

Enhancing Fiscal Stability and Managing Uncertainty

Rising revenue volatility and soaring oil and gas production increased the difficulty of state revenue forecasting. In general, revenues based on natural resource extraction are highly volatile, as changes in prices and volumes can significantly increase or reduce some of the state's largest revenue sources. Revenue swings in either direction confound efforts to keep a balanced budget; therefore, it is important for policymakers to adopt practices that smooth state finances over shifts in the energy sector and in the business cycle. According to Pew Charitable Trusts, such policies can reduce the need for difficult budget choices, including spending cuts and tax increases during periods of decline, or identifying the best use of surplus dollars when tax collections are flush.

New Mexico oil production value is at an all-time high and continues to grow. In the 2019 legislative session, lawmakers used the historic energy revenue surplus to fund \$1.2 billion in a variety of capital outlay and infrastructure projects, build general fund reserves, and backfill other state funds. Going into the 2020 legislative session, lawmakers will have another opportunity to use nonrecurring surpluses to support and enhance the state's overall fiscal health.

Pew's research finds states can manage uncertainty by regularly studying the causes of revenue volatility and developing budget policies that save money during growth periods for use during down times. This brief discusses the sources of New Mexico's general fund revenue volatility, identifies steps lawmakers have taken to reduce volatility, gives examples of how other states treat revenue surpluses, and discusses additional stabilization options for consideration.

Managing Revenue Volatility

A volatility score is a way to mathematically represent revenue volatility and provide comparisons across revenue sources. The score is calculated based on the standard deviation of the revenue's annual percent change. Pew calculates this score for multiple states for the period from 1998 to 2017, finding New Mexico's revenues to be less volatile than other natural resource-rich states like North Dakota and Wyoming and on par with neighboring states of Colorado and Arizona.

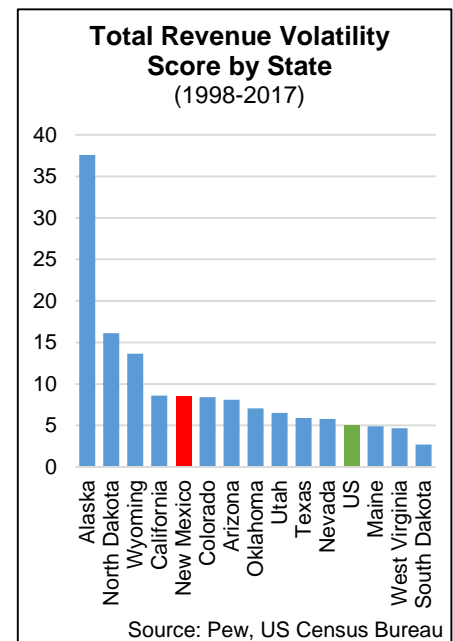
Using a similar method, LFC economists calculated the volatility score of the general fund's major revenue sources from FY05-FY15 and FY15-FY19 to identify changes in revenue volatility in recent years (see Attachment 1). As is the case with most states, corporate income tax (CIT) revenues are the most volatile, since revenues in a given fiscal year are affected by economic conditions, estimated payments, carried forward tax liabilities, and amendments for prior years – making them the most difficult to forecast. However, volatility in energy revenues primarily paid by the oil and natural gas industry is on the rise.

For example, rents and royalty revenues are becoming more volatile, nearly reaching the CIT volatility levels in the period from FY15-FY19. This is because federal royalty payments change with oil and gas production values, and because bonus payments – amounts paid to secure land leases for oil and gas production on

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state and federal lands – are included in this source, which are heavily dependent on market conditions at the time of the sale.

Options for Enhancing the Rainy Day Fund

- Establish formulas directing when and how reserves can be tapped.
- Enact rules that require offsetting budget action in conjunction with rainy day fund withdrawals over certain amounts.
- Require a supermajority vote of the legislature if money is to be withdrawn for purposes other than an economic downturn, health or safety emergency, or unexpected revenue shortfall.
- Enact measures that reserve funds be repaid after being tapped.
- Establish a reasonable and reliable schedule for replenishing rainy day funds after withdrawals.
- Specify a revenue source or sources to provide money automatically for rainy day funds.
- When the economy is expanding and revenues are surging, deposit any resulting surpluses into the rainy day fund.
- Consider the volatility of tax revenues when calculating the adequacy of reserves.
- Deposit excess cash into the rainy day fund when revenues exceed a predetermined amount.
- Use data on historical revenue trends to help stock the rainy day fund.

Note: Checkmarks indicate current practices for the tax stabilization reserve.

Source: Barrett & Greene (2019), *Rainy Day Fund Strategies*, prepared for the Volcker Alliance

Additionally, volatility in gross receipts tax (GRT) revenue is rising, largely due to wider variances in receipts from Eddy and Lea Counties. Drilling and other oil and gas production activity drives receipts in these counties, leading to large gains during price and production booms and large declines when prices and production bust. Technological efficiencies are changing the responsiveness of drilling rigs to oil prices, which creates more uncertainty in GRT revenue projections and compounds the issue of energy volatility.

At the core of New Mexico’s fiscal stability problem is the increasing reliance on volatile revenues from the extractives industry. Although CIT revenues are the most volatile, they make up less than 2 percent of general fund revenue. However, severance taxes and federal royalty payments made up 23 percent of general fund revenues in FY19. When including gross receipts taxes from Eddy and Lea Counties and out-of-state receipts, which are also highly dependent on oil and gas activity, energy-related revenues made up 36 percent of general fund revenue. This is up from a prior 10-year average of 26 percent.

One key way states can reduce revenue volatility is by investing volatile revenue sources into budget stabilization funds. Such funds create a net increase in state savings and allow for more efficient budget decisions, reducing the need for tax increases, painful cuts to programs, or deferred infrastructure maintenance every time revenues dip. Budget stabilizing funds with well-crafted rules for deposit and withdrawals mitigate business cycle fluctuations more effectively than funds with weak rules.

Reducing Uncertainty

Laws 2017 (1st Special Session), Chapter 3 took a significant step toward reducing volatility by sending revenue windfalls from the general fund’s largest oil and gas production tax to the tax stabilization reserve (i.e. the “rainy day fund”). The first deposits into the rainy day fund due to this legislation are estimated to total \$197 million for FY19, which is the amount of oil and gas emergency school tax revenue in excess of the five-year average. This mechanism is projected to deposit another \$224 million into the fund in FY20 and \$253 million in FY21, as soaring oil and gas production is causing an unprecedented surge in this revenue source. The legislation makes general fund severance tax revenue easier to predict, particularly in boom periods, since it caps the general fund distribution to the five-year average. Additionally, should oil and gas production grow less than projected in the consensus revenue estimate, or if price shocks were to cause declines in production or product value, it would first reduce expected inflows into the rainy day fund, providing a buffer to the general fund and lessening any budget cuts that may have otherwise occurred.

Moreover, the tax stabilization reserve is structured to allow excess cash to flow into the fund when revenues significantly exceed budgeted amounts. When the operating reserve – the state’s buffer for minor annual declines from the forecast – reaches 8 percent of the prior year’s recurring appropriation, the excess is deposited into the tax stabilization reserve. Surging oil- and gas-related revenue in the last half of FY18 resulted in a \$527 million transfer to rainy day fund due to this rule. In FY19, the rule is estimated to deposit another \$245 million into the fund. Combined with inflows from excess production tax revenue, the tax

stabilization reserve follows best practices for rainy day funds by establishing specific revenue sources to make automatic deposits into the fund and making deposits during periods of surging revenues.

Statute also requires a two-thirds majority vote of the House and Senate to access the tax stabilization reserve for expenditures other than those necessary to shore up unexpected revenue shortfalls, following another rainy day fund best practice. However, if the tax stabilization reserve grows large enough to meet total reserve targets, it creates a potential incentive to authorize one-time spending from the operating reserve to keep total reserves from growing too large. To prevent this, the state may want to consider establishing a cap for the tax stabilization reserve, allowing automatic deposits into the fund until the fund reaches a target level.

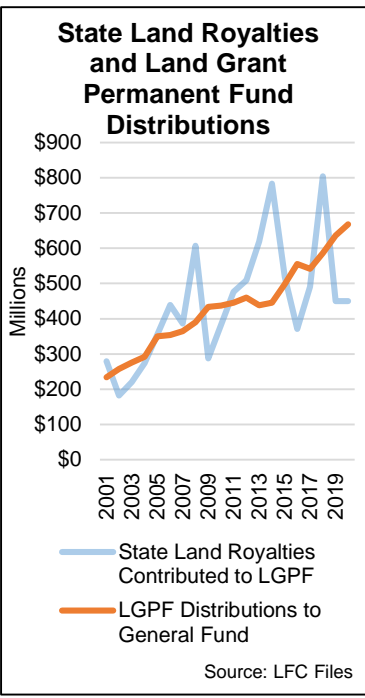
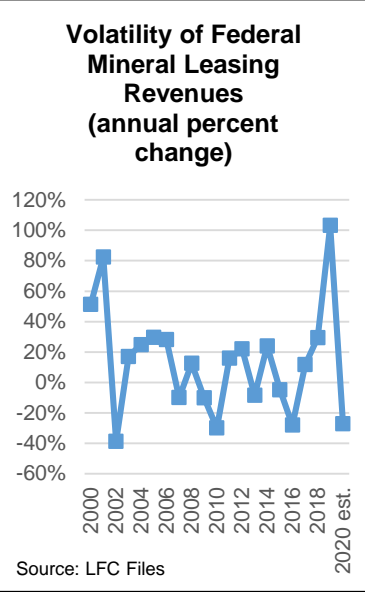
Stabilizing Oil and Gas Royalty Revenues. While lawmakers have taken steps to manage the volatility of severance tax revenue to the general fund, more needs to be done to address the considerable variance from royalties and bonus payments. Currently, all federal mineral leasing (FML) payments are distributed to the general fund, adding to revenue volatility and forecasting difficulties. For example, a record-breaking federal land lease sale in FY19 generated an unexpected revenue windfall of more than \$450 million. Combined with increased oil and gas royalty payments, FML revenues increased 103 percent in FY19 and is projected to decline 27 percent in FY20, as bonus payments will likely return to historical norms.

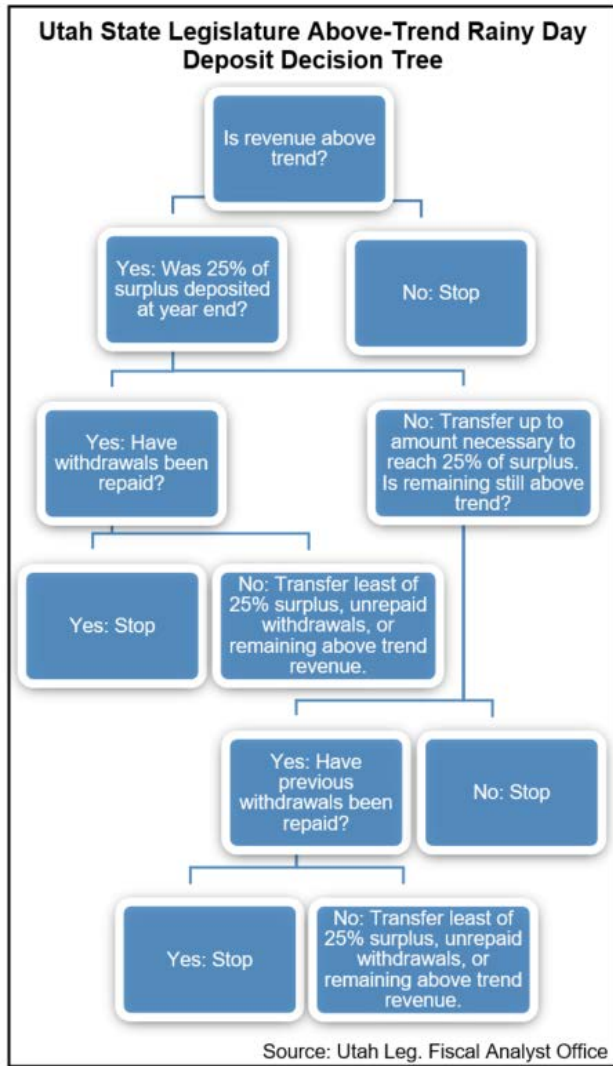
Royalties from production on state lands are similarly volatile; however, the state mitigates this volatility by contributing those revenues to the interest-earning land grant permanent fund (LGPF). The general fund then receives a distribution from the LGPF based on the five-year average value of the permanent fund, creating a smoothing effect that results in a relatively stable general fund revenue source.

Distributing FML payments to a stabilization fund would help smooth federal royalty inflows and invest extractive industry revenues for future use. A bill similar to this effect, which distributed the excess of the five-year average of FML payments to the tax stabilization reserve, passed the House and Senate unanimously in the 2019 legislative session (Senate Bill 401) but was vetoed by the governor. The Legislature could consider passing a similar measure in the upcoming session or consider allowing FML revenue to flow into a new interest-earning stabilization fund from which distributions are made to the general fund. Making deposits into a new stabilization fund would enhance general fund revenue stability and avoid the above-mentioned issue of growing the tax stabilization reserve at the expense of the state’s operating reserve.

Permanent Fund Distributions Enhance Stability. Distributions from the land grant permanent fund (LGPF) and severance tax permanent fund (STPF) are one of the most stable and reliable revenue streams to the general fund. The distribution formula – calculated as a percent of the five-year average of the year-end balance of the fund – makes this revenue source easily predictable for the upcoming budget year, as the actual distribution amounts for the next fiscal year are known prior to the legislative session. The formula also smooths fluctuations in market activity and oil and gas royalty contributions, partially insulating the general fund from sudden shocks. Additionally, the permanent funds provide an intergenerational revenue stream that allows current resource extraction to benefit future New Mexicans.

Federal mineral leasing revenues are distributions from the federal government to New Mexico primarily for the state’s share of production on federal land and bonuses for federal land lease sales in the state. Oil and natural gas production accounts for over 95 percent of federal royalty payments in New Mexico, making it particularly sensitive to changes in oil and gas prices and production levels.





Exercising Fiscal Restraint

Revenue collections in FY19 were nearly \$1.6 billion above the preceding 10-year trend (see Attachment 2), and revenue projections for FY20 and FY21 are more than \$1 billion above trend. Revenues significantly above trend may not be sustainable over time. The last time the state saw strong above-trend revenues was in the years preceding the Great Recession. Revenues from FY06 to FY08 were more than \$750 million above trend but revenues in the following years fell significantly below trend by about \$820 million in FY10 and \$465 million in FY11. The analysis suggests policy makers proceed with caution when allocating the current revenue surge to recurring expenditures.

Some states use trend analyses to manage long-term revenue fluctuations, avoid committing short-term gains to long-term obligations, and assure adequate and justifiable resources in reserve. For example, when revenue estimates are above the 15-year trend, Utah requires some of the surplus be used to restore specified fund withdrawals and maintain reserves. Virginia sets a threshold for above-normal general fund revenue at growth that exceeds the prior six-year average growth rate and deposits half into the state’s rainy day funds. Each of these policies are intended to prevent the state from becoming overly dependent on revenue growth that is one-time, unexpected, and/or unsustainable over time.

Potential Uses of One-Time Revenues. Some states set rules for how to use identified nonrecurring revenues. For example, Louisiana requires nonrecurring revenues be spent on retiring bonds in advance, making payments against the unfunded liability of the public retirement systems, funding capital outlay projects, making deposits into the budget stabilization fund, making deposits into its coastal protection and restoration fund, or funding new highway construction for which federal matching funds are available.

Maintaining Adequate Reserves to Protect Against Revenue Shortfalls. Stress testing of the August 2019 consensus revenue estimate indicates general fund energy-related revenues could fall by \$1.4 billion in a given fiscal year due to an oil price shock and production decline – equivalent to about 18 percent of FY20 recurring appropriations. However, this would not be the extent of general fund losses, as the state also experienced declines in corporate and personal incomes taxes during the last oil price crash.

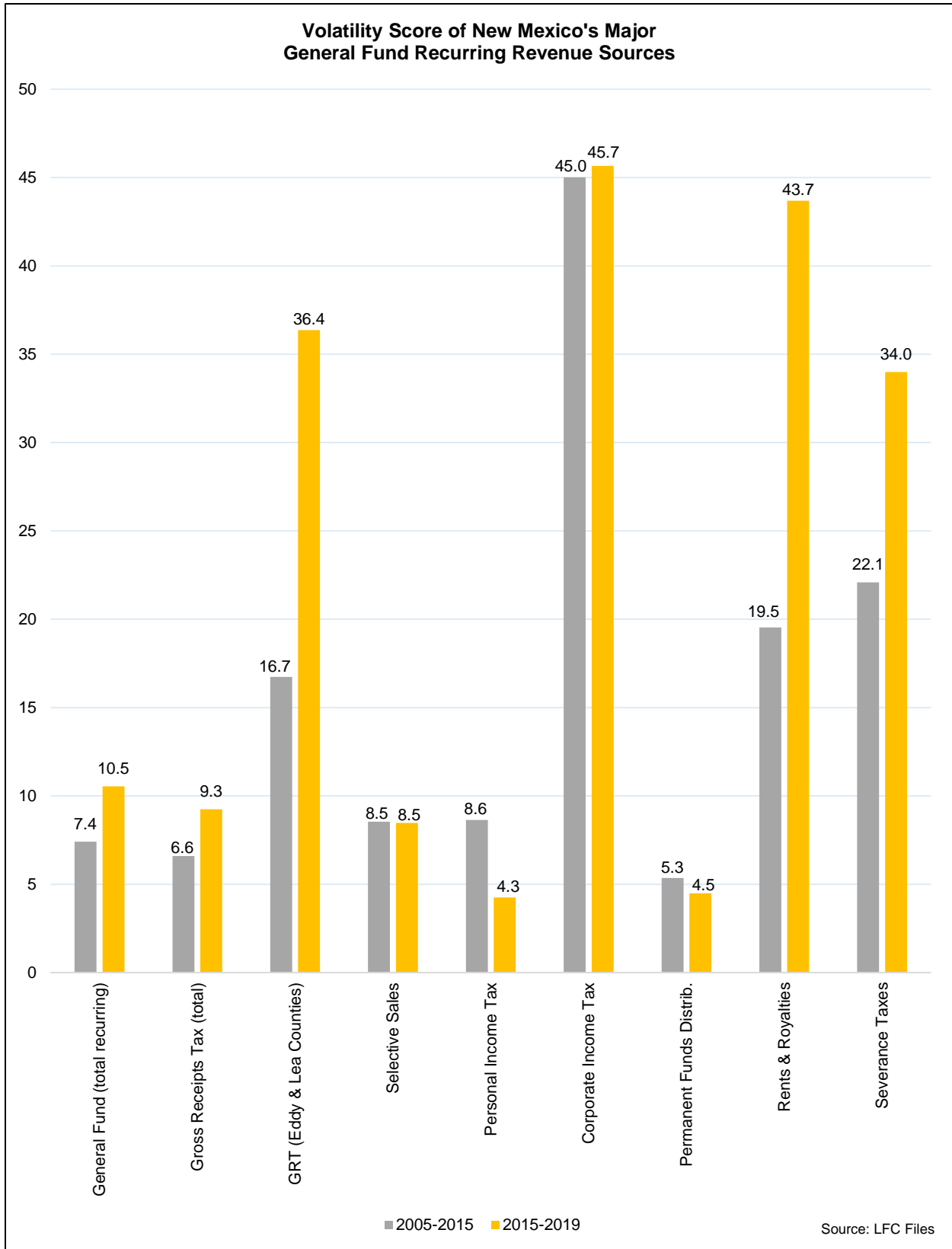
Therefore, LFC economists recommend the state maintain at least 20 percent to 25 percent in general fund reserves to reduce the need for budget cuts in the event of a downturn. Still, if a decline spanned multiple fiscal years, it could deplete reserves and the state would have to take additional measures to balance the budget, such as reducing spending, sweeping cash balances, or raising taxes.

Long-Term Risks to State Revenues

Global oil markets are changing dramatically. The advent of renewable energy technologies, electric vehicles, and growing pressures to decarbonize means oil is facing significant competition for consumer demand. At the same time, the supply side of the oil market is experiencing its own revolution. The advent of new technologies unleashed productivity in the Permian Basin and unlocked new reserves of oil that are expected to continue for the next 20 to 30 years.

Economic research on oil demand in the long-term is largely inconclusive, but scenarios include global oil demand falling before 2025 or as late as 2040, dependent upon global uptake of new energy sources and the rate at which public policies encourage such a shift. Although such risks to the industry are on the distant horizon, the State should prepare for such a scenario through economic and fiscal diversification, financial planning, and investing in long-term savings.

Attachment 1 – Volatility Analysis



Note: A volatility score is a way to mathematically represent revenue volatility and provide comparisons across revenue sources. The score is calculated based on the standard deviation of the revenue's annual percent change. LFC economists calculated the volatility score of the general fund's major revenue sources from FY05-FY15 and from FY15-FY19.

Attachment 2 – Trend Analysis

