

Perspectives on the Economy and Demographics



SUMMARY

The general outlook for the national and Montana economies for the next three years is based on cautious growth with high sensitivity to national and global economic conditions. In particular, commodity prices and demand, interest rates, capital gains, and corporate profits are major drivers that determine a large portion of the state's general fund revenues. Revenues are forecast to increase gradually from FY 2010 levels in FY 2011 through 2013; however, the risks to the forecast—outlined below—are significant and even small changes could result in further revenue decline. In November, the Revenue and Transportation Interim Committee (RTIC) adopted the Legislative Fiscal Division's (LFD) economic assumptions and accompanying revenue estimates. This chapter provides a summary of the key economic indicators and revenue sources used in the revenue estimate.

MAJOR ECONOMIC ASSUMPTIONS USED BY RTIC

As delineated in Section 5-5-227(2)(a), MCA, the RTIC is required to prepare “an estimate of the amount of revenue projected to be available for legislative appropriation.” The estimate and underlying assumptions are intended to be used in any estimation of revenue, including the preparation of fiscal notes. By statute, the LFD assists the revenue and transportation interim committee in performing its revenue estimating duties by submitting its recommendations and assumptions. The Office of Budget and Program Planning also presents the executive’s revenue estimates.

The three-year general fund revenue estimates between the LFD and the executive were within \$45.5 million or 0.87% of each other. However, individual revenue sources, assumptions, and methodologies varied substantially. The RTIC accepted the LFD’s estimates; these official estimates and assumptions are contained in HJ 2, the revenue estimate resolution. Following are the major economic assumptions used by the RTIC, as well as the general economic outlook for the 2013 biennium.

KEY RISKS TO ECONOMIC ASSUMPTIONS

Income

As the unemployment rate increases or stabilizes, Montana wage and salary income may decline or increase only modestly. Since the taxes paid on wage and salary income is the largest component of individual income tax revenue (Montana’s largest general fund revenue source), even a minimal decline in wage and salary income could have a negative impact on general fund revenue.

Interest Rates

The federal funds rate set by the Federal Reserve is currently at historical lows. This rate cannot get much lower and may increase if inflation shows signs of life. Low interest rates are a double-edged sword in which low rates may stimulate economic activity which potentially increases wage and salary and business income. On the other hand, Montana’s earnings from trust funds and excess investable cash decrease fairly quickly at reduced interest rates. Investment income reported for income tax purposes also declines, although this impact can be delayed.

Corporate Profits

In light of the “Great Recession”, a significant risk is the impact of the net operating loss (NOL) carry back provisions provided in 15-31-119, MCA. An NOL generally occurs when deductions exceed gross income. If for any taxable period a net operating loss is sustained, the loss must first be accounted for as a carry back to each of the three taxable periods preceding the taxable period of the loss. If the NOL deductions cannot be fully deducted from the prior years, the remaining deductions may be carried forward to each of the five taxable periods following the taxable period of the loss. Typically, the NOL can be fully deducted through the three period carry back. The loss is deducted against taxes that have usually been paid prior to the period of the loss and refunds are issued for the paid taxes. This situation makes the impact of corporate NOL’s on total fiscal year

collections appear even greater than they may have been because much of the effect is realized in the current fiscal year.

Energy Prices

If the global economic recovery continues to be gradual, demand for energy commodities, primarily oil and natural gas, may be slow to recover. Conversely, if a “double dip” recession occurs reduced prices could prevail until a more vibrant economic recovery occurs. Low energy prices could hamper further exploration and development efforts.

Equities

The equity markets can play havoc on state general fund revenues. A significant portion of non-labor income is derived from net capital gains and interest and dividend income. Just because the equity markets are increasing does not necessarily mean state revenue will corresponding increase. In order for a gain to materialize, investors need to sell equities at a higher price than they paid for them. Conversely, investors may sell equities at a loss thereby offsetting other types of income. Losses can be carried forward at \$3000 per year until the loss is liquidated.

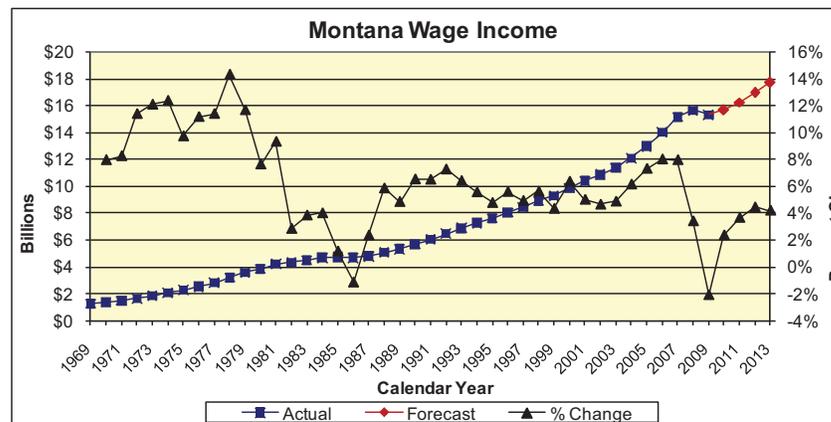
ECONOMIC INDICATORS

The four major economic assumptions the RTIC used to forecast the state’s general fund revenue for FY 2011 – FY 2013 are discussed in detail below. These four are: income, interest rates, corporation indicators, and energy prices.

Income

The total of all income sources listed on the Montana personal income tax form is referred to as Montana total income. The Department of Revenue tracks income from 11 different components, including wages, interest, dividends, business, capital gains, supplemental, rental, farm, social security, IRA and pension, and other incomes. Montana total income is the single most important variable to consider in the revenue estimation process.

Figure 1



Of the 11 income items, wage and salary income provides the largest portion of Montana total income. Since 1990, wage and salary income has contributed an annual average of 65.1% of total income. In 2009, it contributed 67.3%, or \$13.1 billion. The average annual growth in Montana wages and salaries has been 5.4% between 1990 and 2009. Wage growth exceeding this average occurred in the early nineties and again in 2004-2007. In both these periods inflation was relatively high, i.e. greater than 2.5%, and employment growth was relatively high. However, the growth of wages declined sharply to rates of 3.4% and -2.1% in 2008 and 2009 respectively.

As shown in Figure 1, wages are expected to assume a slower rate of growth in the forecast period with growth of 3.7% in 2011, 4.4% in 2012, and 4.2% in 2013.

Interest Rates

The federal funds rate set by the Federal Reserve is currently at historical lows. This rate cannot get much lower and may increase if inflation shows signs of life. Low interest rates may stimulate economic activity which potentially increases wage and salary and business income. On the other hand, Montana’s earnings from trust funds and excess investable cash decrease fairly quickly at reduced interest rates. Investment income reported for income tax purposes also declines, although this impact can be delayed.

A large portion of Montana’s revenues is derived from investment earnings from trust accounts and daily invested cash. Interest rates also affect the amount of investment income that is reported on individual income tax returns. As such, interest rates are a significant assumption when estimating future state revenues.

In addition to the state revenue impact, interest rates are fundamental in understanding the climate in which consumers and businesses are likely to make investments and large purchases. While low interest rates produce less revenue for Montana’s trust and interest holdings, higher income tax earnings might be expected as construction and sales activities increase.

Figure 2



Two types of interest rates, long and short-term, are estimated and used in determining future revenues. Both rates are an average across a selection of investment instruments.

The forecast rates are obtained from IHS. Short-term rates are an average of 3-month corporate paper and 3 and 6-month T-bills. Long-term rates are an average of Corporate Aaa and Baa bonds, 10-year T bonds, and 30-year T bonds. The fiscal year computation of short-term interest rates reached unprecedented low rates of 0.2% in 2009 and 0.3% in 2010. The future short-term interest rates are expected to remain low at a rate of 0.3% in 2011 and will increase to 1.5% and 3.6% by 2012 and 2013 respectively. Long-term rates are expected to be 3.9% in 2011, 4.4% in 2012, and 5.7% in 2013, as shown in Figure 3.

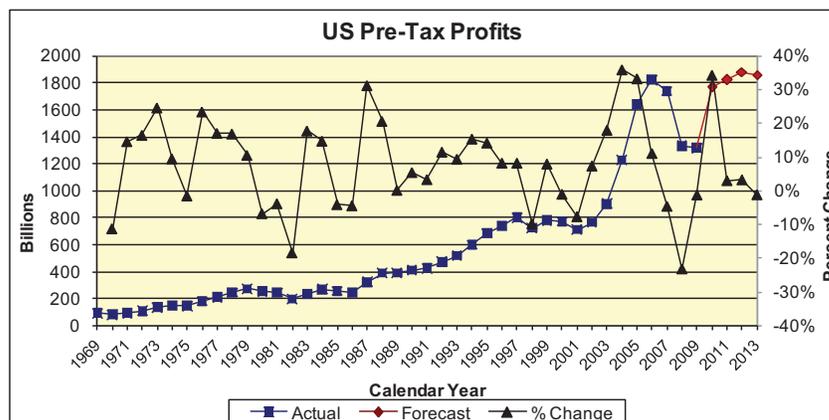
Figure 3



Corporation Indicators

The profitability of corporate America is an important factor in estimating revenues. Corporate profitability affects both corporation license tax and individual income tax estimates. When corporations are profitable nationally, there is an expectation that corporations will be profitable in Montana. Additionally, greater corporate profitability is largely responsible for the amount of dividends corporations pay to stockholders as well as the value of equity investments.

Figure 4



During the most recent years, the reduction of corporate profits has translated to lower corporate license tax collections. According to IHS, between 1990 and 1997, US corporation pre-tax profits increased by an annual average of 10.3%. However, from 1997

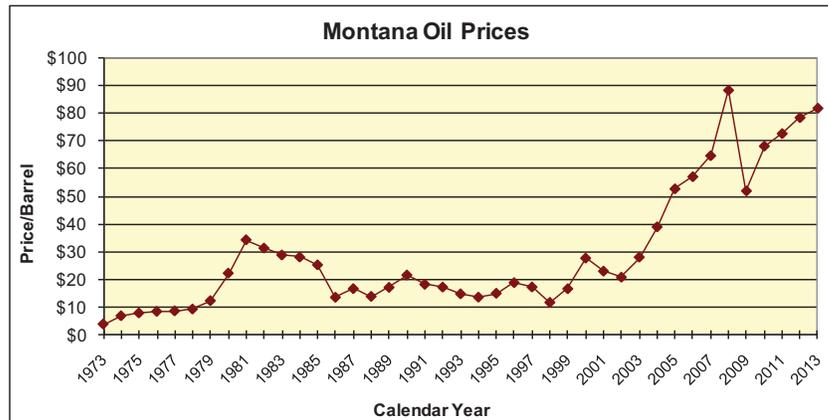
through 2001, profits decreased by an average of 3.0%, the greatest decrease of 8.5% occurring in 2001. Between 2006 and 2010, corporate profitability decreased at an average annual rate of 0.7%. During the forecast period, corporation profits are expected to grow at an average rate of 1.7% annually.

Energy Prices and Production

West Texas Intermediate (WTI) spot oil prices averaged \$25.96 per barrel in 2001 and increased every year through 2008. In 2009, the WTI price dropped by 38.1% to \$61.77 per barrel, and has subsequently increased to an estimated \$77.45 per barrel in 2010. IHS forecasts WTI oil prices to increase to \$82.58 in 2011, \$89.16 in 2012, and \$93.02 in 2013. Montana prices are expected to follow a similar trend.

After a period of decline in oil production, from a peak in 1974 of 34 million barrels to a trough in 1999 of 15 million barrels, the discovery of new oil fields and advances in technologies increased oil production in Montana. New drilling activity increased 75% in 2003, and increased nearly the same amount in 2004. In 2006, the new production hit a peak, with production of over 36 million barrels. Since 2006, oil production has declined and that trend is expected to continue through 2013. Montana oil production is expected to decline to 25 million barrels in 2011, 22 million barrels in 2012, and 20 million barrels in 2013.

Figure 5

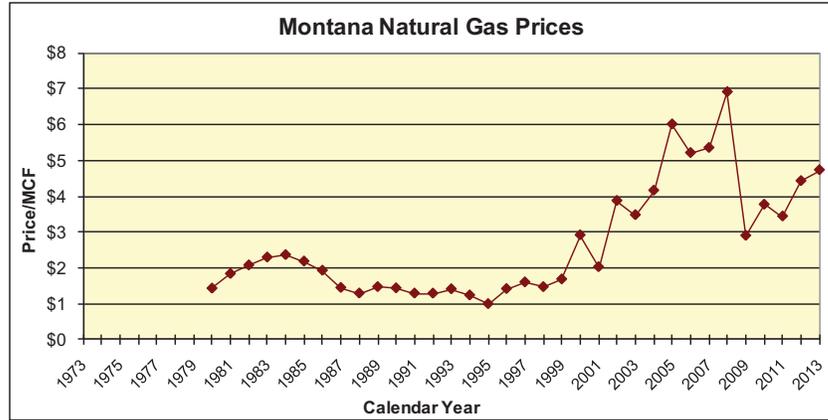


Natural gas prices at the wellhead in the US reached as high as \$8.85 per MCF in 2008, but the prices have declined significantly in the past two years. The average price in 2010 is expected to be \$4.46 per MCF. IHS is forecasting average well head natural gas prices at \$4.18 in 2011, \$5.24 in 2011, and \$5.57 in 2013. While Montana wellhead prices are usually lower than the US average well head price, Montana prices are expected to follow a similar trend.

Natural gas production in Montana almost tripled between 1981 and 2007, from 40 million MCF to 119 million MCF. Production has increased around 70% since 2000. As in the oil market, new drilling activity was up substantially in 2003 and 2004, but production has started to drop and that trend is expected through 2013. Montana natural

gas production is expected to be 110 million MCF in 2010, 107 million MCF in 2011, 101 million MCF in 2012, and 98 million MCF in 2013.

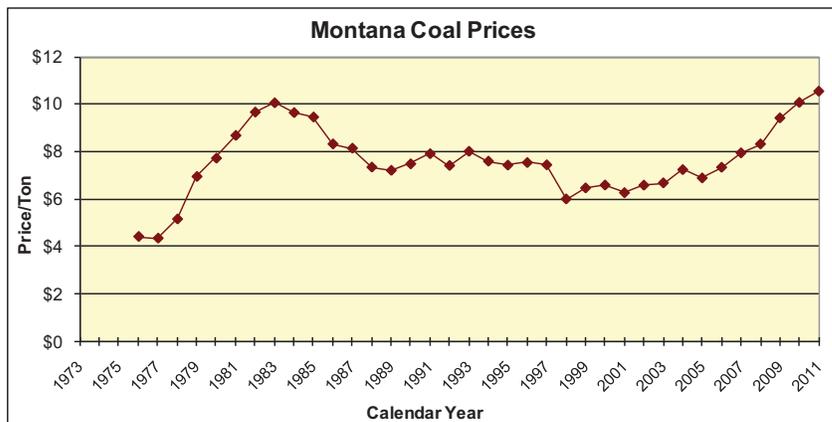
Figure 6



The Montana price for coal remained relatively constant between 1998 and 2006, but has increased since 2006 and is expected to continue increasing over the 2013 biennium as demand for coal grows.

Western U.S. coal production, which has grown steadily since 1970, is expected to continue to increase through 2013. Strong growth, combined with limited improvement in coal mining productivity, is expected to result in average minemouth price increases of 3.5% annually from 2011 through 2013

Figure 7



DEMOGRAPHIC TRENDS

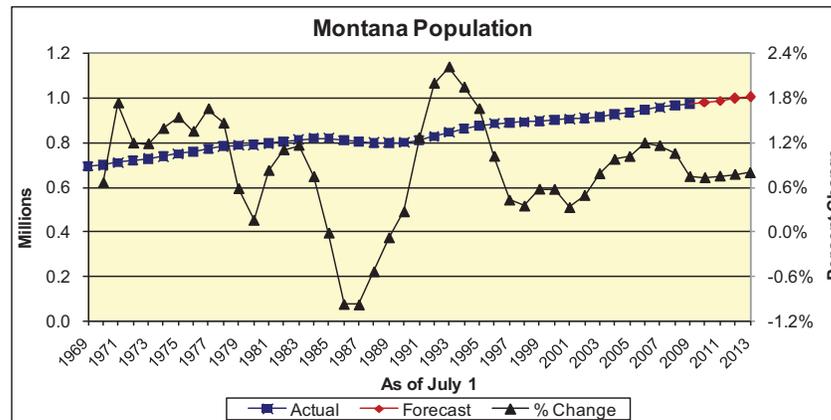
Montana, with a total area of 145,552 square miles, is the fourth largest state. Its population of 974,989 (2009 estimate) places Montana 44th among all 50 states. Montana has 6.2 persons per square mile while the U.S. average is 79.6. A relatively small population in a very large state contributes to Montana being a great place to live, but it also presents many challenges in delivery of government services and in the overall economic well-being of the state.

POPULATION TRENDS

Montana’s population has historically demonstrated slow growth. In the 35 years between 1970 and 2009, the annual rate of growth of the state population was 0.9%. Growth through the next biennium, as shown in Figure 8, is estimated at about 0.8% annually.

Population statistics are used to develop estimates for many of the tax revenue sources including beer, wine, liquor, and cigarette taxes. In addition, the size of the population indirectly affects the profitability of all businesses and the employment levels statewide.

Figure 8



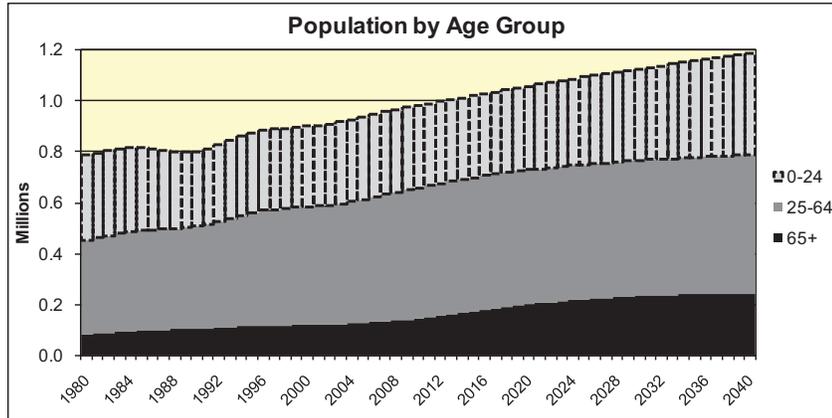
Montana’s Aging Population Trend

One of the most significant events beginning to surface in Montana is the projected increase in the aging population. Between 1940 and 2000, the percentage of Montana’s population 65 and over doubled, and it is expected to double again by 2030, when Montana will have the fifth highest percentage of population 65 and older in the nation.

There are a couple factors causing the increase of the elderly population. First, according to research performed by George W. Haynes, Myles J. Watts, and Douglas J. Young, in a report titled, *Project 2030 Montana’s Ageing Population*, the life expectancy at age 65 increased from 13 years to 19 years between 1940 and 2005. Additionally the

baby-boomer generation, those born between 1946 and 1965, will soon begin to reach the age of 65, swelling the ranks of the elderly. Montana, like other state and local governments, will need to address the issues relative to changing demographics.

Figure 9



With a growing elderly population, the legislature will eventually need to address how the working-age population can support an older population. Currently, there are estimated to be 3.9 people of working age (persons age 20 through 64) to each retiree (person of age 65 and over). This statistic is expected to decline by 2030, when there will only be 2.6 people of working age to each retiree. The level of income earned by the retired population and ultimately how much they will pay in taxes could have a substantial impact on state government finances.

BUDGETARY IMPACTS

The projected demographic changes have budgetary impacts on both revenues and disbursements. Changes in population directly affect consumption-based revenue sources such as cigarettes, liquor, and driver’s licenses, and also impact other tax sources such as income and insurance taxes. As related to state disbursements, the increasing elderly population will require more state provided health related services. The funding of aging services and children’s health insurance are two of the primary areas of concern related to demographic changes.