



2021 LONG-TERM BUDGET

EXECUTIVE APPROPRIATIONS COMMITTEE
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ISSUE BRIEF

OVERVIEW

The Utah Legislature has always been forward thinking and acting. For this reason, Utah is in better fiscal shape than most states. However, lawmakers here face many of the same challenges as other states. Of particular concern are rising inflation rates impacting construction costs and health care costs for both state employees and Medicaid populations, population growth, and a changing and aging workforce.

Because of these pressures, lawmakers need quality information about the long-term impact of their budget decisions. By considering the long-term implications of budget decisions, states can cope with economic volatility, and potentially make government more efficient. A multi-year perspective can also help legislators utilize the best tools available during economic downturns.

Both long-term and short-term forecasts are important in the budget process. Smart budgeting utilizes short-term trends in both revenue and expenditures together with a plan to develop set-asides for long-term goals. Furthermore, long-term forecasts are less affected by brief shifts in the economy than the short-term forecasts we use in the annual budget process. To prepare for the future and address long-run issues, Utah legislators have directed the Office of the Legislative Fiscal Analyst to implement a three-year comprehensive budget evaluation process. [UCA 36-12-13\(e\)\(ii\)](#)

1. In the first year, the office evaluates revenue volatility for the sources of revenue that fund the state budget. These sources are evaluated against the adequacy of state rainy day funds and, when necessary, recommendations are made to adjust the capped percentages diverted into state rainy day funds.
2. In the second year, the office develops a five-year long-term budget for programs appropriated from major funds and tax types. This report meets that requirement.
3. In the third year, the office prepares a budget stress test that compares estimated future revenue to, and expenditures from, major funds and tax types under various potential economic conditions.

Our results indicate that, in aggregate, expenditures are expected to outpace revenues in the next five years. However, when we consider the \$1.8 billion in one-time expenditures built into the FY 2022 budget, the results show a sustainable growth trajectory where ongoing revenue and ongoing expenditures are almost aligned.

LONG-TERM BUDGET PROJECTIONS

During the second year of each three-year cycle, [UCA 36-12-13\(e\)\(ii\)](#) requires the Office of Legislative Fiscal Analyst to prepare a report on the long-term budget for programs with funding appropriated from major funds and tax types.

Long-term budgets combine forecasts with strategy. They help legislators evaluate the ability of revenue growth to maintain long-term budget objectives. Long-term budgets can identify potential problems from current policy paths, but policymakers always have options to eliminate those problems. Multi-year forecasting also helps identify whether budget gaps or related problems stem from the revenue or spending side of the budget.

Demographic changes such as general inflation and the aging population are putting increasing pressure on Utah's budget, while the future course of health care costs, one of the largest parts of Utah's budgets, continues an upward trajectory. Also, the federal government, which provides over one-quarter of Utah's state revenues, is a risk to the state budget, particularly with the unprecedented injection of federal COVID relief funding in the past year and a half. As federal funding levels change, the state could face difficult decisions about funding programs to maintain the current level of services. The state is also faced with an aging infrastructure and rising construction costs.

METHODOLOGY

Statistical models called ARIMA models, or autoregressive integrated moving average models, were used to forecast revenues and expenditures from historical data. ARIMA models are time-series models that forecast future values based on the forecast errors of past predicted values compared to actual values.

We collected fifteen years of historical data from the State of Utah Annual Comprehensive Financial Reports.

The revenue side includes forecasts for:

1. Sales tax
2. Income tax
3. Corporate tax
4. Motor fuel tax
5. Federal funds
6. All other revenue sources

The expenditure side includes forecasts for:

1. Public education
2. Higher education
3. Social services and environmental quality
4. Transportation
5. All other expenditures

We chose these categories to align with the data available through the Division of Finance.

Independent variables we included in the regression models:

1. Population
2. A recession dummy variable
3. Indicators for strength of the economy
 - a. Payroll
 - b. Employment
 - c. Personal Income

We added an ad hoc inflation adjustment to the forecasts.

RESULTS

Based on the results of the ARIMA models, in aggregate, expenditures are expected to outpace revenues in the next five years. However, when we consider the \$1.8 billion in one-time expenditures built into the FY 2022 budget, the results show a sustainable growth trajectory where ongoing revenue and ongoing expenditures are almost aligned. This is shown in Charts 1 and 2.

Chart 1: Total Revenues vs. Expenditures

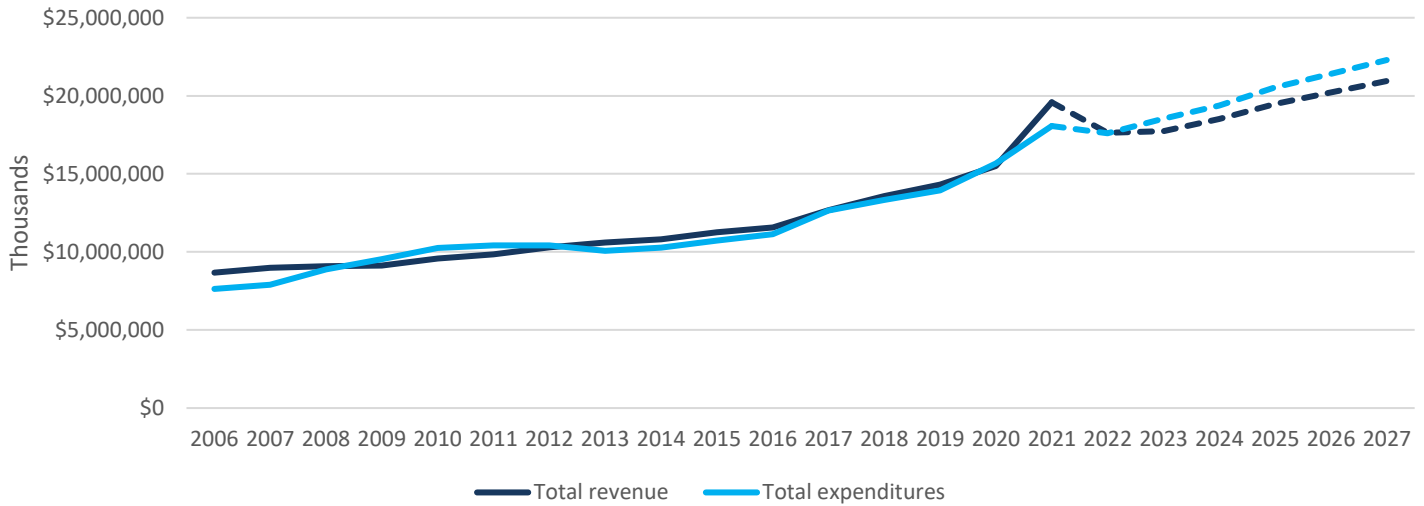
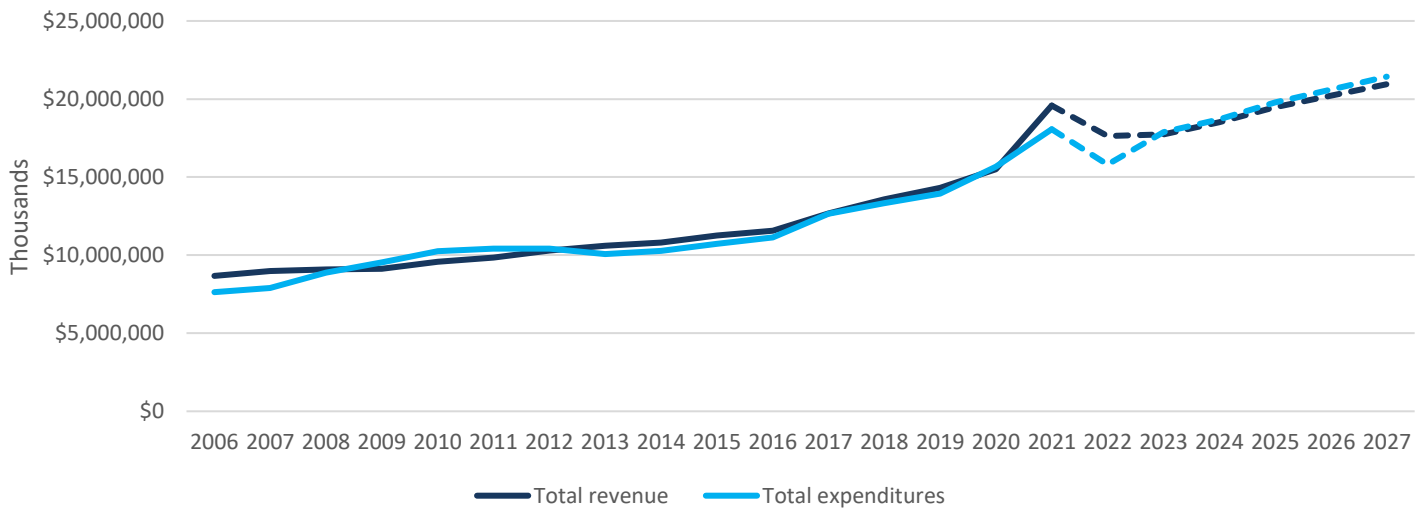
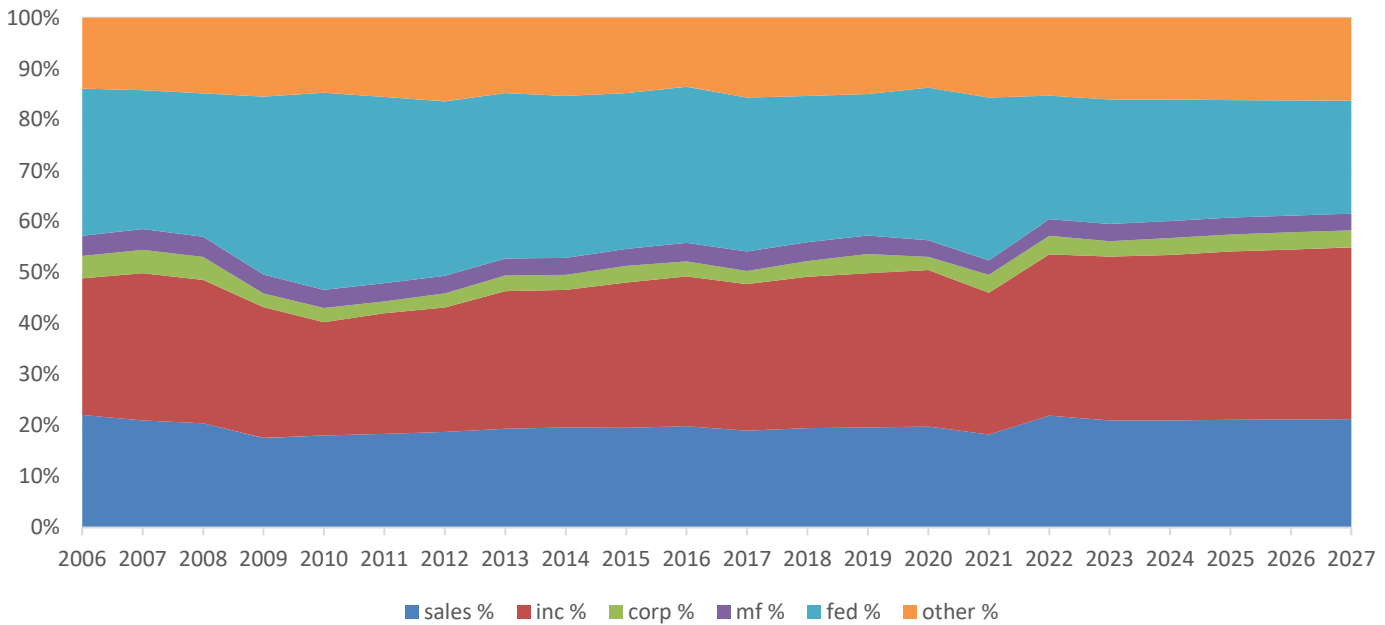


Chart 2: Total Revenues vs. Expenditures (Less \$1.8 Billion One-time Spending in FY 2022) [Should you also subtract one-time revenue?]



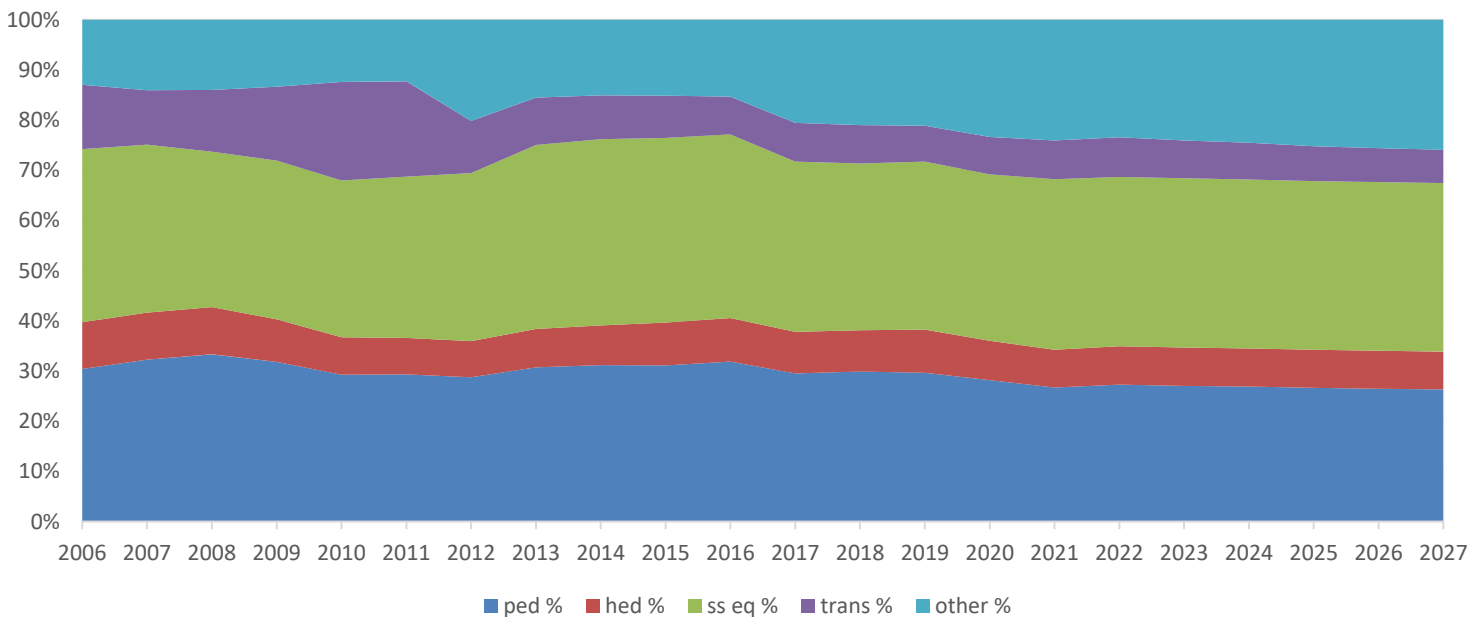
Charts 3 and 4 show the categories of revenue and expenditure where the growth is occurring. On the revenue side, income and sales tax remain above their historical levels over the five years of the forecast. Federal funds start above their historical levels but come down to historical levels by the end of the forecast period. Motor fuel tax and all other tax revenue as a percent of total revenue remain flat over the forecast period.

Chart 3: Revenues as a Percent of Total



On the expenditure side, most categories are largely flat over the forecast period. We project a slight decrease in public education expenditures over the forecast period, as well as a slight increase in the “other” category, which includes capital and debt service, public safety and corrections, general government, heritage and arts, and business and economic development. The public education totals are likely picking up the slowing growth rate of school age population.

Chart 4: Expenditures as a Percent of Total



LIMITATIONS OF THE 2021 LONG-TERM BUDGET

Forecasting state revenue and expenditure during a COVID-19 pandemic has been a challenging task. The unprecedented influx of federal funds in response to the COVID-19-induced recession is likely overstating revenue collections for the State and the economy as a whole. Additionally, the forecast is impacted by current consumer and business spending trends. Where we initially thought consumers and businesses would spend federal funds as

they were received, instead they have chosen to hold onto those funds. For this reason, we expect the effects of the pandemic could continue through FY 2026.

THE IMPORTANCE OF CONDUCTING A LONG-TERM BUDGET FORECAST

1. By preparing early, states can develop strategies to implement policy objectives in the long term.
2. Long-term planning can help reduce uncertainty in state budgets.
3. Looking ahead helps create a sustainable long-term path.
4. Planning for the future helps legislators see what is affordable under current trends.
5. A long-term budget is another way to check for value at risk and to then compare that value at risk against budget buffers.