Interim Report to the Utah Higher Education Strategic Planning Commission

November 13, 2018
Outline

• Report on progress to date
• Environmental scan
• Emergent themes/topics
• Next steps
# Timeline

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<td>R. Finalize Report</td>
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Activities To Date

• Document review
• Data collection and analysis
• Initial on-site interviews and stakeholder engagement activities
• Model concepts and early development
• Planning for regional meetings
Interviews and Stakeholder Engagement to Date

• Commission co-chairs (numerous other commission members have been consulted as part of other interviews)
• USHE Office of the Commissioner
• Members of the Utah Board of Regents
• UTech Office of the Commissioner
• Members of the UTech Board of Trustees
• Several USHE and UTech Presidents
• Governor’s Office of Economic Development
• Utah Department of Workforce Services
• Utah Office of the Governor
• Kem C. Gardner Policy Institute
• Utah Manufacturers’ Association
• Utah Technology Council
• BioUtah
• Economic Development Corporation of Utah
• Salt Lake Chamber of Commerce
Emergent Themes/Topics

• Goals
  – Clarity around the goal
  – Other goals, e.g., workforce preparation, economic diversification, innovation, equity gaps, etc.

• Serving adult students – new education and business models

• Work-based learning
  – Outreach and delivery
  – Credentialing

• Affordability
  – Student debt
  – Sub-baccalaureate tuition
  – Measurement and monitoring
Emergent Themes/Topics

• Organization of higher education
  – Meeting future needs, e.g., alternative delivery, sharing of programs
  – Institutional productivity, e.g., facilities, sharing of services

• Governance
  – Regents and USHE institutions trustees
  – Legislature and regents – trust issues
  – Statewide coordination and structure

• Institutional missions
  – Mission clarity and program approval
  – The two-year mission – dual mission versus a more typical community college approach
  – Expectations regarding research and public service
Environmental Scan Analysis

• Educational attainment
• Participation
• Completion
• Finance and productivity
• Affordability
• Economic and workforce conditions
• Migration
• Projections for the future
Percentage of Jobs in 2020 that Will Require a Postsecondary Education, by State

National Average = 65%

Source: Georgetown University Center on Education and the Workforce, Projections of Jobs and Education Requirements through 2020; 2013
Gap Between Percent of Jobs in 2020 That Will Require a College Education and the Percent of Adults, Aged 25-64 with Associates and Higher in 2015

Percent of Residents Ages 25-64 With A High-Quality Certificate or Higher

Certificate-holder data is the best available estimate based on Georgetown CEW updated calculations using SIPP 2008 Wave 12 data (2012) and IPEDS (2014). Found in Stronger Nation 2016 report; Data for percent of residents with an associates and higher from U.S. Census Bureau, 2016 American Community Survey; Table B15001.
Percent of Adults Aged 25-64 with College Degrees – Associate & Higher – by County (2012-16)

Source: U.S. Census Bureau, 2012-16 American Community Survey (ACS) Five-Year Estimates; Table B15001

State = 42.38
Difference in College Attainment Between Whites and Underrepresented Minorities, Ages 25-64, 2016

Source: U.S. Census Bureau, 2016 American Community Survey One-Year Public Use Microdata Sample.
Educational Attainment of Adults Aged 25-64 by Race, Utah, 2016

Source: U.S. Census Bureau, 2016 American Community Survey One-Year Public Use Microdata Sample.

Source: U.S. Census Bureau, 2016 American Community Survey One-Year Public Use Microdata Sample.
Median Annual Wages for Employed Workers Aged 25 to 64 - by Level of Education (2016)

Source: U.S. Census Bureau, 2016 American Community Survey One-Year Public Use Microdata Sample.
Student Pipeline, 2016
For every 100 9th graders, how many graduate within 150% of program time?

High School Graduation, College Participation, & Completion, 2015-16

Input Rates

- High School Graduation Rate
- College Going Rate
- Participation of 25 to 49 Year Olds with Less than a Bachelors

Throughput Rates

- Undergraduate Credentials and Degrees Awarded per 100 FTE Undergraduates

Sources:
Undergraduate Enrollment Age 25-49 as a Percent of Population Age 25-49 with Less than an Associates Degree, Fall 2015

Sources: NCES, IPEDS Fall 2015 Enrollment File; ef2015b Provisional Release Data File; U.S. Census Bureau, 2015 American Community Survey One-Year Public Use Microdata Sample.
Proportion of FTE Enrollments in Public Institutions

Source: NCES, IPEDS Academic Year 2015-16 Instructional Activity File; efia2016 Provisional Release Data File.
## Origin of 75 Percent of All Undergraduates, by USHE Institution, Fall 2017

<table>
<thead>
<tr>
<th></th>
<th>University of Utah</th>
<th>Utah State University</th>
<th>Weber State University</th>
<th>Southern Utah University</th>
<th>Snow College</th>
<th>Dixie State University</th>
<th>Utah Valley University</th>
<th>Salt Lake Community College</th>
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<tbody>
<tr>
<td>1</td>
<td>Salt Lake (44.8)</td>
<td>Unknown (37)</td>
<td>Davis (42)</td>
<td>Iron (22)</td>
<td>Sanpete (17.8)</td>
<td>Washington (53.1)</td>
<td>Utah (60.1)</td>
<td>Salt Lake (76.9)</td>
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<td>2</td>
<td>Domestic Non-Resident (25.9)</td>
<td>Domestic Non-Resident (22.1)</td>
<td>Weber (31.1)</td>
<td>Domestic Non-Resident (21.8)</td>
<td>Salt Lake (15.9)</td>
<td>Domestic Non-Resident (18.5)</td>
<td>Salt Lake (12.6)</td>
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<td>Cache (10.6)</td>
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<td>Salt Lake (10.1)</td>
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<td>Sevier (12.1)</td>
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<td>Washington (6.9)</td>
<td>Domestic Non-Resident (5.4)</td>
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<td>Juab (4.3)</td>
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Notes: The proportion of total undergraduates is given by the number in parentheses. Data are for county of origin for Utah residents. Domestic non-residents are U.S. citizens from other states. The calculation of the percentage includes international students. At Brigham Young University, 58.3 percent of undergraduates are domestic non-residents and an additional 15.6 percent are from Utah County.

Source: USHE
FAFSA Applicants Who Failed to Enroll, by County, 2017

Recent High School Graduates Who Were FAFSA Applicants as a Percent of 18 Year Olds

All FAFSA Applicants as a Percent of 18-34 Year Olds
Undergraduate Awards per 1,000 Population Age 18-44 with No College Degree, 2015-16

Sources: NCES, IPEDS 2015-16 Completions File; c2016_a Provisional Release Data File; U.S. Census Bureau, 2016 American Community Survey; Table B15001
Proportion (%) of Undergraduate Awards by Level (2015-16)

Source: NCES, IPEDS 2015-16 Completions File; c2016_a Provisional Release Data File.
Proportion (%) of Undergraduate Credentials Awarded by Type - STEM, Health, and Other (2015-16)

- STEM:
  - Utah: 15.2%
  - US: 14.2%

- Health:
  - Utah: 22.2%
  - US: 17.8%

- Other:
  - Utah: 62.6%
  - US: 68%

Source: NCES, IPEDS 2015-16 Completions File; c2016_a Provisional Release Data File.
Public FTE Enrollment and Educational Appropriations per FTE, Utah, FY 1992-2017
Net Tuition as a Percent of Public Higher Education Total Educational Revenue by State, FY 2016

Source: SHEEO SHEF FY 2016
Family Share of Public Higher Education Operating Revenues, Utah

Source: SHEEO
Net Cost as a Percent of Median Family Income, Public 4-Year Institutions, 2015-16

Source: NCES, IPEDS Institutional Characteristics Files; hd2016 and ic2016_ay Provisional Release Data Files; NCES, IPEDS Fall 2015 Enrollment File; ef2015a Provisional Release Data File; NCES, IPEDS Academic Year 2015-16 Student Financial Aid File; sfa1516 Provisional Release Data File; U.S. Census Bureau, 2016 American Community Survey (ACS) One-Year Public Use Microdata Sample (PUMS) File.
Net Cost as a Percent of Lowest Quintile Family Income, Public 4-Year Institutions, 2015-16

Wyoming: 32.3
Utah: 34.6
Alaska: 40.4
Iowa: 41.4
North Dakota: 42.5
Idaho: 42.5
North Dakota: 43.4
New Mexico: 47.3
Maine: 48.1
Kentucky: 48.1
Oklahoma: 50.2
Missouri: 50.2
Arkansas: 52.6
Georgia: 52.6
Mississippi: 53.7
South Dakota: 55.7
Minnesota: 55.7
Tennessee: 57.0
Indiana: 57.0
Florida: 59.1
Washington: 59.8
New Hampshire: 61.0
Vermont: 61.0
New Jersey: 61.2
North Carolina: 62.7
Ohio: 64.4
Indiana: 64.4
Michigan: 65.0
Pennsylvania: 66.8
Delaware: 66.8
Arizona: 66.8
South Carolina: 67.5
Connecticut: 68.9
West Virginia: 69.8
Nation: 70.4
California: 70.7
Massachusetts: 70.7
Florida: 70.8
North Carolina: 70.8
Texas: 70.9
New York: 72.2
Arkansas: 72.2
Texas: 72.3
North Carolina: 72.7
Nebraska: 72.7
Missouri: 72.9
Virginia: 72.9
Arizona: 73.5
Montana: 74.4
New Mexico: 74.6
Arkansas: 74.6
Michigan: 75.0
North Carolina: 75.9
Ohio: 76.0
North Dakota: 76.5
Maine: 76.8
New Jersey: 77.7
Washington: 77.9
New Hampshire: 78.8
Ohio: 78.8
Illinois: 81.2
Massachusetts: 81.2
Virginia: 83.6
California: 83.6
Colorado: 87.0
Hawaii: 90.7
Nation: 90.7

Source: NCES, IPEDS Institutional Characteristics Files; hd2016 and ic2016_ay Provisional Release Data Files; NCES, IPEDS Fall 2015 Enrollment File; ef2015a Provisional Release Data File; NCES, IPEDS Academic Year 2015-16 Student Financial Aid File; sfa1516 Provisional Release Data File; U.S. Census Bureau, 2016 American Community Survey (ACS) One-Year Public Use Microdata Sample (PUMS) File.
Utah Population by Age & Race/Ethnicity, 2017

Source: U.S. Census Bureau, Population Division; SC-EST2017-ALLDATA6: Annual State Resident Population Estimates for 6 Race Groups (5 Race Alone Groups and Two or More Races) by Age, Sex, and Hispanic Origin: April 1, 2010 to July 1, 2017; File: 7/1/2017 State Characteristics Population Estimates; Release Date: June 2018
Change in Utah Population by Age & Race, 2007-2017

Source: U.S. Census Bureau, 2000 Census; Summary File 1; U.S. Census Bureau, Population Division; SC-EST2017-ALLDATA6: Annual State Resident Population Estimates for 6 Race Groups (5 Race Alone Groups and Two or More Races) by Age, Sex, and Hispanic Origin: April 1, 2010 to July 1, 2017; File: 7/1/2017 State Characteristics Population Estimates; Release Date: June 2018
Per Capita Income by County, Utah (2016)

Source: Bureau of Economic Analysis
Percent Change in GDP, Utah & US

- **Utah**
  - Percent Change, 2007 to 2012: 10.4%
  - Percent Change, 2012 to 2017: 29.0%

- **US Average**
  - Percent Change, 2007 to 2012: 11.5%
  - Percent Change, 2012 to 2017: 20.1%

*Source: Bureau of Economic Analysis*
Percent of Total Gross State Product by Industry and Comparison to U.S.

- Agriculture, forestry, fishing, and hunting: 0.4% (Utah 2006), 1.4% (Utah 2016), 1.0% (US 2016)
- Mining: 1.4% (Utah 2006), 1.4% (Utah 2016), 1.0% (US 2016)
- Construction: 6.6% (Utah 2006), 6.2% (Utah 2016), 4.3% (US 2016)
- Manufacturing: 4.8% (Utah 2006), 4.6% (Utah 2016), 4.6% (US 2016)
- Transportation, Warehousing, Utilities: 5.2% (Utah 2006), 5.3% (Utah 2016), 6.0% (US 2016)
- Wholesale trade: 7.2% (Utah 2006), 7.1% (Utah 2016), 5.9% (US 2016)
- Retail trade: 21.3% (Utah 2006), 22.3% (Utah 2016), 21.0% (US 2016)
- Finance, insurance, real estate, rental, and leasing: 25.6% (Utah 2006), 28.6% (Utah 2016), 31.8% (US 2016)
- Information and Services: 13.9% (Utah 2006), 12.8% (Utah 2016), 12.4% (US 2016)

Source: Bureau of Economic Analysis.
## Non-Agricultural Jobs by Industry, State of Utah, 2007 and 2017

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<tbody>
<tr>
<td>Total Non Agricultural Wage and Salary Jobs</td>
<td>1,251,233</td>
<td>1,469,068</td>
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<td>217,835</td>
<td>17%</td>
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<tr>
<td>Government</td>
<td>76,410</td>
<td>79,402</td>
<td>5%</td>
<td>2,992</td>
<td>4%</td>
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<td>Trade, Transportation &amp; Utilities</td>
<td>259,098</td>
<td>293,394</td>
<td>20%</td>
<td>34,296</td>
<td>13%</td>
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<td>Leisure &amp; Hospitality</td>
<td>117,737</td>
<td>150,336</td>
<td>10%</td>
<td>32,599</td>
<td>28%</td>
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<td>Education &amp; Health Services</td>
<td>247,717</td>
<td>336,127</td>
<td>23%</td>
<td>88,410</td>
<td>36%</td>
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<td>Natural Resources &amp; Mining &amp; Construction</td>
<td>115,648</td>
<td>107,305</td>
<td>7%</td>
<td>-8,343</td>
<td>-7%</td>
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<td>Financial Activities</td>
<td>75,288</td>
<td>84,810</td>
<td>6%</td>
<td>9,522</td>
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<td>Other Services</td>
<td>36,149</td>
<td>40,731</td>
<td>3%</td>
<td>4,582</td>
<td>13%</td>
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<td>Manufacturing</td>
<td>127,708</td>
<td>129,231</td>
<td>9%</td>
<td>1,523</td>
<td>1%</td>
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<td>Information</td>
<td>33,681</td>
<td>39,770</td>
<td>3%</td>
<td>6,089</td>
<td>18%</td>
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<td>Professional &amp; Business Services</td>
<td>161,797</td>
<td>207,962</td>
<td>14%</td>
<td>46,165</td>
<td>29%</td>
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Source: Utah Department of Workforce Services, [https://jobs.Utah.gov](https://jobs.Utah.gov)
## Utah Average Annual Employment by Major Industry Group and Number of Workers with a College Degree – 2012-16

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<thead>
<tr>
<th>Industry Title</th>
<th>Total Number Employed</th>
<th>Number Employed with a College Credential</th>
<th>Percent with a College Credential</th>
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<tbody>
<tr>
<td>Manufacturing</td>
<td>120,949</td>
<td>41,459</td>
<td>34.3</td>
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<tr>
<td>Professional, Scientific, Management, Administrative, Waste Management Services</td>
<td>119,248</td>
<td>65,971</td>
<td>55.3</td>
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<td>Educational</td>
<td>110,397</td>
<td>80,246</td>
<td>72.7</td>
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<td>Retail Trade</td>
<td>107,909</td>
<td>32,484</td>
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<td>Health</td>
<td>104,599</td>
<td>66,963</td>
<td>64.0</td>
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<td>Finance, Insurance, Real Estate, Rental and Leasing</td>
<td>71,224</td>
<td>37,155</td>
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<td>Construction</td>
<td>70,672</td>
<td>15,323</td>
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<td>Arts, Entertainment, Recreation, Accommodation, Food Services</td>
<td>63,682</td>
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<td>Public Administration</td>
<td>60,417</td>
<td>29,994</td>
<td>49.6</td>
</tr>
<tr>
<td>Transportation and Warehousing</td>
<td>45,274</td>
<td>13,505</td>
<td>29.8</td>
</tr>
<tr>
<td>Other Services</td>
<td>37,032</td>
<td>14,136</td>
<td>38.2</td>
</tr>
<tr>
<td>Wholesale Trade</td>
<td>29,103</td>
<td>11,802</td>
<td>40.6</td>
</tr>
<tr>
<td>Information</td>
<td>24,115</td>
<td>12,650</td>
<td>52.5</td>
</tr>
<tr>
<td>Mining</td>
<td>13,413</td>
<td>3,291</td>
<td>24.5</td>
</tr>
<tr>
<td>Social Services</td>
<td>12,524</td>
<td>6,433</td>
<td>51.4</td>
</tr>
<tr>
<td>Utilities</td>
<td>8,560</td>
<td>3,365</td>
<td>39.3</td>
</tr>
<tr>
<td>Agriculture, Forestry, Fishing, and Hunting</td>
<td>7,334</td>
<td>2,281</td>
<td>31.1</td>
</tr>
<tr>
<td>Military</td>
<td>2,882</td>
<td>1,473</td>
<td>51.1</td>
</tr>
<tr>
<td><strong>Total</strong></td>
<td><strong>1,009,334</strong></td>
<td><strong>456,325</strong></td>
<td><strong>45.2</strong></td>
</tr>
</tbody>
</table>

Source: U.S. Census Bureau, 2012-16 American Community Survey (ACS) Public Use Microdata Sample (PUMS) File.
# Utah Average Annual Employment by Major Occupation Group and Number of Workers with a College Degree – 2012-16

<table>
<thead>
<tr>
<th>Industry Title</th>
<th>Total Number Employed</th>
<th>Number Employed with a College Credential</th>
<th>Percent with a College Credential</th>
</tr>
</thead>
<tbody>
<tr>
<td>Managerial</td>
<td>118,472</td>
<td>72,606</td>
<td>61.3</td>
</tr>
<tr>
<td>Education, Training, and Library</td>
<td>68,920</td>
<td>56,469</td>
<td>81.9</td>
</tr>
<tr>
<td>Office and Administrative Support</td>
<td>148,876</td>
<td>49,391</td>
<td>33.2</td>
</tr>
<tr>
<td>Healthcare Practitioners and Technical</td>
<td>56,735</td>
<td>48,454</td>
<td>85.4</td>
</tr>
<tr>
<td>Sales and Related</td>
<td>100,907</td>
<td>37,991</td>
<td>37.6</td>
</tr>
<tr>
<td>Computer and Mathematical</td>
<td>41,395</td>
<td>28,644</td>
<td>69.2</td>
</tr>
<tr>
<td>Financial Operations</td>
<td>28,221</td>
<td>21,331</td>
<td>75.6</td>
</tr>
<tr>
<td>Architecture and Engineering</td>
<td>22,803</td>
<td>17,088</td>
<td>74.9</td>
</tr>
<tr>
<td>Business</td>
<td>28,461</td>
<td>16,933</td>
<td>59.5</td>
</tr>
<tr>
<td>Arts, Entertainment, Design, Sports, and Media</td>
<td>18,599</td>
<td>12,918</td>
<td>69.5</td>
</tr>
<tr>
<td>Production</td>
<td>69,107</td>
<td>11,454</td>
<td>16.6</td>
</tr>
<tr>
<td>Community and Social Services</td>
<td>14,612</td>
<td>11,232</td>
<td>76.9</td>
</tr>
<tr>
<td>Transportation and Material Moving</td>
<td>58,582</td>
<td>9,953</td>
<td>17.0</td>
</tr>
<tr>
<td>Legal</td>
<td>10,614</td>
<td>8,937</td>
<td>84.2</td>
</tr>
<tr>
<td>Life, Physical, and Social Sciences</td>
<td>9,527</td>
<td>7,974</td>
<td>83.7</td>
</tr>
<tr>
<td>Installation, Maintenance, and Repair</td>
<td>34,882</td>
<td>7,699</td>
<td>22.1</td>
</tr>
<tr>
<td>Construction</td>
<td>52,208</td>
<td>6,935</td>
<td>13.3</td>
</tr>
<tr>
<td>Protective Services</td>
<td>17,752</td>
<td>6,798</td>
<td>38.3</td>
</tr>
<tr>
<td>Personal Care and Service</td>
<td>17,307</td>
<td>5,841</td>
<td>33.7</td>
</tr>
<tr>
<td>Healthcare Support</td>
<td>18,185</td>
<td>5,776</td>
<td>31.8</td>
</tr>
<tr>
<td>Food Preparation and Serving</td>
<td>33,676</td>
<td>5,450</td>
<td>16.2</td>
</tr>
<tr>
<td>Building, Grounds Cleaning and Maintenance</td>
<td>31,172</td>
<td>4,717</td>
<td>15.1</td>
</tr>
<tr>
<td>Military</td>
<td>1,500</td>
<td>794</td>
<td>52.9</td>
</tr>
<tr>
<td>Farming, Fishing, Forestry, and Hunting</td>
<td>3,751</td>
<td>636</td>
<td>17.0</td>
</tr>
<tr>
<td>Extraction</td>
<td>3,070</td>
<td>304</td>
<td>9.9</td>
</tr>
<tr>
<td>Total</td>
<td>1,009,334</td>
<td>456,325</td>
<td>45.2</td>
</tr>
</tbody>
</table>

Source: U.S. Census Bureau, 2012-16 American Community Survey (ACS) Public Use Microdata Sample (PUMS) File.
## Occupational Employment & Growth, Utah, 2016-2026

<table>
<thead>
<tr>
<th>Occupation Title</th>
<th>Employment, 2016</th>
<th>Employment, 2026</th>
<th>Net Change</th>
<th>Percent Change</th>
<th>Average Annual Openings, Growth</th>
<th>Average Annual Openings, Replacement</th>
<th>Average Annual Openings, Total</th>
</tr>
</thead>
<tbody>
<tr>
<td>Total, All</td>
<td>1,490,490</td>
<td>1,924,190</td>
<td>433,700</td>
<td>29.1</td>
<td>43,370</td>
<td>185,010</td>
<td>228,380</td>
</tr>
<tr>
<td>Office &amp; Administrative Support</td>
<td>254,530</td>
<td>310,780</td>
<td>56,250</td>
<td>22.1</td>
<td>5,625</td>
<td>31,816</td>
<td>37,441</td>
</tr>
<tr>
<td>Sales &amp; Related</td>
<td>150,100</td>
<td>182,510</td>
<td>32,410</td>
<td>21.6</td>
<td>3,241</td>
<td>22,054</td>
<td>25,295</td>
</tr>
<tr>
<td>Food Preparation &amp; Serving Related</td>
<td>112,490</td>
<td>147,290</td>
<td>34,800</td>
<td>30.9</td>
<td>3,480</td>
<td>22,327</td>
<td>25,807</td>
</tr>
<tr>
<td>Management</td>
<td>97,400</td>
<td>126,930</td>
<td>29,530</td>
<td>30.3</td>
<td>2,953</td>
<td>8,657</td>
<td>11,610</td>
</tr>
<tr>
<td>Production</td>
<td>94,120</td>
<td>112,840</td>
<td>18,720</td>
<td>19.9</td>
<td>1,872</td>
<td>11,658</td>
<td>13,530</td>
</tr>
<tr>
<td>Construction &amp; Extraction</td>
<td>93,310</td>
<td>131,290</td>
<td>37,980</td>
<td>40.7</td>
<td>3,799</td>
<td>11,277</td>
<td>15,076</td>
</tr>
<tr>
<td>Transportation &amp; Material Moving</td>
<td>89,860</td>
<td>117,350</td>
<td>27,490</td>
<td>30.6</td>
<td>2,749</td>
<td>12,203</td>
<td>14,952</td>
</tr>
<tr>
<td>Education, Training, &amp; Library</td>
<td>83,880</td>
<td>110,520</td>
<td>26,640</td>
<td>31.8</td>
<td>2,664</td>
<td>8,211</td>
<td>10,874</td>
</tr>
<tr>
<td>Business &amp; Financial Operations</td>
<td>77,760</td>
<td>104,590</td>
<td>26,830</td>
<td>34.5</td>
<td>2,683</td>
<td>8,003</td>
<td>10,686</td>
</tr>
<tr>
<td>Healthcare Practitioners &amp; Technical</td>
<td>70,560</td>
<td>94,700</td>
<td>24,140</td>
<td>34.2</td>
<td>2,415</td>
<td>4,320</td>
<td>6,734</td>
</tr>
<tr>
<td>Installation, Maintenance, &amp; Repair</td>
<td>58,460</td>
<td>74,550</td>
<td>16,090</td>
<td>27.5</td>
<td>1,609</td>
<td>6,240</td>
<td>7,849</td>
</tr>
<tr>
<td>Building &amp; Grounds Cleaning &amp; Maintenance</td>
<td>51,780</td>
<td>67,170</td>
<td>15,390</td>
<td>29.7</td>
<td>1,539</td>
<td>7,374</td>
<td>8,913</td>
</tr>
<tr>
<td>Personal Care &amp; Service</td>
<td>48,650</td>
<td>67,500</td>
<td>18,850</td>
<td>38.7</td>
<td>1,885</td>
<td>8,903</td>
<td>10,788</td>
</tr>
<tr>
<td>Computer &amp; Mathematical</td>
<td>46,680</td>
<td>67,330</td>
<td>20,650</td>
<td>44.2</td>
<td>2,065</td>
<td>3,716</td>
<td>5,781</td>
</tr>
<tr>
<td>Healthcare Support</td>
<td>34,740</td>
<td>47,900</td>
<td>13,160</td>
<td>37.9</td>
<td>1,316</td>
<td>4,548</td>
<td>5,864</td>
</tr>
<tr>
<td>Architecture &amp; Engineering</td>
<td>26,530</td>
<td>34,580</td>
<td>8,050</td>
<td>30.4</td>
<td>806</td>
<td>2,155</td>
<td>2,961</td>
</tr>
<tr>
<td>Arts, Design, Entertainment, Sports, &amp; Media</td>
<td>26,480</td>
<td>35,120</td>
<td>8,640</td>
<td>32.6</td>
<td>864</td>
<td>2,949</td>
<td>3,813</td>
</tr>
<tr>
<td>Protective Service</td>
<td>23,020</td>
<td>27,980</td>
<td>4,960</td>
<td>21.5</td>
<td>496</td>
<td>2,914</td>
<td>3,410</td>
</tr>
<tr>
<td>Community &amp; Social Service</td>
<td>21,230</td>
<td>27,990</td>
<td>6,760</td>
<td>31.9</td>
<td>677</td>
<td>2,650</td>
<td>3,327</td>
</tr>
<tr>
<td>Life, Physical, &amp; Social Science</td>
<td>11,480</td>
<td>15,050</td>
<td>3,570</td>
<td>31.1</td>
<td>357</td>
<td>1,175</td>
<td>1,531</td>
</tr>
<tr>
<td>Legal</td>
<td>9,610</td>
<td>11,870</td>
<td>2,260</td>
<td>23.5</td>
<td>226</td>
<td>656</td>
<td>882</td>
</tr>
<tr>
<td>Farming, Fishing, &amp; Forestry</td>
<td>7,840</td>
<td>8,370</td>
<td>530</td>
<td>6.7</td>
<td>53</td>
<td>1,206</td>
<td>1,259</td>
</tr>
</tbody>
</table>

Percent of Adults Aged 25 to 64 with College Degrees Employed in Management and Professional Occupations (2012-16)

Source: 2012-16 American Community Survey (Public Use Microdata Sample)
Percent of Adults Aged 25 to 64 with College Degrees Employed in High Tech Occupations (2012-16)

Source: 2012-16 American Community Survey (Public Use Microdata Sample)
The Relationship Between Educational Attainment, Personal Income, and the State New Economy Index

Percent of Adults 25 to 64 with College Degrees (2016)

High College Attainment, Low Personal Income
Low College Attainment, Low Personal Income
Low College Attainment, High Personal Income
High College Attainment, High Personal Income

Personal Income per Capita (2016)

State New Economy Index 2017
Top Tier
Middle Tier
Bottom Tier

Source: U.S. Census Bureau, American Community Survey; Bureau of Economic Analysis; ITIF
2017 State New Economy Index – Overall Index Scores

Source: ITIF 2017 States New Economy Index
Federally Financed R&D Expenditures Per Capita, State Totals, 2013

Source: National Science Foundation; WebCASPAR
Average Annual Net Migration of 22 to 64 Year Olds by Education Level, Utah, 2012-16

Source: U.S. Census Bureau, 2012-16 American Community Survey (ACS) Five-Year Public Use Microdata Sample.
Migration Churn Rate Estimate 22-64 (Per 1,000 Population), Associates Degree & Above

Note: Migration Churn Rate is the sum of in-migrants and out-migrants relative to 1,000 state population (population base excludes in-migrants for this calculation).

Source: U.S. Census Bureau, 2012-16 American Community Survey (ACS) Five-Year Public Use Microdata Sample.
Projected Percent Change by Selected Age Group, 2016-2040

Source: Kem C. Gardner Institute.
County Share of the State Population Change, 2015-2040

Source: Kem C. Gardner Institute.
Projected Natural Increase and Net Migration, State of Utah, 2015-2040

Source: Kem C. Gardner Institute.
Summary of Environmental Scan

- **Strengths**
  - High attainment relative to most other states
  - Strong K-12 pipeline performance and postsecondary participation of adults
  - Relatively strong starting position in finance, affordability, efficiency
  - Thriving economy and growing population, including in-migration
  - Mix of awards tilts slightly toward STEM and health

- **Challenges**
  - Income measures are low relative to other states
  - College-going lags other states (due in part to LDS commitments), and chances for enrollment are weaker in rural areas
  - Emphasis on baccalaureate programs and a relatively high share of residents with some college, no degree
  - Continued growth in enrollment demand, from a diversifying population mostly concentrated in Salt Lake and Utah counties
  - Meeting employment needs of a strengthening high-tech economy
Emergent Themes/Topics

• **Goals**
  - Clarity around the goal
  - Other goals, e.g., workforce preparation, economic diversification, innovation, equity gaps, etc.

• **Serving adult students – new education and business models**

• **Work-based learning**
  - Outreach and delivery
  - Credentialing

• **Affordability**
  - Student debt
  - Sub-baccalaureate tuition
  - Measurement and monitoring
Emergent Themes/Topics

• Organization of higher education
  – Meeting future needs, e.g., alternative delivery, sharing of programs
  – Institutional productivity, e.g., facilities, sharing of services

• Governance
  – Regents and USHE institutions trustees
  – Legislature and regents – trust issues
  – Statewide coordination and structure

• Institutional missions
  – Mission clarity and program approval
  – The two-year mission – dual mission versus a more typical community college approach
  – Expectations regarding research and public service
Next Steps

- Model building
  - Future enrollment demand
  - Future workforce demands for education
  - Cost modeling
- Regional meetings
- Report drafting
Regional Meetings

- Regional meetings
  - Locations
    - Logan (Bear River region)
    - Uintah Basin (Vernal)
    - Ogden (Wasatch Front North)
    - Downtown Salt Lake City & Draper (Wasatch Front South)
    - Provo (Mountainland)
    - Ephraim or Richfield (Central Utah)
    - Cedar City (Southwest)
    - Moab or Price (Southeast)
  - Identification and recruitment of participants by USHE, USTC, DWS, & GOED
  - Agenda
    - Brief data foundation
    - Local challenges and opportunities
    - Current and future educational and workforce needs
    - Testing/refinement of models
Contact Information

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