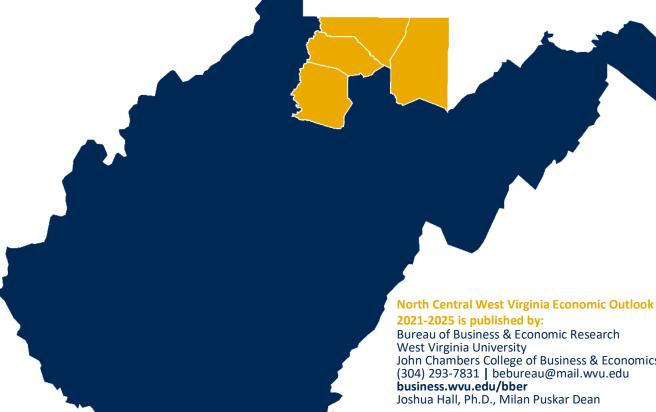
NORTH CENTRAL WEST VIRGINIA

2022-2026





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Executive Summary

North Central West Virginia has been one of a few economic regions in state to record steady economic growth over the past decade, but the area has dealt with some struggles over the past couple of years. The COVID-19 recession led to an abrupt loss in jobs in the spring of 2020 and the pandemic continues to weigh on local economic activity for a variety of factors. The closure of Mylan's manufacturing plant in mid-2021 will be a significant limiting factor to the area's recovery. In this report, we present a detailed discussion of North Central West Virginia's economy along with a forecast of regional conditions through 2026. Several key facts behind the recent economic performance of North Central West Virginia are as follows:

- Prior to the COVID-19 pandemic, North Central West Virginia North Central West Virginia managed to add nearly 9,000 jobs between 2010 and 2019, easily outperforming the overall employment performance of the state during this time period.
- The region has begun to lag the statewide recovery from the COVID-19 recession in recent quarters.
 Overall, just 60 percent of jobs lost early in the pandemic have been recovered by mid-2021.
- Among the region's four counties, Preston County is the only one to see employment rise close to prepandemic levels. Marion County's recovery from the COVID-19 pandemic has been weakest, as less than half of the jobs lost in early-2020 have been recovered.
- Natural gas output in the region has grown rapidly over the past two years and should continue to another healthy increase in withdrawals during 2021.
- Regional coal production has trended lower over the past several years and will decline during the outlook as an expected rebound in steam coal demand will likely not be a lasting one.
- Unemployment in the region has fallen rapidly after spiking to 14 percent during the COVID-19 recession, declining to its lowest point since late-2008.
- Labor force participation is higher in the area compared to the balance of West Virginia. While the region does lag the overall national average,

- workforce participation for several age groups is well above average.
- Per capita personal income growth in North Central WV has lagged state and national averages since 2013. Harrison and Monongalia counties rank among the top six in terms of per capita income levels.
- Regional demographic trends are also favorable.
 More than 26,000 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 to recover from the COVID-19 recession, though the region will not achieve its pre-pandemic level of employment until mid-2023. Key aspects of our North Central forecast are as follows:

- We expect employment to grow at an annual rate of 1 percent per year in North Central WV. This rate is higher than expected growth for West Virginia overall (0.9 percent), but slower than the national rate of 1.4 percent.
- Monongalia County will likely see the fastest rate of job growth in the region, though most of this growth will occur after 2022. Harrison County is also expected to grow faster than the statewide average.
- Services sectors most affected by the pandemic, leisure and hospitality, other services and professional and business services, will enjoy the fastest rates of job growth. The area's manufacturing sector will be hurt significantly by the closure of Mylan's oral dose manufacturing plant.
- Unemployment is expected to remain low 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 1.5 percent between 2022 and 2026, surpassing statewide and national growth.
- The region's population is expected to continue to grow in coming years, but Monongalia County will account for essentially all these population gains.

Recent Economic Performance

North Central West Virginia¹ has been one of the state's steadier economic regions over the long term. Even though the completion of several natural gas pipeline projects—along with the delays of the Atlantic Coast Pipeline (ACP) and Mountain Valley Pipeline (MVP)—caused the four-county area to lose jobs on net during 2019, but the overall losses were relatively small as some key segments of the region's diverse base of public and private sector industries buoyed the economy during this transitional period.

Of course, the region's economic diversity could not shield

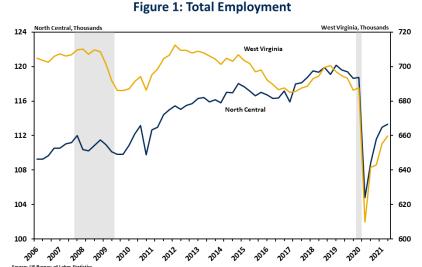
it from the same fate suffered throughout the rest of the US in March and April 2020, as the outbreak of the COVID-19 pandemic pushed the North Central region into a deep, though short-lived recesssion. Overall, the region saw payrolls contract by nearly 14,000 (11.7 percent) between the first and second quarters of 2020 on account of public health restrictions implemented during the initial pandemic response. The four-county area recovered at an above-average pace over the remainder of the year, gaining back approximately half of the jobs lost during the COVID-19 recession by the fourth quarter of 2020.

At the same time, the North Central region has seen its pace of recovery lag the state and nation during 2021. First, the area's healthcare sector has been under significant stress due to its ability to receive hospitalized COVID-19 patients from other parts of the state that lack ICU capacity and other necessary resources—particularly during the late-summer 2021 surge in hospitalizations fueled by the Delta variant. Secondly, however, the pandemic itself has not been the only factor encumbering the region's recovery, as the four-county area's economy was dealt a significant blow with the closure of Mylan's oral dose production facility in Morgantown.

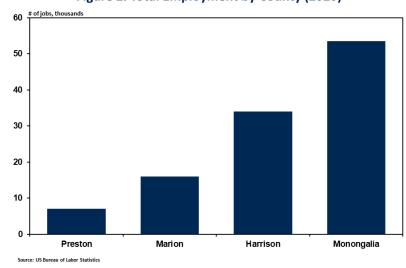
PERFORMANCE BY COUNTY Monongalia County represents the North Central region's primary economic engine. To that point, West Virginia University is the linchpin of the county's economy

given the combined presence of 30 thousand students, faculty and staff on its main campus in Morgantown typically acts as a stabilizing force amid the ups and downs caused by macroeconomic fluctuations and regional volatility in energy production. Mon County lost roughly 7,000 jobs during the initial pandemic response in spring 2020 but was able to recover more than two-thirds of those losses by mid-2021.

WVU has generated growth opportunities for the region's economy thanks to numerous new construction and renovation projects across the university's three

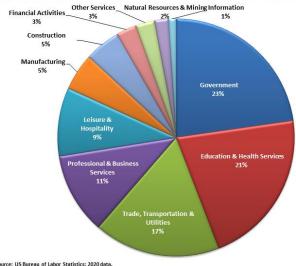






¹ For the purposes of this report, North-Central West Virginia consists of Harrison, Marion, Monongalia and Preston counties.

Figure 3: North Central Employment Distribution by Sector



campuses, not to mention the creation of spillover effects created by on-campus research and outreach activities by faculty and staff.

While the COVID-19 pandemic had a significant impact on WVU's 2020-21 academic year, both in terms of operations and enrollment figures, conditions have returned closer to normal for the 2021-22 academic year, due in part to high vaccine uptake among faculty, staff and student. Moreover, the move toward more normal operations has helped the area's leisure and hospitality sector as attendance restrictions have been removed for on-campus sporting events and other activities.

WVU Medicine's expanding campus at JW Ruby Memorial Hospital, and via its network growth throughout the state, has bolstered the region's economy, particularly with the addition of a new dedicated children's hospital that will add more than 150 pediatric beds and create opportunities for pediatric research as well as care to underserved residents in West Virginia. The pandemic has considerably strained the hospital's staff and resources, especially during the surge in ICU and other resource capacity utilization due to the Delta variant, but it does indicate the healthcare sector's importance to the regional economy and the facility's position statewide in providing critical care and research.

Unfortunately, Monongalia County's economy suffered a major setback in July 2021 as Viatris began the process of shutting down Mylan's oral dose manufacturing facility in Morgantown. The plant is slated to fully close in early-2022 and altogether the closure will result in the elimination of

more than 1,400 high-wage jobs and one of the state's largest manufacturing facilities. The facility's closure was a growing risk due to numerous setbacks in recent years, including large-scale layoff events, restructuring of the company's IT operations and multiple FDA "483" facility violations. Last-ditch efforts by state and local officials to keep the plant open or facilitate its transfer to another company were ultimately unsuccessful, though initial talks between Viatris and West Virginia University over the potential conveyance of the facility for a to-be-determined use have begun.

Harrison County has experienced the greatest volatility as any county in the North Central region over the past couple of years. While growth in the upstream natural gas production has increasingly shifted to "rich" gas deposits in the northwestern part of the state, many drilling and field support services tend to locate their regional management operations in Harrison County. These operations have seen appreciable growth as natural gas and natural gas liquids (NGL) production has surged over the past several years.

Natural gas pipeline construction activity provided a significant boost to Harrison County between early-2017 and mid-2019 as work on the MVP, ACP, Goff Connector, Mountaineer Xpress (MXP) and the Sherwood Lateral for Rover II were all under construction at the time within the county or in neighboring counties. Of course, these jobs have been 'lost' as several of these projects were completed and the ACP was canceled in mid-2020 by the companies backing the project. Moreover, the MVP project remains mired in delays due to litigation and regulatory reviews at the state and federal levels.

Other sectors have buoyed Harrison County's economy during the pandemic and accounted for some consistent sources of new job creation over the past several years. Regional aerospace manufacturing and service operations have expanded in the area, particularly with recent moves by Mitsubishi Heavy Industries (formerly Bombardier) to add two hangars. Also, the continued build-out of the Charles Pointe and White Oaks developments as well as increased staffing at the FBI's Criminal Justice Information Services (CJIS) facility in Clarksburg are additional signs of progress.

Preston County's employment situation mirrored that of most regions during the COVID-19 recession in 2020, but

the level of payrolls in the county has fully returned to prepandemic levels. By contrast, Marion County's economy remains the weakest among the region's four counties. Not only had the county lost more than 11 percent of its employment base since 2014, but employers also shed an additional 2,800 jobs during the brief COVID-19 recession and less than half of those jobs have been recovered by mid-2021. On a positive note, WVU Medicine's decision to purchase the Fairmont Medical Center and build a new facility has lifted the area's prospects, as have some commercial and residential developments along the I-79 corridor.

PUBLIC SECTOR The public sector is a major feature of North Central West Virginia's economic landscape. In addition to the presence of 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. The federal arm of the public sector has been especially supportive to regional growth in recent years, due in large part to personnel and program investments at the FBI's facility since 2016.

The COVID-19 pandemic did have a sizable negative impact on public sector payrolls, particularly at the state and local government levels. Indeed, state, county and municipal payrolls remain appreciably below pre-pandemic levels. A portion of this can be attributed to the region's colleges and universities losing employees vis-à-vis early retirements, but measurable losses in income and other tax revenue streams, as well as concerns over the extent to which these revenue sources would recover after the pandemic, did precipitate actual job cuts or resulted in unfilled jobs to remain open. However, this trend is expected to reverse itself quickly within the next year or so thanks to large increases in federal aid to state and local governments as well as healthy rebounds in a broad cross-section of revenue sources.

HEALTHCARE Healthcare services represents a major linchpin to the North Central Region's economy. J.W. Ruby Memorial Hospital and the Monongalia Health System employ nearly 10,000 people in Monongalia County alone and WVU Medicine has aggressively expanded its operations, including the new 114-bed Southeast tower at

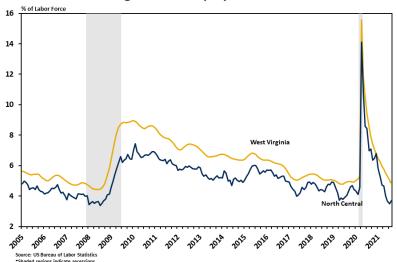
Ruby Memorial and the Outpatient Center at University Town Centre. Construction work is nearly complete on the new 155-bed tower that will house WVU Medicine Children's Hospital, providing the region's healthcare hub with an additional point of strength. The facility will enable WVU Medicine to renowned pediatric physicians and researchers and boosts its ability to provide top healthcare opportunities for children in West Virginia rather than referring pediatric cases to Cleveland or Pittsburgh.

CONSTRUCTION North Central West Virginia has been home to a significant amount of construction activity, with much of it related to the energy sector. Indeed, Harrison County has been a central location for the ups-and-downs in pipeline development for the region given that it falls within the footprint of the now-canceled ACP, court-delayed MVP project and Goff Connector. Another project, the \$555-million Hammerhead Pipeline project connects a 65-mile connection between the MVP and Ohio Valley Connector in Wetzel County, is situated in western portions of Monongalia and Marion counties. Despite being completed, the project remains embroiled in a legal dispute between EQT and Equitrans Midstream, slowing its ability to enter service.

The lone remaining major pipeline project underway in the region is the MVP, though work on the pipeline largely remains frozen beyond routine upkeep and mitigation measures due to ongoing litigation in federal courts and regulatory reviews in Virginia and at the federal level. The MVP's delays will not have the impact on these types of jobs as much of the site development and pipeline installation has already occurred. However, the absence of additional pipeline capacity could have future impacts on natural gas development in West Virginia and could even limit development of downstream industries in the Appalachian Basin.

ENERGY The natural resources and mining sector accounts for roughly 2 percent of regional payrolls but cyclical and structural changes in energy production have had substantial impacts on the North Central region's economy. Harrison County has consistently ranked among the state's top natural gas-producing counties, and while the overall volume of withdrawals has not kept pace with Doddridge, Marshall, Ritchie, Tyler and Wetzel counties, production in Harrison County increased by 58 percent during 2020 and is on pace to increase at a double-digit pace in 2021. Gas drilling activity and production have also

Figure 4: Unemployment Rate



increased in Monongalia County as well in recent years, as it briefly overtook Harrison County in terms of withdrawal volume during 2020. Overall, Mon County natural gas output increased 39 percent between 2019 and 2020; preliminary data indicates growth has slowed appreciably during the first six months of 2021, but a modest increase is still expected for the calendar year overall. Marion County has enjoyed increases in gas production but remains a relatively minor producer.

In addition to natural gas production, the North Central region contains coal mine activity. However, while the area's natural gas industry has enjoyed strong growth over the past couple of years, regional coal output has declined appreciably since 2014. After reaching nearly 16 million tons in that year, tonnage fell to fewer than 7 million tons in 2020. Steam coal shipments from area mines have fallen

off rapidly in recent years as electricity generation from coal-fired power plants has waned in response to heightening competition from natural gas and renewables. The Blacksville No 2 mine in Monongalia County closed permanently in August 2021 as the mine's high production costs and declining customer base in the Mid-Atlantic region made the operation uneconomic.

UNEMPLOYMENT North Central West Virginia consistently has an unemployment rate that comes in well below the statewide average. Prior to the pandemic, the four-county region's jobless rate had been below five percent since 2016. Overall, the region's labor market was among the tightest in the state as suggested by the reported unemployment rate. The regional jobless rate did surge to 14.1 percent during the COVID-19 recession but was cut roughly in half by late-2020 as the reopening process unfolded. Surges in the pandemic during the latefall/early-winter of 2020 and the Delta variant surge in late-summer 2021 likely caused the jobless rate to inch higher for brief periods, but the regional jobless rate recently fell to 3.7 percent—its lowest reading since late-2008. Anecdotal reports on unfilled job openings locally suggest the labor market has become incredibly tight since the beginning of 2021.

Among the four counties, Monongalia possesses the lowest rate in the region at roughly 3.6 percent as of the second quarter of 2021, followed by Preston County at 4.1 percent. Marion County typically has the region's highest rate of unemployment and that

trend has continued over the course of the pandemic, averaging a seasonally adjusted 4.7 percent during the second quarter of 2020. Incomplete data for the third quarter indicated the area's jobless rate has declined even lower, likely falling to the low-3-percent range.

Workforce participation tends to exceed statewide averages in North Central West Virginia. Prior to the pandemic, the four-county area's labor force increased by more than 7,000 between 2017 and 2019 versus significant declines for the balance of the state. In terms of the share of residents aged 16 and older that actively participate in the workforce, Monongalia County has the highest at nearly 61 percent either holding a job or actively seeking employment. Preston County is the lowest in the region, coming in a couple of percentage points or so

% of Labor Force % of Population 16 yrs and over 4.8 62% Labor Force Participation Rate 4.6 4.4 4.2 58% 4.0 56% 3.8 4.1 3.6 54% 3.4 52% 3.6 3.0 Harrison Marion

Figure 5: Unemployment and Labor Force Participation by County

Source: US Bureau of Labor Statistics; US Census Bureau Note: Unemployment rate represents 2021q2 average; labor force participation rate is 2019 annual average

Figure 6: Per Capita Personal Income

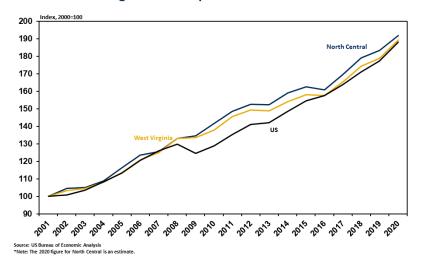
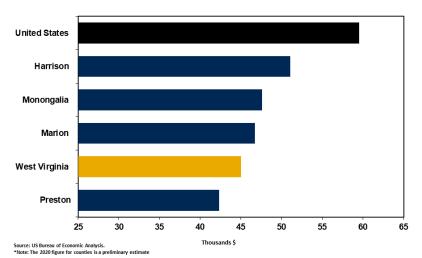


Figure 7: Per Capita Personal Income by Area (2020)



below the statewide figure. Each county in the region lags the national average rate of workforce participation by several percentage points but focusing on the prime working age population of 25 to 54 the region compares relatively well with nearly 80 percent of residents in this cohort either work or are looking for work. Like much of the US, however, the four-county area has yet to see a full recovery in the size of its labor force to prepandemic levels; however, at the same time the region has seen its workforce increase in size over the past year.

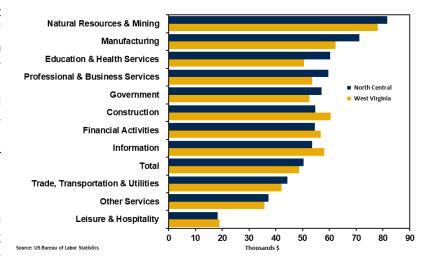
INCOME Per capita personal income (not adjusted for inflation) in the North Central West Virginia Region was estimated at nearly \$47,600 during calendar year 2020. This marked a 4.6 percent rate

of growth in average income levels from 2019. Overall, North Central West Virginia has seen per capita income increase 26 percent since 2013, falling short of state and national growth. Income growth in 2020 was supported in large part by transfer payments as the federal government's pandemic response included direct payments to households and expanded unemployment insurance benefits.

Harrison County has the highest per capita income of all four counties in the region at approximately \$51,100 in 2020, followed by Monongalia, where residents earned more than \$47,600 on average. The region's diverse mix of high-wage industries does make income growth somewhat less volatile, per capita income trails the national average by a considerable margin overall due to the presence of tens of thousands of college students at WVU, Fairmont State and smaller institutions.

POPULATION Although many economic regions in West Virginia have suffered sustained population losses, North Central West Virginia has tended to see gains in the number of residents, adding roughly 26,000 people overall since 2000. The region's population has been stable for the most part over the last three years due in large part to a weakening rate of population growth in Monongalia County. Indeed, due to declines in oncampus enrollment at WVU and a drop in international immigration into the county between

Figure 8: Average Annual Salary by Major Sector (2020)



2017 and 2020, the county's slowing growth has only managed to offset the moderate losses recorded in the rest of the region's counties.

DEMOGRAPHICS Many of North Central West Virginia's underlying demographics offer a noticeable contrast to the rest of the state. However, many of these differences are driven in large part by Monongalia County, since the region's other three counties resemble the state by most demographic measures. For example, while the region's overall median age is 38 years, the presence of West Virginia University helps to place almost 40 percent of Monongalia County's population under the age of 25 and make the area's overall age distribution appear measurably younger.

Finally, rates of educational attainment for the region are noticeably higher versus other parts of the state as nearly 30 percent of residents aged 25 and older possess a college degree, more than 8 percentage points above the statewide figure. Unsurprisingly, Monongalia County contains the state's highest concentration of college graduates and is the only county in the state to exceed the national average, as more than 41 percent of residents 25 years and older hold bachelor's degree or higher.

Figure 9: Summary Population Profiles

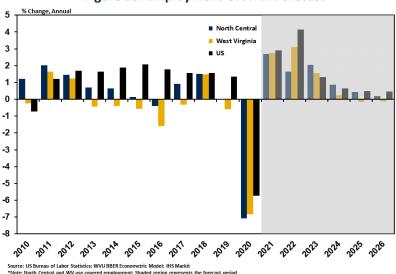
	North Central	West Virginia	United States
Total Population (2020)	263,301	1,784,787	329,484,123
% Population Under 18 (2020)	18.6%	20.0%	22.1%
% Population 65 Years + (2020)	17.6%	22.6%	16.9%
Population with Less than High School Diploma (2019, 25 yrs. +)	10.0%	12.9%	11.4%
Population with High School Diploma, No College (2019, 25 yrs. +)	36.1%	40.2%	26.9%
Population with Some College (2019, 25 yrs. +)	24.4%	25.8%	28.6%
Population with Bachelor's Degree or Higher (2019, 25 yrs.+)	29.5%	21.1%	33.1%
Median Age (2020)	38.4	43.0	38.6
Mean Household Income (2019)	\$72,108	\$65,842	\$92,324
Average Household Size (2019)	2.58	2.40	2.61

Source: US Census Bureau

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 going forward. The forecast calls for the region's recovery from the COVID-19 recession to surpass the statewide average over the entirety of the forecast horizon, but the large number of job losses related to Mylan's closure and protracted shortages in the labor supply will cause the area's recovery to be below-average for the first half of the outlook period. We do not anticipate the four-county area will return to its pre-pandemic level of employment until mid-2023.

Figure 10: Employment Growth Forecast



COUNTY OUTLOOK We anticipate total employment in the four-county region will increase at an average annual rate

of just over 1 percent during the five-year outlook period. Monongalia County is expected to pace the region overall in terms of job growth during the outlook period, though gains over the next five years will lag the national average, especially during the first couple of years of the forecast horizon. Healthcare, leisure and hospitality and other consumer services will lead the way early on as the expected waning of the COVID-19 pandemic enables these sectors to return to more normal conditions and WVU Medicine continues to grow its local presence via the WVU Children's Hospital. We also anticipate a boost to construction payrolls as we assume Longview Power builds a new natural gas combined-cycle plant, though the exact timing of that project is not exactly clear. Also, the company has indefinitely suspended its plans to build a small utility-scale solar generation facility after its plans to purchase a property fell through.

At the same time, Mon County's rebound will be weaker over the near term and perhaps longer as the direct and indirect impacts of Viatris' decision to close the Mylan pharmaceuticals plant become clearer. In addition to the more than 1,400 jobs lost as a result of the facility's closure, few similar options exist for laid off workers to take as jobs once their severance payments are exhausted.

Consequently, this could produce downstream impacts on the area's retailers and other consumer-oriented industries as well as the housing market, since some unemployed workers will need to leave the area to find work. Efforts by WVU to secure the facility in order to cultivate for vaccines or other advanced medical research or to develop a public-private partnership to attract a pharmaceutical manufacturer interested in using the site for raw materials production or some other use offer upside potential going forward are possible avenues. However, the chances of any of these outcomes occurring are currently unknown.

Harrison County is expected to grow faster than the statewide average over during the outlook period, achieving average annual growth of 1 percent. Much like Mon County, Harrison County will see its

large base of leisure and hospitality businesses located

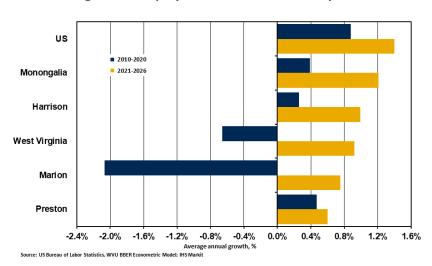


Figure 11: Employment Growth Forecast by Area

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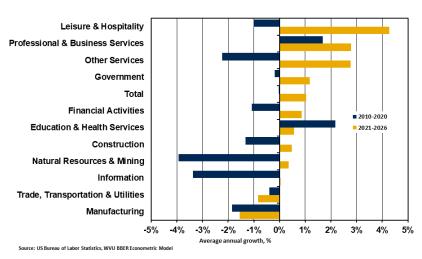
along the I-79 corridor benefit from the ongoing ebb in the COVID-19 pandemic. In addition, anticipated growth in aerospace manufacturing and service activity along with the stability provided by major federal installations located in the area will also buoy the county going forward. Volatility in the energy sector could affect growth in both directions during the next five years, though we anticipate positive contributions from expanding natural gas production, exploration and development throughout the North Central and northwestern portions of the state.

Marion County will likely see payrolls expand by 0.8 percent annually during the outlook period, as the rebound from the COVID-19 recession

continues and new commercial and infrastructure developments along the I-79 corridor boost area payrolls, along with WVU Medicine's commitment to build a new Fairmont Regional Medical Center. The county does face palpable risks going forward from its exposure to declining manufacturing activity and a generally poor long-term outlook for domestic steam coal demand. Preston County is expected to post employment growth of roughly 0.5 percent per year, the slowest rate of any county in the region. However, the county is the closest to achieving its pre-pandemic level of employment and given the county's demographic characteristics and overall industrial mix, it is expected to grow more slowly during the outlook period.

SERVICE SECTORS The forecast calls for the leisure and hospitality sector to lead the region in terms of job growth over the next five years, largely due in large part to that the COVID-19 pandemic should continue to recede in the coming months. The sector's recovery has been hampered thus far by periods of surging covid infections and hospitalizations over the past year or so, as consumers have continued to show some reluctance to venture into indoor settings such as restaurants and bars during periods of high community transmission. In addition, labor shortages have impeded the sector's ability to recover more fully thus far as workers in this sector have been more likely to be exposed to the virus and sidelined by quarantines or isolations. Moreover, employers in the sector have faced some difficulty attracting workers due to broader increases in wage rates from competing industries.

Figure 12: North Central Employment Growth Forecast by Sector



The professional and business services sector is expected to post average annual job growth of nearly 3 percent during the outlook period. Part of this increase will reflect the sector's initial rebound from the COVID-19 pandemic, several factors will boost its performance over the remaining part of the forecast. WVU's presence will certainly engender further opportunities for research, innovation and technology, as will the assortment of federal and private research facilities that are located along the I-79 High-Tech Corridor. Additional growth and development in natural gas and NGL resources throughout the Tri-State area bodes well for business services in the North Central region, as energy producers heavily utilize contract labor and engineering, legal and related firms provide an array of technical support to energy producers.

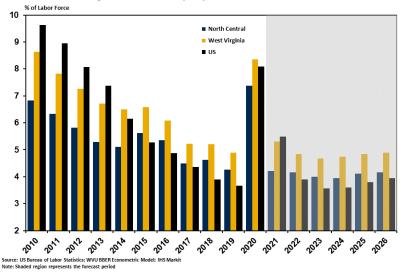
Finally, a nationwide shift to remote work for many tech services jobs combined with the region's competitive level of skilled labor and improving broadband availability should bolster the four-county area's ability to capture a growing share of these workers. The Ascend WV program is an example of a program that will attempt to leverage the low cost of living, natural amenities and other features in areas such as Morgantown (where broadband capacity is also widely available) with a financial incentive for new residents with remote work opportunities moving from larger cities.

After growing more than 2 percent per year over the last decade or so, the education and healthcare services sector is expected to see job gains come in at approximately one-third the rate during the outlook period. However, the forecast calls for relatively strong growth over the first half

of outlook thanks to the new WVU Children's Hospital at Ruby Memorial and the construction of the Fairmont Regional Medical Center.

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. In addition, the completion of the WVU Children's Hospital will enable the region to provide critical care and research opportunities for pediatric medicine, enabling the area to retain greater amounts of care that was previously transferred to larger hospitals such as UPMC Children or Cleveland Clinic Children's Hospital.





The North Central Region's trade, transportation and utilities sector is expected to register a loss of nearly 1 percent annually in payrolls through 2026. The region's newer retail centers should perform well during the outlook period thanks to anticipated population and income gains. For retail more broadly, however, the shift toward online direct-ship or order-and-pickup purchasing activity by consumers accelerated rapidly during the pandemic and is not expected to reverse itself to any significant extent going forward, putting further downward pressure on brick-and-mortar employment during the outlook period.

GOVERNMENT Public sector employment in the four-county area is expected to grow just over 1 percent annually between 2021 and 2026. Barring any lingering revenue problems associated with the pandemic or reductions in funding from Charleston, WVU and other educational institutions should see funding streams stabilize and grow somewhat over the next few years as federal aid has buttressed state government finances significantly since the beginning of the pandemic. By contrast, local government has more potential for increases in manpower as increased revenue streams (local sales taxes and fees from home rule, natural gas activity, and general commercial growth) allow the area's city and county governments meet the needs of a growing population that demands more local government services.

Public infrastructure investments within the region will be 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, but they also create opportunities to ease prior shortcomings 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. Finally, the Infrastructure Investment and Jobs Act and FY2022 budget reconciliation bills, which are currently being debated in Congress, will likely add a significant level of federal spending to various types of infrastructure programs over the next decade, though the final size of the bills are not finalized at this time.

The FBI Criminal Justice Information Services Division in Bridgeport could potentially add more workers depending upon expanded federal mandates on background checks conducted at the facility. Elsewhere, we do not anticipate any major changes for the region's other federal employers, but downside risks are a factor that cannot be ignored as the outcome of the 2020 election could lead to changes in spending priorities, especially given the impending shortfalls for Medicare and Social Security and how those will soon begin to strain the broader federal budget.

UNEMPLOYMENT OUTLOOK Large revisions to historical data in the next benchmark revision as well as any unanticipated changes in the North Central region's labor force participation rate could cause the regional unemployment rate to differ significantly from both its projected level and path. Nonetheless, the forecast calls for the four-county area's jobless rate to fall only slightly over the next year or so, as the expected diminishment of COVID-19 infections and strong backdrop of wage growth encourage larger gains in labor force participation. Ultimately, the region's unemployment rate will likely average around 4 percent for much of the forecast horizon.

Monongalia County will maintain the lowest jobless rate among the region's four counties throughout the forecast but should see some upward pressure over the near term as certain sectors of the labor are approaching full employment and rising wages should draw in more

entrants to the labor force. Harrison County's unemployment rate will generally track the broader statewide figure during the outlook period, hovering in the mid- to upper-5-percent range. Marion County will see the largest percentage-point declines in its unemployment rate as the county's commuters benefit from healthier job prospects along the I-79 corridor in Harrison and Monongalia counties.

INCOME GROWTH Given the substantial impact federal government transfers will have on personal income levels during 2021, the first half of the year in particular, the region is expected to see real income decline in 2022. Job growth in some relatively high-wage sectors, along with rapid growth in wages for some sectors with strong labor

demand, should help to offset the large loss in the wage base attributed to Mylan's closure. Nonetheless, real wage and salary growth in 2022 will be muted to some extent by stronger-than-normal rates of inflation and the drag caused by the loss of Mylan salaries. As these effects transition away in 2023, real wage growth should pick back up and local income should also benefit from royalties associated with natural gas production, investment income returns as well as the continued long-term upward trend (notwithstanding the large decline between 2021 and 2022) in transfer income for an aging population. This

latter impact will be most noticeable in Harrison, Marion and Preston counties.

POPULATION OUTLOOK The region's resident population is expected to increase between 0.1 and 0.2 percent annually during the outlook period, which will lag the rate of growth observed in the most recent decade. Monongalia County will account for virtually all the area's population growth through, adding residents at 0.5 to 0.6 percent per year. One potential downside risk to regional population growth, particularly within Monongalia County, could be related to infrastructure issues. Indeed, portions of Monongalia County have deficiencies in road that limit residential and development opportunities. As commercial development is expected to extend to the west of I-79, including areas such as WestRidge, newer high-volume roadways will be needed to accommodate traffic in previously undeveloped areas.

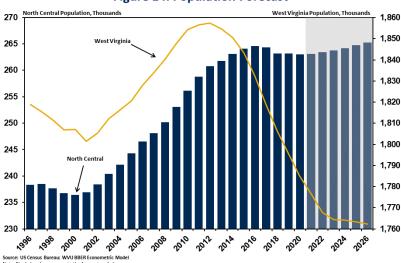


Figure 14: Population Forecast

The region's other three counties are expected to register declines in population going forward, though the losses should be relatively small in Preston and Harrison counties. In addition, Harrison does have some upside potential for modest population growth during the outlook period, but any such gains will be driven by development of downstream industries for natural gas as well as continued growth in aerospace industries tied to the regional airport.