STRESS TESTING THE UTAH STATE BUDGET

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WHY STRESS TEST?

- 1. Manage the business cycle
- 2. Set sustainable expectations and meet them
- 3. Avoid crisis-driven policy decisions
MAJOR CHALLENGES FOR STATE GOVT IN ECONOMIC DOWNTURN

- Unstable economic conditions impact government revenues
- Tax policy amplifies economic instability
- Expenditure patterns are countercyclical
- Expectations of stable government services

ISSUES TO DECIDE

- Formal vs. informal process
- High-level vs. lots of detail in revenue and expenditure categories to review
- Selecting economic assumptions
- Defining budget reserves
- Choosing time frame
- Speculating about future / considering probabilities
- Communicating results
UTAH’S STRESS TESTING PROCESS
REVENUE

1. Scenario Assumptions
2. Each entity estimates revenue using different assumptions
3. Estimates were made for sales tax, income tax, corporate tax, and “other”
4. Come to consensus

UTAH GENERAL FUND—EDUCATION FUND REVENUE STRUCTURE
NEW IN THE 2016 PROCESS

- Used economic scenarios purchased from Moody’s Analytics—adverse, severely adverse, stagflation
- Expanded from two to five-year timeframe
- Assumes baseline grows for 12 months after recession begins, then flattens as governments begin to respond
1. Scenario Assumptions

2. Each entity estimates expenditures using different assumptions. Same timeframe as revenue.

3. Estimates were made for enrollment-driven programs (Medicaid, higher ed, public ed), but added employee retirement costs

4. Come to consensus
IT TAKES A TOOL KIT

- Value at Risk
- Severity/Volatility
- Revenue Enhancement
- Operating Reserves
- Working Rainy Day Funds
- Spending Reductions
- Structural Balance
- Cashflow Management
- Budgetary Reserves

NEW ON BUFFERS

- Removed the Permanent School Fund as a potential buffer
- Counted ongoing sources for every year in which they are available, adjusted for debt repayment in early years
- Considered spending cuts and tax increases
INVENTORY OF BUFFERS

- **Easily Accessible**: Unappropriated balances, operating reserves, buildings working rainy day fund
- **Moderately Accessible**: Nonlapsing balances, roads working rainy day fund, capital improvements relief valve
- **Somewhat Difficult to Access**: Capital improvements corpus, restricted fund balances
- **Difficult to Access**: Formal rainy day funds
- **Very Difficult to Access**: Permanent trust funds

RISKS VS. BUFFERS

![Graph showing Total Value at Risk over five years and Reserves/Offsets ($billions) with different access levels for various economic conditions and financial risks.](image-url)
CUTS AND TAXES

<table>
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<tr>
<th>Session</th>
<th>FY</th>
<th>Budget Cuts</th>
<th>Revenue Increases</th>
<th>Revenue Multiplied</th>
<th>Shortfall</th>
<th>Cut % Shortfall</th>
<th>Rev % Shortfall</th>
<th>GF/EF Budget</th>
<th>Cut % Budget</th>
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CONCLUSIONS

- 5-year risk between $2.3 billion and $3.7 billion
- Informal buffers = $2.5 billion (2016)
- Formal buffers = $500 million (2016)
- Cuts/Revenue ~ $0.3 billion - $1.3 billion
- Bonding erodes largest informal buffer (working rainy day fund)
- Working rainy day fund creates future commitments