West Virginia Economic Outlook 2010

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Table of Contents

List of Figures

List of Figures, continued

List of Tables

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Executive Summary

The West Virginia economy is in the midst of a very severe recession. Employment is in free fall, with the state losing 22,600 jobs from the second quarter of 2008 to the same quarter of 2009. That translates into a rate of job loss of 3.0 percent. The severe job losses have been accompanied by a rapidly rising unemployment rate, which has doubled during the past four quarters (from 4.3 percent to 8.8 percent, seasonally adjusted). Further, real personal income growth has also slowed during the first half of 2009, compared to the same period in 2008, but remained positive.

West Virginia is not alone in the downturn. The national economy lost jobs at a faster rate during the past year, at 3.9 percent. The national economy has also recorded a massive increase in the seasonally adjusted unemployment rate, which hit 9.4 percent in the second quarter of 2009. In addition, real income has actually declined nationally during the past four quarters, down 2.4 percent.

Overall, the state has weathered the recession so far a little better than the national economy, although the state has been hit hard. Keep in mind that the state has not seen job losses in the 3.0 percent range since the early 1980s and that after losing almost 23,000 jobs, state employment is back to levels last seen in 2004.

Job losses in West Virginia during the past year have been widely distributed across industries. Indeed, losses were similar for the goods-producing and service-providing sectors. Within the goods-producing sector, manufacturing posted the largest job losses, with those declines concentrated in the durable manufacturing sector. This reflects the huge drop in demand caused by the national (and global) downturn. Construction jobs are also down significantly from year-ago levels, which reflects the housing correction in the state. Finally, natural resources and mining jobs are also down during the past four quarters, which reflects declining demand for energy and steel that results in less demand for coal and natural gas.

Within the natural resources and mining sector, coal production has fallen precipitously during the past four quarters. Indeed, current estimates put coal production at about 140 million tons in the second quarter of 2009, roughly 13.0 percent below year ago levels. In addition, spot coal prices for Central and Northern Appalachian coal are down from the $145/ton range during the summer of 2008 to the $45/ton range during the summer of 2009. Natural gas prices are also well down from year-ago levels. Weakening demand for coal also hit the value of coal exports, which were down 23.0 percent in the second quarter of 2009, compared to year ago levels.

In addition to the goods-producing sector job losses, the state has also posted large losses in service-providing employment. The largest losses were in retail trade, which reflects the retrenchment of the consumer both nationally and in the state. Professional and business services; leisure and hospitality; and financial activities also posted significant job losses during the past year.

Not all service-providing sectors have lost jobs lately. Education and health care and government employment were both above year-ago levels in the second quarter of 2009. Health care job growth during the recession reflects the fact that this sector tends to be less sensitive (but not immune) to national business cycle trends that many other sectors. Government employment growth reflects gains in federal government employment in the state.

The outlook for the state depends on the outlook for the national (and global) economies. The forecast which underpins the state outlook is summarized in detail in the *National Outlook* section. That forecast calls for U.S. real GDP growth to rebound in the second half of 2009, while national employment begins to grow again in 2010.

That sets the stage for West Virginia employment to stabilize during the first half of 2010 and for growth to pick up steam during the second half of the year. However, gains are likely to be slow during the remaining years of the forecast. Indeed, the state does not regain 2008 employment levels until 2013.

As Table 1 shows, the forecast calls for state job growth to average 0.7 percent per year during the 2009-2014 period. That is below average growth during the previous five years and is well below the 1.4 percent growth rate expected for the nation.

TABLE 1
W.VA. AND U.S. ECONOMIC GROWTH

	West Virginia				Average Annual Growth Rates			
	Actual		Forecast		2003-2008		2009-2014	
	2003	2008	2009	2014	W.Va.	U.S.	W.Va.	U.S.
Jobs (000s)*	677.2	709.1	688.1	713.9	0.9	1.1	0.7	1.4
Real Per Capita Income ($2005)	26,332	29,020	29,585	32,021	2.0	1.6	1.6	1.8
Population (000s)	1,802	1,814	1,820	1,835	0.1	0.9	0.2	1.0
Unemployment Rate** (Percent)	6.0	4.3	8.1	7.5	-0.3	-0.0	-0.1	-0.3

*Covered by unemployment insurance for West Virginia. Nonfarm payroll for U.S.
**Growth rate is average annual change.

Job losses in natural resources and mining contribute to the sluggish overall employment gains. This reflects the slow rebound in coal production from 140 million tons in 2009 to 148 million tons by 2014.

Construction employment rises modestly during the forecast, which reflects the end of the housing correction and continued investment in energy transmission and generation projects.

Manufacturing employment is forecast to stabilize during the next five years, again as world demand recovers. In addition, continued depreciation of the U.S. dollar, which makes U.S. goods and services more competitive internationally, will help drive increased demand for U.S. manufactured goods.

Most job gains during the forecast come in service-providing sectors, particularly professional and business services and health care. Growth in professional and business services reflects the rebounding national economy, while health care gains are connected to the aging of the state's residents.

Also adding significant numbers of jobs during the forecast are trade, transportation, and utilities, leisure and hospitality, and government. While employment in leisure and hospitality continues to growth during the forecast, the rate of growth drops dramatically compared to gains earlier this decade. That reflects increased competitive pressures in the gaming sector, as neighboring states move to take advantage of this revenue source.

As employment losses gradually turn to employment gains during the next year, the state's unemployment rate will peak and then begin to fall. The forecast calls for the state unemployment rate to peak at 9.5 percent in the second quarter of 2010 and then slowly drop to 7.5 percent by 2014. This roughly mirrors the national pattern, although the national rate is expected to peak at 10.0 percent in the first quarter of 2010.

Employment growth during the forecast contributes to income growth, although real per capita personal income growth is forecast to be slower than the national average. While the state made quite a bit of progress in closing the per capita income gap with the nation so far this decade, the gap is forecast to slowly expand again during the next five years.

Job and income growth contribute to slow population growth during the forecast, with the state forecast to add residents at a 0.2 percent per year rate. That is far below the national rate. In addition, the demographics of the state will soon begin to shift toward the older age groups, as the baby boom generation begins to pass from the 45-64 age group into the 65-and-older age group.

The aging of the state's residents will also contribute to more job openings for younger workers, as the baby boomers begin to retire in large numbers. This suggests that the state will have a better chance to retain young college graduates and generate stronger wage growth in the future.

Risks to the forecast include the possibility that the national economy will slide back into recession in 2010. That would likely put the state back into recession as well. In addition, there are state specific risks to the forecast.

One set of risks pertain to the natural resources sector and relate to national environmental policies. The U.S. Environmental Protection Agency has already begun to increase reviews of surface mining permits. This additional scrutiny has the potential to reduce surface mining (particularly affecting the southern part of the state) activity, which would reduce overall job and income growth in West Virginia.

In addition, the nation (and Congress) continues to debate restrictions on carbon dioxide emissions (likely through a cap-and-trade style policy intervention). If these restrictions are implemented they will likely result in much lower levels of coal production in West Virginia, with accompanying job and income losses. Further, the impacts of this policy intervention would also adversely affect the manufacturing sector in West Virginia.

The gaming sector of the state economy has generated strong growth during this decade. In part, that was because the State of West Virginia legalized certain forms of gaming before surrounding states. This is now changing and the result is considerable competitive pressures on gaming establishments. With all states under considerable pressure to raise revenues, it is likely that more of our surrounding states will legalize more forms of gaming, thus increasing competitive pressures on the sector in West Virginia.

Finally, health care remains one of the fastest growing sectors in the state (and the nation). However, this sector faces the prospect of a major restructuring of the public funding of health care. This restructuring has the potential to slow the growth of the sector in the state.

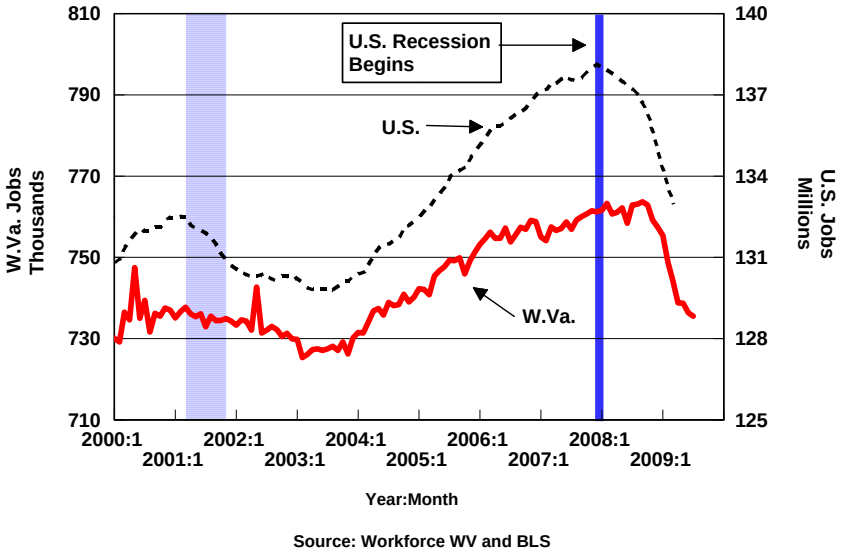
West Virginia Outlook

Recent Developments

West Virginia And U.S. Jobs In Free Fall

In the second quarter of 2009, West Virginia joined the U.S. in shedding a remarkable number of jobs. From the second quarter of 2008 to the second quarter of 2009, the state lost 22,600 jobs, which translates into an annual rate of loss of 3.0 percent. That was somewhat better than the national rate of job loss during the same period of 3.9 percent. As Figure 1 shows, this also came on the heels of a relatively stable first quarter, during which state jobs were down just 1.2 percent, much better performance than the nation (down 3.1 percent from the same quarter of 2008).

FIGURE 1
W.VA. AND U.S. PAYROLL EMPLOYMENT
MONTHLY, SEASONALLY ADJUSTED
NATIONAL RECESSIONS SHADED



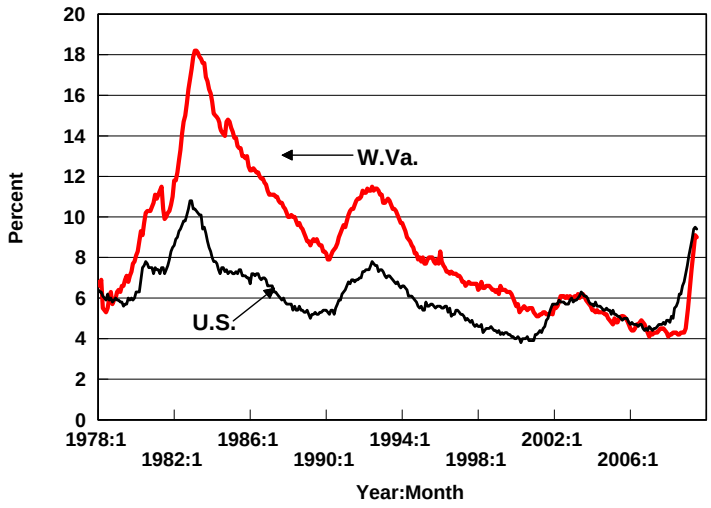
Source: Workforce WV and BLS

The pace of job losses in West Virginia in the second quarter was particularly severe. In fact, the state has lost roughly two-thirds of the jobs added since mid-2003 and employment is now back to levels last seen in 2004. In addition, the 3.0 percent job loss in the second quarter of 2009 (year-to-year basis) is the largest year-to-year drop the state has experienced since 1983, which was during one of the worst recessions the state has experienced. Keep in mind, however, that the current downturn is not yet as severe as the recession during the early 1980s. Indeed, from 1979 to 1983, state jobs declined by 12.0 percent.

For the national economy, year-to year job losses in the 3.0 to 4.0 percent range are even more unusual. The current pace of job loss nationally is the worst since the 1957-1958 downturn.

The massive job losses experienced by the state and nation have been accompanied by a huge increase in the unemployment rate. As Figure 2 shows, the unemployment rates for both the state and the nation have roughly doubled since 2008, rising from the 4.0 percent range to the 9.0 percent range by mid-2009. The large increase in the West Virginia unemployment rate reflects an equally startling increase in the number of unemployed residents. Indeed, the number of unemployed state residents is estimated at 34,962 during the second quarter of 2008. By the second quarter of 2009, the number of unemployed state residents had risen to 69,503.

FIGURE 2
UNEMPLOYMENT RATES FOR W.VA. AND THE U.S.
MONTHLY, SEASONALLY ADJUSTED



Source: Workforce WV and BLS

The seasonally adjusted U.S. unemployment rate hit 9.5 percent in June 2009, which is far above the peak levels during the last two recessions (2001 and the early 1990s). Indeed, the national rate is at its highest level since July 1983, which came during a very severe downturn.

For West Virginia, the story is different. In June 2009, the seasonally adjusted state unemployment rate hit 9.1 percent, which is well above the peak rate during the downturn earlier this decade, but remains well below the peak rate (11.5 percent) reached during the recession of the early 1990s and far below the peak rate during the recession during the early 1980s (18.2 percent).

Both Goods-Producing And Service-Providing Sectors Lose Jobs

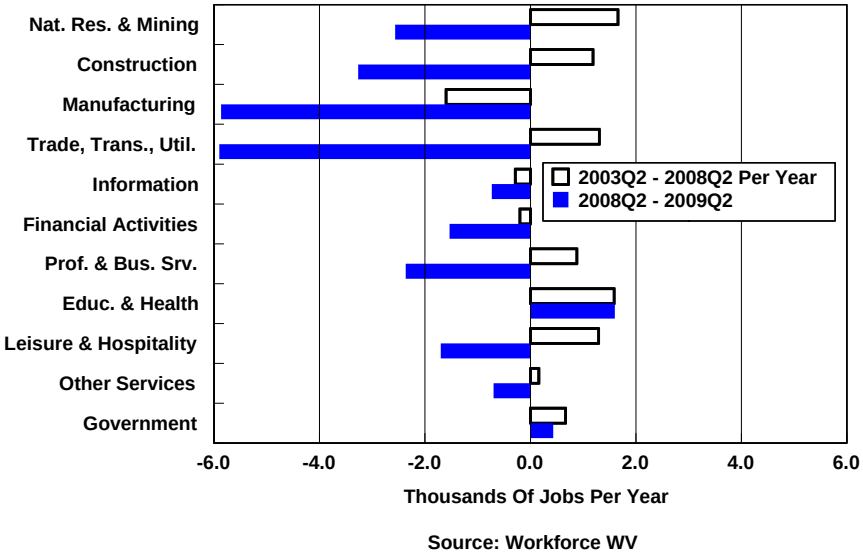
State job losses in the second quarter of 2009 were severe. The job losses were also widespread, with both the goods-producing and service-providing sectors losing similar numbers of jobs. Goods-producing sectors (natural resources and mining, construction, manufacturing) lost 11,700 jobs during the past four quarters. As Figure 3 shows, those losses came in all three sectors.

Natural resources and mining lost 2,600 jobs during the period, as collapsing world economic activity reduced demand for energy (and thus for natural gas and steam coal) and for steel (and thus demand for metallurgical coal). Indeed, seasonally adjusted West Virginia coal production plummeted by 13.3 percent in the second quarter of 2009, compared to the same period of 2008. That puts state coal production at roughly 140 million tons in the second quarter of this year, its lowest level since late 2003. Falling coal production has been matched by falling spot coal prices for Northern and Central Appalachian coal. Prices have been on an amazing roller coaster during the past two years, rising from the $45/ton range during the summer of 2007 to the $145/ton range during the summer of 2008. As of the summer of 2009, spot prices are back to the $45/ton range. Spot prices for natural gas nationally have been on a similar roller coaster, although recent prices have fallen well below 2007 levels.

The national housing bust depressed residential activity in the state, and thus construction jobs dropped by 3,300 from the second quarter of 2008 to the same quarter in 2009.

Finally, manufacturing job performance weakened further, with this sector losing 5,900 jobs during the past four quarters. That weakness was present in both nondurable (chemicals) and durable manufacturing, but the largest losses were in the durable manufacturing sectors (primary metals, many others).

FIGURE 3
MOST W.VA. SECTORS LOST JOBS
DURING THE PAST YEAR



Source: Workforce WV

The service-providing sector has not escaped the downturn, losing 10,900 jobs during the past four quarters. The largest job losses were in trade, transportation, and utilities, which lost 5,900 jobs. The bulk of those losses came in retail trade, reflecting dramatic consumer retrenchment nationally and in the state which has buffeted this sector. In addition, a large call center in the Eastern Panhandle closes, costing the state hundreds of retail jobs.

As we would expect, other business cycle sensitive industries have also lost jobs, including professional and business services. This sector includes accountants, lawyers, engineers, computer programmers, as well as call centers and has lost 2,400 jobs.

The leisure and hospitality sector has also lost jobs during the past four quarters (down 1,700), which reflects weakness in hotels, motels, restaurants, and bars during the period. This also reflects consumer retrenchment locally and at the national level.

Financial activities has also shed jobs during the past year, losing 1,500. This reflects both lower levels of activity in the banking sector, as well as the housing bust, which has reduced demand for real estate workers.

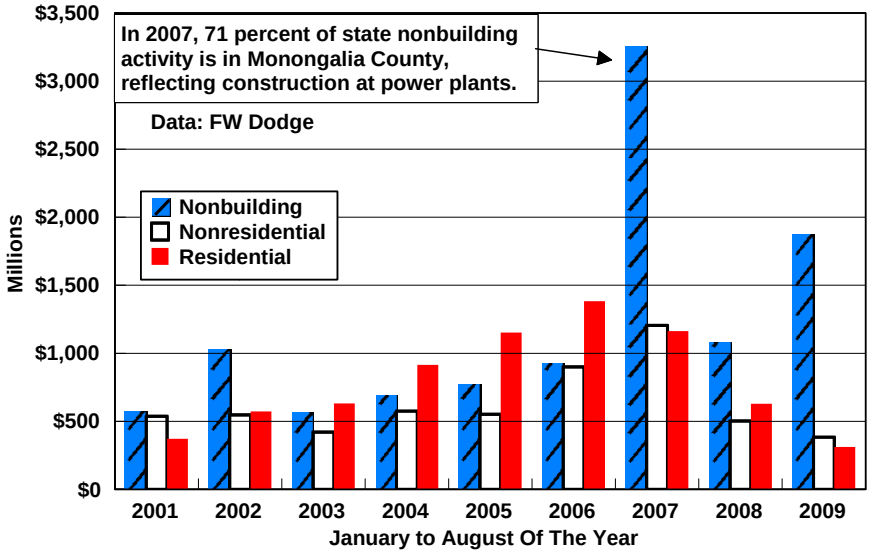
The only two sectors to add jobs during the past year were government and health care. The government sector expanded because of net job growth in the federal government sector, because both state and local government employment fell slightly during the period.

Education and health care was the fastest growing sector from the second quarter of 2008 to the same quarter of 2009. That growth was driven by gains in health care, which tends to be less sensitive (but not immune) to business cycle trends. Health care added 2,100 jobs during the past year.

W.Va. Residential Construction Activity Plummets, House Prices Fall

The total value of construction starts in West Virginia rose 16.4 percent during the first eight months of 2009, compared to the same period of 2008, according to the latest data from FW Dodge. As Figure 4 shows, that was completely driven by an increase in nonbuilding construction activity, because the value of both nonresidential and residential activity fell during the period. The increase in nonbuilding activity is related to a dramatic increase in starts related to the utility sector (power plants, gas, and communications) in 2009.

FIGURE 4
THE VALUE OF W.VA. RESIDENTIAL CONSTRUCTION STARTS FELL AGAIN IN 2009

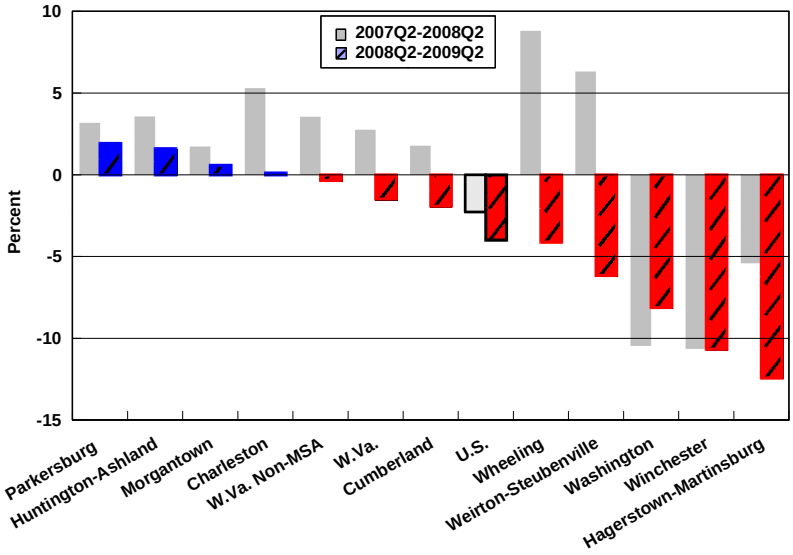


In contrast to rising nonbuilding activity in 2009, the value of nonresidential starts fell by 23.7 percent in 2009, compared to 2008. Nonresidential starts are also down by 68.2 percent from their peak in 2007. The slower pace of nonresidential activity in 2009 was fairly widespread, but the value of starts for schools and libraries posted the biggest year to year drop.

The value of residential starts also fell rapidly again during the first eight months of 2009, averaging just $312 million. That is down 50.4 percent from the same period of 2008. It is 77.4 percent below peak levels reached during 2006. The value of residential starts fell during the first eight months of 2009, compared to 2008, in 40 out of the 55 counties in the state. The largest declines were posted by Berkeley and Jefferson counties. Overall, the value of residential starts in the Eastern Panhandle are down by 86.6 percent from peak levels reached in 2006.

Declines in the value of residential starts reflect the impact of the national housing bust on West Virginia. As is the case for the nation, the markets that are experiencing the largest declines in activity are generally those that posted the biggest increases earlier this decade (primarily the Eastern Panhandle counties). The impact of the housing correction is also reflected in single-family house price declines during the past year. As Figure 5 shows, single-family house prices (as measured by the Federal Housing Finance Agency) fell by -1.5 percent in West Virginia, from the second quarter of 2008 to the second quarter of 2009. Even though prices declined during the past year in West Virginia, the state fared better than the nation, which posted a decline of -4.0 percent during the same period.

FIGURE 5
W.VA. HOUSE PRICE APPRECIATION HEADS SOUTH
FEDERAL HOUSING FINANCE AGENCY



House price appreciation weakened during the past year in most metropolitan areas with counties in West Virginia. Indeed, just four markets posted house price increases during the past four quarters. The metropolitan areas including West Virginia's Eastern Panhandle posted by far the largest house price declines during the past year. Single-family house prices fell by -12.4 percent in the Hagerstown-Martinsburg metropolitan statistical area. The Winchester metropolitan area posted a drop of -10.7 percent and the Washington metropolitan area recorded a decline of -8.1

percent. These markets have seen house prices drop by between 18.0 and 23.0 percent from peak levels in 2006-2007. Keep in mind that each of these markets also generated strong appreciation during the first six years of the decade, with house prices more than doubling.

Population Rises, A Little

West Virginia has added 7,500 residents during the past eight years, which translates into an average annual growth rate of 0.05 percent. That rate of growth is far below the national average of 0.9 percent per year and ranked the state 48th out of 50 states and the District of Columbia. Only North Dakota and Rhode Island had slower population growth so far this decade. Louisiana posted population losses.

West Virginia's slow population growth is related to its demographic mix. The state has a relatively high median age (40.6 years in 2008 according to the American Community Survey), compared to the national average (36.8 years). That ranks the state third in the nation in 2008. This reflects the fact that the state has a relatively large share of residents age 65 and older (at 15.7 percent), which ranks the state second in the nation and is far above the national rate of 12.8 percent. The state's demographic mix contributes to minimal natural increase. Indeed, West Virginia is the only state in the nation to post more deaths than births so far this decade.

In addition, West Virginia's population growth is remarkably unevenly distributed across counties. By far the fastest population growth this decade has come in the Eastern Panhandle region. The three counties (Berkeley, Jefferson, Morgan) that make up the region have combined to add 36,100 residents from 2000 to 2008. That means that without the Eastern Panhandle population growth, the state would have posted significant population loss during the past eight years.

Per Capita Personal Income Remains Below U.S.

West Virginia's per capita personal income hit $31,641 in 2008, the most recent year for which we have data. That ranked the state 50th out of 50 states and the District of Columbia (above only Mississippi) and was 21.3 percent below the national average.

Even though West Virginia's per capita income remains low, compared to other states, it grew relatively quickly last year. Indeed, the state posted per capita income growth of 5.0 percent from 2007 to 2008, which was much faster than the 2.0 percent growth posted by the nation. The state's growth rate also far exceeded the national rate of inflation during the year (3.8 percent, measured by the CPI), which implies a rising standard of living for state residents, on average. In addition, the state's growth so far this decade (at 4.5 percent per year) beat the national average of 3.6 percent per year. This relatively fast growth implies that the state has made some progress in closing the gap with the nation. In fact, the state's per capita personal income gap with the nation has fallen from -26.9 percent in 2000 to -21.3 percent in 2008.

West Virginia's strong personal income growth during the past year was driven by gains in net earnings from work, which expanded much faster than the national average (5.0 percent versus 2.0 percent). That reflects in part the strong gains in state natural resources and mining employment in 2008. The relatively high wages in this sector, in turn, provided a boost to overall earnings from work in the state.

Real GDP Growth Was Strong In 2008

West Virginia real GDP rose by 2.5 percent in 2008, which far exceeded the national rate of 0.7 percent. West Virginia posted strong gains in mining, as coal and oil and gas activity expanded rapidly in response to strong demand. Professional and business services also posted strong gains in 2008, as did education and health care; information; accommodation and food services; real estate; utilities; and government. Manufacturing posted strong declines in 2008, with both durable and nondurable manufacturing contributing to the decline. In addition, transportation and warehousing posted a small decline and arts, entertainment, and recreation activity decreased in 2008.

Of the metropolitan statistical areas with West Virginia counties, Morgantown posted the strongest real GDP growth in 2008, at 4.2 percent. That far exceeded the growth for all U.S. metropolitan areas, which was 0.8 percent. Weirton and Wheeling also posted solid year-to-year growth in 2008, at 3.4 percent and 3.2 percent, respectively. Washington and Cumberland also generated solid gains, in the 2.5 percent range, while Charleston (1.7 percent), Parkersburg (0.9 percent), and Huntington (0.7 percent) also expanded at more modest rates. Real GDP in the Hagerstown-Martinsburg area was stable for the year and Winchester (-2.5 percent) posted a significant decline. Activity in these areas has been severely affected by the housing correction.

West Virginia Exports Explode In 2008

West Virginia commodity exports exploded in 2008, rising to $5.6 billion from $4.0 billion in 2007. That translates into a rate of growth of 41.2 percent for the year, far above the national average growth of 11.8 percent.

Strong increases in exports of minerals and ores (primarily coal) drove the gains in 2008, with the year-to-year growth rate topping 150 percent. Strong gains in coal exports in 2008 reflect strong world demand for coal, supply disruptions experienced by other coal exporting nations, and a weakening U.S. dollar. Of the state's largest export commodities, chemicals, transportation equipment, and primary metals also posted gains during the period.

Through the first half of 2009, the value of West Virginia commodity exports is running well below 2008 levels. Indeed, commodity exports are down by -18.0 percent so far this year. While that is not good news, the state is still outperforming the nation. National commodity exports are down -24.6 percent so far this year. The decline in exports reflects the severe national and global downturn, which has reduced demand for commodities.

West Virginia Forecast

The outlook for the state depends in part on the outlook for the nation. The national forecast, which underpins the state forecast, is summarized in the *National Outlook* section. Overall, the forecast for the nation calls for real GDP growth to rebound in the second half of 2009, while employment growth does not turn positive until the second quarter of 2010.

Rebounding national growth sets the stage for recovery in West Virginia as well. The outlook calls for state jobs to stabilize during the first half of 2010 and for growth to pick up steam in the second half of 2010. However, gains are slow during the forecast and the state does not begin to hit new highs in employment until 2013. The West Virginia forecast is summarized in Tables 2 and 3.

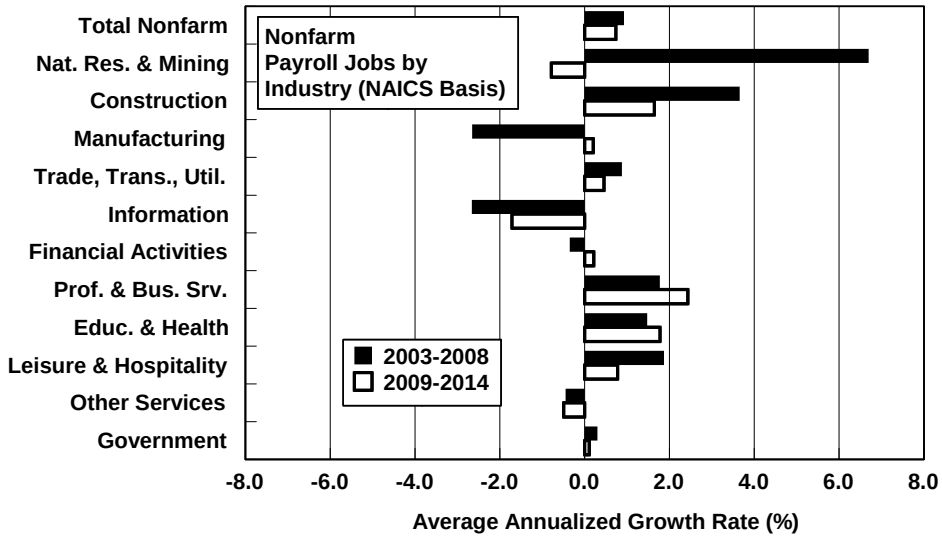
On average during the next five years, the state adds jobs at a rate of 0.7 percent per year, which is a bit slower that the 0.9 percent per year rate posted during the 2003-2008 period, as Figure 6 shows. The goods-producing sector (mining, construction, manufacturing) contributes modestly to this job growth, adding roughly 500 jobs per year.

Job losses in natural resources and mining contribute to slow job growth in the state. This reflects the gradual rebound in coal production as the national and world economies pick up steam during the forecast. Coal production is forecast to hit 140 million tons in 2009, well down from the 158 million tons mined in 2008. Production remains flat into 2010 and gradually rises to 148 million tons by 2014.

Construction employment rises during the forecast, but at a relatively slow rate. This reflects the end of the housing bust in the state as well as continued investment in energy transmission and generation projects.

Manufacturing employment stabilizes during the forecast, in contrast to the massive job layoffs posted during the 2003-2008 period. The durable manufacturing sector is forecast to add jobs at a modest rate during the forecast, with wood products generating the most growth. Nondurable manufacturing continues to lose jobs, with the chemicals sector continuing to post job losses. Overall, employment in the manufacturing sector stabilizes as national and world growth rebounds during the forecast and as the value of the U.S. dollar falls. The depreciating U.S. dollar makes U.S. produced goods (and services) more competitive in international markets.

FIGURE 6
W.VA. JOB GROWTH REMAINS SLOW DURING THE NEXT FIVE YEARS



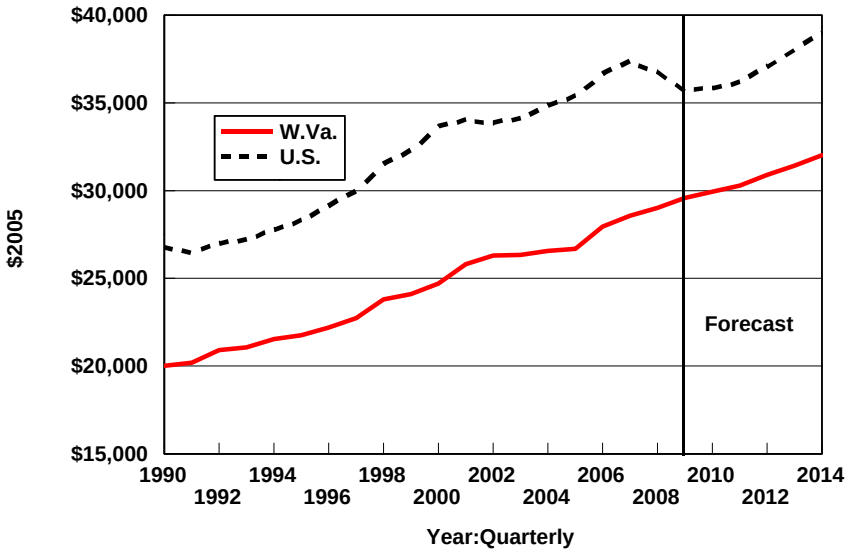
The service-providing sector generates most of the net job growth in West Virginia during the next five years, adding 4,700 jobs per year. The fastest growing sectors are expected to be professional and business services and education and health care, as Figure 6 shows. These two sectors combine to add 3,600 jobs per year, on average. Growth in professional and business services reflects the recovering national economy, while health care employment gains are related to the demographic aging of the state's residents.

Also adding significant numbers of jobs during the forecast are trade, transportation, and utilities, leisure and hospitality, and government. While employment in leisure and hospitality continues to growth during the forecast, the rate of growth drops dramatically compared to gains earlier this decade. That reflects increased competitive pressures in the gaming sector, as neighboring states move to take advantage of this revenue source.

As employment losses gradually turn to employment gains during the next year, the state's unemployment rate will peak and then begin to fall. The forecast calls for the state unemployment rate to peak at 9.5 percent in the second quarter of 2010 and then slowly drop to 7.5 percent by 2014. This roughly mirrors the national pattern, although the national rate is expected to peak at 10.0 percent in the first quarter of 2010.

Rebounding employment growth helps to generate real personal income growth during the next five years. As Figure 7 shows, West Virginia real per capita personal income remained more stable during the 2007-2009 period than the national average. In part, this reflects the large role that transfer payments play in West Virginia personal income. Indeed, in 2008, transfer payments (Social Security, Medicare, Medicaid, welfare) accounted for 25.1 percent of total personal income in West Virginia. That's far above the national average of 15.3 percent and is the largest share of any state in the nation. It also reflects the growth in the mining sector in 2008, which is more important for the state than the nation.

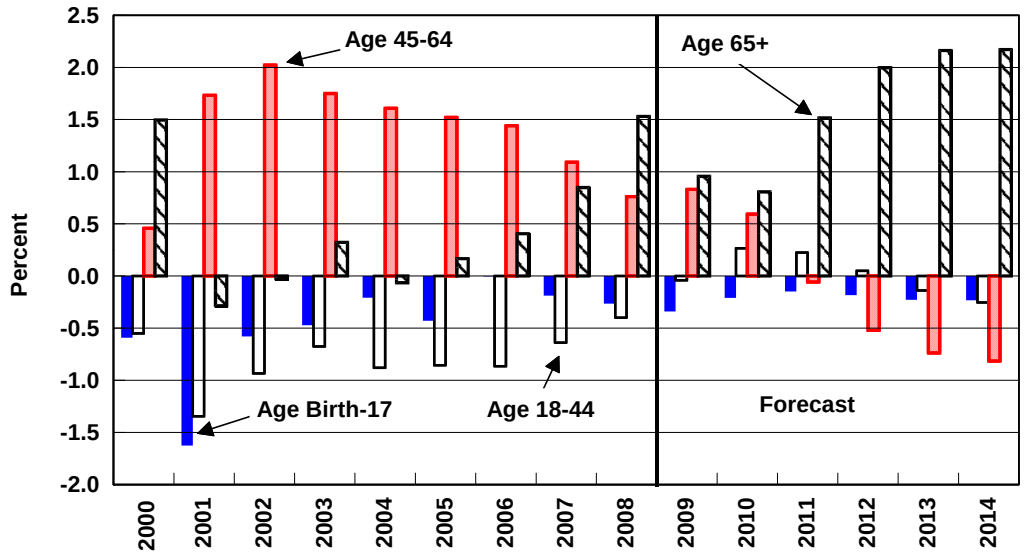
FIGURE 7
W.VA. PER CAPITA PERSONAL INCOME WAS LESS VOLATILE THAN THE NATIONAL AVERAGE DURING THE DOWNTURN



The forecast calls for West Virginia's real per capita personal income to grow by 1.6 percent per year during the 2009-2014 period. That is a bit slower than the expected national rate of 1.8 percent per year, but does reflect an average improvement in the standard of living of state residents.

Job and income growth during the forecast contributes to modest population gains. The state is forecast to add 3,000 residents per year, which translates into annual growth of 0.2 percent. That is well below the expected national rate of 0.9 percent per year. As Figure 8 shows, most of that population growth is concentrated in the older age groups. Note that the number of state residents in the school-age and 18-44 age groups declines during the next five years.

FIGURE 8
POPULATION GROWTH TAKES OFF IN THE 65-AND-OLDER AGE GROUP IN W.VA.



Note also that the strong population growth in the 45-64 age group earlier this decade gives way to population losses beginning in 2011. This corresponds to the aging of the baby boom generation. This phenomenon also contributes to the strong increases in population growth in the 65-and-older age group during the 2011-2014 period. Population growth in the older age group, combined with population losses in the younger age groups, will contribute to a rapid rise in the state's median age. In turn, this will likely worsen the state's natural decrease, making West Virginia's population growth even more dependent on net migration.

The aging of the state's residents will also contribute to more job openings for younger workers, as the baby boomers begin to retire in large numbers. This suggests that the state will have a better chance to retain young college graduates and generate stronger wage growth in the future.

Table 2
West Virginia Employment, Labor Force, and Unemployment Rate Forecasts
(Thousands)

Indicator	Actual	Forecast				Actual	Forecast						Annual Growth		
	2009:1	2009:2	2009:3	2009:4	2010:1	2008	2009	2010	2011	2012	2013	2014	W.Va. 2009-2014**	W.Va. (%) 2009-2014**	U.S. (%) 2009-2014**
Covered Employment By Industry* **															
Total Jobs	700.5	688.1	682.3	681.5	682.6	709.1	688.1	685.9	695.8	704.6	710.1	713.9	5.2	0.7	1.4
Goods Producing	123.4	115.6	113.8	113.5	112.7	127.7	116.6	112.3	113.9	116.7	118.5	118.9	0.5	0.4	1.1
Natural Res. & Mining	33.7	30.1	29.7	29.3	29.4	32.1	30.7	29.6	29.4	29.7	29.7	29.5	-0.2	-0.8	-1.8
Mining	31.6	28.0	27.5	27.2	27.3	30.0	28.6	27.4	27.3	27.5	27.5	27.5	-0.2	-0.8	-2.0
Coal Mining	22.0	18.9	18.6	18.3	18.3	20.4	19.4	18.5	18.3	18.4	18.2	18.1	-0.3	-1.4	n/a
Other Mining	9.7	9.1	8.9	8.9	8.9	9.6	9.1	9.0	9.0	9.1	9.3	9.4	0.1	0.6	n/a
Natural Resources	2.1	2.1	2.2	2.1	2.2	2.0	2.1	2.1	2.1	2.2	2.2	2.0	-0.0	-1.2	1.1
Construction	36.9	34.9	34.2	34.0	33.8	39.1	35.0	33.6	34.8	36.4	37.6	38.0	0.6	1.6	1.3
Manufacturing	52.7	50.6	49.9	50.2	49.5	56.5	50.8	49.1	49.7	50.7	51.2	51.4	0.1	0.2	1.1
Durable Mfg.	32.7	31.0	30.5	30.9	30.5	35.3	31.3	30.3	31.2	32.4	33.1	33.6	0.5	1.4	2.2
Wood Products	7.2	6.9	6.7	6.6	6.6	8.5	6.8	6.7	7.3	7.8	8.1	8.5	0.3	4.4	4.6
Nonmetallic Minerals	3.1	3.1	3.0	3.0	3.0	3.5	3.1	3.0	3.0	3.1	3.1	3.0	-0.0	-0.7	1.8
Primary Metals	5.4	4.5	4.3	4.6	4.4	6.1	4.7	4.3	4.7	4.9	5.1	5.0	0.1	1.2	2.8
Fabricated Metals	6.4	6.3	6.2	6.2	6.0	6.5	6.3	5.9	5.8	5.9	6.2	6.4	0.0	0.3	1.1
Trans. Equip.	4.9	4.8	4.9	5.0	5.1	4.7	4.9	5.0	5.0	5.1	5.1	5.1	0.0	0.8	4.1
Other Dur.	5.6	5.5	5.3	5.4	5.5	5.9	5.5	5.5	5.4	5.7	5.7	5.7	0.0	0.8	1.1
Non-Durable Mfg.	20.0	19.6	19.4	19.3	19.0	21.1	19.6	18.8	18.4	18.2	18.1	17.8	-0.4	-1.9	-0.8
Food Products	3.4	3.3	3.3	3.4	3.4	3.6	3.4	3.4	3.5	3.5	3.5	3.5	0.0	0.7	0.8
Chemicals	9.8	9.6	9.4	9.3	9.1	10.0	9.5	8.9	8.7	8.6	8.6	8.6	-0.2	-2.1	0.1
Plastics & Rubber	3.2	3.1	3.1	3.1	3.1	3.7	3.1	3.0	3.0	3.0	3.0	3.0	-0.0	-0.8	-0.0
Other Non-Dur.	3.7	3.6	3.6	3.5	3.5	3.8	3.6	3.4	3.3	3.1	3.0	2.8	-0.2	-5.0	-3.0
Service Producing	577.1	572.5	568.5	568.0	569.9	581.5	571.5	573.6	581.9	587.9	591.5	595.0	4.7	0.8	1.4
Trade, Trans., & Utilities	134.3	131.6	130.4	129.9	129.8	138.7	131.5	130.8	131.8	132.8	133.8	134.6	0.6	0.5	1.2
Wholesale Trade	23.9	23.1	22.8	22.6	22.4	24.7	23.1	22.2	22.4	23.0	23.4	23.7	0.1	0.5	1.3
Retail Trade	87.3	85.7	84.9	84.6	84.8	90.1	85.6	85.7	86.3	86.6	87.0	87.4	0.4	0.4	0.7
Utilities	6.4	6.4	6.3	6.2	6.2	6.3	6.3	6.2	6.3	6.2	6.3	6.4	0.0	0.2	-1.4
Transportation & Warehousing	16.7	16.5	16.4	16.4	16.5	17.6	16.5	16.6	16.9	17.0	17.0	17.0	0.1	0.6	3.0
Information	10.9	10.6	10.5	10.3	9.8	11.1	10.6	9.7	9.8	9.7	9.7	9.7	-0.2	-1.7	-1.0
Financial Activities	27.7	27.2	26.6	26.7	26.9	28.4	27.1	27.0	27.2	27.4	27.4	27.4	0.1	0.2	0.1
Profess. & Business Services	60.1	59.6	58.7	58.6	59.1	60.9	59.3	59.6	62.3	64.5	65.8	66.8	1.5	2.4	4.1
Educational & Health Services	111.8	112.3	112.7	113.0	113.8	110.5	112.4	116.2	119.7	121.1	121.6	122.8	2.1	1.8	1.7
Educational Services	5.2	5.2	5.2	5.2	5.2	5.0	5.2	5.3	5.3	5.3	5.2	5.1	-0.0	-0.4	-0.6
Health Care & Social Assist.	106.6	107.1	107.4	107.8	108.6	105.5	107.2	110.9	114.3	115.8	116.4	117.7	2.1	1.9	2.2
Leisure & Hospitality	72.2	71.2	71.3	71.3	71.5	72.8	71.5	72.0	72.4	73.2	74.0	74.3	0.6	0.8	0.9
Other Services	21.4	21.0	20.8	20.7	20.7	21.3	21.0	20.7	20.7	20.7	20.6	20.5	-0.1	-0.5	0.5
Government	138.5	138.9	137.5	137.5	138.4	137.6	138.1	137.6	137.9	138.5	138.6	138.9	0.2	0.1	0.7
Federal Civilian	23.3	23.6	22.3	22.2	23.1	22.9	22.8	22.2	22.4	22.9	23.1	23.3	0.1	0.4	-0.5
State & Local	115.3	115.3	115.2	115.3	115.3	114.7	115.3	115.4	115.5	115.6	115.5	115.6	0.1	0.1	0.8

Indicator	Actual	Forecast				Actual	Forecast						W.Va.	W.Va. (%)	U.S. (%)
	2009:2	2009:3	2009:4	2010:1	2010:2	2008	2009	2010	2011	2012	2013	2014	2009-2014**	2009-2014**	2009-2014**
Resident Labor Force, Employment, and Unemployment Rate															
Labor Force	793.0	792.2	791.8	794.5	795.2	806.2	793.1	795.6	797.2	799.6	802.2	805.9	2.6	0.3	0.8
Employed	726.4	721.6	719.1	719.7	719.9	771.8	728.6	721.4	726.9	734.1	740.0	745.1	3.3	0.4	1.1
Unemployment Rate(%)	8.4	8.9	9.2	9.4	9.5	4.3	8.1	9.3	8.8	8.2	7.8	7.5	-0.1	-1.5	-3.6

* Quarterly data are seasonally adjusted.
**These columns contain the average yearly change during the 2009-2014 period
***Beginning with the West Virginia Economic Outlook 2008, employment is measured by covered employment (ES-202).

Table 3
West Virginia Population and Income Forecasts

Indicator	Actual	Forecast				Actual	Forecast						Annual Growth		
	2008:4	2009:1	2009:2	2009:3	2009:4	2008	2009	2010	2011	2012	2013	2014	W.Va. 2009-2014**	W.Va. (%) 2009-2014**	U.S. (%) 2009-2014**
									Population (Thousands)						
Total Population	1,817	1,818	1,819	1,821	1,822	1,814	1,820	1,826	1,831	1,834	1,835	1,835	3.0	0.2	1.0
Age 0-17	386	385	385	385	384	386	385	384	383	383	382	381	-0.8	-0.2	n/a
Age 18-44	628	628	628	629	629	629	628	630	632	632	631	629	0.2	0.0	n/a
Age 45-64	516	517	518	519	520	515	519	522	522	519	515	511	-1.6	-0.3	n/a
Age 65 and up	287	287	288	288	288	285	288	290	295	300	307	314	5.2	1.7	n/a

Indicator	Actual	Forecast				Actual	Forecast						W.Va.	W.Va. (%)	U.S. (%)
	2009:2	2009:3	2009:4	2010:1	2010:2	2008	2009	2010	2011	2012	2013	2014	2009-2014**	2009-2014**	2009-2014**
									Real Personal Income (Millions of 2005 Dollars)						
Total Real Income	54,114	53,768	53,854	54,244	54,518	52,655	53,841	54,669	55,464	56,662	57,663	58,749	981.7	1.8	2.8
Wage and Salary	24,695	24,633	24,574	24,801	25,002	24,568	24,734	25,135	25,697	26,076	26,351	26,593	371.7	1.5	2.3
Other Labur Income	8,165	8,180	8,253	8,273	8,313	7,731	8,186	8,321	8,428	8,638	8,758	8,896	142.1	1.7	3.2
Proprietors' Income	3,466	3,457	3,455	3,476	3,512	3,629	3,473	3,531	3,650	3,732	3,792	3,857	76.6	2.1	3.6
Div., Int., Rent	6,570	6,495	6,493	6,533	6,546	6,864	6,560	6,543	6,578	6,915	7,154	7,411	170.2	2.5	4.0
Transfer Income	14,698	14,476	14,541	14,647	14,651	13,210	14,369	14,659	14,692	14,927	15,268	15,686	263.5	1.8	2.5
									Real Per Capita Personal Income (2005 Dollars)						
Real Per Capita Income	29,749	29,533	29,554	29,741	29,865	29,020	29,585	29,937	30,290	30,898	31,428	32,021	487.2	1.6	1.8
Wage and Salary	13,576	13,530	13,486	13,598	13,696	13,540	13,591	13,764	14,034	14,219	14,362	14,494	180.6	1.3	1.3
Other Labur Income	4,488	4,493	4,529	4,536	4,554	4,261	4,498	4,557	4,603	4,710	4,774	4,849	70.2	1.5	2.2
Proprietors' Income	1,905	1,899	1,896	1,906	1,924	2,000	1,909	1,934	1,993	2,035	2,067	2,102	38.7	1.9	2.6
Div., Int., Rent	3,612	3,567	3,563	3,582	3,586	3,783	3,605	3,583	3,592	3,770	3,899	4,040	86.9	2.3	3.0
Transfer Income	8,080	7,951	7,980	8,031	8,026	7,280	7,895	8,027	8,024	8,140	8,322	8,550	130.9	1.6	1.5
									Coal Production						
Coal Production (Mil. Tons)	140	137	135	137	140	158	140	141	144	147	147	148	1.4	1.0	1.9

* Quarterly data are seasonally adjusted.
**These columns contain the average yearly change during the 2009-2014 period.

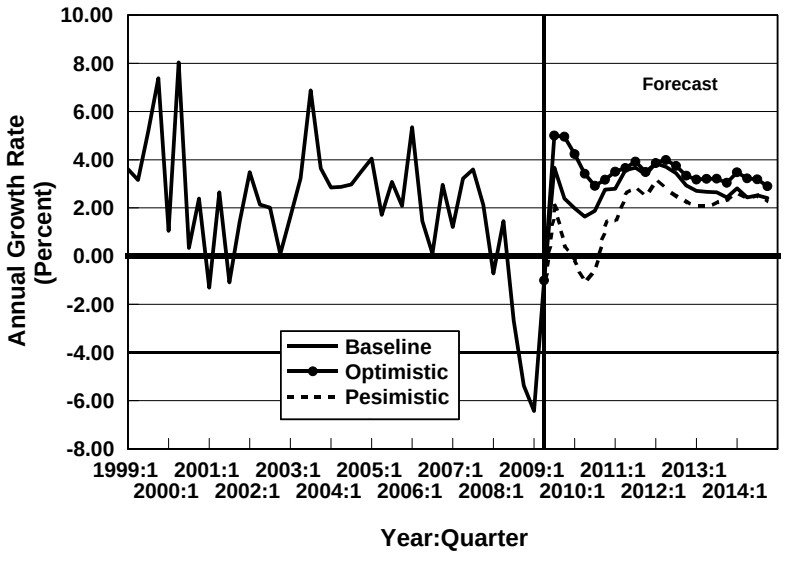
Risks

The baseline forecast for the national economy, shown in Figure 9, calls for real GDP growth to begin growing again in the second half of 2009. This forecast, which was produced by IHS Global Insight in September 2009, calls for growth to be sluggish in 2010 as the nation (and the world) struggles to find solid footing after a particularly severe downturn during 2008-2009.

A major driver of the recovery in the second half of 2009 is the return of inventory building (in the fourth quarter), after two years of major draw downs. This process is supported by stabilizing residential construction activity and by growth in business spending for equipment, as well as by renewed gains in exports (in turn driven by recovering world growth and a declining U.S. dollar). These trends are helped along by expansionary monetary policy (very low short-term interest rates) and the impact of the federal fiscal stimulus. As Figure 10 shows, the federal deficit skyrockets during the forecast, hitting -11.0 percent of GDP in fiscal year 2009. The deficit is gradually trimmed, but at the cost of slower growth during the remaining years of the forecast.

Overall, the baseline forecast calls for real GDP growth to gradually accelerate through 2012. Employment growth follows suit, although with a lag. Employment levels finally stabilize in 2010 and begin to grow more strongly by 2011. The national unemployment rate peaks at 10.0 percent in early 2010 and falls to 7.6 percent by 2014.

FIGURE 9
U.S. REAL GDP GROWTH
BASELINE AND ALTERNATIVES
FORECASTS FROM IHS GLOBAL INSIGHT SEPTEMBER 2009

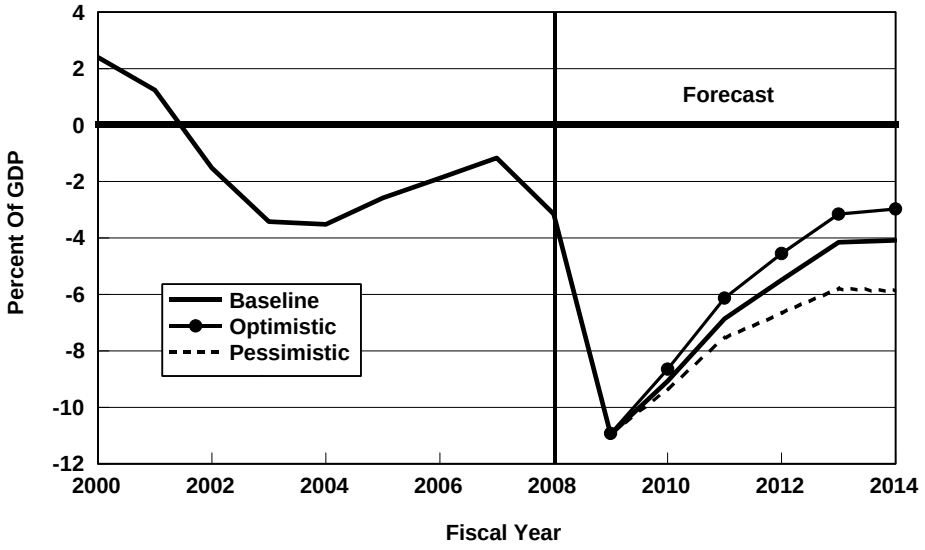


The pessimistic alternative scenario assumes that the rebound in the second half of 2009 is a temporary thaw that is soon replaced by more declines in real GDP. This scenario calls for the financial crisis to continue into 2010, which further depresses business capital spending. In addition, the housing correction continues to drag the economy down under this scenario,

undermining consumer confidence and draining wealth (which further weakens consumer spending).

Overall, this scenario generates a "W" shaped recession, which lingers until the third quarter of 2010. Employment drops for 11 straight quarters, declining by 8.2 million jobs by the time growth returns. Note from Figure 10 that the federal budget deficit remains huge under this scenario, at 5.8 percent of GDP by fiscal year 2014. That implies that significant spending cuts and tax increases lie ahead for the economy.

FIGURE 10
U.S. FEDERAL BUDGET DEFICIT
BASELINE AND ALTERNATIVES
FORECASTS FROM IHS GLOBAL INSIGHT SEPTEMBER 2009



The optimistic alternative scenario calls for real GDP growth to rebound faster in 2009 and remain stronger into 2010, than under baseline assumptions. The optimistic scenario assumes that monetary and fiscal stimuli boost the economy effectively (and rapidly). This spurs a rapid rebound in capital spending and softens the housing correction, which eventually results in stronger consumer spending. This scenario also assumes stronger world growth, which contributes to a rapid turnaround in exports. As Figure 10 shows, the federal budget deficit falls during the forecast, hitting -3.0 percent of GDP by 2014, which marks a return to pre-recession levels.

The optimistic scenario generates much stronger real GDP growth in the second half of 2009 and into 2010. That, in turn, translates into strong job growth and a lower unemployment rate. Under these assumptions, the national unemployment rate peaks below 10.0 percent and falls to 6.4 percent by 2014.

The performance of the West Virginia economy depends on the growth of our trading partners, whether they are located around the U.S. or around the world. That implies that the state outlook depends on the outlook for our trading partners. Thus, one risk to the baseline state outlook is the

risk that national economic growth differs from that outlined in the baseline national outlook. If the future growth of the national economy turns out to be more similar to the pessimistic outlook than to the baseline outlook, then the performance of the state economy will likely fall below expectations. On the other hand, if national growth turns out to be similar to the optimistic scenario, then the state will likely outperform the baseline estimates.

There are important state-specific risks to the forecast. One set of risks pertain to the natural resources sector and relate to national environmental policies. The U.S. Environmental Protection Agency has already begun to increase reviews of surface mining permits. This additional scrutiny has the potential to reduce surface mining (particularly affecting the southern part of the state) activity, which would reduce overall job and income growth in West Virginia.

In addition, the nation (and Congress) continue to debate restrictions on carbon dioxide emissions (likely through a cap-and-trade style policy intervention). If these restrictions are implemented they will likely result in much lower levels of coal production in West Virginia, with accompanying job and income losses. Further, the impacts of this policy intervention would also adversely affect the manufacturing sector in West Virginia.

The gaming sector of the state economy has generated strong growth during this decade. In part, that was because the State of West Virginia legalized certain forms of gaming before surrounding states. This is now changing and the result is considerable competitive pressures on gaming establishments. With all states under considerable pressure to raise revenues, it is likely that more of our surrounding states will legalize more forms of gaming, thus increasing competitive pressures on the sector in West Virginia.

Finally, health care remains one of the fastest growing sectors in the state (and the nation). However, this sector faces the prospect of a major restructuring of the public funding of health care. This restructuring has the potential to slow the growth of the health care sector in the state.

Focus On…

Highlights Of Tuition Assistance And Work In West Virginia 2008

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With rapidly rising tuition rates across the nation, the affordability of higher education has become an increasingly important issue for students, their families, and policymakers. States have responded to these concerns in a variety of ways, including higher education tuition assistance via grants. One innovation during the past 19 years is the adoption by several states of broad based merit-aid programs, which tend to have higher thresholds for academic performance. One of the justifications for these merit-based programs is the assertion that they will help the state retain its brightest students after graduation.

This section presents highlights from a recently released report titled, *Higher Education Tuition Assistance and Work in West Virginia 2008*. The report analyzes the West Virginia labor market experiences of graduates from West Virginia public institutions of higher education that received either the PROMISE scholarship or funds from the West Virginia Higher Education Grant Program (HEGP). It is designed to provide evidence on the degree to which graduates from public institutions that received higher education tuition assistance (either from PROMISE or the HEGP programs) remained in the state to work at wage and salary jobs and the wages they earned. The report was funded by the West Virginia Higher Education Policy Commission.

The data analyzed in the report come from the matching of demographic information on graduates from West Virginia public institutions of higher education with employment records maintained by Workforce West Virginia and the federal government. Graduates reflect the highest degree earned during the 2003-2004 to 2006-2007 period. Employment is measured in 2008. The self-employed, student workers, most church workers, and unpaid family workers are generally not covered by this data. *For this report, U.S. Postal Service workers are not included, due to data limitations.*

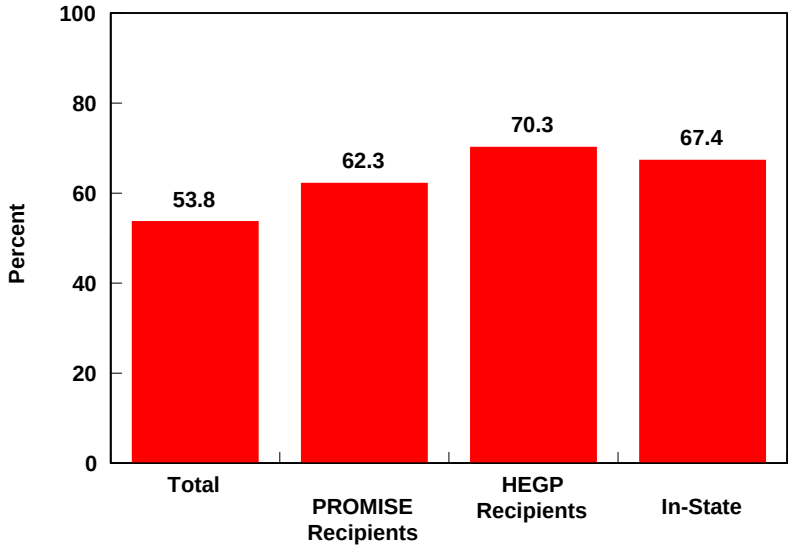
Work Participation And Wages Of PROMISE And West Virginia Higher Education Grant Recipients

Work Participation Results

In 2008, 2,301 of the 3,692 PROMISE graduates earned wages from establishments in West Virginia. This yields a total work participation rate of 62.3 percent, as illustrated in Figure 11 and Table 4. At first glance, the PROMISE scholarship appears to be successful in retaining graduates in West Virginia, as the participation rate of PROMISE graduates is 8.5 percentage points higher than that of all graduates from West Virginia public higher education intuitions from 2003-2004 to 2006-2007, at 53.8 percent.

However, PROMISE scholar graduates, which, as a prerequisite, must be West Virginia residents, have a 5.1 percentage point lower work participation rate than all in-state resident graduates over the same time period, who had a work participation rate of 67.4 percent, and a 8.0 percentage point lower participation rate than HEGP recipients, who had a participation rate of 70.3 percent.

FIGURE 11
WORK PARTICIPATION IN 2008 OF GRADUATES FROM WEST VIRGINIA PUBLIC HIGHER EDUCATION INSTITUTIONS DURING 2003-2004 TO 2006-2007



As Table 4 also shows, PROMISE graduates earning an Associate's degree had the highest work participation rate, at 80.6 percent, followed by graduates earning a Master's degree, at 60.6 percent, and finally by graduates earning a Bachelor's degree, at 58.4 percent. Females were more likely to work in the state than males, 63.8 percent to 59.8 percent respectively. Those having Black ethnicity had the highest work participation rate at 63.4 percent, just ahead of those with White ethnicity, at 62.7 percent, and Hispanic ethnicity, at 61.1 percent.

We find similar trends in the data for HEGP graduates, with Associate's degree recipients posting the highest work participation rate (76.4 percent), followed by Master's, Bachelor's, First Professional, and Doctoral degree recipients. Female recipients post higher work participation rates than males (72.6 percent versus 66.2 percent). White recipients post the highest work participation rates (70.7 percent) and work participation rates fall time since graduation increases.

Note that work participation rates for Associate's degree graduates are higher for PROMISE graduates than for HEGP graduates, but that for all other degrees HEGP graduates post higher work participation rates. We also note that work participation rates rise a bit with experience for PROMISE graduates, which breaks the normal pattern for all graduates. This may be due to the relatively low numbers of PROMISE graduates during the 2003-2004 to 2004-2005 period, because the more recent PROMISE cohorts show the more normal declining pattern.

TABLE 4
WORK PARTICIPATION AND WAGES FOR W.VA. PUBLIC HIGHER EDUCATION GRADUATES RECEIVING PROMISE AND HEGP ASSISTANCE

	PROMISE Recipients		W.Va. HEGP Recipients		All Graduates	
	Work Participation Rates in 2008 (In Percent)	Annualized Wages In 2008	Work Participation Rates in 2008 (In Percent)	Annualized Wages In 2008	Work Participation Rates in 2008 (In Percent)	Annualized Wages In 2008
Total	62.3	24,805	70.3	31,828	53.8	34,350
Residency						
In-state	--	--	--	--	67.4	34,446
Out-of-state	--	--	--	--	11.4	33,353
Other	--	--	--	--	31.2	32,178
Degree						
Associate	80.6	27,556	76.4	27,354	71.9	30,153
Bachelor	58.4	23,947	67.7	29,080	49.5	29,877
Master	60.6	35,998	72.4	43,030	52.2	46,022
Doctoral	--	--	65.7	61,440	27.2	64,685
First Professional	--	--	66.9	80,754	49.0	74,677
Gender						
Male	59.8	27,185	66.2	35,556	47.7	38,269
Female	63.8	23,478	72.6	29,975	58.3	32,010
Race						
White	62.7	25,010	70.7	32,200	56.2	34,647
Black	63.4	18,976	64.5	24,973	43.2	26,383
Hispanic	61.1	20,789	65.8	24,534	29.5	28,865
Asian	32.7	19,054	53.6	35,019	14.7	40,817
American Indian	n/d	n/d	73.8	32,786	49.3	31,181
Unknown	61.3	16,344	70.5	22,367	36.1	26,750
Year						
2003-2004	80.0	31,059	66.3	36,131	50.9	39,627
2004-2005	69.9	26,901	69.9	34,335	53.9	36,793
2005-2006	60.4	27,372	72.0	30,887	55.3	33,360
2006-2007	62.4	22,890	73.3	25,694	54.8	27,901

n/d: not disclosed

Table 5 summarizes work participation rates for PROMISE graduates, HEGP graduates, and all graduates by area of concentration. For PROMISE graduates, Science Technologies, at 85.7 percent, had the highest participation rate of any disclosed area of concentration in 2008. Health Professions had the second highest participation rate, at 77.3 percent, followed by Education, at 71.6 percent, and History, at 68.9 percent. The lowest disclosed participation rates came from Physical Sciences, at 34.7 percent, and Biological and Biomedical Sciences, at 40.3 percent.

For HEGP graduates, Science Technologies (88.0 percent) also had the highest work participation rate (of the disclosed areas of concentration), followed by Precision Production (84.8 percent), Mechanic and Repair Technicians (83.3 percent), Personal and Culinary Services (79.2 percent), and Education (79.2 percent). The lowest work participation rates were posted for degrees in Mathematics and Statistics (49.0 percent) and Physical Sciences (51.6 percent).

TABLE 5
STATISTICS FOR W.VA. PUBLIC HIGHER EDUCATION GRADUATES DURING THE 2003-2004 TO 2006-2007 PERIOD BY AREA OF CONCENTRATION

	PROMISE Recipients		W.Va. HEGP Recipients		All Graduates	
	Work Participation Rates in 2008 (In Percent)	Annualized Wages In 2008	Work Participation Rates in 2008 (In Percent)	Annualized Wages In 2008	Work Participation Rates in 2008 (In Percent)	Annualized Wages In 2008
Total	62.3	24,805	70.3	31,828	53.8	34,350
Degree						
Agriculture, Ag. Operations	42.1	16,310	55.6	26,374	39.1	27,243
Architecture and Related Services	n/d	n/d	n/d	n/d	13.3	28,618
Biological and Biomed. Sci.	40.3	12,038	51.9	25,085	39.0	25,241
Bus., Mgmt., Mktg.	65.9	25,900	68.8	30,431	53.9	33,771
Communication, Journalism	56.9	18,863	62.2	27,616	41.5	30,679
Communications Technologies	n/d	n/d	70.0	17,316	63.6	20,238
Computer and Info. Sciences	66.7	35,638	65.7	36,760	50.9	38,337
Education	71.6	23,017	79.2	31,772	64.0	33,478
Engineering	45.9	44,998	54.2	55,649	32.1	58,132
Engineering Technologies	68.8	37,835	70.2	39,107	62.4	42,644
English	55.7	14,276	65.7	18,399	44.7	20,018
Family and Cons. Sci.	56.7	18,724	59.6	21,568	37.6	20,316
For. Lang., Lit., and Ling.	56.0	13,221	61.1	17,755	33.4	18,144
Health Professions	77.3	36,513	77.0	45,399	64.1	47,462
History	68.9	12,106	67.1	21,073	44.9	21,509
Legal Professions and Studies	n/d	n/d	70.7	41,771	60.4	47,373
Liberal Arts	68.8	13,521	69.4	23,514	59.0	28,249
Library Science	n/d	n/d	n/d	n/d	n/d	n/d
Mathematics and Statistics	n/d	n/d	49.0	34,818	32.5	33,362
Mechanic and Repair Tech.	n/d	n/d	83.3	40,917	72.1	38,973
Multi/Interdisciplinary Studies	60.5	30,024	65.9	29,298	54.4	30,459
Nat. Res. and Conserv.	70.6	23,979	72.6	27,026	45.6	31,523
Parks, Rec., Leisure	58.1	9,846	58.1	22,315	31.5	24,129
Personal and Culinary Services	n/d	n/d	79.2	18,123	64.4	20,300
Philosophy and Religious Studies	n/d	n/d	n/d	n/d	36.1	25,067
Physical Sciences	34.7	15,770	51.6	30,680	39.3	35,102
Precision Production	n/d	n/d	84.8	35,493	86.2	38,124
Psychology	66.0	16,327	67.0	22,663	49.7	23,544
Pub. Administration and Soc. Serv.	64.3	17,068	72.3	30,912	59.9	30,309
Science Technologies	85.7	25,852	88.0	24,998	81.3	29,752
Security and Protective Services	67.5	24,776	74.3	25,371	60.6	26,960
Social Sciences	57.9	17,734	69.4	22,744	42.1	23,528
Trans. and Materials Moving	n/d	n/d	n/d	n/d	n/d	n/d
Visual and Performing Arts	60.5	13,483	54.8	18,350	35.2	19,920

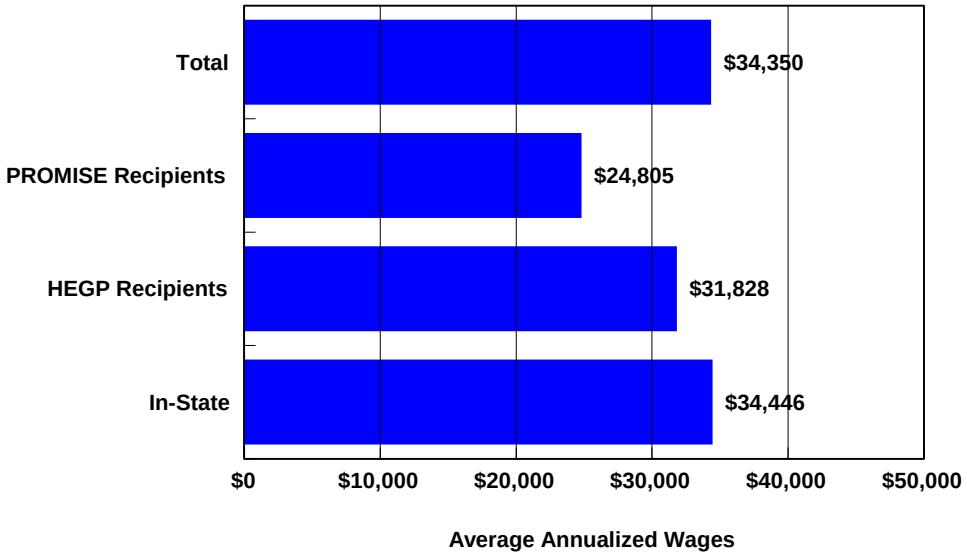
n/d: not disclosed

Work participation rates for most areas of concentration tend to be lower for PROMISE graduates than for HEGP graduates. However, 2008 work participation rates are higher for PROMISE graduates in Visual and Performing Arts, History, Computer and Information Sciences, and Health Professions.

Annualized Wage Results

The average annualized wage for graduates receiving a PROMISE scholarship and employed in West Virginia in 2008 was $24,805, as Figure 12 and Table 4 show. This wage is substantially lower than the average wage for HEGP recipients, whose average wage in 2008 was $31,828, and all West Virginia public higher education graduates during the period, at $34,350. The difference is even larger when PROMISE graduates are compared with the average of all fellow in-state graduates, whose wage averaged $34,446.

FIGURE 12
AVERAGE ANNUALIZED WAGES IN 2008 OF GRADUATES FROM WEST VIRGINIA PUBLIC HIGHER EDUCATION INSTITUTIONS DURING 2003-2004 TO 2006-2007



For PROMISE graduates, Master's degree recipients averaged the highest wage, at $35,998, followed by graduates earning an Associate's degree, at $27,556, and then graduates earning a Bachelor's degree, at $23,947. Though being outnumbered and out participated by females, male PROMISE graduates averaged $3,707 more than female PROMISE graduates. White graduates averaged the highest wage, at $25,010, followed by graduates having Hispanic ethnicity, at $20,789, and Asian ethnicity, at $19,054. The more time a worker spends in the labor market, the more experience he/she has and the higher wage the worker should expect. It comes as no surprise that the graduates of 2003-2004, the earliest graduating class with disclosed data, had the highest wage, averaging $31,059, and the most recent graduates, those of 2006-2007, had the lowest wage, averaging only $22,890.

For HEGP graduates, wages are highest for First Professional degrees ($80,754) and Doctoral degrees ($61,440), followed by Master's ($43,030), Bachelor's ($29,080), and Associate's degrees ($27,354). In addition, males posted higher wages than females ($35,556 versus $29,975) and Asian graduates posted the highest wages ($35,019) across race. We find that wages rise with experience, as expected.

Average annualized wages were lower for PROMISE graduates than for either HEGP graduates or all graduates during the period. These results arise in part because the vast majority of PROMISE graduates to date received Associate's and Bachelor's degrees, which tend to be associated with lower wage employment (than Master's, First Professional, and Doctoral degrees).

Annualized wages for PROMISE graduates with Bachelor's degrees, are closer to wages earned by HEGP Bachelor's graduates (and all Bachelor's graduates), but remain about $5,000 lower. The difference can partly explained by differing levels of experience, because most PROMISE recipients graduated during the 2005-2006 to 2006-2007 period, while HEGP graduates (and all

graduates) tend to have more experience. It is likely that as data for more PROMISE cohorts become available, wages will become more similar.

Table 5 summarizes annualized wages for PROMISE, HEGP, and all graduates by area of concentration. Engineering PROMISE graduates, while having one of the lowest participation rates, averaged the highest wage, at $44,998. Next, were Engineering Technologies graduates, averaging $37,835, slightly edging out Health Professions graduates, who averaged $36,513, and Computer Science graduates, who averaged $35,638. The lowest disclosed wages were earned by graduates in Parks and Recreation, at $9,846, and Biological and Biomedical Sciences, at $12,038.

Annualized wages were highest for HEGP graduates in Engineering ($55,649), followed by Health Professions ($45,399), Legal Professions ($41,771), Mechanic and Repair ($40,917), and Engineering Technologies ($39,107).

Conclusion

Our results suggest that both PROMISE and HEGP graduates remain in the state to work after graduation at higher-than-average rates. However, PROMISE graduates are less likely to remain in the state after graduation than the average in-state graduate. In contrast, HEGP graduates are more likely to remain in the state than the average in-state graduate.

Overall, our results also suggest that PROMISE graduates earn less than HEGP graduates, although this difference is likely to shrink over time. It is important to keep in mind that the data for PROMISE graduates is limited by the fact that we have only the first two large cohorts to analyze. Thus, their wages are relatively low in part because their careers have just begun.

This study also suggests several avenues for additional research. First it would be useful to track destinations of the graduates that leave the state. This is possible for selected neighboring states, but expansion of this type of geographic coverage will contribute significantly as we seek to understand why graduates remain or leave the state. In addition, it would be instructive to track the destination of graduates that remain in the state and the industry in which they choose to work. This is possible with the existing data set and research along these lines could also focus on the match between degrees and industries in West Virginia.

Focus On…

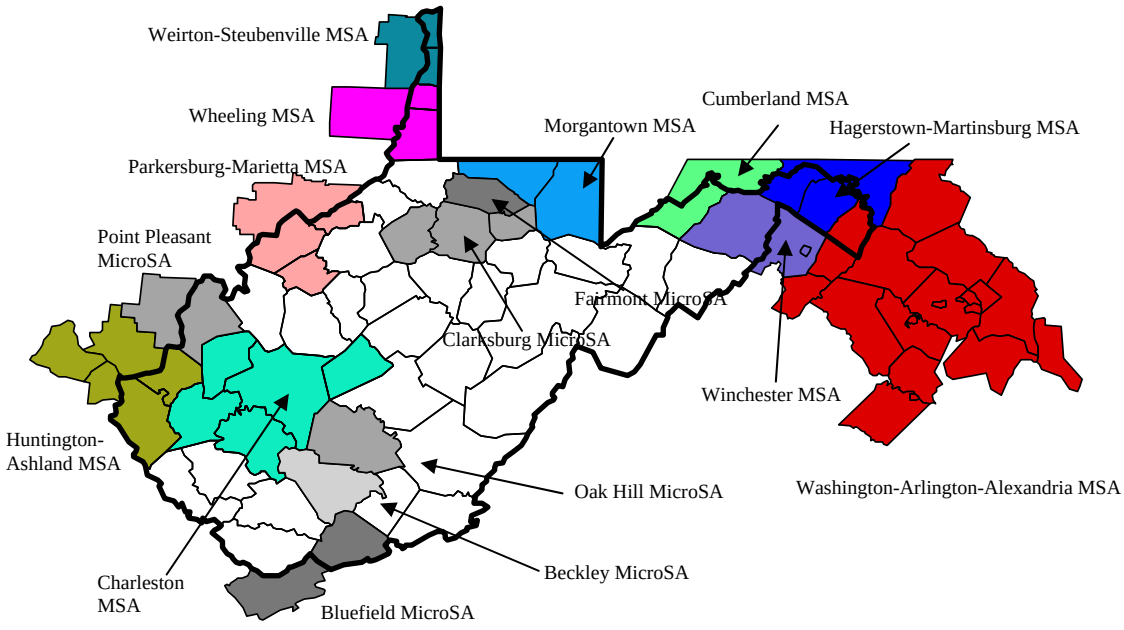
West Virginia County Performance

Peter Shirley, Undergraduate Research Assistant

West Virginia is composed of many small, diverse economies. There are large differences in industrial mix across West Virginia's regional economies and thus there is much variation in economic performance. These differences are clearly evident in the major indicators of economic performance, including employment, population, educational attainment, housing prices, and personal income. We begin by comparing the growth in metropolitan statistical areas (MSAs), which are designated by the United States Office of Management and Budget. An MSA is defined by a densely populated city (or urban agglomeration) with more than 50,000 residents. Once the urbanized area is defined the county containing it becomes the core county of the MSA. Any adjacent counties with at least 25 percent of its labor force commuting to or from the core are included in the MSA designation.

As shown in Figure 13, West Virginia has 21 counties that compose or are components of ten different MSAs. Note that only two of these MSAs are completely contained within the state. The largest MSA with component counties in the state is Washington-Arlington-Alexandria, with 5,358,130 residents in 2008. The Cumberland MSA is the smallest with 99,033 residents and includes Mineral County in West Virginia.

FIGURE 13
WEST VIRGINIA'S STATISTICAL AREAS
CENSUS 2000



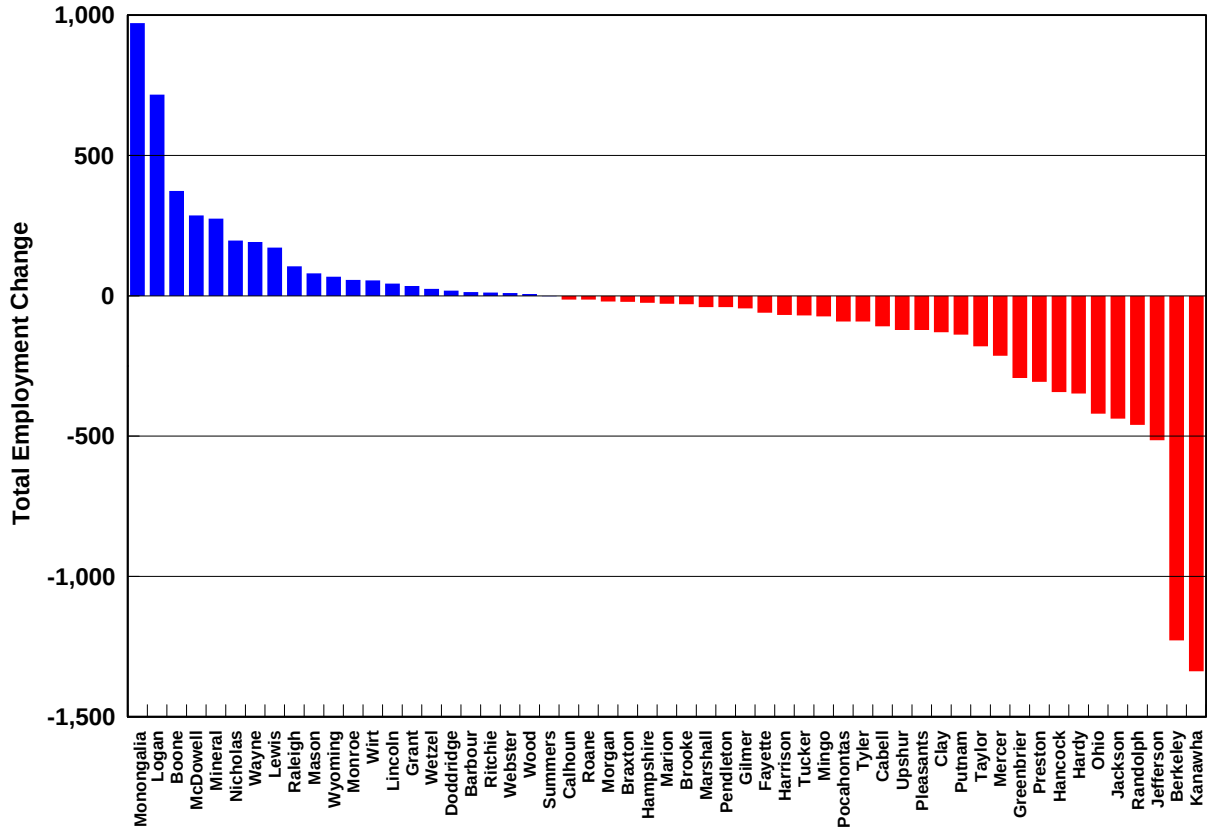
Source: Office of Management and Budget (OMB)

County Performance

Employment

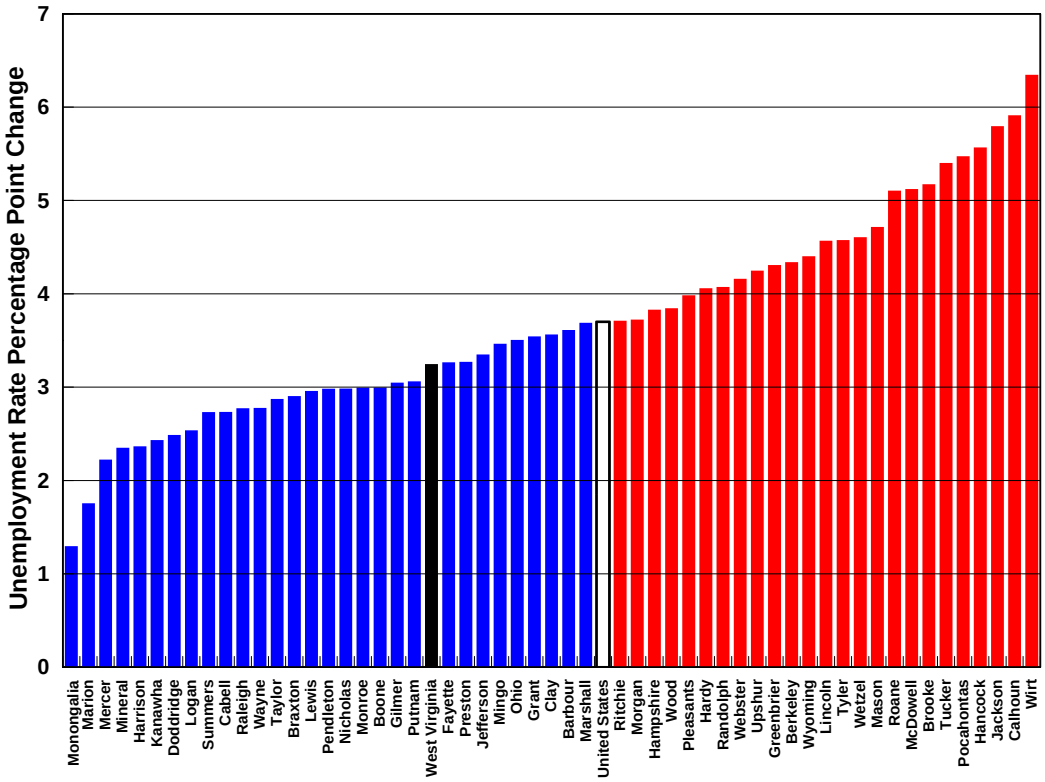
From the first six months of 2008 to the first six months of 2009, West Virginia lost 17,416 jobs. As Figure 14 shows, Kanawha and Berkley counties contributed greatly to this job decline in the state, losing 1,338 and 1,228 jobs, respectively. Jefferson County, located near Berkley County in the Eastern Panhandle, also saw a dramatic loss in employment from the first six months of 2008 to the first six months of 2009, losing 515 jobs. Morgan County, the other county comprising the Eastern Panhandle, lost only 20 jobs from the first six months of 2008 to the first six months of 2009. Monongalia and Logan counties, on the other hand, helped to stem job losses in the state, adding 972 and 717 jobs, respectively. Boone County also had a significant job gain (373 jobs gained) from the first six months of 2008 to the first six months of 2009.

FIGURE 14
TOTAL NONFARM EMPLOYMENT CHANGE BY COUNTY
JANUARY TO JUNE 2008 TO JANUARY TO JUNE 2009



From the first six months of 2008 to the first six months of 2009, the unemployment rate in West Virginia increased by 3.2 percentage points from 4.6 percent to 7.8 percent. The United States had an unemployment rate spike even more dramatic than this, increasing the national unemployment rate from 5.3 percent to 9.0 percent, an increase of 3.7 percentage points from the first six months of 2008 to the first six months of 2009. As Figure 15 shows, Monongalia County had the lowest increase in the unemployment rate, from 2.9 percent in the first six months of 2008 to 4.2 percent in the first six months of 2009, an increase of only 1.3 percentage points. Marion County had the second lowest increase in the unemployment rate. Marion County's unemployment rate increased by 1.7 percentage points, from an unemployment rate of 3.9 percent in the first six months of 2008 to an unemployment rate of 5.6 percent in the first six months of 2009. Wirt County had the largest unemployment rate increase at 6.3 percentage points (from a 6.5 percent unemployment rate in the first six months of 2008 to a 12.8 percent unemployment rate in the first six months of 2009).

FIGURE 15
UNEMPLOYMENT RATE CHANGES BY COUNTY
JANUARY TO JUNE 2008 TO JANUARY TO JUNE 2009



As Table 6 shows, between 2003 and 2008, United States annual job growth has outpaced the state of West Virginia. The U.S. has grown at a rate of 1.1 percent per year, while West Virginia's growth has only been 0.9 percent per year. Mingo County recorded the highest job growth rate in the state at 3.9 percent annually. This growth is mainly attributed to an 11.8 percent per year growth in goods-producing employment, second only to McDowell County's

15.0 percent per year growth. Putnam County had the second highest growth rate in the state at 3.2 percent, driven by a 5.4 percent per year growth in goods-producing employment as well as a 2.5 percent per year growth in service-producing employment.

Conversely, Hancock and Pocahontas counties had the largest rate of decrease in employment between 2003 and 2008 (-2.6 percent per year and -2.0 percent per year respectively). Hancock County's loss of overall employment was due to its -11.0 percent per year loss in goods-producing employment which completely negated its 1.5 percent per year growth in service-producing employment. Pocahontas County had negative job growth in both the goods-producing (-2.9 percent per year) and service-producing (-2.0 percent per year) sectors.

Table 6 also shows the annual unemployment rates for West Virginia, its counties, and the nation as a whole. In 2006, West Virginia had a higher unemployment rate than the nation. In 2007, however, the state's unemployment rate was 4.3 percent, slightly below the national unemployment rate of 4.6 percent. And most recently in 2008, both West Virginia and the U.S. had the same unemployment rates as they did in 2007. Monongalia County had the lowest unemployment rate in the state at 2.7 percent, while the highest in the state was Pocahontas and Wetzel counties with 7.1 percent of their labor forces unemployed, well above the national average.

Population

Only twenty of the fifty-five counties in West Virginia increased in population between 2000 and 2008. West Virginia's overall population gain was relatively small, despite increases in population from domestic and international migration, because of a negative natural increase. Only Berkeley, Grant, Hampshire, Jefferson, Morgan, and Putnam counties grew at or above the national average of 0.8 percent per year. Conversely, thirty-five counties lost population between 2000 and 2008.

As Table 7 shows, between April 2000 and July 2008, West Virginia has had 515 more deaths than births. Berkeley County's natural increase of 4,234 was the highest in the state; while Kanawha County's negative natural increase of 944 was the greatest decrease. This negative natural increase has been offset by population increases from domestic and international migration, located primarily in the Eastern Panhandle because of the location's proximity to Washington D.C.

International migration occurred primarily in Monongalia and Kanawha counties. The combined 2,112 increase in population (1,652 and 460 respectively) accounted for 48.6 percent of West Virginia's total net international migration. The reason these two counties had such relatively high numbers of new international citizens can be attested to the location of West Virginia University in Monongalia County, and the location of the University of Charleston as well as the state's capital in Kanawha County.

Personal Income

Per capita personal income in West Virginia grew slower than the U.S. average from 2002 to 2007, according to Table 8. The state averaged an annual growth of 4.1 percent per year, while the nation averaged 4.6 percent per year. Personal income is a measurement of the income received by residents. It includes earnings from work (wages, fringe benefits, proprietor's income, less social insurance taxes), asset income (dividends, interest, and rent), and transfer income (Social Security, Medicare, Medicaid, welfare).

Only Kanawha County had a higher PCPI than the U.S. average in 2007. Kanawha County had a PCPI of $39,337 in 2007, barely beating the national average of $38,615 but greatly outpacing the West Virginia average of $29,385. Clay County had the lowest PCPI in the state at $19,133. Gilmer County had the highest annual growth rate of PCPI between 2002 and 2007 at 5.3 percent. Wirt County had the lowest growth rate recording a 1.8 percent per year growth in PCPI from 2002 to 2007.

Only 14.8 percent of the population of West Virginia at least 25 years old held at least a bachelor's degree in 2000. This is 9.6 percentage points lower than the national average of 24.4 percent of individuals 25 years old or older. This "brain drain" is a serious problem in West Virginia, as the state lacks the education component of human capital, which is a key factor for economic development. The non-metro/non-micro counties are even more hurt by this, with only 10.2 percent of their population at least 25 years old holding a bachelor's degree or above. Only two MSAs including a county in West Virginia had a higher rate of bachelor's or above degree holders in 2000. These MSAs were the Washington-Arlington-Alexandria MSA which contains our nation's capital, and the Morgantown MSA, home to West Virginia University. The Weirton-Steubenville MSA had the lowest rate with only 12.1 percent. West Virginia's Micropolitan Statistical Areas are not much better off, with only 13.1 percent of their population 25 or older holding at least a bachelor's degree.

The Federal Housing Finance Agency (FHFA) has devised the House Price Index (HPI) as a way of calculating the price changes in single-family homes. The HPI is measured on many different geographic levels, including the national average, Census division, the 50 states, and MSAs. From 2000 to 2008, West Virginia's house prices rose at an annual rate of 5.0 percent per year. This growth was outpaced, however, by the national average of 6.0 percent per year. The Washington-Arlington-Alexandria MSA had the highest annual growth in housing prices at 9.4 percent. Both the Hagerstown-Martinsburg and Winchester MSAs, which are located in the Eastern Panhandle and are in close proximity to the Washington-Arlington-Alexandria MSA, had relatively high annual growths at 8.4 and 8.3 percent per year, respectively. The Charleston and Weirton-Steubenville MSAs both had the lowest annual growth in house prices at 3.5 percent annually, followed closely by the Parkersburg-Marietta MSA at 3.6 percent per year, and the Wheeling MSA at 4.4 percent annually, all of which were below the West Virginia average.

TABLE 6
NONFARM EMPLOYMENT GROWTH AND UNEMPLOYMENT RATES
WEST VIRGINIA COUNTIES

	Total Nonfarm Employment				Nonfarm Employment Average Annual Growth Rates 2003-2008				Unemployment Rates		
		Annual Gr.(%)			Goods-		Service-				
	2003	2008	2003-2008	Rank	Producing	Rank	Producing	Rank	2006	2007	2008
Barbour	3,780	3,940	0.8	32	5.5	7	0.1	41	5.4	5.2	4.8
Berkeley	27,500	30,340	2.0	10	-2.4	46	2.7	3	3.9	3.9	4.7
Boone	8,210	9,220	2.3	7	3.5	15	1.4	12	4.4	4.5	3.8
Braxton	4,360	4,470	0.5	37	2.4	24	0.1	42	5.2	5.2	5.0
Brooke	9,700	9,300	-0.8	51	-1.9	43	-0.5	49	6.9	5.6	5.6
Cabell	53,160	55,730	0.9	27	2.8	22	0.7	28	4.3	3.9	3.8
Calhoun	1,590	1,590	0.0	42	0.0	37	0.2	38	6.8	6.7	6.7
Clay	2,010	2,230	2.1	8	3.2	20	1.7	9	6.4	6.6	6.2
Doddridge	1,300	1,350	0.8	33	5.9	6	0.0	45	4.9	4.6	4.7
Fayette	13,230	13,640	0.6	34	3.7	14	0.1	40	5.3	5.1	4.5
Gilmer	2,200	2,370	1.5	15	3.7	12	1.0	24	4.4	3.8	3.8
Grant	4,010	4,330	1.5	13	3.8	11	0.5	31	5.6	5.0	5.1
Greenbrier	13,570	14,190	0.9	30	-0.3	40	1.1	19	5.8	5.8	5.4
Hampshire	4,230	4,420	0.9	31	-2.0	44	1.3	15	3.7	3.4	4.2
Hancock	14,340	12,570	-2.6	55	-11.0	54	1.5	11	7.1	5.4	5.8
Hardy	6,510	6,390	-0.4	45	-1.5	42	1.1	21	3.7	4.0	4.5
Harrison	33,960	34,850	0.5	36	0.6	32	0.5	33	4.4	4.0	3.8
Jackson	8,630	9,130	1.1	23	0.5	33	1.4	13	4.9	4.6	5.0
Jefferson	14,090	15,020	1.3	20	-4.0	51	2.1	6	3.2	3.0	3.7
Kanawha	115,740	115,580	-0.0	43	-0.3	39	0.0	44	4.1	3.8	3.5
Lewis	5,990	6,400	1.3	18	3.1	21	1.0	25	4.8	4.8	4.1
Lincoln	3,080	3,540	2.8	5	9.7	3	1.3	14	5.7	5.2	4.6
Logan	11,710	12,360	1.1	25	4.6	10	0.2	37	4.5	4.9	4.1
McDowell	5,750	6,680	3.0	3	15.0	1	0.4	34	7.2	7.0	5.8
Marion	21,360	22,360	0.9	28	2.8	23	0.5	32	4.2	4.0	3.5
Marshall	11,310	11,490	0.3	38	-2.1	45	1.3	16	5.3	5.0	5.0
Mason	6,500	7,090	1.8	12	0.7	31	1.9	8	6.5	6.5	6.9
Mercer	24,350	23,910	-0.4	44	1.0	29	-0.5	50	4.6	4.0	3.9
Mineral	7,280	8,180	2.4	6	6.2	5	1.1	17	4.7	4.5	4.5
Mingo	7,830	9,470	3.9	1	11.8	2	-0.0	46	5.1	5.4	4.2
Monongalia	47,250	54,810	3.0	4	5.4	9	2.7	1	3.2	3.0	2.7
Monroe	2,360	2,520	1.3	19	6.5	4	-0.1	47	5.1	4.4	4.3
Morgan	3,290	3,200	-0.6	48	-5.1	52	0.3	35	4.4	4.5	5.2
Nicholas	8,800	9,350	1.2	21	3.3	17	0.7	29	5.0	4.7	4.5
Ohio	29,210	31,950	1.8	11	-1.5	41	2.1	5	4.5	4.0	4.1
Pendleton	1,970	1,930	-0.4	46	1.1	27	-0.6	51	4.0	3.5	4.3
Pleasants	3,030	3,270	1.5	14	3.3	18	0.8	27	5.2	5.4	5.7
Pocahontas	3,890	3,510	-2.0	54	-2.9	49	-2.0	55	7.3	6.9	7.1
Preston	7,150	7,890	2.0	9	0.0	37	2.7	2	4.2	4.1	3.8
Putnam	18,320	21,440	3.2	2	5.4	8	2.5	4	3.8	3.5	3.2
Raleigh	31,250	33,540	1.4	16	3.7	13	1.1	20	4.2	4.2	3.9
Randolph	12,150	12,710	0.9	29	0.3	35	1.0	23	4.8	4.8	5.3
Ritchie	3,230	3,460	1.4	17	0.4	34	2.1	7	4.7	4.9	5.4
Roane	3,350	3,540	1.1	24	1.1	27	1.0	22	5.9	6.1	6.3
Summers	2,680	2,710	0.2	41	-7.8	53	0.8	26	5.9	5.7	4.9
Taylor	3,520	3,190	-1.9	53	-12.5	55	0.1	39	4.9	4.6	4.3
Tucker	2,980	2,800	-1.2	52	-2.5	47	-1.0	53	5.8	5.7	6.3
Tyler	2,670	2,700	0.2	40	-2.6	48	1.5	10	6.7	5.9	6.2
Upshur	8,640	9,100	1.0	26	0.8	30	1.1	18	4.4	4.2	4.1
Wayne	10,200	10,350	0.3	39	3.4	16	-0.4	48	5.1	4.4	4.6
Webster	2,490	2,560	0.6	35	1.4	26	0.2	36	5.4	5.4	5.4
Wetzel	5,400	5,190	-0.8	50	1.5	25	-1.0	54	7.7	6.5	7.1
Wirt	840	890	1.2	22	3.3	19	0.6	30	5.7	5.7	5.9
Wood	42,990	42,090	-0.4	47	-3.0	50	0.1	43	4.6	4.4	4.6
Wyoming	5,820	5,650	-0.6	49	0.1	36	-0.8	52	5.2	5.8	4.7
West Virginia	727,600	761,100	0.9	--	1.0	--	0.9	--	6.0	4.3	4.3
U.S.	129,999	137,066	1.1	--	-0.4	--	1.3	--	5.8	4.6	4.6

Source: West Virginia Bureau of Employment Programs. [http://www.wvbep.org/bep/default.htm]
Calculation of ranks and changes by authors. All changes are annual. A rank of 1 indicates the highest growth rate.

TABLE 7
WEST VIRGINIA COUNTY POPULATION CHARACTERISTICS

	Total Population						Components of Change - April 2000 to July 2008				
	April 1990	April 2000	July 2000	July 2008	Ann. % Ch. April 1990-April 2000	Ann. % Ch. July 2000-July 2008	Births	Deaths	Natural Increase	Net Domestic Migration	Net International Migration
Barbour	15,699	15,548	15,412	15,600	-0.1	0.2	1,387	1,582	-195	302	2
Berkeley	59,253	76,413	81,086	102,044	2.6	2.9	10,156	5,922	4,234	21,993	118
Boone	25,870	25,491	25,523	24,977	-0.1	-0.3	2,682	2,518	164	-629	44
Braxton	12,998	14,720	14,679	14,700	1.3	0.0	1,228	1,425	-197	297	-6
Brooke	26,992	25,373	24,979	23,520	-0.6	-0.7	1,894	2,639	-745	-1,053	0
Cabell	96,827	96,710	95,547	94,631	-0.0	-0.1	9,587	9,690	-103	-1,984	338
Calhoun	7,885	7,581	7,334	7,212	-0.4	-0.2	637	738	-101	-231	5
Clay	9,983	10,315	10,293	10,075	0.3	-0.3	1,094	991	103	-320	5
Doddridge	6,994	7,408	7,433	7,201	0.6	-0.4	573	681	-108	-52	-3
Fayette	47,952	47,498	46,991	46,341	-0.1	-0.2	4,695	4,976	-281	-819	104
Gilmer	7,669	7,169	6,999	6,873	-0.7	-0.2	533	685	-152	-103	7
Grant	10,428	11,287	11,290	12,047	0.8	0.8	1,055	1,010	45	797	5
Greenbrier	34,693	34,423	34,448	34,567	-0.1	0.0	3,095	3,655	-560	868	22
Hampshire	16,498	20,291	20,801	22,574	2.1	1.0	1,956	1,733	223	2,199	20
Hancock	35,233	32,621	31,949	30,008	-0.8	-0.8	2,768	3,517	-749	-1,683	1
Hardy	10,977	12,695	12,830	13,591	1.5	0.7	1,232	1,157	75	896	15
Harrison	69,371	68,564	67,813	68,853	-0.1	0.2	6,768	7,040	-272	577	220
Jackson	25,938	28,041	28,043	28,157	0.8	0.1	2,657	2,513	144	196	25
Jefferson	35,926	42,439	44,685	51,615	1.7	1.8	5,152	3,213	1,939	7,471	136
Kanawha	207,619	199,714	196,025	191,018	-0.4	-0.3	19,379	20,323	-944	-7,642	460
Lewis	17,223	16,862	16,920	17,281	-0.2	0.3	1,576	1,869	-293	715	8
Lincoln	21,382	22,133	22,194	22,386	0.3	0.1	2,374	2,136	238	154	5
Logan	43,032	37,560	36,807	35,525	-1.4	-0.4	3,643	4,033	-390	-1,620	21
McDowell	35,233	27,127	25,784	22,707	-2.6	-1.6	2,394	3,093	-699	-3,809	13
Marion	57,249	56,504	56,158	56,496	-0.1	0.1	5,114	5,941	-827	873	92
Marshall	37,356	35,395	34,827	32,766	-0.5	-0.8	2,767	3,166	-399	-2,124	6
Mason	25,178	25,965	25,934	25,678	0.3	-0.1	2,437	2,488	-51	-70	-4
Mercer	64,980	62,927	61,989	61,500	-0.3	-0.1	5,973	6,703	-730	-553	90
Mineral	26,697	27,038	27,115	26,795	0.1	-0.1	2,463	2,532	-69	-37	39
Mingo	33,739	28,021	27,466	26,352	-1.8	-0.5	2,979	2,828	151	-1,914	6
Monongalia	75,509	81,914	83,349	88,221	0.8	0.7	7,537	5,169	2,368	2,735	1,652
Monroe	12,406	13,200	13,314	13,739	0.6	0.4	1,069	1,243	-174	767	-4
Morgan	12,128	15,012	15,232	16,325	2.2	0.9	1,263	1,475	-212	1,623	61
Nicholas	26,775	26,548	26,133	26,137	-0.1	0.0	2,377	2,511	-134	-187	5
Ohio	50,871	47,330	46,176	44,106	-0.7	-0.6	3,934	4,826	-892	-2,440	166
Pendleton	8,054	8,167	7,961	7,582	0.1	-0.6	684	738	-54	-532	6
Pleasants	7,546	7,500	7,510	7,150	-0.1	-0.6	562	728	-166	-187	15
Pocahontas	9,008	9,110	8,938	8,472	0.1	-0.7	699	992	-293	-321	8
Preston	29,037	29,287	29,431	30,285	0.1	0.4	2,608	2,700	-92	1,165	6
Putnam	42,835	51,734	52,088	55,488	1.9	0.8	5,321	3,834	1,487	2,604	31
Raleigh	76,819	79,048	78,854	79,357	0.3	0.1	7,303	7,627	-324	574	250
Randolph	27,803	28,206	28,304	28,264	0.1	-0.0	2,652	2,842	-190	264	44
Ritchie	10,233	10,335	10,298	10,308	0.1	0.0	946	1,034	-88	98	5
Roane	15,120	15,458	15,286	15,169	0.2	-0.1	1,366	1,467	-101	-129	34
Summers	14,204	14,324	13,912	13,017	0.1	-0.8	954	1,339	-385	-883	3
Taylor	15,144	16,081	15,988	16,158	0.6	0.1	1,297	1,545	-248	399	4
Tucker	7,728	7,294	7,227	6,877	-0.6	-0.6	514	719	-205	-212	5
Tyler	9,796	9,586	9,355	8,841	-0.2	-0.7	731	932	-201	-494	6
Upshur	22,867	23,412	23,327	23,582	0.2	0.1	2,309	2,165	144	92	34
Wayne	41,636	42,900	42,403	41,082	0.3	-0.4	3,841	3,853	-12	-1,558	64
Webster	10,729	9,688	9,669	9,394	-1.0	-0.4	788	966	-178	-88	10
Wetzel	19,258	17,672	17,183	16,329	-0.9	-0.6	1,606	1,720	-114	-1,154	5
Wirt	5,192	5,881	5,798	5,757	1.3	-0.1	477	488	-11	-81	8
Wood	86,915	87,874	87,581	86,204	0.1	-0.2	8,306	8,003	303	-1,813	124
Wyoming	28,990	25,583	24,721	23,534	-1.2	-0.6	2,214	2,408	-194	-1,853	8
West Virginia	1,793,477	1,806,977	1,799,392	1,814,468	0.1	0.1	171,606	172,121	-515	11,084	4,344
United States	248,709,873	281,421,906	282,194,308	301,621,157	1.2	0.8	34,126,003	20,001,837	14,124,166	-	8,114,516

TABLE 8
WEST VIRGINIA PERSONAL INCOME BY COUNTY

	Total Personal Income (Millions $)			Per Capita Personal Income			PCPI Rank	
			Annual Gr. (%)			Annual Gr. (%)	Level	Annual Gr.
	2002	2007	2002-2007	2002	2007	2002-2007	2007	2002-2007
Barbour	292.0	360.0	4.3	18,949	23,252	4.2	42	32
Berkeley	2,055.7	2,900.9	7.1	25,352	29,146	2.8	13	52
Boone	505.2	611.8	3.9	19,795	24,292	4.2	37	31
Braxton	246.3	310.2	4.7	16,777	21,174	4.8	48	12
Brooke	598.9	661.7	2.0	23,975	27,993	3.1	18	47
Cabell	2,472.8	2,893.3	3.2	25,880	30,646	3.4	8	43
Calhoun	121.5	147.6	4.0	16,564	20,507	4.4	52	27
Clay	156.3	193.4	4.4	15,188	19,133	4.7	55	13
Doddridge	139.6	150.6	1.5	18,786	20,793	2.1	51	54
Fayette	945.1	1,126.9	3.6	20,113	24,351	3.9	36	40
Gilmer	132.1	168.2	5.0	18,868	24,392	5.3	35	1
Grant	263.6	321.4	4.0	23,347	27,013	3.0	23	50
Greenbrier	786.7	985.4	4.6	22,838	28,533	4.6	15	19
Hampshire	415.8	515.1	4.4	19,989	22,849	2.7	43	53
Hancock	783.1	874.7	2.2	24,510	29,002	3.4	14	44
Hardy	262.8	329.2	4.6	20,480	24,127	3.3	39	46
Harrison	1,786.2	2,226.9	4.5	26,340	32,627	4.4	7	26
Jackson	588.4	717.7	4.1	20,984	25,479	4.0	32	38
Jefferson	1,286.9	1,813.2	7.1	28,800	35,701	4.4	3	24
Kanawha	6,266.3	7,520.4	3.7	31,967	39,337	4.2	1	29
Lewis	357.7	461.0	5.2	21,142	26,963	5.0	24	6
Lincoln	376.1	472.1	4.6	16,948	21,162	4.5	49	20
Logan	817.0	980.0	3.7	22,196	27,554	4.4	20	23
McDowell	428.4	467.5	1.8	16,614	20,344	4.1	53	35
Marion	1,383.8	1,691.1	4.1	24,641	29,849	3.9	10	39
Marshall	789.0	933.1	3.4	22,655	28,181	4.5	17	22
Mason	516.4	619.2	3.7	19,911	24,254	4.0	38	36
Mercer	1,467.1	1,709.1	3.1	23,667	27,898	3.3	19	45
Mineral	588.8	717.3	4.0	21,714	26,868	4.4	25	28
Mingo	560.2	688.1	4.2	20,395	25,793	4.8	30	9
Monongalia	2,220.7	2,917.0	5.6	26,643	33,408	4.6	6	16
Monroe	256.1	301.5	3.3	19,234	22,269	3.0	45	49
Morgan	407.5	552.3	6.3	26,751	33,788	4.8	4	10
Nicholas	535.1	679.9	4.9	20,477	26,030	4.9	27	7
Ohio	1,366.8	1,611.5	3.3	29,599	36,328	4.2	2	30
Pendleton	170.3	208.4	4.1	21,386	27,366	5.1	22	5
Pleasants	174.2	214.1	4.2	23,201	29,757	5.1	11	4
Pocahontas	195.6	225.8	2.9	21,887	26,358	3.8	26	41
Preston	602.7	778.6	5.3	20,480	25,753	4.7	31	14
Putnam	1,435.5	1,838.5	5.1	27,560	33,505	4.0	5	37
Raleigh	1,907.4	2,345.0	4.2	24,189	29,658	4.2	12	33
Randolph	639.0	797.3	4.5	22,578	28,217	4.6	16	18
Ritchie	206.7	266.6	5.2	20,071	25,815	5.2	29	2
Roane	269.4	336.9	4.6	17,625	22,104	4.6	46	15
Summers	238.8	280.5	3.3	17,168	21,273	4.4	47	25
Taylor	301.4	380.5	4.8	18,849	23,634	4.6	41	17
Tucker	153.1	178.3	3.1	21,179	25,963	4.2	28	34
Tyler	184.9	203.4	1.9	19,760	22,732	2.8	44	51
Upshur	452.7	576.0	4.9	19,407	24,507	4.8	34	11
Wayne	821.7	1,026.0	4.5	19,377	24,893	5.1	33	3
Webster	159.4	196.6	4.3	16,486	20,870	4.8	50	8
Wetzel	394.4	451.0	2.7	22,952	27,472	3.7	21	42
Wirt	101.7	111.1	1.8	17,538	19,165	1.8	54	55
Wood	2,249.3	2,569.2	2.7	25,682	29,872	3.1	9	48
Wyoming	477.5	568.3	3.5	19,316	24,030	4.5	40	21
West Virginia	43,311.5	53,181.3	4.2	24,070	29,385	4.1	--	--
U.S.	8,872,871.0	11,634,322.0	5.6	30,838	38,615	4.6	--	--

MSA Performance

The metropolitan statistical areas (MSAs) that included at least one county in West Virginia experienced a lower average per capita personal income growth (PCPI) than the non-metro/non-micro counties in West Virginia. Table 9 shows several key economic performance indicators for West Virginia's MSAs from 2000 to 2008. The MSAs that include at least one county in West Virginia had a per capita personal income annual average growth rate of 4.4 percent from 2000 to 2007. This growth rate exceeds both the West Virginia (4.3 percent per year) and national (3.7 percent per year) PCPI growth rates, but falls short of the growth rate of nonmetropolitan counties in West Virginia, which had an average annual PCPI growth rate of 4.5 percent from 2000 to 2007. The average PCPI of West Virginia's MSAs was $49,342 in 2007, well above both West Virginia's PCPI ($29,385) and the nation's ($38,615). That PCPI is so high, however, because of the Washington-Arlington-Alexandria MSA which includes Jefferson County. This MSA had a PCPI of $54,971 in 2007 and had a population higher than all of the other West Virginia MSAs combined.

TABLE 9
WEST VIRGINIA'S STATISTICAL AREAS

	Per Capita Personal Income		Empl.	Unempl. Rate	Population		Educ. Attain. B.A.+	Housing Prices
	Dollars 2007	Ann. Gr. % 2000-2007	Ann. Gr. % 2000-2007	Ann. Avg. % 2008	Residents 2008	Ann. Gr. % 2000-2008	% of Pop. 2000	Ann. Gr. % 2000-2008
Metropolitan Statistical Areas	**49,342**	**4.4**	**1.6**	**4.0**	**6,977,548**	**1.1**	**35.8**	**n/a**
Charleston MSA	35,027	4.4	0.2	3.6	303,944	-0.2	17.9	3.5
Cumberland MSA	27,103	4.0	0.4	5.5	99,033	-0.4	13.4	7.5
Hagerstown-Martinsburg MSA	31,787	3.9	1.5	5.3	263,753	2.1	14.5	8.4
Huntington-Ashland MSA	28,397	4.0	0.4	5.0	284,234	-0.2	14.9	4.6
Morgantown, MSA	31,439	5.2	2.0	2.9	118,506	0.8	26.0	6.4
Parkersburg-Marietta MSA	29,254	3.5	-0.0	5.1	160,678	-0.3	14.7	3.6
Washington-Arlington-Alexandria MSA	54,971	4.4	1.9	3.8	5,358,130	1.3	42.5	9.4
Weirton - Steubenville MSA	28,335	3.5	-0.8	6.5	122,054	-0.9	12.1	3.5
Wheeling MSA	30,137	3.8	0.3	5.2	144,847	-0.7	14.6	4.4
Winchester MSA	32,260	3.4	2.4	4.3	122,369	2.1	18.3	8.3
Micropolitan Statistical Areas	**28,479**	**4.3**	**0.6**	**4.3**	**436,283**	**-0.1**	**13.1**	**n/a**
Beckley	29,658	4.6	0.9	3.9	79,357	0.0	12.7	n/a
Bluefield	28,278	4.3	0.3	4.2	105,287	-0.2	12.7	n/a
Clarksburg	30,111	4.4	0.7	4.0	92,212	0.0	14.9	n/a
Fairmont	29,849	4.2	0.7	3.5	56,496	-0.0	16.0	n/a
Oak Hill	24,351	4.2	0.3	4.5	46,341	-0.3	10.7	n/a
Point Pleasant	26,562	3.7	0.4	6.7	56,590	-0.1	10.3	n/a
Non-Metro/Non-Micro Counties in W.Va.	**25,102**	**4.5**	**0.4**	**5.0**	**445,857**	**-0.4**	**10.2**	**n/a**
W.Va.	**29,385**	**4.3**	**0.6**	**4.3**	**1,814,468**	**0.0**	**14.8**	**5.0**
U.S.	**38,615**	**3.7**	**1.2**	**5.8**	**304,059,724**	**1.0**	**24.4**	**6.0**

Per capita income data is from the U.S. Bureau of Economic Analysis.
Total full & part-time employment is from the U.S. Bureau of Economic Analysis.
Unemployment rate data is from the U.S. Bureau of Labor Statistics.
Population data is from the U.S. Census Bureau.
Educational Attainment is % of the population that is 25 years and older.
House Price Data is from the Office of Federal Housing Enterprise Oversight.
Non-Metro/Non-Micro Counties in WV is calculated using data from WV Bureau of Employment Programs.

Six of ten MSAs had negative annual population growth from 2000 to 2008. The Weirton-Steubenville MSA had the greatest population decrease at -0.9 percent per year from 2000 to 2008. The Wheeling MSA had the second greatest population decrease at -0.7 percent per year. The Cumberland and Parkersburg-Marietta MSAs had population growth rates of -0.4 and -0.3 percent per year, respectively. The Winchester MSA, containing Hampshire County in the

Eastern Panhandle, and the Hagerstown-Martinsburg MSA had the greatest annual population growths at 2.1 percent per year. Table 9 shows that West Virginia's MSAs are growing in population at an annual rate of 1.1 percent, which is higher than West Virginia (no growth) and the U.S. growth rate of 1.0 percent per year. West Virginia's micropolitan statistical areas and non-metro/non-micro counties, however, have both had a negative annual growth rate from 2000 to 2008, recording rates of -0.1 percent and -0.4 percent annually, respectively.

West Virginia's MSAs had faster growth in employment and lower unemployment rates than both the nation and the state. Metropolitan areas had a 2008 average unemployment rate of 4.0 percent, whereas the nation's average and West Virginia's average were 5.8 and 4.3 percent, respectively. The Weirton-Steubenville MSA had the highest 2008 unemployment rate at 6.5 percent, while the Morgantown MSA had the lowest unemployment rate at 2.9 percent. The Weirton-Steubenville MSA was also the only MSA to experience negative employment growth from 2000 to 2007 at -0.8 percent per year, while the Parkersburg MSA experienced no job growth and the Winchester MSA had the largest employment growth rate at 2.4 percent per year. The MSAs had a rapid growth rate in employment from 2000 to 2007, averaging 1.6 percent per year, compared to the West Virginia average of 0.6 percent per year, and the U.S. average of 1.2 percent per year. West Virginia's micropolitan statistical areas and non-metro/non-micro statistical areas employments grew in close relation to the West Virginia's growth rate at 0.6 percent annually and 0.4 percent annually, respectively.

Focus On…

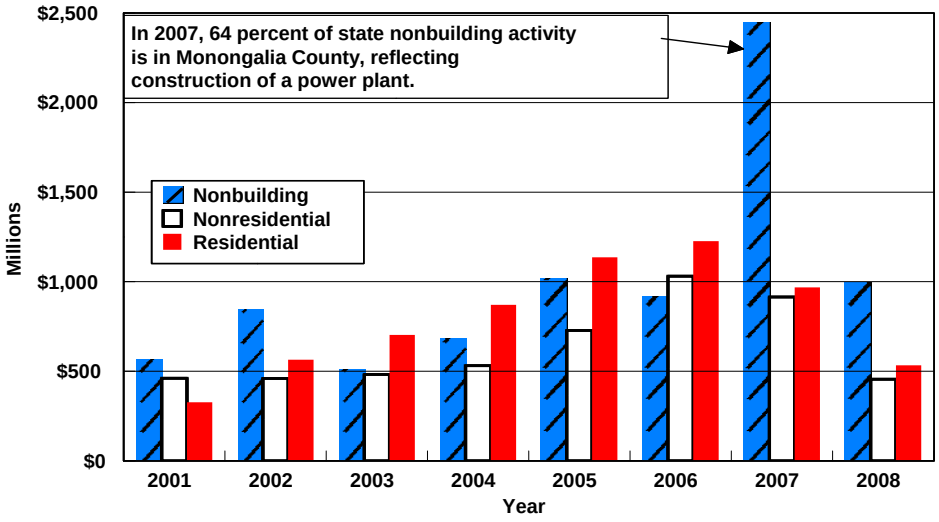
West Virginia Construction Update 2009

Peter Shirley, Undergraduate Research Assistant

The construction industry has several measures that help us to understand its economic performance in West Virginia. Whether it is construction starts, which is the entire value of a construction project recorded in the period ground is broken, to house price appreciation, which measures aggregate house prices in an area, to construction employment which comprises a significant share of total employment in West Virginia. All of these measures reflect upon one another, and indeed the data supports that all three of these measures have similar trends.

Construction starts in West Virginia have grown at an average annual rate of 5.6 percent from 2001 to 2008. Construction starts were at their peak in West Virginia in 2007 at $4.33 billion, because of the breaking ground of Longview power plant in Monongalia County, where 64.4 percent of all 2007 nonbuilding construction starts in West Virginia were. Indeed, without Monongalia County's nonbuilding construction starts in 2007, West Virginia's total construction starts would have declined from 2006 to 2007. Construction starts were $1.98 billion in 2008, a 54.2 percent decline from their record year in 2007.

FIGURE 16
W.VA. VALUE OF CONSTRUCTION CONTRACTS BY TYPE
F.W. DODGE



As Figure 16 shows, all three types of construction starts, nonbuilding, nonresidential, and residential, fell from 2007 to 2008, but nonbuilding starts declined the most, both in terms of value of construction starts and percent change. Nonbuilding construction starts peaked in 2007 at $2.45 billion, thanks to the aforementioned Longview power plant. Without Monongalia County's nonbuilding construction starts in 2007, nonbuilding construction starts would have totaled $873.0 million, which is indeed below West Virginia's value of nonbuilding construction

starts in both 2006 and 2008. Nonbuilding starts have grown an average annual rate of 8.4 percent, from their value of $566.7 million in 2001 to their value of $996.0 million in 2008.

Unlike nonbuilding construction starts in West Virginia, nonresidential construction starts did not grow from 2001 to 2008. Indeed, nonresidential construction starts in West Virginia in 2001 were $460.5 million and $455.2 million in 2008, which translates into an average annual growth rate of -0.2 percent. Nonresidential construction starts have fallen dramatically from 2007 to 2008. In 2007, nonresidential construction starts in West Virginia were $914.3 million, which translates into a -50.2 percent change from 2007 to 2008.

Residential construction starts in West Virginia, similarly to nonbuilding and nonresidential starts, have seen large declines from 2007 to 2008. Residential construction starts were $533.3 million in West Virginia in 2008, a 44.9 percent decline from their value of $968.4 million in 2007. Residential construction starts peaked in 2006 at $1.23 billion. Residential construction starts were at their lowest point during the period in 2001, at $326.9 million. Residential construction starts then grew at a 7.2 percent per year from 2001 to 2008.

Another important indicator when evaluating construction performance in West Virginia is to measure house prices, and compare how those how prices are changing relative to surrounding areas and the nation as a whole. As Table 10 shows, house prices in West Virginia have fallen by 1.5 percent from the second quarter of 2008 to the second quarter of 2009. The fact that the housing market in West Virginia has not yet bottomed-out is a concern, but when we compare the state's performance to surrounding states and the nation, we see that West Virginia is performing quite well. Indeed, the only state to outperform West Virginia was Kentucky where house prices declined by only 0.6 percent from the second quarter of 2008 to the second quarter of 2009. West Virginia is also outperforming the nation, which saw house prices decline by 4.0 percent from the second quarter of 2008 to the second quarter of 2009.

The Parkersburg-Marietta has fared the best of all the MSAs in Table 10, with house prices increasing by 1.9 percent from the second quarter of 2008 to the second quarter of 2009. Only the Huntington-Ashland (1.6 percent appreciation), Morgantown (0.6 percent appreciation), and Charleston MSAs (0.1 percent appreciation), saw house price appreciation from the second quarter of 2008 to the second quarter of 2009. The Hagerstown-Martinsburg had the greatest decline in house price appreciation from the second quarter of 2008 to the second quarter of 2009 at -12.4 percent, with the Winchester MSA also experiencing a dramatic decline of -10.7 percent in house prices.

TABLE 10
HOUSE PRICE APPRECIATION IN W.VA. METROPOLITAN STATISTICAL AREAS*
FEDERAL HOUSING FINANCE AGENCY

	Annual Percent Change			
	2005Q2-2006Q2	2006Q2-2007Q2	2007Q2-2008Q2	2008Q2-2009Q2
W.Va. MSAs*				
Charleston MSA	4.3	2.9	5.3	0.1
Cumberland MSA	16.2	10.4	1.8	-1.9
Hagerstown-Martinsburg MSA	15.3	2.0	-5.4	-12.4
Huntington-Ashland MSA	4.0	4.8	3.6	1.6
Morgantown MSA	8.2	6.2	1.7	0.6
Parkersburg-Marietta MSA	3.0	0.8	3.2	1.9
Wash.-Arl.-Alex. MSA	14.3	0.3	-10.5	-8.1
Weirton-Steubenville MSA	0.8	3.2	6.3	-6.2
Wheeling MSA	6.3	1.8	8.8	-4.1
Winchester MSA	15.9	-3.0	-10.6	-10.7
W.Va. Non-MSA	7.8	6.4	3.6	-0.3
Kentucky	3.7	3.1	2.5	-0.6
Maryland	15.2	3.7	-5.1	-8.7
Ohio	0.9	0.4	-0.6	-2.0
Pennsylvania	9.2	4.1	0.8	-1.9
Virginia	12.7	3.2	-3.2	-4.4
W.Va.	7.0	3.6	2.8	-1.5
U.S.	8.2	2.9	-2.3	-4.0

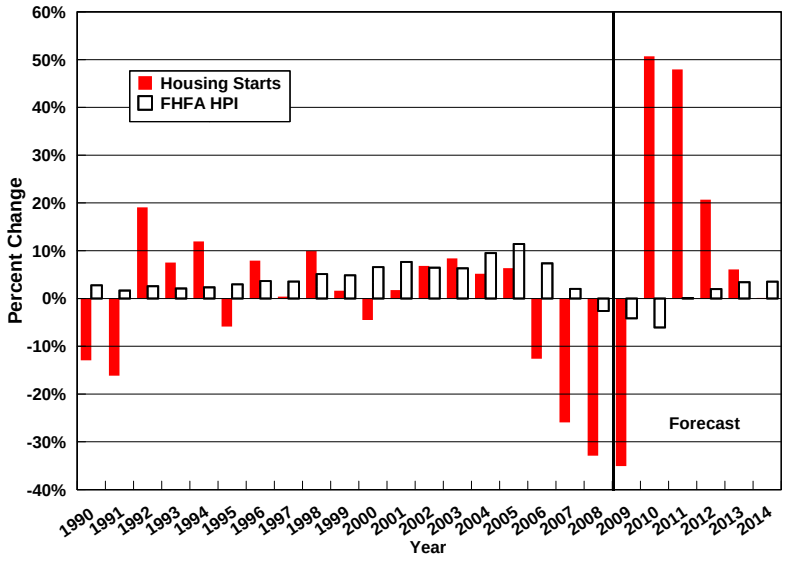
*MSAs with at least one West Virginia county. These data cover repeat transactions on single-family detached properties for which at least two mortgages were originated and subsequently purchased by either Freddie Mac or Fannie Mae. The use of repeat transactions on the same physical property helps to control for differences in the quality of the houses comprising the sample used for statistical estimation. http://www.fhfa.gov/

As with the housing price index, the number of housing starts is also a good gauge of the performance of the housing market. Figure 17 shows the annual percent changes of both housing starts and the FHFA house price index. As the figure shows, there is a positive correlation between these two measures of the housing market. In the early 2000s, the nation experienced a housing boom, which can be seen in the dramatic growth of both house prices and housing starts from 2000 to 2005. Indeed, on average house prices rose 8.2 percent per year, while housing starts rose at an average of 5.7 percent per year from 2000 to 2005.

In 2006, we begin to see the housing bubble begin to burst, with a -12.6 percent decline in housing starts. Both housing starts and the HPI fall dramatically from that point, continuing into the forecast. Housing starts bottom out in 2009, declining by -35.1 percent from 2008, while the HPI bottoms out in 2010 with a -6.1 percent decline from 2009. Housing starts begin to recover in 2010, increasing by 50.7 percent. By 2014, housing starts have a flat growth rate, but have returned to normal levels.

The HPI experiences dramatic declines in 2009 (-4.2 percent) and 2010 as the housing market bottoms out, and then becomes flat in 2011. By 2012, the HPI has risen by 2.0 percent from 2011, and then returns to normal growth rates in 2013 and 2014 of 3.4 and 3.5 percent, respectively.

FIGURE 17
THE U.S. HOUSING MARKET BEGINS
TO RECOVER DURING THE FORECAST
IHS GLOBAL INSIGHT, SEPTEMBER 2009



County and Labor Market Results

Per capita construction starts in West Virginia in 2008 were $1,094. This included $549 in nonbuilding construction starts, $251 in nonresidential construction starts, and $294 in residential construction starts for each person in the state. Grant County led all counties in West Virginia with $8,906 per capita in construction starts, because of the highest nonbuilding construction starts per capita in the state at $8,698. Pendleton County had the second highest per capita construction starts in the state at $4,994, due to being in the top 5 in both nonbuilding (second highest, $4,318 per capita), and residential (fifth highest, $676 per capita). Tucker County, which had the highest starts per capita in nonresidential construction at $2,617, and the seventh highest nonbuilding construction starts per capita at $1,637, ranked third in the state in terms of total construction starts per capita.

Pleasants County had the lowest construction starts per capita of all West Virginia counties in 2008 at $9. Pleasants County had $9 per capita in nonbuilding construction starts, which was the lowest in the state, and no nonresidential or residential construction starts in 2008. Mercer County had the second lowest construction starts per capita at $113. Mercer County's low construction starts can be attributed to ranking fifty-third in nonbuilding construction starts per capita at $83, and having only $1 per capita in residential construction starts.

As Table 11 shows, all fifty-five West Virginia counties had nonbuilding construction starts in 2008, ranging from $8,698 to $9. Seventeen West Virginia counties did not have any nonresidential construction starts in 2008. Ten West Virginia counties had no residential construction starts in 2008.

TABLE 11
WEST VIRGINIA COUNTY CONSTRUCTION DATA

	Per Capita Construction Value							
	Total Construction Value		Value Of Nonbuilding		Value Of Nonresidential		Value Of Residential	
	2008	Rank	2008	Rank	2008	Rank	2008	Rank
Barbour	394	41	177	41	156	16	61	38
Berkeley	4,023	4	1,035	10	616	6	2,371	1
Boone	538	33	538	17	0	39	0	46
Braxton	492	34	399	23	0	39	93	27
Brooke	361	42	277	33	0	39	84	30
Cabell	921	17	264	35	526	8	130	17
Calhoun	156	53	156	43	0	39	0	46
Clay	3,106	8	3,070	4	0	39	36	42
Doddridge	414	39	414	22	0	39	0	46
Fayette	223	51	116	50	29	33	78	33
Gilmer	786	22	738	13	48	26	0	46
Grant	8,906	1	8,698	1	0	39	208	12
Greenbrier	1,527	12	235	37	740	4	552	6
Hampshire	1,331	15	795	11	35	29	501	7
Hancock	399	40	301	30	7	37	92	28
Hardy	3,108	7	2,384	5	24	35	700	4
Harrison	909	18	439	20	149	18	321	10
Jackson	272	44	227	38	44	27	0	46
Jefferson	1,646	9	358	29	287	10	1,001	2
Kanawha	681	24	360	28	242	12	78	32
Lewis	253	47	151	44	31	31	70	35
Lincoln	242	48	86	52	0	39	156	15
Logan	878	19	709	14	49	25	120	20
McDowell	3,168	6	2,083	6	958	2	127	18
Marion	667	26	567	16	30	32	70	36
Marshall	974	16	190	39	668	5	116	22
Mason	3,638	5	3,547	3	5	38	86	29
Mercer	113	54	83	53	29	34	1	45
Mineral	594	29	117	48	34	30	443	8
Mingo	471	35	371	26	0	39	99	24
Monongalia	1,391	14	288	31	934	3	170	14
Monroe	195	52	71	54	0	39	124	19
Morgan	1,615	10	98	51	564	7	953	3
Nicholas	453	37	179	40	155	17	118	21
Ohio	264	46	136	46	52	24	76	34
Pendleton	4,994	2	4,318	2	0	39	676	5
Pleasants	9	55	9	55	0	39	0	46
Pocahontas	576	30	576	15	0	39	0	46
Preston	464	36	266	34	91	20	107	23
Putnam	839	21	389	24	128	19	323	9
Raleigh	777	23	452	19	278	11	47	41
Randolph	1,581	11	1,398	8	88	21	95	26
Ritchie	1,392	13	1,169	9	216	14	7	44
Roane	672	25	420	21	0	39	252	11
Summers	575	31	513	18	0	39	62	37
Taylor	267	45	146	45	64	22	57	39
Tucker	4,255	3	1,637	7	2,617	1	0	46
Tyler	334	43	278	32	57	23	0	46
Upshur	616	28	119	47	352	9	146	16
Wayne	225	50	117	49	12	36	95	25
Webster	423	38	366	27	0	39	57	40
Wetzel	239	49	169	42	40	28	30	43
Wirt	847	20	763	12	0	39	84	31
Wood	654	27	241	36	241	13	172	13
Wyoming	558	32	389	25	170	15	0	46
West Virginia	1,094	--	549	--	251	--	294	--

Construction data is from FW Dodge, August 2009

Focus On….

Evaluating The West Virginia Economic Outlook Forecasts

A forecast is a prediction about the future. In the simplest terms, evaluating a forecast means comparing forecast values to actual realizations. In theory, this is simple; in practice, it gets complicated. The purpose of this section is to systematically compare forecasts from the West Virginia Econometric Model to actual realizations and summarize the results.

Overall, the forecast differences have so far been fairly small for most of the major indicators of the state economy. But, as you know from your mutual fund prospectus, past performance is not necessarily a good indication of future performance. Indeed, part of the reason that the model has performed well during the last nine years is that the overall state/national economic environment has been fairly stable. However, as model forecasts extend to less stable time periods, forecast differences are likely to increase.

Keep in mind that most forecasts differ from what we eventually observe. It is a fact of life that the future is uncertain and an econometric model cannot surmount that. In addition, the current economic situation is uncertain. Even preliminary economic data are released at least one month after the fact and sometimes take years to become "final." Thus, we find ourselves in the position of evaluating what the future may bring, while in possession of only incomplete information about what has just happened!

Indeed, this uncertainty contributes to the importance of timely analysis of current trends and forecasting. The West Virginia Economic Outlook is devoted to increasing our understanding of current and past economic trends and exploring what these may mean for the future. The analysis below is intended to explain in an accessible way how the West Virginia Econometric Model works and how we can systematically track its performance.

What The Model Does

The West Virginia State Econometric Model consists of over 50 equations designed to relate key West Virginia economic variables to each other and to important national variables. The model forecasts nonfarm jobs by industry (until Fall 2003 these industries were classified using the Standard Industrial Classification (SIC) codes), the unemployment rate, population by age group, and inflation-adjusted personal income by major component.

Broadly speaking, the model separates the state economy into those sectors that depend on local economic conditions and those that depend on national/international conditions. For instance, a large part of retail trade activity depends on the income of state residents and population of the state. In contrast, a large part of the activity in the transportation equipment and chemical industries depends on the performance of the national and international economies, since much of the production of these industries is purchased by individuals and businesses located out of state.

In order to produce a forecast for West Virginia, the model requires forecasts for the relevant national and international variables. Thus, each state forecast depends on a specific national

forecast; ours have come from Global Insight (a major international forecasting and consulting firm).

To sum up, the forecast attempts to summarize as much as possible of what we know about the past, present, and expected future course of the state economy.

How To Evaluate A Forecast

The Switch To NAICS

The West Virginia State Econometric Model produced 14 state forecasts, using the SIC-based industry classification for the employment sector. This method of classifying firms into industries is a crucial step in data and model development. Beginning with the forecast produced in November 2003, we adopted the North American Industry Classification System (NAICS), because the U.S. Bureau of Labor Statistics (and the West Virginia Bureau of Employment Programs) began releasing employment data solely on the NAICS basis. In other words, the detailed SIC-based historical employment estimates have been discontinued.

This switch primarily impacts the employment sector of the model, but it also affects our ability to evaluate model performance, since forecasts produced using SIC-based data cannot be evaluated using NAICS-based historical data. Thus, our evaluation of SIC-based employment forecasts ended in November 2003. See past editions of the West Virginia Economic Outlook for forecast evaluations of SIC-based employment data. Forecast evaluation of employment by NAICS industry is now available for selected sectors. Again, recent decisions by the U.S. Bureau of Labor Statistics to limit published statistics to relatively large sectors impacts our ability to evaluate past forecasts. However, forecast evaluation of total employment, the unemployment rate, population by age group, and personal income by major component will continue as before.

The model produces quarterly forecasts, although we also present these results in the form of annual average forecasts. Each release contains forecasts ranging from one quarter ahead to between 12 and 16 quarters ahead.

To summarize the forecasting performance of the model, we focus on forecasts that are one, four, and eight quarters ahead and forecasts that are one, two, three, and four years ahead. The average results from these particular forecast horizons should be representative of the overall performance of the model.

Forecast Horizon

Now, what is the meaning of a one-quarter-ahead forecast? A practical example might answer this question more clearly. Suppose that in the fall of 2008, the most current historical data for employment ended with the first quarter of 2008. A one-quarter-ahead forecast at that time would be a forecast for the second quarter of 2008. A four-quarter-ahead forecast would extend to the first quarter of 2009. Thus, each forecast has its own one-quarter-ahead forecast, four-quarters-ahead forecast, and so on.

This method of dealing with forecast horizons has an important implication when we analyze annual averages. That's because model forecasts are almost always completed without a full year's worth of data for the current year. In other words, in the fall of 2008 we had employment data through the first quarter of the year, which means that the annual average data for 2008 reflects one quarter of actual results and three quarters of forecast data. Further, that means that our annual data for 2008 is actually a forecast. For the purposes of our example, the annual data for 2008 is a one-year-ahead forecast and data for 2009 is a two-year-ahead forecast, and so on.

Forecast Difference

To measure how far a forecast differs from the actual results, I use the term "forecast difference." A forecast difference is measured simply as a forecast value minus the actual value. A percentage forecast difference is just the forecast difference divided by the actual value, multiplied by 100. Thus, a positive forecast difference tells us that the forecast exceeds the current estimate, whereas a negative difference tells that the forecast falls short of the current estimate.

In the end, I report average percentage forecast differences for all available forecasts at various forecast horizons. Since the forecast difference from each release could be positive or negative, an average of forecast differences would allow positive forecast differences to be canceled by negative forecast differences. In order to account for this, we also compute an average of the absolute percentage forecast differences.

Tracking West Virginia Economic Outlook Forecasts

Table 12 summarizes both the average absolute percentage forecast differences as well as the average percentage forecast differences for all variables. The table is based on data obtained from the evaluation of at most 25 available forecasts. It shows that in general the forecast values have fairly closely matched the actual values. Average absolute percentage forecast differences at the two-year-ahead horizon for the major aggregates (total nonfarm employment, total population, personal income) vary from 0.54 percent to 2.00 percent.

At the two-year-ahead horizon, the average absolute percentage difference is 0.61 percent for nonfarm payroll jobs. The average percentage difference at this horizon is 0.13 percent, indicating that the model has shown a slight tendency to overpredict job growth. Further, a forecast difference of 0.61 percent amounts to 4,638 jobs (evaluated at the 2008 nonfarm payroll employment level). In other words, on average for 23 forecasts, forecast values have tended to be 0.61 percent above or below actual values.

Population forecasts have also exceeded actual estimates on average, although the absolute percentage difference has not been large (0.54 percent at the two-year horizon). That translates into an average forecast difference of 9,798 residents (based on last year's level). For population, a two-year-ahead forecast horizon is really a two-year ahead forecast, because these estimates are released only once a year.

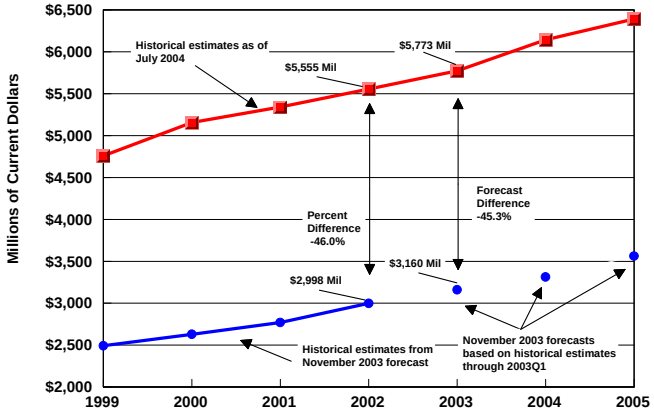
The largest forecast differences produced by the model have been in personal income. At the two-year-ahead horizon, average absolute forecast differences have averaged 2.00 percent. Looking at the forecast detail, wage and salary income shows the smallest forecast differences, while dividends, interest, and rent produces the largest differences.

Part of the reason that the forecast differences are largest in personal income is that most of the components of income (except wages and salaries) are subject to large historical revisions. Figure

18 provides a concrete example of how data revisions affect forecast evaluation, using data for West Virginia other labor income. This consists of employer contributions of employee pension and insurance funds and employer contributions for government insurance.

In July 2003, the U.S. Bureau of Economic Analysis (BEA) estimated that state income from other labor income amounted to $2,998 million dollars in 2002. This estimate was preliminary and based on incomplete data. For the November 2003 Outlook, the West Virginia Econometric Model used the 2002 data and forecasted from that level, producing a forecast for state other labor income in 2003 (a one-year-ahead forecast) of $3,160 million.

FIGURE 18
THE IMPACT OF DATA REVISIONS ON FORECAST EVALUATION: W.VA. OTHER LABOR INCOME



*Consists of employer contributions of employee pension and insurance funds and employer contributions for government insurance.

By July 2004, BEA revised its presentation of personal income to include employer contributions for government social insurance, which increased the estimate of state other labor income for 2002 up to $5,555 million.[1] In the forecast evaluation of one-year-ahead forecasts, I compare the forecast (produced in November 2003) for other labor income for 2003 to the latest historical estimate of 2003 other labor income. The forecast difference for this particular forecast is now –45.3 percent. Indicating that the forecast produced in 2003 is significantly below current estimates.

However, it is clear that most of the forecast difference is attributable to the data revision, not to a problem with the forecast model. Indeed, the percent difference between the two historical estimates for 2002 was –46.0 percent. Thus, most of the observed forecast difference in 2003 is attributable to the data revision and not to problems with the model.

[1] This change in presentation does not affect the estimate of total personal income, since employer contributions for government social insurance are subsequently subtracted from gross earnings in the computation of personal income.

Table 13 summarizes the forecast evaluation for the Eastern Panhandle Region. The West Virginia Economic Outlook has produced forecasts for a large number of regions, but I focus on the Eastern Panhandle Region because there are twelve forecasts available for evaluation. Having more than one or two forecasts is important so that one-time events do not dominate the forecast differences.

As the table shows, the Eastern Panhandle Region model has performed in much the same manner as the state model. One-year-ahead average absolute forecast differences for the major aggregates (total nonfarm employment, total population, personal income) range from 0.80 percent to 3.01 percent. Regional forecasts use annual data, so I cannot present a quarterly forecast evaluation. As we noted for the statewide forecasts, forecast differences are larger for personal income, and particularly so for the components of personal income which are subject to significant data revisions.

TABLE 12
TRACKING WEST VIRGINIA ECONOMIC OUTLOOK FORECASTS
QUARTERLY AND ANNUAL AVERAGE FORECAST DATA

	Percentage Differences: Quarterly Data						Percentage Differences: Annual Average Data							
	One Quarter Ahead		Four Quarters Ahead		Eight Quarters Ahead		One Year Ahead		Two Years Ahead		Three Years Ahead		Four Years Ahead	
	Avg. Diff.*	Avg. Abs. Diff.	Avg. Diff.*	Avg. Abs. Diff.	Avg. Diff.*	Avg. Abs. Diff.	Avg. Diff.*	Avg. Abs. Diff.	Avg. Diff.*	Avg. Abs. Diff.	Avg. Diff.*	Avg. Abs. Diff.	Avg. Diff.*	Avg. Abs. Diff.
Number of Forecasts**	25	25	25	25	23	23	25	25	23	23	21	21	19	19
Employment and Labor Force (%)														
Total Nonfarm Employment	-0.13	0.46	0.07	0.52	0.59	1.04	-0.08	0.38	0.13	0.61	0.61	1.07	1.15	1.54
Goods Producing	-0.04	1.11	-0.94	1.82	-1.21	3.40	-0.39	1.09	-1.22	2.03	-1.89	3.26	-0.38	0.38
Natural Res. & Mining	-2.22	3.95	-5.83	5.83	-10.68	10.68	-2.72	3.89	-6.95	6.95	-12.13	12.13	-16.46	16.46
Construction	-0.18	2.56	-2.69	4.98	-3.71	8.09	-0.87	2.25	-3.49	5.00	-5.62	7.65	-1.73	1.73
Manufacturing	0.96	1.02	2.45	2.45	5.11	5.11	0.90	0.96	2.78	2.78	5.45	5.45	9.16	9.16
Non-Durable Mfg.	1.59	1.61	3.06	3.26	4.46	4.46	1.52	1.55	3.35	3.35	4.68	4.68	1.33	1.33
Service Producing	-0.36	0.61	-0.13	0.49	0.28	0.69	-0.35	0.46	-0.13	0.50	0.15	0.54	0.41	0.41
Trade, Trans., & Utilities	-0.57	0.78	-1.20	1.68	-1.14	2.67	-0.71	0.82	-1.52	1.93	-1.95	2.50	-1.41	1.41
Wholesale Trade	-0.91	1.32	-1.67	2.64	-2.52	4.30	-1.02	1.34	-2.42	3.21	-4.11	4.37	-4.17	4.17
Retail Trade	-0.41	0.71	-0.80	1.37	-0.23	2.07	-0.57	0.86	-0.85	1.40	-0.66	1.78	0.37	0.37
Information	2.50	2.50	4.40	4.52	5.86	6.14	2.83	2.83	4.63	4.76	6.16	6.16	6.61	6.61
Financial Activities	1.09	1.25	1.81	1.81	3.60	3.60	1.21	1.24	2.41	2.41	3.74	3.74	4.19	4.19
Profess. & Business Services	-0.61	2.15	0.14	1.40	1.36	2.55	-0.29	1.51	0.52	1.77	1.95	2.58	3.80	3.80
Educational & Health Services	-0.54	1.59	0.14	1.93	0.68	2.08	-0.46	1.33	0.13	2.22	1.03	1.80	1.52	1.52
Educational Services	-8.19	11.03	-5.61	12.82	-6.18	14.61	-7.15	10.49	-7.54	14.37	-7.62	16.03	-4.69	4.69
Health Care & Social Assist	0.27	0.76	0.78	1.52	1.43	1.83	0.25	0.79	0.99	1.73	1.95	1.95	2.12	2.12
Leisure & Hospitality	-1.02	1.22	-0.74	1.12	-0.55	1.43	-1.16	1.24	-0.91	1.08	-0.88	1.41	0.12	0.12
Other Services	-0.31	1.19	0.25	1.55	1.31	1.39	-0.15	0.93	0.76	1.14	1.60	1.60	0.57	0.57
Government	-0.12	0.63	-0.04	0.41	-0.23	0.36	-0.19	0.42	-0.07	0.22	-0.51	0.51	-1.26	1.26
Federal Civilian	2.01	2.01	1.30	1.91	1.20	1.90	1.14	1.32	1.66	1.97	1.25	1.80	-1.22	1.22
State & Local	-0.51	0.90	-0.27	0.50	-0.48	0.63	-0.42	0.66	-0.38	0.58	-0.83	0.83	-1.26	1.26
Labor Force	0.58	0.81	1.10	1.41	1.91	2.06	0.72	0.90	1.16	1.45	2.00	2.13	2.99	2.99
Employment	0.60	0.80	0.94	1.34	1.58	1.85	0.69	0.84	0.87	1.27	1.48	1.71	2.38	2.43
Unemployment Rate	-0.37	2.36	3.74	7.93	7.34	14.30	0.58	2.25	5.14	7.22	9.20	12.56	11.61	14.06
Population (%)														
Total	0.34	0.39	0.39	0.45	0.50	0.59	0.37	0.41	0.47	0.54	0.55	0.69	0.31	0.65
Age 0-17	-0.08	0.89	-0.36	0.91	-0.55	0.84	-0.23	0.91	-0.48	0.81	-0.66	1.11	-1.08	1.55
Age 18-44	1.17	1.26	1.46	1.53	1.89	1.89	1.31	1.40	1.74	1.74	2.14	2.14	2.03	2.06
Age 45-64	-0.46	1.27	-0.52	1.33	-0.64	1.52	-0.49	1.27	-0.61	1.47	-0.77	1.59	-0.90	1.77
Age 65 and up	0.35	0.65	0.47	0.84	0.62	1.20	0.41	0.74	0.60	1.07	0.69	1.29	0.26	1.15
Nominal Personal Income (%)														
Total	0.05	1.99	-0.17	2.10	-0.46	2.33	0.03	2.03	-0.23	2.00	-0.44	2.58	-1.90	3.51
Wage & Salary	-0.34	1.00	-0.59	1.17	-0.87	1.94	-0.19	0.85	-0.64	1.43	-0.94	2.22	-2.22	3.43
Other Labor	-35.20	36.66	-37.09	38.73	-39.04	40.15	-35.23	36.90	-37.12	38.74	-39.45	39.99	-44.08	44.08
Proprietors'	3.21	7.69	2.64	7.80	0.79	6.69	2.98	7.30	1.81	7.39	-0.32	5.72	-4.61	6.31
Div., Int., Rent	-0.71	10.42	0.15	12.77	1.29	15.48	-0.44	10.89	0.81	13.91	2.29	16.18	7.72	17.49
Transfer	4.65	8.37	4.96	9.52	5.36	10.55	4.80	8.60	5.14	9.86	5.67	10.47	2.25	9.06

*Positive numbers indicate that the forecast exceeds current estimates.
Negative numbers indicate that the forecast falls short of current estimates.
** Forecasts evaluated: Mid-Year Review: 1995, 1996, 1997, 1999, 2001, 2003, 2005; Long-Term Forecast 1998, 2000, 2002, 2004, 2006;
West Virginia Economic Outlook: 1995, 1996, 1997, 1998, 1999, 2000, 2001, 2002, 2003, 2004, 2005, 2006. 2007, 2008
NAICS employment forecasts begin in November 2003. BLS no longer publishes seasonally-adjusted
estimates for many employment sectors, so forecast differences cannot be computed.
Beginning with the 2007 forecast, jobs are measured by covered employment. Previous forecasts used nonfarm payroll employment.

TABLE 13
TRACKING EASTERN PANHANDLE REGION FORECASTS

	Percentage Differences					
	One Year Ahead		Two Years Ahead		Three Years Ahead	
	Avg. Diff.*	Avg. Abs. Diff.	Avg. Diff.*	Avg. Abs. Diff.	Avg. Diff.*	Avg. Abs. Diff.
Number of Forecasts**	12	12	11	11	10	10
	Nonfarm Employment by Industry (%)					
Total	-0.07	0.80	0.27	2.14	0.42	2.49
Goods Producing	3.12	4.58	6.69	9.80	26.52	26.52
Nat. Res. & Mining	6.54	9.39	7.30	8.72	9.45	9.45
Construction	1.12	5.14	7.79	14.80	39.66	39.66
Manufacturing	4.31	5.96	5.93	9.01	18.10	18.10
Service Producing	-0.57	0.78	0.36	1.48	5.54	5.54
Trade, Trans., Util.	-1.93	2.00	-1.06	3.82	7.11	7.11
Information	2.26	6.78	4.12	7.79	17.31	17.31
Financial Activities	-3.69	3.69	-5.88	5.88	-4.40	4.40
Prof. & Business Serv.	1.78	6.79	10.13	14.09	45.67	45.67
Education & Health	0.34	1.87	0.94	2.28	6.15	6.15
Leisure & Hospitality	1.42	2.48	2.53	2.91	4.14	4.14
Other Services	-0.06	1.41	-0.29	2.18	-7.03	7.03
Government	-1.71	1.02	-2.34	2.83	-3.83	3.83
	Civilian Labor Force, Employment, and Unemployment (%)					
Labor Force	-1.63	2.06	-1.68	3.45	-2.32	4.33
Employment	-1.04	1.48	-0.98	3.33	-1.48	4.42
Unemployment Rate	-0.22	6.31	0.17	11.25	0.24	17.50
	Population (%)					
Total Population	-0.53	0.75	-1.22	1.51	-2.19	2.31
	Nominal Personal Income (%)					
Total	-2.35	3.01	-2.43	2.69	-3.92	3.97
Wage and Salary	-1.29	1.65	-1.71	1.95	-2.73	3.17
Other Labor Income	-31.84	32.62	-34.40	35.35	-38.60	39.72
Proprietors' Income	-5.10	10.20	-8.11	15.53	-11.38	18.89
Dividends, Interest, Rent	-5.49	11.82	-3.94	16.47	-2.20	18.99
Transfer Income	7.88	12.70	8.73	14.36	9.19	14.18

Eastern Panhandle Region: Berkeley, Morgan, and Jefferson Counties

** Forecasts evaluated: 1996, 1997, 1998, 1999, 2001, 2002, 2003, 2004, 2005, 2006, 2007, 2008

Employment forecasts by NAICS industry can only be evaluated for 2004-2008. Total employment forecast differences are evaluated for all forecasts.

National Outlook

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George W. Hammond, Associate Director

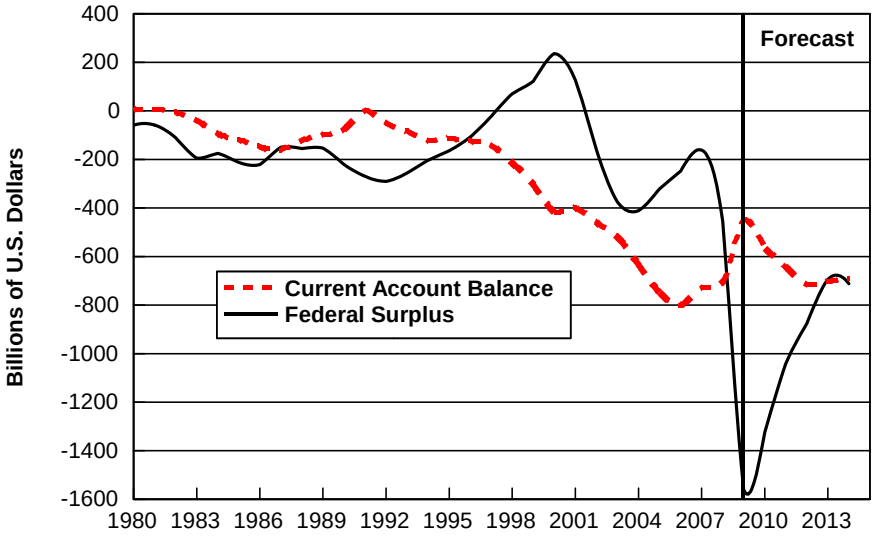
No state can produce all the goods and services its residents need. Therefore, trade becomes a key economic factor driving state and local economic performance. This means that West Virginia's economic growth depends, in part, on national and international economic performance. Likewise, the forecast for West Virginia depends on the forecast for the U.S. IHS Global Insight, Inc., a worldwide consulting and forecasting group, provided the U.S. forecast summarized in this section, which underpins the state forecast.

Recent Developments

This past year has been one for the record books. The U.S. has posted four consecutive quarters of negative real GDP growth (and five out of the last six quarters have been negative as well), jobs are down by 3.9 percent from the second quarter of 2008 to the same quarter of 2009 (the largest drop since the late 1950s), and the unemployment rate skyrocketed to 9.3 percent (its highest levels since the early 1980s).

This downturn has been accompanied by severe distress in the financial system and frantic federal government efforts to combat the recession. Following a complete government buyout of mortgage giants Fannie Mae and Freddie Mac, the government pledged $700 billion in the Troubled Asset Relief Program (TARP), followed by a $787 billion government stimulus package. These actions helped skyrocket the federal deficit from -$162 billion in 2007 to an estimated -$1.56 trillion in 2009, shown in Figure 19.

FIGURE 19
TWIN DEFICITS PUSH U.S. DEBT TO RECORD HEIGHTS
U.S. FORECAST FROM IHS GLOBAL INSIGHT SEPTEMBER 2009

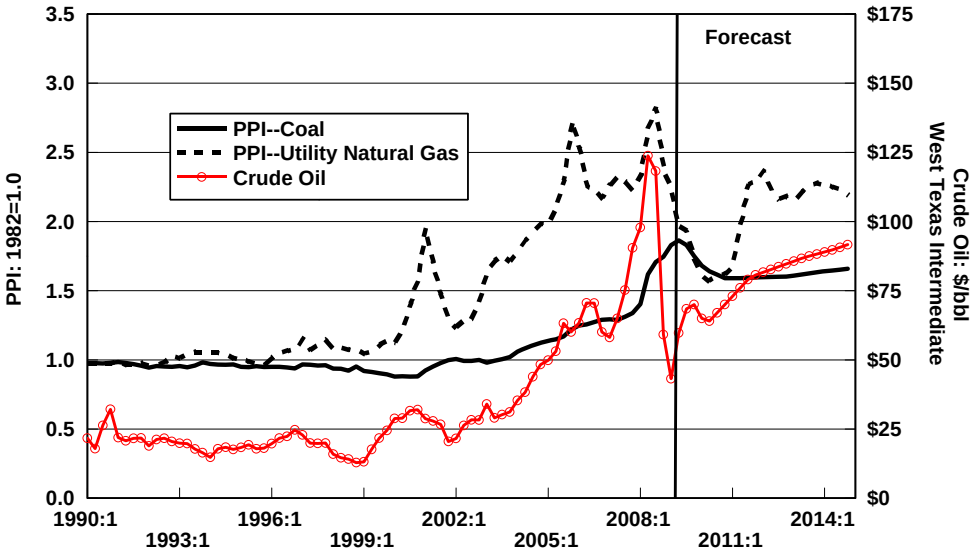


The current account balance, the greater of the two deficits for most of the past decade, is expected to fall to -$455 billion in 2009, as the recession reduces imports more than exports. The trade deficit then gradually widens again, as U.S. consumers and businesses accelerate spending on foreign produced goods and services.

Consumers have been feeling the burden of the recession as debt levels remain high, wealth reserves fall, and a deteriorating labor market reduces incomes. The Car Allowance Rebate System (better known as "cash for clunkers") has shown that consumers will continue to spend, however, if the price is right. Cash for clunkers helped stimulate 690,000 new vehicle sales in July and August. Some of these sales would have occurred anyway during these months (estimated between one-quarter and one-half). However, the rise in overall sales was less than would be expected by merely adding clunker sales to the previous rate. This suggests that fewer sales were borrowed from future quarters and that increases the forecast for light-vehicle sales in 2010 from 11.1 million to 11.2 million.

Consumers have also gotten relief at the pump. After reaching an all-time record high of $124 per barrel during the second quarter of 2008, oil has fallen back down to less than half that amount, coming in at $60 per barrel for the second quarter of 2009, as illustrated in Figure 20. Notice also that falling of natural gas prices should help ease consumers as winter heating bills approach.

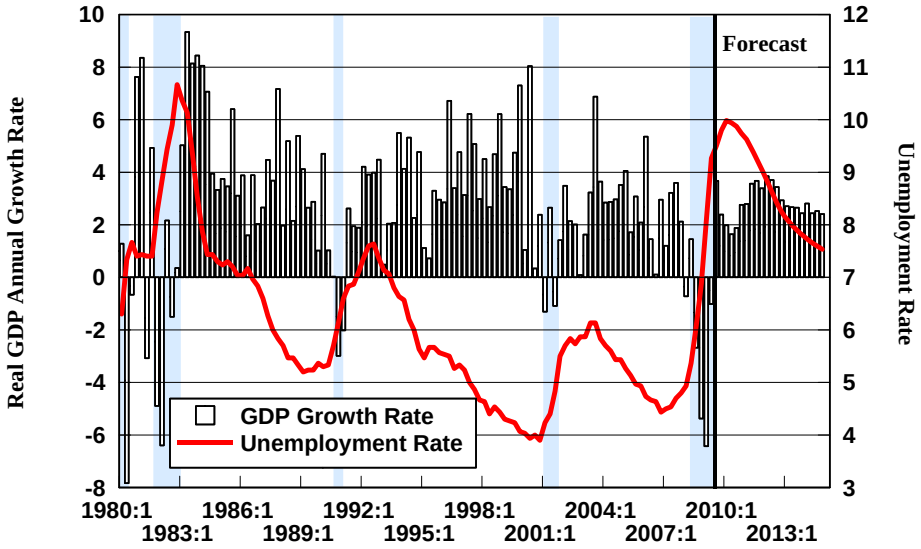
FIGURE 20
ENERGY PRICES PLUMMET
U.S. FORECAST FROM IHS GLOBAL INSIGHT SEPTEMBER 2009



National Forecast

Table 14 shows the national forecast based on data provided by IHS Global Insight. The table shows that real GDP is forecast return to positive growth in 2010. The second quarter of 2009, with real GDP growth at -1.0 percent, is forecast to be the last quarter of the recession. Recovery begins in the third quarter, with real GDP growth of 3.7 percent, illustrated in Figure 21. Over the next five years, GDP is forecast to stabilize and post positive growth between 1.6 and 3.9 percent each quarter.

FIGURE 21
U.S. REAL GDP RECOVERS BUT UNEMPLOYMENT REMAINS HIGH
U.S. RECESSIONS SHADED
U.S. FORECAST FROM IHS GLOBAL INSIGHT SEPTEMBER 2009



Unemployment, which tends to lag real GDP growth, is forecast to continue to rise and to remain high through 2014. The unemployment rate is not expected to hit its peak of 10.0 percent until the first quarter of 2010. Following the first quarter of 2010, the unemployment rate is expected to slowly fall for the remainder of the forecast, hitting 7.6 percent by 2014.

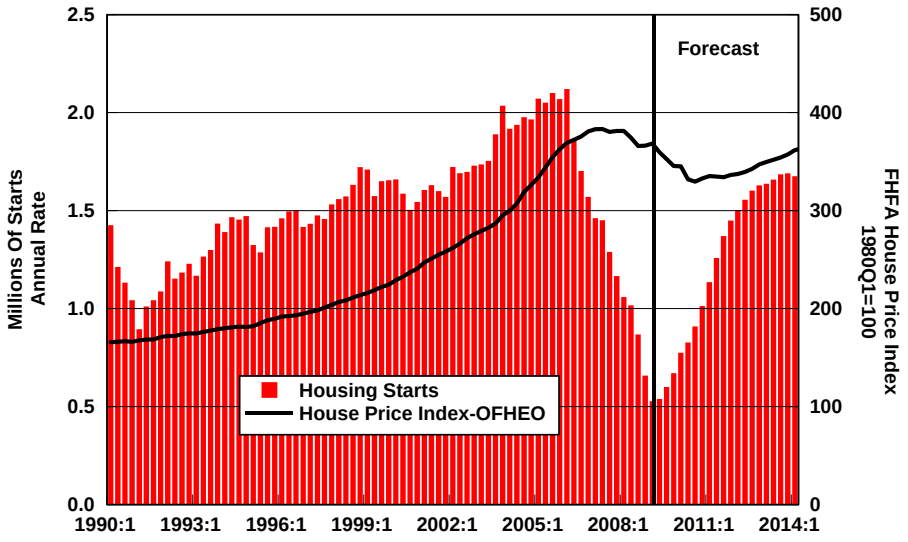
Real GDP growth in the third quarter is expected to be sparked by a turnaround in exports. After a punishing first two quarters of 2009, posting negative annual growth rates of -29.9 percent and -5.0 percent, exports are expected to rebound as Asia and Europe begin to recover.

In addition, the housing market finally bottoms out and begins to recover during the forecast. With better affordability and extra incentives from the first-time homebuyer tax credit stimulus, housing starts hit rock bottom in the first quarter of 2009 and then climb back to the 1.67 million rate by 2014, as illustrated in Figure 22. Housing prices will take longer to recover than sales, but the bottom is close for this indicator as well. House prices are expected to fall another 3.9 percent by the end of 2010 and gradually increase through 2014.

FIGURE 22

HOUSING STARTS BEGIN TO REBOUND

U.S. FORECAST FROM IHS GLOBAL INSIGHT SEPTEMBER 2009



Financial markets have stabilized and the forecast calls for interest rates to remain near current levels. The federal funds rate (a key indicator of monetary policy) is forecast to stay below 1.0 percent through the first quarter of 2011, enticing consumption spending and investment, rather than savings. The 30-year fixed mortgage rate is forecast to vary less than 2.0 percent over the next five years, rising from 5.12 percent in 2009 to 7.11 percent in 2014. The value of the dollar, after some recent volatility, is forecast to end 2009 within recent trading ranges of $1.39/euro, 93 yen/dollar, and Canadian $1.13/ U.S. dollar. The forecast calls for the value of the U.S. dollar to fall during the 2010-2014 period, which will help to drive increased export growth and slow import growth during the forecast.

TABLE 14
U.S. FORECAST
IHS GLOBAL INSIGHT SEPTEMBER 2009

	Years						
	Actual	Forecast					
	2008	2009	2010	2011	2012	2013	2014
				Annual Percent Change			
Real GDP	0.4	-2.5	2.0	2.9	3.6	2.9	2.6
Industrial Production	-2.2	-10.1	3.1	3.5	4.7	3.4	2.8
Nonfarm Employment	-0.4	-3.7	-0.5	1.8	2.4	2.0	1.3
Nominal Personal Income	2.9	-2.0	2.6	3.9	5.2	5.3	5.3
Personal Consumption Deflator	3.3	0.1	1.3	1.8	1.7	1.7	1.8
Real Export Growth (GDP Basis)	5.4	-11.3	5.8	7.1	8.2	8.9	8.3
Real Import Growth (GDP Basis)	-3.2	-14.1	8.9	6.6	6.6	4.4	3.7
Housing Price Appreciation OFHEO Index	-8.9	-9.2	-3.0	0.8	3.5	5.1	4.2
				Percent			
Unemployment Rate	5.8	9.2	9.9	9.3	8.5	7.9	7.6
Federal Funds Rate	1.93	0.16	0.24	1.70	3.34	3.55	4.59
30-Year Fixed Mortgage Rate	6.04	5.12	5.25	5.48	6.12	6.43	7.11
				Billions of Dollars (FY)			
Federal Budget Surplus (Unified Basis)	-455	-1561	-1324	-1041	-876	-694	-712
				Key Prices			
Real Trd.Wtd. Value of U.S. Dollar vs Major Trading Partners (2000=1.000)	0.889	0.937	0.910	0.881	0.869	0.862	0.862
Oil - West Texas Intermediate ($ per barrel)	99.76	60.33	66.50	77.17	83.16	87.02	90.27

Appendix

General Information And Data Sources

The West Virginia forecast uses seasonally adjusted quarterly data and most series are forecast from the third quarter of 2009 to the fourth quarter of 2014.

Covered employment by industry data come from the U.S. Bureau of Labor Statistics and Research, Information and Analysis Division of Workforce West Virginia. It is seasonally adjusted by the WVU BBER. This data is current through the first quarter of 2009 and is forecast from the second quarter of 2009 through 2014.

Household employment, labor force, and unemployment rate data for West Virginia are the average of monthly seasonally adjusted estimates supplied by the Research, Information and Analysis Division, Workforce West Virginia. All employment data are forecast from the third quarter of 2009 to the fourth quarter of 2014.

Historical seasonally adjusted national employment data used in most tables and figures can be found at the Bureau of Labor Statistics web site <http://www.bls.gov/>. Workforce West Virginia offers a wealth of labor market data for the state and its regions online at <http://www.workforcewv.org>

Seasonally adjusted historical nominal personal income data for West Virginia and the U.S. from 1969 to the second quarter of 2009 come from Personal Income by Major Source, Regional Economic Information System, Bureau of Economic Analysis. These estimates are also available free on the Internet through the Bureau of Economic Analysis web site <http://www.bea.doc.gov/>. West Virginia data are forecast from the third quarter of 2009 through the fourth quarter of 2014.

Quarterly West Virginia population estimates are derived from annual data for the 1969 to 2007 period. These data are available through the Bureau of the Census web site at<http://www.census.gov/>. West Virginia population is forecast from the first quarter of 2009 to the fourth quarter of 2014 using a modified single-year age group cohort-component model embedded within the econometric model.

All U.S. forecast data come from the Review of the U.S. Economy, September 2009, IHS Global Insight. All forecast data for West Virginia, except where otherwise noted, come from the West Virginia State Econometric Model, Bureau of Business and Economic Research, West Virginia University.

Frequently Used Terms

Annual Growth Rates between consecutive years are calculated as:

Annual Growth Rate in Percent

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

where X denotes the time series for which the growth rate is being calculated, t denotes the reference time period and t-1 denotes the previous time period.

Civilian Labor Force includes noninstitutionalized civilian residents, aged 16 and older, who are either employed or unemployed.

Consumer Price Index (CPI) is an index of retail prices of a representative basket of goods and services purchased by consumers. Percentage change is commonly used as a measure of inflation. It is not a cost-of-living index. The Consumer Price Index used here is for all urban consumers.

Dividends, Interest, and Rent is income from the three sources mentioned. Dividend income is the dividend income received by individuals. Interest income is the monetary interest received by individuals. Rental income is the income from the rental of real property and royalties. In 2006, income from dividends, interest, and rent accounted for 13.3 percent of West Virginia total personal income.

Federal Funds Rate is the interest rate on Federal Funds, which are reserves borrowed and lent by member institutions to one another, usually overnight. Reserves are deposits at member institutions (e.g. commercial banks, savings and loans, and credit unions) which have not been converted into loans to customers. Member institutions must hold a fraction of deposits as reserves.

Gross Domestic Product (GDP) is the market value of all final goods and services produced by labor and property located in the United States.

Gross State Product (GSP) is the market value of goods and services produced by labor and property located in a state. For more, see the Winter 1998 West Virginia Business and Economic Review

Industrial Production is an index which measures output from manufacturing, mining, and electric and gas utilities industries. The industrial production index's base year is 1992=100.

Nonfarm Payroll Employment includes persons on establishment payrolls who received pay for any part of the pay period which includes the 12th of the month. Nonfarm payroll employment does not include proprietors, the self-employed, unpaid volunteer or family workers, farm workers, domestic workers, or military personnel. Nonfarm payroll employment is a count of jobs not people

Other Labor Income includes payments by employers to private benefit plans for employees and employer contributions for social insurance. Private benefit plans include pension and profit-sharing plans, private group health and life insurance, supplemental unemployment benefit plans, and payments by employers to privately administered workers' compensation plans. In 2006, other labor income accounted for 14.6 percent of West Virginia total personal income.

Personal Income is income received by residents before income taxes. It includes wages and salaries, proprietors' income, other labor income, dividends, interest, rental income, and transfer payments. For more, see the Spring 1997 West Virginia Business and Economic Review

Population is the number of persons whose usual place of residence was within the state (nation) 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, as long as that is within the U.S.

Proprietors' Income is the income of sole proprietorships and partnerships and of tax-exempt cooperatives. A sole proprietorship is an unincorporated business owned by a person. A partnership is an unincorporated business with two or more partners. In 2006, proprietors' income accounted for 6.7 percent of West Virginia total personal income.

Average Annual Growth Rates are compound annual growth rates. For annual data the formula is:

Average Annual Growth Rate in percent

$$= \left[\left(\frac{X_{t+N}}{X_t} \right)^{1/N} - 1 \right] \times 100,$$

where X denotes the time series for which the growth rate is being calculated, t denotes the beginning year and N denotes the number of years over which the growth rate is calculated.

Real (Constant) Dollar figures have been adjusted for inflation. Using real figures eliminates the year-to-year changes in price and gives a clearer picture of the true changes in purchasing power, production, etc. Real GDP (or GSP) gives a more accurate measure of increased production than nominal GDP, which is given at current price levels.

Resident Employment includes all those employed for pay during the week including the 12th of the month, or who worked more than 15 hours unpaid in a family business, and those who were temporarily absent from their regular job. A person may only be counted as employed once using this measure.

Seasonal Adjustment is a statistical procedure designed to remove regularly occurring seasonal fluctuations in time series data. It is designed to account for the fact that some economic time series tend to rise (or fall) in the same month or quarter every year. Typical examples are strong gains in retail sales (and retail trade employment) before Christmas and gains in construction employment in the spring followed by similar losses in the winter.

Ten-Year Treasury Note Yield is the yield on a ten-year treasury note. The yield (interest rate) is expressed as an annualized rate.

Transfer Income is income not related to participation in current production. It includes income from Old Age Survivors and Disability Insurance (OASDI), Medicare, Medicaid, unemployment and workers' compensation, Aid to Families with Dependent Children, and food stamps, in addition to various other sources. In 2006, transfer income accounted for 25.2 percent of West Virginia total personal income.

Unemployment Rate is the percent of the civilian labor force that is unemployed. The civilian labor force is comprised of noninstitutionalized 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).

Wage and Salary Income is payments to employees for participation in current production. They are measured before deductions for Social Security and union dues and reflect the wages and salaries disbursed, not necessarily earned during the period. In 2006, wages and salaries accounted for 47.6 percent of West Virginia total personal income.