Executive Summary

North Central West Virginia has remained one of the state’s strongest economic regions and actually gained some momentum over the past year or so. Despite a couple of high-profile layoff events, the area as a whole has recorded solid gains in income and employment and all four of the region’s counties have shown varying degrees of improvement across a range of labor market indicators. In this report, we present a detailed discussion of North Central West Virginia’s economy along with our forecast for regional conditions for the next five years.

Several key facts behind the recent economic performance of North Central West Virginia are as follows:

- North Central West Virginia businesses added more than 8,000 jobs between early-2010 and mid-2018, for cumulative growth of more than 7 percent.
- After the region as a whole saw little change in payrolls between mid-2014 and late-2016, total employment in the four-county area has increased by nearly 2,500 since the end of 2016.
- Among the region’s four counties, Monongalia and Harrison counties have accounted for the bulk of economic growth both in recent quarters and over the past several years. Marion County’s economy has stabilized after seeing significant job loss over the previous decade.
- Many of the region’s sectors have outperformed statewide growth by sizable margins in recent years. Performances have been particularly strong within healthcare, retail trade and leisure and hospitality.
- The energy sector has seen a great deal of volatility in recent years, as the region’s coal and natural gas output have moved in opposite directions due to structural changes in the US electric power sector and rising global demand for natural gas.
- Unemployment in the region is consistently lower than the statewide average by a sizable margin.
- Labor force participation is higher in the area compared to the balance of West Virginia. However, the region does lag the nation as a whole in terms of workforce participation.
- Per capita personal income has increased more rapidly since 2010 compared to the statewide average. Three of the region’s counties rank among the state’s top-10 counties in terms of income levels.
- Regional demographic trends are also favorable. Nearly 27,000 residents have been added to the area since 2000. The area’s population is also younger and more highly-educated versus statewide norms.

Our forecast calls for North Central West Virginia as a whole to grow at rates well above its regional performance of the last couple of years. Key aspects of our North Central forecast are as follows:

- We expect employment to grow at an annual rate of 0.7 percent per year in North Central WV during the outlook period. This rate is higher than expected growth for West Virginia overall (0.4 percent) and is in line with the national average.
- Monongalia County is expected to exhibit the highest rate of job growth among the region’s four counties in coming years. Harrison County is expected to grow at a below-average rate, but at the same time likely has the most risks (positive and negative) to growth.
- The energy sector, professional and business services, health care and manufacturing are the sectors likely to lead in terms of overall regional job growth going forward.
- Unemployment is expected to fall moderately in coming years and should remain appreciably lower than the statewide average throughout the outlook period.
- Real per capita personal income is expected to increase at an annual average rate of more than 1.6 percent over the next five years. This rate of growth falls between what is expected for the statewide and national averages.
- The region’s population is expected to continue to grow in coming years. Most of the anticipated growth will occur in Monongalia County.
Recent Economic Performance

North Central West Virginia\(^1\) has remained one of the state’s strongest economic regions over the past decade, posting solid job growth at a time when many other parts of West Virginia have recorded substantial losses in employment and real wages. The region as a whole did experience some sluggishness in job creation between mid-2014 and late-2016, though most of this can be traced to large job losses sustained in one of the area’s four counties as well as a slump in the region’s energy sector. However, renewed growth in natural gas production and large increases in gas pipeline infrastructure have bolstered the area’s economy, as have major additions to the region’s health care sector and the ongoing build-out of several major commercial developments in Monongalia and Harrison counties. Overall, North Central West Virginia employers have added nearly 2,500 jobs over just the past six quarters.\(^2\)

**PERFORMANCE BY COUNTY** Monongalia County represents the primary economic engine for North Central West Virginia. West Virginia University, with nearly 26,000 on-campus students and 6,500 faculty and staff members, acts as a stabilizing force amid the ups and downs caused by the national business cycle as well as large swings in the state’s coal and natural gas industries. WVU has felt the effects of several years’ worth of weak state fiscal conditions, as slumping tax revenues have led to some reductions in the university’s base budget and prompted some degree of consolidation across its campuses. Nonetheless, WVU has continued to generate growth opportunities for the region’s economy thanks to longer-term increases in student enrollment, numerous new construction and renovation projects of buildings across the university’s three campuses as well as the generation of positive spillover effects from faculty and staff engaging in research and outreach activities.

While WVU represents Monongalia County’s single-largest economic driver, the private sector has accounted for a significant portion of local economic growth in recent years as well. Commercial and retail developments such as the University Town Centre TIF District and Suncrest Towne Center, as well as expansion and new facility construction projects by WVU Medicine and Monongalia Health System have generated certainly boosted local payrolls. Monongalia County has not totally escaped some degree of weakness among its major private employers, particularly two sizable layoff events at Mylan in late-2017 and early-2018 that resulted in the loss of roughly 500 jobs at its Morgantown operations. Volatility in the energy sector and the closing of a few major retailers

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\(^1\) For the purposes of this report, North-Central West Virginia consists of Harrison, Marion, Monongalia and Preston counties.

\(^2\) Sources for historical information are noted in each figure.
have weighed on payrolls as well, but by and large employment has trended higher in recent years. Indeed, Monongalia County employers have added 4,200 jobs since the beginning of 2012, which represents a significant departure from the rest of the state over this time period, as payrolls statewide fell by roughly 20,000.

After remaining in a fairly stable range between early-2012 and mid-2016, Harrison County has accounted for a growing share of overall regional growth. Rebounding natural gas production and new natural gas pipeline infrastructure being added (both in Harrison and in adjacent counties) have provided a significant boost to local economic activity. Indeed, employment within the natural gas drilling and field support services and pipeline construction industries have accounted for roughly three-fourths of the 1,500 jobs added on net since late-2016. The other major sources of gains for Harrison County in recent years stem from continued build-out of the Charles Pointe and White Oaks development and expanded hiring at the FBI’s Criminal Justice Information Services (CJIS) facility in Clarksburg.

Preston County’s employment situation has been stable for the most part during the past four years, though it did enjoy a solid pace of growth during the earlier stages of recovery in the Great Recession’s aftermath. By comparison, Marion County has generally been the weakest performer within the North Central WV region over the past several years, but payroll levels have stabilized since late-2016 as conditions have improved for area coal producers and natural gas output has turned noticeably higher. Unfortunately, even with these brighter spots for the county’s performance in recent quarters, overall employment in Marion remains stuck at levels last observed more than two decades ago.

PUBLIC SECTOR The public sector is a major feature of North Central West Virginia’s economic landscape. In addition to the presence of public higher education institutions, namely WVU and Fairmont State University, several major federal installations can be found in the area, including the FBI’s CJIS facility, Department of Energy’s National Energy Technology Laboratory, Louis A. Johnson VA Medical Center, National Institute for Occupational Safety and Health (NIOSH) and US Bureau of Prisons. Overall, government employment combined at the federal, state and local levels accounts for just above 1 in 5 jobs (22 percent) locally. In addition to the protracted problems for the West Virginia state budget, public sector employment in the region has generally been under pressure in recent years due to sequestration and slow growth in federal spending. Total government payrolls have increased slightly since late-2015, though most of this gain is connected to expanded hiring activity by the FBI.

HEALTHCARE SECTOR Healthcare services also represents another linchpin to the North Central Region’s economy. J.W. Ruby Memorial Hospital and the Monongalia Health System employ nearly 9,000 people in Monongalia County alone and WVU Medicine has aggressively expanded its operations, including a new 114-bed Southeast tower at Ruby Memorial and the Outpatient Center at University Town Centre. Work is also currently underway on a new 155-bed tower that will house an expansion for WVU Medicine Children’s Hospital, though construction is not expected to be completed until 2020. Monongalia Health System has added several smaller facilities in recent years, chiefly the Monongalia Health Medical Park facilities adjacent to Route 705 in Morgantown. All told, the sector as a whole has added roughly 3,700 jobs on net in the four-county area since the beginning of 2010, though these gains occurred mostly in Monongalia and Harrison counties.

CONSTRUCTION North Central WV has remained one of the state’s most active regions in terms of construction activity for the past several years. A significant portion of
the region’s construction activity has been centered in Monongalia County, with a range of new facilities added for WVU, WVU Medicine, Monongalia Health and major commercial retail projects at University Towne Centre (UTC) and Suncrest. Site development continues at WestRidge just adjacent to UTC and upon completion is expected to contain several hundreds of acres worth of retail, commercial and residential developments. Harrison County has seen some noteworthy commercial projects spring up over the past several years, particularly the Charles Pointe and White Oaks developments.

Like the rest of the state, the North Central region saw only limited amounts of public infrastructure spending occur in recent years. However, several major projects for the four-county region with a combined value of several hundred million dollars are either underway or slated to begin within the next year or so. Most of these will receive funding from the Roads to Prosperity bond program and have already started to alleviate some of the strain placed upon the region’s roadways and bridges.

In addition to addressing public infrastructure, the region has also witnessed a burst of construction activity associated with natural gas pipelines. Indeed, Harrison County has been a central location for much of this development as the Atlantic Coast Pipeline (ACP), Mountain Valley Pipeline (MVP) and Goff Connector all lie within the county’s borders. The ACP and MVP projects have been met with a host of court- and regulatory agency-ordered delays, which have pushed the likely completion dates for each beyond their original targeted timelines.

Nonetheless, these projects will alleviate a significant bottleneck to the Appalachian Basin’s natural gas pipeline infrastructure, which has forced the region’s natural gas to sell at a relatively large discount since it cannot be easily delivered to and utilized by industries both within this region and other parts of the country. Finally, the projects have resulted in the addition of hundreds of new construction and trucking jobs in the four-county area due to intense labor needs for site preparation, transporting and installing pipe, and adding compressor stations and other major equipment investments.

**NATURAL RESOURCES & MINING** The natural resources and mining sector accounts for only 2 percent or so of jobs in the region, but cyclical and structural changes in energy production have had substantial impacts on the North Central regional economy in recent years. Harrison County was traditionally among the state’s top natural gas-producing counties, but even as growth in withdrawal volumes have not kept pace with Doddridge, Marshall, Ritchie, Tyler and Wetzel counties, many drilling and field service firms that operating in fields located in these outlying counties have established their regional operations in and around the Clarksburg area. Natural gas drilling and field service payrolls are slightly below their late-2014 peak, but have increased by nearly 30 percent over the past two years.

![Figure 4: Unemployment Rate](image)

In addition to abundant natural gas assets, North Central West Virginia contains an appreciable amount of coal production. Total tonnage reached 18.6 million tons in 2017, an increase of 11 percent from the previous year, but still its second-lowest output in several decades. Through the first three quarters of 2018, coal tonnage is roughly on par with the same period last year. While output has held relatively steady during the past year or so, coal mine payrolls have declined by roughly 14 percent largely as a result of the idling of the Federal #2 Mining complex.

**UNEMPLOYMENT** North Central West Virginia consistently has an unemployment rate that comes in well below the statewide average. The four-county region's jobless rate reached its lowest level on record in mid-2008.
at just above 3 percent before more than doubling to a peak of 7.3 percent by the end of 2010. After falling steadily over the subsequent four years to a low of 5 percent in the fourth quarter of 2014, energy industry layoffs and uncertainty in the public sector put upward pressure on the region’s unemployment rate. Indeed, the jobless rate surged more to 6.1 percent by mid-2015 before falling to 4.2 percent roughly two years later. The regional unemployment rate has edged upward during the past year, though most of this increase can be traced to unemployed residents returning to the labor force. Among the four counties, Monongalia possesses the lowest rate in the region at 3.7 percent, while Marion County contains the highest incidence of unemployment at 5.2 percent.

Workforce participation tends to exceed statewide averages in North Central West Virginia. Overall, the four-county region’s labor force has expanded by 6,000 since the first quarter of 2012, with nearly half of that increase coming in the past year alone. This stands in contrast to the rest of West Virginia, where the adult-aged workforce has contracted by nearly 30,000 people since early-2012—even with the large statewide increase in the past year. In terms of the share of residents aged 16 and older that actively participate in the workforce, Monongalia County has the highest at nearly 60 percent either holding a job or actively seeking employment. Preston County is the lowest in the region, but is still on par with the statewide average; however, all four counties lag the national average by three percentage points or more.

INCOME Per capita personal income (not adjusted for inflation) in the North Central West Virginia Region was estimated at nearly $42,700 during calendar year 2017. This marked a 4.3 percent rate of growth in from 2016 average income levels, which surpassed growth for the state and nation as a whole. Overall, North Central West Virginia has seen per capita income increase nearly 20 percent since 2010, falling in between state and national growth during this time period.
Harrison County has the highest per capita income of all four counties in the region at approximately $45,100 in 2017, followed by Monongalia, where residents earned more than $42,500 on average. Per capita income in the region still continues to lag the national figure by an appreciable amount, but the region’s average income deficit with the nation has been much less volatile than the state as a whole thanks to a diverse mix of high-wage industries and the stabilizing presence of WVU and several federal government installations.

**Population** Although many economic regions in West Virginia have suffered from sustained population losses, North Central West Virginia has tended to see gains in the number of residents, adding roughly 1,250 people per year since 1997. However, the region as a whole did experience its first year-to-year decline in population since 2000.

Monongalia County represents the region’s most populous county and is the third largest statewide at roughly 105 thousand residents. Moreover, Monongalia has been the region’s leader in population growth over the past decade or so, offsetting the moderate losses recorded in Harrison and Marion counties.

**Demographics** Many underlying demographic characteristics for North Central West Virginia offer a fairly noticeable contrast when compared to the state as a whole. To some extent, however, these differences are driven in large part by Monongalia County, as the other three counties in the region tend to resemble the state by most demographic measures. For example, while the region’s overall median age is 37.4 years, the presence of West Virginia University helps to place nearly 40 percent of Monongalia County’s population under the age of 25 and make the area’s overall age distribution appear measurably younger. In fact, Harrison, Marion and Preston counties all have age distributions that are quite similar to many counties throughout West Virginia.

Finally, rates of educational attainment for the region are noticeably higher versus other parts of the state as just below 28 percent of residents 25 and older possess a college degree, 8 full percentage points higher than the state as a whole. Monongalia County contains the state’s highest concentration of college graduates, wherein more than 40 percent of 25-and-older residents hold at least a four-year degree.
Economic Outlook

Expectations for the US and West Virginia economies during the forecast horizon will have a significant impact on the North Central Region’s economic performance. Our forecast calls for the region to continue expanding over the next five years. Anticipated improvements in economic conditions for the rest of the state and continued growth for the national economy, provide a solid backdrop that should enable one of West Virginia’s stronger economic regions to enjoy growth that exceeds the statewide average and matches the national figure during the outlook period.

EMPLOYMENT OUTLOOK

We anticipate total employment in the four-county region will increase at an average annual rate of 0.7 percent. This pace of job growth is slightly ahead of what occurred during the past decade and will lead North Central West Virginia to account for an increasingly larger share of aggregate state economic output going forward. Regional-level growth will likely be much stronger over the earlier portion of the outlook period, with payroll gains averaging well over 1 percent annually through 2020. Gains associated with the expanding natural gas industry should serve to boost what was already expected to be a period of broad-based economic growth in the four-county area over the next several years.

Monongalia County is expected to log the strongest rate of job growth (just below 1 percent per year) in the region during the outlook period, beating the national average by a healthy margin. The forecast calls for Preston and Marion counties to expand at a similar rate of between 0.6 and 0.7 percent annually, but in the case of Marion County this represents a mild rebound in the county’s labor market given the depth of losses recorded in recent years. Harrison County will trail the statewide average over the next five years, though most of that deficit in the county’s growth is expected to stem from construction sector employment declines caused by natural gas pipeline and public infrastructure development winding down. At the same time, however, Harrison does have the most potential (both upside and downside) in the region for growth to differ from the baseline due to its higher exposure to cyclical swings in natural gas and manufacturing activity.

SECTOR OUTLOOK

The natural resources and mining sector is expected to pace the region’s overall job growth during the outlook period, with payrolls rising by an average annual rate of 3.1 percent. The region’s coal industry faces a great deal of risk from ongoing structural changes in the domestic electric power sector, as power plants in several states that source coal from area mines have already been designated for retirement or are at risk of either retirement or conversion within the next five years.

By contrast, the region’s natural gas industry is positioned for strong growth as drilling and exploration activity...
continues to rebound from its 2015-2016 slowdown and benefits from further gains in domestic and international demand for natural gas. Furthermore, while additional delays to the MVP, ACP and other pipeline projects could affect the timing of natural gas industry growth during the outlook period, upcoming additions to pipeline capacity throughout the Appalachian Basin will help to remove the area’s price discount with national benchmarks and encourage exploration and development.

Figure 12: North Central WV Employment Growth Forecast by Sector

![Graph showing employment growth forecast by sector](image)

Downstream processing capacity remain limited overall in the Appalachian Basin at present, mostly to natural gas power plants and the Shell ethane cracker in Beaver County, PA, once it comes on line in a few years. However, further downstream gas developments are a strong possibility given the region’s wealth of natural gas and ongoing concerted efforts by federal, state and local policymakers as well as a host of industries. For example, China Energy’s memorandum of understanding with the West Virginia Development Office has the potential of deploying $84 billion over the next 20 years in the state for a range of projects such as natural gas power plants to chemicals and plastics manufacturing facilities.

The professional and business services sector is expected to add jobs at a rate of 1.0 percent annually during the outlook period, benefiting in part from broader regional and national economic growth underpinning demand for business support firms. Also, WVU’s presence along with the numerous federal and private research facilities located along the I-79 High-Tech Corridor will continue to facilitate technology transfer and innovation, which will lead to opportunities for entrepreneurship and job creation locally.

At the same time, the professional and business services sector is expected to benefit directly from the energy sector’s rebound and projected growth over the next several years. Indeed, contract labor services are utilized heavily by gas drilling firms and as production and exploration activity continue to increase over the next couple of years these jobs should increase in number. Finally, given the many complexities that occur with land development, gas leases and other deals, rising natural gas production bodes well for a range of firms specializing in legal, accounting, engineering and other expert service industries.

Construction activity is expected to remain strong over the next two to three years, but weaken over the latter portion of the outlook as construction on the ACP, MVP and Goff Connector wind down over the next year or so. WVU and WVU Medicine also have a handful of major projects that are expected to be completed during the 2020-2021 time frame. Public infrastructure investments within the region will appreciable over the next several years. An array of major roadway and other public infrastructure projects have already been approved throughout the I-79/I-68 corridor in Harrison, Marion and Monongalia counties. Not only will these projects create direct economic impacts during the construction phase in the outlook period, they also create opportunities to ease prior limitations in the region’s infrastructure that, had they not been addressed, would have placed limits on the North Central economy’s growth potential—especially in Monongalia County.

After growing at a rate of 2.0 percent annually in the past decade, the education and healthcare services sector is expected to see job gains come in at less than half that pace during the outlook period. Most of these gains will come during the earlier part of the forecast horizon, coinciding with the WVU Medicine’s addition of a new Southeast Tower at Ruby Memorial. From a longer term perspective, the region has become a hub for healthcare services for residents across West Virginia. This status will only be reinforced over the longer term as an aging population bids up demand for healthcare services statewide and some specialized services could be shifted.
entirely to the North Central Region as cost issues cause parts of West Virginia facing declining and/or highly-rural populations to focus on providing basic care.

The North Central Region’s consumer-driven sectors, namely leisure and hospitality and the retail portion of trade, transportation and utilities, should continue to record steady increases in payrolls. Population growth and the anticipated gains in several high-wage industries in the region will drive most of these gains going forward. In addition, the eventual build-out of University Town Centre, along with the eventual emergence of WestRidge on the western side of I-79 have the potential to drive economic activity into previously undeveloped portions of Monongalia County. The Charles Pointe and White Oaks developments will remain focal points for consumer spending activity in the southern portion of the region and could see additional retail, dining, lodging and entertainment business emerge.

Public sector employment in the four-county area is expected to grow just over 0.3 percent annually between 2018 and 2023. State government payrolls will increase slightly over the next five years, reflecting the cyclical and structural problems that are anticipated to continue for several major sources of tax revenue collected by the state. Local government employment should see more potential for growth as increased revenue streams (local sales taxes and fees, natural gas, etc.) allow the area’s city and county governments meet the needs of a growing population that demands more local government services.

The FBI Criminal Justice Information Services Division in Bridgeport could potentially add more workers depending upon the agency’s needs for the facility to meet expanded mandates on background checks. Beyond that facility, we do not anticipate any major changes for the region’s other federal employers, but downside risks are a factor that cannot be ignored given the partisan divide in Washington as well as the spending strain caused by Medicare and Social Security will continue to rise as more people reach retirement age.

UNEMPLOYMENT OUTLOOK Large revisions to historical data as well as any unanticipated changes in the labor force participation rate for North Central West Virginia could cause the forecast for the area’s unemployment rate to differ significantly from both its projected level and path. Nonetheless, expected job growth during the outlook period is expected to result in further declines in North Central West Virginia’s unemployment rate. After averaging roughly 4.6 percent for all of calendar year 2018, our forecast calls for the jobless rate to settle in the lower 4.0-percent range for the remainder of the forecast horizon.

Monongalia County will maintain the lowest jobless rate among the region’s four counties throughout the forecast, edging lower to the mid-3.0-percent range. Preston County’s unemployment rate will remain below the statewide average and eventually decline by late-2019. Harrison County’s jobless rate will generally track the statewide average while Marion County will see the largest percentage-point decline in its unemployment rate thanks to better job prospects within the county and healthy growth in neighboring Harrison and Monongalia counties.

INCOME OUTLOOK Inflation-adjusted per capita income in North Central West Virginia is projected to increase at an average annual rate of 1.6 percent through 2023, falling just between state and national averages. Job growth in relatively high-wage sectors will translate into strong increases in real wages and salaries earned by workers and continued improvements in equity markets should bolster local households’ investment income. Finally, growth in transfer payments will accelerate during the latter half of the outlook period as more people in the area enter...
retirement, particularly in Harrison, Marion and Preston counties.

**POPULATION OUTLOOK** The region’s resident population is expected to increase between 0.2 percent per year during the outlook period, which will lag the rate of growth observed in the most recent decade. Monongalia County will account for virtually all of the area’s population growth over the next five years, adding residents at 0.6 to 0.7 percent per year. One potential downside risk to regional population growth, particularly within Monongalia County, could be from smaller numbers of international students and professionals immigrating to the US as a result of recent discussions on proposed changes in federal immigration policy. In addition, even with the level of infrastructure development assumed in the forecast, portions of Monongalia County have significant deficiencies in terms of infrastructure capacity that will severely limit residential and commercial development. If these deficiencies are not addressed, it could dampen the area’s attractiveness to potential residents.

Preston County’s population is expected to grow over the next five years, but the gains will be very small in comparison to the last decade or so as the county’s population becomes increasingly concentrated in older age groups. Marion County’s population total will likely remain stable over the next several years while Harrison County should see moderate losses during the outlook period, as the number of residents falls to just below 67,000 by the early 2020s.