State of Utah

Investor Presentation

December 2018
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Executive Summary

- Utah’s economy, demographics, and resources are among the strongest of any state in the nation.
- Utah’s budget management tools include structural balance, reserves, tracking and forecasting, and stress testing.
- Utah’s financial performance has resulted in Aaa/AAA/AAA ratings and strong debt ratios.
- Key credit strengths of the State include:
  - Economic fundamentals that have long-run trajectories outpacing national projections.
  - A diversified and growing economy.
  - Conservative fiscal and debt management policies, which allow for successful and timely action when addressing any budgetary imbalances.
  - Well-funded retirement and OPEB plans.
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I. ECONOMIC SUMMARY
Demographics

- The Utah population CAGR from 1940 to 2010 was just shy of 25%
- Projections call for the CAGR from 2010 to 2060 to exceed 12%
- From 2010 to 2016, the population change in Utah was more than double the national level and 3rd highest among all states

State of Utah Age Distribution

<table>
<thead>
<tr>
<th>Population Age Group</th>
<th>% of Total Utah Population</th>
<th>National Ranking</th>
</tr>
</thead>
<tbody>
<tr>
<td>Pre-school age (under five years old)</td>
<td>8.3</td>
<td>1st</td>
</tr>
<tr>
<td>School age (five to 17)</td>
<td>21.9</td>
<td>1st</td>
</tr>
<tr>
<td>Working age (18-64)</td>
<td>59.2</td>
<td>49th</td>
</tr>
<tr>
<td>Retirement age (over age 65)</td>
<td>10.5</td>
<td>50th</td>
</tr>
</tbody>
</table>

Fertility Rates – Utah vs. United States

<table>
<thead>
<tr>
<th>Year</th>
<th>United States</th>
<th>Utah</th>
</tr>
</thead>
<tbody>
<tr>
<td>2000</td>
<td>1.67</td>
<td>2.12</td>
</tr>
<tr>
<td>2010</td>
<td>1.55</td>
<td>2.12</td>
</tr>
<tr>
<td>2015</td>
<td>1.67</td>
<td>2.12</td>
</tr>
</tbody>
</table>

Source:
1. Values may not sum to 100% due to rounding.
2. Ratings are from most favorable to least favorable, highest to lowest.
3. Fertility Rate defined as the estimated number of lifetime births expected per woman if she were to live to the end of her child-bearing years and give birth to children in alignment with the prevailing age-specific fertility rates (Source: OECD)
Source: National Center for Health Statistics
Employment

• Utah nonfarm total employment has grown 244% since 1976 and 33% growth since 2010

• Employment Growth has occurred in all but 4 of the last 40 years
• Employment Growth has exceeded 2% in all but 6 of the past 30 years

Unemployment Rate in Utah and the USA: January 2007 - October 2018

• Historical relationship between Utah and USA
  ○ Unemployment rates: Utah lower than USA
  ○ Labor force participation: Utah higher than USA

Unemployment Rate (%)

Utah Labor Force Participation (%)

Source: U.S. Bureau of Labor Statistics
Note: Vertical axis does not begin at zero in Nonfarm Employment graph
Source: Moody’s.
Employment (cont’d)

- Employment in Utah is diverse
- Recent growth has occurred broadly across sectors

Distribution of Employment: Utah and the U.S., 2017

<table>
<thead>
<tr>
<th>Category</th>
<th>Utah %</th>
<th>US %</th>
</tr>
</thead>
<tbody>
<tr>
<td>Government and Government Services</td>
<td>12.8%</td>
<td>11.3%</td>
</tr>
<tr>
<td>Retail Trade</td>
<td>8.4%</td>
<td>6.9%</td>
</tr>
<tr>
<td>Professional, Scientific, and Technical</td>
<td>4.3%</td>
<td>3.7%</td>
</tr>
<tr>
<td>Administrative and Support and Waste</td>
<td>13.3%</td>
<td>10.5%</td>
</tr>
<tr>
<td>Construction</td>
<td>4.6%</td>
<td>4.3%</td>
</tr>
<tr>
<td>Real Estate and Rental and Leasing</td>
<td>7.7%</td>
<td>7.1%</td>
</tr>
<tr>
<td>Wholesale Trade</td>
<td>4.2%</td>
<td>3.7%</td>
</tr>
<tr>
<td>Arts, Entertainment, and Recreation</td>
<td>3.3%</td>
<td>3.1%</td>
</tr>
<tr>
<td>Management of Companies and Enterprises</td>
<td>1.1%</td>
<td>1.1%</td>
</tr>
<tr>
<td>Mining, Quarrying, and Oil and Gas</td>
<td>5.7%</td>
<td>5.6%</td>
</tr>
<tr>
<td>Utilities</td>
<td>2.2%</td>
<td>2.1%</td>
</tr>
</tbody>
</table>

Utah Nonfarm Employment Change 2018 YoY Estimates

<table>
<thead>
<tr>
<th>Category</th>
<th>Estimate</th>
</tr>
</thead>
<tbody>
<tr>
<td>Construction</td>
<td>6.5%</td>
</tr>
<tr>
<td>Information</td>
<td>5.1%</td>
</tr>
<tr>
<td>Education &amp; Health Services</td>
<td>3.9%</td>
</tr>
<tr>
<td>Trade, Trans., Utilities</td>
<td>3.4%</td>
</tr>
<tr>
<td>Leisure &amp; Hospitality</td>
<td>3.3%</td>
</tr>
<tr>
<td>Financial Activity</td>
<td>3.2%</td>
</tr>
<tr>
<td>Professional &amp; Business Services</td>
<td>3.2%</td>
</tr>
<tr>
<td>Manufacturing</td>
<td>2.6%</td>
</tr>
<tr>
<td>Other Services</td>
<td>2.5%</td>
</tr>
<tr>
<td>Mining</td>
<td>2.1%</td>
</tr>
</tbody>
</table>

Source: U.S. Bureau of Labor Statistics
Source: GOMB Analysis of Bureau of Economic Analysis Data
Income

- Median household income exceeds the national level
- Personal income has consistently grown

**Median Household Income (in current dollars)**

- **Utah**
- **United States**

**Annual Change in Utah Personal Income**

Source: U.S. Census Bureau
Source: U.S. Bureau of Economic Analysis; Forecast: Revenue Assumptions Working Group
Real Estate and Construction

- Median home prices in Utah are at an all-time high and decreased relatively modestly during the recession.

- Construction activity is at record levels:
  - Residential construction is near a high point.
  - Nonresidential and additions/alterations/repairs have set new highs.

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Median Sales Price of Existing Single-Family Homes

- United States
- Utah

Utah Construction Permit Value

- Residential
- Nonresidential
- Additions, Alterations, Repairs

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Source: National Association of Realtors (NAR): Real Estate Outlook; Moody’s Analytics
2015-2018 Capital Investment

<table>
<thead>
<tr>
<th>Number of Firms</th>
<th>New Jobs Created</th>
<th>Capital Investment ($)</th>
<th>Square Footage</th>
</tr>
</thead>
<tbody>
<tr>
<td>126</td>
<td>43,246</td>
<td>4,796,127,086</td>
<td>12,652,145</td>
</tr>
</tbody>
</table>

Facility Function/Type
- Multi-Function: 22%
- Manufacturing: 17%
- Data Center: 14%
- Special Use: 12%
- Professional Office Space: 11%
- Warehouse: 10%
- Back Office: 14%
- Other: 12%

Location
- Salt Lake City: 22%
- Eagle Mountain: 17%
- Delta: 13%
- Brigham: 12%
- Draper: 12%
- Lehi: 10%
- West Jordan: 9%
- Hyrum: 7%
- Hyrum: 6%
- Other: 2%

Source: edcUtah
New Capital Investment

Salt Lake City International Airport

• The $3.6 billion project is being built in phases with the first phase to open in 2020 and the second phase to be completed in 2024. The first phase will include a new terminal, a new parking garage with double the capacity, and portions of the two new concourses. The new concourses will be able to accommodate larger planes and all gates will have boarding bridges.

• The project will create more than 24,000 jobs and generate more than $1 billion in wages over the construction period.

• The New airport is designed to accommodate 23 million passengers and will replace the five existing concourses with two linear concourses—the North Concourse and the South Concourse—which will be connected by a passenger tunnel.
The State has issued $295.8 million of the $1 billion authorization and plans three more issues across 2019, 2020, and 2021.

As part of a new world-class training facility for RSL, this development will also house the new stadium for the RSL affiliate, Real Monarchs, of the USL. It will seat 5,000 people.
Housing Developments

**Brixton Flats**

2200 S 700 E Salt Lake City

Brixton Flats is a 4-story mixed-use residential project located in the Sugarhouse area near the S-Line streetcar. The project calls for 93 units in one building and a connected building for retail that bring back the return of the Bicycle Center. dbURBAN Communities continues to develop quality urban infill.

**Garden Lofts**

100 W 600 S Salt Lake City

Wasatch plans to tear down an older Royal-Inn hotel to make way for a modern apartment project. The development is set to be five-floors of affordable housing.

**Hi-Grade Apartments**

2100 S West Temple South Salt Lake City

Hi-Grade Apartments is a modern apartment building to be built in 'downtown' South Salt Lake City. This project will be 100 units of residential and nearly 1,500 square feet of ground-level retail, making it a very well designed project.
650 Main Office Buildings
600 S Main Street Salt Lake City
Two ten-story office buildings have been proposed for downtown Salt Lake extending to the south. The two buildings will surround a huge parking structure that will have a courtyard in front. Expected to have nearly 320,000 sq/ft of very high end office space.

Pluralsight Headquarters
65 Highland Drive Draper
Pluralsight plans to move its headquarters from Farmington to a new set of buildings in Draper.

Hardware District
400 W North Temple Salt Lake City
The Hardware Village development will include three new buildings, consisting of a mix of residential (two 6-story buildings), commercial and office space (10 stories) at the site of the current Salt Lake Hardware building.
II. FISCAL OPERATIONS AND BUDGET OVERVIEW
## State Tax System

- The State’s tax revenues are derived from various taxes and fees. These fees and taxes are regulated by the Legislature.

<table>
<thead>
<tr>
<th>Type of Tax</th>
<th>Current Rate</th>
</tr>
</thead>
<tbody>
<tr>
<td>Individual Income Tax</td>
<td>4.95%</td>
</tr>
<tr>
<td>Corporate Tax</td>
<td>4.95%</td>
</tr>
<tr>
<td>General State Sales Tax</td>
<td>4.70%</td>
</tr>
<tr>
<td>Unprepared Food Items Sales Tax</td>
<td>1.75%</td>
</tr>
<tr>
<td>Residential Fuels Sales Tax</td>
<td>2.00%</td>
</tr>
<tr>
<td>Additional Taxes and Fees</td>
<td></td>
</tr>
<tr>
<td>Unemployment Compensation Tax</td>
<td></td>
</tr>
<tr>
<td>Workers’ Compensation Insurance Premium Tax</td>
<td></td>
</tr>
<tr>
<td>Various Highway Users’ Taxes</td>
<td></td>
</tr>
<tr>
<td>Motor and Special Fuels Tax</td>
<td>$0.294 per gallon</td>
</tr>
<tr>
<td>Other Taxes and Fees</td>
<td></td>
</tr>
<tr>
<td>Property Tax (Authorized, currently abated)</td>
<td>Not levied since 1974</td>
</tr>
</tbody>
</table>

1. Effective April 1, 2019, the General Sales Tax rate changes to 4.85%
2. Effective January 1, 2019, the Motor and Special Fuels Tax rate changes to $0.30 per gallon
Recent Steps to Modernize Utah’s Tax Code

• Index gas tax for inflation (SB 276 2017 General Session)
• Index motor vehicle registration fees for inflation, pilot project for road user charges, state funds for transit (SB 136 2018 General Session)
• Re-emphasize property tax for schools (HB 293 2018 General Session)
• Single sales factor apportionment (HB 293 2018 General Session)
• Reduce individual income tax and corporate income tax rate from 5.00% to 4.95% (HB 293 2018 General Session)
• Online sales tax (SB 2001 2018 2nd Special Session)
• Sales tax exemption for manufacturing (SB 2001 2018 2nd Special Session)
• Federal corporate tax conforming changes (HB 2002 2018 2nd Special Session)
• Utah personal exemption and net operating loss carryback elimination (HB 2003 2018 2nd Special Session)
Continuing State Tax Modernization in 2019

• Tax modernization major topic of upcoming session
• Governor’s budget set aside $200 million in unallocated funds to be used for tax reductions in conjunction with tax modernization
  • Establish a lower uniform sales tax rate (below 3.90% from FY 2020 4.85% rate)
  • Broaden the sales tax base to tax consumption services
  • Reduce state sales tax earmarks
  • Create an income tax credit or rebate to offset sales tax regressivity
  • Continue to emphasize transportation user fees through direct road user charges, fuel taxes, and registration fees
• Tax e-cigarettes similar to other tobacco products
Recent Tax Changes: SB 136 – Transportation Governance

- SB 136 passed during the 2018 General Session
- Increased electric and hybrid vehicle registration fees
- All registration fees indexed for inflation
- Changed management structure of the Utah Transit Authority and provided state funds for transit
- Road user charge pilot project
- In the long-run, will shift transportation funding from strictly General Fund and gas tax, towards directly charging highway users for use of roads
Recent Tax Changes:

• **SB 2001: Online Sales Tax Amendments**
  – Passed during the 2018 Second Special Session, in response to the Supreme Court’s *South Dakota v. Wayfair* decision
  – Requires out of state sellers who receive more than $100,000 in revenue from Utah consumers to collect and remit sales tax to the State of Utah. Estimated increase in sales tax receipts of $60 million annually
  – Provides manufacturing machinery and equipment exemption. Estimated decrease in sales tax receipts of $60 million annually
  – Revenue neutral goal – expected new revenue from remote sales tax collections offset by sales tax exemption for manufacturing

• **HB 2002: Repatriation Tax Amendments**
  – Makes changes to corporate income tax deferred foreign income provisions
Federal Tax Reform Impacts State Revenue

• Estimated $80 million increase in individual income tax revenue, primarily due to personal exemption elimination

• This $80 million offset in the 2018 General Session by corporate income tax apportionment reform and cut in the individual and corporate tax rate from 5.00% to 4.95%

• Legislation in the summer special session provided $30 million in individual income tax relief by creating a Utah personal exemption

• Legislation in the special session also resulted in an estimated increase in FY19 income tax revenue of $58 million, primarily from corporate income

• The increase in corporate income tax is primarily from repatriated income
Ballot Initiatives

- A voter initiative can only change state law and state law can be amended by the Legislature; only the Legislature can initiate the process to amend the Utah Constitution
- Three of the four November 2018 ballot items passed, including (1) Medicaid expansion, (2) Redistricting Commission, and (3) Medical marijuana
- Two have sizable fiscal impacts
  - **Medicaid Expansion**
    - Estimated $89 million state sales tax increase (4.70% to 4.85% rate)
    - Estimated 128,000 newly eligible in FY 2020
  - **Medical Marijuana**
    - $15 million ongoing costs, funded with fee revenue
- Ballot opinion question did not pass:
  - Gas tax increase and funding shift for education

Source: Governor’s Office of Management and Budget
Income Tax

- The State has experienced strong income tax growth and income tax reform was implemented in 2008
Sales Tax

- While retail activity has been changing, total taxable sales have been increasing.
Fuel Tax Collections

- Effective January 1, 2016, the State increased its motor and special fuels tax rates from $0.245 to $0.294 per gallon.
- Effective January 1, 2019, the State will increase its motor and special fuels tax rates to $0.300 per gallon.

Source: Governor’s Office of Management and Budget
Property Tax Base – Well Aligned With Economy

- Property tax is not imposed by the State, however it significantly impacts education funding formulas.
FY 2018 General Fund/Education Fund

- GF/EF revenue collections $252 million above forecast
- $260 million GF/EF surplus (including budget savings) before reserve account deposits
  - $50 million General Fund
  - $210 million Education Fund
- Budget reserve account transfers
  - $64.6 million Education Fund Budget Reserve Account
  - $30.4 million Medicaid Growth Reduction and Budget Stabilization Account
  - $6.1 million General Fund Budget Reserve Account
  - $0.9 million Wildland Fire Suppression
## Outlook – Utah Economy & State Revenues

### Select Economic Indicators: October 2018

<table>
<thead>
<tr>
<th>Indicator</th>
<th>CY 2018 (e)</th>
<th>CY 2019 (f)</th>
<th>CY 2020 (f)</th>
</tr>
</thead>
<tbody>
<tr>
<td>Population</td>
<td>1.9%</td>
<td>1.8%</td>
<td>1.7%</td>
</tr>
<tr>
<td>Nonfarm Employment</td>
<td>3.3%</td>
<td>3.1%</td>
<td>3.0%</td>
</tr>
<tr>
<td>Unemployment Rate</td>
<td>3.1%</td>
<td>3.0%</td>
<td>3.2%</td>
</tr>
<tr>
<td>Total Personal Income</td>
<td>6.1%</td>
<td>5.4%</td>
<td>5.3%</td>
</tr>
<tr>
<td>Taxable Retail Sales</td>
<td>6.0%</td>
<td>9.2%</td>
<td>5.1%</td>
</tr>
<tr>
<td>Residential Permit Value</td>
<td>5.3%</td>
<td>8.2%</td>
<td>-4.7%</td>
</tr>
</tbody>
</table>

### Select Revenue Estimate Growth Rates: November 2018

<table>
<thead>
<tr>
<th>Revenue</th>
<th>FY 2018</th>
<th>FY 2019 (f)</th>
<th>FY 2020 (f)</th>
</tr>
</thead>
<tbody>
<tr>
<td>Total GF/EF Revenue</td>
<td>11.4%</td>
<td>7.5%</td>
<td>4.7%</td>
</tr>
<tr>
<td>Individual Income Tax</td>
<td>10.8%</td>
<td>7.5%</td>
<td>5.4%</td>
</tr>
<tr>
<td>Corporate Income Tax</td>
<td>36.4%</td>
<td>14.3%</td>
<td>-2.3%</td>
</tr>
<tr>
<td>Sales Tax</td>
<td>8.7%</td>
<td>6.0%</td>
<td>4.7%</td>
</tr>
</tbody>
</table>

Source: Revenue Assumptions Working Group and Consensus Revenue Forecast
Unrestricted General Fund / Education Fund Budget $7.9B - FY 2020 Proposed

Funding Sources
- Income Tax: 58.7%
- Corporate Tax: 6.5%
- Sales and Use Tax: 27.1%
- Other Sources: 7.7%

Funding Uses
- Education Fund: 65.9%
  - Public Education: 49.0%
  - Higher Education: 17.1%
- General Fund: 34.1%
  - Other Social Services: 7.9%
  - Public Safety & Corrections: 11.3%
  - Debt Service: 0.5%
  - Medicaid: 7.0%
  - Transportation: 0.2%
  - Other: 7.0%

Source: Governor's Office of Management and Budget
Total Funds Budget
$19 B - FY 2020 Proposed

Source: Governor's Office of Management and Budget
Budget Totals

- Utah’s strong economy has boosted funding levels for various programs

General Fund / Education Fund Spending (Billions)

- Public Education
- Social Services
- Law Enforcement / Justice
- Transportation
- General Government
- Higher Education
- Medicaid and CHIP
- Capital Budget (Including Education Buildings)
- Debt Service
- Transfers/Other

Source: Governor’s Office of Management and Budget
Budget Totals

- The growth in the 2019 budget reflects strong economic growth and voter-initiated Medicaid expansion.
State Revenue

- From 2010 to 2018, General Fund and Sales Tax Earmarks increased by $978 million - an increase of 47%

General Fund and Sales Tax Earmarks

$ Billions

Source: Governor’s Office of Management and Budget
Medicaid Expansion in Utah

- **2017 Limited Expansion Legislation (HB 437)**
  - Coverage to parents 50-65% FPL & adults w/out dependents ~0% FPL.
  - $17 million in GF, $14 million in hospital assessment
  - CMS waiver approved, 8,000 newly eligible enrolled.

- **2018 Coverage Gap Legislation (HB 472)**
  - Coverage to all adults under 100% FPL. Beneficiary work participation requirements, spending & enrollment cap options.
  - $11 million in additional hospital assessment & redirected GF savings sources.
  - CMS waiver unapproved at 90/10 ACA match rate
Medicaid Expansion in Utah

- Proposition 3: Utah Decides Healthcare Act
  - Coverage to full expansion population 0-138% FPL
  - Includes additional uncontemplated ACA provisions: mandatory annual provider rate increases at regional CPI, benefit and enrollee cost sharing floors as of January 2017, no county cost sharing requirements.
  - Program begins April 1, 2019
  - Estimated 128,000 newly eligible and 19,000 traditionally eligible but unenrolled in FY 2020
  - $88.8 million sales tax revenue (4.70% to 4.85% in FY 2020)
  - Costs projected to exceed resources in FY 2021
Medicaid

- The Affordable Care Act and Medicaid Expansion impact Medicaid enrollment

Medicaid and CHIP Programs Enrollment and % of UT Population

- Traditional Medicaid Enrollment Only (inc. PCN)
- CHIP Enrollment Only
- Limited Utah Expansion Population
- Prop 3 Woodwork
- Prop 3 Newly Eligible
- All Medicaid & CHIP % of Utah Population
- Fiscal Year Unemployment Rate
Utah State Correctional Facility: Status Update

Complete
- Schematic Design
- Wildlife mitigation plan
- Widen frontage road
- Clear and grub site
- Design Development

Partial Completion
- Import soil (final grade 2021)
- Wick drains and surcharge (50% complete)
- Install waterline to prison site (Spring of 2019)

Funding Plan
- The December 2018 special session directed surplus revenues be used to fund near-term prison development cost

Procurements completed
- Campus security electronics
- Campus detention equipment
- Precast detention cells
- Substation

Construction documents complete
(construction to start in January 2019)
- Men’s maximum security facility
- Medical and mental health facility
- UDC warehouse
- Offsite sewer, water, roads, pump stations
- Offsite natural gas, fiber optics, electrical power
Possible Future Debt

• Transportation
  • General Obligation Bonds, Series 2019
    • Pricing the week of January 14, 2019
    • Additional transportation issuances anticipated in coming years

• Water
  • Lake Powell Pipeline timing and amounts highly uncertain – earliest possible timing appears to be 2022
  • Governor has recommended conditions to be met prior to authorizing project
  • 2015 cost estimates of $1.1 to $1.8 billion project (likely higher now), a portion will be funded or financed locally
III. BUDGET MANAGEMENT
Management Tools

• **Structural Balance**
  - Understand revenue and expenditure trends
  - Separately identify ongoing and one-time revenues and expenditures

• **Cash Flow** — timing of spending compared to revenues (appropriate in later year when possible)

• **Spending Reductions** (3% last recession)

• **Revenue adjustments** — tax base, tax rate, fees (nearly 1% last recession)

• **Budget Reserves:**
  - Unappropriated balances
  - Operating reserves
  - Capital budget — “Working rainy day funds” (cash-funded capital projects) and unused bonding capacity
  - Nonlapsing balances
  - Restricted fund balances
  - Formal rainy day funds
  - Permanent trust funds
Revenue Tracking and Forecasting

• Formal revenue point consensus forecasts—November and February
• Formal revenue updates with consensus range forecast—June and October
• Formal monthly revenue collection reports after 3\textsuperscript{rd} month of fiscal year
  • New process with GOMB and LFA releasing a joint budget-focused revenue collection report
  • Tax Commission report now focuses on revenues only
• Informal internal tracking processes
## Monthly State Revenue Snapshot 11 | 2018

Based on the Utah State Tax Commission Monthly Revenue Summary (Report TC-23)

### General Fund

<table>
<thead>
<tr>
<th>Fund</th>
<th>Projected Growth Rate - October Estimates</th>
<th>Actual Growth Rate</th>
<th>Projected Range in Collections Through 4 Months</th>
<th>Actual Collections</th>
<th>Condition</th>
</tr>
</thead>
<tbody>
<tr>
<td>Sales &amp; Use Tax</td>
<td>4.1%</td>
<td>7.2%</td>
<td>$727,000,000 - $755,000,000</td>
<td>$763,172,608</td>
<td>Above target range</td>
</tr>
<tr>
<td>All Other Sources</td>
<td>1.1%</td>
<td>12.0%</td>
<td>$157,000,000 - $171,000,000</td>
<td>$187,721,283</td>
<td>Above target range</td>
</tr>
<tr>
<td>Subtotal General Fund</td>
<td>3.5%</td>
<td>8.8%</td>
<td>$950,893,891</td>
<td></td>
<td></td>
</tr>
<tr>
<td>Sales &amp; Use Tax Set-Asides</td>
<td>4.8%</td>
<td>7.1%</td>
<td>$208,000,000 - $217,000,000</td>
<td>$217,027,151</td>
<td>Above target range</td>
</tr>
</tbody>
</table>

### Education Fund/USF

<table>
<thead>
<tr>
<th>Source</th>
<th>Projected Growth Rate - October Estimates</th>
<th>Actual Growth Rate</th>
<th>Projected Range in Collections Through 4 Months</th>
<th>Actual Collections</th>
<th>Condition</th>
</tr>
</thead>
<tbody>
<tr>
<td>Individual Income Tax</td>
<td>3.2%</td>
<td>6.3%</td>
<td>$1,132,000,000 - $1,200,000,000</td>
<td>$1,200,927,846</td>
<td>Above target range</td>
</tr>
<tr>
<td>Corporate Tax</td>
<td>-18.6%</td>
<td>101.6%</td>
<td>$47,000,000 - $78,000,000</td>
<td>$153,803,928</td>
<td>Above target range</td>
</tr>
<tr>
<td>All Other Sources</td>
<td>-1.6%</td>
<td>95.7%</td>
<td>$6,000,000 - $11,000,000</td>
<td>$13,993,499</td>
<td>Above target range</td>
</tr>
<tr>
<td>Subtotal Education Fund</td>
<td>1.0%</td>
<td>12.9%</td>
<td>$1,368,725,273</td>
<td></td>
<td></td>
</tr>
<tr>
<td>Subtotal GF/EF</td>
<td>1.9%</td>
<td>11.2%</td>
<td>$2,319,619,164</td>
<td></td>
<td></td>
</tr>
</tbody>
</table>

### Transportation Fund

<table>
<thead>
<tr>
<th>Fund</th>
<th>Projected Growth Rate - October Estimates</th>
<th>Actual Growth Rate</th>
<th>Projected Range in Collections Through 4 Months</th>
<th>Actual Collections</th>
<th>Condition</th>
</tr>
</thead>
<tbody>
<tr>
<td>Motor Fuel Tax</td>
<td>3.6%</td>
<td>0.7%</td>
<td>$122,000,000 - $127,000,000</td>
<td>$121,192,535</td>
<td>Below target range</td>
</tr>
<tr>
<td>Special Fuel Tax</td>
<td>9.6%</td>
<td>4.2%</td>
<td>$48,000,000 - $54,000,000</td>
<td>$48,224,813</td>
<td>On target</td>
</tr>
<tr>
<td>Other</td>
<td>-0.8%</td>
<td>13.9%</td>
<td>$28,000,000 - $29,000,000</td>
<td>$32,410,000</td>
<td>Above target range</td>
</tr>
<tr>
<td>Subtotal Transportation Fund</td>
<td>4.3%</td>
<td>3.4%</td>
<td>$201,827,348</td>
<td></td>
<td></td>
</tr>
</tbody>
</table>

### Total, GF/EF/USF/TF

<table>
<thead>
<tr>
<th>Source</th>
<th>Projected Growth Rate - October Estimates</th>
<th>Actual Growth Rate</th>
<th>Projected Range in Collections Through 4 Months</th>
<th>Actual Collections</th>
<th>Condition</th>
</tr>
</thead>
<tbody>
<tr>
<td>Total</td>
<td>2.1%</td>
<td>10.5%</td>
<td>$2,521,446,512</td>
<td></td>
<td></td>
</tr>
</tbody>
</table>

Source: Governor’s Office of Management and Budget
Budget Stress Test – General Framework

• Formal review of “playbook” in a downturn
• Uses same consensus process used for annual budget
• Revenues – GOMB, LFA, Tax Commission
• Expenditures – GOMB and LFA
• Modeled how state budget might respond to economic scenarios (adverse, severely adverse, stagflation)
• Revenues
• Expenditures
• Categorized budget reserves
Budget Buffers

Inventory Of Buffers:

- Easily Accessible: Unappropriated balances, operating reserves, capital budget for buildings
- Moderately Accessible: Non-lapsing balances, capital budget for roads, 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 (75% vote)
Budget Stress Testing Results (2016)

Revenue Risks and Cost Pressures vs. Reserves – 5 Year

Multi-Year Potential Risk ($B)

- Stagflation
- Adverse
- Severe

Reserves/Offsets ($B)

- Easy
- Moderate
- Somewhat Difficult
- Difficult
- Very Difficult

Management: budget cuts, revenue increases

By Category of Accessibility

Revenues | Expenditures

Source: Governor’s Office of Management and Budget
FY 2020 Ongoing Budget Recommendations & Buffer Resources

FY 2020 EF/GF One-Time Budget ~$288 M

FY 2020 EF/GF Ongoing Budget ~$7.6B

Reserve Account Balances, Working Rainy Day Funds and Structural Surpluses Approximate 21% of Ongoing Budget in FY 2020

FY 2020 Working RD & Structural Surpluses: $750 M
FY 2020 Reserve Account Balances: $825 M
Structural Budget Surplus

- About $97 million in Governor’s budget proposal
- Unappropriated funds
- Ongoing funds for one-time items
- Portion of debt service line item unneeded in 2021 due to paying cash for prison
- Ongoing deposit into rainy day fund
“Working Rainy Day”

• About $653 million in Governor’s budget recommendation
• Non-debt appropriations for capital expenditures (new transportation capacity, water, etc.)
• Capital development / prison
• New Facility Renovation Fund
• Capital improvement
Budget Reserve Accounts

- The State maintains substantial rainy day fund balances that have grown significantly since the Recession.

Rainy Day Fund Balances

Source: Governor’s Office of Management and Budget
IV. TAX BASE, COLLATERAL, AND DEBT RATIOS
### Taxable/Fair Value of Property Value

- The ad valorem levy, if necessary, would apply to a large and growing tax base.

<table>
<thead>
<tr>
<th>Tax Year/ Fiscal Year</th>
<th>Taxable Value&lt;sup&gt;2&lt;/sup&gt;</th>
<th>% Change Over Prior Year</th>
<th>Fair Market Value&lt;sup&gt;3&lt;/sup&gt;</th>
<th>% Change Over Prior Year</th>
</tr>
</thead>
<tbody>
<tr>
<td>2018/2019&lt;sup&gt;1&lt;/sup&gt;</td>
<td>$285,970,117,064</td>
<td>10.4%</td>
<td>$402,546,000,000</td>
<td>10.4%</td>
</tr>
<tr>
<td>2017/2018&lt;sup&gt;1&lt;/sup&gt;</td>
<td>259,071,436,352</td>
<td>8.2</td>
<td>364,682,337,447</td>
<td>8.7</td>
</tr>
<tr>
<td>2016/2017</td>
<td>239,422,200,513</td>
<td>7.1</td>
<td>335,540,187,517</td>
<td>7.7</td>
</tr>
<tr>
<td>2015/2016</td>
<td>223,557,499,607</td>
<td>6.2</td>
<td>311,651,315,372</td>
<td>6.6</td>
</tr>
<tr>
<td>2014/2015</td>
<td>210,415,507,970</td>
<td>7.3</td>
<td>292,490,917,013</td>
<td>7.8</td>
</tr>
<tr>
<td>2013/2014</td>
<td>196,058,968,791</td>
<td>3.0</td>
<td>271,337,328,737</td>
<td>3.6</td>
</tr>
<tr>
<td>2012/2013</td>
<td>190,273,603,344</td>
<td>0.0</td>
<td>261,933,703,652</td>
<td>(0.6)</td>
</tr>
</tbody>
</table>

1. Preliminary; subject to change. (Source: Municipal Advisor.)
2. Includes all state–wide redevelopment agencies’ valuations. **Does not include Uniform Fees (as defined below) or semi–conductor manufacturing equipment.**
3. Estimated fair market values were calculated by dividing the taxable value of primary residential property by 55%, which eliminates the 45% exemption on primary residential property granted under the Property Tax Act. See “Property Tax Matters” above.

Source: Property Tax Division, State Tax Commission
G.O. Bonds

General Obligation Pledge:

• Full faith and credit pledge without limitation.
• Property tax is abated provided other revenues are sufficient to pay debt service.
• Debt service is budgeted in the prior fiscal year using other revenues.
• Money in sinking fund is exclusively for debt service.
• Legislative rule requires pass or defeat of each base budget bill, including debt service, by noon of the tenth day of the session.
• Ad Valorem Levy.
  • Though authorized to do so under Part 9 of the Property Tax Act (defined below), the State does not presently levy ad valorem property taxes and has not done so since 1974. However, if the State does not have sufficient moneys available to pay principal of and interest on its general obligation bonds from sources other than ad valorem taxes, the ad valorem property taxes would no longer be abated, and the State Tax Commission would be required to collect ad valorem property taxes on all taxable property in the State to cover the shortfall.
# Debt Outstanding and Overview of Debt Limits and Ratios

<table>
<thead>
<tr>
<th>Type of Debt</th>
<th>Principal Outstanding¹</th>
</tr>
</thead>
<tbody>
<tr>
<td>General Obligation</td>
<td>$2.146 billion</td>
</tr>
<tr>
<td>State Building Ownership Authority</td>
<td>$315.130 million</td>
</tr>
<tr>
<td>State Guaranty Of General Obligation School Bonds</td>
<td>$3.316 billion</td>
</tr>
<tr>
<td>Moral Obligation</td>
<td>$2.191 billion</td>
</tr>
</tbody>
</table>

## Debt, Limits and Ratios

<p>| | |</p>
<table>
<thead>
<tr>
<th></th>
<th></th>
</tr>
</thead>
<tbody>
<tr>
<td>Constitutional G.O. Debt Limit</td>
<td>$3,177,308,802</td>
</tr>
<tr>
<td>Statutory Limitation G.O. Debt Limit</td>
<td>$1,383,549,066</td>
</tr>
<tr>
<td>Statutory Limitation on Certain Highway G.O. Bonds</td>
<td>$347,866,241</td>
</tr>
<tr>
<td>G.O. Debt Ratios 2018</td>
<td></td>
</tr>
<tr>
<td>Per capita</td>
<td>$773</td>
</tr>
<tr>
<td>As % of State Total Personal Income</td>
<td>1.72%</td>
</tr>
<tr>
<td>As % of Taxable Value</td>
<td>0.93%</td>
</tr>
<tr>
<td>As % of Fair Market/Market Value</td>
<td>0.66%</td>
</tr>
</tbody>
</table>

¹ Bond values outstanding as of December 1, 2018
V. RETIREMENT SYSTEMS AND OPEB
Utah Retirement Systems

- Multi-employer cost sharing plan
- 5 year actuarial smoothing for contribution rates
- Corridor bands from 75% to 125%
- Actuarial Assumption 6.95%
- Tier 1 & 2 contribution rates remain at 22.19% and 19.94%, respectively
- GASB 68 State Net Pension Liability: $781.4 million
- GASB 68 Net Pension Asset: $532,555 (Tier 2 Public Safety & Firefighters)
Utah Retirement Systems

Utah Retirement System Rates of Return

Utah Retirement System’s Funding Ratios

Source: Utah State Treasurer’s Office, Utah Retirement Systems
OPEB Plan Summary

- OPEB funding levels are robust: the employees fund is 72% funded and the elected officials fund is 81% funded

<table>
<thead>
<tr>
<th>Utah State Employees OPEB Plan Summary</th>
<th>Legislature and Governor’s OPEB Plan Summary ($1,387,600 appropriated for FY2020)</th>
</tr>
</thead>
<tbody>
<tr>
<td><strong>Discount Rate</strong></td>
<td><strong>June 30, 2017 Actuarial Roll Forward</strong></td>
</tr>
<tr>
<td></td>
<td>3.75%</td>
</tr>
<tr>
<td><strong>Amortization Period</strong></td>
<td>7 year closed</td>
</tr>
<tr>
<td><strong>Total OPEB Liability (TOL)</strong></td>
<td>$363.0MM</td>
</tr>
<tr>
<td><strong>Fiduciary Net Position (FNP)</strong></td>
<td>$254.2MM</td>
</tr>
<tr>
<td><strong>Net OPEB Liability (NOL)</strong></td>
<td>$108.8MM</td>
</tr>
<tr>
<td><strong>Actuarially Determined Contribution (ADC)</strong></td>
<td>$25.9MM</td>
</tr>
<tr>
<td><strong>Funded Ratio</strong></td>
<td>70.0%</td>
</tr>
<tr>
<td><strong>ADC as % of Payroll</strong></td>
<td>2.68%</td>
</tr>
<tr>
<td><strong>Discount Rate</strong></td>
<td><strong>June 30, 2017 Actuarial Roll Forward</strong></td>
</tr>
<tr>
<td></td>
<td>5.25%</td>
</tr>
<tr>
<td><strong>Amortization Period</strong></td>
<td>20 year open</td>
</tr>
<tr>
<td><strong>Total OPEB Liability (TOL)</strong></td>
<td>$15.7MM</td>
</tr>
<tr>
<td><strong>Fiduciary Net Position (FNP)</strong></td>
<td>$12.1MM</td>
</tr>
<tr>
<td><strong>Net OPEB Liability (NOL)</strong></td>
<td>$3.6MM</td>
</tr>
<tr>
<td><strong>Actuarially Determined Contribution (ADC)</strong></td>
<td>$1.03MM</td>
</tr>
<tr>
<td><strong>Funded Ratio</strong></td>
<td>76.8%</td>
</tr>
</tbody>
</table>

To accelerate payoff, the Governor’s budget recommends $50 million in one-time funding to pay down the state’s OPEB liability
VI. SUMMARY
Summary

• Utah’s economy is supported by fundamentals that have contributed to its strong financial performance and consistent Aaa/AAA/AAA ratings

<table>
<thead>
<tr>
<th>Demographics as of 2017</th>
<th>National Ranking¹</th>
</tr>
</thead>
<tbody>
<tr>
<td>Median household income</td>
<td>$71,319 14th</td>
</tr>
<tr>
<td>Personal income % change</td>
<td>4.4% 4th</td>
</tr>
<tr>
<td>Population growth rate</td>
<td>1.9% 3rd</td>
</tr>
<tr>
<td>Fertility rate</td>
<td>2.12 2nd</td>
</tr>
<tr>
<td>Median age</td>
<td>30.3 years 1st</td>
</tr>
<tr>
<td>Household size</td>
<td>3.1 persons 1st</td>
</tr>
</tbody>
</table>

• Utah’s rapid and expanding growth across a variety of demographic indicators is expected to continue in future years

• Given Utah’s expanding population, diversified economy, strong budget management practices (including binding consensus revenue forecasting and multi-year financial planning), the State is positioned well to deal with what the future may be bring

¹. Rankings are from most favorable to least favorable, highest to lowest.