specific requirements. In addition, the Mountain Valley Pipeline has faced significant opposition and two separate court-ordered stoppages during the second half of 2018. While the forecast calls for the pipeline project to be completed in late-2019/early-2020, additional legal or regulatory setbacks raise the potential for further delays (possibly even cancellation).

While legal and/or regulatory hurdles pose an appreciable downside risk for the region’s energy sector, and by extension the overall economy, risks to the Wheeling Area’s forecast are biased to the upside. First, while no decision has been rendered, PTT Global Chemical’s proposed ethane cracker in Belmont County could provide a significant boost to the region’s outlook from numerous angles. For example, the facility would create numerous jobs during its construction and generate positive impacts for the region’s natural gas industry and, when combined with the ethane cracker in Monaca, PA, spur a new wave of development in the Mid-Ohio Valley’s plastics and chemicals manufacturing industries.

A second source of upside potential arises from the state’s recent memorandum of understanding with China Energy that would include \$84 billion in spending over the next 20 years. While specific details on what projects would emerge as a result of the agreement, the construction of natural gas-fired power plants and the development of mid- and downstream projects have been discussed, some of which would likely occur in the region’s footprint.

**Figure 11: Employment Growth Forecast by Area**



Source: US Bureau of Labor Statistics; WVU BBER Econometric Model; IHS Markit

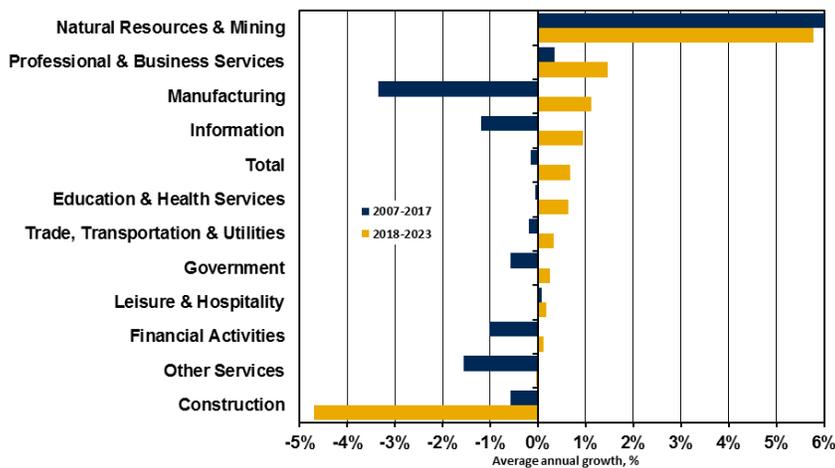
While the PTT Global Chemical and China Energy-backed developments would likely occur well into the forecast

<sup>3</sup> All forecast estimates presented herein are derived from the West Virginia University Bureau of Business & Economic Research Econometric Model unless otherwise noted.

horizon, and perhaps even beyond it, they could provide the positive economic shock needed for the region to arrest (or even reverse) its long-term trend of net out-migration and population decline.

**COUNTY DIFFERENCES** Among the region’s four counties, Belmont County is expected to realize the fastest pace of job growth going forward (1.0 percent per year) and will outperform both state and national averages. Most of this growth will reflect continued development of the county’s shale gas resources as well as associated gains in industries that provide direct support services to drilling and exploration activity.

**Figure 12: Wheeling Area Employment Growth Forecast by Sector**



Source: US Bureau of Labor Statistics, WVU BBER Econometric Model

Wetzel County will likely experience growth of a similar magnitude. Over the near term, pipeline construction and additional growth in natural gas production will support the county’s job and income gains, though natural gas production and related activities will drive most of the growth during the latter half of the outlook period. The county’s growth could exceed expectations, particularly during the latter half of the forecast horizon, if the proposed natural gas-fired power plant in Moundsville gets built.

Marshall County is expected to register 0.7 percent average annual growth during the outlook period. However, this understates the county’s economic gains as the winding down of pipeline-related construction activity will create very unfavorable comparisons between 2018 and 2023. As in other parts of the four-county area, the energy sector industry will drive most of Marshall County’s fortunes, either directly or indirectly, over the next five

years. However, the natural gas industry will account for all of the sector’s positive contributions going forward. While Marshall County will likely remain West Virginia’s leading coal-producing county, ongoing shifts in the US electric power market have caused us to lower coal production and employment for West Virginia counties that are highly exposed to domestic steam coal demand. Ohio County’s coal industry will face similar issues over the next several years as several large coal-fired power plants that purchase coal from mines in both counties are slated for retirement by 2022. Ohio County is expected to register average annual job growth of nearly 0.3 percent. Solid prospects will continue to emerge from growth associated with the Wheeling Area’s natural gas industry, ranging from drilling and exploration as well as fracking materials companies to auxiliary services firms that provide engineering, legal and financial representation as well as contract labor. The gaming industry appears poised for continued losses over the course of the outlook period, but the availability of sports betting services at Wheeling Island are expected to provide a moderate boost to the sector’s performance over the next few years.

**BUSINESS SERVICES** The energy industry will play an outsized role in the Wheeling Area’s performance during the outlook period in a direct manner, but its influence will extend into other segments of the region’s economy as well.

Indeed, a significant portion of the region’s professional and business services sector has an interdependent relationship with the area’s coal and natural gas industries vis-à-vis providing contract labor workers, as well as engineering, legal and other support services. During the forecast horizon, we anticipate the energy industry’s growth, along with broader US economic gains that will buoy demand for business services firms, will cause payrolls to increase 1.5 percent per year.

**CONSTRUCTION** Construction payrolls in the Wheeling Area are actually expected to decline at a significant rate of nearly 5 percent annually during the forecast horizon. However, these declines are expected to take place in late-2019/early-2020 as the completion of the region’s current natural gas pipeline infrastructure projects will cause construction sector payrolls in the region to be down by nearly 1,000 by early-2021.

Other portions of the construction sector are expected to see a solid performance over the next five years. Public infrastructure investment is expected to be at a relatively high level as the region has numerous projects, both large and small, identified for funding by the Justice Administration’s Roads to Prosperity program. In addition, strong income growth will likely bolster housing demand in the area to some extent and growth in the region’s natural gas industry should foster nonresidential construction activity as other sectors with major connections to the industry expand and need to add more office and industrial space.

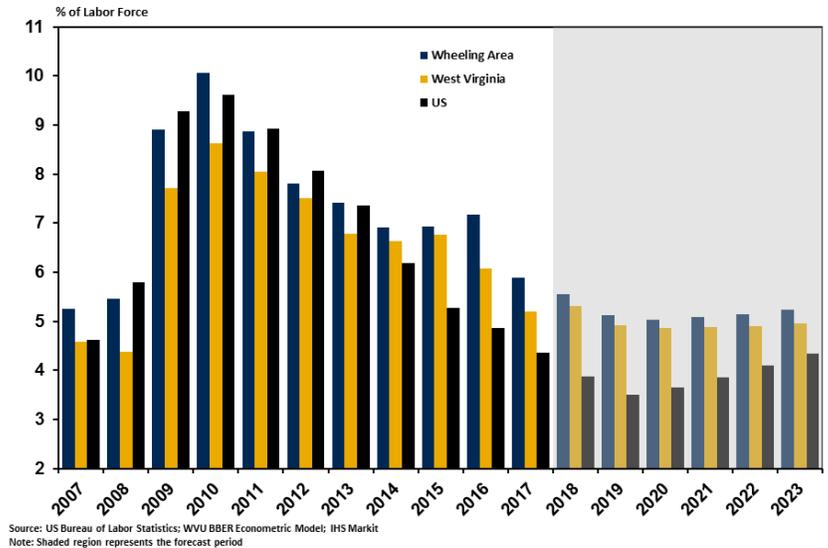
The construction sector does have a couple of opportunities for upside potential. The aforementioned advanced combined-cycle natural gas power plant in Moundsville would likely create a few hundred construction jobs during peak development. Meanwhile, PTT Global Chemicals ethane cracker, if approved, would require a few thousand construction workers to build out the facility over a period of several years.

**MANUFACTURING** The forecast calls for manufacturing payrolls to increase just over 1 percent annually during the outlook period. The region’s chemicals industry has endured a decades-long downward trend in both production and employment caused by the closure and downsizing of many plants over the years. Going forward, we anticipate at least some stabilization for these manufacturers, a direct result of an abundant supply of low-cost feedstock in the Marcellus and Utica Shale plays. Moreover, opportunities will increase as the Monaca, PA, Shell ethane cracker begins operation by the closing quarters of the forecast horizon since the facility will produce polyethylene pellets that can be used by local plastics and chemicals manufacturers and not imported from the Gulf Coast.

**OTHER SECTORS** The Wheeling Area’s leisure and hospitality sector is expected to see job growth on the order of 0.2 percent per year during the outlook period. As with construction, the sector’s anticipated below average rate of job growth will be influenced as much by difficult comparisons than by its underlying fundamentals. Indeed, hotels, restaurants and other similar local service establishments are expected to ratchet up hiring over the next year or so to meet increased demand created by

pipeline workers. Wheeling Island will benefit from the expansion of sports betting over the next couple of years, but these gains are expected to fade as more states begin to roll out their own sportsbook services. Trade, transportation and utilities will benefit from similar underlying trends in local consumer demand, but should also see some appreciable job growth for transportation companies that service natural gas drilling activities.

**Figure 13: Unemployment Rate Forecast**



Education and health services is expected to add jobs at a 0.6 percent average annual rate through 2023. Healthcare demand is expected to grow consistently within the region, reflecting the region’s large share of elderly residents. Improved severance tax collections bode well for many of the area’s local governments, as do heightened property tax revenues associated with industrial development and natural gas pipeline construction in the region. However, overall government employment in the Wheeling Area is expected to increase by just below 0.3 percent per year as structural budget problems for West Virginia’s state government dampen the outlook, as do expectations for a declining population.

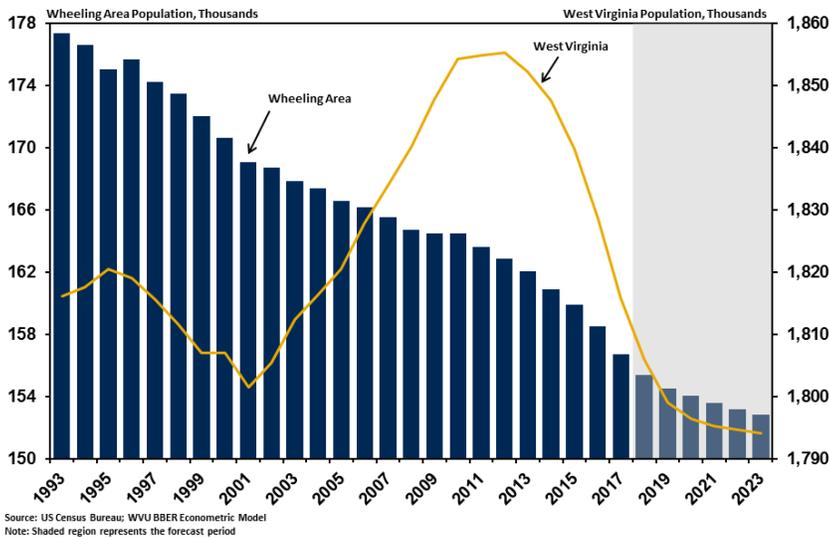
**UNEMPLOYMENT OUTLOOK** Large revisions to historical data as well as any unanticipated changes in the Wheeling Area’s labor force participation rate could cause the forecast for the regional unemployment rate to differ significantly from both its projected level and path. With that said, the forecast calls for the regional unemployment rate to remain in the lower-5.0 percent range through the first half of 2019. Growth in the energy sector will bring some previously-discouraged workers back into the labor

force as they search for a job, thereby putting some upward pressure on the unemployment rate. Longer term, the area’s jobless rate is expected to settle around 5.1 percent. The potential addition of PTT Global Chemical’s ethane cracker in Belmont County would likely lead to additional reductions in the region’s unemployment rate.

Ohio County is expected to have the lowest unemployment rate in the four-county region, averaging in the mid-4.0 percent range during the outlook period. Marshall and Wetzel counties will see their local labor markets tighten more during the outlook period, while Belmont County’s jobless rate will decline to the low-5.0 percent range by the latter half of the forecast horizon.

years, or a decline of more than 500 residents per year. Population losses are expected to occur in all of the region’s counties, though Wetzel County is expected to lose residents at the fastest rate (0.7 percent average annual decline). Marshall, Belmont and Ohio counties are expected to post population declines between 0.2 and 0.4 percent per year through 2023.

**Figure 14: Population Forecast**



**INCOME** Inflation-adjusted per capita income in the Wheeling Area is projected to increase at an average annual rate of more than 1.6 percent through 2023, outpacing the statewide averages. Job growth in the region’s high-wage sectors will provide a significant boost, as should royalty payments attributed to rising shale gas production in the region. However, the completion of pipeline construction projects will negatively affect the level of earned wages during the second half of the outlook period. In addition, the area’s high share of residents at or above the age of 65 will cause government transfer payments (i.e. Social Security and Medicare) to account for a growing share of incomes going forward.

**POPULATION** Historical demographic trends for the Wheeling Area are expected to persist into the outlook period as the forecast calls for the region’s population to shrink at a rate of 0.3 percent annually over the next five