



GOVERNOR
BRIAN SCHWEITZER
STATE OF MONTANA

ECONOMIC OVERVIEW SECTION 1

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GOVERNOR'S OFFICE OF
BUDGET AND PROGRAM PLANNING

Introduction

The executive budget is based on assumptions about economic conditions through the 2013 biennium. This section describes the key economic assumptions that are common to all of the revenue estimates. It also provides some background information by describing long-term trends in the state economy. The estimate sections describing individual revenue forecasts explain how each revenue source is related to economic conditions, and any assumptions that are unique to specific revenue sources.

National Economic Conditions

The national economy went through a mild recession in calendar years (CY) 2000 and 2001; impact on a fiscal year (FY) basis was somewhat muted by its short duration. The national economy recovered steadily through FY 2007 with the growth of gross domestic product (GDP) accelerating. The nation is currently emerging from its most severe post-war economic downturn. The “Great Recession” has been characterized by an almost unprecedented negative nominal GDP “growth” and nearly three years of declining employment. Table 1 summarizes three key national economic indicators for fiscal years 2000 through 2010 and Global Insight’s forecasts for FY 2011 through FY 2013.

Fiscal Year	Gross Domestic Product (\$billions)	Percent Change	Employment (millions)	Percent Change	Inflation Rate
2000	\$9,668	6.6%	130.597	2.5%	2.9%
2001	\$10,153	5.0%	132.252	1.3%	3.4%
2002	\$10,445	2.9%	130.876	-1.0%	1.8%
2003	\$10,841	3.8%	130.116	-0.6%	2.2%
2004	\$11,512	6.2%	130.474	0.3%	2.2%
2005	\$12,248	6.4%	132.470	1.5%	3.0%
2006	\$13,047	6.5%	135.011	1.9%	3.8%
2007	\$13,716	5.1%	136.966	1.4%	2.6%
2008	\$14,312	4.4%	137.726	0.6%	3.7%
2009	\$14,190	-0.9%	133.911	-2.8%	1.4%
2010	\$14,354	1.2%	129.952	-3.0%	1.0%
2011	\$14,880	3.7%	130.580	0.5%	1.3%
2012	\$15,489	4.1%	132.695	1.6%	1.8%
2013	\$16,182	4.5%	135.724	2.3%	2.0%

U.S. Corporate Sector

Table 2 presents the developments in the United States corporate sector, as represented by corporate profits and the path of the Standard & Poor’s 500 stock index (S&P 500), for FY 2000 through FY 2010 and the Global Insight baseline forecast for FY 2011, FY 2012, and FY 2013. The table shows that, as the national economy went through the 2001/2002 recession, corporate profits declined in FY 2002 and FY 2003 but rebounded sharply. With the current recession corporate profits slowed in FY 2007 and then declined rapidly until FY 2010 when they bounced back strongly, recovering most of the decline of the prior two years.

Table 2
Corporate Profits and
Standard & Poor's 500 Stock Index

Fiscal Year	Corporate Profits (\$ billions)	Percent Change	S&P 500 Index	Percent Change
2000	\$794	7.1%	1,395	16.4%
2001	\$755	-4.9%	1,337	-4.2%
2002	\$689	-8.7%	1,115	-16.6%
2004	\$1,064	27.0%	1,078	20.5%
2005	\$1,436	35.0%	1,160	7.6%
2006	\$1,756	22.3%	1,255	8.2%
2007	\$1,794	2.2%	1,400	11.6%
2008	\$1,615	-10.0%	1,427	1.9%
2009	\$1,163	-28.0%	966	-32.3%
2010	\$1,620	39.2%	1,086	12.4%
2011	\$1,777	9.7%	1,125	3.6%
2012	\$1,860	4.7%	1,213	7.8%
2013	\$1,880	1.1%	1,304	7.6%

The forecast for corporate profits anticipates they will remain on an upward trend. The S&P 500 index forecast reflects those trends as well. While the corporate profits forecast in Table 2 are estimates of large national firm profits, Montana participates in this national activity. In fact, the largest 20 Montana corporate license tax filers (of over 13,000 total filers) generally pay over 50% of Montana's annual corporate tax receipts. Thus, the bulk of corporate license tax revenues are better reflected in the national corporation profits and S&P 500 index trends. Income from "main street" Montana businesses is principally reflected in Montana personal income with taxes on those incomes reported on individual income tax returns, as these firms file partnership and "S" corporation returns. As discussed (below), the Montana personal income statistics are anticipated to begin to grow more rapidly.

Montana Production and Income

The impact on the Montana economy of national economic events can be seen in Table 3 which presents the evolution of Montana's gross state product (GSP) and personal income over time. The Montana economy grew more slowly than the national economy through the 2001 recession but outpaced the national economy between FY 2003 and FY 2009. Global Insight forecasts this broad measure of state economic activity to pick up at a pace similar to the national economy as a whole. The projection for FY 2011 through FY 2013 is for a slower recovery (averaging 4.1% GSP growth per year) than is typical after a significant recession. During the previous comparable post-recession period of recovery (FY 2003- 2006) GSP growth averaged 6.4% per year.

Montana personal income is a good summary indicator of economic impact on state revenues as it is the product of the interaction of multiple variables (wages and salaries, capital gains, transfers, proprietors' incomes, inflation, etc.) with high incidence on state revenue. Personal income in Montana grew rapidly during the FY 2000 through FY 2009 period (6.2% per year on average). The effect of the national economic downturn in CY 2001/2002 is seen in much slower growth during FY 2002 and FY 2003 than in the years preceding or following the recessionary period. Global Insight forecasts Montana personal incomes in Montana to grow at approximately 60% of the rate of the previous expansion (6.2%) as the projected average growth rate for FY 2011 and the 2013 biennium is 3.6%.

Table 3				
Gross State Product and Personal Income				
(\$ millions)				
Fiscal Year	Gross State Product	Percent Change	Personal Income	Percent Change
2000	\$20,870	3.37%	\$20,412	4.52%
2001	\$21,901	4.9%	\$22,142	8.5%
2002	\$22,992	5.0%	\$23,112	4.4%
2003	\$24,353	5.9%	\$23,971	3.7%
2004	\$26,588	9.2%	\$25,651	7.0%
2005	\$28,545	7.4%	\$27,245	6.2%
2006	\$30,924	8.3%	\$29,306	7.6%
2007	\$32,843	6.2%	\$31,481	7.4%
2008	\$35,371	7.7%	\$33,476	6.3%
2009	\$35,473	0.3%	\$33,980	1.5%
2010	\$35,639	0.5%	\$34,416	1.3%
2011	\$37,048	4.0%	\$35,675	3.7%
2012	\$38,488	3.9%	\$36,882	3.4%
2013	\$40,154	4.3%	\$38,286	3.8%

Montana Employment and Population

Montana non-farm employment and population for FY 2000 through FY 2010 is presented in Table 4 along with Global Insight's forecasts through FY 2013. The recession of 2001 slowed Montana's labor market growth however, total employment did not decline. The post-2007 recession however has resulted in the largest decline in overall employment since 1976 (when the current employment series began) and has been marked by three fiscal years of declining employment. Employment has begun to recover slowly from the depths of the "Great Recession" but is not projected to return to the rapid growth of the FY 2005 to FY 2007 period until after the 2013 biennium. However, employment growth is expected to continue to pick-up at an increasing rate during the biennium.

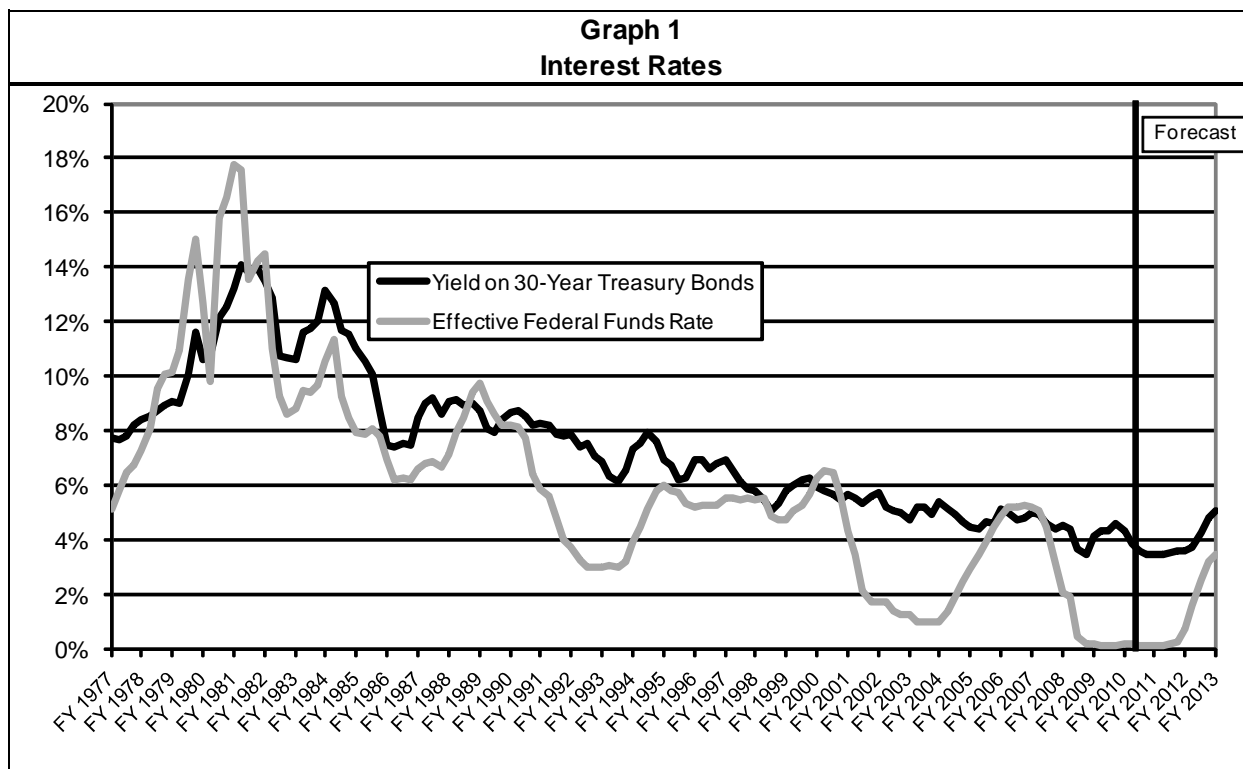
Table 4				
Montana Employment and Population				
Fiscal Year	Employment	Percent Change	Population	Percent Change
2000	388.158	2.2%	901.295	0.6%
2001	391.975	1.0%	904.905	0.4%
2002	392.800	0.2%	908.369	0.4%
2003	398.442	1.4%	914.166	0.6%
2004	405.408	1.7%	922.454	0.9%
2005	415.792	2.6%	931.451	1.0%
2006	428.508	3.1%	941.933	1.1%
2007	440.175	2.7%	953.092	1.2%
2008	446.784	1.5%	963.972	1.1%
2009	437.617	-2.1%	972.378	0.9%
2010	426.525	-2.5%	979.392	0.7%
2011	426.137	-0.1%	986.628	0.7%
2012	431.522	1.3%	994.147	0.8%
2013	439.555	1.9%	1,001.950	0.8%

In the second half of the 2000s, Montana's population grew at over one percent (1.0%) per year. Population grew as the economy attracted returning Montanans and migrants from the rest of the United States. The table shows that even as population growth continues in Montana, it will be below FY 2005 to FY 2008 rates. It is believed that mobility is limited by effects of the collapse of the housing bubble.

Interest Rates

The state earns interest on trust funds, such as the coal severance tax trust fund, the school trust, and the tobacco settlement trust, and on short-term cash holdings in the general fund and other state funds. The state also pays interest on funds it borrows. Trust fund interest earnings and payments on debt are affected by changes in long-term interest rates. Most bonds held by the state trust funds are kept for several years; consequently, trust fund interest earnings are affected more by long-term trends than year-to-year variations. On the other hand, interest earnings on cash balances and interest payments on short-term debt are affected by short term interest rates.

Graph 1 shows the effective federal funds rate and the annualized yield on 30-year U.S. Treasury obligations from FY 1977 through the first quarter of FY 2010 and Global Insight's forecast through FY 2013.

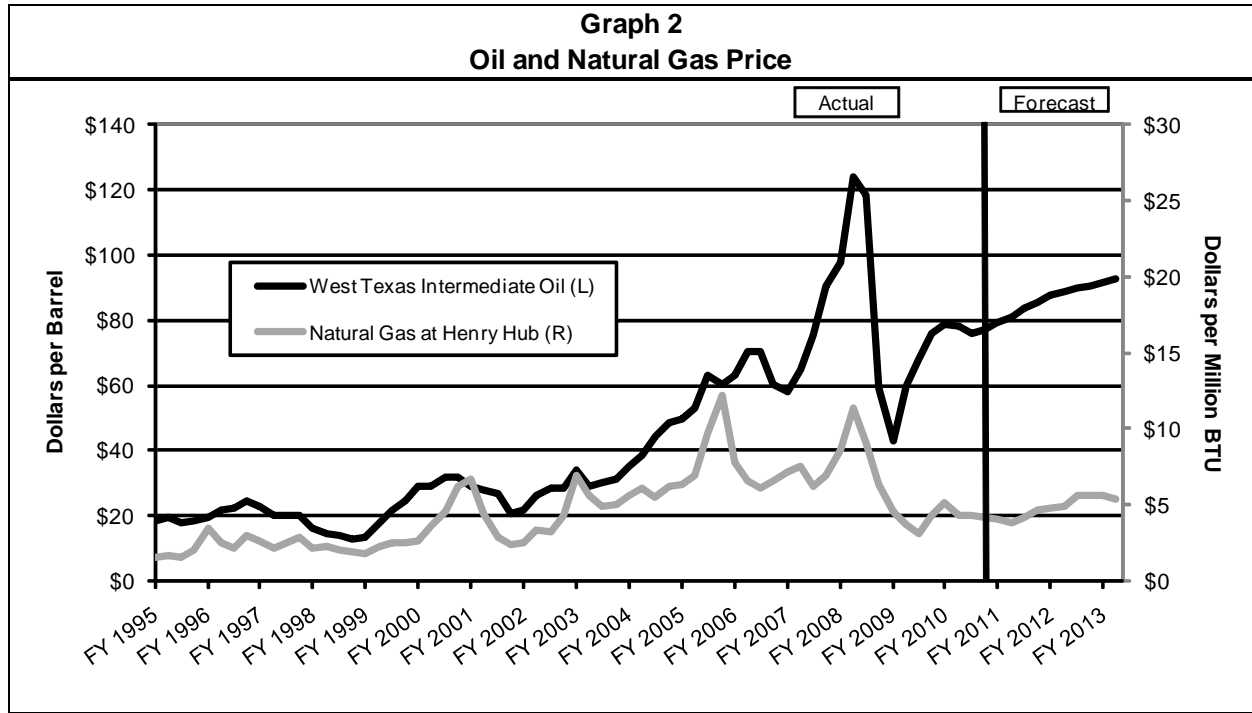


Interest rates hit historic highs in 1981, with both short-term and long-term interest rates at over 14%. Interest rates have decreased since 1981 to recent unprecedented lows as the Federal Reserve Open Market Committee (FOMC), moved to stem the decline in the economy in the fall of 2008. The FOMC decreased the target federal funds rate (the rate banks charge each other to meet overnight reserve requirements) to near zero and worked to increase the money supply, as financial markets locked-up, by purchasing government and private sector bonds (so-called "Quantitative Easing"). The graph shows that short-term interest rates are more volatile than long-term rates. When the FOMC wants to dampen inflationary expectations, they act by increasing the target federal funds rate and short-term interest rates rise. This is expected to happen late in FY 2012 once the economy is seen to be on the road to a more normal recovery.

Oil and Natural Gas Prices

Oil and natural gas prices have impact on the state budget through several channels. The state taxes oil and natural gas production, receives royalties from production on state lands, shares the royalties from production on federal land located in the state, and taxes the income from production. Energy prices are transmitted through the state economy in general, with higher prices translating into higher incomes for the energy producers and higher costs for consumers.

Graph 2 shows national oil and natural gas prices from FY 1995 through the first quarter of FY 2010, and Global Insight's forecasts through FY 2013. It shows the price of a standard grade of a barrel of crude oil, West Texas Intermediate, measured on the left axis and the price of natural gas per million BTU at Henry Hub, a common benchmark market on the right axis.



Oil and natural gas prices have become more volatile since 1995. Energy consumption is relatively insensitive to prices in the short-run. As a result, near-term changes in supplies can produce large price swings. In the long-run, energy users respond to higher prices by conserving and using energy more efficiently. Oil and gas producers respond to sustained higher prices by increasing exploration and development activities which tend to increase production.

From about 1987 through 1999, oil and natural gas prices were relatively low as world supplies were plentiful. However, for several reasons, oil and natural gas prices have risen significantly since 1999. First, world supplies have been stagnant. Oil and gas fields developed in the 1970s are being depleted and relatively low oil prices limited exploration. Second, world demand has steadily grown as income growth in developing countries, particularly China, has enabled consumers to afford cars, appliances, and other energy using consumer goods. Third, short-term supply disruptions such as wars, political instability in producing regions, and hurricane damage have led to short-term price spikes.

Both oil and natural gas prices peaked during FY 2008 and have dropped until recently. Oil is forecast to rise slowly as world energy demand remains begins to rise. Oil prices are forecast to remain in the mid \$80s per barrel through the 2013 biennium

Age Structure of the Montana Population

Table 5 shows, the 1990 and 2000 census counts, and Global Insight's 2010 and 2015 population forecast grouped into ten-year age groups (cohorts) and the percent of the total population in each group.

Age	1990 Census		2000 Census		2010 Forecast		2015 Forecast	
	Persons	%	Persons	%	Persons	%	Persons	%
0-9	125,603	15.7%	116,609	12.9%	122,360	12.4%	129,190	12.6%
10-19	120,285	15.0%	140,404	15.5%	125,800	12.8%	122,870	12.0%
20-29	104,491	13.0%	109,966	12.2%	142,990	14.5%	140,830	13.8%
30-39	134,798	16.8%	118,349	13.1%	110,660	11.3%	123,100	12.0%
40-49	104,085	13.0%	148,918	16.5%	124,670	12.7%	117,760	11.5%
50-59	71,729	8.9%	109,839	12.2%	149,100	15.2%	144,710	14.2%
60-69	66,959	8.3%	70,879	7.8%	106,320	10.8%	122,640	12.0%
70-79	49,789	6.2%	54,778	6.1%	59,500	6.1%	73,660	7.2%
80+	24,201	3.0%	33,924	3.8%	41,600	4.2%	47,160	4.6%
Total	801,939	100.0%	903,666	100.0%	983,000	100.0%	1,021,920	100.0%

The table shows, amongst other factors, that the population over the age of 60 year is growing as a share of the population. By the 2000 census, this group represented 17.7% of the population, whereas by 2015 it is expected to include 23.8% of the state's people. This aging of the population mirrors national trends and is expected to continue. In 2015, the 40 and over age group is forecast to contain over 50% of the population.

Economic Structure

Table 6 shows Montana's GSP divided into eleven sectors. Actual GSP, divided by sector, is shown for CY 2004 and CY 2008, and forecast amounts are shown for CY 2012 and CY 2016. For sectors that have grown faster than the economy as a whole, the percent of total output has increased over time. For sectors that have not grown as fast as the economy, the percent has decreased.

Economic Sector	CY 2004		CY 2008		CY 2012		CY 2016	
	\$	%	\$	%	\$	%	\$	%
Other Services	\$6,482	23.6%	\$8,864	24.7%	\$10,228	26.0%	\$12,384	26.4%
Finance, Insurance, & Real Estate	\$4,297	15.7%	\$5,568	15.5%	\$6,443	16.4%	\$7,791	16.6%
Transp., Comm., & Util.	\$3,110	11.3%	\$3,973	11.1%	\$4,593	11.7%	\$5,390	11.5%
State and Local Govt, Schools	\$3,032	11.0%	\$3,834	10.7%	\$4,414	11.2%	\$5,211	11.1%
Retail Trade	\$2,038	7.4%	\$2,533	7.1%	\$2,735	7.0%	\$3,207	6.8%
Manufacturing	\$1,383	5.0%	\$1,451	4.0%	\$1,566	4.0%	\$1,873	4.0%
Wholesale Trade	\$1,534	5.6%	\$1,850	5.2%	\$1,975	5.0%	\$2,287	4.9%
Construction	\$1,669	6.1%	\$2,007	5.6%	\$2,023	5.1%	\$2,352	5.0%
Federal Government	\$1,059	3.9%	\$1,217	3.4%	\$1,458	3.7%	\$1,650	3.5%
Agriculture, Forestry, & Fishing	\$1,345	4.9%	\$1,496	4.2%	\$1,244	3.2%	\$1,423	3.0%
Mining	\$1,019	3.7%	\$2,543	7.1%	\$1,986	5.0%	\$2,491	5.3%
Military	\$485	1.8%	\$553	1.5%	\$667	1.7%	\$764	1.6%
Total	\$27,453	100.0%	\$35,888	100.0%	\$39,331	100.0%	\$46,823	100.0%

The Montana economy has increasingly become less of a primary goods-producing economy. Agriculture and mining boomed in 2008 on higher prices at 8.6% of the economy but the long-term trend suggests that the primary production share will drop to below 7% of gross state product. Services are expected to continue to expand. Four sectors produce services almost exclusively: 1) finance, insurance, and real estate; 2) retail trade; 3) wholesale trade; and 4) other services. Four sectors produce physical goods almost exclusively: 1) manufacturing; 2) agriculture, forestry, and fishing; 3) mining; and 4) construction. The other four sectors produce a mix of goods and services. Together, the services only sectors accounted for 52.5% of state income in 2008, and they are predicted to account for 64.7% of state income in 2012. The goods-producing sectors accounted for 20.9% of state income in 2008 and are forecast to make-up 17.3% of state income in 2012. The mixed sectors accounted for 26.6% of state income in 2008 and are predicted to account for 18% of state income in 2012.

Table 7 shows actual Montana wage and salaries divided into fifteen sectors¹ for CY 2004 and CY 2008, and Global Insight's forecast for CY 2012 and CY 2016.

Economic Sector	2004		2008		2012		2016	
	\$	%	\$	%	\$	%	\$	%
Educational & Health Svcs	\$1,631	13.5%	\$2,164	13.8%	\$2,710	16.0%	\$3,281	16.3%
State & Local Government, Schools	\$1,965	16.2%	\$2,449	15.6%	\$2,676	15.8%	\$3,130	15.6%
Professional & Business Svcs	\$1,003	8.3%	\$1,501	9.6%	\$1,756	10.1%	\$2,325	11.4%
Construction and Mining	\$1,168	9.7%	\$1,744	11.1%	\$1,617	9.5%	\$2,072	10.3%
Retail Trade	\$1,147	9.5%	\$1,403	9.0%	\$1,452	8.5%	\$1,662	8.3%
Financial Activities	\$742	6.1%	\$955	6.1%	\$996	5.4%	\$1,109	5.2%
Leisure & Hospitality	\$698	5.8%	\$929	5.9%	\$953	5.6%	\$1,065	5.3%
Manufacturing	\$677	5.6%	\$810	5.2%	\$837	5.8%	\$1,008	5.9%
Transportation, Warehousing & Utilities	\$651	5.4%	\$799	5.1%	\$858	6.0%	\$960	5.7%
Federal Government	\$690	5.7%	\$786	5.0%	\$841	5.9%	\$893	5.3%
Wholesale Trade	\$583	4.8%	\$760	4.9%	\$762	7.5%	\$867	7.2%
Other Services	\$402	3.3%	\$504	3.2%	\$543	3.2%	\$586	2.9%
Agriculture, Forestry & Fishing	\$213	1.8%	\$257	1.6%	\$330	2.0%	\$402	2.0%
Military	\$257	2.1%	\$287	1.8%	\$326	2.8%	\$377	2.8%
Information	\$273	2.3%	\$304	1.9%	\$331	2.0%	\$375	1.9%

Wages and salaries for professional and business services have consistently grown faster than wages in the economy as a whole, and are expected to continue along this trend. As the population ages, health services are expected to drive continued growth in the education and health service group. State and local governments as well as local schools are expected to maintain their share of personal income but not grow. Construction and mining will drop slightly from their 2008 peak.

Comparison of Forecast Service Projections

The Legislative and Executive branches have, for many years, used Global Insight as the principal vendor of purchased economic data/econometric projections. In September 2010, the Revenue and Transportations Interim Committee directed that a subscription to Moody's Analytics be used by the Legislative Fiscal Division. The Office of Budget and Program Planning (OBPP) has also paid for access to Moody's Analytics. With the addition of Moody's Analytics

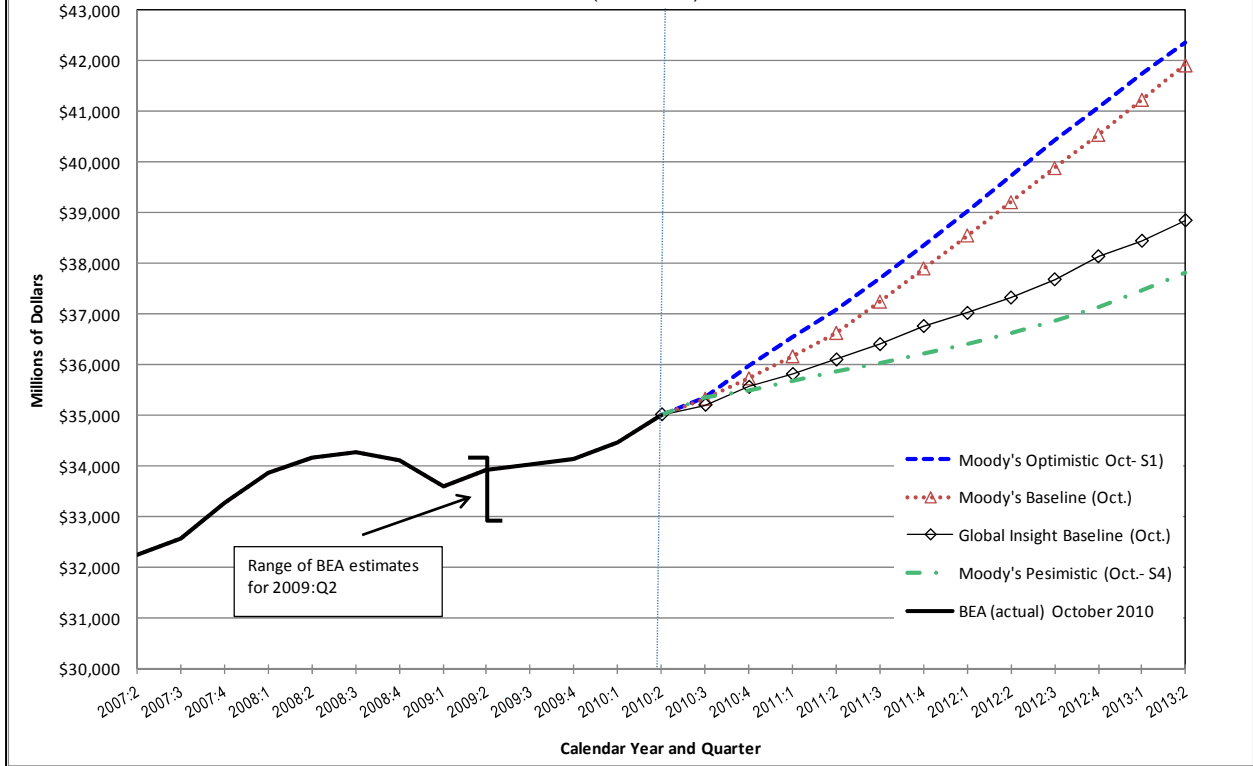
¹ The growth in total wages and salaries for a sector is due to a combination of growth in employment in the sector and growth of wages. These differ between sectors.

forecasts to IHS Global Insight forecasts there are now ten different possible forecast scenarios that can be used for revenue estimating purposes. However, direct comparison of the relative probability each forecasting service assigns to estimates is not straight forward. The probabilities of IHS Global Insight's three scenarios add up to 100%, but Moody's Analytics provides seven scenarios – one optimistic, one baseline scenario (which is un-weighted but presumably has the highest single probability), and five other (generally more pessimistic) scenarios which range in probability from 25% to 4%. These five scenarios sum to a 53% probability. However, both firms have provided a comparable assessment of their perceptions of a chance of a second recession. As of their October forecasts Moody's Analytics assessment of the odds of a second recession is one-in-three chance of such an event whereas, IHS Global Insight has assigned that risk a one-in-four chance. These probabilities are summarized in table 8 that follows.

Table 8		
Comparison of Probabilities Assigned to October 2010 Economic Scenarios		
Scenario	IHS Global Insight	Moody's Analytics
Optimistic	15%	10%
Baseline	60%	37%
Pessimistic	25%	53% ¹
Odds of a near-term recession	1 in 4 chance	1 in 3 chance
¹ Five scenarios with probabilities of ranging from 4% to 25%, summing to 53%.		

The most likely of the various forecasts is illustrated in by the following chart (Graph 3) comparing forecast scenarios of Montana personal income from both services. As was stated earlier, personal income is a good summary indicator of economic impact on state revenues as it is the product of the interaction of multiple variables (wages and salaries, capital gains, transfers, proprietors' incomes, inflation, etc.) with high incidence on state revenue.

Graph 3
Comparison of Global Insight Baseline and Moody's Analytics Forecasts
Total Montana Personal Income
 (\$ millions)



Using Moody's Analytic's October 2010 baseline assumptions in the individual income tax and corporation license tax revenue estimate models instead of the Global Insight October 2010 baseline would add approximately \$87 million to the current OBPP three-year revenue forecast.

Risks

In summary, the executive budget is based on assumptions about economic conditions through the 2013 biennium. The recent period of extraordinary economic turmoil makes clear that uncertainty presents inherent risks that have to be accounted for in selecting forecasts on which to base revenue estimates. The consensus of forecasters has the economy avoiding a “double-dip” recession but growing slowly in the near term before growth accelerates.

Care, if not caution, also needs to be taken in assuming a repeat of the October 2008 to April 2009 plunge in economic activity. The “Great Recession’s” unprecedented declines had signals that began to unfold between August 2007 and October 2008, after imbalances developed over the housing and finance bubble of 2003 to 2007. The recession also exposed other structural weaknesses in the economy which by their very nature of being exposed means they can be addressed or their risks evaluated. Forecasters, having been challenged by the “Great Recession,” appear to be better conditioned to look for “black swans” (extremely rare and unanticipated events) and appear to be more conservative in their outlooks. This should limit downside forecasting risk.

Uncertainties remain, as always, as forecasters try to identify the source for the next economic “shock” and how that might work through the economy. Currently, optimistic scenarios point to increased consumer savings and pent-up demand leading to increased economic activity. Pessimistic scenarios see the risk of sovereign debt default rising and the emergence of trade disputes holding back growth. Most forecasters recognize the “working out” of the housing bubble with household’s and financial sector firm’s rebuilding of balance sheets leading to a slower than usual post-recession economic recovery. These scenarios also recognize that Federal fiscal issues will need to be addressed in the mid-term but there continue to be near-term concerns about deflation.

While all forecasts inherently contain elements of uncertainty, both the Moody’s Analytics and IHS Global Insight baseline and alternate scenario forecasts were reviewed. They provide a weighted and balanced consideration of potential positive and adverse risks. These revenue estimates were prepared after an assessment of all the available scenarios. In order to provide an internally consistent set of revenue estimates, the IHS Global Insight baseline forecast was selected as it is the most conservative baseline forecast and incorporates a good balance of all the scenarios provided by the state’s two forecasting services.