

# **MANAGING FINANCIAL VOLATILITY**

A Report Prepared for the  
**Legislative Finance Committee**

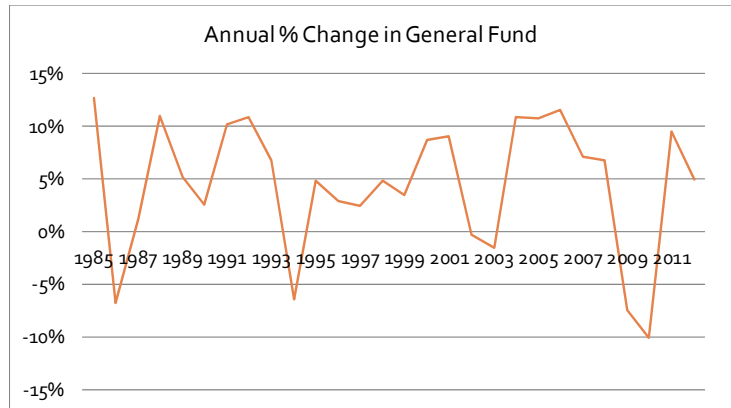
By  
Amy Carlson, LFA  
Terry Johnson, Principal Fiscal Analyst  
Barbara Smith, Assistant Principal Fiscal Analyst  
Stephanie Morrison, Fiscal Analyst II  
Brian Hannan, Fiscal Analyst I

September 27, 2012



## INTRODUCTION

In Montana, volatile revenue streams are nearly an expectation. Annual general fund revenue growth has varied from -10.0% to +12.8% to since 1985. While some of these changes are predictable, many are not. Consequently, the ability to anticipate changes in revenue has been challenging.



In addition, two other factors increase Montana's volatility relative to other states.

1. Montana tends to have more volatile revenue streams than many states for two reasons: 1) Montana does not have a sales tax. The sales tax in most states is a large and relatively predictable source of revenue that adds stability to many states' estimates; and 2) Montana's economy is more heavily dependent on commodities and the volatility of those markets.
2. According to a study by the National Council of State Legislatures (NCSL) the revenue estimate error rate for biennial budgets like Montana is twice that for annual estimated budgets<sup>1</sup>.

With volatility being inherent in Montana's revenues, it may be practical to consider means of managing this volatility. This paper reviews the management considerations and some of the choices available to the legislature.

## PURPOSE

This report follows a legislative request to determine how Montana could manage volatility through policy, definitions, or statute. Specifically, the Legislative Fiscal Division (LFD) was requested to look at ending fund balance and structural balance definitions, and to consider what level of ending fund balance would be appropriate for managing volatility under various economic conditions. Secondly, this report looks at historical patterns of the specific revenue sources and considers options for managing the volatility of those specific sources.

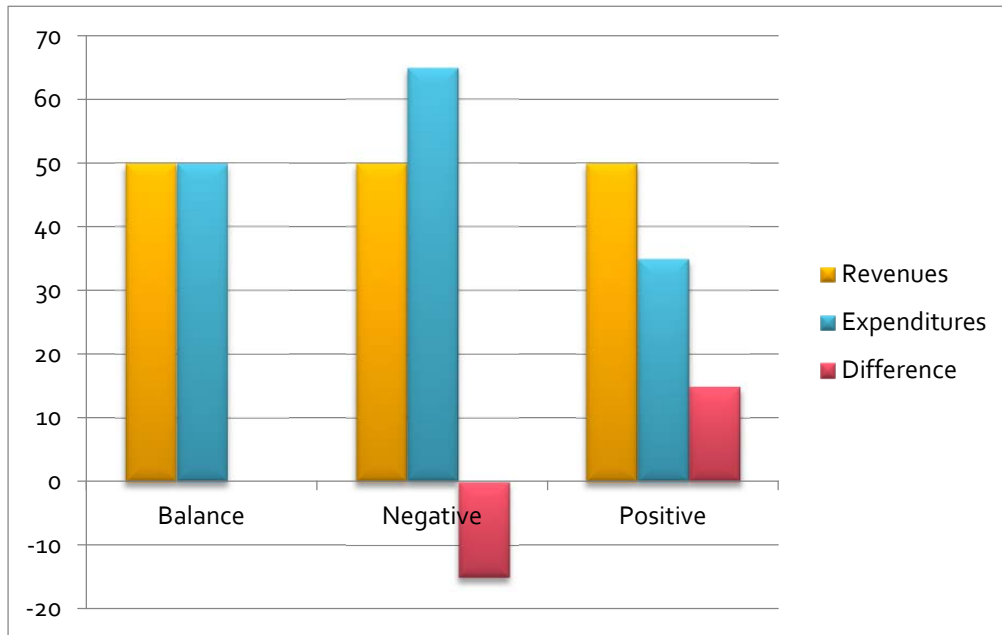
---

<sup>1</sup>Ronald Snell, National Conference of State Legislatures, State Experiences with Annual and Biennial Budgeting, April 2011 [http://www.ncsl.org/documents/fiscal/BiennialBudgeting\\_May2011.pdf](http://www.ncsl.org/documents/fiscal/BiennialBudgeting_May2011.pdf)

## LFC REQUEST 1: DEFINITIONS

**Structural balance** is defined as the difference between ongoing revenues and ongoing expenditures during a fiscal year. Per the chart below, consider structural balance in three different scenarios.

- 1) Balance – Structural balance exists when revenues and ongoing expenditures are equal.
- 2) Negative – A negative structural balance exists when revenues (yellow bar) fall short of ongoing appropriations (blue bar). When this occurs, the ending fund balance could be utilized to supplement revenues to meet the expenditure demands. The short fall can come from revenue volatility, costs of natural disasters, or other unanticipated costs.
- 3) Positive – A positive structural balance exists when revenues (yellow bar) exceed expenditures (blue bar). When this occurs, the ending fund balance is increased by the difference. The increase can come from revenue volatility and/or reduced expenditures



### Ending Fund Balance

The general fund ending fund balance is effectively the “checking account balance” of the state. It is often equated to “surplus” funds, yet to be truly “surplus” the funds would not be serving a purpose of the legislature or the State of Montana. In contrast a “Rainy Day Fund” is understood as funds that are needed for managing volatility. This paper explores the concept of using an ending fund balance to meet Montana’s needs for managing volatility.

**Surplus:** The amount of funds that are in excess of the level needed for state government, including any need to manage revenue or spending volatility.

**Rainy Day Fund:** funds needed to cover times of volatility of revenues or spending.

The ending fund balance is currently comprised of two components.

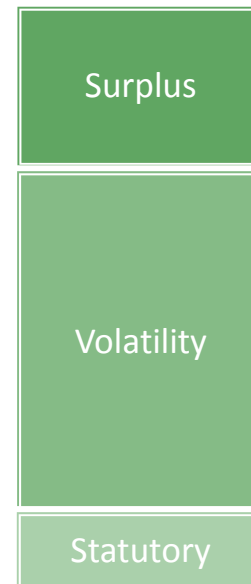
1. Statute requires that the state maintain an ending fund balance of 1% of all general fund appropriations in the biennium. (Any level less than this would require the executive to impose spending reductions per 17-7-140, MCA.)
2. Funds above the statutorily required fund balance. Whether this is a “surplus” is dependent upon the pressures to fund known ongoing or one-time expenditures. For example, the ending fund balance in the current biennium may have to cover state fire costs (currently estimated at approximately \$50 million).



The statutorily required level is rarely broken out from the total ending fund balance in publications and presentations, if this break out were provided more often, it may aid understanding by the public and the legislature.

An alternative way to define the ending fund balance would be to utilize a three tier definition. As part of this approach the definition for statutorily required remains the same. Tiers two and three would be defined differently as listed below.

1. Statutorily required ending fund balance of 1% of all general fund appropriations in the biennium, as currently used.
2. Volatility reserve (or other name), or that portion of the ending fund that is established by the legislature to account for fluctuations in general fund revenue sources and unanticipated expenditure pressures.
3. Surplus or the anticipated amount of the ending fund that exceeds statutory and volatility reserves.



The LFD publishes and presents the ending fund balance several times each year and throughout the legislative session. A breakdown of the ending fund balance with these terms in all LFD publications could change how ending fund balance is perceived by the legislature and the public.

If the legislature chooses to create and report using these definitions it would need to determine the amount, be it a percentage of revenue or a static amount, which would represent the volatility reserve. The next section reviews financial considerations of determining a level of fund balance that could be reserved for volatility.

## FINANCIAL MANAGEMENT CONSIDERATIONS OF SETTING VOLATILITY LEVELS

Standard and Poor’s (S&P) is one of three agencies that rate the credits in U.S. public finance. An article from S&P dated July 26, 2010<sup>2</sup>, outlines the management characteristics of the highly rated credits in U.S. public finance. Highly rated credits are those that S&P considers to be the best managed from a financial perspective. These top 10 include the following:

---

<sup>2</sup> Standard and Poor’s Global Credit Portal, Top 10 Management Characteristics of Highly Rated Credits in U.S. Public Finance; July 26, 2010, Primary Credit Analyst: Robin Prunty; Secondary Credit Analysts: Karl Jacob and Horacio Aldrete-Sanchez

1. An established "rainy day"/budget stabilization reserve.
2. Regular economic and revenue updates to identify shortfalls early.
3. Prioritized spending plans and established contingency plans for operating budgets.
4. A formalized capital improvement plan in order to assess future infrastructure requirements.
5. Long-term planning for all liabilities of a government, including pension obligations, OPEB (other post-employment benefits) and other contingent obligations and comprehensive assessment of future budgetary risks.
6. A formal debt management policy in place to evaluate future debt profile.
7. A pay-as-you-go financing strategy as part of the operating and capital budget.
8. A multiyear financial plan in place that considers the affordability of actions or plans before they are part of the annual budget.
9. Effective management and information systems.
10. A well-defined and coordinated economic development strategy.

In this report items 1 and 8 will be examined as they most directly relate to the financial definitions that are being considered.

### Item 1: Rainy Day Fund and Ending Fund Balance

Rainy day fund and ending fund balance policies illustrate how states value the set aside for volatility. As the National Conference of State Legislatures (NCSL) states each state needs to evaluate the volatility of the specific financial considerations of the state prior to determining the appropriate level for the specific state. In its top 10 analysis, S&P gives more specifics as to what they consider in their evaluation of rainy day funds<sup>3</sup>:

- 1) The government's cash flow/operating requirements;
- 2) The historic volatility of revenues and expenditures through economic cycles;
- 3) Susceptibility to natural disaster events;
- 4) Whether the fund will be a legal requirement or an informal policy;
- 5) Whether formal policies are established outlining under what circumstances reserves can be drawn down; and
- 6) Whether there will be a mechanism to rebuild reserves once they are used.

While many states have formal rainy day funds, Montana has used its ending fund balance in recent years for this purpose. NCSL produces information that combines rainy day funds and ending fund balances for the purpose of comparing state financial strength.

#### ***Other states' policies***

S&P considers Montana relative to the other 50 states when determining the relative management strength. A comparison of other states' ending fund balances may add value to the analysis. In addition, NCSL looks to ending fund balances for state fiscal strength.

State Combined Rainy Day and Ending Fund Balances as a % of general fund spending FY 2011	
<u>Top 5 states</u>	
Alaska	220.5%
Wyoming	95.5%
North Dakota	83.8%
West Virginia	38.0%
Nebraska	24.5%
<b>Average of all states</b>	<b>6.3%</b>
<b>Montana</b>	<b>19.7%</b>
<u>Bottom 5 states</u>	
Illinois	-10.4%
California	-2.9%
Washington	-0.6%
Arizona	0.0%
Tie: Wisconsin/Oregon	0.8%

*“NCSL regards year-end balances as the most useful single*

<sup>3</sup> Standard and Poor's Global Credit Portal, Top 10 Management Characteristics of Highly Rated Credits in U.S. Public Finance; July 26, 2010, Primary Credit Analyst: Robin Prunty; Secondary Credit Analysts: Karl Jacob and Horacio Aldrete-Sanchez

indicator of state fiscal conditions. Balances in the general fund and rainy day fund grow when revenues exceed forecasts, which tends to happen in times of economic growth. Recessions, on the other hand, put pressure on revenues, causing general fund balances to fall, and states may tap their rainy day funds. Total year-end balances reflect these changes.”<sup>4</sup>

Summary statistics on the average aggregate (including rainy day) state year end balances for FY 2011 is to the right.

### ***What level do other states deem necessary to cap their rainy day funds?***

While these actual ending fund balances give some indication of what happened in FY 2011, the results are a combination of policy, budgeting, and reality. In order to evaluate best practices an examination of the rainy day fund policies may be helpful.

The following is a link to a summary report from NCSL that summarizes how states cap their rainy day funds. This summary is from a report titled: State Budget Stabilization Funds, Spring 2008 - Revised September 26, 2008, Daniel G. Thatcher, (<http://www.ncsl.org/issues-research/budget/state-budget-stabilization-funds-spring-2008.aspx>). States cap their rainy day funds between 2% and 15% of revenues or expenditures. In addition to rainy day funds, the states would anticipate some level of ending fund balance. These amounts would be included in the above table on combined rainy day funds and ending fund balances.

*“The majority of states (37) limit the sizes of their budget stabilization funds by capping the size of the funds in relation to state general fund revenues or appropriations (see Table 1.). For example, New Jersey caps its "Surplus Revenue Fund" at 5 percent of total anticipated general fund revenues, while Connecticut's "Budget Reserve Fund" cannot exceed 10 percent of net general fund appropriations for the fiscal year in progress. Minnesota is unique in that it caps its budget reserve and cash flow accounts at specific dollar amounts (\$653 million and \$350 million, respectively).*

	<b>Appropriations</b>	<b>Revenues</b>
<b>2.0%</b>	New York, District of Columbia	South Carolina
<b>2.5%</b>		Iowa
<b>3.0%</b>	New York	Rhode Island, South Carolina
<b>4.0%</b>	Colorado, District of Columbia	Louisiana
<b>5.0%</b>	North Dakota, Tennessee, Vermont, Wisconsin, U.S. Virgin Islands	California, Delaware, Idaho, Illinois, Kentucky, New York, Ohio, Oregon
<b>6.0%</b>	Utah, Puerto Rico	Pennsylvania
<b>7.0%</b>		Arizona, Indiana
<b>7.5%</b>	Mississippi	Iowa, Maryland, Missouri, Oregon
<b>10.0%</b>	Alabama, Connecticut, South Dakota, South Dakota, Virginia, West Virginia	Florida, Georgia, Michigan, New Hampshire, Oklahoma, Texas, Washington
<b>12.0%</b>		Maine
<b>15.0%</b>	Nevada	Massachusetts
<b>No Cap</b>	Alaska, California, Hawaii, Nebraska, New	

<sup>4</sup> National Conference of State Legislatures, NCSL FISCAL BRIEF: HOW STATE TAX POLICY RESPONDS TO ECONOMIC RECESSIONS, January 5, 2011  
<http://www.ncsl.org/documents/fiscal/TaxPolicyandRecessions.pdf>

	<i>Mexico, North Carolina, Wyoming</i>	
<b>Other</b>	<i>Minnesota (Cash Flow Account capped at \$350 million, Budget Reserve Account capped at \$653 million)</i>	

**Note:** A state may appear more than once because of variations between the state's multiple funds.

Budget experts and observers debate the amount states should accumulate in their budget stabilization funds. The National Conference of State Legislatures' Fiscal Affairs and Oversight Committee (and informally used by municipal bond rating agencies) suggests that the combination of general fund surpluses and budget stabilization funds should equal at least 5 percent of total state expenditures. Other organizations, such as the Center on Budget and Policy Priorities, suggest a target fund level of at least 15 percent of expenditures. (CBPP, 2007). Suggested levels can vary according to individual state circumstances, specific economic conditions or access to atypical revenue sources, such as vast mineral resources. Professors Cornia and Nelson caution against "a one-size-fits-all [budget stabilization fund]," because of the "heterogeneity among state economic conditions and tax codes." (Cornia and Nelson, 2003). For example, states with highly elastic revenue sources, such as a progressive income tax system, might opt for larger balances because revenues from these sources tend to experience greater fluctuations during economic swings. At the end of FY 2007, the median amount accumulated in budget stabilization funds across the nation neared 5 percent of total general fund appropriations. Alaska led the states with the highest percent accumulated, 47 percent..”

### **Montana’s Policies**

The following reviews how Montana’s finances compare to the S&P criteria stated on page 4.**Error! Bookmark not defined.**

#### Montana’s Cash Flow Needs (The government's cash flow/operating requirements)

Due to spending and revenue patterns over the course of the fiscal year, Montana has the greatest need for cash flow in November and March. A look at historical spending patterns indicate that a range of 4 – 8% of annual spending needs to be in the ending fund balance to carry the cash through the low points of the annual cash flow without borrowing.

#### Historic Volatility: Biennial Revenue Estimates (The historic volatility of revenues through economic cycles)

Given that Montana is a biennial budgeting state, volatility occurs over roughly 30 months. The National Conference of State Legislatures report titled: **STATE EXPERIENCES WITH ANNUAL AND BIENNIAL BUDGETING: Ronald K. Snell, National Conference of State Legislatures**, April 2011, ([http://www.ncsl.org/documents/fiscal/BiennialBudgeting\\_May2011.pdf](http://www.ncsl.org/documents/fiscal/BiennialBudgeting_May2011.pdf)) addresses the revenue component of this issue.

*“Planning a biennial budget requires a 30-month revenue forecast, compared with 18 months for an annual budget. As Speaker Wills of Arkansas commented, the difference is significant. A 2011 analysis of the accuracy of state revenue estimates from 1987 through 2009 indicates that the average error of estimate for biennial states was 2.18 percent, more than twice the 1.04 percent average for annual budgeting states. The volatility of state revenue sources was the prime cause of miscalculations.<sup>12</sup> Such averages do not mean that revenue forecasts in biennial states are always less accurate than those in annual budget states. Some biennial states have a more accurate forecasting record than some annual states. Overall, though, the statistics suggest the greater difficulty of forecasting revenues accurately in biennial budget states.”*

An analysis was performed for this study that looked at the previous two recession’s revenue volatility. When the legislature is considering the biennial budget there are inherently 30 months or two and half fiscal years of revenue risk that are relevant to consider. The analysis uses the estimates for all three fiscal years available at the time of the given session. For example, it uses the 2001 session estimate of the FY 2001 revenues and the

2001 session estimate for the FY 2003 revenues. It does not use estimates for these years adopted by previous or later sessions.

As shown in the table to the right, if the actual differences for each of the three years were considered the amount of the biennial revenues that would have needed to be reserved for volatility would have been 6.7% in the 2001 session and 6.4% in the 2009 session. If the legislature adopted the maximum of these numbers for a volatility reserve, it would be set at 6.7% of the biennial revenues.

Historic Volatility of Revenues Compared to the Estimate						
Session	Fiscal Year	Estimate during session	Actual	Difference	3 Year Difference	% of Biennial Revenue
2001	2001	\$1,214	\$1,269	\$56		
	2002	\$1,406	\$1,266	(\$140)		
	2003	\$1,347	\$1,246	(\$101)	(\$185)	-6.7%
2009	2009	\$1,845	\$1,808	(\$37)		
	2010	\$1,773	\$1,627	(\$146)		
	2011	\$1,829	\$1,783	(\$47)	(\$229)	-6.4%

As shown in the graphic on page 4, if the legislature wished to reserve enough ending fund balance to also guard against volatility and the statutorily required ending fund balance (MCA 17-7-140), it would have reserved an additional 1% of biennial appropriations, which is typically approximately 1% of revenues. Thus the total ending fund balance “reserved” would be set at a 7.7% of biennial revenue or approximately \$279 million in the 2013 biennium.

Utah has a similar mechanism to this approach except that Utah has an annual budget. Utah sets its rainy day fund cap at the 18 month error rate in revenue estimates. Utah’s rainy day fund has an automatic replenishment from the difference between forecast and actual revenue collections [fund balance]. Utah has a general fund ending fund balance in addition to the rainy day fund.

Historic Volatility: Spending (The historic volatility of expenditures through economic cycles and Susceptibility to natural disaster events)

Note that this section focuses on spending volatility and does not address the potential of having capacity within the structural balance to address spending pressures resulting from an economic downturn.

Spending volatility can be characterized through the examination of supplemental appropriations, appropriations from special sessions, and the use of the fire suppression funds. Each of these items demonstrates an unplanned or unforeseen event in which the state, at some point, has to cover the cost. In the past, these events included increases in caseloads, wildland fire suppression costs, legal settlements, student transportation costs, and others. An examination of these items in terms of percent of general fund expenditures can provide a proxy for spending fluctuations and identify where the greatest risks have been. Figure 1 illustrates the historical use of supplemental appropriations, special session funding, the fire suppression fund, and federal funds that were used to fund costs that ordinarily would have been funded with general fund on a biennial basis for the last four completed biennia. In relation to total general fund expenditures, the highest occurred in the 2005 and 2007 biennia at 2.4%.



History of Unanticipated Expenditures (in millions)							
Biennium	Supplementals	Special Sessions	Fire Fund <sup>5</sup>	Federal Funds	Total	GF Expenditures	% of GF Expenditures
2005	\$29.10	\$0.00	\$0.00	\$35.00	\$64.10	\$2,650.20	2.4%
2007	71.80	0.00	0.00	0.00	71.80	2,934.70	2.4%
2009	1.20	42.20	11.70	0.00	55.10	3,283.10	1.7%
2011	<u>2.10</u>	<u>0.00</u>	<u>8.40</u>	<u>0.00</u>	<u>10.50</u>	<u>3,781.60</u>	0.3%
Total	<u>\$104.20</u>	<u>\$42.20</u>	<u>\$20.10</u>	<u>\$35.00</u>	<u>\$201.50</u>	<u>\$12,649.60</u>	

### *Supplemental Appropriations*

There are often two components to supplemental appropriations: 1) a transaction in the even number year that moves authority from the second year of the biennium to the first; and 2) approval from the legislature for increased expenditure authority in the second or odd-numbered fiscal year of the current biennium. The second adds authority to an agency, indicating that the original appropriation is not sufficient to operate the program due to specific financial pressures. Supplemental appropriations add spending authority to an agency's budget when the amount originally appropriated by the previous legislature is not sufficient to fund the agency through the biennium. This need for additional funding would signal spending volatility. Supplemental appropriations total \$104.2 million for the last four completed biennia and represents 0.8% of all general fund spending for the same period of time. Note that for FY 2005, the legislature used the supplemental process to fund items that were considered pay-offs of state obligations, such as the Crow Tribe water compact and the note against the IRIS information technology project. Those items have been removed from the data.

### *Special Sessions*

Wildland fire is nearly a given on Montana's landscape. The state costs to suppress wildland fire are not predictable given the variables of weather, snow pack, location of fire, and resources used in suppression. The extreme fire season of the summer of 2007 or FY 2008 landed the legislature in special session in September of 2007 to appropriate \$42.0 million for suppression costs and \$0.2 million to fund the Fire Suppression Interim Committee. While this has occurred just once during the last four biennia, it does account for 0.33% of all general fund spending for the same period of time.

### *Fire Suppression Fund*

The special session of September 2007 also created the fire suppression fund by using a \$40.0 million transfer of general fund. The purpose of the fund is to cover the state share costs of wildland fire. As per the figure above, at the end of the 2011 biennium, \$20.1 million had been expended from this fund, indicating an available balance of \$19.9 million before interest earnings. However, fire costs for the 2013 biennium will exceed this amount and a general fund supplemental will be required to fund the remainder. There is currently not an automatic mechanism to replenish the fire suppression fund.

### *Other funds*

In the 2005 biennium, \$35.0 million of federal funds were expended to cover the costs of wildland fire. This was part of \$50.0 million Congress granted in fiscal relief funds under the Federal Jobs and Growth Tax Relief Reconciliation Act, which imposed few limits on the use of the money. Without these federal funds, a supplemental to pay fire suppression costs would have been required.

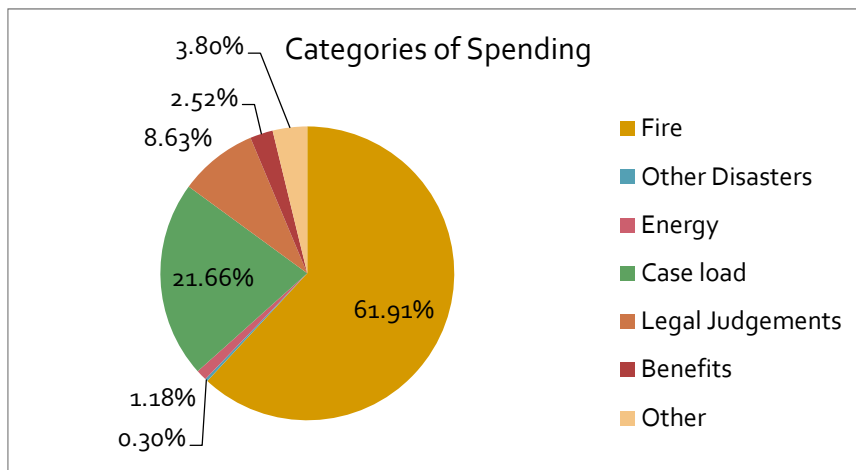
In total, for the four biennia period ending FY 2011, \$201.5 million of general fund was expended through supplemental appropriations, special sessions, the fire suppression fund, and federal funds. This represents

<sup>5</sup> The fire fund was established in FY 2008. Fire costs prior to that time are included in the general fund supplemental total.

1.6% of all general fund expenditures for the same period of time. The largest amount of unanticipated expenditures was \$71.8 million or 2.4% of general fund in the 2007 biennium. The next step is to examine the drivers of these expenditures.

*Drivers of Expenditure Volatility*

Drivers of volatility fall into categories as listed below in Figure 2. The major items are caseload adjustments (22%) and fire suppression (62%). Caseload adjustments relate predominantly to the number of persons being served within the Department of Health and Human Services (DPHHS) and the Department of Corrections (DOC), as well as BASE aid, transportation costs, and tuition within the Office of Public Instruction (OPI). DPHHS supplemental expenditures occurred in 2007, 2005, and 2003. The Department of Corrections incurred a supplemental in 2005 and 2007 for population adjustments. OPI has been routinely provided a supplemental for transportation, due to the difficulty in predicting the overall cost. In addition, OPI has received a supplemental for tuition payments that are made by OPI on behalf of state custody youth that are placed out of district.



Wildland fire is the largest driver of expenditure volatility. As stated before, the state costs to suppress wildland fire are not predictable given the variables of weather, snow pack, location of fire, and resources used in suppression. Additionally, long after the last flame is extinguished is when the state share is actually verified. Given the timing, the legislature is often faced with an urgent request for supplemental funding in the early days of session, or as in the case of

FY 2008, a special session was required. The current costly fire season is no exception as it will contribute to an increase in the average cost of suppression and put pressure on the ending fund balance as the fire suppression fund is exhausted.

A counter balance to the volatile nature of fire suppression costs is the Governor’s emergency fund. By statute, the Governor has available \$16.5 million each biennium to cover costs related to a Governor-declared disaster. A declaration must occur prior to the Governor accessing these funds. The amount expended is driven by the types of emergencies, if other resources are available (such as the fire fund in FY 2009 through part of FY 2012), and whether Montana can access federal funds for the same purpose. Emergency fund appropriations totaled \$66.0 million over the last four biennia, of which \$37.4 million was expended. Since some expenditure of these funds is anticipated, they are not included in the totals in the figure above.

*Conclusion*

In conclusion, spending volatility is tied directly to wildland fire and case load adjustments. Both items are not known costs to the state until triggering events occur; therefore, establishing the amount for spending volatility is more of an art than a science. One option is to adopt the highest level of unanticipated expenditures, \$71.8 million in the 2007 biennium, or 2.4% of general fund expenditures. This high point occurred prior to the creation of the fire suppression fund and therefore includes \$30.0 million of fire suppression cost, the largest cost driver.

If the fire suppression fund was to be replenished, volatility would decrease as funds would be available for at least some portion of fire suppression costs beyond the Governor’s emergency fund. (The two funds need to be considered together due to the rising costs of fire suppression). If this was the case, an alternative could be to adopt the average amount for the last four completed biennia which is \$50.4 million or 1.6%. Some fire costs

would still be accounted for in this number; however, as per recent history wildland fire costs often far exceed the average.

The last option could be to consider a static amount. Since the statute allows the Governor \$16.5 million for the biennium for emergencies, the legislature could adopt a similar policy. This amount equates to an average 0.52% of general fund expenditures for the last four biennia.

#### Other policies considered by S&P

S&P considers other policies when in their overall analysis of state financial condition:

- Whether the fund will be a legal requirement or an informal policy
- Whether formal policies are established outlining circumstances under which reserves can be drawn down
- Whether there will be a mechanism to rebuild reserves once they are used

If the LFC adopts definitions for use with the budget development, it defines a range of informal policy, but is not a formal policy or a legal requirement. This is discussed further in the options section at the end of the report.

#### Use of a rainy day fund or ending fund balance

When a state uses the fund balance two questions arise:

- 1) How will the funds be replenished? When ending fund balance is used the replenishment occurs automatically as revenues come into the state, but are not protected from subsequent spending.
- 2) Is there an underlying structural imbalance between revenues and spending? If revenue levels decline and a rainy day fund is used to shore up spending, the spending in a given year or years will exceed the revenue for those years. If revenues do not return to prior levels, the ongoing spending or revenue may need to be adjusted to regain structural balance.

### **Item 8: Structural Balance**

In its top 10 analysis, S&P gives more specifics as to what they consider in their evaluation of state fiscal strength<sup>6</sup>:

***“8. A multiyear financial plan in place that considers the affordability of actions or plans before they are part of the annual budget***

*In our analysis, we consider whether this plan is comprehensive. During a sustained economic recovery, we see program enhancements and tax reductions as typical. We believe that pension funds that performed at record levels provide incentive to expand or enhance benefits. Elected officials will be ultimately responsible for the decisions necessary to restore out-year budget balance. We consider multiyear planning as an important part of this process. In our view, even when there is legal authority to raise taxes, there may not be a practical ability to do so because it is politically unpopular. Standard & Poor's realizes that the out-years of a multiyear plan are subject to significant change. They provide a model to evaluate how various budget initiatives affect out-year revenues, spending and reserve levels. These plans will often have out-year gaps projected, which we believe allows governments to work out, in advance, the optimal method of restoring fiscal balance.”*

Montana has several mechanisms to develop a multiyear financial plan that ensure affordability in the long term. Specifically:

- Structural balance as defined on page 3 is a specific consideration and is consistently reported to the legislature on the session status sheets and many other documents. Session status sheets illustrate the long term viability of the decisions of the legislature throughout the legislative process. Structural

---

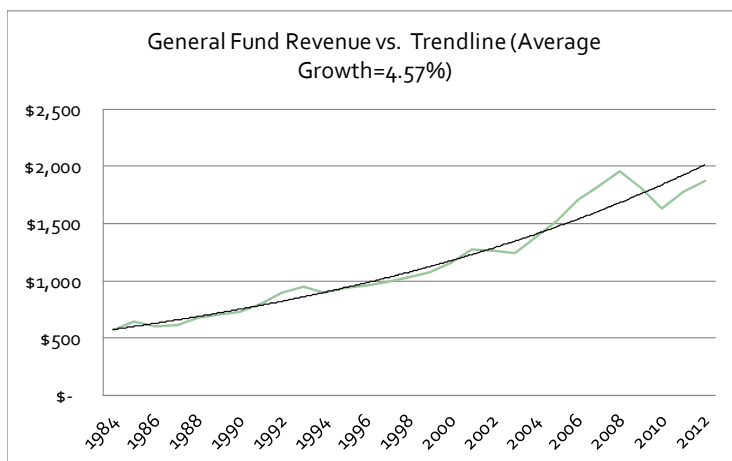
<sup>6</sup> Standard and Poor's Global Credit Portal, Top 10 Management Characteristics of Highly Rated Credits in U.S. Public Finance; July 26, 2010, Primary Credit Analyst: Robin Prunty; Secondary Credit Analysts: Karl Jacob and Horacio Aldrete-Sanchez

- balance of the second year establishes the ongoing level of spending in the following biennia and aids in maintaining a long term financial plan that considers the affordability of actions taken during session
- o Beginning with the 2007 session Montana has fiscal notes that extend two biennia in the future. All bills that have fiscal impacts receive fiscal notes that report the anticipated fiscal impact of each piece of legislation. These fiscal notes are compiled in the status sheet throughout session to ensure structural balance in the current biennia. Also clearly stated on the first page of the fiscal note is the impact in the subsequent biennia. If later impacts are greater than current impacts, this information is readily available to decision makers
- o Finally, the budget itself is a two year plan as opposed to the annual plan of many states. This longer term look adds to the successful long-term financial planning of the state

## LFC REQUEST 2: SPENDING OR REVENUE CAPS

### General Fund Revenue Trends: Capping Over Trend Spending

An alternative to reserving ending fund balance described previously could be an approach to cap spending at the long-term revenue trend. Historically, since 1984, general fund revenues have grown at 4.57% per year. The data on long term revenue has **not** been adjusted for significant revenue policy changes. These changes are included in the long term revenue trend in this analysis and have not been isolated. If the legislature wished to pursue the policy of using long term trend to cap spending, additional work in identifying major policy changes and adjusting the long term trend would be necessary. For purposes of this high level analysis, these differences should not change the overall analysis and conclusions.



The table to the left shows that actual revenues can vary significantly from the long term trend. In peak revenue years such as FY 2008, actual revenues can be substantially above the long-term trend. In FY 2008, revenues were \$270.8 million or 16.1% above long term revenue trends.

In the 2007 session, the legislature adopted a budget that spent less than the revenue estimate for FY 2009 by \$75 million or 4% of annual anticipated revenues. The revenue estimate was \$1,875 million and the ongoing spending was set at \$1,800 million. If the long-term

revenue trend of \$1,760 million was used to cap ongoing spending, the budget would have been set at \$1,760 million or \$115 million below the anticipated revenues. In this capping mechanism, funds received above the spending cap could be spent on one-time items, returned to taxpayers, or deposited in a reserve account in the following legislative session.

Some states have spending limits on total general fund revenue estimates, but these estimates tend to be a fixed percentage of the total revenue estimate. According to the report “States’ Revenue Estimating, Cracks in the Crystal Ball” by the Pew Center on the States and the Nelson A. Rockefeller Institute of Government:<sup>7</sup>

*“Some states have spending rules written in their constitutions.<sup>124</sup> For example, Delaware limits appropriations to 98 percent of the official revenue forecast; Rhode Island also sets the limit at 98 percent, and Oklahoma maintains its limit at 95 percent. Iowa (99 percent) and Mississippi (98 percent) have statutory rules in place.”*

<sup>7</sup> States’ Revenue Estimating, Cracks in the Crystal Ball; Pew Center on the States and the Nelson A. Rockefeller Institute of Government, page 34

In summary, the legislature could choose to limit total general fund spending or total ongoing general fund spending by:

- A percentage of the general fund revenue estimate
- The long term revenue trend
- A certain percentage greater than the long term revenue trend

While the above addresses capping spending of total general fund revenues, the legislature could choose to limit reliance on specific volatile sources instead.

## **Capping Revenues from Specific Volatile Sources**

Some states cap specific volatile revenue streams. The additional funds from these revenue streams are typically deposited into a rainy day fund. The following gives examples of how other states cap particular revenue sources:

*“Fiscal Devices for Limiting Reliance on Volatile Taxes (from States’ Revenue Estimating, Cracks in the Crystal Ball; Pew Center on the States and the Nelson A. Rockefeller Institute of Government)  
Policy changes to a budgeting system can be a great help sometimes. Massachusetts, for example, addressed part of its volatility problem by making changes in the way revenues from the capital gains tax can be used. Capital gains are one of the most topsy-turvy revenue sources for states because they track the ups and downs of the stock market. Massachusetts relied heavily on capital gains-related revenues in its 2008 budget, to the tune of \$2.1 billion. But the following year, capital gains brought in only \$500 million, leaving a huge hole in the budget. The same phenomenon occurred in 2001 following the dot-com stock boom and bust.”<sup>8</sup>*

An example from an NCSL PowerPoint presentation:

*“Washington: In November of 2011, voters approved a measure requiring the transfer of additional funds to the Budget Stabilization Account if the state received “extraordinary revenue growth” or the amount which the growth in general states revenues for that biennium exceeds by 1/3 the average biennial percentage growth in general state revenue over the prior 5 biennia. No transfer occurs following a fiscal biennium in which average state employment growth averaged less than 1% per fiscal year. These amounts are in addition to the 1% of general state revenues are deposited each year.”*

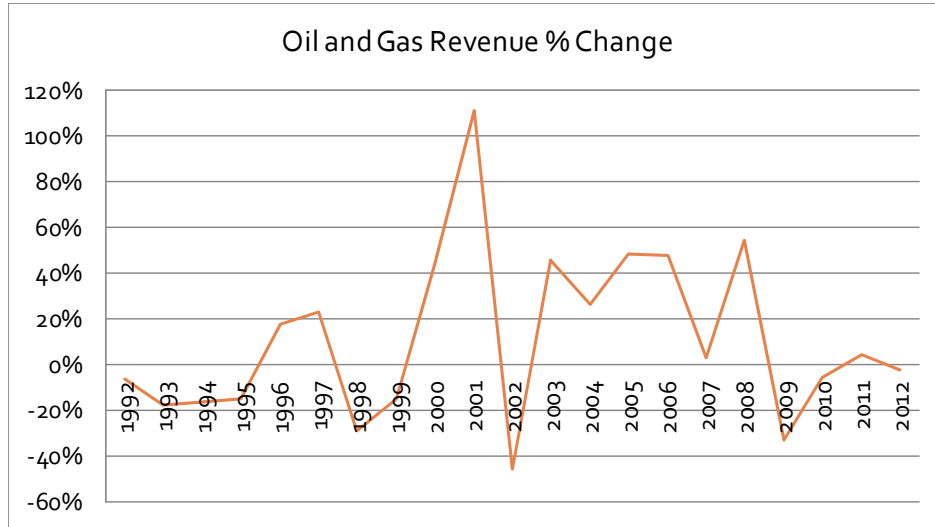
The LFC requested this study review three specific revenue sources: oil and gas, corporation tax, and capital gains revenues. Each of these sources could be deposited in a rainy day fund or any other reserve fund, or could be used for one-time specific purposes defined by the legislature. These sources are considered individually below. Note that each source is shown for the number of years that the data appeared to be relatively consistent. In the case of oil and gas, a significant change in law occurred in 1991 and so data has been included only from that point forward.

---

<sup>8</sup> States’ Revenue Estimating, Cracks in the Crystal Ball; Pew Center on the States and the Nelson A. Rockefeller Institute of Government, page 34

## Oil and Gas Revenues

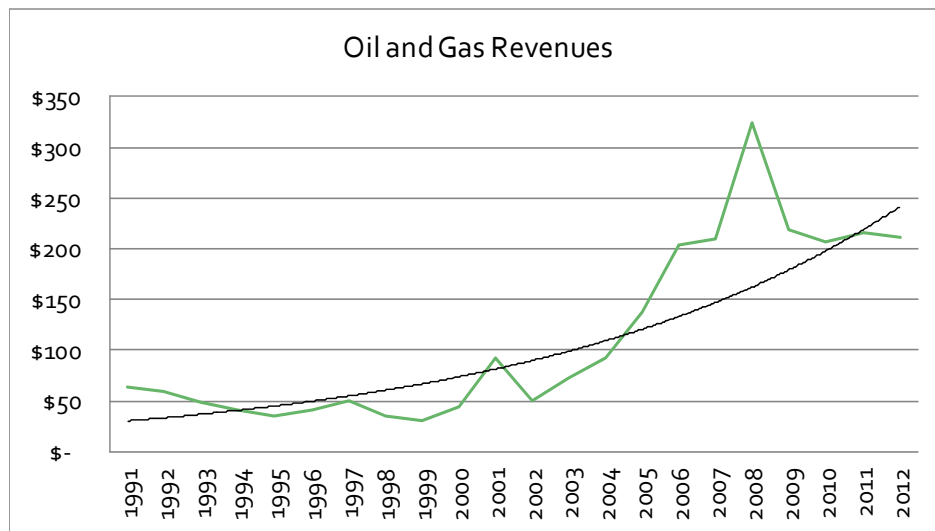
The annual variation of oil and gas revenue ranges from -46% to 111%, so there is no clear annual growth pattern to oil and gas collections. Oil and gas revenues are shared between the state general fund, several state special funds, and local entities. Any changes in policy would need to consider potential impacts to local governments.



If the legislature wished to cap the oil and gas revenues spent in a given biennium the following choices offer a few options to consider:

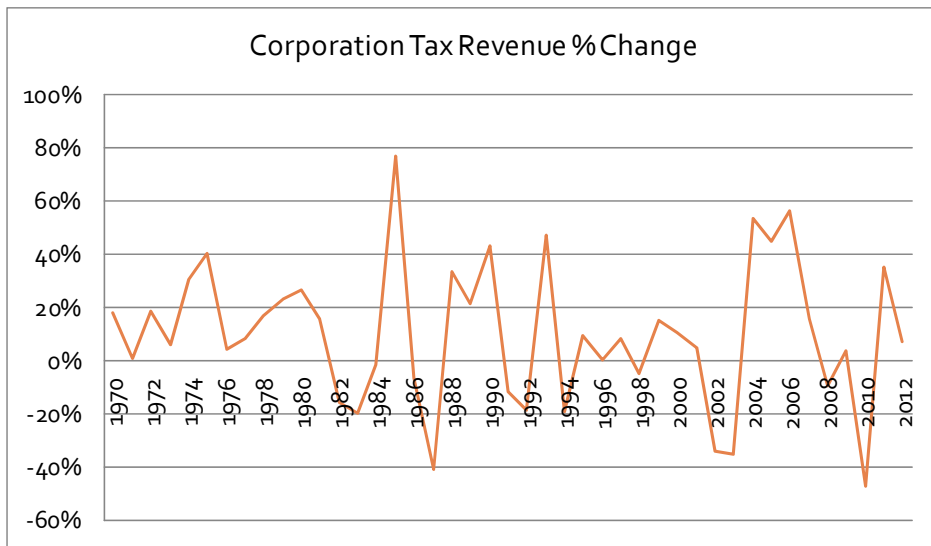
- Limit to an average or some portion of an average of the previous several years' revenue
- Limit to a specific dollar amount and grow with inflation
- Limit based on the price of oil and natural gas that grows with inflation
- Limit to specific level of production
- Limit to a specific dollar amount

In the case of oil and gas, the legislature would need to consider if the limitation only applied to state funding from oil and gas or if the cap also applied to the local share of oil and gas.



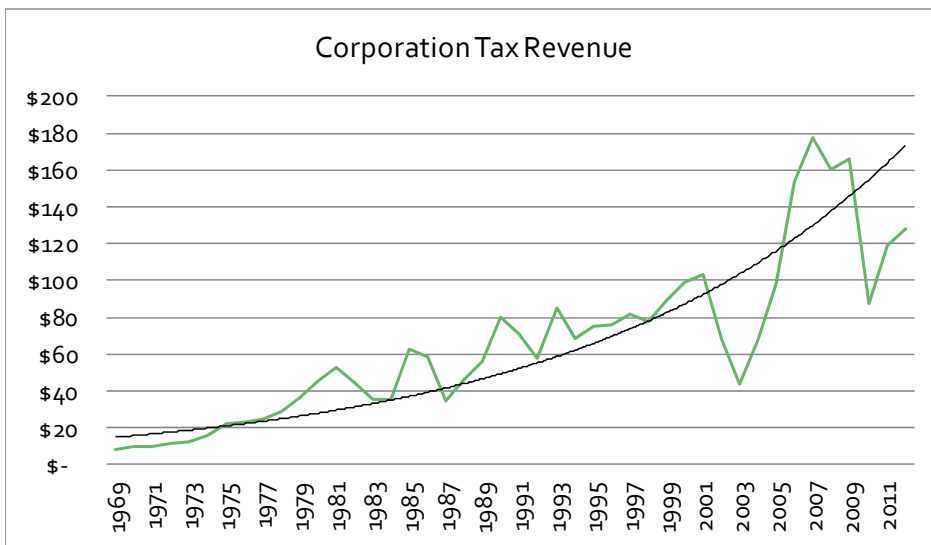
## Corporation Tax Revenues

The annual variation of corporation tax revenue ranges from -47% to 77%, so there is an inconsistent annual growth pattern to corporation tax collections. All corporation tax revenues are deposited in the general fund.



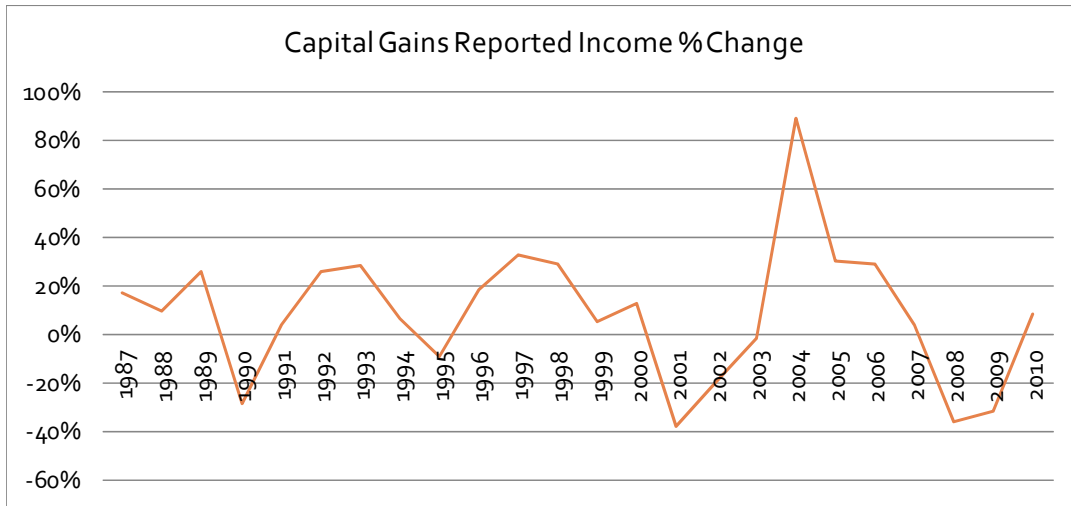
If the legislature wished to cap the corporation tax revenues the following offers a few options to consider:

- Cap at an average over a typical business cycle, such as seven years
- Cap at some portion of an average of the previous several years revenue
- Limit to a specific dollar amount and grow at the rate of inflation



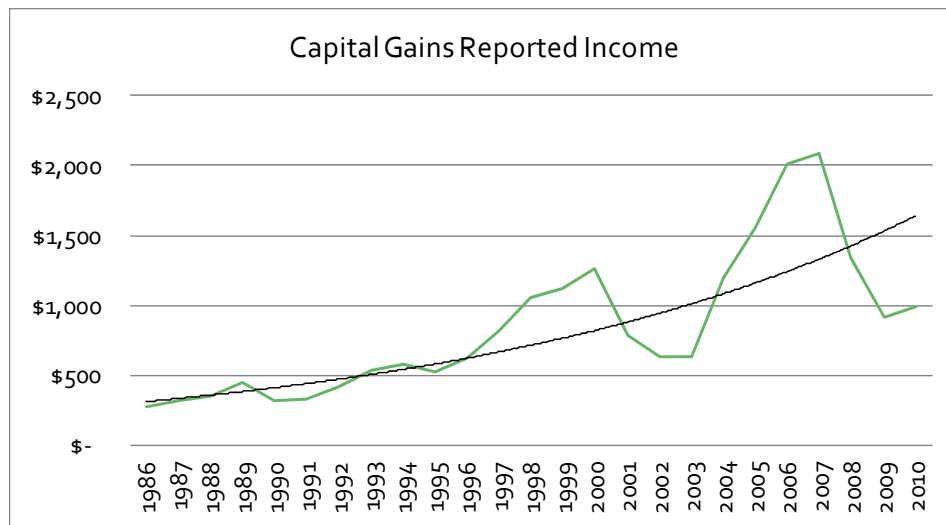
## Income Tax: Capital Gains Reported Income

The annual variation of capital gains reported income ranges from -38% to 89%, so there is an inconsistent annual growth pattern to capital gains reported income.



Capital gains income is not a specific revenue source, but a component of the larger source: personal income tax. It is difficult to isolate capital gains revenues for three reasons:

- 1) Actual reported capital gains are unknown until after the close of the fiscal year when the return data is available following November.
- 2) Even after all return data is collected, how would you determine how much of the taxes paid were due to capital gains?
- 3) Taxes are collected throughout the year through quarterly estimated payments or current year payments at the time of filing the return for capital gains, rents and royalties and other more volatile revenue sources.



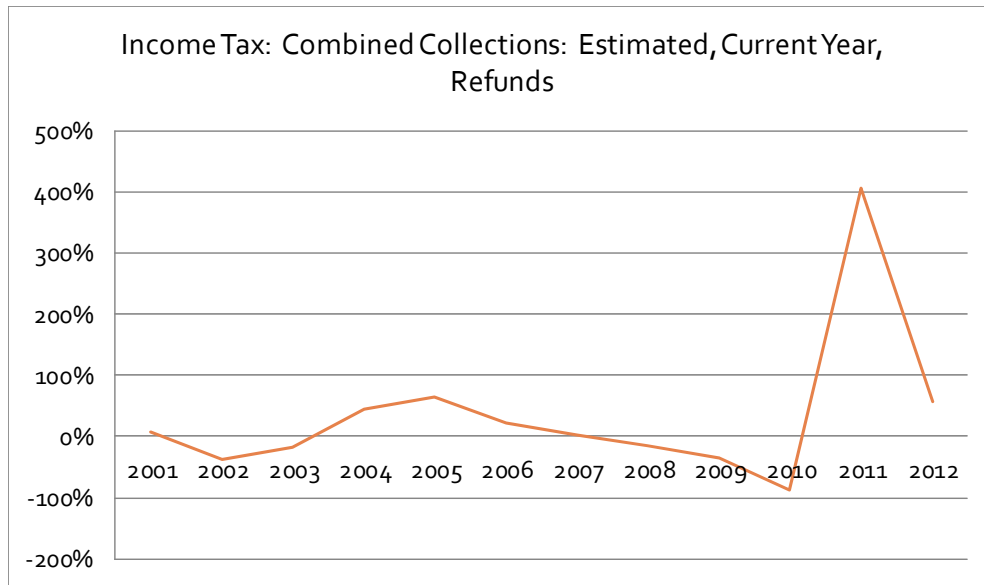
If the legislature chose to cap spending of tax revenues from capital gains the significant question of how much revenue was collected from capital gains would need to be resolved.

An alternative might be to cap reliance on the net collections received through quarterly estimated payments, current year payments, and refunds. These net collections typically come from non-wage income sources, such as capital gains, and rents and royalties.



### ***Income Tax: Estimated, Current Year, and Refunds***

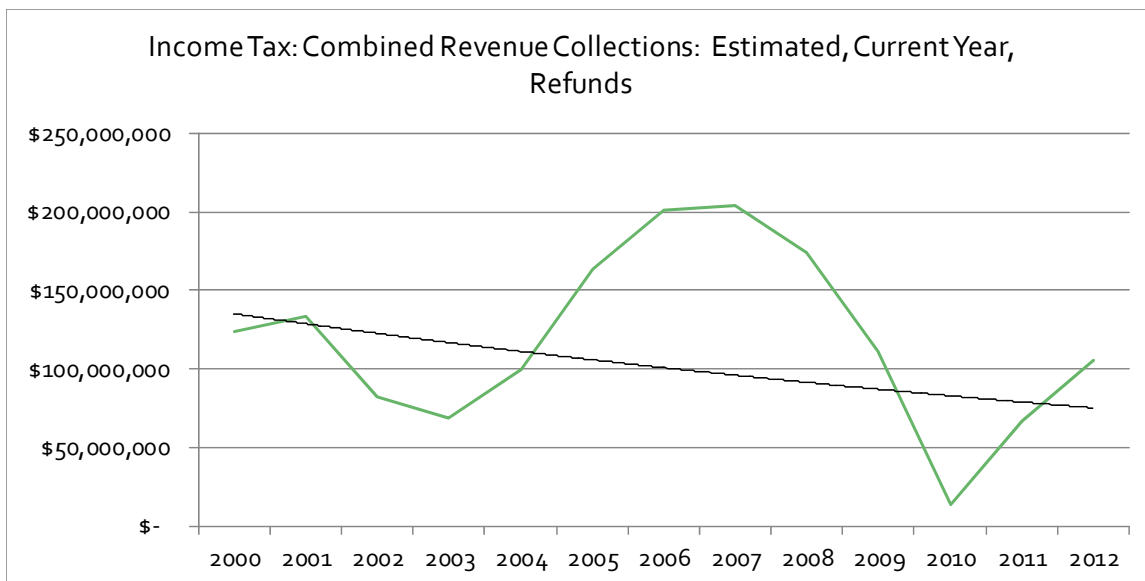
The annual percent change of combined collections from estimated, current year, and refunds collections vary from -88% to 405%. The actual collections varied from \$13 million to \$204 million from FY 2000 to FY 2012.



Given the extreme volatility of these sources, there does not appear to be a formulaic option for capping spending. The legislature may wish to choose a specific dollar amount to cap. All of these sources are significantly volatile, with refunds being the most volatile.

Further analysis could explore more options such as:

- 1) Capping estimated and current year payments only and not considering refunds;
- 2) Only capping estimated payments; or
- 3) Only capping current year payments.



# SUMMARY OF CHOICES

## ENDING FUND BALANCE CHOICES

The following illustrates the range of choices for creating definitions of ending fund balance. These provide a range of options that the legislature could choose to create definitions for surplus. It should be stated that the legislature may choose to establish a budget that does not fully meet the adopted definitions and not have a shortage of state funds.

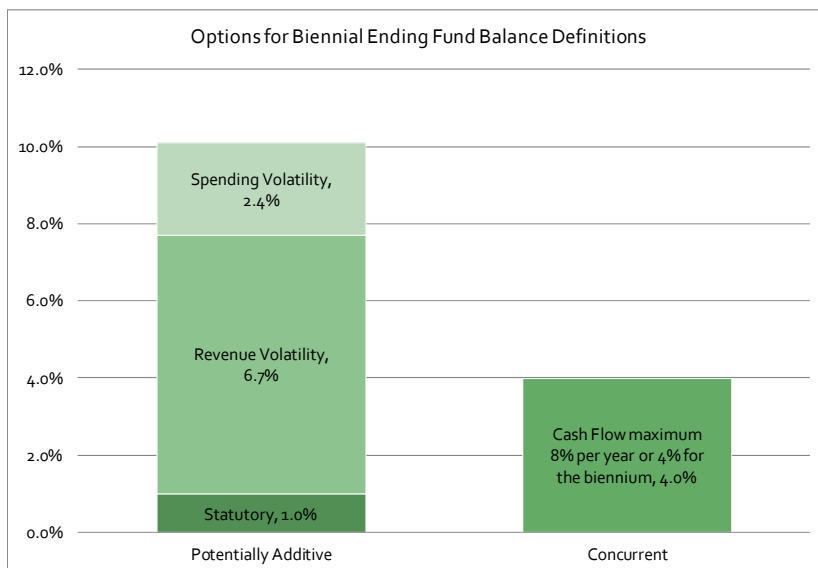
Various arguments could be posed that in strong economic times the need for volatility reserves may be lower. At the same time, one could argue that strong economic times are the times to develop strong reserves to carry the state through times of reduced revenue collections or increased expenditure volatility. The legislature could choose to debate this with or without adopting a definition.

**Surplus:** The amount of funds that are in excess of the level needed for state government, including any need to manage revenue or spending volatility.

**Rainy Day Fund:** funds needed to cover times of volatility of revenues or spending.

The choices can be summarized as follows:

- Statutorily required ending fund balance equal to 1% of spending, which is roughly 1% of revenue.
- Cash flow level 4 to 8% of annual spending. Since cash flow needs are temporary during certain months of the fiscal year, this amount is concurrent with other uses of ending fund balance and does not add to the total to be considered.
- Revenue volatility level of 6.7%. This amount can include the statutory level or be added to it
- Spending volatility level of 2.4%. This amount can include the statutory level or be added to it



Under this analysis, arguably the highest ending fund balance for volatility is 10.1% or roughly \$366 million for the 2013 biennium. However, the legislature could:

- 1) Adopt a definition where the revenue and spending volatility is considered concurrent, meaning the legislature could consider the likelihood of both revenue shortage and unusually high supplemental demand unusual enough to not warrant a reserve fund to cover both risks at one time; and/or
- 2) Consider the statutory amount concurrent with the other sources of volatility. This may require the Governor to use the spending reduction provisions of MCA 17-7-140 in times of anticipated shortfall.

If the legislature adopted this type of analysis, the range of 6.7% to 10.1% of biennial revenues could be defined as the ending fund balance to cover volatility and the statutory requirements. In terms of the current budget, this

translates to between \$243 million and \$366 million of the current ending fund balance that would **not** be considered surplus.

Options available to the LFC are:

- 1) Adopt definitions of volatility reserve and surplus then create a policy that the LFD will report ending fund balance in components of statutory, volatility, and surplus.
- 2) Recommend per its duties in 5-12-205 (7) (aka Global Motions) for the 2013 legislative session that the legislature adopt certain definitions and use these definitions in the LFD publications.
- 3) Recommend a bill to the 2013 Legislature creating a law requiring that certain definitions be used by the LFD and the executive when publishing information regarding the ending fund balance.
- 4) Make no recommendation on definitions.

## **CAPPING REVENUE AND SPENDING CHOICES**

In all cases, capping revenue or spending would need to be addressed by legislation. The following summarizing the options described in the capping revenues and spending section of the report:

- 1) Cap general fund spending to a percentage (e.g. 95% to 98%) of the general fund revenue estimate.
- 2) Cap general fund ongoing or all spending to the long term revenue trend.
- 3) Limit spending of oil and gas revenues
  - a. Limit to an average or some portion of an average of the previous several years' revenue
  - b. Limit to a specific dollar amount and grow with inflation
  - c. Limit based on the price of oil and natural gas that grows with inflation
  - d. Limit to specific level of production
  - e. Limit to a specific dollar amount.
- 4) Limit spending of corporation tax revenues
  - a. Cap at an average over a typical business cycle, such as 7 years
  - b. Cap at some portion of an average of the previous several years revenue
  - c. Limit to a specific dollar amount and grow at the rate of inflation.
- 5) Limit spending of estimated and current year income tax payments.
- 6) Limit spending of estimated, current year income tax payments, and refunds.
- 7) Make no recommendation.