WEST VIRGINIA ECONOMIC OUTLOOK
2013

• NATIONAL AND GLOBAL FORECASTS
• WEST VIRGINIA PROFILES AND FORECASTS
• ENERGY
• HEALTHCARE
• WHOLESALE AND RETAIL TRADE
• LEISURE AND HOSPITALITY
• CONSTRUCTION

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OUTLOOK

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**EXECUTIVE SUMMARY**

*By Eric Bowen*

West Virginia continues to pull out of the Great Recession. Strong economic and job growth in 2011 is expected to continue to improve over the next five years. Employment is forecast to reach pre-recession levels by 2013, and the state’s Gross State Product (GSP) is forecast to continue to rise at a pace higher than the previous five years. Table 1 shows a summary of the West Virginia forecast.

---

**EMPLOYMENT**

The West Virginia economy added 12,600 jobs between 2010 and 2011, an increase of 1.7 percent, and by January came within 400 jobs of matching the state’s pre-recession levels. These gains were faster than the national average, and represent a strong showing for the state. The job gains led to the unemployment rate improving from 8.4 percent to 8.0 percent by the end of last year and continuing to fall through the first quarter of 2012.

Weakness in the Energy sector could potentially derail some of these gains, however, at least in the short term. A mild winter sent coal stockpiles at power plants higher, and mines cut back production to compensate. Natural gas took a larger share of power generation this year, as power plants switched from coal to gas when gas prices fell. As a result, mining employment fell substantially in the second and third quarters of 2012 and the ripple effects of those job losses will play out through 2013. GSP in the Mining sector is projected to fall through 2017.

Over the longer term, the losses in the Energy sector are expected to be outweighed by gains in other parts of the economy. The Construction sector is expected to recover from the recession, led by increasing demand for residential housing. Healthcare also is expected to have large gains in both GSP and employment as demand for health services rises with the state’s aging population. The state’s Leisure and Hospitality sector should see gains related to the Summit Bechtel Family National Scout Reserve, a 10,600-acre Boy Scout camp located in Fayette and Raleigh counties. Lastly, the Wholesale and Retail Trade sectors are expected to be positively affected by a new Macy’s distribution center in Martinsburg, as well as a new Cabela’s store in Charleston. While GSP in the sector has been on the rise, employment has lagged, and will continue to grow slowly over the forecast period.

Employment slowed in March and then took a downturn. This downturn was caused by the Resources and Mining sector. The sector started to take a hit in February as demand for coal fell due to a mild winter that sent coal stockpiles at power plants higher. Coal production decreased and mining companies began to shed workers. Employment in the sector fell by 5,900 people between January and August, with most of those losses coming in the second and third quarters. Employment continued to rise in other major sectors, however, which softened the losses in mining. Construction added 2,100 jobs, and the Education and Healthcare sector added more than 2,300 jobs over the same time period.

Overall, employment is forecast to rise by an average of 1.2 percent per year between 2012 and 2017, sending the unemployment rate down to 5.7 percent by the end of the forecast period. Job losses in the Energy sector are forecast to continue through the beginning of 2013 and then level off. All told, employment in the sector is expected to end down 1.5 percent on an average annual basis through 2017. Gains in other sectors, however, are predicted to make up the difference. Employment in the Professional and Business Services sector is predicted to rise by 15,000 jobs over the next five years. Construction jobs are forecast to rise by more than 5.1 percent per year, as residential housing starts to rebound. Healthcare sector employment growth is expected to continue to be strong as the state’s older population increases over the forecast period. Employment in the sector is projected to rise by an average annual rate of 2.4 percent by 2017.

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**TABLE 1: 2013 WV Forecast Summary**

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<td>Real Gross State Product (millions, $2005)</td>
<td>55,765.0</td>
<td>57,681.6</td>
<td>64,285.5</td>
<td>1.2</td>
<td>2.2</td>
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<td>Employment¹ (thousands)</td>
<td>753.0</td>
<td>759.9</td>
<td>808.1</td>
<td>-0.1</td>
<td>1.2</td>
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<tr>
<td>Unemployment Rate</td>
<td>8.0</td>
<td>7.0</td>
<td>5.6</td>
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<td>Real Per Capita Personal Income ($2005)</td>
<td>29,450</td>
<td>29,790</td>
<td>33,280</td>
<td>1.3</td>
<td>2.2</td>
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<tr>
<td>Population (thousands)</td>
<td>1,855.6</td>
<td>1,857.8</td>
<td>1,882.1</td>
<td>0.3</td>
<td>0.3</td>
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Source: IHS Global Insight

¹ Employment in this document refers to Non-Farm employment unless otherwise noted.
and Hospitality sector will see short term employment gains related to the Summit Bechtel Family National Scout Reserve. Over the five-year forecast window, employment in this sector is expected to fall slightly, ending down a fraction of a percent annually through 2017.

**GROSS STATE PRODUCT**

West Virginia’s Gross State Product (GSP), which is a measure of the entire economic activity in the state, fell during the recession, but has been on an upswing the last three years. In 2011, West Virginia’s inflation-adjusted (real) GSP was $66.8 billion, which was up 4.5 percent from the year before. West Virginia’s economy has also grown at a higher rate than the nation since the economic downturn.

Real GSP\(^2\) is forecast to continue to grow over the next five years. From 2012 to 2017, the state economy is expected to grow by 2.2 percent annually, compared with 2.7 percent average annual growth for the national economy. The Trade, Transportation and Utilities sector is projected to have the largest dollar gain of $1.5 billion, while Professional and Business Services will have the largest average annual percentage gain of 5.8 percent. Though the Natural Resources and Mining sector has had phenomenal growth over the last five years, it is forecast to fall an average of 1.4 percent per year from 2012 to 2017.

**INCOME**

West Virginia’s per capita personal income (PCPI) continues to be among the lowest in the country, but it has been increasing recently. The state’s income is forecast to grow faster than inflation, giving state residents a boost in spending power. West Virginia’s PCPI was $33,513 in 2011, which is 80 percent of the national average. The state’s PCPI fell slightly during the recession but has grown 4.6 percent since 2010.

The forecast calls for PCPI to continue growing over the forecast period, rising an average of 2.2 percent annually from 2012 to 2017. Inflation-adjusted disposable income is also expected to rise during the forecast period, increasing 2.3 percent on an average annual basis. This should give a boost to the state’s consumer spending. Another measure of income, average annual wage, is forecast to climb over the forecast period but at a decreasing rate. Workers can expect to see annual gains of 2.7 percent in average annual wages between 2012 and 2017. Wage growth will be led by the Professional and Business Services sector, with Financial Services coming a close second. Faster-than-inflation income growth in the state is expected to give West Virginia residents a boost in spending power, sending inflation-adjusted retail sales higher.

**POPULATION**

Since 2006, the state’s population has grown an average of 0.3 percent annually. This increase is largely due to more people moving into the state, rather than natural growth. Net migration is forecast to accelerate from a little over 2,300 people in 2011 to more than 6,000 by 2017. This influx of new residents is expected to cause the state’s population to continue to grow an average of 0.3 percent every year over the next five years.

West Virginia continues to get older. The median age of West Virginia is 41.5, which is four years above the nation’s median age. West Virginia’s high median age reflects an above-average proportion of population over 65. In the United States, approximately 13.3 percent of the population is over 65, while in West Virginia the age group accounts for over 16 percent. In West Virginia, the 65-and-older age cohort is expected to grow faster than younger age groups and is predicted to be near 19 percent of the population in the state by 2017, about four percentage points higher than what is expected for the nation.

\(^2\) Real GSP is in 2005 dollars.
The world economy continues to stay the course, recovering from the 2008-2009 world recession. Much of the rebound was the result of the extensive fiscal stimulus and expansionary monetary policies provided by many governments in both developed and developing economies. The recovery, however, has been slower than expected as some problems from the recession continue to linger or have yet to be fully resolved. The housing market has rebounded but slowly, bank deleveraging in most developed economies continues, and the unemployment rate in many developed economies remains high. As new setbacks emerge and the sovereign debt crisis in the European Union prolongs, the pace of the global recovery is decelerating.

CURRENT TRENDS
After a 2.4 percent drop in real Gross Domestic Product (GDP) in 2009, the world economy rebounded with a decent 4.1 percent growth in 2010. Yet, this was still below what economists expected, which signaled that global recovery could be slow. Indeed, growth fell considerably to 2.7 percent in 2011.

The pace of the global recovery differs among regions. In general, the developed economies seem to bear the harsher consequences of the recession. Developed economies rebounded from the recession with a modest 2.7 percent growth in 2010, but as new setbacks emerged, growth dropped to an anemic 1.4 percent in 2011. In contrast, despite slowing, developing economies grew strongly at 7.5 percent in 2010 and 6.0 percent in 2011 (Figure 1). 4

The trajectory of the US and European Union (EU) economies explains much of what happens in the developed economies as a whole. They are two of the largest economies in the world. Their 2010 GDPs combined accounted for 42.3 percent of the world’s GDP. 5 In 2010 their merchandise exports combined accounted for 42.2 percent of the world’s exports, and their merchandise imports combined accounted for 47.6 percent of the world’s imports. Moreover, they have strong economic ties with each other. In 2010, 18.7 percent of US merchandise exports went to the European Union, and 16.6 percent of US merchandise imports originated in the EU. 6 In sum, what happens in one of these two economies will significantly affect the other, which in turn affects the world economy as a whole.

The US economy rebounded from the recession with 2.4 percent growth in real GDP in 2010. The recovery, however, slowed considerably in the first half of 2011, which was partly driven by new setbacks on the supply side due to oil prices rising at the end of 2010 and the tsunami in Japan. These, combined with lingering problems such as a slow housing market recovery, persistently high unemployment rate, and weak consumer and business confidence, have held back job creation and the overall recovery. United States GDP growth slowed to 1.8 percent in 2011.

The EU economy rebounded from the recession with modest growth of 2.7 percent in 2010. However, a major setback emerged in the EU in the form of the sovereign debt crisis that

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3 A significant portion of this section represents the author’s review, analysis, interpretation, and summary of three major sets of publications including United Nations’ 2012 and mid-2012 World Economic Situation and Prospects reports, IMF’s April and July 2012 World Economic Outlook reports, and IHS Global Insight’s September 2012 US Economic Outlook report.

4 The terms “developed and developing economies” are used in the United Nation’s World Economic Situation and Prospect reports. Developed economies consist of countries in North America and European Union, United Kingdom, Japan, Australia, and New Zealand. Developing economies consist of countries in East, South, and Western Asia, countries in Latin America and Caribbean, and countries in North and Sub-Saharan Africa. While similar, these two groups are not exactly the same as the groups named “advanced economies” and “emerging and developing economies,” mentioned in the IMF’s World Economic Outlook.

5 World Economic Outlook Database, IMF, April 2012.

first erupted in Greece and subsequently spread to Ireland, Portugal, Italy, and then Spain. The crisis sent the consumer and business confidence plunging and tightened the financial sector. This slowed consumption and investment spending. Real GDP growth in the EU dropped to 1.3 percent in 2011. With the sovereign debt crisis still looming, growth is expected to slow further in the near future.

Unlike the developed economies, developing economies recovered faster from the recession and so far have become the engine of growth for the global recovery. After slowing to a 2.4 percent growth in 2009, the developing economies rebounded strongly with 7.5 percent growth in 2010. The slowing economic recovery in the developed economies has impacted the developing economies through trade and financial channels. In 2011 the developing economies grew at a slower but still solid rate of 5.9 percent.

The experience of the two largest developing world economies, China and India, can tell much about the overall economic fortunes of the developing world as a whole. Together with the next two largest developing economies, Brazil and Russia, they make up what is known as the BRIC7 countries. Their 2010 GDPs combined accounted for 17.7 percent of the world’s GDP.8

The recession affected BRIC countries differently. China and India have been able to weather the recession better. Strong exports, resilient aggregate demand, and loose ties with the world’s financial sector helped them maintain strong economic growth. In 2009 when the world’s real GDP dropped 2.4 percent, China and India grew at 9.2 percent and 7.0 percent, respectively. However, these gains are below these countries’ five-year average annual growth before the crisis of around 11.5 percent in China and 8.5 percent in India. Growth in the two countries rebounded in 2010 to 10.4 for China and 8.9 percent for India. However, in 2011, growth slowed again to 9.2 percent and 7.1 percent, respectively, due in part to the decreasing external demand from the developed economies.

Of these four developing countries, China has the greatest impact on the US economy. China has strong economic ties with the world economy. China is among the leading exporters and importers in the world. China’s 2010 exports accounted for 10.4 percent of the world’s exports, and its 2010 imports accounted for 9.1 percent of the world’s imports. What happens in China significantly impacts the world economy and thus the US economy.

The strong direct economic ties between China and the United States are expected to get stronger. In 2010, the largest portion of US merchandise imports originated from China, which surpassed the EU. The share of US merchandise imports from China increased from 15.0 percent in 2005 to 19.5 percent in 2010, while those from EU dropped from 18.5 percent to 16.6 percent, respectively. During the same period, the share of US merchandise exports to China, while not as big as US exports to the EU, increased from 4.6 percent to 7.2 percent (Table 2).

Finally, what happens with the global and US economies will affect what happens with the West Virginia economy. The US economic slowdown weighs on the state economy. The state, however, was able to dodge some of the effect of the national slowdown through its export growth. After dropping 14.5 percent in 2009, West Virginia exports increased by 33.6 percent in 2010 and further by 40.1 percent in 2011. More specifically, between 2009 and 2011, coal exports, which accounted for about 50 percent of the state’s exports, increased by 151.5 percent.9

How well the state’s exports continue to grow will depend on the economic growth of the state’s export destination countries. Table 3 shows the state’s ten largest export destinations, which include Canada, Brazil, the Netherlands, India, Italy, Ukraine, Japan, China, South Korea, and United Kingdom. The state’s 2011 exports to these countries accounted for 65.7 percent of the state’s total exports. Between 2009 and 2011, the value of the exports increased by 107.5 percent.

**FORECAST**10

As the global economy is approaching the end of 2012, three recent trends are expected to continue: prolonged sovereign debt crisis in the EU, fading fiscal stimulus in both developed and developing economies, and continued bank deleveraging. For that reason, the global recovery, while continuing, is expected to remain sluggish. The forecast calls for global GDP growth to slow to 2.5 percent in 2012. The forecast assumes that the EU sovereign debt crisis will gradually be resolved and that the damaging impact of the crisis can be contained. The forecast also assumes that contraction in fiscal stimulus will be done such that it does not generate a downward demand shock, which could disrupt the recovery. Under these assumptions the forecast calls for the global economy to gradually bounce back, growing 3.1 percent in 2013 (Table 4, page 6).

Developed economies are expected to remain in a state of slow growth, with GDP growing 1.3 percent in 2012, before rebounding with 1.9 percent growth in 2013. The United States is forecast to maintain a modest growth of 2.2 percent in 2012. With the US fiscal stimulus expected to gradually decline, while unemployment remains high and the world economy slows, US GDP growth is expected to slow to 1.8 percent in 2013.

The EU will face a tougher challenge as it addresses the sovereign debt crisis. EU GDP growth is expected to plummet to 0.7 percent in 2012. Assuming that the crisis will gradually be resolved, growth is expected to slowly rebound at 1.7 percent rate in 2013.

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7 BRIC represents developing countries that are on the verge of becoming newly developed countries.
8 World Economic Outlook Database, IMF, April 2012
9 Foreign Trade Statistics, US Census Bureau
10 Unless otherwise stated, this forecast section is based on the World Economic Situation and Prospects 2012 and mid-2012, the United Nations.
### TABLE 2: Merchandise Trade of the United States - 10 Largest Origin and Destination Countries

| Destination | EXPORTS | | | IMPORTS | | |
|-------------|---------|---------|---------|---------|---------|
|             | Value (million) | Share (%) | | Value (million) | Share (%) | |
|             | 2005 | 2010 | | 2005 | 2010 | |
| Canada      | 248,411.1 | 23.4 | 19.4 | China | 383,107.1 | 15.0 | 19.5 |
| European Union | 239,579.9 | 20.7 | 18.7 | European Union | 327,048.8 | 18.5 | 16.6 |
| Mexico      | 163,448.5 | 13.3 | 12.8 | Canada | 279,656.9 | 16.8 | 14.2 |
| China       | 91,864.2 | 4.6 | 7.2 | Mexico | 232,332.8 | 10.0 | 11.8 |
| Japan       | 60,485.1 | 6.1 | 4.7 | Japan | 123,682.9 | 8.2 | 6.3 |
| South Korea | 38,807.2 | 3.1 | 3.0 | South Korea | 50,686.8 | 2.6 | 2.6 |
| Brazil      | 35,424.3 | 1.7 | 2.8 | Taiwan | 37,289.4 | 2.1 | 1.9 |
| Singapore   | 29,122.3 | 2.3 | 2.3 | Venezuela | 33,427.1 | 2.0 | 1.7 |
| Hong Kong, China | 26,540.5 | 1.8 | 2.1 | Saudi Arabia | 32,695.4 | 1.7 | 1.7 |
| Taiwan      | 26,002.8 | 2.4 | 2.0 | Nigeria | 31,400.4 | 1.4 | 1.6 |

Source: International Trade Statistics 2011, World Trade Organization

### TABLE 3: West Virginia’s Ten Largest Export Destination Countries

<table>
<thead>
<tr>
<th>Export Destination</th>
<th>2009</th>
<th>2010</th>
<th>2011</th>
</tr>
</thead>
<tbody>
<tr>
<td></td>
<td>Value ($million)</td>
<td>Share (%)</td>
<td>Value ($million)</td>
</tr>
<tr>
<td>Total WV Exports</td>
<td>4826</td>
<td>100.0%</td>
<td>6449</td>
</tr>
<tr>
<td>Total, Top 10 Countries</td>
<td>3033</td>
<td>62.8%</td>
<td>4249</td>
</tr>
<tr>
<td>Canada</td>
<td>1021</td>
<td>21.2%</td>
<td>1474</td>
</tr>
<tr>
<td>Brazil</td>
<td>407</td>
<td>8.4%</td>
<td>400</td>
</tr>
<tr>
<td>Netherlands</td>
<td>364</td>
<td>7.5%</td>
<td>362</td>
</tr>
<tr>
<td>India</td>
<td>208</td>
<td>4.3%</td>
<td>359</td>
</tr>
<tr>
<td>Italy</td>
<td>166</td>
<td>3.4%</td>
<td>255</td>
</tr>
<tr>
<td>Ukraine</td>
<td>50</td>
<td>1.0%</td>
<td>245</td>
</tr>
<tr>
<td>Japan</td>
<td>218</td>
<td>4.5%</td>
<td>408</td>
</tr>
<tr>
<td>China</td>
<td>296</td>
<td>6.1%</td>
<td>360</td>
</tr>
<tr>
<td>Korea, South</td>
<td>76</td>
<td>1.6%</td>
<td>109</td>
</tr>
<tr>
<td>United Kingdom</td>
<td>227</td>
<td>4.7%</td>
<td>277</td>
</tr>
</tbody>
</table>

Source: Foreign Trade Statistics, US Census Bureau
Developing economies will see their GDP growth slow to 5.3 percent in 2012 with a slight uptick to 5.8 percent in 2013. The effect of this next slowing in the world economy will weigh considerably on China, dragging its GDP growth down to a modest rate of 3.4 percent in 2012. China is expected to rebound with 6.0 percent growth in 2013. The Indian economy is expected to fare better than China. While slowing, India is expected to grow at 8.3 percent and 8.5 percent in 2012 and 2013, respectively. Brazil and Russia are expected to rebound slowly with 3.8 percent and 4.0 percent growth, respectively in 2013.

Similarly, the Indian economy is expected to grow at the slower rates of 6.7 percent in 2012 and 7.2 percent in 2013. Brazil will start its gradual rebound in 2012 with 3.3 percent growth, and accelerate further to 4.5 percent growth in 2013. Russia is expected to maintain its GDP growth rates at 4.4 percent through 2013.

The effects of the next slowdown will vary among the rest of West Virginia’s top ten export destination countries. Italy is expected to be hit the hardest, with a GDP drop of 0.3 percent in 2012. Ukraine, on the other hand, while slowing, will maintain decent GDP growth of 3.8 percent in 2012. The other European countries will see GDP growth slow to around 1.0 percent in 2012, while Canada and South Korea will see their GDP growth slow to 1.7 percent and 3.6 percent, respectively. The forecast calls for real GDP growth in these countries to rebound nicely in 2013.

The global unemployment rate is expected to decline slightly, but will remain high. In the developed economies, the unemployment rate is expected to decline to 8.5 percent in 2012 and 8.3 percent in 2013, still well above the pre-crisis rate of 5.8 percent in 2007 (Table 5). The unemployment rates will stay very high in most EU countries facing the sovereign debt crisis. Even in 2013 when the world economy is expected to start getting better, unemployment rates in Spain, Greece, Ireland, Portugal, and Italy will be 19.9 percent, 17.6 percent, 14.9 percent, 14.0 percent, and 8.3 percent, respectively. The average unemployment rate for the EU overall will remain high at 9.3 percent, only slightly below the 9.6 percent rate in 2011. The unemployment rate in the United States is expected to gradually decline to 8.2 percent in 2012 and further to 8.0 percent in 2013. While declining, the rates are still well above the 4.6 rate in 2007 before the crisis. A major concern is that the current decline in unemployment rates is partly a result of declining labor force participation rates (LFPR). In the US, the LFPR declined from 64.6 percent in 2007 to 62.2 percent in 2011, and is projected to be 62.1 percent in 2013. This indicates that more and more unemployed have decided to quit looking for work, suggesting that the true unemployment rate is actually higher than the official rate.

The world’s demand for oil has increased partly due to continued growth in the developing countries such as China and India. The supply, while increasing, was not able to keep up with the increasing demand, causing oil prices to increase considerably in 2011 to $104.0 per barrel (Figure 2, page 8). Oil price declined in the first half of 2012, which partly reflects the world’s slowing demand. The price, however, rose back up in the second half of 2012, due in part to supply disruption and increased tension in the Middle East. Oil price will continue to fluctuate, but is forecast to remain high at $105.0 or higher per barrel through 2013. High oil price will weigh on the global recovery.

Consumer price inflation increased in 2011 partly driven by an increase in oil and food prices, with the latter driven by a drop in food production. Inflation, however, is expected to decline as aggregate demand decreases and upward pressure on wages remain weak due to persistently high unemployment. Figure 3 (page 8) shows that different economies are expected to experience similar fluctuations of inflation. In the United States, inflation increased considerably to 3.0 percent in 2011, but is expected to decline to 2.1 percent in 2012 and 1.9 percent in 2013. In the EU, after rising to 2.9 percent in 2011, inflation should slide back to 2.0 percent in 2012 and 1.8 percent in 2013. China is forecast to have somewhat higher inflation, but with similar fluctuations. Nonetheless, the world inflation is considered mild in 2012 and 2013. These mild inflation rates should leave more room for monetary authorities to continue applying expansionary monetary policies, which should help the world economy stay on course with its recovery.

---

11 IHS Global Insight, US Economic Outlook data, September 2012
### TABLE 4: Real GDP Growth for the World and Selected Economies (2007-2013)

<table>
<thead>
<tr>
<th></th>
<th>2007</th>
<th>2008</th>
<th>2009</th>
<th>2010</th>
<th>2011</th>
<th>2012</th>
<th>2013</th>
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<td>1.9</td>
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<td>4.1</td>
<td>2.7</td>
<td>2.5</td>
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<td>-4.0</td>
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<td>1.3</td>
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<td>5.3</td>
<td>5.8</td>
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<td><strong>BRIC</strong></td>
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<tr>
<td>India</td>
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<td>7.5</td>
<td>7.0</td>
<td>8.9</td>
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<td>6.7</td>
<td>7.2</td>
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<td>Russia</td>
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<td>4.3</td>
<td>4.4</td>
<td>4.4</td>
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<td><strong>Other West Virginia 10 Largest Export Destination Countries</strong></td>
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<td></td>
<td></td>
<td></td>
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<td></td>
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<tr>
<td>Canada</td>
<td>2.2</td>
<td>0.7</td>
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<td>4.3</td>
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<td>-4.4</td>
<td>1.8</td>
<td>0.9</td>
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### TABLE 5: Unemployment Rate, Selected Developed Economies (2007-2013)

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<th></th>
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<th>2009</th>
<th>2010</th>
<th>2011</th>
<th>2012</th>
<th>2013</th>
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<td>17.4</td>
<td>17.6</td>
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<td>13.7</td>
<td>14.3</td>
<td>14.5</td>
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<td>7.8</td>
<td>8.4</td>
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<td>8.5</td>
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<td>8.5</td>
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<td>12.0</td>
<td>12.5</td>
<td>13.4</td>
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</tr>
<tr>
<td>Spain</td>
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<td>11.4</td>
<td>18.0</td>
<td>20.1</td>
<td>20.8</td>
<td>20.5</td>
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<tr>
<td>Other selected EU countries</td>
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<td>3.4</td>
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<td>7.4</td>
<td>7.5</td>
<td>7.3</td>
<td>7.1</td>
</tr>
<tr>
<td>The Netherlands</td>
<td>3.6</td>
<td>3.1</td>
<td>3.7</td>
<td>4.5</td>
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<td>4.2</td>
<td>4.0</td>
</tr>
<tr>
<td>United Kingdom</td>
<td>5.3</td>
<td>5.6</td>
<td>7.6</td>
<td>7.8</td>
<td>8.0</td>
<td>8.5</td>
<td>8.1</td>
</tr>
</tbody>
</table>

FIGURE 2: World Oil Price (US $ per barrel) (2008-2013)

Source: World Economic Outlook, October 2012, IMF

FIGURE 3: Inflation Rates of Selected Economies (2007-2013)

UNITED STATES OUTLOOK

By Christiadi

The United States is expected to maintain modest real GDP growth of 2.2 percent in 2012, and, despite a brief slow-down in 2013, exceed 2.8 percent growth between 2014 and 2017 (Figure 4). This national outlook is based on IHS Global Insight's United States forecast, which focuses on several major economic indicators—consumer spending; the unemployment rate; the inflation rate; investment, and government spending; and exports. These factors play a large role in determining real GDP growth.

The largest component of US GDP is consumer spending. During the Great Recession, consumer spending fell to 1.9 percent growth in 2009, down from 2.9 percent in 2006, and has yet to fully recover. Several factors continue to suppress household spending, including high debt, low house prices, and a lack of confidence in the economy. Overall, consumer spending is forecast to slow from 2.5 percent growth in 2011 to 2.0 percent in 2012. Growth will accelerate gradually to 2.3 percent in 2013, and will remain at 2.5 percent between 2014 and 2017 (Figure 5), giving real GDP growth a boost.

Real GDP growth has also been stunted by sluggish job growth and a high unemployment rate. Tightened government budget has led to significant job losses in the government sector, undermining job creation in the private sector. The forecast calls for the unemployment rate to gradually decline from 8.2 percent in 2012 to 6.1 percent in 2017, which is still above pre-crisis rates of between 4 and 5 percent. A high unemployment rate puts negative pressure on consumer spending, so as the unemployment rate decreases, consumer spending can be expected to grow, as can real GDP.

Closely related to consumer spending is inflation—as prices rise, people are less willing to spend on goods and services. In 2011, inflation rose to 3.1 percent, up from 1.6 percent in 2010, due to a severe drought, which curtailed the supply of corn and soybeans and caused farm commodity prices to rise. Several factors will contribute to a decrease in the inflation rate over the forecast period. As the food market finds equilibrium between supply and demand, and both the world and US economies slow, aggregate demand will weaken, which will lower the inflation rate. Oil prices, which surged recently, partly due to tsunami in Japan and increased tension in the Middle East, are expected to decline following supply adjustments and weakened demand. In addition, the Federal Reserve has announced its intention to continue applying expansionary monetary policies, while keeping the Federal fund rates low. Such measures should help the US economic recovery to stay on course. As a result, the national inflation rate is forecast to drop to 2.0 percent in 2012 and further to 1.8 percent in 2013. Inflation is expected to rise slightly during the later years of the forecast, but will be kept mild at 2.0 percent or lower through 2017 (Figure 5), which will contribute to positive real GDP growth.

Investment spending is another component of real GDP growth, and is typically measured by non-residential investment. After plunging 18.1 percent in 2009, non-residential investment growth surpassed pre-recession levels in 2011 with 8.6 percent growth, sparked in part by increased automobile production (Figure 6). However, growth slowed in the second half of 2012 as the European debt crisis worsened. While the European economy remains jeopardized, tight credit and a lack of confidence in the economy will keep investment spending at conservative levels. Growth in non-residential investment spending is forecast to slow considerably from 8.0 percent in 2012 to 4.8 percent in 2013. Though growth is expected to rise to above 7.0 percent through 2015, it will decline to 4.8 percent in 2017.

US exports are expected to slow in 2012, partly due to the economic slowdown in the developing economies, primarily China, and the deepening European sovereign debt crisis. Export growth is forecast to slow from 6.7 percent in 2007 to 4.0 percent in 2012, and then to 3.7 percent in 2013. As the developing economies and world economy rebound, growth is forecast to rise slowly to 4.7 percent in 2014, before rising further to 6.7 percent or higher through 2017 (Figure 6). This will have a positive effect on real GDP growth in the United States.

Both Federal and State and Local government spending are expected to decline considerably during the forecast period. The federal budget deficit crisis in 2011 has put the pressure for the federal government to reduce total federal spending. The forecast assumes that reduction in total federal government spending will be done such that it avoids a fiscal cliff that could generate a downward demand shock that would disrupt the US economic recovery. Federal government spending is forecast to fall 2.5 percent in 2012, and fall further over 3.0 percent in 2013 and 2014. The decline in spending will gradually ease to 0.9 percent in 2017. State and Local government spending will fall 1.6 percent in 2012, an improvement over the 2011 decline of 3.4 percent. The State and Local government spending is expected to rise again in 2014 and reach 1.0 percent increase in 2017 (Figure 7).

Figures 4 - 7 can be found on the following page.

12 Investment spending generally refers to the creation and acquisition of capital goods—equipment, machinery, buildings, roads, etc.—that individuals, businesses, and governments hope will increase production or value in the long-term. Nonresidential investment is defined as spending on factories and plants or equipment.
Figure 4: United States Real GDP Growth (2006-2017)

Source: US Economic Outlook September 2012, IHS Global Insight

Figure 5: US Real Consumer Spending and Inflation Growth Rates (2006-2017)

Source: US Economic Outlook September 2012, IHS Global Insight

Source: US Economic Outlook September 2012, IHS Global Insight


Source: US Economic Outlook September 2012, IHS Global Insight
GLOBAL AND UNITED STATES FORECAST RISK

Economists perceive the EU’s sovereign debt crisis as the biggest risk the global economy currently faces. Despite big measures that the EU has implemented, problems persist. The fear is that as crisis continues, the impact will escalate to the other EU members, which could lead to another crisis in European financial markets and eventually in world markets.

Continued gradual decline in fiscal stimulus in most economies is expected. In the United States in particular, payroll tax and extended unemployment insurance benefits will expire in 2013. A too-much-too-soon withdrawal of the fiscal stimulus in many economies could lead to what economists call a fiscal cliff, creating a downward demand shock, which could disrupt the global recovery and lead the world to another economic downturn.

Another concern the world currently faces is the political uprising in Libya, Iran, and the Middle East in general. Continued turmoil could lead to a disruption in the world’s oil supply, which would cause oil prices to spike, dragging down the fragile global recovery.

WEST VIRGINIA PROFILE

By Amy Godfrey, Tess Meinert, Eric Bowen, Christiadi, and Patrick Manzi

OVERVIEW

The timeline shown in Figure 8 illustrates West Virginia’s economic past by showing the annual percentage change in total employment from 1990 to 2011. The timeline also includes a number of major economic events that occurred within the state that have influenced and may continue to influence the state’s level of employment.

POPULATION

Since 2000, the state’s population has grown annually by an average of 0.2 percent. This increase in population is not attributed to more births than deaths in the state, but rather, to positive net migration, meaning more individuals moved into the state than out of the state.

According to the US Census Bureau, the median age of West Virginia in 2011 was 41.5, which is four years above the nation’s median age and among the highest in the nation.

West Virginia’s high median age can be at least partially attributed to the state’s population 65 years of age and older. In the United States, approximately 13.3 percent of the population is over 65, while in West Virginia the age group accounts for more than 16 percent. As noted later in this report, the rapidly aging population in West Virginia will have an impact on important sectors such as Healthcare.

<table>
<thead>
<tr>
<th>TABLE 6: West Virginia Population Profile</th>
</tr>
</thead>
<tbody>
<tr>
<td>Total Population (2011)</td>
</tr>
<tr>
<td>Median Age (2011)</td>
</tr>
<tr>
<td>% Population 65 years + (2011)</td>
</tr>
<tr>
<td>% Population with High School Diploma</td>
</tr>
<tr>
<td>(2010, % of pop. 25 yrs +)</td>
</tr>
<tr>
<td>% Population with Bachelor’s Degree</td>
</tr>
<tr>
<td>(2010, % of pop. 25 yrs +)</td>
</tr>
<tr>
<td>Median Household Income (2011)</td>
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<tr>
<td>Average Household Size (2010)</td>
</tr>
</tbody>
</table>

Source: US Census Bureau
FIGURE 8: Annual Percentage Change in West Virginia Employment Timeline

- 1992: State unemployment rate = 11.22%
- 1994: Per capita personal income = $17,270
- 1996: Ground breaking for Toyota plant in Buffalo
- 1997: Greatest total coal production in WV 181,914,000 tons
- 2000: State unemployment rate = 5.46%
- 2001: 1st permit issued in WV for developing the Marcellus Shale formation
- 2002: 1st permit issued in WV for automatic transmission gear production at Toyota plant
- 2004: Sago mine disaster
- 2006: Century Aluminum plant closes
- 2006: Expansion to automatic transmission gear production at Toyota plant
- 2009: Patriot Coal closes mine in Greenbrier Co
- 2010: United Coal re-opened mine in Raleigh Co
- 2011: Per capita personal income = $33,510
- 2011: Ground breaking for Macy’s distribution center in Martinsburg
WEST VIRGINIA ECONOMIC OUTLOOK 2013

West Virginia’s GSP was $66.8 billion, while the national GDP was over $15.0 trillion. For 2011, West Virginia had exceptional GSP growth (7.9 percent) though GDP for the nation increased by only 3.9 percent, indicating that West Virginia’s economy grew at a higher-than-average rate after the economic downturn felt throughout the nation.

In 2011, West Virginia’s inflation-adjusted or real GSP increased by a rate of 4.5 percent ranking the state’s growth in the top quintile of the country. Real GDP for the United States increased by 1.5 percent in 2011 with the largest contributor to this growth being the durable goods manufacturing industry. For West Virginia, the largest contributing industry to real GSP growth was the mining industry, which includes coal mining and natural gas extraction. The mining industry accounted for 3.9 percentage points of the total real GSP growth.

The breakdown of the industries in the West Virginia economy for 2011 is not typical for the United States, as shown in Figure 9. West Virginia’s largest industries or sectors, as measured by percentage of total GSP, were Mining; Information, Finance, and Real Estate; and Government. These three sectors accounted for approximately 46.4 percent of the state’s GSP.

From 2006 to 2011, West Virginia’s total GSP grew by 1.2 percent annually with all except the agriculture and construction sectors experiencing GSP growth. The construction industry, which was dramatically impacted by the economic downturn that occurred during this time, experienced a 2.4 percent average annual drop in GSP.

PERSONAL INCOME
West Virginia’s total personal income level has grown annually since 2000, with the exception of 2009. In 2011, total real personal income was $54.6 billion, which represented a 2.1 percent increase from 2010. Of that, $49.0 billion was considered disposable income. This annual growth is attributed to increased wage and salary disbursements, as well as significant increases in supplements to wages and salaries such as employer contributions for employee pension and insurance funds.

For 2011, West Virginia’s per capita personal income (PCPI) was $33,513. This was the third lowest, with only Idaho and Mississippi having lower average income (Figure 10). While West Virginia’s PCPI was only 80 percent of the national average, it increased 4.6 percent from 2010 to 2011.

LABOR FORCE, EMPLOYMENT, AND WAGES
Since January 2007, West Virginia has had an unemployment rate below the national average, as shown in Figure 11. The seasonally adjusted unemployment rate has remained below 7.5 percent.

The largest sector in the state is the Government sector, which includes federal, state, and local government jobs, accounting for 151,709 jobs. Figure 12 shows West Virginia employment by sector in 2011.

FIGURE 9: Percent of Total US GDP and WV GSP by Major Sector

Source: US Bureau of Economic Analysis (www.bea.gov)
FIGURE 10: Per Capita Personal Income by State (2011)

Source: US Bureau of Economic Analysis (www.bea.gov)

FIGURE 11: Monthly Unemployment Rate (2006-2012)

Total employment in West Virginia has fallen at an average annual rate of 0.05 percent since 2006. In 2011, total employment in West Virginia increased by 1.0 percent to a level of 753,980 from 746,500 at the end of 2010. In terms of employment, the Mining and Logging sector of the West Virginia economy has been accelerating. Employment in this sector has increased from 28,600 jobs in 2007 to approximately 33,500 jobs in 2011, which can be attributed to the development of the Marcellus Shale for natural gas extraction. This growth in employment in the Mining and Logging sector is expected to slow significantly due to the softening of the oil and natural gas activity resulting from exceptionally low prices and forecasts calling for coal production in the state to decline significantly.

The impact of lower employment growth in the Mining and Logging sector will lower the total wages in the state. Figure 13 below shows the average hourly earnings by major industry in West Virginia in 2011. On average, the hourly wage rate in the state was $18.94. The mining and logging industry has the highest average hourly rate $26.00, which is 37.3 percent higher than the state average. The construction industry had the second highest average hourly earnings at $23.54.

**FIGURE 13: West Virginia Average Hourly Earnings by Major Industry (2011)**

WEST VIRGINIA OUTLOOK

By Eric Bowen

The West Virginia economy is expected to recover slowly from the Great Recession over the next five years. The pace of recovery will be greatly influenced by activity in the Energy sector which faces significant challenges as mine and power plant closures continue to cause job losses over the near term.

ECONOMIC GROWTH

The state’s economic output, as measured by GSP, fell slightly during the recession, but has been positive over the last three years, and is forecast to continue to grow over the next five. From 2012 to 2017, West Virginia’s real GSP is expected to grow by an average of 2.2 percent annually, compared with 2.7 percent average annual growth for national GDP (Figure 14). In West Virginia, the Trade, Transportation and Utilities sector is projected to have the largest dollar gain of $1.5 billion over the next five years, while Professional and Business Services will have the largest average annual percentage gain of 5.8 percent. The Construction and Healthcare sectors will also do well. Though the Natural Resources and Mining sector has had phenomenal growth over the last five years, it is forecast to fall an average of 1.4 percent annually from 2012 to 2017.

EMPLOYMENT

West Virginia employment is expected to rise at a slower rate than national employment. However, because state employment did not fall as far during the recession as the national average, employment is expected to return to pre-recession levels by 2013, two years earlier than the United States overall. West Virginia’s unemployment rate forecast reflects the improving jobs picture. The unemployment rate is expected to improve slowly through 2013, and then gain speed thereafter. The unemployment rate is forecast to move from 7.9 percent at the end of 2011 to 5.7 percent by 2017. Job gains will be led by the Professional and Business Services sector, which is expected to gain more than 15,000 jobs over the next five years. Figure 15 shows the growth in each major sector.

There is some concern that the state’s job gains might not materialize as quickly as the forecast data predicts. The seasonally adjusted unemployment rate ticked upward in the early part of the third quarter of 2012 even as some workers left the labor force. Job losses were felt mostly in the Natural Resources and Mining sector, which saw employment fall 6.7 percent between the first and second quarters of 2012. Natural Resources and Mining sector jobs fell an additional 6.5 percent between the end of June and the end of August, which is the latest data available at the time of this report. Conversely, Construction sector jobs were up 1.2 percent in each of the first two quarters, and rose an additional 3.7 percent from June to August. So far the Mining sector losses are outweighing gains in other areas, but these diverging trends leave the near-term employment picture somewhat murky.

INCOME

As shown in Figure 16, average annual wage growth is forecast to climb over the forecast period but at a decreasing rate. Workers can expect to see wage gains of 2.7 percent annually on average between 2012 and 2017. Wage growth will be led by the Professional and Business Services sector, with Financial Services coming a close second. Income growth is expected to outpace inflation and give West Virginia residents a boost in spending power, sending inflation-adjusted retail sales higher.

As shown in Figure 17, West Virginia’s inflation-adjusted per capita personal income (PCPI) fell slightly in 2009, but rebounded strongly over the next three years. The forecast calls for real PCPI to continue growing at an average annual rate of 2.2 percent from 2012 to 2017. Inflation-adjusted disposable income is expected to rise 2.3 percent annually over the same period. This should give a boost to the state’s consumer spending.

POPULATION

West Virginia is expected to grow from 1,855,582 in 2011 to 1,882,066 by 2017. The gain in population over the next five years is expected to come from new residents moving to the state. Net migration is forecast to accelerate from a little over 2,300 people in 2011 to more than 6,000 annually by 2017. In West Virginia, the 65-and-older age group is expected to grow faster than younger age groups and is predicted to be near 19 percent of the population by 2017. This is significantly higher than in the rest of the country, where it is forecast to be about 15 percent.

ENERGY

Growth in the West Virginia economy will be tempered by a slowdown in the state’s Energy sector, which is forecast to take a downturn over the next five years. Inflation-adjusted GSP in the Energy sector is projected to fall an average of 1.1 percent per year between 2012 and 2017. Employment is forecast to fall by 1.5 percent annually over the same time period. This year’s outlook is a significant change from the past five years. From 2006-2011, real GSP in the Energy sector grew at an average annual rate of 5.7 percent, and jobs increased by 2.7 percent annually, with gains coming in both the coal and natural gas industries.

Employment in the Natural Resources and Mining sector, which totaled 33,483 at the end of 2011, currently is expected to fall at an average annual rate of 1.7 percent between 2012 and 2017, a loss of more than 4,300 jobs. West Virginia energy employment is expected to fare better than the national economy, which is forecast to fall by 2.4 percent annually over the next five years.

Figures 14 - 17 can be found on the following page.

13 For more detailed information, see the Energy report on page 23.

14 The Energy sector is made up of the Natural Resources and Mining, and Utilities sectors.

Source: IHS Global Insight

FIGURE 15: Major Sector Employment Growth

Source: IHS Global Insight
FIGURE 16: Percent Change in Average Annual Wages

- Total Nonfarm Employment
- Construction and Mining
- Educational & Health Services
- Transp., Trade & Utilities
- Leisure & Hospitality
- Manufacturing
- Information
- Financial Activities
- Professional & Business Services
- Other Services
- Government

Source: IHS Global Insight


Source: IHS Global Insight
ENERGY (CONTINUED)

Other factors increase the variability of this forecast. Patriot Coal’s bankruptcy and mine closures from Alpha Natural Resources and Arch Coal may well push down expectations for employment in the mining industry. Exports, which in the past have been a bright spot in the mining sector, are also forecast to slow over the next five years, further reducing the sector’s prospects.

Jobs in the Utility subsector are also expected to fall over the next five years. West Virginia is expected to perform better than the national economy in this subsector, but the state has been hurt by a shift away from coal-fired power generation, which provides nearly all of West Virginia’s power, and electricity exports. The state’s coal-fired generators have had significant competition from natural gas generation in 2012 as historically low natural gas prices have driven demand to gas-fired generation plants. If tighter emissions standards are adopted, this will limit the long-term growth potential for coal-fired power.

HEALTHCARE 15

The Healthcare and Social Assistance sector is a bright spot in West Virginia’s economy. Real GSP in the sector is expected to grow at an average annual rate of 2.8 percent between 2012 and 2017. This is somewhat lower than the national average annual rate of 3.6 percent. The growth in the Healthcare sector is reflective of ongoing trends in West Virginia’s population that will lead to increasing healthcare costs. West Virginia has one of the highest percentage of its population over the age of 65. This age group requires the bulk of healthcare services. Couple the aging population with high rates of obesity and smoking. There will be an increased demand for healthcare.

WHOLESALE AND RETAIL TRADE 16

Real GSP in the Wholesale and Retail Trade sector fell during the recession, but has rebounded in the last few years. The forecast calls for real GSP in the sector to rise by an average of 2.9 percent annually over the next five years. Employment in the sector fell during the recession and has been largely flat since. Jobs in the sector are forecast to grow slowly, rising an average of 0.4 percent annually over five years.

The sector is expected to get a boost from a few large wholesale and retail establishments in the state. The Macy’s new distribution center in Martinsburg officially opened in July 2012 and is expected to employ 1,200 full-time workers, with as many as an additional 800 during peak seasons. Outdoor products retailer Cabela’s also plans to hire as many as 250 employees at its new store in Charleston.

LEISURE AND HOSPITALITY 17

The Leisure and Hospitality sector will get a boost from the Summit Bechtel Family National Scout Reserve, a 10,600-acre Boy Scout camp located in Fayette and Raleigh counties. The 2013 Jamboree is expected to draw about 40,000 scouts and 75,000 more tourists to southern West Virginia. The effect from the camp will be most apparent in the early part of the forecast (2012-2014). Jobs are forecasted to rise through 2014, before declining a fraction of a percent annually through 2017, compared with a gain of nearly 0.2 percent on average annually nationwide.

The gaming industry is another major contributor to the Leisure and Hospitality sector. This subsector has been growing, but there is increasing competition from surrounding states. Maryland, Ohio, and Pennsylvania also have legalized gambling outlets. Over the next few years, these new facilities are expected to draw visitors away from West Virginia casinos, creating serious competition especially for those casinos near the border with adjoining states.

CONSTRUCTION 18

Real output in the Construction sector is expected to rebound sharply from recession levels. GSP in the sector fell 2.4 percent annually from 2006 to 2011, but recent performance has been more promising. For the next five years, real GSP in the Construction sector is forecast to rise at an average annual rate of 3.9 percent. This boom should lead to a 5.1 percent increase in employment on an annual basis. The strong showing in this sector reflects pent-up demand for new residential housing. Housing starts fell slightly in 2011, but are forecast to more than double from 2,540 in 2012 to 5,510 in 2017.

PROFESSIONAL AND BUSINESS SERVICES SECTOR

The largest employment gains in the state will come in the Professional and Business Services sector. This sector includes a wide variety of industries, including administrative support staff, business managers and scientific researchers. The forecast predicts jobs in this sector will increase by more than 15,000, an annual average gain of 4.4 percent.

MANUFACTURING

Employment in the Manufacturing sector is forecast to grow by an average of 1.5 percent annually, which is slightly greater than the national employment annual average growth of 1.4 percent. The sector’s growth will be led by durable goods, particularly wood products manufacturing and non-metallic mineral products, both of which reflect the state’s strength in natural resources.

15 For more detailed information, see the Healthcare report on page 29.
16 For more detailed information, see the Wholesale and Retail report on page 33.
17 For more detailed information, see the Leisure and Hospitality report on page 35.
18 For more detailed information, see the Construction report on page 40.
Expert Opinion: West Virginia Fiscal Concerns

By Mark Muchow, Deputy Cabinet Secretary, West Virginia Department of Revenue

The West Virginia economy generally outperformed the US economy over the past five years due to a relatively strong energy sector featuring rising coal prices, increasing coal exports to foreign countries and rising natural gas production. The state Treasury benefited from a 42 percent rise in severance tax collections between fiscal year 2007 and fiscal year 2012, an average annual growth rate of more than 7.7 percent. The increase in severance tax revenues accounted for nearly half of total growth in state general revenues. The energy boom also resulted in higher personal income taxes, corporate income taxes and sales taxes for the state. The recession still had an impact upon overall state finances with average annual revenue growth falling below its long-term average of nearly 4.0 percent per year to just 1.6 percent per year over the past five years. Lower revenue growth also contributed to a trend of more conservative budget growth in recent years.

Coal industry fortunes began changing at the conclusion of the first quarter of the last fiscal year with a trend of rapidly falling demand associated with competition from natural gas and slowing global economic growth. Severance tax receipts began to decline during the final few months of the past fiscal year and continue to decline in the current year with total cumulative collections down roughly 25 percent as of mid-September. In addition, the electric power industry is in the process of retiring a number of coal-fired power plants in the state accounting for roughly 15 percent of total coal-fired capacity between 2012 and 2016.

The state budget remains in general balance in the current year despite a revenue growth rate that is slowing toward zero percent or less. As with most other major energy producing states, West Virginia maintains healthy rainy day fund balances in the event of economic downturn. Current rainy day fund balances are in excess of $883 million, an amount equal to roughly 2.5 months of general fund expenditures.

Key sectors in the state economy include coal mining, natural gas extraction, Healthcare services, tourism, electric power manufacturing and chemical manufacturing. Some of the key drivers of state economic performance in 2012 and 2013 include payroll employment, coal demand, coal prices, natural gas production and demand, global economic growth, regional casino gaming competition, currency exchange rates, federal budget policy and tax policy and consumer confidence.

The fiscal year 2014 budget will be difficult to balance with rising demands for programs such as Medicaid and corrections coupled with stagnant revenue collection trends. The slowdown in the coal industry is expected to continue for the foreseeable future. Severance tax collections from the coal industry and business and occupation tax receipts from electric power generators will continue to decrease over the forecast period. Sales tax collections will be flat with the continuing phase-out of tax on food for home consumption, and income tax growth will slow with the economy as a whole. In addition, no growth is anticipated in lottery revenues due to continued emerging competition from neighboring states. Most agencies are expected to reduce their budgets by 7.5 percent to help bridge the anticipated budget gap that was estimated to be $389.3 million in the six-year financial plan as published last January in the fiscal year 2013 Executive Budget.
In recent years, the state budget has relied heavily upon lottery revenues and tax revenues associated with both coal production and electric power generation. On average, these sectors directly accounted for roughly one-fourth of the general state budget. The state has prepared for anticipated changes to these sectors since at least fiscal year 2005 in a variety of ways. Since fiscal year 2005, the state has committed a total of an extra $1.8 billion toward extra contributions to various underfunded public sector pension programs in an effort to reduce the necessary funding requirements during future years.

The state also generated significant budget surpluses over the past eight years largely from significant increases in coal severance tax revenues and growing lottery revenues. In addition to committing roughly $1 billion of surplus funds to pension debt, the state also allocated roughly half of those surplus dollars to its Revenue Shortfall Reserve Fund (Rainy Day Fund A). As a result, the balance in Rainy Day Fund A rose from less than $54 million at the end of fiscal year 2005 to nearly $552 million today. The state took advantage of an environment of very low interest rates to refund a number of special revenue funded bonds resulting in a significant overall savings to the Treasury. The state also implemented a number of tax policy changes in the hope of stimulating additional diverse business activity growth. Among other changes, the state gradually lowered its corporate income tax rate from 9 percent to 7.75 percent this year and to 6.5 percent by calendar year 2014 and gradually phased-out its business franchise tax from 0.70 percent to 0.27 percent today and to zero percent by calendar year 2015. The state also recently eliminated additional nuisance fees and taxes that imposed a significant burden on small businesses while generating relatively little net revenue for the state.
The Energy sector has long been one of West Virginia’s most important industries, accounting for almost 17 percent of the state’s GSP. In the immediate future, the state is expected to be held back by the Energy sector as a confluence of both short-term and long-run factors slow growth and threaten jobs. Over the next five years, the Energy sector faces changes stemming from the transition from coal to gas in the electricity production market that currently favors natural gas power generation. The sector has also been hurt by shorter-term effects, such as a mild winter that sent coal stockpiles at power plants rising.

LONG TERM TRENDS
The Energy sector includes the Natural Resources and Mining sector, which includes both coal mining and natural gas extraction and related industries; and the Utilities sector, which is a subsector of Trade, Transportation, and Utilities.

This Energy sector has been doing well in recent years, despite a drop in coal production since the start of the Great Recession. Inflation-adjusted GSP in the Mining sector grew remarkably fast over the last two years, rising almost 48 percent between 2009 and 2011. The Utility sector fell 9 percent over that same time period. The Great Recession took a toll on coal production, which fell sharply in 2008, and has been in a slow decline since then (Figure 18). However, natural gas production rose dramatically during that time period, rising 12.1 percent per year on average since 2006.

Exports have done very well recently. The value of exports from the Minerals and Ore sector rose 91.4 percent from 2010 to 2011. Exports for the first half of 2012 are up almost 50 percent (Figure 19). Exports to China skyrocketed in 2012; total export value through June is up 389 percent over the same time last year.

West Virginia is not a major exporter of oil and gas. The state exported a total of $7.7 million worth of oil and gas in 2011, with all of the exports going to Canada. The value of oil and gas exports has fallen off in 2012, down almost 30 percent from second-quarter 2011.

Despite these gains, West Virginia’s coal sector faces long-term headwinds as the power generation sector partially shifts away from coal. The trend toward more natural gas power generation has been going on for several years, the result of a dramatic increase in the harnessing of shale gas resources. Production of natural gas began a rapid increase in 2008 as new horizontal drilling and hydraulic fracturing techniques became widely adopted and opened up vast new natural gas reserves that previously were not economically recoverable. High gas prices between 2006 and 2009 spurred rapid development of shale
FIGURE 18: Coal and Gas Production (2006-2012)

* Data through Dec. 2011
Source: US Energy Information Administration, WV Geological and Economic Survey

FIGURE 19: West Virginia Minerals and Ores Exports to the Top Five Receiving Countries

* First two quarters
Source: WISERTrade
Gas. West Virginia natural gas production ramped up through 2011, ending 32 percent higher than the year before.

Gas prices fell, leading to greater use of natural gas as a fuel for power generation. Over the last five years, coal's share of power generation nationally has been falling relative to natural gas (Figure 20). This convergence trend culminated in April 2012, when natural gas and coal accounted for almost the same share of US power generation, a first in the nation's history.

Long-term trends for power generation also favor natural gas. Low fuel costs, coupled with gas turbines' low capital costs, have made gas-fired power generation a viable alternative for base-load power generation, previously the purview of coal and nuclear power plants. Recent cost figures, measuring both fixed and variable costs, place gas plants at a significant cost-advantage over coal, suggesting that new power plants are likely to be based on gas for the foreseeable future. The US Energy Information Administration (EIA) predicts that coal-fired power capacity will decline over the next few years as older, inefficient coal plants are retired and are replaced with natural gas plants. The EIA projects that US coal capacity will fall from 310.7 gigawatts (GW) in 2011 to 270.3 GW in 2017. This represents a drop of 13.0 percent of total capacity, an average annual reduction of 2.3 percent. Meanwhile, natural gas combined cycle capacity is projected to rise by 8.6 GW over the same time frame, an increase of 0.8 percent on an average annual basis.

Growth in coal-fired power generation is also likely to be limited by recent regulations designed to reduce power plant emissions. The US EPA announced new rules in March 2012 that would require new power plants to emit less CO2 per megawatt hour (MWh) of generation. The EPA determined that the action would not affect coal-fired power plant investment over a five-year time-frame because investment is likely to favor gas regardless of whether the rule is in place. However, the rule could potentially affect investment over the longer term. The EPA also finalized mercury and air toxics standards in February 2012 that require emissions reductions of heavy metals. The EPA estimated that approximately 40 percent of coal-powered generating units do not have the mercury controls in place to meet the standards. The agency estimated that the standards would make 4.7 GW of capacity not economical to maintain by 2015. The EPA is currently reconsidering the standards and expects to make a ruling by March 2013.

The EIA predicts that natural gas generation will not stay at current high levels indefinitely, and will fall through the end of 2012. Coal-fired generation rose above gas again in May, and is expected to continue to provide the largest share of power generation into the foreseeable future. However, it will play a diminished role compared with its historical importance to the utility sector.
SHORT-TERM PICTURE
By the second quarter of 2012, several factors contributed to a sharp downturn in the coal market. A mild winter nationally meant that power plants didn't burn as much coal as they expected, sending coal stockpiles at power plants higher. At the same time natural gas prices for electricity generation fell rapidly (Figure 21), and power generation switched to the now low-cost alternative. As coal consumption by electric utilities began to fall, coal production levels also began falling. By August 2012, West Virginia year-to-date coal production was down 4.8 percent from the previous August.

Employment in the Energy sector as a whole did very well through first quarter 2012, which is the latest available data at the industry-level (Figure 22). Employment in the coal mining industries was up 3.7 percent from the end of 2011. Employment in the natural gas industries was up 4.7 percent, and gas distribution was up a whopping 43.3 percent over the same time period. Employment in the Utilities sector was up slightly, rising 0.2 percent.

FIGURE 21: Average Cost of Coal and Natural Gas for Electricity Generation

Source: US Energy Information Administration


Source: Workforce West Virginia
The natural gas industry has played an important role in keeping the West Virginia economy going strong during this most recent recession. How has the development of the Marcellus Shale in West Virginia been affected by low natural gas prices in 2012?

Coal has been the cornerstone of our nation’s electric sector. West Virginia has played a leading role as a provider of electricity through coal-fired power plants. West Virginia is ranked third in the country behind Pennsylvania and Alabama on the amount of electricity put into the grid for other states to use. Coal achieved its prominence in electric generation as an affordable energy source. Now, natural gas has a competitive edge due to increased supply resulting in a lower resource cost. West Virginia coal plants, for the most part, are compliant with the Cross State Air Pollution Rule. The six smaller coal-fired power plants in West Virginia, without stack gas scrubbers and low NOx burners, represent 14 percent of our electric generation capacity. These plants were targeted by the EPA for closure. The remaining 86 percent, or roughly 12,000 megawatts, are compliant with existing EPA emission regulations. The impact on West Virginia coal demand from EPA emission regulations will come from other states that have been slower in installing stack gas scrubbers and low NOx burners. Nationwide, compliance with the EPA standards is roughly 50 percent.

The state of West Virginia has seen significant economic benefits from natural gas production from the Marcellus Shale. Our overall natural gas production increased from 297.9 billion cubic feet (Bcf) in 2010 to 394.2 Bcf in 2011. Natural gas sector employment has nearly returned to pre-recessionary levels, approximately 20,000 jobs. Severance taxes increased from $60,933,410.10 in 2010 to $72,334,056.94 in 2011. All of these developments have happened in a low price environment for natural gas. Equally important to the state of West Virginia is the ability of our new lower gas prices to serve as an industrial development incentive in West Virginia. Low natural gas prices are important to our chemical industries and help home owners and businesses meet their monthly energy costs. West Virginia is the only state in our region that is a net exporter of natural gas. The Marcellus resource will enable West Virginia to be a larger contributor to meeting the winter energy needs of New England and other eastern states. Admittedly, low energy prices have constrained natural gas production. This is a market dynamic which should be anticipated.

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Energy Issues in West Virginia

By Jeff Herholdt, Director, West Virginia Division of Energy

The state of West Virginia has seen significant economic benefits from natural gas production from the Marcellus Shale. Our overall natural gas production increased from 297.9 billion cubic feet (Bcf) in 2010 to 394.2 Bcf in 2011. Natural gas sector employment has nearly returned to pre-recessionary levels, approximately 20,000 jobs. Severance taxes increased from $60,933,410.10 in 2010 to $72,334,056.94 in 2011. All of these developments have happened in a low price environment for natural gas. Equally important to the state of West Virginia is the ability of our new lower gas prices to serve as an industrial development incentive in West Virginia. Low natural gas prices are important to our chemical industries and help home owners and businesses meet their monthly energy costs. West Virginia is the only state in our region that is a net exporter of natural gas. The Marcellus resource will enable West Virginia to be a larger contributor to meeting the winter energy needs of New England and other eastern states. Admittedly, low energy prices have constrained natural gas production. This is a market dynamic which should be anticipated.
ENERGY SECTOR FORECAST FOR WEST VIRGINIA
While the energy sector has done well over the past five years, the picture is not so rosy going forward. Both inflation-adjusted GSP and employment are forecast to fall significantly from 2012 to 2017, with the biggest drop coming toward the end of 2012 and the beginning of 2013. Real GSP in the energy sector is forecast to fall by 1.1 percent annually, and employment is forecast to fall by 1.5 percent annually. Employment in the Natural Resources and Mining sector is forecast to fall by 1.7 percent annually, and 0.7 percent annually in the Utilities subsector (Figure 23). Wages in the Construction and Mining sector are forecast to rise, but more slowly than in the last five years. Annual Average Wage is forecast to rise by 2.6 percent per year on average between 2012 and 2017, compared with a 6.2 percent gain over the last five years. Exports are also expected to slow in the next few years, and thus will not continue to bolster the sector.

Employment losses in coal mining are already apparent. Alpha Natural Resources announced in September that it would idle eight mines, including four in West Virginia, and lay off 1,200 workers, about 9 percent of its workforce. The move came after the company announced a $2.2 billion loss in the second quarter 2012. Patriot Coal filed bankruptcy proceedings in July 2012, citing the rapidly changing coal marketplace for its financial difficulties. The company plans to use the bankruptcy to restructure its pension obligations. Patriot had previously announced that it would close its Big Mountain complex in Boone County, laying off 215 workers. Other companies announcing large layoffs include Arch Coal, who announced in June that 750 jobs would be cut in Appalachia; and Consol Energy, who laid off 318 workers in Clay County in June. Layoffs have also been announced at several coal-based power generation plants in recent months. FirstEnergy and American Electric Power (AEP) have announced plans to retire a combined 2,290 megawatts of older coal-fired power capacity based in West Virginia. FirstEnergy estimated that 105 employees at the plants will be affected. AEP didn’t release employment figures for the plants to be closed.

The rapid changes in the market have begun to show up in the broader employment data. As of August 2012, employment in the Natural Resources and Mining sector was down almost 17 percent from its high in January, a loss of 5,900 jobs. The data doesn’t differentiate between coal-related employment and natural gas employment, so it’s difficult to know which industry is taking the largest job losses. Preliminary data from the US Mine Safety and Health Administration, however, shows that coal mining employment fell 5.1 percent in just the second quarter 2012.

West Virginia’s energy sector should continue to be bolstered by natural gas production and related activities. However, production has shifted toward production in wet gas regions, which contain not only methane, the main component of natural gas, but other hydrocarbons, such as ethane, butane, and propane. These additional products found in wet gas give further value beyond what the dry shale gas can produce. Wet gas regions are largely confined to the northwestern part of the state. Low gas prices may also have led to the decision by some drillers to scale back and keep gas in the ground in the hope that prices will recover.

West Virginia’s energy sector will fall at a slower pace than the national average. The state’s mining and utilities industries may fall faster than is currently forecast. However, these events may be mitigated if gas prices rise, as EIA predicts will happen over the next few months. Coal production could turn positive again as coal becomes more attractive with respect to natural gas.

West Virginia is often described as the second most rural state in the nation. More than 60 percent of the population lives in counties that the Census Bureau defines as rural. Rugged terrain and long travel times have limited many West Virginians’ access to healthcare services. More recently, construction of new roads and the expansion of healthcare services have made access easier. However, just because West Virginians can now access health services more easily, doesn’t mean that their health is improving.

Figure 24 on the following page shows that West Virginia’s Healthcare sector has grown consistently since 2006. The sector gained 2,000 jobs from 2010 to 2011, a 2 percent increase. This growth is driven by a myriad of factors, one of which is the poor overall health status of West Virginia residents. The prevalence of obesity in the state has increased by an average of 4.6 percent per year since 1989. West Virginia is currently ranked 41st in overall health. This is up from 43rd in 2010. In 2011 the obesity rate was 32.9 percent of adults. Rates of childhood obesity have also been high. There is an obesity rate of 13.4 percent among children ages 2-4 in West Virginia who are enrolled in the Women, Infants, and Children program, slightly lower than the national average of 14.7 percent. According to the National Survey of Children’s Health, 18.9 percent of children ages 10-17 were obese, slightly higher than the national average of 16.4 percent. Finally, in West Virginia 20.3 percent of male high school students were obese, significantly higher than the 7.7 percent of high school females.

Other health issues affecting the state include high rates of diabetes and smoking as well as a high median age. In the past 10 years, rates of diabetes have increased from 7.6 percent to 11.7 percent of the population. Unlike other states, smoking has not declined within the past 10 years; 393,000 adults still smoke in West Virginia. The economic costs associated with tobacco usage are estimated to be $2 billion annually. Half of these costs come from direct healthcare costs, while the other half come from productivity and occupational costs.

As of 2011, the population of West Virginia was one of the oldest in the nation with a median age of 41.5 years. In West Virginia, 16.2 percent of people are over 65 years of age. This segment of the population is increasing at a rate faster than that of the nation.

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19 http://www.americashealthrankings.org/SiteFiles/Statesummary/WV.pdf

20 The Behavioral Risk Factor Surveillance System defines adult obesity as having a body mass index (BMI) of 30 or greater and childhood/adolescent obesity as having a BMI equal to or greater than the 95th percentile BMI-for-age based on the 2000 Centers for Disease Control (CDC) growth charts.

21 The Pediatric Nutrition Surveillance System (PedNSS) tracks the status of low-income children under the age of 5.
Table 7 provides a breakdown of the types of employment captured under the umbrella of the Healthcare and Social Assistance sector. Hospital employees account for the largest share of workers in the sector. Employment in this sector accounted for roughly 15 percent of total employment in the state in 2011. The Healthcare and Social Services sector contributed more than $5 billion to the state GSP in 2011, representing 10 percent of the total state GSP.

![West Virginia Historical Healthcare Sector Employment Growth](image_url)

### FIGURE 24: West Virginia Historical Healthcare Sector Employment Growth

![Graph showing historical growth rate of healthcare sector employment in West Virginia from 2006 to 2011.](image_url)

Source: IHS Global Insight

<table>
<thead>
<tr>
<th>SECTOR</th>
<th>TOTAL EMPLOYMENT</th>
<th>TOTAL WAGES</th>
<th>AVERAGE ANNUAL WAGE</th>
</tr>
</thead>
<tbody>
<tr>
<td>Ambulatory Healthcare Services</td>
<td>37,509</td>
<td>$1,621,445,499</td>
<td>$43,228.17</td>
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<tr>
<td>Hospitals</td>
<td>39,041</td>
<td>$1,842,114,366</td>
<td>$47,184.10</td>
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<tr>
<td>Nursing &amp; Residential Care Facilities</td>
<td>18,669</td>
<td>$473,041,507</td>
<td>$25,338.34</td>
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<tr>
<td>Social Assistance</td>
<td>16,586</td>
<td>$272,412,422</td>
<td>$16,424.24</td>
</tr>
<tr>
<td>TOTAL</td>
<td>111,805</td>
<td>$4,209,016,794</td>
<td>$37,646.05</td>
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</table>

Source: Workforce WV
INDUSTRY INSIGHT:
HEALTHCARE CONCERNS IN WV

By Thomas Jones, President & CEO West Virginia United Healthcare System

The largest challenge is simply the uncertainty created by the Affordable Healthcare Reform Act. Will November elections result in major changes? Will West Virginia Medicaid be expanded or will the uninsured continue to increase? Will West Virginia have a health insurance exchange and how will businesses react to an exchange. Will they continue traditional health insurance coverage or move employees to an exchange or just pay a penalty and drop insurance coverage? Should a hospital start an accountable care organization? These are just a few of the questions hospitals face.

Uncompensated care continues to be a major problem. West Virginia hospitals delivered $742 million in uncompensated care in 2010. Charity care and bad debt continue to increase significantly due to the overall poor economy.

In 2010 hospitals were paid $333 million under cost by Medicaid and PEIA. This remains a major challenge for hospitals. Reimbursements from Medicare will decrease by $155 billion to US hospitals over the next 10 years. West Virginia Medicaid has a $200 million hole next year. Additional cuts on the federal and state levels are inevitable because of budget cuts. If sequestration occurs, US hospitals will see $11.1 billion in Medicare cuts.

In 2010 almost 75 percent of West Virginia hospitals lost money from operations. Close to 50 percent still showed a loss on the bottom line even after non-operating and investment income. Many may not be able to continue in the future.

West Virginia hospitals are over regulated by both federal and state governments, financial reporting, privacy regulations, mandated electronic records, quality reporting, rate regulation, and certificate of need, all add to the cost of doing business and require more staff to comply.

Workforce issues are also becoming a major concern. The number of primary care physicians is inadequate. There is an impending shortage of physicians estimated to be 90,000 by 2020. Finally, the average age of healthcare workers is increasing without trained, educated replacements on the horizon.

As a result of healthcare reform, hospitals must now become more integrated with other providers such as physicians, home health agencies, rehab centers, and nursing homes. Care must be coordinated across the spectrum to reduce cost and improve quality. Hospitals must figure out how to transform from a fee for service model to a preventive care model where all providers share a bundled payment.

Access to capital to replace facilities is also a challenge given smaller operating margins, decreasing cash reserves, age of facilities in West Virginia and lack of bond insurance. Without access to new capital, a hospital cannot survive long term.

Finally, hospitals are challenged by lack of vision. Other industries such as banks, drug stores, and food stores have merged and consolidated to reduce cost and take advantage of size scale. To meet future challenges, hospitals too must consolidate to create the infrastructure necessary to reduce cost and improve quality. Some hospitals will need to be transformed from inpatient to outpatient oriented facilities. They must adapt to do more with less.

The challenges are significant, but hospitals are critical to our citizens and together with government, insurers, and businesses must find ways to survive and prosper.
HEALTHCARE SECTOR FORECAST FOR WEST VIRGINIA

The West Virginia Healthcare sector provided a total of 111,805 jobs in 2011 while paying out roughly $4.21 billion in wages to its employees. As shown in Table 8 the Healthcare sector is forecast to grow steadily, adding roughly 2,000-4,000 jobs per year from 2012-2017. Healthcare services wages are also expected to increase steadily through 2017. The Healthcare sector will continue to account for roughly 9 percent of the state GSP.

As the Healthcare sector continues to grow there will be a need for more and more healthcare professionals. This means there will be an increased demand for doctors, physicians’ assistants, and nurses, as well as health administration professionals who oversee the operations of health-related facilities. West Virginia currently has multiple schools offering programs in health administration-related fields and nursing with associate, Bachelor’s, Master’s and Doctoral programs. There are three medical schools in the state. According to various job sites around the state, there are currently 400-500 healthcare-related jobs posted online.

If obesity trends continue at their current rate, the Center for Disease Control and Prevention estimates a statewide prevalence of 46.1 percent by 2018. Tobacco use is currently the leading cause of death in the state. If current trends continue, 40,000 more state residents will die by the year 2020. Investments in nutrition and tobacco education to young students have the potential to slow this rate of obesity and tobacco use.

The continued aging of the state’s population could also be a driver in the growth of the Healthcare sector. Though perhaps not in the short term, advancements in medical technology will allow more and more people to live longer and healthier lives. As other sectors in the state continue to grow, there will be increased construction of new roads and services. New roads will provide better access to current healthcare facilities and this access, coupled with advances in medical technology, will provide people across the state with better healthcare and increased job opportunities in the healthcare industry. This industry will continue to be a vital asset to the state.

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**TABLE 8: WV Forecast Healthcare and Social Assistance Employment, Wages, and share of GSP**

<table>
<thead>
<tr>
<th></th>
<th>2012</th>
<th>2013</th>
<th>2014</th>
<th>2015</th>
<th>2016</th>
<th>2017</th>
</tr>
</thead>
<tbody>
<tr>
<td>Healthcare employment (thousands of jobs)</td>
<td>115.7</td>
<td>117.60</td>
<td>120.63</td>
<td>123.46</td>
<td>127.24</td>
<td>130.32</td>
</tr>
<tr>
<td>Healthcare average weekly wages</td>
<td>$732.61</td>
<td>$749.44</td>
<td>$769.57</td>
<td>$790.38</td>
<td>$810.29</td>
<td>$831.73</td>
</tr>
<tr>
<td>Healthcare share of GSP</td>
<td>9.12%</td>
<td>9.22%</td>
<td>9.32%</td>
<td>9.38%</td>
<td>9.53%</td>
<td>9.66%</td>
</tr>
</tbody>
</table>

Source: Workforce WV
WHOLESALE AND RETAIL TRADE IN WEST VIRGINIA

By Eric Bowen

The wholesale and retail sector encompasses a wide range of industries that handle the trade of goods in the economy. Retailers generally sell small quantities of goods directly to consumers, and represent the last step in goods distribution. This sector comprises subsectors such as general merchandise, gas stations, clothing stores, and furniture stores, among others. Wholesalers are middlemen in the trade of goods, buying large quantities from manufacturers and distributing them to retailers or other wholesalers. They can also be involved in selling inputs to the production of finished goods.

Retail trade is highly dependent on consumer spending, which fell significantly at the national level during the recession. Recently sales have been looking better. US wholesale trade was down toward the middle of 2012. Because of the drop in sales volume, business inventories rose somewhat, but remained manageable.

Two measures of consumers’ expectations for the future have fluctuated over the course of 2012. By mid-2012, the Index of Consumer Sentiment, compiled by the University of Michigan Institute for Social Research was up 13.5 percent over the previous year. The Conference Board’s Consumer Confidence Index fell in the first two quarters of 2012, but appears to be rising in the third quarter. Consumer confidence is expected to rise through 2014.

The wholesale and retail trade sector accounts for approximately 12 percent of West Virginia’s economy, as measured by Gross State Product (GSP). This is about the same share as in the national economy. An estimated 110,084 people are employed in the Wholesale and Retail Trade sector, with the majority of those jobs coming in four subsectors: general merchandise; food and beverage stores; merchant wholesale, durable goods; and motor vehicle and parts dealers.

WHOLESALE AND RETAIL TRADE SECTOR FORECAST FOR WEST VIRGINIA

West Virginia’s Wholesale and Retail Trade sector was hurt by the Great Recession. Total inflation-adjusted GSP was down by 5.5 percent between the 2007 peak and the trough in 2009. However, GSP in the sector has recovered and now is up 4.4 percent from its low point, topping $7.7 billion in 2011. Most of the gains came in the retail sector, which is up almost 13 percent since 2009. Real GSP in the sector is forecast to rise by more than 2.9 percent annually over the next five years.

Revenue gains have not translated into increased employment in the sector. Employment fell 5.4 percent from a total of 116,334 jobs in 2007 to 110,100 in 2009. Since then, the sector has remained flat over the last two years. Employment in the
sector is forecast to rebound slowly over the next five years, with an average annual growth of 0.4 percent (Figure 25). The wholesale sector is expected to do better, growing 0.9 percent annually compared with an average annual gain of 0.3 percent for the retail sector over this period.

The sector is expected to get a boost from a few large wholesale and retail establishments in the state. Macy’s new distribution center in Martinsburg, WV officially opened in July 2012 and is expected to employ 1,200 full-time workers, with an additional 800 during peak seasons. Outdoor products retailer Cabela’s also plans to hire as many as 250 employees at its new store in Charleston, WV.

In West Virginia, the sector also should be buoyed by growth in personal income. Total inflation-adjusted personal income is projected to rise at an annual average rate of 2.5 percent over the next five years, which is about 0.9 percent higher than during the past five years. Nationally, inflation-adjusted (real) disposable income is projected to increase by 1.6 percent in 2012, another 1.9 percent in 2013, and 2.9 percent in 2014. Real consumer spending is projected to grow a modest 2.1 percent in 2013, and 2.5 percent in 2014. Spending on durable goods is expected to increase over the forecast period. Durable goods purchases are forecast to rise 6.4 percent in 2012, and another 4.9 percent in 2013.


![Wholesale and Retail Trade Employment (2006-2017)](image)

Source: IHS Global Insight
The Leisure and Hospitality sector covers a broad range of businesses, activities, and places in West Virginia. The Mountain State is home to wild forests and rivers, historical sites and landmarks, and a rich culture that pre-dates the Revolutionary War, but also boasts more recent developments such as casinos, racetracks, and adventure resorts that are important to the state's economy.

Employment in the Leisure and Hospitality sector has increased since 2006, when it was 70,966 individuals. In 2008, employment peaked at 72,880, which represented 10 percent of the jobs in West Virginia. When the Great Recession took its toll on the sector in 2009, Leisure and Hospitality employment fell by more than 1,000 positions. The following year saw employment gains, and by 2011, the sector had rebounded to 72,950 jobs. This represented an average annual employment increase of 0.6 percent since 2006, whereas the state experienced an average annual employment decrease of less than 0.1 percent. Over the same time frame, real wage disbursements (total wages distributed, adjusted for inflation) increased at an annual average rate of 2.7 percent, which was greater than the state wage annual average growth of 1.4 percent.

Since 2006, the Leisure and Hospitality sector has represented a constant share of West Virginia’s real GSP, remaining just under 4.0 percent between 2006 and 2011. The Leisure and Hospitality sector saw an overall increase in total real GSP between 2006 and 2011. The sector’s real GSP was $2.06 billion in 2006, and peaked at just under $2.11 billion in 2007. The Great Recession ushered in a period of decline, with 2009 marking a low point of $1.97 billion in real GSP. The sector’s real GSP more than recovered by 2010, however, and was measured at $2.21 billion in 2011.

Since 2009, West Virginia’s leisure and hospitality industry has continued to rebound from the Great Recession. More opportunities for growth are on the horizon. However, businesses will face significant competition among themselves and from outside the state. The following subsections highlight aspects of West Virginia’s Leisure and Hospitality sector that will influence the industry in years to come.

THE SUMMIT BECHTEL FAMILY NATIONAL SCOUT RESERVE
A huge development for the West Virginia adventure tourism industry is underway, and will become a reality by 2013. The Summit Bechtel Family National Scout Reserve, a 10,600 acre plot located in Fayette and Raleigh counties, is under construction for the 2013 National Scout Jamboree held by the Boy Scouts of America. The scout reserve is located along the New River Gorge and incorporates whitewater activities,
climbing, zip lines, biking, and much more. The 2013 Jamboree is expected to draw about 40,000 boy scouts and 75,000 more tourists. Even larger numbers are expected for the World Scout Jamboree which will take place in 2019. This will be the first time in 52 years that the event will be held in the United States. As the Jamboree approaches, local hospitality and tourism establishments will be pushed to capacity.

The combined activities of the complex are expected to supplement local income by $25.3 million annually. The National Scout Jamboree, to be held every four years, could provide an additional $16.9 million of local income, not including the additional federal, state, and local tax revenues from sales and income tax. Because the Summit will offer many of the same adventure activities as the local Adventure Resorts, it will be a big competitor for those businesses.

WHITEWATER AND ADVENTURE TOURISM

Since the sport of whitewater rafting was pioneered, people have been coming from all over the world to experience West Virginia’s untamable wild waters. According to industry professionals, participation in rafting peaked in the mid-1990s and has been steadily declining since. In order to keep attracting customers to West Virginia, rafting companies have diversified to become full-scale adventure resorts. To supplement income from rafting, the industry has expanded to adventure activities such as paintball, zip line tours, ATV tours, hiking, caving, and other outdoor activities.

These activities extend beyond the traditional March to August rafting season, allowing outfitters to solve the problems of seasonality and the decreased interest in rafting. By offering many different levels of intensity and physical challenge, these companies have widened their market. With the addition of new activities and different facilities to the growing industry of adventure resorts in West Virginia comes the need for more employees with different guiding experience.

GAMING INDUSTRY

Another big draw for both in-state and out-of-state tourists is the gaming industry in West Virginia. The state has five casinos: the Casino Club at the Greenbrier; Hollywood Casino at Charles Town Races; Mardi Gras Casino and Resort in Cross Lanes, WV; Mountaineer Casino, Racetrack and Resort in Chester, WV; and Wheeling Island Hotel-Casino-Racetrack. Racetracks in the state employed 4,304 individuals in 2010, and gambling industries employed an additional 1,135. The West Virginia Lottery Commission reported $1.45 billion in revenues for fiscal year 2011-12, of which $651.7 million was profit. This was higher than estimates for the year and actual amounts in the previous year.

While the gambling industry has been growing in West Virginia, there is increasing competition from surrounding states. Maryland, Ohio, and Pennsylvania also have legalized gambling outlets. West Virginia’s casinos are already feeling the effects of this competition. After a new casino opened in Cleveland, OH, gross receipts at West Virginia racetrack casinos decreased by ten percent. Tax revenues from both racetrack video lottery and table games have declined by $7.8 million over the past year. Further decreases in revenues are expected as Maryland opens another casino in Baltimore’s Inner Harbor in 2012. Over the next few years, these new facilities will draw both in-state and out-of-state visitors away from West Virginia casinos, creating serious competition especially for Hollywood Casinos, Mountaineer Casino, and Wheeling Island Casino.
**ACCOMMODATIONS**

Hotels and motels in West Virginia have seen a lot of traffic in recent years from natural gas workers, who have come to the state as the natural gas industry thrives. Natural gas workers, both from West Virginia and from out of state, are filling up the state’s hotels, motels, and campgrounds. Some of the state’s permanent residents have rented out their spare acreage to oil and gas workers who want to park their trailers because traditional hospitality venues are at maximum capacity. Whether this influence on the hospitality and tourism industry will continue in coming years will depend on the sustainability of West Virginia’s oil and natural gas industry.

West Virginia has another big change on the horizon. As West Virginia University football gains a space in the Big 12 Conference, the state’s national presence is expected to increase. West Virginia’s football exposure, which was limited to the eastern states in past years, will expand to the mid-western and southwestern states. The added publicity may bring more visitors to West Virginia, for football games or other attractions. The magnitude of this effect on the Leisure and Hospitality sector, as well as on other industries, will be a factor to watch in coming years.

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**INDUSTRY INSIGHT:**

**THE ECONOMIC IMPACT OF THE SUMMIT**

*By Steven McGowan, The Boy Scouts of America, Steptoe & Johnson*

In October 2008, the Boy Scouts of America formally announced plans to build a national Scout reserve that will serve as the site of future national Scout Jamborees, a fourth high-adventure base, and eventually extensive training and educational facilities. Construction of the Summit began in mid-2010, and it is scheduled to open July 15, 2013, for the 2013 National Scout Jamboree.

It is anticipated that some 40,000 Scouts and Scouters will travel to West Virginia to attend or staff the Jamboree in 2013. Most of the 32,000 Scouts will travel by bus and will typically incorporate tour stops along the way. While visitor predictions for this first West Virginia Jamboree are inherently speculative, preparations are being made to accommodate the over 75,000 visitors the Scouts hope to host on any of the seven days the Summit will be open to visitors. The Boy Scouts have provided a link to the State of West Virginia’s Tourism web-page so that Jamboree visitors and participants can research all that West Virginia has to offer along the way.

The construction schedule for the Summit has been ambitious. By the time the Summit opens, the Boy Scouts will have built four dams creating 77 acres of lakes, as well as 336 shower houses, 24 miles of roads, 235 miles of trails and pedestrian routes, and a multitude of high-adventure activities for visitors and Scouts. The site’s six base camps will be able to support more than 40,000 Scouts and Scouters.

The economic impact Summit construction has had in southern West Virginia in terms of jobs, material purchases, and opportunities for local contractors is unprecedented. The impact of the Summit on the local community and West Virginia includes:

- On-site contractors have employed 952 people, and more than 80% of them are from West Virginia.
- On-site contractors have paid more than $34.5 million in wages, $12 million of which has been paid to subcontractors of West Virginia companies.
- There are currently more than 700 people working on-site each day.
  - 90 percent of those employed on-site are working for West Virginia contractors.
  - Over 20 percent of those working on-site are from Fayette, Raleigh, or Nicholas counties.
  - In 2013, the Boy Scouts of America salary and benefits for permanent Summit employees will be more than $1.5 million with more than half of the employees being hired in West Virginia.
• $16 million in materials have been purchased in West Virginia, more than $9 million from vendors in Fayette, Raleigh, and Nicholas counties.
• Laid end to end, more than 100 miles of underground electric, fiber, gas, water, and sewer lines are being installed, which will create a long-term demand on West Virginia—provided utility services.
• Local utility officials, the West Virginia Division of Highways, and other state and local agencies are working to build additional infrastructure to support the Summit.
• The installation of 4G broadband service for the 40,000 Jamboree participants as well as guests is already benefiting the local area.
• The CONSOL Energy Bridge is more than 700 feet long and will feature a wingtip design allowing Scouts and visitors to walk along the upper suspension structure; the iconic bridge is sure to be a long-term area attraction.
• A 75,000-square-foot logistics center will employ an estimated 80 people before and during the Jamboree and approximately 15 people full time after the Jamboree.

In addition to the direct economic impact of construction, since 2008 Scout leaders, visitors, volunteers, and out-of-town contractors have spent an unknown amount of money on hotel rooms, meals, car rentals, airfare, and other purchases in the local area. One estimate is that this has contributed more than $1 million additional dollars to the local economy. Many local hotels report that they are already fully booked for the Jamboree period in 2013, and it is expected that Scouts and visitors will have a significant impact on hospitality and recreational facilities statewide during the month of July next year.

Other notable adventure areas being built for 2013, some of which will be open only to Jamboree participants, include:
• More than six miles of zip lines and canopy tours
• A 50-acre outdoor shooting and archery sports area with approximately 350 shooting stations
• 37 miles of mountain bike trails
• A 90-acre canopy tour
• An 18-acre grass stadium with a capacity of 80,000
• A 27-acre BMX and skate park area

The Summit Center area, which will be open to visitors as part of the Jamboree visitor fee, will feature 100 acres of exhibits, two “five-across” zip lines, four BMX courses, a skate plaza, two challenge courses, a 3,500-foot boardwalk, and more than 60 climbing/rappelling/bouldering stations. Exhibits will include a sustainability treehouse with two exhibit floors suspended in the air, a conservation area, a West Virginia exhibit, and Scouting exhibits.

During the Summer of 2014 the Summit will host an estimated 5,000 Scouts as part of the pilot high-adventure program. In the years that follow the program will continue to expand as construction continues. The Boy Scouts hope that substantial vertical construction will be completed by the next Jamboree in 2017 and that the Summit will be well on its way to accommodating tens of thousands of Scouts and their families in the years that follow. In 2019 the Summit will host the World Jamboree of Scouting with Scouts from over 160 nations expected to attend.

Clearly the Summit will offer an unprecedented opportunity for the nation and the world to see and experience the entire State and its hospitality. As attendance at the Summit increases with time Scouts and their families will look to West Virginia as both their Scouting and vacation destinations for many years to come.
LEISURE AND HOSPITALITY SECTOR FORECAST FOR WEST VIRGINIA

Employment is expected to remain fairly constant throughout the forecast period, ending with 74,690 jobs in 2017 (Figure 27). Total real wage distributions in the Leisure and Hospitality sector are projected to grow at an annual average rate of 0.3 percent over the forecast period. This is significantly slower than the growth expected for the state’s real wage distribution, which has an annual average growth rate of 2.2 percent from 2012 to 2017.

Despite positive developments in the Leisure and Hospitality sector, it is expected to remain constant over the next five years. Real GSP from this sector will grow by $25.9 million between 2012 and 2017. As the rest of the state grows, these industries will make up an increasingly smaller portion of state real GSP, representing only 3.6 percent of total real GSP by the end of the forecast period, down from just under 4.0 percent in 2011.

The opening of the Summit Bechtel Boy Scout Reserve may have a major impact on this forecast. Because the Summit is still in planning stages, the available forecast data may not account for recent developments or for events scheduled beyond the 2012-2017 forecast period. Therefore, the forecasts for Leisure and Hospitality GSP and employment are conservative. The Summit will add significant amounts of direct and indirect income to West Virginia’s GSP, though it is also likely to take away business from other adventure tourism companies in the area. Currently, the Summit employs many West Virginians as its construction process is underway, and after the facility is finished many of these jobs will no longer be available. However, local accommodations and food services businesses are likely to require more employees to handle the influx tourists and scouts to the area.


Source: IHS Global Insight
CONSTRUCTION AROUND THE STATE

By Amy Godfrey, Patrick Manzi, and Christiadi

The Construction sector in West Virginia was significantly impacted by the national housing crisis. However, West Virginia weathered the crisis better than the nation as a whole. Figure 28 shows that between 2007 and 2009 housing price growth stagnated, but the state did not experience a decline in its average housing price. On the other hand, the average housing price in the United States dropped by 6.4 percent from 2007 to 2008 and by roughly 1 percent from 2008 to 2009.

Following a steady increase from 2008 to 2009, existing single family home sales fell slightly from 2009 to 2010. Figure 29 shows single family home sales were up by 2.4 percent from 2010 to 2011, a good indicator of recovery in the housing market.

While construction of housing may be the most recognizable component of the Construction sector, it is not the largest component. Around half of employment in the construction industry belongs to the Special Trade Contractors subsector, which includes building equipment contractors, site preparation contractors, electrical contractors, and plumbing and HVAC contractors. Construction of Building subsector counts for about 30 percent, and Heavy and Civil Engineering Construction counts for about 20 percent. Figure 30 shows that total employment in the Construction sector started to decline in 2006, driven primarily by job losses in the Construction of Building subsector. In 2009, all three sub-sectors within the Construction sector experienced considerable job losses, causing a total of nearly 5,000 job losses in the state. Job losses decelerated in 2010, and in 2011 employment in the construction industry started to level off.
FIGURE 28: Annual Historical Percentage Change in Average Price of Existing Homes (2006-2011)

Source: IHS Global Insight


Source: IHS Global Insight

FIGURE 30: West Virginia Construction Sector Employment (2006-2011)

Source: IHS Global Insight
INDUSTRY INSIGHT:
CONSTRUCTION AROUND THE STATE

By Mike Clowser, Executive Director, Contractors Association of West Virginia

While the recession officially ended in June 2009, the construction industry has continued to suffer from job losses and ever-tighter margins. West Virginia’s construction employment increased from 33,300 in August 2011 to 36,200 jobs in August 2012. Until this year’s boost in construction jobs, West Virginia’s construction employment had dropped 19 percent during the three prior years.

Quite a few of the new construction jobs are in the Marcellus shale industry and related power and energy industries. Water and sewer contractors are putting in lines, highway contractors are putting in roads, bridges and well pads, building contractors are constructing office and ancillary buildings, aggregate producers are supplying stone and equipment dealers are selling and renting machinery. West Virginia contractors are seeing a good market in the oil and gas industry that was not there a few years ago.

However, public construction continues to decline as local and state governments struggle to balance budgets and as Congress and the White House fail to reach an agreement on a federal budget in time to avoid massive mandatory federal spending cuts on January 2.

The Budget Control Act of 2011 requires some $1.2 trillion in spending cuts absent an agreement by Congress and the White House to reduce the federal deficit by other means. The Office of Management and Budget identifies 48 separate budget accounts targeted for spending cuts that directly fund the design, construction and rehabilitation of buildings. Funding for highways, bridges, water and sewer systems, airports, dams, waterway and other vital infrastructure programs could see an 8 to 10 percent cut in available budgetary resources if there is not a plan to avoid a looming fiscal cliff.

Construction projects in West Virginia totaled $5.3 billion in 2011, up from $1.9 billion the year before, according to a report from McGraw-Hill Construction. However, the bulk of the increase can be attributed to two large projects, not an overall increase in construction projects in West Virginia. The McGraw-Hill numbers include a $400 million natural gas processing plant in Natrium, which is nearly complete, and a $3 billion coal-to-liquids plant in McDowell County, which may or may not be built. With both large projects removed, total construction in 2011 was $1.98 billion, compared to $3 billion in 2009 and $1.91 billion in 2010.

Federal investment policies are causing considerable uncertainty for construction firms. This is due to Congress’ inability to pass long-term investment legislation addressing the nation’s aging inventory of water, road and aviation systems. Plus, State Highway Trust Fund revenues continue to stagnate which is leading West Virginia’s transportation system into a crisis situation, and, without action, the state’s roads and bridges will continue to deteriorate.

The West Virginia Division of Highways has found that by 2026, nearly two-thirds – 351 of 555 miles – of the state’s Interstate system will be in need of significant rehabilitation or reconstruction. Similarly, half of the bridges – 46 percent – will need significant repairs or reconstruction. WVDOH also found that additional lanes along 142 miles of the existing Interstate system by 2026 will be needed in order to relieve growing traffic congestion. Unfortunately, West Virginia’s system of state and county roads does not fare much better. A report by the independent research group TRIP
The Road Information Program -- shows that 37 percent of major roads are in poor or mediocre condition and more than one-third of the state's bridges show significant deterioration or do not meet current design standards.

West Virginia Department of Transportation Secretary Paul A. Mattox Jr., P.E., stated the total cost of needed repairs and expansion of West Virginia's transportation system over the next 25 years is $39 billion; however only $15 billion will be available. Governor Earl Ray Tomblin in August created the Blue Ribbon Commission on Highways which will review the state's transportation condition, examine overall needs and develop a consensus on a long-term strategic plan of action. The commission will study innovative and additional criteria for financial modeling.

While many expect slow or sub-par growth expected in the construction industry, there is growing consensus that reviving demand for construction, particularly private sector construction activity, is essential to sustaining broader economic growth. That is because: Construction builds a more globally competitive economy; there is a direct connection between construction activity and employment levels; construction improves our environment by cutting waste and pollution by building and infrastructure efficiency; and a growing realization that investing in efficient water and sewage treatment facilities, good schools and a modern and safe transportation system improves our quality of life.

Congress, as well as West Virginia lawmakers, will realize that it will cost more to repair the nation's and the state's infrastructure rather than just maintaining it. This will lead to future funding of roads, bridges, schools, water and sewer systems and airports. This will boost the economy and will immediately improve employment levels. It will also lead to an increase in domestic demand for manufactured goods, shipping services and construction supplies and materials. And it will bring new vitality to many of our hardest hit communities.

One thing is very clear when we debate future funding for the nation's and West Virginia's infrastructure. We must solve the problem or accept the consequences.

CONSTRUCTION SECTOR FORECAST FOR WEST VIRGINIA
In recent years the fate of housing and the Construction sector seemed bleak, but looking forward, construction in West Virginia appears to be on the rebound. Table 9 presents a selection of forecast information for the West Virginia housing industry.

A projected rise in housing permits strengthens the assertion of housing industry growth. Figure 31 shows the drastic fall in housing starts from 2006 to 2009 and the projected rise of new housing starts in the next five years. Sales of existing single family homes are expected to show a similar trend.

Construction sector employment is forecast to grow steadily through 2017. A large part of this growth comes from the projected doubling of new housing starts throughout the state. This growth is being driven by pent-up demand for housing. This demand is partially due to the rapid growth in the natural gas industry. In many parts of the state, a shortage of housing occurred due to the influx of skilled workers into the state. The construction sector will continue to account for roughly 4 percent of West Virginia’s GSP.

The projected boom in housing starts is not the only force driving the projected growth of the construction industry. Construction of new roads, utilities, and local retail outlets will be necessary as the housing sector expands. Construction of the Summit Bechtel Family National Scout Reserve in Fayette and Raleigh counties is currently underway. Construction of the necessary infrastructure to handle such a high volume of tourists will also help the construction sector in the upcoming years. New hotels, restaurants and service stations will be a necessity.

After the decline of the Great Recession, it appears that the Construction sector is on its way to recovery. The construction industry should continue to flourish well into the second half of this decade.
FIGURE 31: Historical and Forecast Total Private Housing Starts (thousands) (2006-2017)


<table>
<thead>
<tr>
<th>Year</th>
<th>2012</th>
<th>2013</th>
<th>2014</th>
<th>2015</th>
<th>2016</th>
<th>2017</th>
</tr>
</thead>
<tbody>
<tr>
<td>Housing starts</td>
<td>2,540</td>
<td>3,060</td>
<td>3,890</td>
<td>4,950</td>
<td>5,330</td>
<td>5,510</td>
</tr>
<tr>
<td>Single family housing permits</td>
<td>1,770</td>
<td>2,000</td>
<td>2,560</td>
<td>3,390</td>
<td>3,700</td>
<td>3,810</td>
</tr>
<tr>
<td>Existing single family home sales</td>
<td>25,720</td>
<td>27,180</td>
<td>28,200</td>
<td>30,440</td>
<td>30,640</td>
<td>31,390</td>
</tr>
<tr>
<td>Construction employment</td>
<td>34,610</td>
<td>35,000</td>
<td>36,130</td>
<td>39,180</td>
<td>42,290</td>
<td>44,420</td>
</tr>
<tr>
<td>Construction sector contribution to GSP</td>
<td>3.68%</td>
<td>3.53%</td>
<td>3.60%</td>
<td>3.85%</td>
<td>4.02%</td>
<td>4.08%</td>
</tr>
</tbody>
</table>

Source: IHS Global Insight
ECONOMIC OUTLOOK AROUND THE STATE

By Amy Godfrey and Patrick Manzi

WEST VIRGINIA’S MSAs

The West Virginia Economy is an amalgamation of many diverse regions. Each region is influenced by its own set of economic and demographic characteristics. We can evaluate the performance of the state as a whole by looking at these areas individually. Assessments of performance are made by taking into account such indicators as population, employment, housing starts and personal income, all of which vary significantly across the state.

West Virginia has 55 counties and 16 Core Based Statistical Areas (CBSA)—densely developed regions designated by the United States Office of Management and Budget. A metropolitan statistical area (MSA) is distinguished by a densely populated city or urban agglomeration with a population of 50,000 or more. The county containing that city becomes the core of the MSA. If an outlying county has at least 25 percent of its labor force commuting to or 25 percent of its employment commuting from the core area it is included in the MSA. A micropolitan statistical (MicroSA) is a scaled down version of an MSA; its core city has between 10,000 and 49,999 residents. The state’s CBSAs can be seen below in Figure 32. This report will focus only on MSA and individual county-level economic activity.

Twenty-one West Virginia counties are included in ten MSAs. Only two of these MSAs are entirely within West Virginia—the Morgantown MSA and the Charleston MSA. Many of these statistical areas also include counties in Kentucky, Maryland, Ohio, or Virginia. The largest is the Washington-Arlington-Alexandria MSA (including Jefferson County in West Virginia) with a population of 6,841,866 by the 2010 Census count. The smallest is the Cumberland MSA (including Mineral County in West Virginia) with 103,299 residents.

The following sections present some key economic indicators and forecasted performance of West Virginia’s 10 MSAs and 55 counties in the past year and into the future.

FIGURE 32: West Virginia Core Based Statistical Areas (CBSAs)
The Washington-Arlington-Alexandria MSA had the highest average annual wage, while the Steubenville-Weirton MSA had the lowest (Table 10). Such high wages in the Washington-Arlington-Alexandria MSA are to be expected considering the high level of economic activity taking place in the Washington, DC area. Although only one West Virginia county is included in this MSA, the state reaps many of the spillover benefits of the Washington, DC area from commuters and travelers passing through the region.

Population growth or decline is a significant indicator of economic performance. Table 10 shows how each of the state’s MSA populations changed between 2010 and 2011. Half of the state’s MSAs experienced negative population growth. The highest population growth came from the Washington-Arlington-Alexandria MSA, while the Steubenville-Weirton MSA experienced the highest rate of population decline.

Four of nine MSAs experienced employment declines from 2010 to 2011. The Winchester, VA, MSA experienced the highest rate of employment growth at 2.87 percent. The Morgantown MSA had one of the lowest unemployment rates in the nation during the Great Recession. The BLS reported in August 2012 that Morgantown, WV has the 30th lowest unemployment rate in the nation.

Six of the state’s MSAs experienced declines in housing starts. Most affected by the decline was the Parkersburg MSA. The Huntington, Morgantown and Washington DC MSAs all experienced greater than thirty percent increases in housing starts indicating a positive outlook for the future.

**MSA OUTLOOK, 2012-2017**

Macy’s has constructed a $150 million, 1.3 million-square-foot distribution center in Martinsburg, which is part of the Hagerstown-Martinsburg MSA, to facilitate orders from the retailer’s online store. The facility opened in July 2012 and will employ 1,200 when fully operational. Another significant construction project in the state is the opening of a new Cabela’s retail outlet in Charleston, WV. Cabela’s plans to hire as many as 250 employees at its new, 80,000-square-foot store.

The Morgantown MSA should see some positive economic spillovers following the WVU football team’s entrance into the Big 12 conference. Entrance into this conference brings with it new levels of national exposure. This added publicity could entice more visitors to the Morgantown area as well as the state. New housing developments, retail centers, natural gas industry development, Mylan Pharmaceuticals, and an ever-expanding West Virginia University will also help the Morgantown MSA continue to grow into the future.

Employment is projected to grow in all of West Virginia’s MSAs in the next five years (Table 11). The Washington-Arlington-Alexandria MSA is expected to grow the most with projected average annual employment increases of 1.79 percent. The Morgantown MSA follows in a close second with expected average annual employment increases of 1.47 percent. The Steubenville-Weirton MSA is projected to have the lowest average annual increase in employment at a rate of 0.83 percent. All MSAs are projected to have steady wage increases in the forecast period.

Population decline is only expected in three of the state’s MSAs. The Steubenville-Weirton MSA leads in this category. The Washington-Arlington-Alexandria MSA is projected to lead the way in population growth at an average annual rate of 1.42 percent.

Housing starts are projected to dramatically increase in all MSAs except Morgantown. The decline in housing starts in the Morgantown MSA could be due to overbuilding of new student housing across the region during the last few years of strong growth. IHS Global Insights forecasts a 33.33 average annual percent change in housing starts in the Steubenville-Weirton MSA over the forecast period. This is quite a statistic, but could be explained by the region’s housing market’s sharp decline from 2010 to 2011 and a dramatic increase from 2012 to 2017. Such a huge increase is hard to fathom, but could be due to spillovers from the increased presence of the natural gas industry in the surrounding areas. Slow housing market growth in the Huntington, WV MSA could be due to low rates of population growth in the area.
**TABLE 10: Economic Profiles of Metropolitan Statistical Areas with West Virginia Counties (2011)**

<table>
<thead>
<tr>
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</tr>
</thead>
<tbody>
<tr>
<td>Charleston, WV</td>
<td>Boone, Clay, Kanawha, Lincoln, Putnam</td>
<td>$34,400</td>
<td>$43,700</td>
<td>7.3</td>
<td>-0.01%</td>
<td>-0.19%</td>
</tr>
<tr>
<td>Cumberland, MD-WV</td>
<td>Mineral</td>
<td>$29,010</td>
<td>$36,500</td>
<td>8.2</td>
<td>1.55%</td>
<td>-0.03%</td>
</tr>
<tr>
<td>Hagerstown, MD-WV</td>
<td>Berkeley, Morgan</td>
<td>$30,820</td>
<td>$39,900</td>
<td>9.0</td>
<td>1.15%</td>
<td>0.70%</td>
</tr>
<tr>
<td>Huntington, WV-KY-OH</td>
<td>Cabell, Wayne</td>
<td>$28,930</td>
<td>$40,000</td>
<td>8.3</td>
<td>-0.44%</td>
<td>-0.10%</td>
</tr>
<tr>
<td>Morgantown, WV</td>
<td>Monongalia, Preston</td>
<td>$30,930</td>
<td>$42,200</td>
<td>5.7</td>
<td>0.74%</td>
<td>1.60%</td>
</tr>
<tr>
<td>Parkersburg, WV-OH</td>
<td>Pleasants, Wirt, Wood</td>
<td>$29,090</td>
<td>$36,700</td>
<td>8.44</td>
<td>0.57%</td>
<td>0.07%</td>
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<tr>
<td>Steubenville-Weirton, WV-OH</td>
<td>Hancock, Brooke</td>
<td>$27,400</td>
<td>$34,280</td>
<td>11.43</td>
<td>-1.36%</td>
<td>-0.78%</td>
</tr>
<tr>
<td>Washington-Arlington-Alexandria, DC-VA-MD-WV</td>
<td>Jefferson</td>
<td>$50,250</td>
<td>$70,300</td>
<td>5.8</td>
<td>1.28%</td>
<td>1.70%</td>
</tr>
<tr>
<td>Wheeling, WV-OH</td>
<td>Marshall, Ohio</td>
<td>$30,080</td>
<td>$34,300</td>
<td>8.6</td>
<td>-0.22%</td>
<td>-0.40%</td>
</tr>
<tr>
<td>Winchester, VA-WV</td>
<td>Hampshire</td>
<td>$30,870</td>
<td>$41,100</td>
<td>6.6</td>
<td>2.87%</td>
<td>0.90%</td>
</tr>
</tbody>
</table>

<table>
<thead>
<tr>
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<th></th>
</tr>
</thead>
<tbody>
<tr>
<td>Charleston, WV</td>
<td>Boone, Clay, Kanawha, Lincoln, Putnam</td>
<td>2.44</td>
<td>2.70</td>
<td>1.25</td>
<td>0.16</td>
</tr>
<tr>
<td>Cumberland, MD-WV</td>
<td>Mineral</td>
<td>2.36</td>
<td>2.42</td>
<td>0.89</td>
<td>0.07</td>
</tr>
<tr>
<td>Hagerstown, MD-WV</td>
<td>Berkeley, Morgan</td>
<td>1.87</td>
<td>2.47</td>
<td>1.41</td>
<td>1.00</td>
</tr>
<tr>
<td>Huntington, WV-KY-OH</td>
<td>Cabell, Wayne</td>
<td>2.08</td>
<td>2.55</td>
<td>1.32</td>
<td>0.14</td>
</tr>
<tr>
<td>Morgantown, WV</td>
<td>Monongalia, Preston</td>
<td>1.88</td>
<td>2.77</td>
<td>1.47</td>
<td>0.95</td>
</tr>
<tr>
<td>Parkersburg, WV-OH</td>
<td>Pleasants, Wirt, Wood</td>
<td>2.31</td>
<td>2.77</td>
<td>1.16</td>
<td>-0.06</td>
</tr>
<tr>
<td>Steubenville-Weirton, WV-OH</td>
<td>Hancock, Brooke</td>
<td>1.80</td>
<td>2.23</td>
<td>0.83</td>
<td>-0.31</td>
</tr>
<tr>
<td>Washington-Arlington-Alexandria, DC-VA-MD-WV</td>
<td>Jefferson</td>
<td>1.77</td>
<td>2.54</td>
<td>1.79</td>
<td>1.42</td>
</tr>
<tr>
<td>Wheeling, WV-OH</td>
<td>Marshall, Ohio</td>
<td>2.15</td>
<td>2.68</td>
<td>1.11</td>
<td>-0.09</td>
</tr>
<tr>
<td>Winchester, VA-WV</td>
<td>Hampshire</td>
<td>1.65</td>
<td>2.70</td>
<td>1.32</td>
<td>1.18</td>
</tr>
</tbody>
</table>

Source: IHS Global Insight
WEST VIRGINIA’S COUNTIES
The demographics of West Virginia’s 55 counties can give insight into the economic performance of the state. In 2010, 25 of West Virginia’s counties experienced population declines while the state as a whole grew by 0.36 percent (Figure 33). Monongalia County experienced the largest level of population growth in 2011 (2.0 percent) and had the state’s lowest median age (29.1 years). As shown in Figure 34, Monongalia County was the only county with a lower median age than the national median age of 37.2 years. The median age for West Virginia in 2011 was 41.5 years, while the median age of West Virginia’s counties ranged between 29.1 years and 47.4 years.

West Virginia’s real per capita income for 2011 was $29,450. This low personal income per capita level can be explained by examining the personal income per capita levels of the counties in the state, as shown in Figure 35. Forty-five of the state’s 55 counties had a personal income per capita below the state average, with the lowest level found in Doddridge County. Kanawha County had the highest real per capita personal income ($37,518) of any West Virginia county in 2011 and was one of six counties in the state with a personal income per capita greater than the nation ($32,700).

Figure 36 shows nonfarm employment by county. Kanawha County dwarfed the rest of the state in terms of employment with nearly double the employment level of Monongalia County, the county with the second highest level of employment. The counties with the highest levels of employment tended to be counties that are a part of an MSA. This is to be expected considering that MSAs have higher population levels.
FIGURE 33: West Virginia County Population Change (2010-2011)

Source: IHS Global Insight
FIGURE 34: County Median Age (2011)

FIGURE 35: County Real Per Capita Personal Income (2011)

The chart illustrates the real per capita personal income for various counties in West Virginia in 2011. The income is measured in 2005 dollars.

Source: IHS Global Insight
FIGURE 36: County Nonfarm Employment (2011)

Thousands of Employees

Source: IHS Global Insight
COUNTY OUTLOOK, 2012-2017
The highest projected growth rate for employment (Figure 37) and real personal income (Figure 38) is in Putnam County while the highest projected rate of decline in employment comes from McDowell County. Three other counties, Clay, Mingo, and Wyoming are also forecast to have employment declines.

FIGURE 37: Forecast Percentage Change in Total Employment by County (2012-2017)

Source: IHS Global Insight
FIGURE 38: Forecast Percentage Change in Real Personal Income by County (2012-2017)

Source: IHS Global Insight
Jefferson County, a part of the Washington-Arlington-Alexandria MSA, will lead the way in real gross county product growth (Figure 39) as well as population growth (Figure 40). Mingo, McDowell, and Clay are forecast to have negative growth in their respective gross county products. Population decline is expected in 22 of West Virginia’s 55 counties over the forecast period with McDowell County leading the way in the decline.

Several West Virginia coal-fired power plants are slated for retirement over the forecast period. Power plants in Kanawha, Mason, Preston, Marion, Pleasants, Marshall, Campbell, and Lewis counties are set to be retired in the next few years. These closures have already begun to take place. Employment losses in these counties will be a reality. According to the EIA, no new planned coal capacity is planned until 2017. It is likely that if new power plants are constructed in the state, they will be primarily fired by natural gas.

**FIGURE 39: Forecast Percentage Change in Real Gross County Product by County (2012-2017)**

Source: IHS Global Insight
Mine closures in the summer of 2012 hurt employment in Boone and Clay counties. This is likely a result of the price of natural gas falling dramatically relative to coal in the previous year. If natural gas continues to fall in price, it is likely that more mine closures will take place across many West Virginia counties. This effect is likely to be felt through the remainder of the year as these mine workers seek new employment.
APPENDIX A – GLOSSARY OF TERMS

Annual Growth Rate between consecutive years is calculated as:

\[ \left( \frac{X_t}{X_{t-N}} - 1 \right) \times 100 \]

Average Annual Growth Rate is calculated for annual data as:

\[ \left[ \left( \frac{X_t}{X_{t-N}} \right)^{\frac{1}{N}} - 1 \right] \times 100 \]

Gross Product is the sum of gross value added by all resident producers in the economy plus any product taxes and minus any subsidies not included in the value of the products; calculated without making deductions for depreciation of fabricated assets or for depletion and degradation of natural resources. Gross product can be calculated for various sized economies. This paper references Gross Product for counties (GCP), MSAs (GMP), states (GSP), and the domestic economy as a whole (GDP).

Metropolitan Statistical Area is distinguished by a densely populated city or urban agglomeration with a population of 50,000 or more according to the US Office of Management and Budget; a county containing that city become the core of the MSA and if an adjacent county has at least 25 percent of its labor force commuting to or from the core area it is including in the MSA.

Personal Income is the sum of the incomes of an area’s residents; it is calculated as the sum of wages and salaries, proprietor’s income with inventory valuation and capital consumption adjustments, rental income of persons with capital consumption adjustments, personal dividend income, personal interest income, and personal current transfer receipts less contributions for government social insurance.

Per Capita Personal Income is the mean personal income within an economic aggregate, such as a country or city. It is calculated by taking a measure of personal income and dividing it by the total population. Per capita personal income is often used as average income, a measure of the wealth of the population of a nation, particularly in comparison to other nations.

Population is the number of persons whose usual place of residence was within the area at the time the census was taken. It is also referred to as resident population. Persons in the military or institutionalized are counted where the military base or institution is located.

Real data has been adjusted for inflation. Using real data eliminates the year-to-year changes in price and gives a clearer picture of the true changes in purchasing power, production, etc.

Real Dollars dollar amounts have been adjusted for inflation. Using real dollars eliminates the year-to-year changes in price and gives a clearer picture of the true changes in purchasing power.

Unemployment Rate is the percent of the civilian labor force that is unemployed. The civilian labor force is comprised of non-institutionalized persons 16 years of age or over who are employed or unemployed. A resident is considered to be unemployed for the month if that person is at least 16 years old and is not currently employed but is available and actively looking for work during the survey week (the week including the 12th of the month).
APPENDIX B – WORKS CITED


Division of Tobacco Prevention. 2012. Welcome to the WV Division of Tobacco Prevention: West Virginia Department of Health and Human Resources.


Kabler, Phil. 2012. “Casino Revenue Down, but Not as Much as Expected.” The Charleston Gazette.


APPENDIX B – WORKS CITED (CONTINUED)


APPENDIX B – WORKS CITED (CONTINUED)


