Executive Summary

The Potomac Highlands emerged from a mild economic downturn in 2016, but the region has endured some struggles as several of the region’s major industries have failed to maintain consistent levels of growth. In this report, we present a detailed discussion of the economy of the Potomac Highlands along with our forecast for regional economic conditions for the next five years.

Several key facts behind the Potomac Highlands recent economic performance are as follows:

- **After enjoying a moderate bounce-back in job growth after the Great Recession, the Potomac Highlands Region registered a net loss of nearly 1,000 jobs between 2012 and 2015.**

- **The regional economy bottomed out in late-2015 and once again experienced some measured growth in employment during 2016, recovering about one-third of the jobs lost over the 2012 to 2015 slump.**

- **Overall economic conditions have remained somewhat inconsistent, however, as local payrolls ebbed during 2017.**

- **In terms of the region’s five counties, payrolls have generally remained in a fairly stable range. The main exception has been Hardy County, which has recovered a wide majority of jobs lost related to the national collapse in single-family home construction.**

- **Manufacturing, professional and business services and retail trade have consistently added jobs in recent years.** However, these gains have been offset to a large extent by job cuts by the public sector and a handful of private service-providing sectors.

- **Agriculture plays a sizable role in the Potomac Highlands Region’s economy.** Over 2,700 people are employed on farms within five-county area and local farming operations tallied $351 million in crop and livestock sales in 2016.

- **The region’s unemployment rate has fallen steadily since 2010 and currently sits below the statewide average by nearly one-half of a percentage point.**

- **The area’s labor force has increased by 2,500 since 2014.** Commuters in the region have benefited from strong economic growth in Northern Virginia.

- **The Potomac Highlands Region has lost nearly 2,300 residents since 2010.** Losses slowed considerably in recent years and the area’s overall population actually increased slightly during 2017.

- **Per capita personal income has increased at roughly the same rate as the state overall since 2013.** Income levels lag both state and national averages in all five counties.

Our forecast calls for the Potomac Highlands Region to gain some ground over the next few years. The area should post solid rates of job growth over the next two years or so before gains slow appreciably. 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.** Job growth in the region is expected to be at its strongest between 2018 and 2020.

- **The professional and business services and construction sectors are expected to lead the way in terms of job growth during the outlook period.** Healthcare and leisure and hospitality will also enjoy growth that surpasses the overall regional average during the next five years.

- **Unemployment is expected to decline over the next five years, but the overall drop will be small as the jobless rate should hold in the mid-4.0 percent range.**

- **Inflation-adjusted per capita income is expected to grow at an annual average rate of 1.6 percent over the next five years.** Federal government transfer payments and earned income imported into the area by commuters will pace overall income gains.

- **The area’s population is expected to remain stable for the most part during the outlook period.**

- **In-migration of residents from higher-cost areas in Virginia and Maryland could provide a boost to the area’s population numbers.** However, underlying issues such as poor health outcomes and an older-than-normal population will likely dampen upside potential for growth.
Recent Economic Performance
The Potomac Highlands\textsuperscript{1} Region has struggled to gain traction over the past several years. Since the beginning of 2012, the five-county region has lost nearly 1,000 jobs, or 4 percent of the area’s overall employment compared to a roughly 3 percent drop over the same time period for the state as a whole. The region’s economy has experienced some additional volatility over the past two years, but in general overall conditions are improving due to a healthier backdrop for several of the area’s key industries as well as the Potomac Highlands’ labor market connectivity with larger economic centers in neighboring Virginia and Maryland.

PERFORMANCE BY COUNTY Although not strictly the region’s economic center, Mineral County accounts for the largest share of jobs in the region, serving as the location for a major federal aerospace and defense contractor (Orbital ATK), WVU’s Potomac State College and even a modest high-tech presence with IBM. Mineral County has been remarkably stable for the past decade, registering no measurable gains or losses in employment since 2008.

Hardy County is the region’s second-largest in terms of jobs, thanks to the presence of Pilgrim’s Pride’s poultry processing plant and American Woodmark’s door and cabinetry fabrication facility, both of which are located in Moorefield. The collapse in single-family home construction across much of the US between 2008 and 2012 caused the county to experience a nearly 18 percent loss in jobs over that time period, with most of those employment losses occurring within the wood products and furniture manufacturing industry. At the same time, this industry has bolstered the county’s performance in response to single-family homebuilding and renovation activity increasing in a fairly consistent manner in recent years.

Hampshire and Grant counties contain roughly the same number of jobs, though Hampshire County has seen little change in payrolls over the past decade. However, Hampshire contains a large number of residents who commute to the city of Winchester or Frederick County in neighboring Virginia. By comparison, Grant County has seen its overall level of employment trend lower for many years. Pendleton County is the region’s smallest economy, though the county did also experience a negative shock in 2015 associated with the closure of Sugar Grove Naval Station, which served as a Naval Information Operations support center. Since its sale in late-2017, plans have been announced to re-purpose the facility for other uses that could help to offset the jobs lost by the base’s closure.

\textbf{Figure 1: Total Employment}

\textbf{Figure 2: Total Employment by County (2017)}

\textsuperscript{1} For the purposes of this report, The Potomac Highlands Region is comprised of five counties: Grant, Hampshire, Hardy, Mineral, and Pendleton.
However, similar to Hampshire County, Pendleton depends to a great degree upon residents commuting to employers located across the border in communities in Virginia (e.g. Harrisonburg).

**MANUFACTURING** Despite its relatively small size, the Potomac Highlands plays a significant role in the overall state’s manufacturing sector. Indeed, while manufacturing accounts for just 7 percent or so of total jobs statewide, that share is more than three times as large in the five-county region. Whereas manufacturing activity in many other regions in the state is concentrated within chemicals and/or metals, the Potomac Highlands contains a sizable presence of defense aerospace production, wood products and furniture fabrication as well as poultry processing.

The aerospace manufacturing sector provides over 2,000 jobs to the state, with two-thirds of those found in Orbital ATK’s Rocket Center operations. Additionally, the wood products and furniture manufacturing industry provides more than 6,000 jobs in West Virginia many of which are centralized in American Woodmark Corporations Moorefield facility, along with a host of sawmills and other mid-stream wood products operations. Even though this industry did suffer heavily in the region due to the fallout of the national housing market’s collapse, it has registered gains in payrolls over the past several years. Agriculture has a prominence in the region with Hardy County’s Pilgrim’s Pride poultry plant and a variety of farms.

**AGRICULTURE** One important portion of the Potomac Highlands economy that is not fully represented in the figures presented above is its farm sector. Some agricultural workers are captured within the natural resources and mining sector, but the majority of the jobs reflected in this category come from Grant County’s coal mining industry as well as logging operations. Data from the US Bureau of Economic Analysis show that more than 2,700 people were employed at farms in the Potomac Highlands region during 2016, nearly 8 percent of total employment. Overall, this represents a share nearly three times the statewide share of jobs and nearly five times over the national share. Among the counties in the region, Pendleton County contained the highest share of farm employment (19 percent) while Mineral County contained the lowest share (4 percent). Sales of crops and livestock from farms in the region totaled $351 million, or nearly half of the statewide total.

The 2012 Census of Agriculture indicated that the five-county region contained over 2,700 farm operations. Broilers and layers represent the single-largest source of farm activity in the area, particularly in Hardy County, which accounted for approximately 40 percent of all broilers sold and a similar share of layer inventory – most of which is directly contracted to Pilgrim’s Pride or other major US poultry products companies.

**SERVICE SECTORS** Even with the prevalence of manufacturing, and to a lesser extent agriculture, the Potomac Highlands Region garners the majority of its jobs and wages from service-providing sectors such as the government, trade, transportation, and utilities, as well as private-sector healthcare providers. After contributing to a large share of regional job growth between the early-1990s and late-2000s, the Potomac Highlands’ healthcare sector has registered only slight increases in payrolls since 2010. This reflects some national trends toward consolidation at larger hospitals, which has helped to offset the growth in demand caused by an aging population and enhanced health insurance coverage.

Trade, transportation, and utilities, accounts for approximately 17 percent of the five-county region’s payrolls. Overall employment has tracked lower in recent years, largely as a result of losses within the transportation...
and warehousing and wholesale trade sectors, which have been affected in part by more firms centralizing warehousing operations along the I-70/I-81 corridors. Retail activity in the area has weathered the downward pressures the sector has experienced in recent years, with moderate gains in employment since early 2014.

The area’s public sector has seen the number of jobs fall steadily since late-2012, though some of this decline may be overstated due to changes in data reporting requirements for local governments throughout West Virginia. Sugar Grove Naval Station’s closure in 2015 represented an appreciable loss in the public sector employment base for the region and also marked the disappearance of one of Pendleton County’s largest employers.

**UNEMPLOYMENT** The Potomac Highlands Regional unemployment rate trends closely with the statewide average. Since 2010, the unemployment rate has fallen steadily from its peak of 9.8 percent to 4.7 percent in mid-2017. The recent increase in the regional unemployment rate is due to a rising labor force participation rate as more people enter the job market. The unemployment rate varies by county within the Potomac Highlands Region. While Pendleton and Hampshire counties have unemployment rates in the upper 3.0-percent range, Hardy County’s unemployment rate averaged 5.0 percent in 2017. Mineral and Grant counties saw their jobless rates lie in the mid-5.0 percent range during 2017.

**LABOR FORCE** Even with the volatility observed for payrolls locally, the Potomac Highlands Region has experienced gains in its labor force over the past couple of years thanks to broader improvements in economic growth in adjacent states. Indeed, since 2014 the five-county area has seen its labor force increase by 2,500, and all five counties posted some measurable gains in labor force during this time period.

Workforce participation in the Potomac Highlands Region falls slightly below that of the state as a whole, but significant differences exist between the five counties. Pendleton County has the area’s lowest labor force participation rate, at just over 47 percent, while more than 57 percent of Hardy County’s population actively participates in the workforce.

Although only Grant and Hardy have participation rates above the statewide average, age distribution plays a more significant role in explaining the region’s below-average rate of labor force participation. Specifically, with nearly 22 percent of its residents aged 65 and older, the Potomac Highlands has a smaller pool of labor available from which it can draw compared to the state as a whole, which is already appreciably older than the US average. Labor force participation rates among the population aged 25-54, which is typically viewed as the prime working years, are several points higher than the statewide average and only a few percentage points lower than the overall national figure.
INCOME Per capita personal income (not adjusted for inflation) increased 1.2% in the Potomac Highlands during 2017, with the calendar year average reaching $33,700. The level of per capita income for the region as a whole lags that of the nation and the rest of West Virginia, but the rate of income growth in the Potomac Highlands has fallen in between the state and national average since 2012.

For the individual counties in the region, per capita incomes during 2017 fell within a fairly broad range, from $29,000 in Hardy County up to $37,000 in Mineral County—just shy of the overall statewide figure. While wage rates tend to be lower in the region, income levels in the area are buoyed by the presence of high-tech related jobs at Orbital ATK and IBM. Furthermore, the region’s wealth of manufacturing activity helps to bolster incomes.

In terms of the overall composition of income for residents in the Potomac Highlands, a sizable share of income can be attributed to federal transfer payments. While safety net programs such as unemployment insurance and welfare benefits account for a portion of these transfers, the older-than-normal age distribution explains the five-county region’s above-average share of income originating federal transfers. Aside from transfer payments, the Potomac Highlands also receives a disproportionate share of earned income from residence adjustment, as counties such as Hampshire and Pendleton import income from their large contingents of workers who commute to Harrisonburg and Winchester in Virginia.

POPULATION The Potomac Highlands Region has lost nearly 2,300 residents since 2010, though the five-county region did experience a slight gain in population during 2017. This stands in contrast to a loss of nearly 13,000 for the balance of West Virginia. Similar to many other regions in West Virginia, many of the underlying demographic trends for the Potomac Highlands Region have not been supportive to population growth in recent years. Indeed, the region’s larger-than-normal
share of elderly residents and high incidences of negative health outcomes have caused deaths to outnumber births by a widening margin. Moreover, the opioid drug abuse epidemic has also lifted death rates both statewide and in the region, particularly among younger cohorts.

Finally, the five-county area lags both the state and nation by a significant margin in measures of educational attainment. Although the region’s large share of elderly residents helps to explain the educational attainment deficit, the Potomac Highlands Region has a much lower share of residents holding a college degree even among younger age groups. This demographic characteristic could pose a significant obstacle to the region’s economic growth potential over the longer term.

Figure 9: Summary Population Profiles

<table>
<thead>
<tr>
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<th>Potomac Highlands</th>
<th>West Virginia</th>
<th>United States</th>
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<tbody>
<tr>
<td>Total Population (2016)</td>
<td>83,384</td>
<td>1,831,102</td>
<td>323,127,513</td>
</tr>
<tr>
<td>% Population Under 18 (2016)</td>
<td>19.7%</td>
<td>20.4%</td>
<td>22.8%</td>
</tr>
<tr>
<td>% Population 65 Years + (2016)</td>
<td>21.7%</td>
<td>18.7%</td>
<td>15.2%</td>
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<td>Population with Less than High School Diploma (2016, 25 yrs. +)</td>
<td>16.8%</td>
<td>14.0%</td>
<td>12.8%</td>
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<tr>
<td>Population with High School Diploma, No College (2016, 25 yrs. +)</td>
<td>48.4%</td>
<td>40.7%</td>
<td>27.6%</td>
</tr>
<tr>
<td>Population with Some College (2015, 26 yrs. +)</td>
<td>21.8%</td>
<td>25.7%</td>
<td>28.9%</td>
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<tr>
<td>Population with Bachelor's Degree or Higher (2016, 25 yrs.+</td>
<td>12.9%</td>
<td>19.6%</td>
<td>30.6%</td>
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<td>Median Age (2016)</td>
<td>45.8</td>
<td>42.2</td>
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<tr>
<td>Mean Household Income (2016)</td>
<td>$47,519</td>
<td>$56,568</td>
<td>$78,378</td>
</tr>
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<td>Average Household Size (2016)</td>
<td>2.46</td>
<td>2.49</td>
<td>2.73</td>
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Source: US Census Bureau
Economic Outlook

Expectations for the West Virginia and US economy during the 2018-2023 forecast horizon will have a significant impact on the performance of the Potomac Highlands going forward. The forecast calls for the region to realize moderate job growth during the five-year outlook period.

Overall, we anticipate total employment will increase at an average annual rate of 0.4 percent through 2023. Regional payroll growth is expected to increase the fastest over the first half of the outlook period, averaging roughly 0.8 percent annually over the 2018 to 2020 time period. Increasing construction activity and developments in professional and business services are expected to be main drivers of this growth. Regional growth is projected to slow over the remainder of the forecast period, partly as a result of the area’s less-favorable underlying demographic characteristics. Ultimately, given the rate of growth anticipated during the outlook period, the region will likely finish the forecast horizon below the total level of employment seen as recently as 2012.

GOOD-PRODUCING SECTORS Manufacturing and construction are expected to increase in the region, in part due to the continued highway development of Corridor H and the new residents who can bring new demand into area. This long-lived highway development, along with other projects that have been identified by West Virginia for funding via $5.7 million from the Roads to Prosperity Amendment, should continue to improve access to a comparatively underdeveloped region and potentially even create demand for second homes as residents in the Greater Washington DC area look for recreational activities. The Potomac Highlands region currently has many residents who commute out of state for employment and improved transportation infrastructure could allow more residents to settle in the area while they work in areas such as Harrisonburg or Winchester, Virginia, but would prefer to live in less densely-populated areas such as the Potomac Highlands.

OTHER SECTORS The professional and business service sector is expected to grow at a strong level during the first two years of the forecast before leveling off during the remaining years. This reflects a recovering confidence in the economy and a growing demand for firms that provide administrative support for local businesses. The professional and business service sector employment is expected to grow at a 1.5 percent annual rate over the next five years.

Employment in the education and health services sector is estimated to grow over the next five years at an annual rate of 0.7 percent. Though increasing costs of healthcare create risk for this sector, the region’s aging population should support growth in the health care industries.

2 All forecast estimates presented herein are derived from the West Virginia University Bureau of Business & Economic Research Econometric Model unless otherwise noted.
The leisure and hospitality sector accounts for seven percent of the total employment in the Potomac Highlands Region. Unlike other regions within the state, the Potomac Highlands region provides year-round tourist activities from white-water rafting at the North Branch Dam Release to more mild weather activities such as fishing, hunting, and mountain biking. Since 2007, the region’s leisure and hospitality sector experienced annual reductions in employment of 1.4 percent. However, due to growing incomes in the surrounding regions, the sector employment is expected to grow at an annual rate of 0.6 percent over the next five years.

Public sector employment for the Potomac Highlands region is forecasted to grow at an annual rate of 0.3 percent between 2018 and 2023. This differs from the annual loss of employment that was seen over the last decade in the sector.

Growth in real per capita income should lead to an increase in consumer demand for retail and utilities. This will reverse the recent trend of annual losses of 0.8 percent in regional trade, transportation, and utilities sector employment in the Potomac Highlands. The sector is expected to grow at an annual rate of 0.2 percent over the next five years.

**UNEMPLOYMENT OUTLOOK** Unanticipated changes in the region’s labor force participation rate and revisions to historical data could cause the unemployment rate for the Potomac Highlands region to differ from both its forecasted rate and recent trajectory. With that said, the regional unemployment rate is expected to remain close to the current level over the next few years, as previously discouraged workers rejoin the labor force as market conditions improve putting an upward pressure on the unemployment rate. Overall, the unemployment rate for the Potomac Highlands region is estimated to stand at 4.4 percent by 2023. This will put the region at unemployment levels below that of the state, but above the nationwide figure. However, we expect this stability in measured unemployment to be accompanied by a slight increase in labor force participation, indicating an improving economy overall.

**INCOME** Inflation-adjusted per capita income in the Potomac Highlands is projected to increase at an average annual rate of around 1.6 percent through 2023, which will lag state and national averages. The fastest driver of income growth will be transfer payments, such as Social Security retirement benefits. In addition, however, another driver of income growth is increasing reliance on income from those who commute to work in neighboring states.
**POPULATION** In light of the state’s recent demographic trends, population in the Potomac Highlands Region is expected to stabilization in the outlook period as the forecast calls for the region’s population to settle at around 84 thousand residents. However, despite a stabilizing population, the region will continue to face many of the same demographic challenges that affect many of West Virginia’s other economic regions, such as poor education and health outcomes.

**Figure 13: Population Forecast**

Source: US Census Bureau WVU/UBER Econometric Model
Note: Shaded region represents the forecast period