

BUDGET STABILIZATION RESERVE FUND, PART III

**Recommendations for Strengthening
State Finances**

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Strengthening State Finances

This is the third in a series of reports that outline the special set of tools and mechanisms Montana has developed to strengthen state finances. During the 2017 regular session, lawmakers adopted policy to implement a budget stabilization reserve fund (BSRF) for Montana. The BSRF is a significant asset for managing general fund volatility and is the cornerstone of Montana's budget management tools.

The previous two reports focused on [best practices in other states](#) and [comprehensive systems](#) used to manage financial volatility. This report details statistical analysis used to predict long term revenue trends in Montana and makes evidence-based recommendations to strengthen the budget stabilization reserve fund policy. States with multiple financial management tools expand their options for managing financial uncertainty.

[SB 261](#) (2017 regular session) required study of the specific Montana statutory elements for managing volatility:

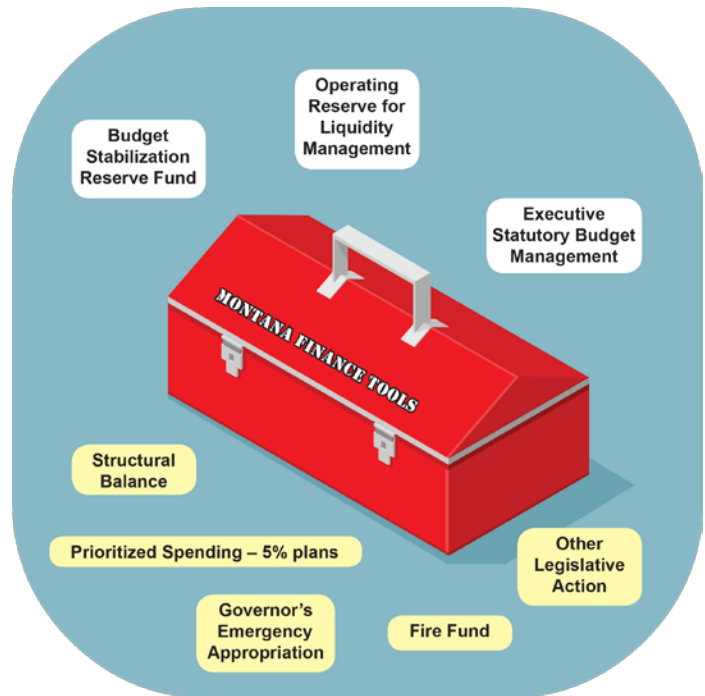
1. Budget Stabilization Reserve Fund
2. Operating Reserve for Liquidity Management
 - a. Cash buffer
 - b. Minimum projected general fund balance
3. Executive Statutory Budget Management
 - a. Spending reductions when deficit forecasted ([17-7-140, MCA](#))

Other State Financial Volatility Tools Available (*but not required element of the study*):

1. Structural Balance
2. Prioritized spending reductions known as 5% reduction plans provided by agencies at time of budget submittal
3. Governor's Emergency Statutory Appropriation
4. Wildland Fire Suppression Fund
5. Other Tools Requiring Legislative Action

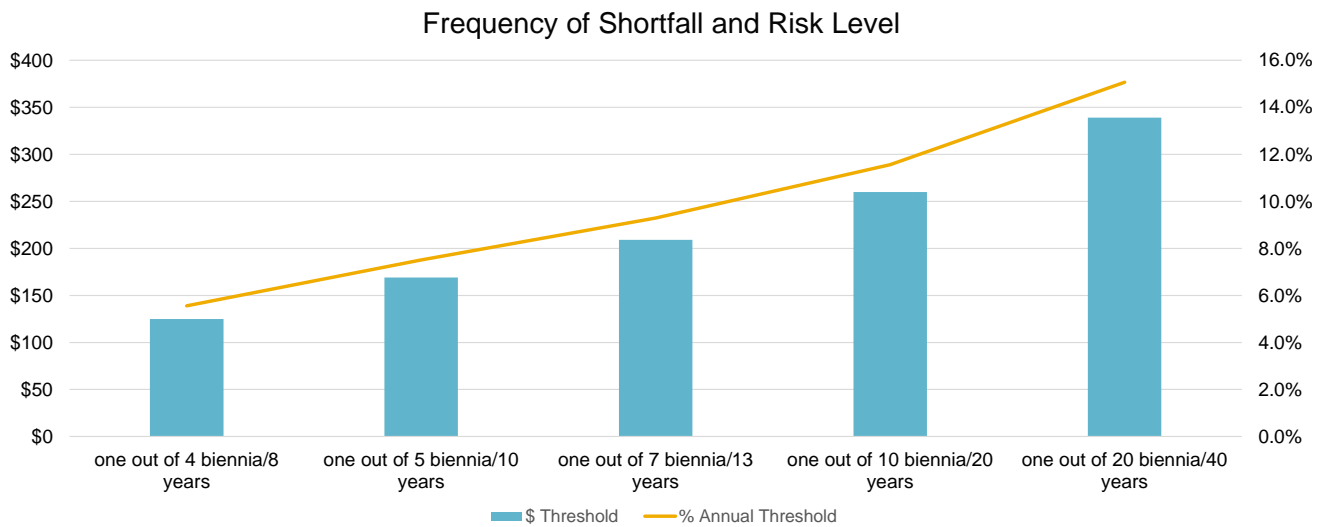
Revenue Risk and Volatility

A [study](#) that attempts to quantify the likelihood and magnitude of a revenue downturn was recently undertaken by the LFD. Various statistical approaches were evaluated to model Montana's long-term revenue trend. Ultimately, a quadratic time trended model was chosen. Deviations above and below this long-term trend, known as the short-term component, represent economic upturns and downturns.



The patterns governing these economic upturns and downturns were then studied in an attempt to predict future frequencies and severities, and which are supported in academic literature.¹

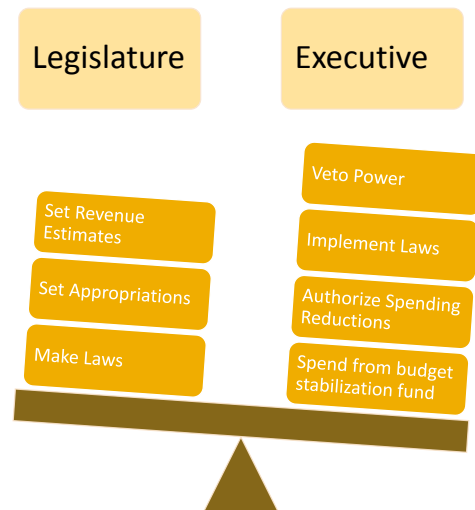
The following graphic shows the frequency that various levels of revenue shortfall occur: higher levels of revenue “shock” occur less frequently. A policy of “scalable response” under various levels of risk is appropriate. Tools to respond to shortfalls should match the level of severity of the shortfall with more tools needed for the Legislature and the Governor to respond to large scale shortfalls.



Finding the Right Balance

Legislative and Executive Branches manage state government finances differently. The constitution grants the responsibility to the executive for implementing laws, including appropriations, passed by the legislature. The constitution also allows the Governor veto and line item veto power. On the other hand, the legislature is responsible for setting appropriations and for keeping those appropriations within available revenues. Article VIII Section 9 of the Montana Constitution states that “Appropriations by the legislature shall not exceed anticipated revenue.”

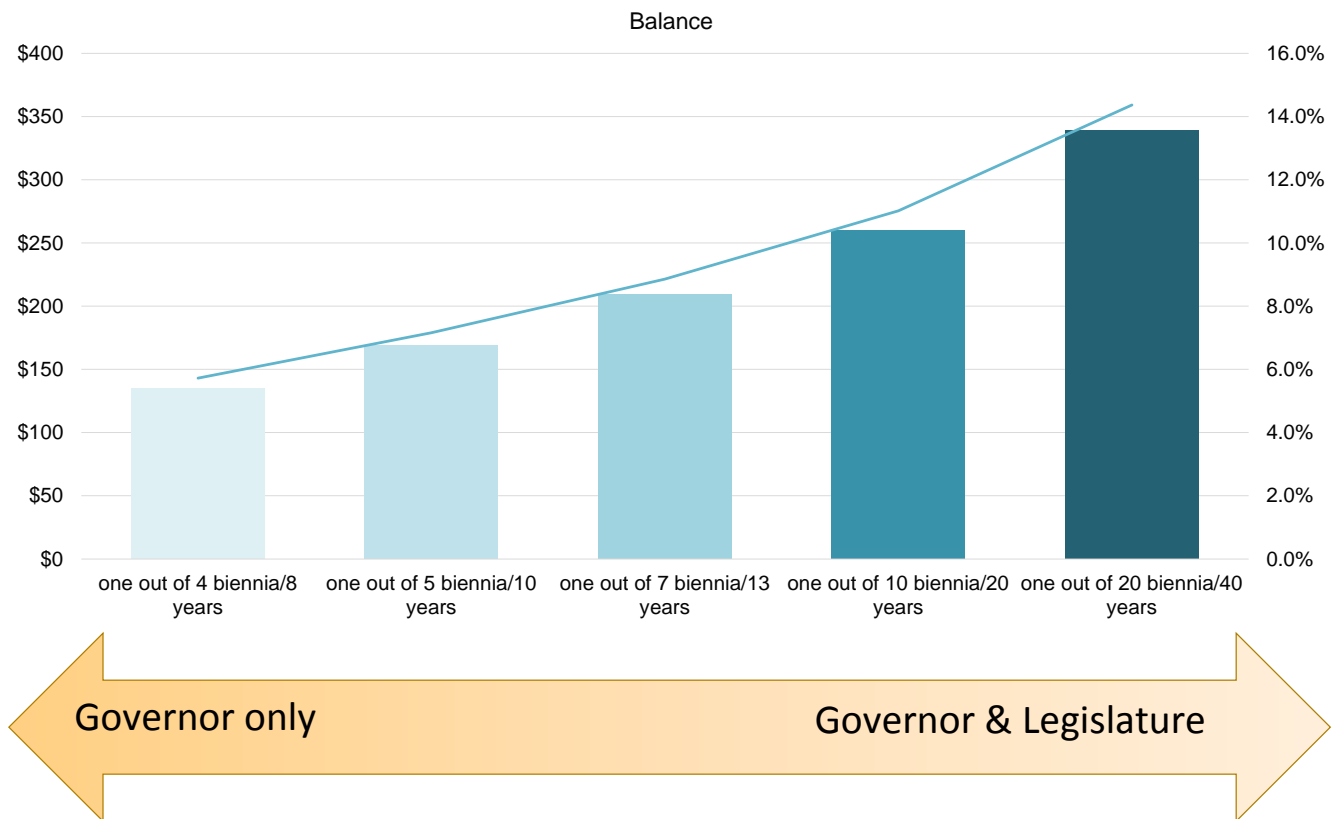
Clearly there is a balance of responsibility and authority directed by the Constitution. However, Montana is unique. Most states have annual sessions and the legislature is scheduled to meet each year. With Montana’s legislature meeting every other year, the Governor has been delegated more independence than most states. Montana currently grants a higher level of autonomy to the Governor compared to other states in two areas: 1) power to cut spending and 2) ability to spend from the budget stabilization fund.



¹ Mikesell, J. L. (2007). Fiscal administration (7th ed.). Belmont, CA: Thomson Wadsworth.

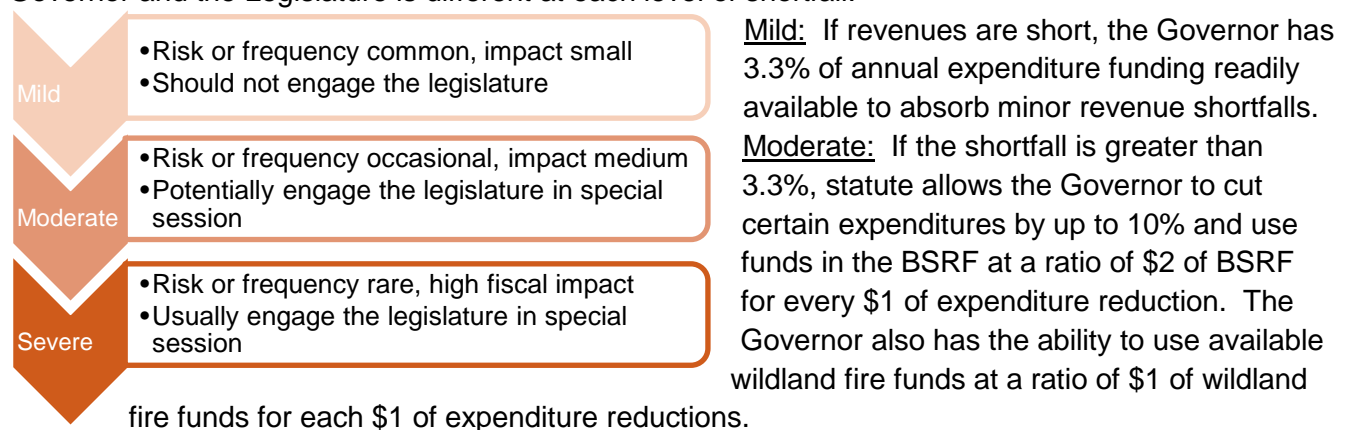
Each state has unique attributes that impact the appropriate balance between the two branches. The right balance for Montana can be informed by the statistical and numeric facts, but ultimately, it is a policy decision for the branches to determine.

Legislature and Governor Partnership in Practice



Scalable response

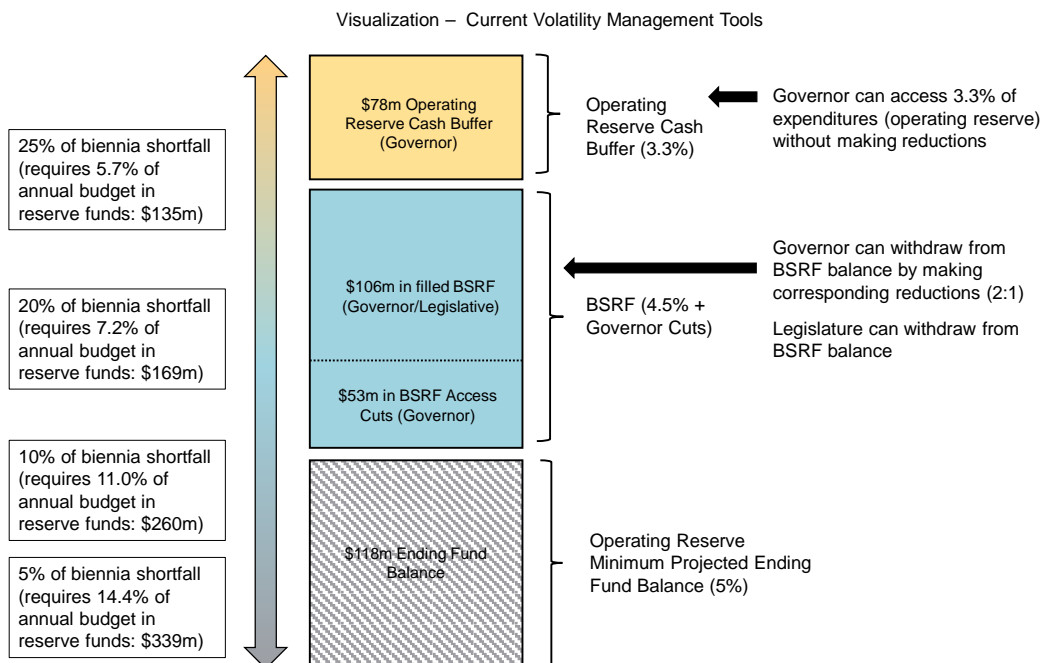
Under current law, Montana has a scalable response to revenue shortfalls. The balance between the Governor and the Legislature is different at each level of shortfall.



Severe: If the Governor cannot reduce spending with current statute and policy enough to rebalance the ending fund balance back up to 5% of annual expenditures, then the Governor may call a special session and engage the Legislature in decision making.

Legislative Decision Points

Establishing a budget stabilization reserve fund in statute provides Montana with an additional tool to manage financial volatility. The next step is to further refine the BSRF rules and to do so while keeping in mind the other tools Montana uses. Below is a graphic that depicts the state's volatility tools under current law. Total reserves for volatility management are 12.8% of annual general fund budget.



Consider the following decision points:

A. How often should the legislature be willing to conduct special session due to fiscal volatility (revenue or expenditure)?

- This decision depends on policymaker preference – do policymakers want to convene special session for mild, moderate, or severe projected shortfalls (or all of the above)?
- In a given two-decade period (about 2.5-3.5 revenue/business cycles), how often should the legislature convene a special session to address unanticipated volatility?

B. What reserve amount should the Governor have access to before making any spending reductions?

- This decision is informed by the practices of other states
- Like 18 other states, Montana uses the biennial budget process, so it is reasonable to have more executive budget management tools than annual states

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- The Governor can now access 3.3% (operating reserve buffer) without making reductions (plus the 5% ending fund balance, which may be spent under some conditions but not budgeted)
 - The goal should be a timely response to fiscal difficulty by both the executive and legislative branches

C. How and to what degree would the Governor be able to access funds in the BSRF?

- This decision is informed by the practices of other states and academic research²
- Current practice permits the Governor to access the entirety of the BSRF with associated reductions (2:1)
- Only 13 states permit the Governor any level of access to their rainy day fund (BSRF)

D. How and to what degree would the legislature be able to access funds in the BSRF?

- This decision is informed by the practices of other states and academic research³
- Current statute does not limit legislative access to the BSRF
- It may be a good idea to prevent running the BSRF to zero in any given biennia due to the risk of an economic contraction lasting several years (multiple biennia)
- Academic research suggests withdrawal rules should place guardrails on reserve fund access and be clearly defined in statute (Elder and Wagner 2005; Gonzalez and Paqueo 2003⁴), but should not be so strict that they prevent use of the fund during a true economic downturn (Zahradnik and Ribeiro 2003⁵)

E. What is the optimal size for the ‘Operating Reserve Minimum Projected Ending Fund Balance’?

- The practical effect of this concept is similar to the practices of other states: Delaware, Rhode Island, and Mississippi limit budgets to 98% of projected revenue in order to guard against high-side revenue estimate errors (97% of projected revenue in Kansas and Nebraska)
- The ‘operating reserve minimum projected ending fund balance’ is only spent when something has gone wrong – when total expenditures outstrip available revenues
- The size of this reserve should be sufficient to cushion against high-side revenue estimate errors but not so large that it “locks up” a large amount of resources that could otherwise be used to add value to Montanans

^{2,3} Refer to the [SB 261 Budget Stabilization Reserve Fund Study: Evidence from Research and Other State Approaches](#) report from the October 2017 Legislative Finance Committee meeting and [Comparison to Other States and Comprehensive Systems to Manage Volatility](#).

⁴ Wagner, Gary A., and Erick M. Elder. "The role of budget stabilization funds in smoothing government expenditures over the business cycle." *Public Finance Review* 33.4 (2005): 439-465. Gonzalez, Christian Y., and Vincent Paqueo. "Social sector expenditures and rainy-day funds." World Bank Working Paper (2003).

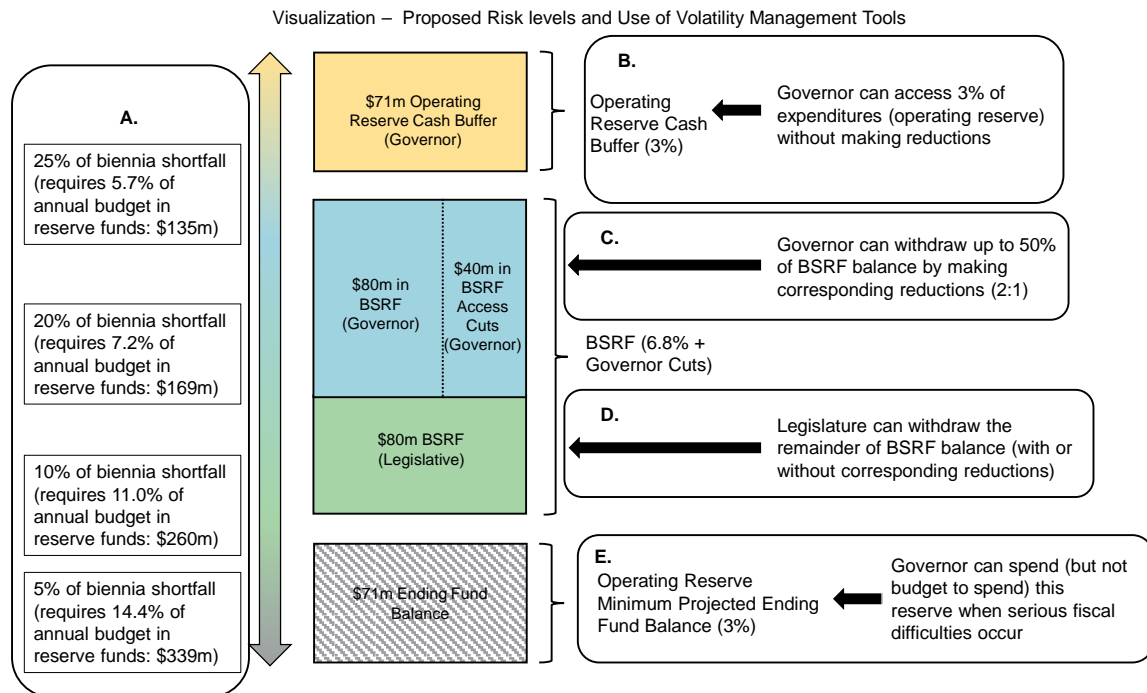
⁵ Zahradnik, Bob, and Rose Ribeiro. "Heavy Weather: Are State Rainy Day Funds Working?." Center on Budget and Policy Priorities, Washington, DC May 13 (2003).

Scenarios Based on Decision Points (A-E)

The scenarios described below assume the following policy changes listed below have been adopted. The legislature can make policy changes along any of the decision points listed above (A-E above or F-H below). **The scenarios below are one set of choices among many possible options. While this configuration makes sense, other policy choice could be made with different priorities.**

- Operating reserve cash buffer is lowered from 8.3% to 6% based on new analysis on cash shown later in the report and recommending policy that will grant ready access to the BSRF cash to the general fund without proof of repayment
- 3.3% to 3% operating reserve cash buffer which allows revenue fluctuations without requiring budget action
- Limit Governor’s access to BSRF (50% of available balance)
- Limit Governor’s access to the wildfire suppression fund (50% of available balance)
- Legislature increased defined size of BSRF from 4.5% to 6.8%
- Reduce Minimum Projected Ending Fund Balance from 5% to 3% to allow revenue fluctuation from reforecast after budget action, similar to practices in other states limiting expenditures to a percentage of the revenue estimate. With 3% ending fund balance, and 3% operating reserve, this budgets a total of 6% for general fund balance to manage cash.
- Maintain reserves for volatility management at 12.8% of annual general fund budget

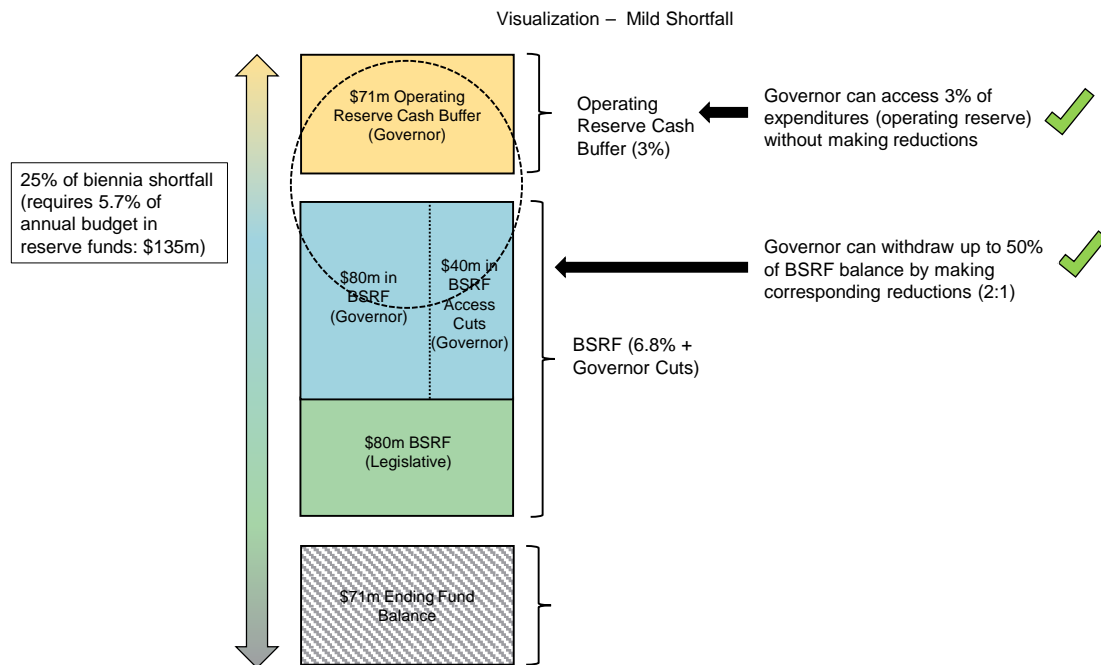
An important caveat – these scenarios assume the BSRF has a significant cash balance. The primary purpose of these reforms is to optimize the BSRF as a tool that can smooth expenditures over the revenue cycle. It is unlikely that the BSRF will have a cash balance at the time of need of this size in the next several years.



Mild Shortfall

In the mild shortfall scenario the Governor can manage the shortfall (projected to be about 5.7% of annual general fund expenditures, or about \$135 million) by utilizing the operating reserve cash buffer

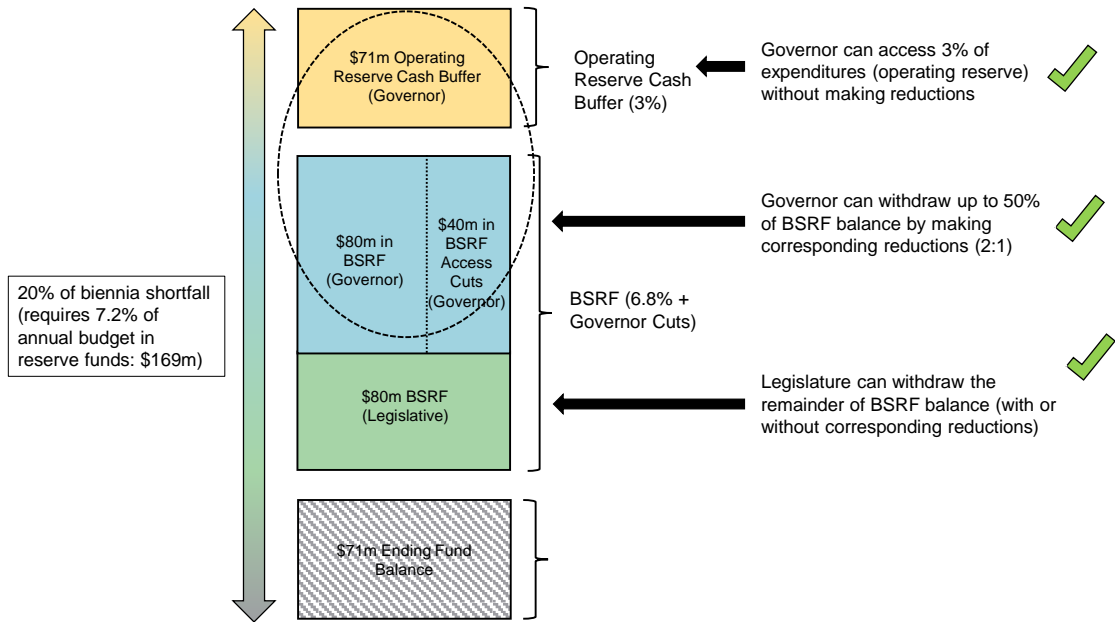
(\$71 million) and up to 50% of the available funds in the BSRF (\$80 million), with associated reductions (\$40 million). In addition to the reductions required for BSRF access the Governor may also make reductions to general fund expenditures. This scenario is expected to occur, on average, in about **1 out of 4** biennia. This scenario could be managed with the tools described and would not require a special session.



Moderate Shortfall

In the moderate shortfall scenario the Governor could manage the shortfall (projected to be about 7.2% of biennial general fund expenditures, or about \$169 million) by utilizing the operating reserve cash buffer and BSRF as described above (\$151 million, plus another \$40 million in BSRF cuts). The Governor could also make reductions not associated with BSRF access. The Governor could choose to operate without further reductions and convene special session if the BSRF balance was not sufficient to meet the shortfall. This scenario is expected to occur, on average, in about **1 out of 5** biennia, or every ten years.

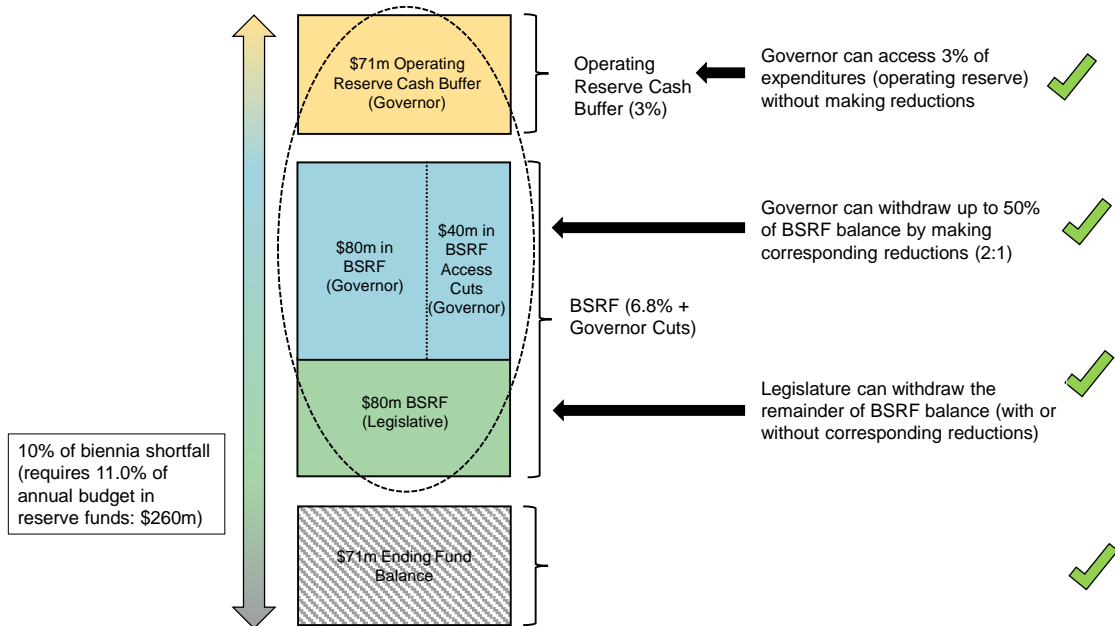
Visualization – Moderate Shortfall



Severe Shortfall

A more severe shortfall scenario would consist of a projected shortfall of \$260 million, or 11.0% of annual general fund expenditures. This scenario is expected to occur, on average, in about **1 out of 10** biennia. This scenario would require special session during which time the legislature could utilize the BSRF. Use of the operating reserve (\$71 million) and BSRF balance (\$160 million assuming a BSRF containing 6.8% of biennial expenditures) with associated cuts (\$40 million) would offer a total of \$271 million, just sufficient to cover the projected shortfall.

Visualization – Severe Shortfall



Other Legislative Decision Points (F-H)

F. Governor Access to Reductions in Expenditures without Legislative Involvement

The [BSRF Part II report, Appendix X](#) discussed statute in 16 other states, including Montana, that allow governors the ability to reduce expenditures without legislative authorization. Three Montana governors have considered expenditure reductions since 2003.

In 2003, Governor Martz decided upon 3.1% of annual reductions (due to timing, only one year was available for reduction). But Governor Martz was not able to meet statutory minimum fund balances, so she ordered a special session and worked with the legislature to reduce budgets and take further steps to balance the budget. Of these reductions the largest agencies were reduced as follows: Health and Human Services was reduced 3.5%, the Montana University System was reduced 3.7% and Corrections was reduced 2.2%.

In 2010, Governor Schweitzer implemented annual reductions equivalent to 4.2% of annual budgeted expenditures and recommended other transfers by the legislature for regular session. Of these reductions the largest agencies were reduced annually (due to timing, only one year was available for the majority of the reductions) as follows: Health and Human Services was reduced 4.3%, the Montana University System was reduced 4.5% and Corrections was reduced 4.0%.

In 2017, Governor Bullock considered 10% reductions for each year of the biennium, which is the maximum allowed, to all programs statutorily accessible by the governor in [17-7-140, MCA](#). Governor Bullock ultimately recommended using approximately one third of the reductions that were potentially available to him (due to timing, two years were available for reductions) or a biennial average of 3.2%. Of these reductions the largest agencies were reduced as follows: Health and Human Services was reduced 4.7%, the Montana University System was reduced 1.0% and Corrections was reduced 1.1%.

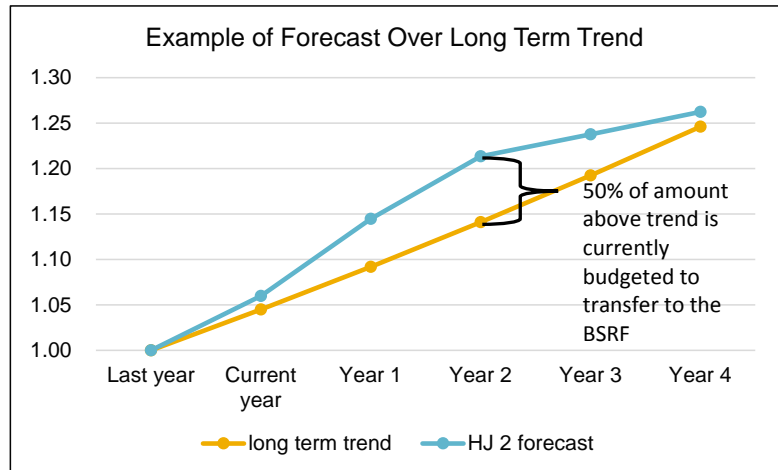
Currently, statute allows this variance in policy choices. Financial policymakers may want to consider adjusting statute to further limit the type and level of access by the Montana governor to reduce expenditures. The legislature may wish to further add guidance to the Governor for reductions such as: limit the level of cuts to certain agencies, and/or limit the maximum reductions allowed to be less than the current 10%. Statutory guidance on the balance between the branches is pivotal in public policy decision making. In addition to statutory guidance, the legislature may choose to implement temporary law to govern reductions in the interim, similar to the plan included in [SB 261](#) of the 2017 session. This law established legislative reductions specific to the 2019 biennium as implemented by statute.

G. Revenue Estimating Process and Deposit Rules into the BSRF

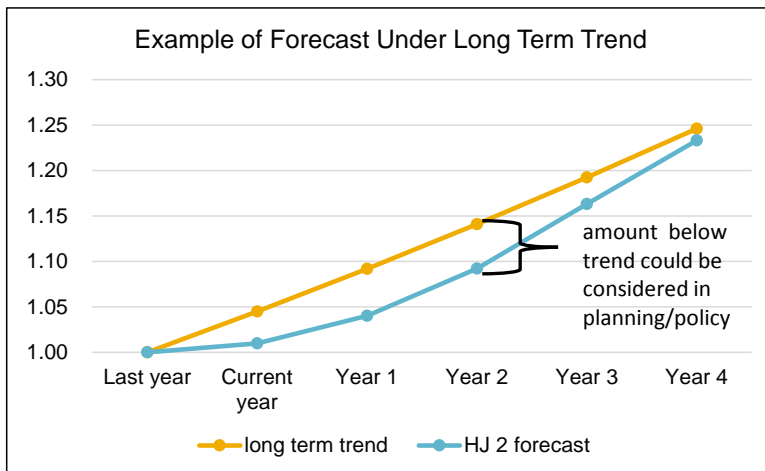
Consensus revenue estimating is a process in which a team of experts with different backgrounds, including members with diverse political ideologies, works together to develop a revenue estimate. In the states that perform consensus revenue estimating, processes vary considerably. One state case study outlined in [Mikesell and Ross \(2014\)](#) documented Indiana's consensus revenue forecast process. In addition, "Utah employs a consensus revenue estimating process for the General and Education Funds, as well as the Transportation Fund and Federal Mineral Lease money. Economists

from the legislative and the executive branches of government agree upon a single set of revenue targets. Both branches then use those targets for budgeting. Each December and February the consensus team releases updated estimates for the current year and projections for the next year. Final targets – including changes associated with legislation – come out in May. The Legislature's Executive Appropriations Committee (EAC) typically adopts these estimates.”⁶ The concept is considered to be a beneficial practice in most academic studies (Poterba [1994]⁷, Mikesell [2007]⁸).

A first step for Montana in improving revenue estimation would be to use the long term trend time squared revenue in practice or in statute to compare the HJ 2 revenue estimate and potentially build in procedures to guide legislative decision making. For example, after July 1, 2021, current law requires that transfers from the general fund to the BSRF occur when actual revenues exceed a particular calculation of long term trend (6 year average growth rate). In practice, this will result in budgeting that requires transfers



to the BSRF when HJ 2 exceeds the long term trend. This will reduce the appropriated level of revenue which is above trend growth to 50% of the amount higher than trend, thus is a statutory requirement to consider long term revenue trend in budgeting.



Other policy choices could be made to further tie or compare HJ 2 forecasts to long term trend. If revenues are forecast below long term trend, policy makers may choose to not fully fund some reserve amounts.

More specifically, policymakers could react to forecasts that are lower than long term trend by:

- Not rapidly refilling reserves during these times
- Not being as concerned if structural balance is slightly negative

Options for long term trend

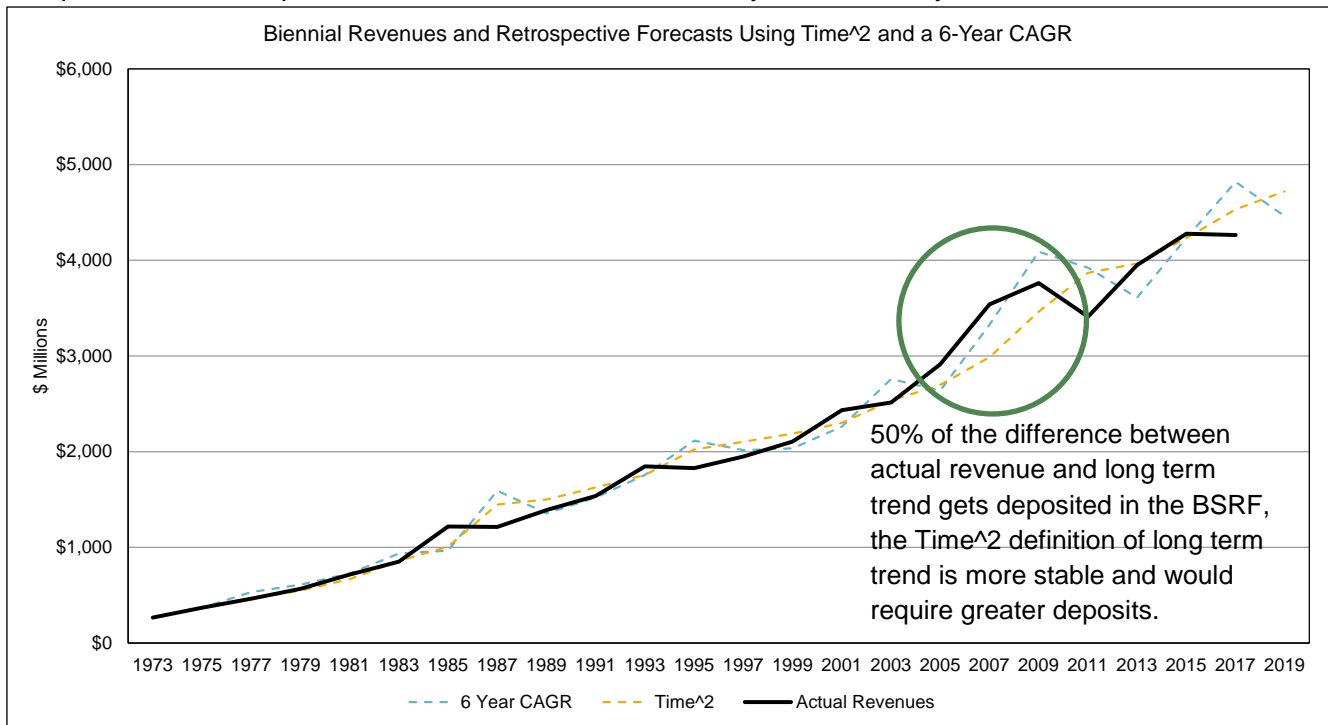
In addition to considering long term trend in budgeting, the policymakers may wish to consider which long term trend comparison best suits the needs of the state. Currently statute requires a six year cumulative average growth (6 year CAGR) comparison for deposits into the BSRF. Statistical

⁶Ball, Jonathan. (2018). E-mail from Utah Legislative Fiscal Analyst to Montana Legislative Fiscal Analyst.

⁷ Poterba, J. M. (1994). State responses to fiscal crises: The effects of budgetary institutions and politics. *Journal of Political Economy*, 102, 799–821.

⁸ Mikesell, J. L. (2007). *Fiscal administration* (7th ed.). Belmont, CA: Thomson Wadsworth.

analysis performed for this study may lead policy makers to reconsider this policy. LFD staff have compared the time squared as used in this statistical analysis to the six year CAGR as shown below:



Example:

As shown in the chart, the time squared calculation is less reactive to current trends and as a result would deposit more revenues to the fund in years of strong revenue growth. For example, during the Bakken oil boom, the CAGR model quickly reflects the growth and would have deposited a combined \$244 million into the BSRF. However, the time squared model would have deposited \$384 million. This time period, as shown above in the green circle, reflects the 2005 and 2007 biennia.

H. Cash Flow Analysis for Operating Reserve Requirements

While the risk associated with borrowing cash is low, managing cash so that under normal circumstances no cash flow loan is required is considered good management. The general fund may borrow from either the market with tax and revenue anticipation notes (TRANS) or internal to state government through accounting transactions from other funds of state government by the Department of Administration. Funds that the Department of Administration can borrow from exceed \$10 billion in total with about \$150 million being state funds that are quickly and easily accessed. In FY 2018, short term borrowing of \$50 million from transactions managed internally resulted in interest payments of about \$75,000.

While the preference would be to not need to borrow short term cash, the consequences of relatively small amounts of short term borrowing are minimal. Planning for the worst case for cash is unnecessary as fund balance will trigger other tools for managing state finances. **The LFD updated analysis indicates that a minimum of a 5.5% beginning fund balance would be adequate for typical cash flow needs, which is satisfied by an operating reserve at 5.5% or greater.**

Detailed Analysis of Cash Need

While current analysis shows the state needing a 5.5% beginning fund balance for cash flow, previous analysis showed 8.0% cash needed to meet cash flow requirements in two-thirds of the years of actual cash flow data. During session, this analysis was used, along with statistical analysis of the volatility of revenue to set the operating reserve level at 8.3%. Actual cash balances over 15 years were used for this analysis, but did not consider specific legislative action impacting individual years.

Since session, cash flow has been evaluated in more detail. In certain (prior) years with unusual significant declines in cash through November, the unusual portion of these declines are largely the result of specific action of the legislature to reduce fund balance for specific purposes in times of excess general fund cash. Therefore, adjusting for these unusual actions is appropriate.

After accounting for unusual activity and using 16 years of data, the low cash month of November reaches an average/median low of 4.8%/4.9% below beginning cash balance and at the 67 percentile, the decline would be 7.3%. Beginning cash in the past 9 years has been 1.8% on average above fund balance; i.e., if fund balance is zero, cash is at 1.8%. In other words, if fund balance is 5.5% (7.3% - 1.8%) or greater, based on past patterns, there is a two out of three likelihood that cash will be sufficient to cover normal flow and no cash loans will be necessary. Currently, the operating reserve is suggested at 8.3% in the general fund balance, which is in addition to cash held in the BSRF and the fire suppression fund. This level appears to be more than necessary to cover the cash needs for the general fund and 5.5% would be sufficient.

Other Things to Consider

States manage fiscal uncertainty differently, but nearly all have a budget stabilization reserve fund (rainy day fund). According to the S&P 500 Top 10 Management Characteristics, “The “Top 10” list of management characteristics associated with Standard & Poor’s highly rated issuers is generally applicable to state and local governments. . .”⁹ Our state currently meets some of the S&P’s top 10 list. The following are remaining options to consider for Montana:

1. Strong long-term and contingent liability management, such as pensions. Montana is in the middle to lower middle of the states in how pension liabilities are managed, further work could be done in this area;
2. A multiyear financial plan in place that considers the affordability of actions or plans before they are part of the annual budget. Biennial budgeting is required in Montana, but full view of the four year or longer budget is not readily available. The LFD will take steps to make this view more accessible to the full legislature;
3. Establishment of a formal debt management policy in statute. Policies of this nature evaluate current and future debt profile and typically require regular publication of a debt affordability study, lays out its purpose and use, indicates a framework including metrics and the entity responsible for its preparation, sets a timeline sufficient for budget preparation and legislative consideration, and includes a clear determination of remaining debt capacity. A formal debt management policy gives policymakers a defined measure of their state’s debt capacity,

⁹ The Top 10 Management Characteristics of Highly Rated U.S. Public Finance Issuers, Sugden and Prunty, page 46, August 2012.

possibly including a dollar amount the state can afford, and informs credit rating agencies that the state is serious about debt management;

4. Develop a pay-as-you-go financing strategy as part of the operating and capital budget process. Strategies of this type can be used for a variety of purposes including budgeting for future operating costs for new facilities, creating a funding reserve for deferred maintenance of existing facilities, or creating a mechanism or fund with which to pay for major construction with cash. Strategies for pre-funding operations and maintenance costs for new building proposals can include requiring agency operating budgets to include future O&M costs when authorizing new construction, and requiring operating endowments for donated buildings. Creation of building reserves for deferred maintenance, major renovations, or new construction can take many forms including but not limited to a dedicated stream of existing or new revenue, deposit of revenues in excess of adopted revenue estimates, or direction of unanticipated revenues such as reversions or one-time settlements and bonuses. The common goal of the building reserves is to create a continuing cash alternative for major capital improvements that have traditionally been funded only through the sale of bonds or one-time-only transfers; and
5. A well-defined and coordinated economic development strategy.