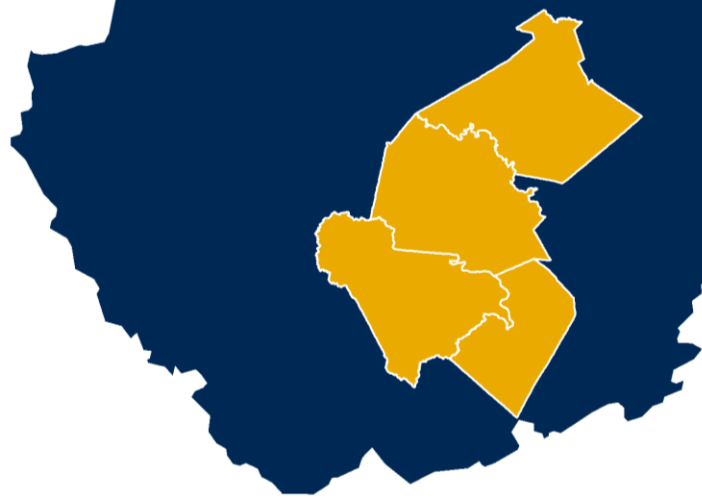


THE NEW RIVER GORGE AREA ECONOMIC OUTLOOK 2017-2021



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Executive Summary

The New River Gorge Area has endured a significant economic downturn over the past few years. After rebounding rapidly just after the Great Recession, employment in the region has fallen sharply over the past four years, driven in large part by severe losses in the coal industry. In this report, we present a detailed discussion of the current state of the New River Gorge Area economy along with our forecast for the likely path of economic activity over the next five years.

Several key facts behind the New River Gorge Area's recent economic performance are as follows:

- **After gaining more than 3,000 jobs between early-2010 and early-2012, the New River Gorge Area has gone onto lose 6,000 jobs in the subsequent four-year period.** Employment in the region is now at its lowest level since 1996.
 - While job losses have occurred in all of the region's four counties at some point in recent years, economic conditions have been relatively more difficult in Nicholas and Fayette counties.
 - **Leisure and hospitality and healthcare have been two of the strongest sectors in the region in recent years.**
 - **Job losses have been driven largely by the coal industry, where more than half of the industry's jobs have been lost since 2012.** Trade, transportation, and utilities has also lost a significant number of jobs in recent years, shedding nearly 9 percent of its workforce since 2007.
 - **Unemployment in the region has been volatile in recent years, but overall has not shown consistent improvement since the Great Recession.** Unemployment currently stands at about one percentage point above the state average.
 - **The region has suffered significant labor force attrition in recent years.** Overall, the area's work force has fallen by more than 9 percent over the past four years.
 - **Per capita personal income has been flat since 2012.** Raleigh County residents have the highest average income levels in the region.
- Our forecast calls for the New River Gorge Area to emerge from recession and begin to recover slowly over the next five years. Key aspects of our forecast are as follows:
- **We expect employment to increase at an average annual rate of 0.4 percent in the region over the next five years.** However, job growth will remain sluggish at best through mid- to late-2017.
 - **Professional and business services is expected to post the fastest rate of job growth during the outlook period, with a forecast gain of 2.5 percent per year.** The construction sector, healthcare services and travel and tourism-related jobs are other areas expected to grow at an above-average rate in the New River Gorge Area.
 - **Unemployment is expected to improve over the next five years, but will likely remain higher than the state and national averages.**
 - **Per capita personal income is expected to rise at an annual average rate of 2.1 percent over the next five years.** Government transfer payments will account for a growing share of income in the region during the outlook period.
 - **Population for the region as a whole has generally declined for the past few decades, but losses have accelerated in the past few years due to economic turmoil.**
 - **Population losses are expected to continue, though at a moderating pace in coming years.** Each of the region's four counties are expected to lose residents, but the largest percentage declines are projected in Fayette County.

Recent Economic Performance

The New River Gorge Area¹ has been in recession for the past three years, having endured its longest and deepest stretch of economic turmoil since the early 1980s. After posting a strong rebound from the Great Recession, in which local payrolls surged more than 9 percent between the first quarters of 2010 and 2012, the region has gone on to see employers shed more than 6,000 jobs on net—effectively erasing all of the gains registered in the four-county area during the mid-2000s and the 2010-2012 economic recoveries. In fact, the area’s overall level of employment is at its lowest since late-1996.²

PERFORMANCE BY COUNTY With its largest principal city of Beckley and more than 60 percent of the region’s total jobs located within its borders, Raleigh County serves as the New River Gorge Area’s economic center. Fayette and Nicholas counties account for most of the area’s remaining economic activity. Three of the region’s four counties have struggled with sizable job losses since the beginning of 2012. Raleigh County payrolls have declined by the largest amount on an absolute basis, contracting by more than 3,200 cumulatively on net (9.4 percent) over the past four years. This essentially surrenders all of the gains posted in its recent economic recovery.

At the same time, Nicholas and Fayette counties have accounted for a more disproportionate share of the area’s losses during the current economic downturn. Indeed, over the past four years employers in Fayette and Nicholas counties have shed more than 1,700 and 1,300 jobs, for percentage declines of 13.4 and 15.3 percent, respectively. Due to its sluggish performance over much of the 2000s, the additional losses recorded in Fayette County since 2012 have caused total employment levels to fall to depths not seen since the late-1980s. The coal industry has accounted for the bulk of job losses observed in these three counties, both directly and

indirectly, as the area’s fabricated metals, machinery equipment manufacturers and business services firms have faced job cuts as a result of the coal industry’s troubles. Summers County has been the region’s best performer in recent years thanks to a modest uptick in job growth over the last several quarters.

TRAVEL & TOURISM Given the sheer number of natural scenic attractions and outdoor-oriented activities in the New River Gorge Area, including the Summit-Bechtel

Figure 1: Total Employment

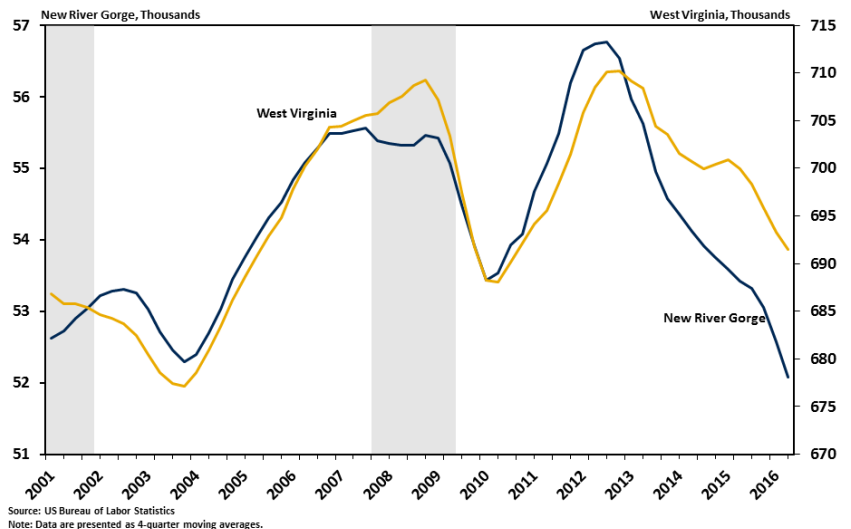
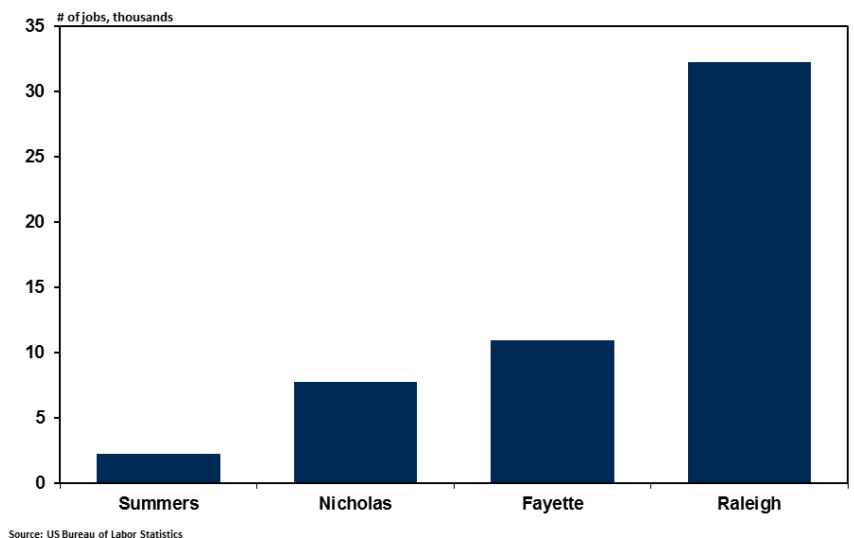


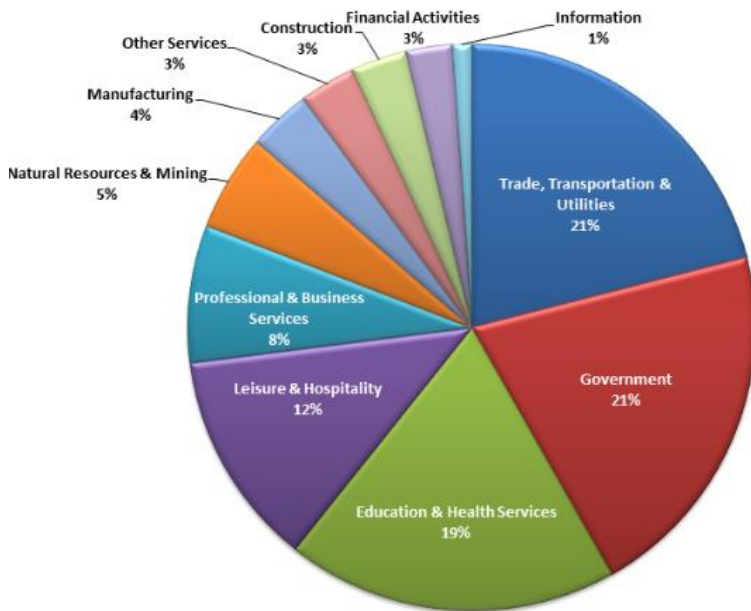
Figure 2: Total Employment by County (2015)



¹ For the purposes of this report, The New River Gorge Area is comprised of four counties: Fayette, Nicholas, Raleigh and Summers counties.

² Sources for historical information are noted in each figure.

Figure 3: New River Gorge Employment Distribution by Sector



Source: US Bureau of Labor Statistics; data for 2015.

Resort, whitewater rafting on the New and Gauley rivers, camping, hiking trails, biking, and zip-line tours, travel and tourism clearly plays a major role in the region’s economy. Furthermore, the industry accounts for a larger-than-normal share of jobs in the region and has generally been one of the area’s few sources of stability, having held onto the jobs added since the end of the US recession in mid-2009 and the region’s four-year bout with recession.

SERVICE-PROVIDING SECTORS Trade, transportation and utilities ranks as the largest source of private sector employment in the New River Gorge Area. Unfortunately, the sector has experienced a fairly consistent trend of job losses dating back to the mid-2000s. The largest portion of these declines can be traced back to the region’s retailers, with a shrinking base of consumers, volatile wage growth and the closure of several large stores and developments have caused payrolls to contract by nearly 9 percent since 2007. Wholesalers and transportation and warehousing firms have also felt the impact of the region’s diminishing retail base over time, but have also been affected by the sharp declines in coal production and manufacturing activity over the past several years.

Education and healthcare services plays a major role in the New River Gorge Area’s economy, reflecting in part the region’s large share of elderly and/ or disabled residents as well as the broader national trend toward an increased footprint for healthcare services. Employment in this

sector has nearly doubled in the past two decades within the region. While this sector has endured some degree of job losses since 2012, the declines have been modest by comparison to other segments of the region’s economic base and still accounts for nearly one-in-five jobs in the four-county region. The region’s public sector, which had been a relatively stable source of employment, has faced challenging times in recent years as well due to the combined effects of declining coal severance tax collections, property taxes and a shrinking population.

NATURAL RESOURCES & MINING Although travel and tourism is the identifiable strength of the New River Gorge Area, the region’s economic heritage has long been connected to coal mining and other resource-based industries. Although accounting for roughly 5

percent of the region’s jobs, the sector’s capital intensiveness cause it to account for more than three times as much of overall output and provides wages that are roughly double what is paid on average in the area.

Raleigh, Fayette and Nicholas counties all contain some level of coal production, ranking 8th, 13th and 16th in terms of production statewide in 2015. Unfortunately, the area’s coal industry, along with other portions of the Central Appalachian Coal Basin, has faced serious downward pressure in recent years and experienced a significant drop-off in production due to market- and regulatory-related factors. Moreover, several of the region’s mines have been closed within the past decade as years of heavy mining activity have caused many seams to become too thin or fragmented to mine profitably. Finally, the industry’s protracted weakness has caused several of the area’s major mining companies, Arch, Alpha and Patriot, to enter bankruptcy proceedings within the past two years.

Weak global demand for metallurgical coal, the emergence of shale gas use in electricity generation, the implementation of the Mercury and Air Toxics Standard (MATS) and falling prices for emissions reduction technologies have all combined to weigh significantly on regional coal production and employment in recent years. Indeed, the combined level of production for Raleigh, Fayette and Nicholas counties has fallen to an annualized total of less than 8 million short tons through the first

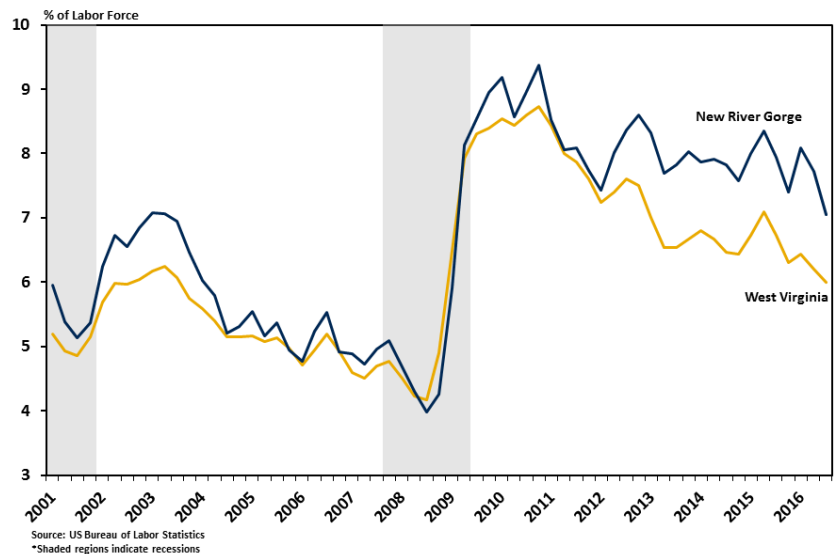
three quarters of 2016. This marks the area’s lowest non-strike output in decades and represents a 56 percent drop since 2011. Coal employment in the area has dipped to its lowest level since the early 2000s, as mining operations in the three counties are employing less than 1,800 people as of the third quarter of 2016. On a positive note, metallurgical coal prices have risen appreciably in recent months and warmer-than-normal weather in late summer and early fall has bolstered demand for thermal coal. As a result, several of the area’s mines have boosted production and brought back some workers in recent weeks.

CONSTRUCTION & MANUFACTURING Aside from the boost created by the Summit Bechtel Reserve development and a few infrastructure projects during the 2010 to 2012 timeframe, the New River Gorge Area’s construction sector has experienced a prolonged downturn, with local construction companies shedding roughly 600 jobs on net since 2012. New home construction in the four-county area has fallen appreciably as broader economic conditions have deteriorated and now stands only slightly above the level observed in the aftermath of the national collapse in homebuilding activity. The annualized pace of new nonbuilding construction projects started, which consist mostly of infrastructure-related items, have remained in a range of \$40-\$60 million over the past several years. By contrast, spending on new nonresidential construction projects remains weak at an annual average of \$20 million.³

Most of the region’s manufacturing base has continued to struggle. These struggles can be traced back to the knock-on effects of the coal mine industry’s downturn, as fabricated metal shops and mining machinery equipment manufacturers have seen shipments and new orders collapse as mines have idled or closed. The broader national improvement in homebuilding activity has benefited the region’s wood products manufacturers to some extent, but those increases have not been sufficient to offset the 20 percent net decline in overall manufacturing jobs since the beginning of 2012.

UNEMPLOYMENT After remaining in line with statewide average between 2005 and early-2012, the New River Gorge Area’s economic struggles have caused its unemployment rate to remain well above the statewide average in recent years. Overall, the four-county region’s jobless rate has been increasingly volatile during the past four years, oscillating between the low-7 to mid-8 percent range. As of the third quarter of 2016, the regional unemployment rate fell to a seasonally-adjusted average of just over 7.0 percent, marking its lowest reading since the fourth quarter of 2009. Unfortunately, the recent downward trend in the area’s unemployment rolls stems largely from labor force attrition rather than underlying improvements in the local labor market.

Figure 4: Unemployment Rate

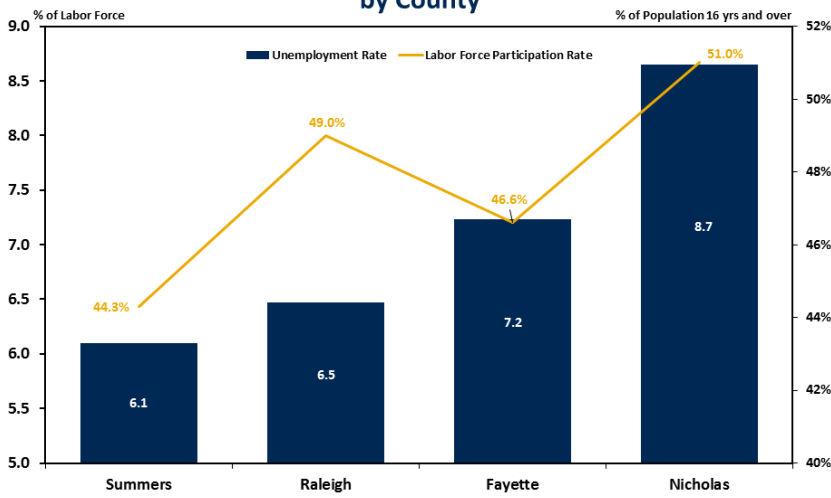


Unemployment rates vary widely within the region, ranging from a low of roughly 6.1 percent in Summers County to a high of 8.7 percent in Nicholas County. All of the counties have recorded appreciably declines in their jobless rates in the past year, but Summers County appears to be the only one seeing a fall in unemployment as the result of job gains rather than labor force attrition.

LABOR FORCE Reflecting the region’s struggling labor market, as well as its underlying demographic trends, the New River Gorge has recorded significant labor force attrition since 2012. Overall, the region’s workforce has declined by more than 9 percent (6,000 people) in the past four years. Workforce participation rates are also very low throughout the four-county region. In most cases, less

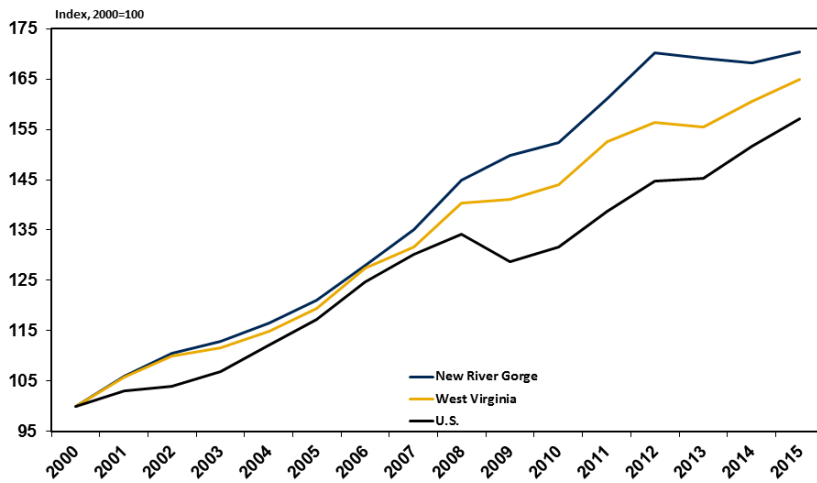
³ Construction data come from McGraw-Hill Construction.

Figure 5: Unemployment and Labor Force Participation by County



Source: Bureau of Labor Statistics; US Census Bureau
 Note: Unemployment rate represents 2016Q3; Labor force participation rate is from 2014.

Figure 6: Per Capita Personal Income



Source: US Bureau of Economic Analysis
 *Note: The 2015 figure for the New River Gorge Area is an estimate.

recent years. Despite the region’s uneven rate of income growth since 2012, the New River Gorge Area has recorded a much-stronger improvement in income levels over the past decade, with per capita income rising at an average annual rate of 3.5 percent between 2005 and 2015, versus gains of 3.3 and 3.0 percent per year at the state and national levels.

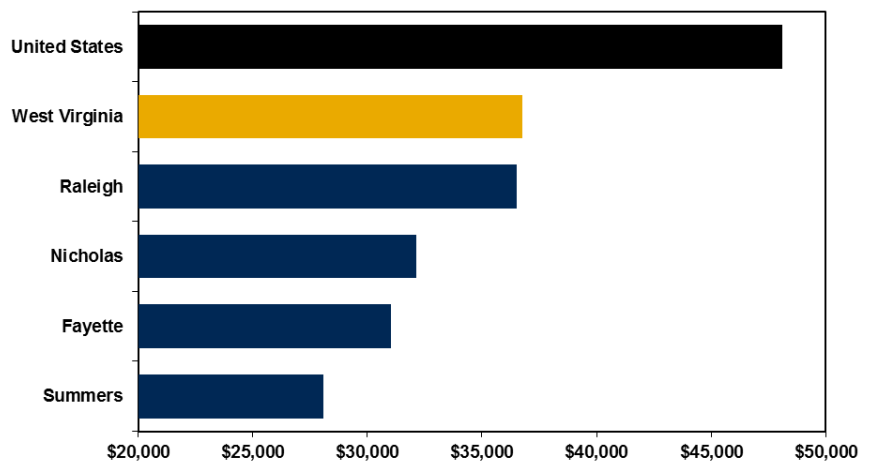
Raleigh County residents received income levels of approximately \$36,500 per person during 2015, ranking it 14th-highest among West Virginia’s 55 counties and nearly identical to the statewide average. The region’s three remaining counties have per capita income levels well below the state average Fayette County, ranging between \$28,000 and \$32,000 in 2014. Per capita incomes in Raleigh, Fayette and Nicholas counties are boosted to some extent by the high wages that are paid to coal miners, but income levels in most of the region are held down to a great extent by the source of income earned by residents. Indeed, due to a combination of demographic and socioeconomic circumstances, federal government transfer payments such as Social Security, Medicare, etc. account for 35 to 40 percent of total personal income in Fayette, Nicholas and Raleigh counties. This share rises to nearly 47 percent in Summers County.

POPULATION The New River Gorge Area’s population trends have been somewhat volatile,

than half of the population either holds a job or is actively looking for a job. Summers County’s labor participation rate is especially low at 44.3 percent - nearly 9 percentage points lower than the statewide average of 53 percent.

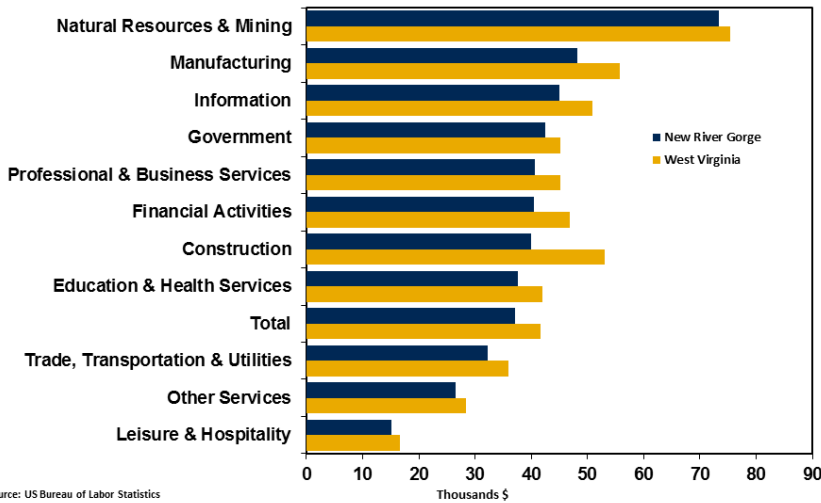
INCOME Per capita personal income (not adjusting for inflation) for the New River Gorge Area was estimated at approximately \$33,500 during calendar year 2015. This marked a 1.3 percent rate of growth versus 2014, but even with this improvement overall per capita income in the region is only slightly higher than 2012 levels, indicating residents have seen a measurable erosion in real purchasing power in

Figure 7: Per Capita Personal Income by Area (2015)



Source: US Bureau of Economic Analysis
 Note: 2015 income figures for counties are preliminary.

Figure 8: Average Annual Salary by Major Sector (2015)



national figures as less than 15 percent of residents aged 25 years and over hold at least a bachelor’s degree.

but the region as a whole has seen its population decline in number over the past few decades and is at its lowest total since the early 1970s. Unfortunately, while population losses have persisted for the most part since the early 2000s—losing nearly 6,100 residents since 2000—all four counties have recorded accelerating population losses since 2012.

DEMOGRAPHIC CHARACTERISTICS Just as with the rest of the state, the size of the New River Gorge 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 also due to higher death rates from a host of causes among younger people living in the region. Finally, rates of educational attainment in the area lag both statewide and

Figure 9: Summary Population Profiles

	New River Gorge	West Virginia	United States
Total Population (2015)	161,340	1,844,128	321,418,820
% Population Under 18 (2015)	20.8%	20.6%	22.9%
% Population 65 Years + (2015)	19.3%	18.2%	14.9%
Population with Less than High School Diploma (2014, 25 yrs. +)	18.1%	15.5%	13.6%
Population with High School Diploma, No College (2014, 25 yrs. +)	42.4%	40.9%	28.0%
Population with Some College (2014, 25 yrs. +)	24.3%	24.8%	29.1%
Population with Bachelor’s Degree or Higher (2014, 25 yrs.+)	15.2%	18.8%	29.3%
Median Age (2015)	43.1	42.1	37.8
Mean Household Income (2014)	\$52,206	\$55,976	\$74,596
Average Household Size (2014)	2.48	2.43	2.63

Source: US Census Bureau

Economic Outlook

Expectations for the West Virginia and US economy during the forecast horizon will have a significant impact on the performance of the New River Gorge Area going forward.⁴ The forecast calls for the region's economy to recover slowly from its recent bout with recession, but even after conditions improve growth will generally trail state and national averages during the outlook period. Overall, we anticipate total employment will increase at an average annual rate of roughly 0.4 percent through 2021. Payrolls are expected to post a large decline in 2016 followed and a slight downtick in 2017, but the New River Gorge Area's economy should begin to stabilize over the next year or so and slowly start to register measurable levels of new job growth over the remainder of the outlook period.

COUNTY DIFFERENCES Among the region's four counties, Summers County is expected to realize the fastest pace of job growth going forward (0.6 percent per year) and will slightly outperform the state as a whole. However, this forecast estimate has the potential for significant variation due to the combined effects of the county's small employment base and recent volatility in seasonal patterns for some key industries making comparisons between 2016 and 2021 difficult.

Raleigh County will likely see payrolls grow by early-2017, but gains will occur at a below-average pace of between 0.4 to 0.5 percent annually through 2021. Nicholas County employers are expected to add jobs at a rate of 0.4 percent per year going forward, though rebuilding efforts in the county's flood-affected areas will likely boost growth through the latter half of 2017. The forecast calls for Fayette County to see the level of payrolls remain roughly unchanged over the next five years as the secular decline in local coal production and associated manufacturers offset the gains anticipated in tourism and a few other private service-providing sectors.

TOP-PERFORMING SECTORS Service-providing sectors will generate most of the job growth in the

New River Gorge Area's economy during the outlook period. Professional and business services will expand at a solid pace of 2.5 percent through 2021. Most of these gains will be driven by broader national economic trends that affect demand for business support services firms that operate in Raleigh County. However, the sector will also benefit from enhanced utilization of contract labor as mine operators begin to increase output at the region's more productive thermal and metallurgical mining operations over the next few years. Construction is expected to rank

Figure 10: Employment Growth Forecast

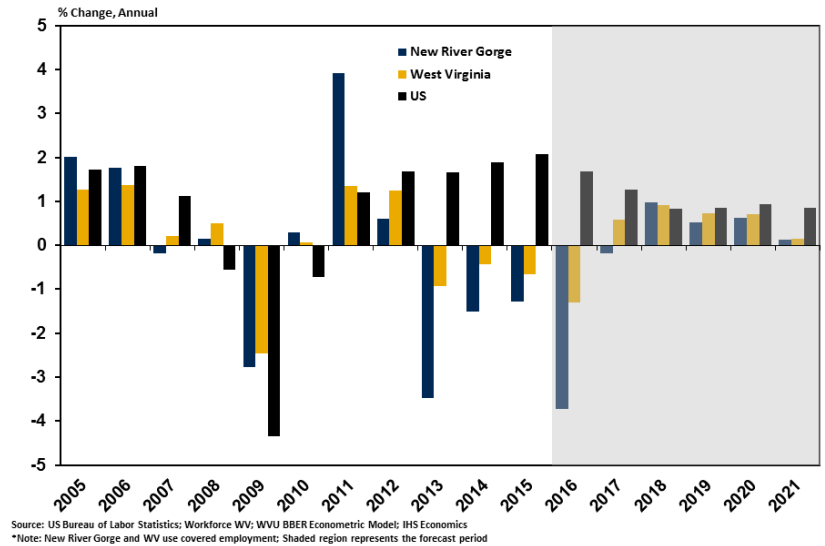
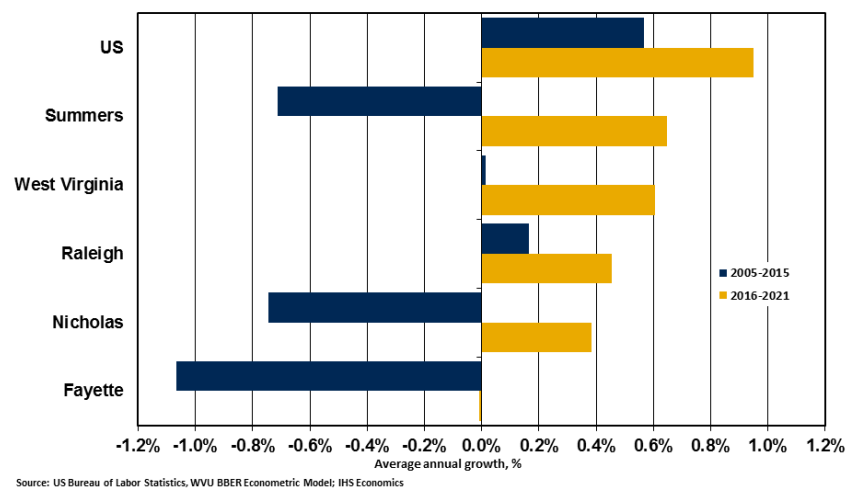


Figure 11: Employment Growth Forecast by Area



⁴ All forecast estimates presented herein are derived from the West Virginia University Bureau of Business & Economic Research Econometric Model unless otherwise noted.

as the second-fastest growing sector over the next five years. These anticipated gains reflect a rebound from the large declines observed over the course of the previous decade, as the region’s residential, nonresidential and nonbuilding construction segments stabilize and eventually record moderate levels of growth.

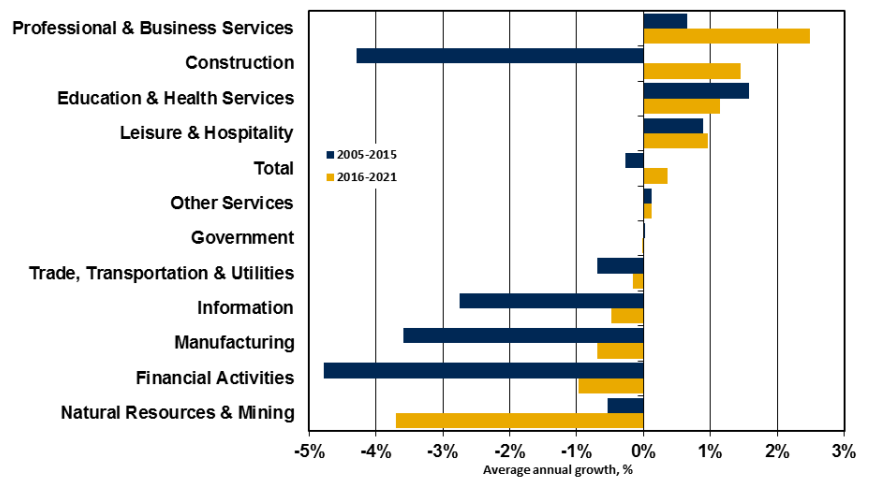
Education and health services is expected to add jobs at a 1.1 percent average annual rate through 2021. Healthcare demand is expected to grow consistently within the region, reflecting the region’s large share of elderly residents and above-average proportion of individuals with disabilities. However, results from the recent presidential election do pose an appreciable degree of uncertainty for the sector going forward. President-Elect Donald Trump has indicated a willingness to undo all or significant portions of the Affordable Care Act, which could push some of the region’s residents into publicly-funded health insurance programs or outside of the system altogether.

TRAVEL & TOURISM Leisure and hospitality is expected to grow nearly 1.0 percent annually during the 2016 to 2021 outlook period. The region’s wealth of natural amenities and outdoor recreational activities will remain a strength for this sector going forward and enable businesses in the area to benefit from spending by domestic and international tourists alike. In addition, events such as National Scout Jamboree in 2017 and 2021 and the World Scout Jamboree in 2019 offer additional opportunities for the region’s travel and tourism sector.

MINING AND MANUFACTURING The New River Gorge Area’s natural resources and mining sector is expected to lose jobs at an average annual rate of 3-4 percent between 2016 and 2021. Most of these declines will be concentrated in 2016 and 2021 as the region’s least productive mines close as they are supplanted by lower-cost operators located in other US coal basins or overseas. Metallurgical coal operations should see a boost in activity within the next year or so thanks to a large increase in market prices, but the longevity of any gain will be determined in large part by the health of the Chinese economy and its ability to absorb excess global steel capacity.

While the presidential election’s outcome does provide some cause for optimism to the coal industry in general, as it likely puts enforcement of the EPA’s Clean Power Plan rule in serious doubt, rescinding the rule will have limited impact on most of the region’s thermal coal producers. Indeed, most utilities have already substituted toward lower-cost coal from the Illinois and Northern Appalachian basins due to the availability of technology to meet emissions standards. In addition, the massive natural gas deposits available in the Marcellus and Utica shale plays along with the suite of regulations already in place that raise the relative cost of either producing coal or using it to generate electricity will make it difficult for the region’s higher-cost operators to be competitive.

Figure 12: New River Gorge Employment Growth Forecast by Sector

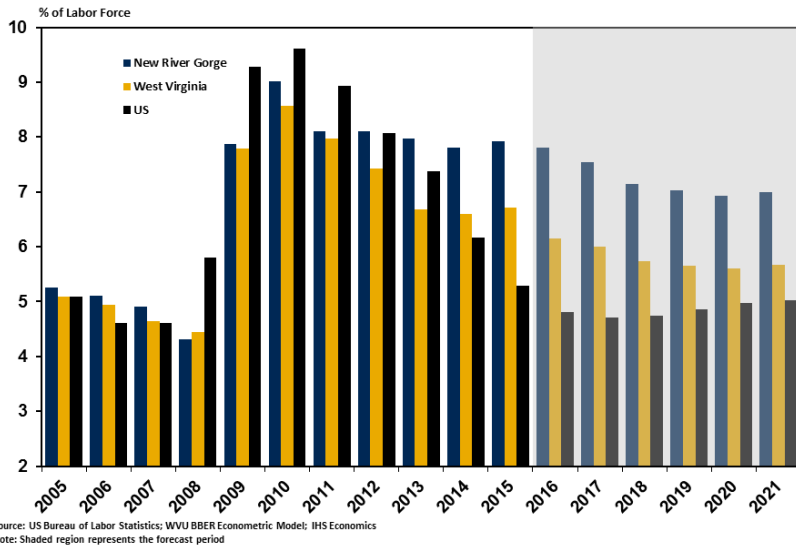


Source: US Bureau of Labor Statistics, WVU BBER Econometric Model

Due in part to the tight linkages many of the region’s manufacturers have with the coal industry, the forecast calls for manufacturing payrolls to contract 0.7 percent per year.

OTHER SECTORS With coal tax severance receipts likely to be at much lower levels in comparison to the 2008-2012 time period and anticipated declines in the region’s school-age population, the New River Gorge Area’s public sector will likely see little if any change in employment levels during the outlook period. The trade, transportation and utilities sector will likely experience modest declines in payrolls through 2021, as losses or sluggish growth in high-wage jobs found in the coal industry and portions of the manufacturing sector erode consumer purchasing power and additional population declines reduce the size of the region’s consumer base.

Figure 13: Unemployment Rate Forecast

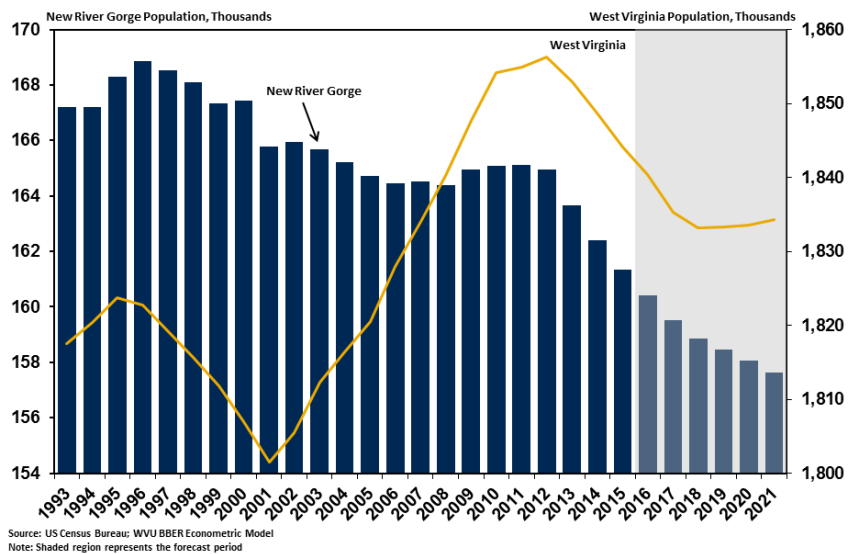


industries will keep a lid on any significant growth in real wages and salaries earned by residents. Transfer payments are expected to be the fastest-growing type of personal income going forward and will account for nearly 40 percent of the region’s overall personal income by the end of the outlook period—and nearly half of income in Summers County.

POPULATION The region’s population is expected to shrink at a rate of nearly 0.3 percent annually over the next five years. Fayette County is anticipated to record the largest percentage declines in population, as the county’s persistent patterns of net outflows of migration and natural population declines lead it to lose residents at a rate of 0.5 to 0.6 percent per year. Raleigh and

Nicholas are expected to lose residents, though at a much smaller rate in comparison to the past four years. Finally, Summers County’s population will likely settle at just below 13,000 residents by 2021.

Figure 14: Population Forecast



UNEMPLOYMENT OUTLOOK Although differences in labor force participation could cause the region’s unemployment rate to differ from its expected level and path, the forecast calls for the New River Gorge Area’s unemployment rate to fall steadily in the coming years, before settling in the upper-6.0 percent range by 2020. We do anticipate some upward pressure on the jobless rate over the near term as many of the region’s key industries continue to struggle, which should keep the regional unemployment rate near the low- to mid-7.0 percent range through mid-2017.

Summers County will continue to have the lowest unemployment rate in the four-county region, eventually settling around 5.7 percent by the mid-point of the forecast horizon. Raleigh County’s jobless rate should hold in the mid-6.0 percent range for much of the outlook period while Fayette and Nicholas counties are expected to have jobless rates at least two-thirds of a percentage point higher than the regional average.

INCOME Inflation-adjusted per capita income in the New River Gorge Area is projected to increase at an average annual rate of 2.1 percent through 2021, falling mostly in line with statewide and national averages. While a return to job growth will help growth in real wages and salaries, anticipated weakness in several of the region’s high-paying