A Strategic Plan for Postsecondary Education in Utah

The National Center for Higher Education Management Systems

November 22, 2019

Prepared for

Utah Higher Education Strategic Planning Commission

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Acknowledgments

NCHEMS appreciates the considerable effort made by Utah state, system, and institutional employees in assisting with coordinating various aspects of the work this report represents. In particular, NCHEMS acknowledges and thanks Allyson Hicks and her colleagues on the legislative staff who ensured that NCHEMS' meetings with the Commission and throughout the state were well organized and ran smoothly, as well as our colleagues at the Western Interstate Commission for Higher Education who participated in our tour of the state's regions. NCHEMS also acknowledges those individuals who provided data, answered questions, and especially helped managed the logistics for the regional meetings.

Executive Summary

In August 2018, the Utah Higher Education Strategic Planning Commission contracted with the National Center for Higher Education Management Systems (NCHEMS) to develop a statewide strategic plan to meet the future needs for higher education in the State of Utah. While not neglecting more current and short-term needs, NCHEMS was directed to focus on a time horizon of 20-30 years in the future to ensure that the resulting plan was innovative, adaptable, and focused first and foremost on the needs of Utah students, taxpayers, and employers.

To accomplish this task NCHEMS gathered extensive data from publicly available sources and from sources in Utah, especially the Utah System of Higher Education (USHE), the Utah Technical College System (UTech), the Kem C. Gardner Institute Policy Institute at the University of Utah, and the Utah Department of Workforce Services. These data provided the basis for a broad-based environmental scan, fed the development of heuristic models that NCHEMS created, and generally provided the quantitative foundation for the resulting report. NCHEMS also used these data to help facilitate a series of site visits to all of Utah's workforce development regions where we gathered the perspectives of educators, local employers and civic leaders, and local workforce and economic development experts. This tour ensured that the resulting plan captured important variation in the conditions facing, and needs for, postsecondary education and training in all parts of the state. Finally, NCHEMS appeared several times before the Strategic Planning Commission and also remained in close contact with its Co-Chairs throughout the process.

This resulting report highlights a number of major findings that lead to a series of recommendations for Utah to implement as it moves forward. The major findings include:

- In spite of having specified that Utah is aiming for 66 percent of its working-adult population to have a postsecondary credential by 2020, Utah's postsecondary structures operate without a tight connection to that goal. This disconnect means that the postsecondary systems and institutions are able to pursue their own interests without adherence to the state's goal.
- Utah continues to grow rapidly, but that growth is uneven across the state. This leads to tension between different regions within the state, with some facing the prospects of serious shortages in postsecondary capacity and others feeling their needs may be neglected.
- So long as they remain in Utah, Utah students attend college close to home. This has implications for where capacity will be needed in the future.
- Utah suffers from low postsecondary participation and completion rates for traditional-aged students. While this is a reflection of how missions undertaken by members of the Church of Latter-Day Saints often interrupt a linear path through college, these remain the most significant point of

leakage in the educational pipeline and contribute to the necessity for Utah to serve adult learners especially well.

- Though there are areas of high demand for baccalaureate degrees, especially in information technology, aeronautics, and some specialties in teacher education, employment demand in Utah is least consistently well met at the sub-baccalaureate level among skilled tradespeople. Meanwhile, growth in sub-baccalaureate awards in Utah has been flat, and while UTech continues to provide technical education, its enrollment has consistently fallen in recent years.
- There is a worsening imbalance between baccalaureate and sub-baccalaureate degree production in the state.
- A relatively low wage premium for postsecondary degrees in Utah may hinder improvements in college-going and in retaining and recruiting the talent Utah's innovation economy will need.
- Issues of postsecondary affordability need increased attention in the years to come.
- In general, key functions of postsecondary policy leadership have gone untended in Utah, leading to policy disconnections and a failure for well-intentioned efforts to yield the full collective benefits desired.

In addition to these findings, NCHEMS articulated and gathered feedback on a set of Key Principles intended to influence the development of recommendations and to guide the strategic plan. These Key Principles were useful in clarifying that the strategic plan should be grounded in the following:

- There exists capable statewide coordination focused on aligning investments with the public's needs, which means that
    - Institutions are the means to the state's goals, not the ends.
    - An effective statewide strategic plan is one that works for all parts of the state.
    - Deliberate attention is paid to technical education as well as academic education.
- Form must follow function.
- A major requirement is that the plan enhances efficiency and addresses affordability for students and taxpayers.
    - Silos are reduced or eliminated in favor of collaboration across institutions, educational sectors, and functions.
    - Necessary changes are not sacrificed to the status quo—programs adjust to meet needs, unproductive duplication is reduced, etc.
- The plan should leverage innovative delivery models by:

- Flexibly addressing evolving education and training needs.
- Being consistent with and enhancing Utah's growing reputation for innovation.

- Strategic use of incentives will complement state-level coordination, i.e., aligning individual and institutional incentives with the state goals will be as essential to success as any regulatory requirements that exist.

With these findings and principles in mind, NCHEMS has identified the following recommendations. In some cases, we have not made a single recommendation in favor of presenting a limited set of options accompanied by a brief discussion of the most important tradeoffs among them. Collectively, these recommendations are designed to address the critical areas of need identified in our analyses. They include:

1. Reassess and recommit to a set of statewide goals for postsecondary education attainment. The goal and its components should be a significant driver of state and institutional policy and practice. This requires the goal to be well-articulated and championed by the state's leadership. In order for it to have meaningful effect, it should be accompanied by a robust set of sub-goals.
2. Reform statewide postsecondary governance to ensure that expert leadership is most effectively focused on aligning investments and institutional activities with the needs of the public foremost in mind. The recommendation lays out a set of essential characteristics and authorities that must be exercised by an entity with an appropriate state-level perspective. It is followed by a set of options that include:
    a. The establishment of a coordinating body to work with the existing USHE and UTech systems.
    b. The creation of a single governing authority over all of the individual public institutions.
    c. The creation of a single coordinating body with some critical authorities (e.g., approval of institutional presidential selections) that give it teeth to ensure that institutional goals are linked to state goals.
3. Develop a funding (resource allocation) model that better links state investments to the achievement of state goals.
4. Address capacity issues in Utah County. This recommendation features a series of critical criteria that must be met in order to assure the rapid growth in that part of the state can be met effectively and efficiently. It includes several options, including:
    a. Maintaining Utah Valley University as a "dual-mission" institution but as a demonstration site for how to effectively employ technology and

innovative academic programming models that bend the cost curve, especially for sub-baccalaureate awards.

b. Create a new community college to serve Utah County and assume the sub-baccalaureate part of UVU's mission, perhaps by separating Mountainland Technical College from the UTech System.

c. Creating UVU as a "mini-system" with a single site for baccalaureate programming and multiple sites for sub-baccalaureate programming.

5. Address capacity needs in rural Utah. Meeting these needs will require innovative models that link capacity and funding to effective and efficient delivery mechanisms. The recommendation lays out critical criteria and includes options for relying on assets in place through Utah State University's Extension function (a part of the Land-Grant mission), better engaging Snow College, and ensuring that funding is capable of seeding and sustaining collaborations across institutional boundaries to identify and serve the needs of rural communities.
6. Address workforce and career readiness through purposeful policy and coordination with related state agencies.
7. Commit to making competencies the essential "currency" of learning by making all sub-baccalaureate programming competency-based, first among CTE programs and eventually for all general education courses.
8. Develop coordinated capacity to deliver distance education programming and increase usage in response to state needs.
9. Take steps to address affordability now and its preservation into the future. This should include the establishment and use of an affordability standard, greater transparency in aid programs (including requiring FAFSAs as a condition of eligibility and creating a common statewide application for financial aid), making a commitment to providing needed financial support to adult learners, and by developing and growing earn-and-learn financial aid programs.

1 Introduction

During its 2018 session, the Utah legislature passed HB 300, which established the Higher Education Strategic Planning Commission. Its charge was to develop a strategic plan for the State of Utah to address the state's needs for postsecondary education over a 20-30-year time horizon. Shortly after its empaneling, the Commission issued an RFP to find a consultant to help it manage the process of developing this plan. The National Center for Higher Education Management Systems (NCHEMS) was subsequently selected for this role. This report is the culmination of NCHEMS' work on behalf of the Commission. After describing the process NCHEMS used to gather data and stakeholder input, the report provides findings and recommendations for the Commission's consideration.

2 Process

Immediately upon being awarded the contract to work with the Commission, NCHEMS made arrangements for an initial visit to Salt Lake City in September 2018. During this trip, NCHEMS met with the co-chairs of the Commission to discuss the expectations for the process for gathering information, engaging the Commission, and preparing the final product. NCHEMS also used this audience with the co-chairs to begin collecting qualitative information about the nature of the challenges and opportunities they saw as critical for the strategic plan to address. While in Salt Lake City, NCHEMS also arranged visits with leaders of relevant agencies, including the Utah System of Higher Education (USHE) and the Utah Technical College System (UTech),[1] the Governor's Office of Economic Development (GOED), the Utah Department of Workforce Services (DWS), and key leaders within the Governor's Office itself.

Simultaneously, NCHEMS set about gathering data to inform all subsequent activities throughout this project. In addition to collecting data from publicly available data sources (e.g., U.S. Census Bureau, National Center for Education Statistics), NCHEMS also made requests for data from USHE and UTech. NCHEMS also gathered data—especially on population trends and projections—from the Kem C. Gardner Policy Institute. Where possible and appropriate, NCHEMS sought to ensure that its data analyses were consistent with the Gardner Institute's population projections. Doing so required some extensive reorganization of key data on employment projections, especially, as data categories were not always consistent. The analyses produced from this data gathering exercise provided details information about relevant topics, including:

- Demography, including race/ethnicity, age, gender, educational attainment level, income, interstate migration, etc. for the state and by county and region

[1] At this initial meeting and at various points throughout the project's duration, NCHEMS engaged leadership within the USHE and UTech system offices and also heard from members of the system boards, institutional presidents, and members of institutional boards of trustees.

- Population projections, including by age (and for high school graduates specifically), race/ethnicity, and geographic dispersion
- Postsecondary enrollment by institution
- Completion of postsecondary credentials by institution
- Affordability and finance of postsecondary education
- Economic conditions
- Current patterns of employment by occupation and industry and projections of future employment

Many of these data were used to benchmark Utah against other states and the nation, as well as to capture trends over time. NCHEMS prepared an extensive collection of static data exhibits to identify analytical themes. In addition, NCHEMS developed heuristic models to analyze the supply of postsecondary credentials in comparison with the statewide educational attainment goal—assuming population projections and varying patterns of enrollment, retention, and completion—and to test the likely effect on occupational projections caused by changes in the mix of industries in the state.

One of the important decisions during this early phase was to establish the geographic regions that NCHEMS would use in organizing its work. Like other states, there are multiple ways of dividing up the state into regions among Utah's state government. Ultimately, NCHEMS and the Commission co-chairs decided to use the DWS workforce regions (Figure 1), which NCHEMS used to disaggregate much of the quantitative data analysis and also to organize the collection of qualitative data through stakeholder outreach activities.

To supplement the data analysis of state and regional conditions, NCHEMS also engaged in extensive efforts to gather stakeholder feedback. These efforts included:

- Initial conversations in September 2018 with various stakeholder groups and and several Commission members (already mentioned).
- Periodic conference calls with key stakeholders. In particular, NCHEMS and GOED staff discussed their respective planning efforts to ensure that both addressed areas of overlap in an appropriately aligned manner. (GOED was required by SB 172, enacted in the 2019 legislative session and co-sponsored by one of the Commission's co-chairs, to prepare a statewide strategic plan for economic development.)
- A statewide tour in April 2019 of each of the geographic regions set out in the report. Meetings were held in the following locations:
    - Cedar City (Southwest Utah)
    - Ephraim (Central Utah)
    - Logan (Bear River)

- Moab (Southeast and Castle Country)
- Ogden (Wasatch Front North)
- Provo (Mountainland)
- Salt Lake City and Draper/Tooele[2] (Wasatch Front South)
- Vernal (Uintah Basin)

Figure 1. Utah Workforce Regions

Each site visit was set up for separate invitation-only meetings with three groups:

- Educators, including officials from local public and private postsecondary institution(s), K-12 leaders and school board members, and any statewide board members from the region.
- Business and community leaders, including leaders from important regional and local businesses (CEOs, human resources directors, etc.), elected officials from the city and counties in the region

[2] Site visits generally occurred over the course of a full day. But in keeping with counsel from the systems, NCHEMS facilitated shorter meetings in Draper and Tooele during a single day.

- Workforce and economic development experts, including those employed by state agencies (e.g., DWS) who have responsibility for the region and city and county employees with relevant job portfolios.

These meetings were designed to be no larger than about 25 individuals in order to allow for a robust conversation. Legislative staff to the commission, the USHE and UTech system offices, and local postsecondary institutions collaborated to organize the logistics of the meeting and to identify appropriate invitees based on broad categories outlined by NCHEMS. NCHEMS staff facilitated each meeting,[3] beginning with a brief presentation of critical relevant data to ground the conversation. During and after this presentation participants were encouraged to offer feedback and context for the data and to inform NCHEMS about key features and conditions in their region, especially those that were likely to differ sharply from an overall statewide perspective or were not revealed by the data. Participants were also asked to share current activities underway that held promise for addressing broader statewide or specific regional needs. Finally, NCHEMS sought information about the particular challenges each region faced in aligning postsecondary education services with regional workforce and economic development needs and in recruiting and serving students most effectively. These focus groups provided NCHEMS crucial qualitative evidence, from which we summarized broad themes that were consistent statewide and also identified important sources of variation across regions.

Throughout the project, NCHEMS made several presentations in public appearances before the Commission, including:

- In November 2018, NCHEMS provided a progress report including a detailed environmental scan primarily showing state-level indicators related to demography, postsecondary enrollment and degree production, and economic and workforce conditions.
- On February 7, 2019, NCHEMS provided testimony before the Joint Higher Education Appropriations Subcommittee of the Utah legislature.
- In April 2019, NCHEMS provided a second progress report that delved deeper into regional variation across the state in postsecondary participation, educational attainment, and economic and demographic conditions, as well as providing the bases for the future orientation of the plan drawn on population projections.
- In September 2019, NCHEMS presented overall high-level findings and draft recommendations for the Commission's consideration and feedback.

In addition, NCHEMS stayed in regular contact with one or both Commission Co-Chairs via in-person meetings and conference calls in order to update progress, keep

[3] NCHEMS staff were joined by colleagues and partners at the Western Interstate Commission for Higher Education (WICHE) in facilitating these meetings.

track of events in Utah, report on findings and observations, and consider the fitness of potential recommendations.

Finally, the Commission met in public session in October 2019 to discuss the preliminary recommendations. Legislative staff compiled the resulting feedback and provided it to NCHEMS, and NCHEMS staff also listened to the public audio recording of that session. NCHEMS considered this feedback in preparing this final report.

3 Major Findings

NCHEMS' quantitative and qualitative analyses led it to identify the following findings and observations.

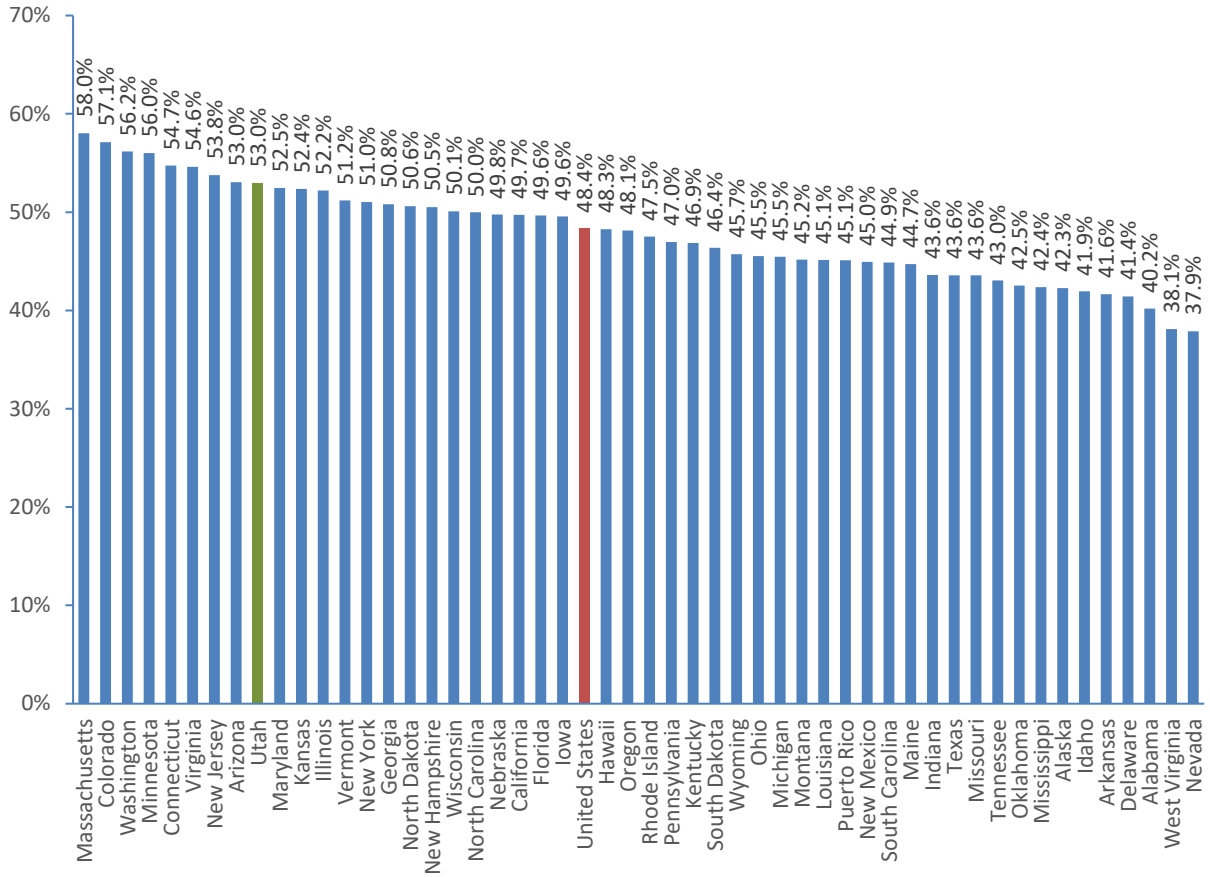
a) **Utah's postsecondary structures operate without a tight connection to a clearly articulated and widely recognized set of state goals.** Utah has established a statewide educational attainment goal that 66 percent of its 25-64 year old population will have attained a postsecondary degree or credential of value by 2025. Yet that goal is no longer driving policy and practices. Interviewees in the state capital flatly told us that the goal was not well understood, and many could not recall with precision the data-based foundation on which the goal was originally established, especially concerning the inclusion of sub-baccalaureate certificates. Furthermore, it was rare that key stakeholders throughout the state cited the goal as being meaningful to the priorities of their institution, workforce and economic development strategies, or advocacy efforts, and few meeting participants could recall the very existence of the goal. Meanwhile, there is no evidence that the statewide goal has served as a compelling motivation underlying the strategic priorities that have been expressed by the USHE and UTech systems. This lack of salience in the state goal robs the systems and their respective leadership of a durable direction clearly expressed by state political leaders on behalf of state taxpayers, employers, and students, which is independent of the interests of the institutions individually and collectively.

   In any event, reaching the target is unlikely to be achievable, assuming current demographic trends and credential production. At 53 percent, Utah's educational attainment rate outpaced the nation's (48.4 percent) but was well short of the estimated workforce requirement of 64 percent by 2020 and the state's attainment goal (Figure 2).[4] Moreover, there was substantial variation in educational attainment across the state, which is partly attributable to the employment opportunities locally (Figure 3). But it also indicates stark differences throughout the state in the readiness for full participation in a

[4] The estimated workforce requirement for postsecondary education comes from Georgetown University's Center on Education and the Workforce.

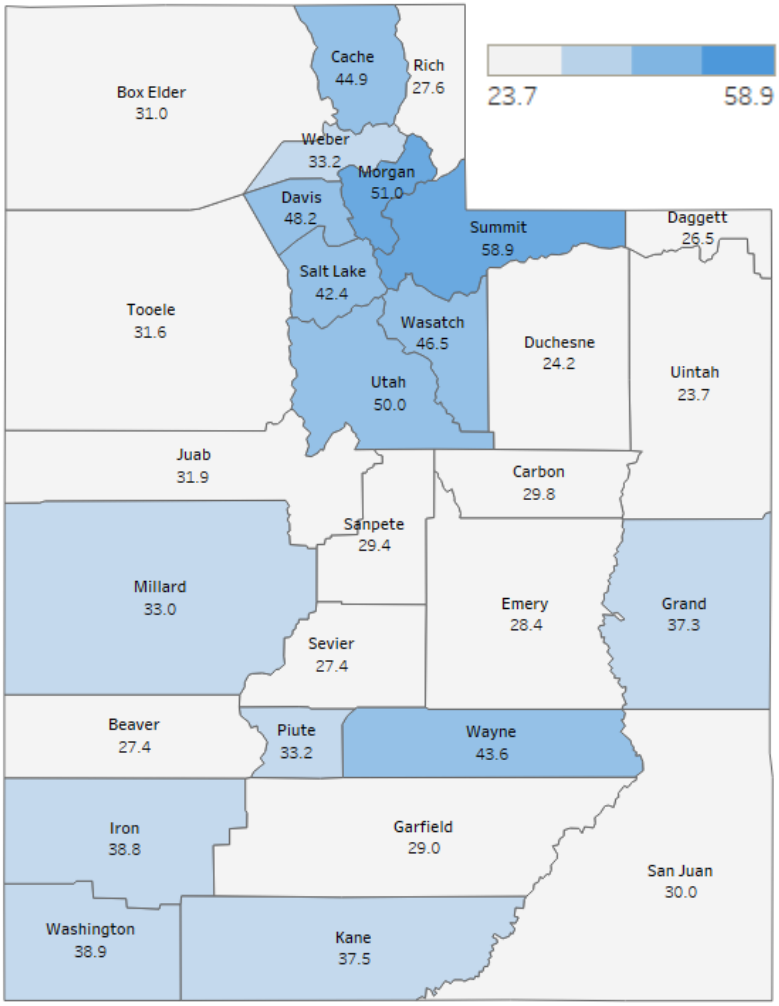
globalizing economy in which good jobs increasingly require postsecondary education and training.

Figure 2. Percent of Residents 25-64 With a High-Quality Certificate or Higher, 2018



Sources: Lumina Foundation *Stronger Nation*; U.S. Census Bureau, 2016 American Community Survey.

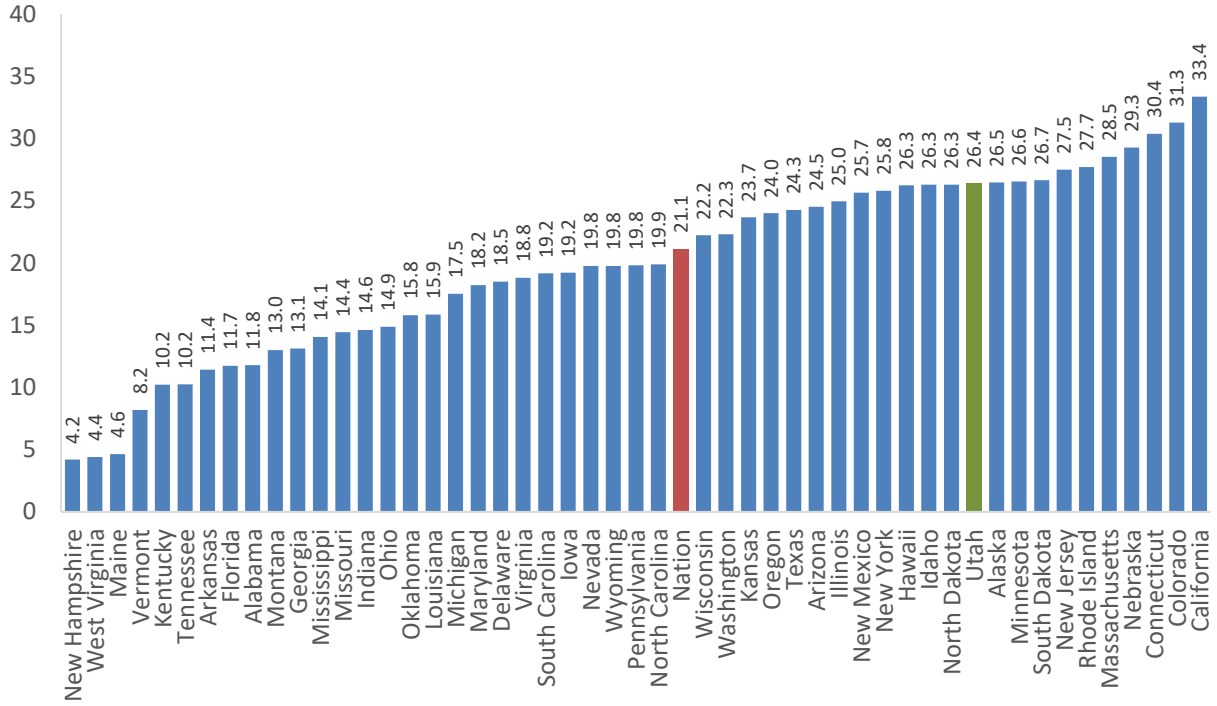
Figure 3. Percent of Adults Aged 25-64 with an Associate's Degree or Higher, by County (2012-2016)



Source: U.S. Census Bureau, American Community Survey (ACS)

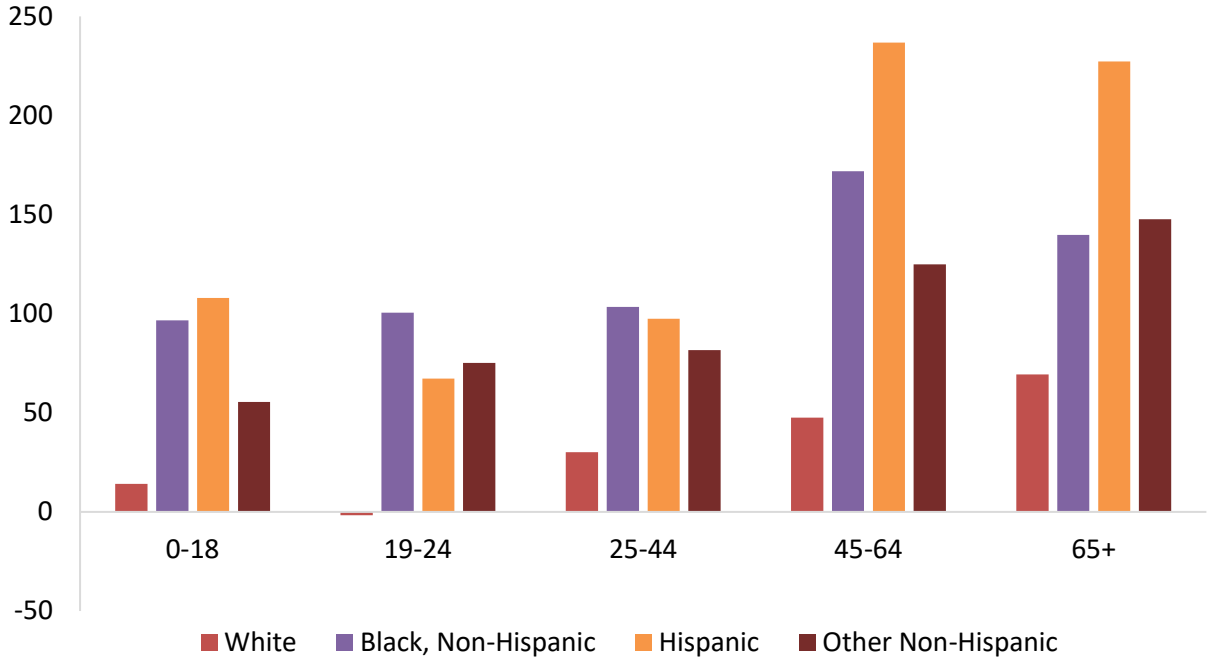
In addition to large geographic variations in attainment levels, Utah has an above-average gap in the educational attainment rate of underrepresented minorities relative to other states (Figure 4). Like most other states, the White non-Hispanic population is the slowest growing segment of the population in percentage terms, and projections indicate that the state's population will continue to grow increasingly diverse (Figure 5), including among high school graduates specifically (Figure 6). It is therefore clear that closing the attainment gap between whites and underrepresented minorities is imperative if Utah is going to achieve its ambitious educational attainment goals.

Figure 4. Difference in College Attainment Between Whites & Underrepresented Minorities, 2016



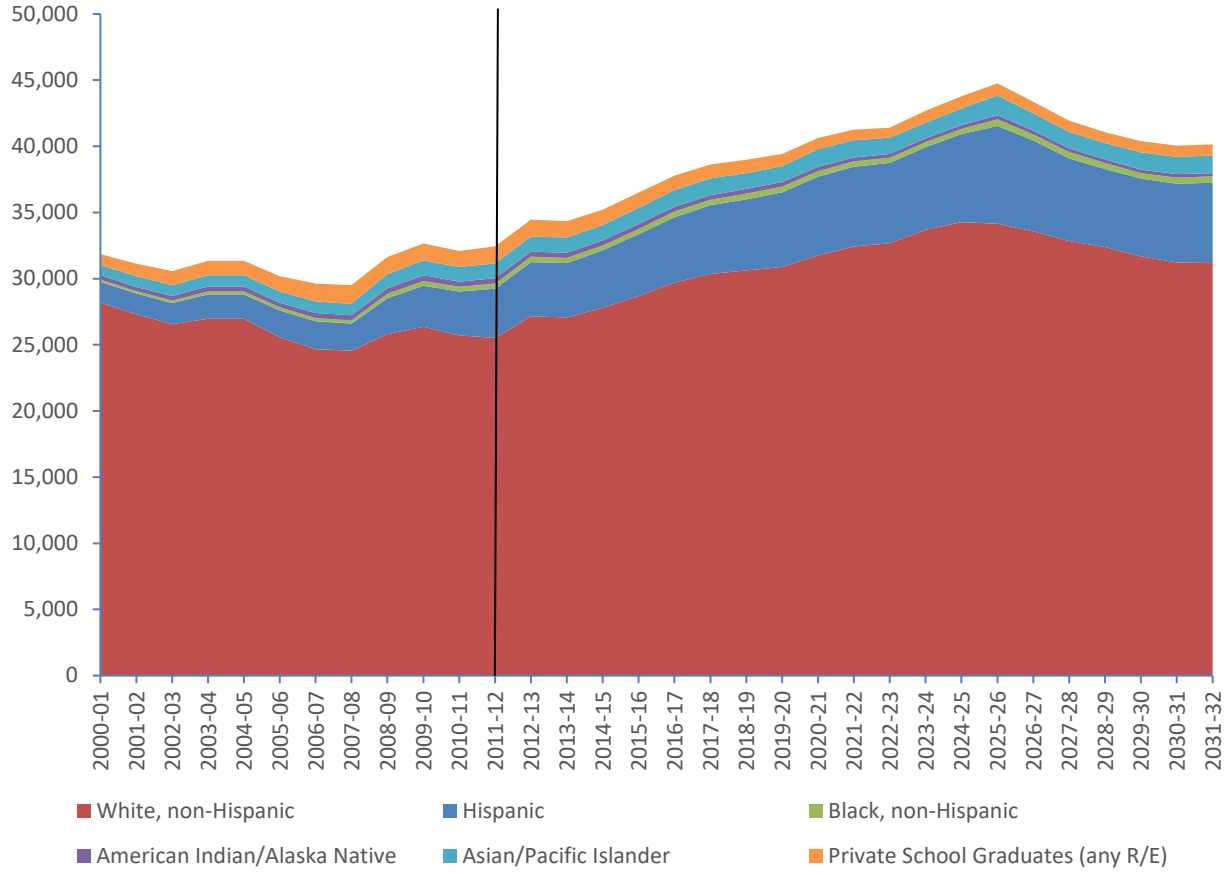
Source: U.S. Census Bureau, 2016 American Community Survey One-Year Public Use Microdata Sample.

Figure 5. Percent Change in Utah Population by Race/Ethnicity, 2000-2017



Source: U.S. Census Bureau.

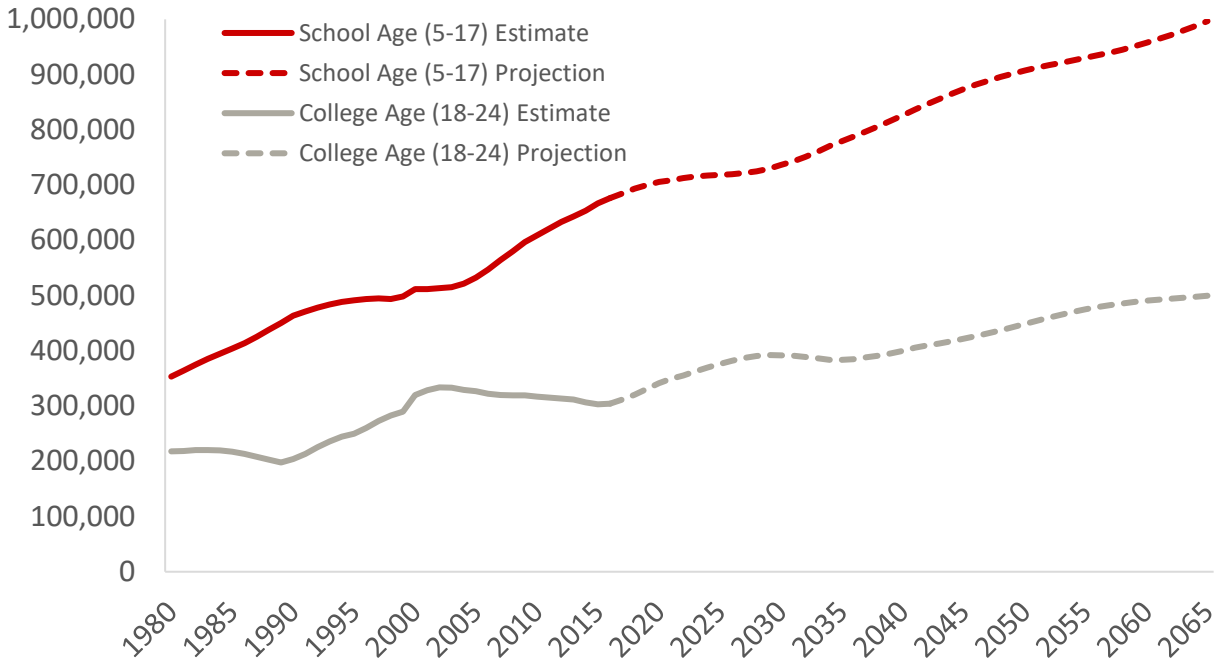
Figure 6. High School Graduates by Race/Ethnicity in Utah, Actual (2001-2011) and Projected (2012-2032)



Source: WICHE, *Knocking at the College Door*

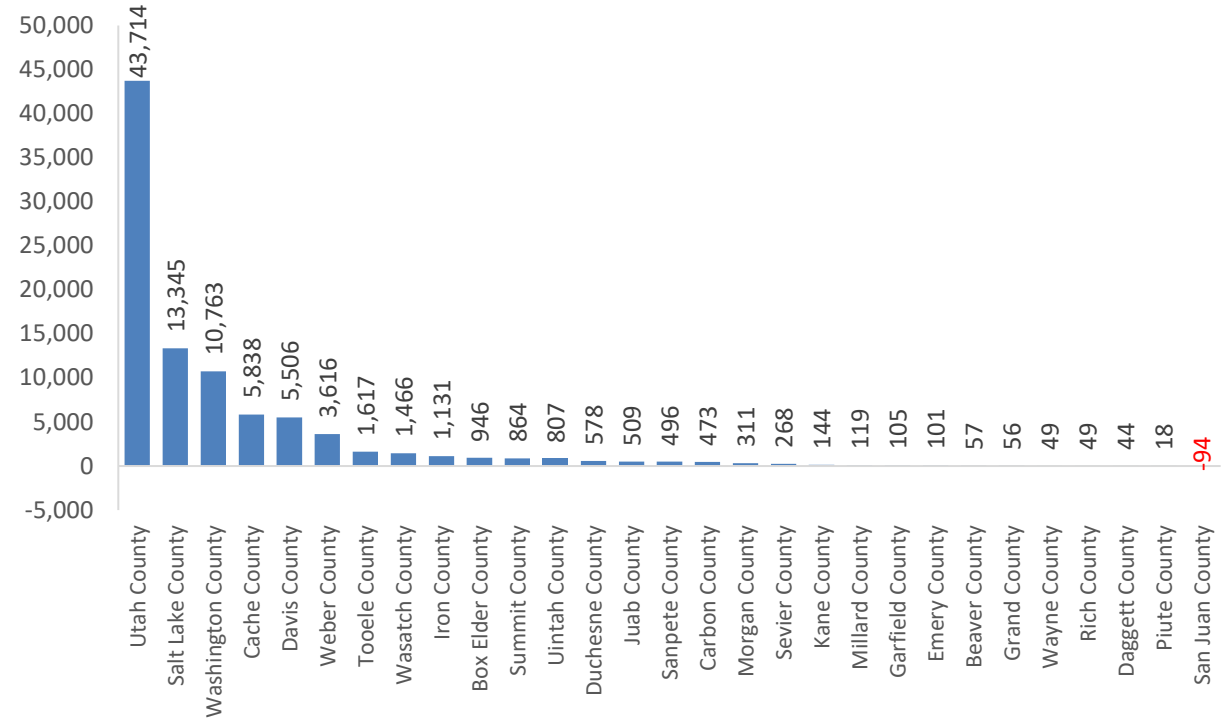
b) **Utah is growing, but the growth is uneven across the state**. Utah is one of just a few states that is likely to see continued growth in the population of traditional college-age students over the next 10-20 years (Figure 7). Yet the trends are highly variable across the state, with much of the growth heavily concentrated in a few counties while others will see steady or declining populations (Figures 8-9).

Figure 7. Utah Population Estimates and Projections



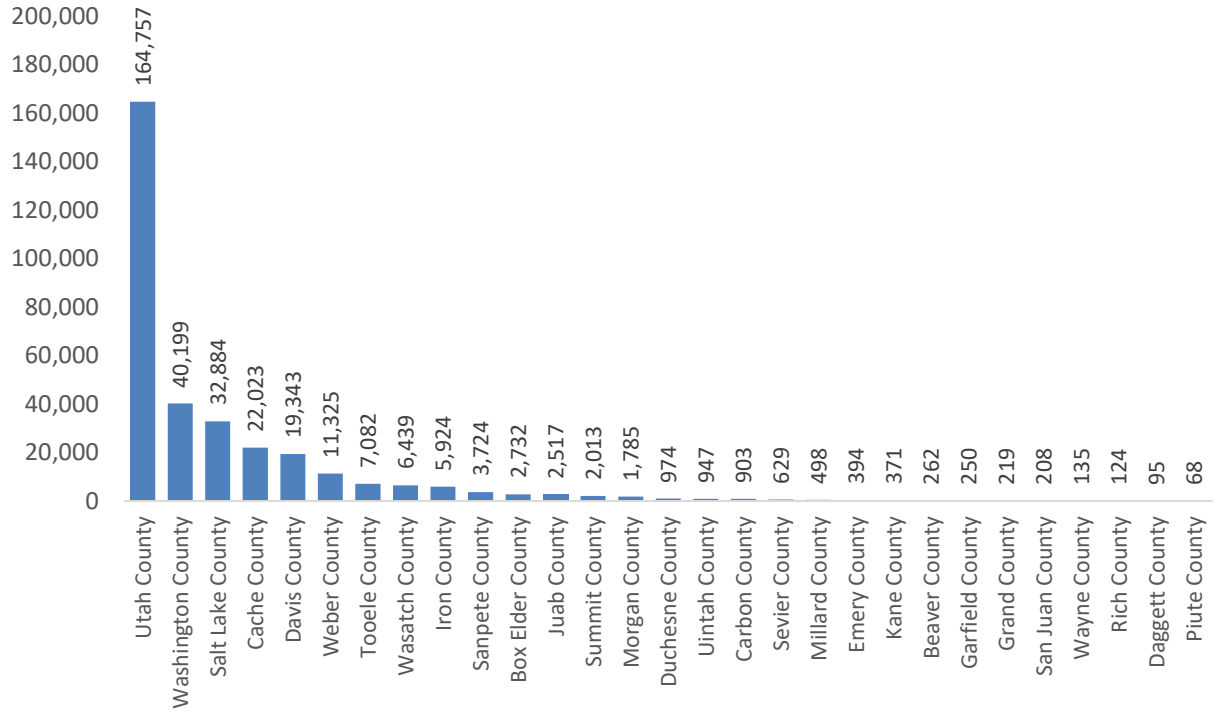
Sources: 1980-1989: Governor's Office of Planning and Budget, Population estimates by sex and single year of age: 1980-1989; 1990 to 2009: Governor's Office of Management and Budget, 2012 Baseline Projections; 2010 to 2065: Kem C. Gardner Policy Institute 2015-2065 State and County Projections.

Figure 8. Difference in Projected Population Aged 19-24 by Utah County, 2020-2050



Source: Kem C. Gardner Policy Institute 2015-2065 State and County Projections

Figure 9. Difference in Projected Population Aged 25-44 by Utah County, 2020-2050



Source: Kem C. Gardner Policy Institute 2015-2065 State and County Projections

In trying to address the challenges of likely enrollment demands overall in the state and especially in some localities, Utah is in an enviable position relative to other states that are staring at extremely difficult choices in the postsecondary sector—possibly including institutional closures and consolidations—driven in large part by contraction in key population demographics. Utah can learn from the experiences elsewhere by not expanding capacity in traditional ways, leaving the state with long-term capital and operational costs. It can take advantage of the opportunity that growth provides to innovate in ways that can generate efficiencies and even improved student success. Such efforts are considerably harder to pull off when the conversation is about how to contract rather than where to make new investments.

c) **Utah students attend college close to home.** As NCHEMS (and others) consistently have found elsewhere, students tend to enroll at colleges relatively close to home (Figure 10). USHE institutions' enrollments of Utah residents, even at the University of Utah, are predominately comprised of students who live nearby, although some do attract students from other states or countries.

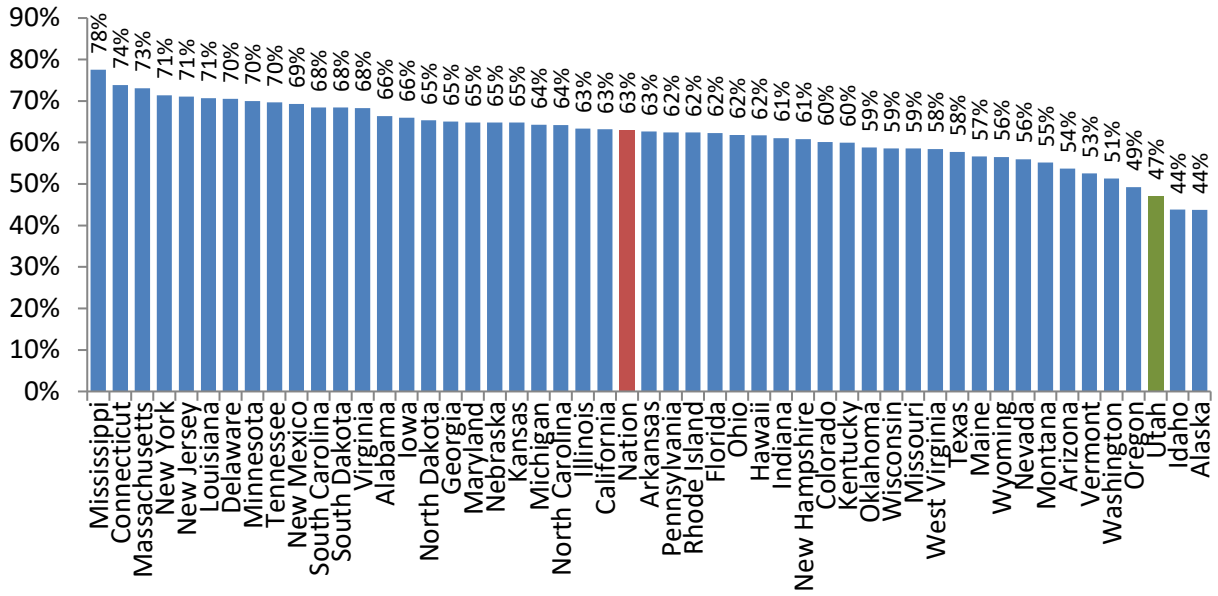
Figure 10. Geographic Origin of 75 Percent of All Undergraduates at USHE Institutions, Fall 2017

University of Utah	Utah State University	Weber State University	Southern Utah University	Snow College	Dixie State University	Utah Valley University	Salt Lake Community College
Salt Lake (44.8)	Domestic Non-Resident (25.7)	Davis (42)	Iron (22)	Sanpete (17.8)	Washington (53.1)	Utah (60.1)	Salt Lake (76.9)
Domestic Non-Resident (25.9)	Unknown (21.6)	Weber (31.1)	Domestic Non-Resident (21.8)	Salt Lake (15.9)	Domestic Non-Resident (18.5)	Salt Lake (12.6)	
	Cache (18.9)		Salt Lake (10.1)	Utah (13.5)			
	Salt Lake (9.0)		Utah (9.5)	Sevier (12.1)			
			Washington (6.9)	Domestic Non-Resident (5.4)			
				Millard (4.7)			
				Juab (4.3)			

Perhaps somewhat surprisingly, Snow College turns out to be the most geographically diverse USHE institution, at least in terms of serving Utahns in large proportions from many counties. Meanwhile, the University of Utah effectively recruits non-residents from other states with its substantial national presence and brand name, but Utahns in attendance—nearly half of its total undergraduate students, and over 60 percent of its resident students—are predominately from the institution's home county. In other words, so long as Utahns stay in-state for college, they are likely to enroll at a local option. This has major implications for where capacity has to be provided, especially in the context of localized rapid population growth.

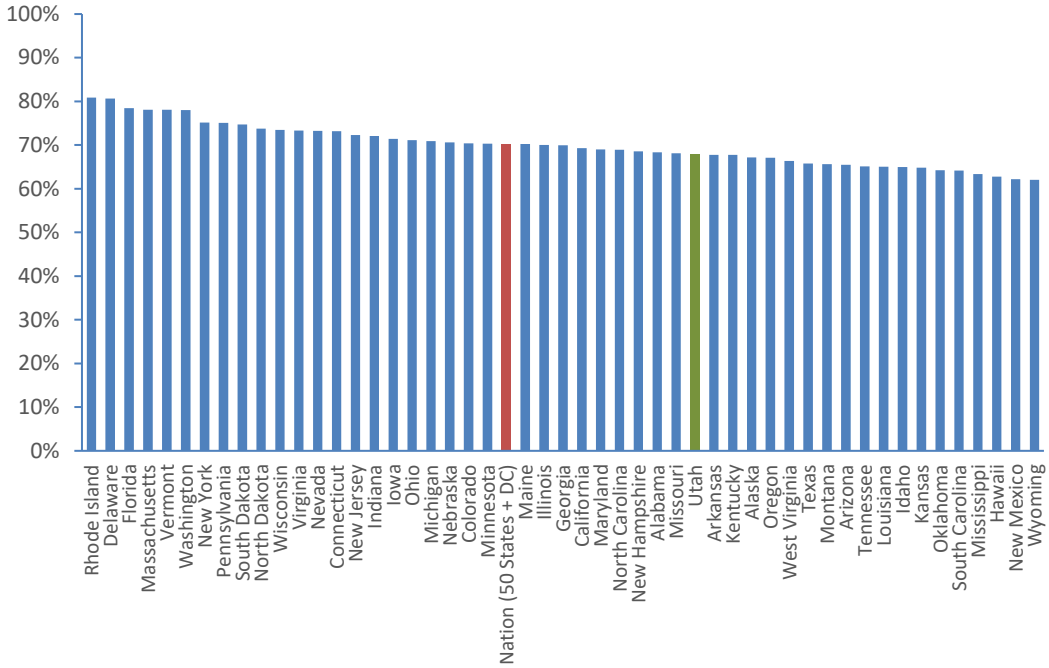
d) **Utah has low postsecondary participation rates and completion rates for traditional aged students.** Utah's most significant point of leakage in the educational pipeline, compared to other states, is in a relatively low college-going rate of recent high school graduates (Figure 11). (This is at least partly due to missions undertaken between high school and college by members of the Church of the Latter-day Saints). In contrast, adults enroll in college at relatively high levels in Utah indicating that many students postpone, rather than forego, college. Retention and graduation rates are also below average for Utah (Figures 12-13).

Figure 11. Percent of High School Graduates Going Directly to College, 2016



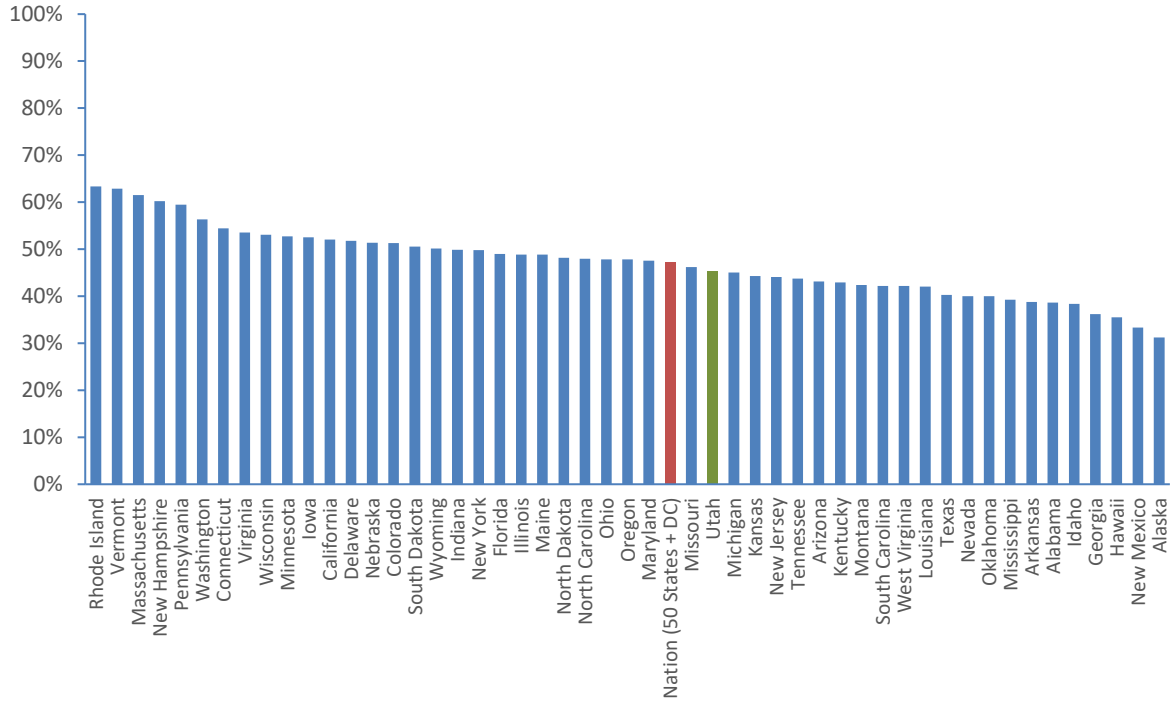
Sources: Western Interstate Commission for Higher Education, *Knocking at the College Door: Projections of High School Graduates*, 2016; NCES, IPEDS Fall 2016 Residency and Migration File.

Figure 12. Retention from First Year to Second Year, 2015-16



Notes: Data are for fall-to-fall retention of first-time degree/certificate seeking students for all Title IV degree-granting institutions
Source: NCES IPEDS

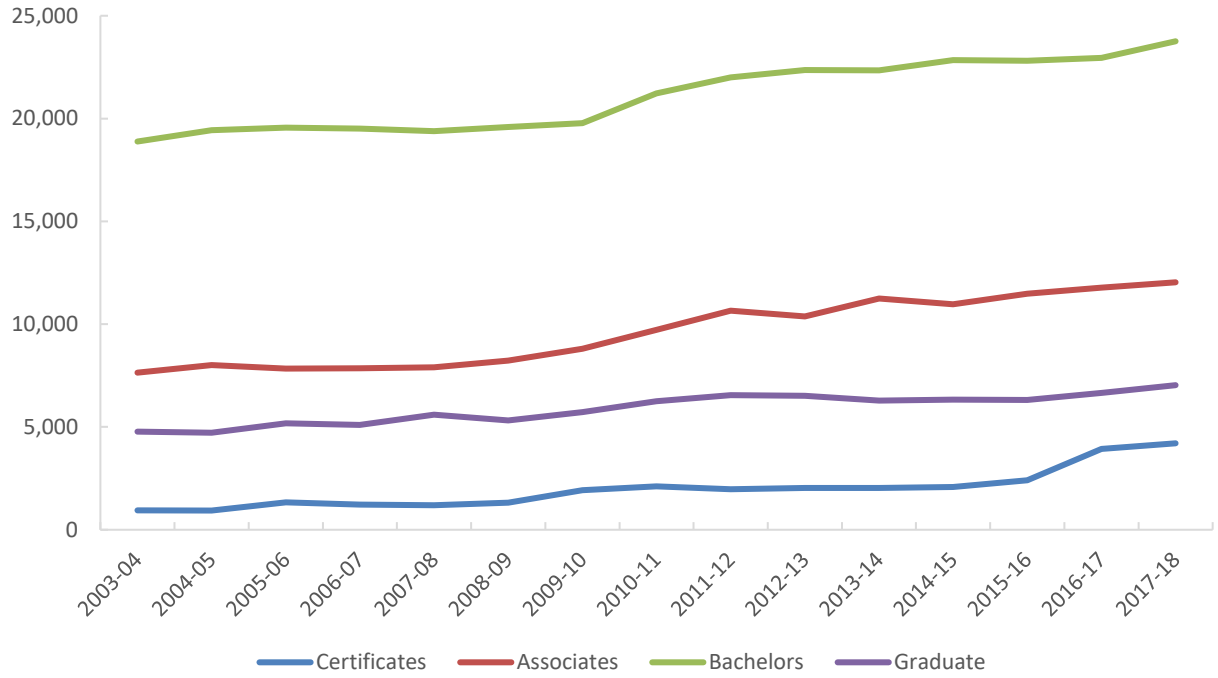
Figure 13. Graduation Within 150% of Normal Time, 2015-16



Notes: Data are for first-time degree/certificate seeking students who complete any award at the original institution aggregated for all Title IV degree-granting institutions. Cohorts consist of first-time students in Fall 2010 for four-year institutions and Fall 2013 for two-year institutions
Source: NCES IPEDS

e) **There is a worsening imbalance between baccalaureate and sub-baccalaureate degree production in Utah.** Awards conferred by Utah's public institutions are heavily concentrated at the baccalaureate level and with few exceptions, that concentration is intensifying (Figure 14). Bachelor's degrees were over half of postsecondary awards conferred by Utah's public institutions plus Brigham Young University and Westminster University in 2017-18. Graduate degrees were nearly 15 percent, associate's degrees accounted for a quarter, and certificates comprised the remainder. In the decade leading up to 2017-18, degrees at the baccalaureate and associate's levels rose largely in lockstep (adding 4,368 and 4,137 respectively) while certificates were up by 3,018. However, the increase in certificates was padded by a spike in liberal arts/liberal studies certificates in 2016-17 at Salt Lake Community College. Without those awards, the growth in certificates over that period would be cut roughly in half.

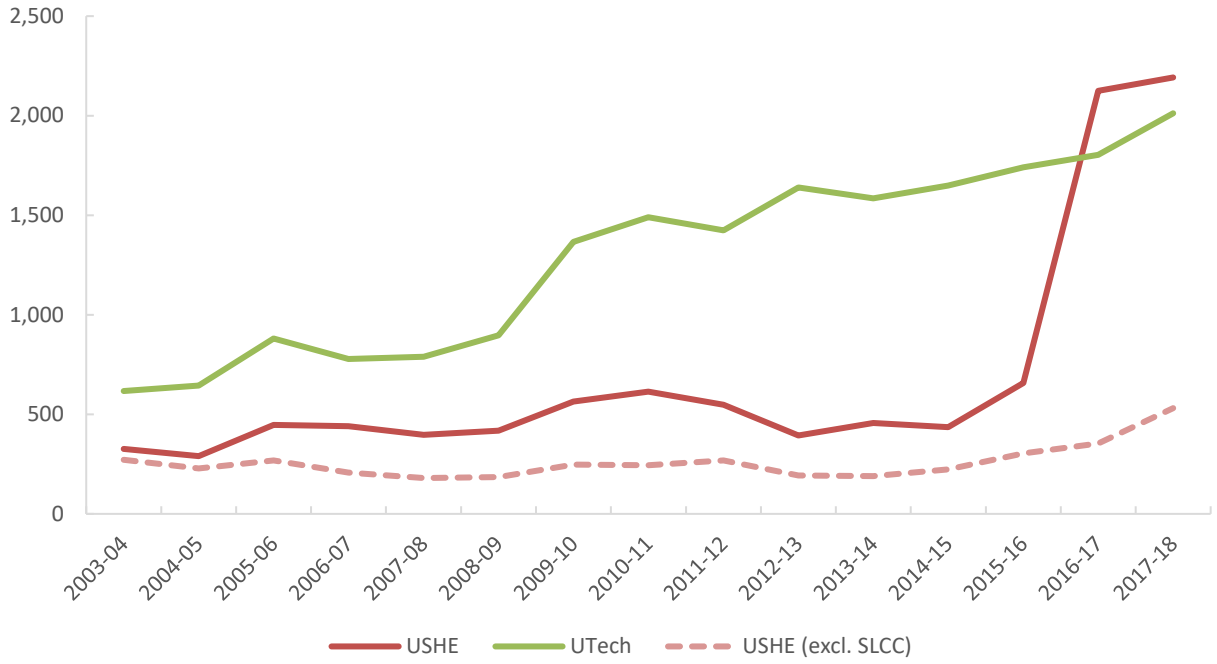
Figure 14. Postsecondary Awards Conferred by Public and Private, Non-Profit Institutions in Utah, by Level



Source: NCES IPEDS

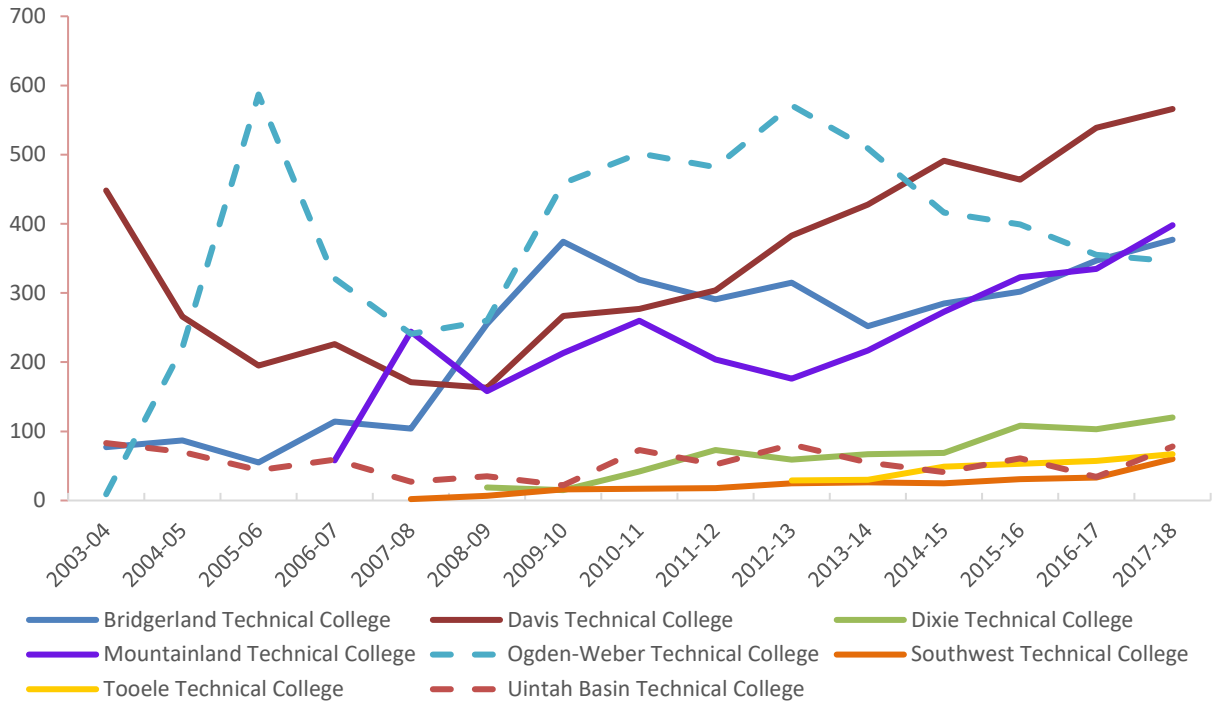
Not surprisingly, the technical colleges have historically produced the majority of the certificates awarded in Utah, and their production has grown modestly over past 15 years (Figure 15). The UTech institutions were overtaken by USHE institutions in 2016-17, although excluding SLCC from the USHE totals reveals that certificate production in the USHE system has been flat throughout most of the period, with a slight upward trend in the past few years. Interestingly, this flatness obscures a significant change in which institutions have been contributing to certificate degree production. Early on Dixie State University was the most significant producer among what are now the USHE institutions, but it fell off dramatically between 2009-10 and 2011-12. Offsetting that drop was a dramatic increase in certificate production at Utah State University, which offered almost none as late as 2009-10 but has conferred between 60-100 annually since 2011-12. Snow College, Southern Utah University, and Utah Valley University have also boosted certificate production in the last few years of these data. Within the UTech institutions, Mountainland, Bridgerland, Davis, and Ogden-Weber are easily the biggest producers of certificates, with the first three having substantially increased production over the past five years or more (Figure 16).

Figure 15. Postsecondary Certificates by Utah Public Institutions, by System



Source: NCES IPEDS

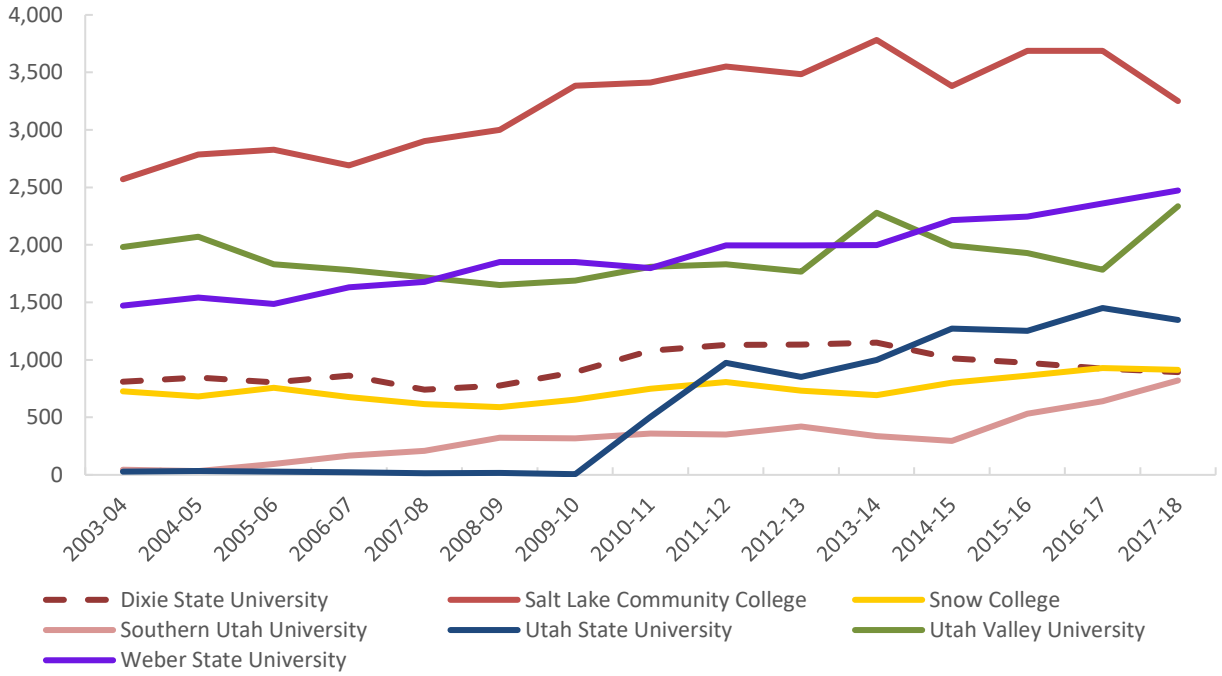
Figure 16. Postsecondary Certificates by UTech Institutions



Source: NCES IPEDS

At the associate's degree level, SLCC is the biggest producer, and apart from a drop in 2017-18, it has seen rising production levels along with Weber State University, and SUU (Figure 17). Utah Valley University produces about the same amount of associate's degrees each year throughout the period, with a notable bump upward in 2017-18 that returned its production level to its previous high point reached in 2013-14. But most notable is Utah State University's entrance as a meaningful producer of associate's degrees beginning in 2009-10.

Figure 17. Associate's Degree Production in Utah Public Institutions

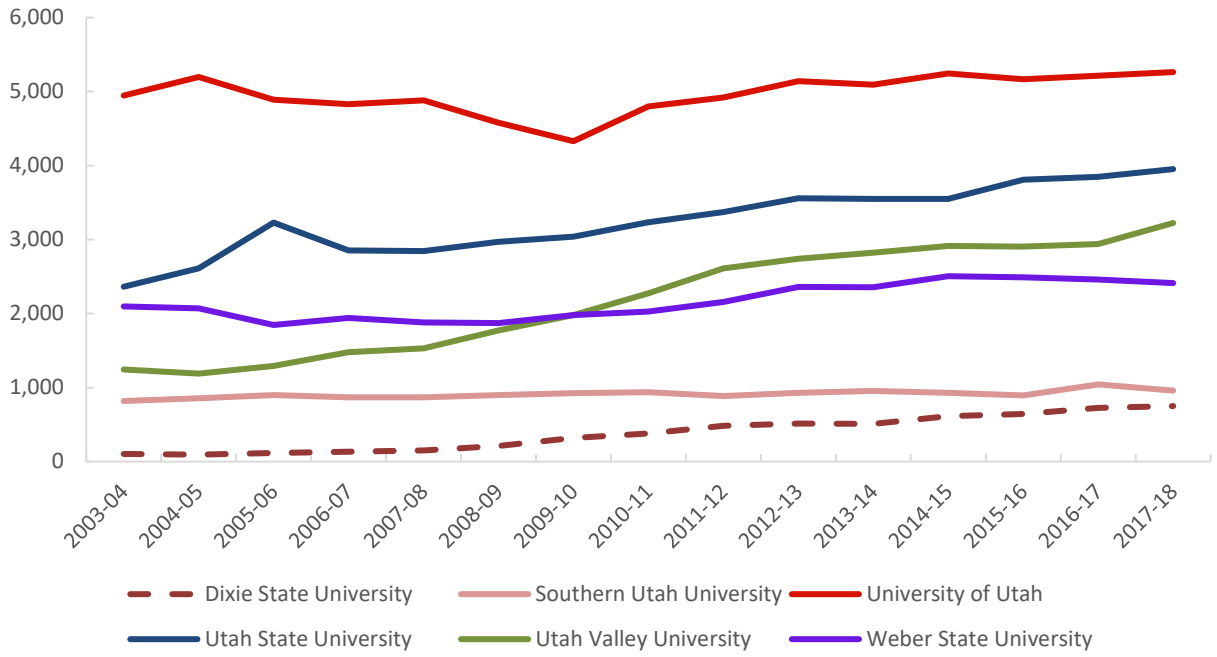


Source: NCES IPEDS

Bachelor's degree production in Utah has risen substantially over the past 15 years (Figure 18). Together with degrees awarded by Brigham Young University and Westminster College, Utah's public institutions produced nearly 5,000 more bachelor's degrees in 2017-18 than they did in 2003-04, an increase of more than 25 percent. BYU has consistently awarded the largest number of bachelor's degrees in Utah followed by the University of Utah. All of the growth occurred in the public sector, as BYU's production has slowed during the last decade. Utah Valley University led the way in ramping up bachelor's degree production, boosting it by nearly 2,000 degrees (equivalent to about 160 percent), and Utah State University, which was up by nearly 1,600 degrees (67 percent). The fastest rate of increase occurred at Dixie

State, which awarded 750 bachelor's degrees in 2017-18, nearly 6.5 times its production in 2003-04.

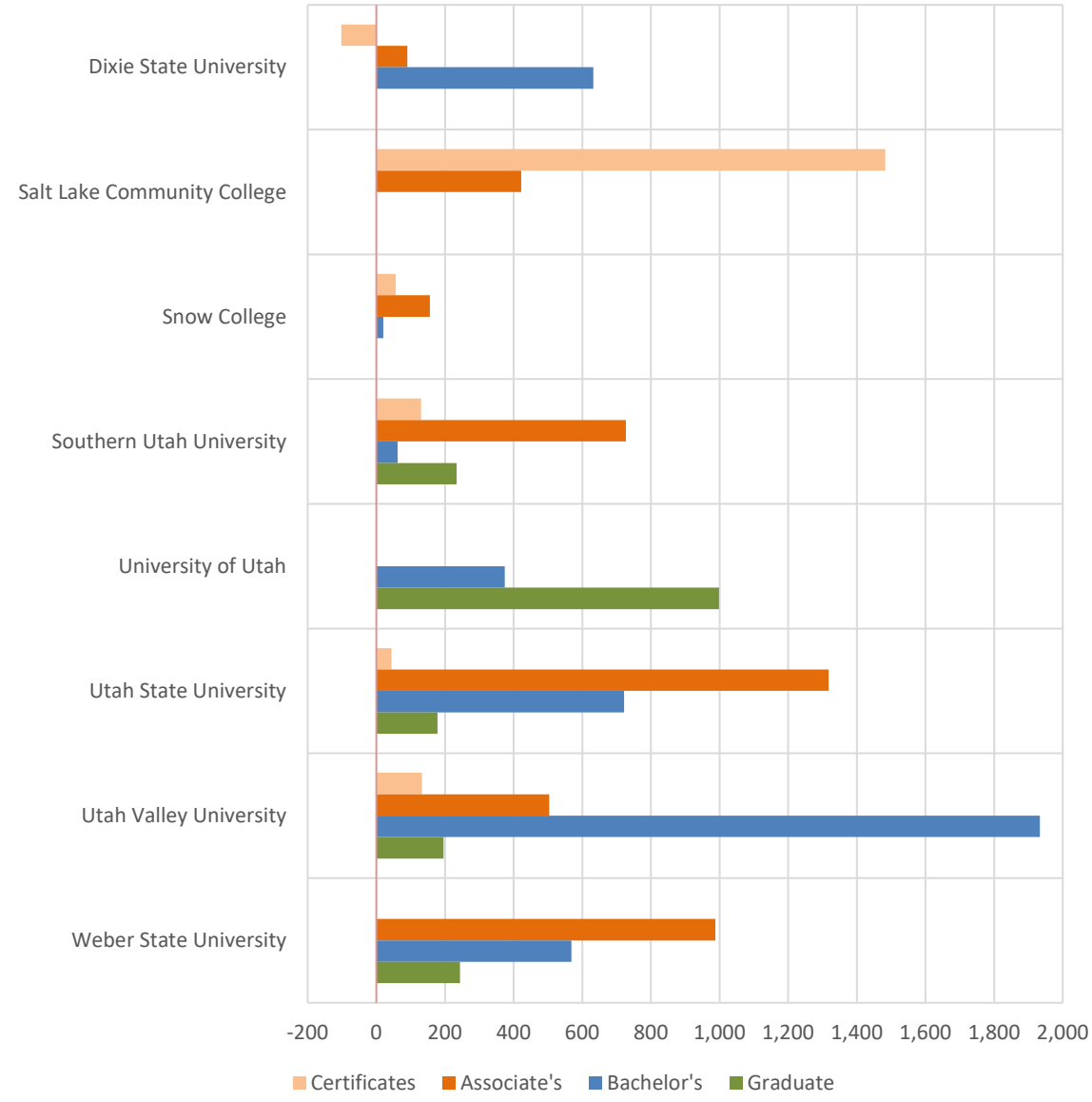
Figure 18. Bachelor's Degree Production in Utah Public Institutions



Source: NCES IPEDS

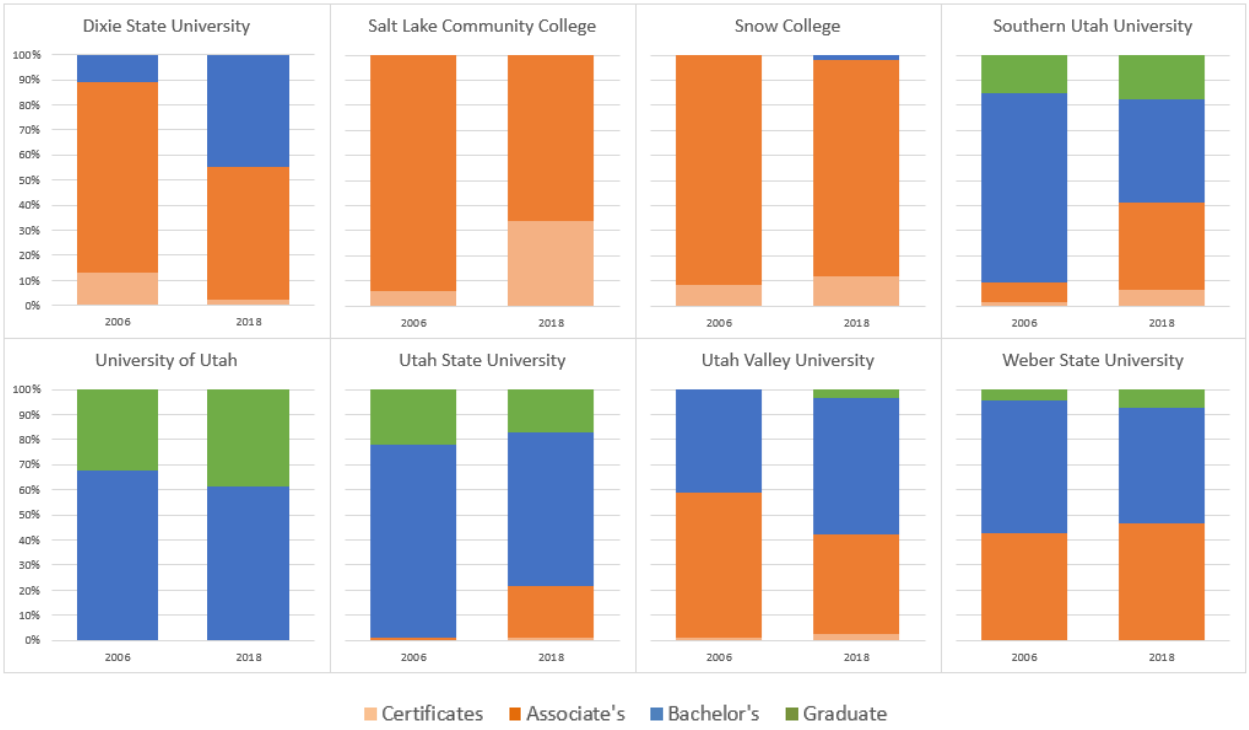
As a view into how institutional missions have evolved, it is instructive to examine how the USHE institutions' production of awards has changed over time (Figures 19-20). It is clear that over the dozen years leading up to 2017-18, current USHE institutions have increased degree production at all levels other than certificates awarded at Dixie State, and these increases are not surprising given the growing population in the state. But the emphases institutions placed on degree levels shifted in several notable ways. Dixie State and Utah Valley University have substantially shifted their emphasis toward baccalaureate degree programs, while Utah State University has added programs at the sub-baccalaureate level where they previously had very little activity. Southern Utah University has also produced considerably more associate's degrees and, to a lesser extent, graduate degrees.

Figure 19. Difference in Awards Produced by USHE Institutions, 2006 vs. 2018



Source: NCES IPEDS

Figure 20. Proportion of Awards Produced by USHE Institutions, 2006 vs. 2018



Source: NCES IPEDS

f) **Widespread demand for educated talent, especially in technical skills at the sub-baccalaureate level and in specific programs at the baccalaureate level.** The demand for talent with postsecondary education and credentials is likely to see substantial increases in the coming years in Utah. While that demand is across all education levels, it is most concentrated at the sub-baccalaureate levels and in technical fields. Utah has a thriving, advanced economy with relatively high levels of educational attainment and low unemployment. The industry mix in Utah has been rapidly changing in ways that are likely to impose greater demands for well-educated workers (Figures 21-23). Employment growth has been particularly strong in professional and business services, education, and health services industries (Table 1).

Figure 21. Percent of Utah's Total Gross State Product by Industry (2006 and 2016) and Comparison to the U.S.

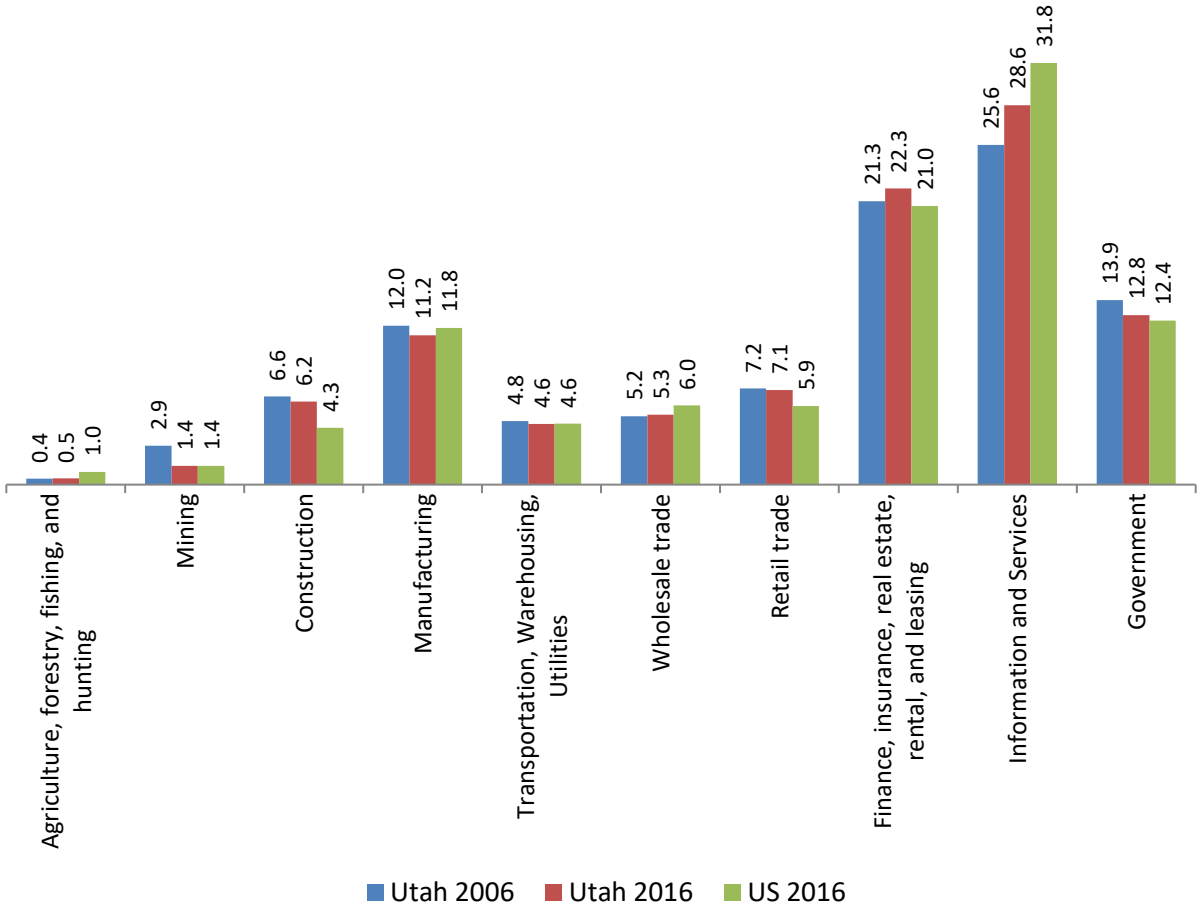
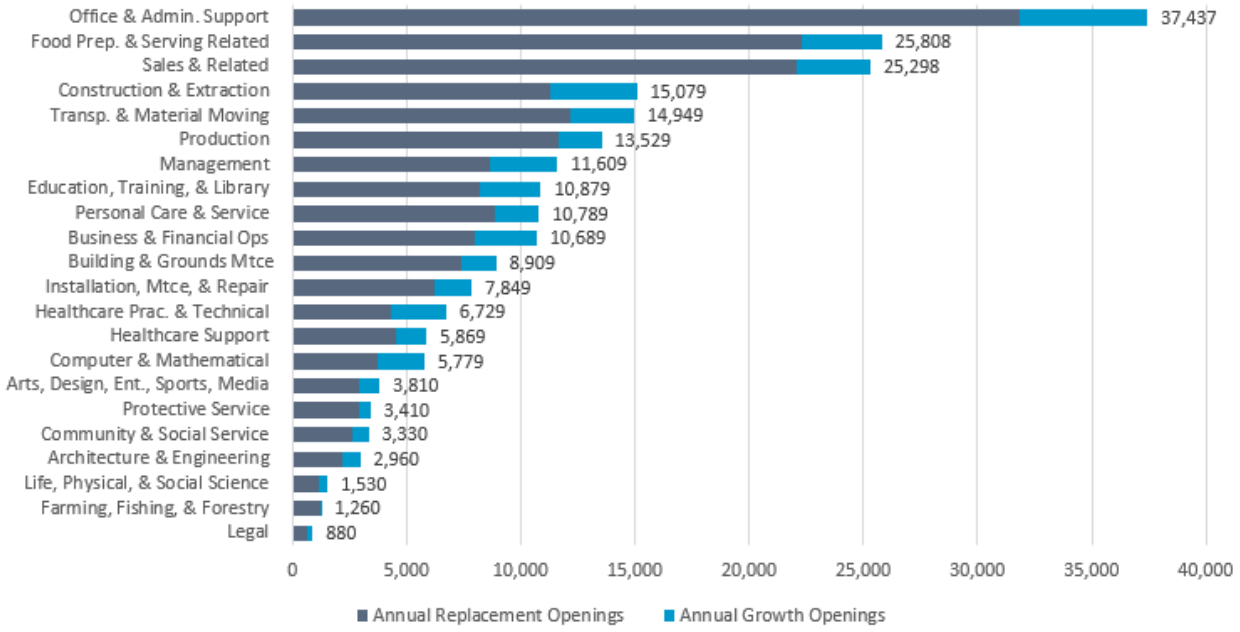


Table 1. Non-Agricultural Jobs by Industry, 2007 and 2017

Industry	2007	2017	2017 Percent of Total	2007-2017 Change	Percent Growth
Total Non-Agricultural Wage and Salary Jobs	1,251,233	1,469,068		217,835	17%
Government	76,410	79,402	5%	2,992	4%
Trade, Transportation & Utilities	259,098	293,394	20%	34,296	13%
Leisure & Hospitality	117,737	150,336	10%	32,599	28%
Education & Health Services	247,717	336,127	23%	88,410	36%
Natural Resources & Mining & Construction	115,648	107,305	7%	-8,343	-7%
Financial Activities	75,288	84,810	6%	9,522	13%
Other Services	36,149	40,731	3%	4,582	13%
Manufacturing	127,708	129,231	9%	1,523	1%
Information	33,681	39,770	3%	6,089	18%
Professional & Business Services	161,797	207,962	14%	46,165	29%

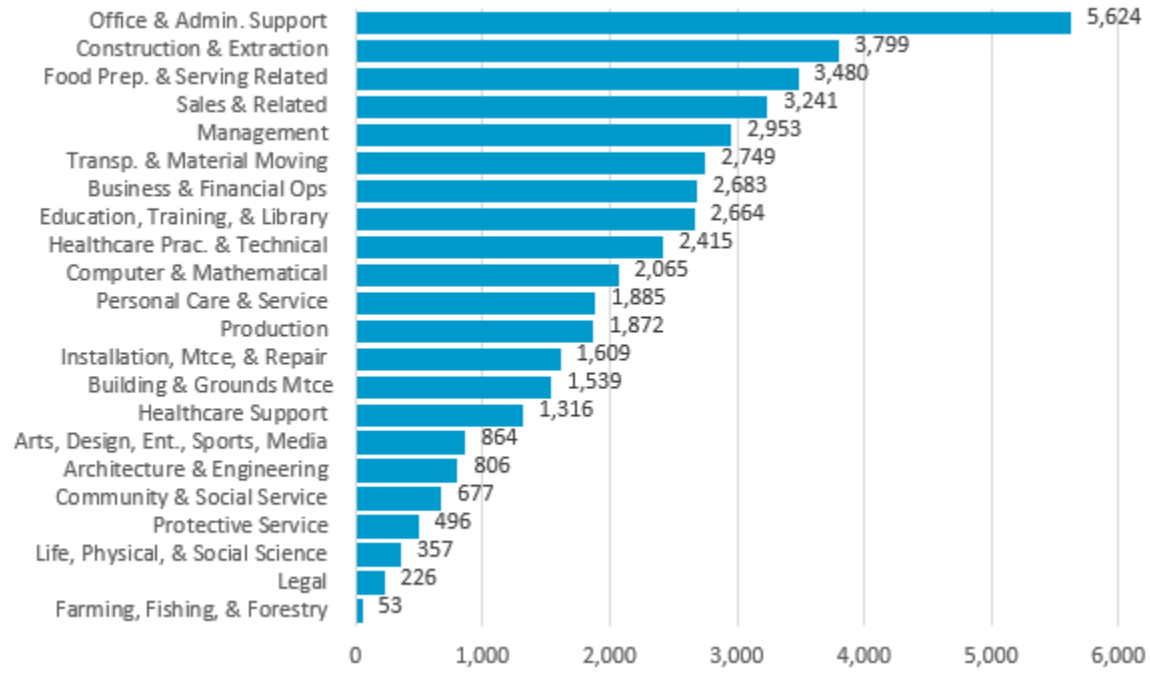
Source: Utah Department of Workforce Services

Figure 22. Average Annual Openings Through 2026 by Occupation



Source: Utah Department of Workforce Services, Occupational Projections 2016-26

Figure 23. Average Annual Growth Openings Through 2026 by Occupation



Source: Utah Department of Workforce Services, Occupational Projections 2016-26

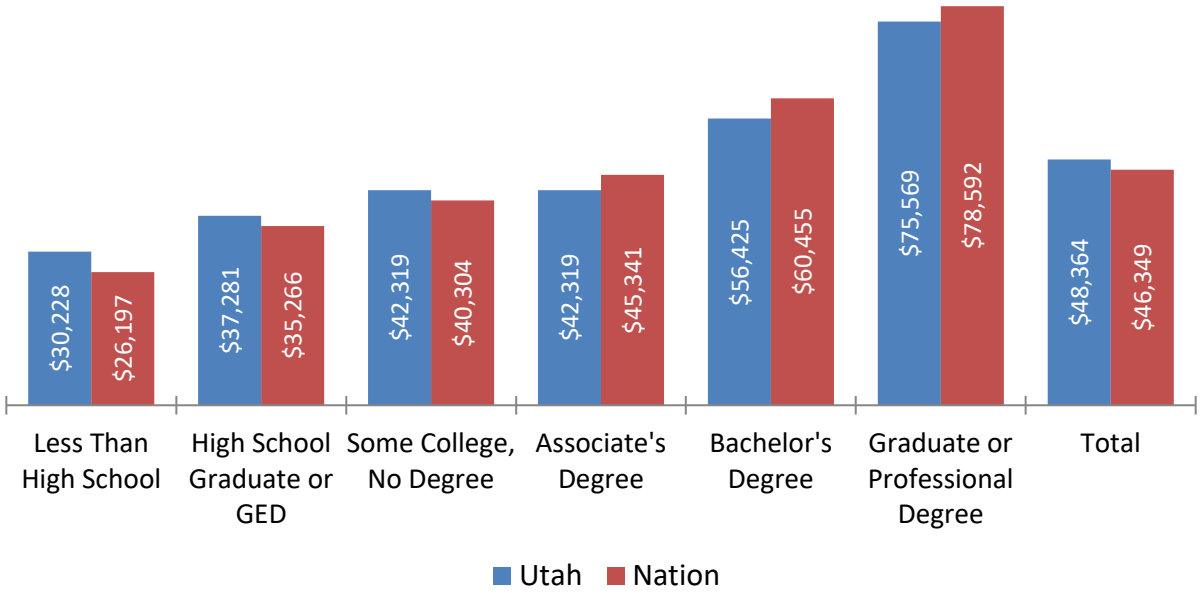
Interviews and focus groups with business, local community leaders, and economic and workforce development experts confirmed the broad outlines of the workforce demands these data indicate, while adding specificity and local context. In general, stakeholders identified jobs seeking graduates of sub-baccalaureate programs and those possessing appropriate technical skills as being the most difficult to fill.

Stakeholders reported that they were generally satisfied with the availability of graduates at the baccalaureate level, while noting existing or anticipated unmet demand in specific areas, namely aeronautical engineers, computer science and related engineering disciplines, and in education (especially at the secondary level and for special education teachers) and health care. These needs at the baccalaureate level tended to be concentrated along the Wasatch Front and surrounding Hill Air Force Base. The exception was the expressed need for teachers that was consistently cited as a need across the state. The need for technically skilled tradespeople was more generally shared throughout the state, including the need for health care workers. Rural communities cited needs for workers who were trained broadly—they need one or two workers with multiple skills rather than multiple workers with one or two skills—as well as for programming that would help grow and sustain small businesses. Stakeholders consistently reported that the state's difficulties in meeting the demands for skilled tradespeople has been at least partly rooted in a lack of appreciation for such educational and career pathways, a lack of effective promotion, and the absence of a clear statewide priority on serving the population of underemployed adults.

g) **There is a relatively low wage premium for postsecondary degrees.** There is a clearly established link between educational attainment levels and wage levels throughout the nation. While this is also true in Utah, individuals with higher levels of education appear to be less well compensated as they get more education. In comparison to the nation as a whole, Utahns with little education earn more than their peers nationwide, while Utahns with postsecondary degrees receive less (Figure 24). This wage compression may contribute to the low college-going rates in the state. To the degree these patterns exist for occupations in demand, it may be a barrier to getting those jobs filled as Utahns with appropriate education and training look elsewhere for better-compensated jobs and residents of other states who might otherwise be attracted to jobs in Utah hesitate to relocate.[5]

[5] Relatively low costs of living, which may have helped Utah attract migrants in spite of these wage patterns, have been rising and may be becoming less potent.

Figure 24. Median Annual Wages for Employed Workers Aged 25-64 by Level of Education, 2016



Source: U.S. Census Bureau, American Community Survey

h) **A need to better serve adult learners.** In spite of anticipated growth in the population of traditionally aged college students, as well as its relatively high participation rates among adults, Utah cannot achieve attainment goals without conferring credentials on adults. NCHEMS' modeling of student enrollment patterns and completions suggests that Utah needs to produce about 227,000 credentials between 2017-18 and 2024-25 to reach its 66 percent goal. Of that number, current trends suggest the state will produce just 17,000 of them. To address the extent to which Utah can make progress toward its educational attainment goal through the traditional pipeline versus better outreach and success with adults, NCHEMS modeled a hypothetical scenario by adjusting assumptions such as:

- increasing the high school graduation rates by 10 percent
- raising the rate at which high school graduates go directly to college from 47 percent to the national average of 63 percent
- boosting the rate at which Utah students enroll in college for the first time between ages 19-22 (to address how LDS missions may be skewing the usual college-going rate) by 20 percent

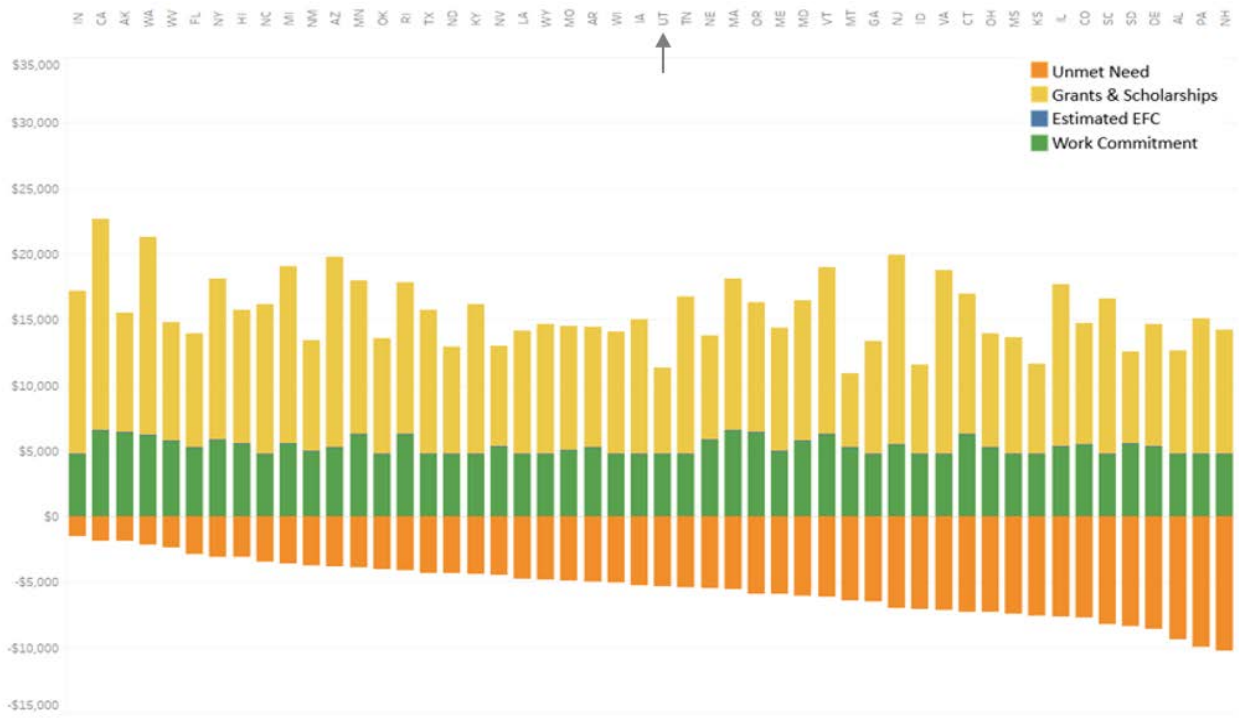
- improving the completion rate[6] of 18-24-year-olds by 15 percent
- The resulting estimates still leave 168,000 additional awards required to reach the statewide goal. Improving the number of adult learners who are recruited to postsecondary education and eventually earn credentials will be a critical component of meeting the demand for highly skilled talent in Utah's rapidly innovating economy. That economy is likely to increase the demand for flexible education and training programs targeted at incumbent workers over the decades to come, another reason to increase the state's capacity to meet the needs of adults.

i) **Affordability is an issue in need of more attention in the years to come.** Due to relatively low published tuition prices, Utah ranks well among states in the share of family income required to pay costs of attendance. As in other states with relatively low tuition pricing, the affordability challenges are narrowly defined according to annual changes in tuition pricing and often fail to fully appreciate the substantial financial barriers of the full costs of attendance for low- and middle-income students. Utah is among the least expensive states when looking just at published prices. But as shown in Figures 25-26, Utah's low- and medium-income students who attend public four-year institutions have unmet need amounts (after earnings from a reasonable work commitment, family contributions, and grant aid are deducted from an in-state student's full costs of attendance) that rank it in the middle third of states.[7]

[6] Measured as credentials per 100 FTE—although not a graduation rate, this measure better captures awards to all students, not just a subset of first-time entrants who complete programs at their original institution within a confined timeframe.

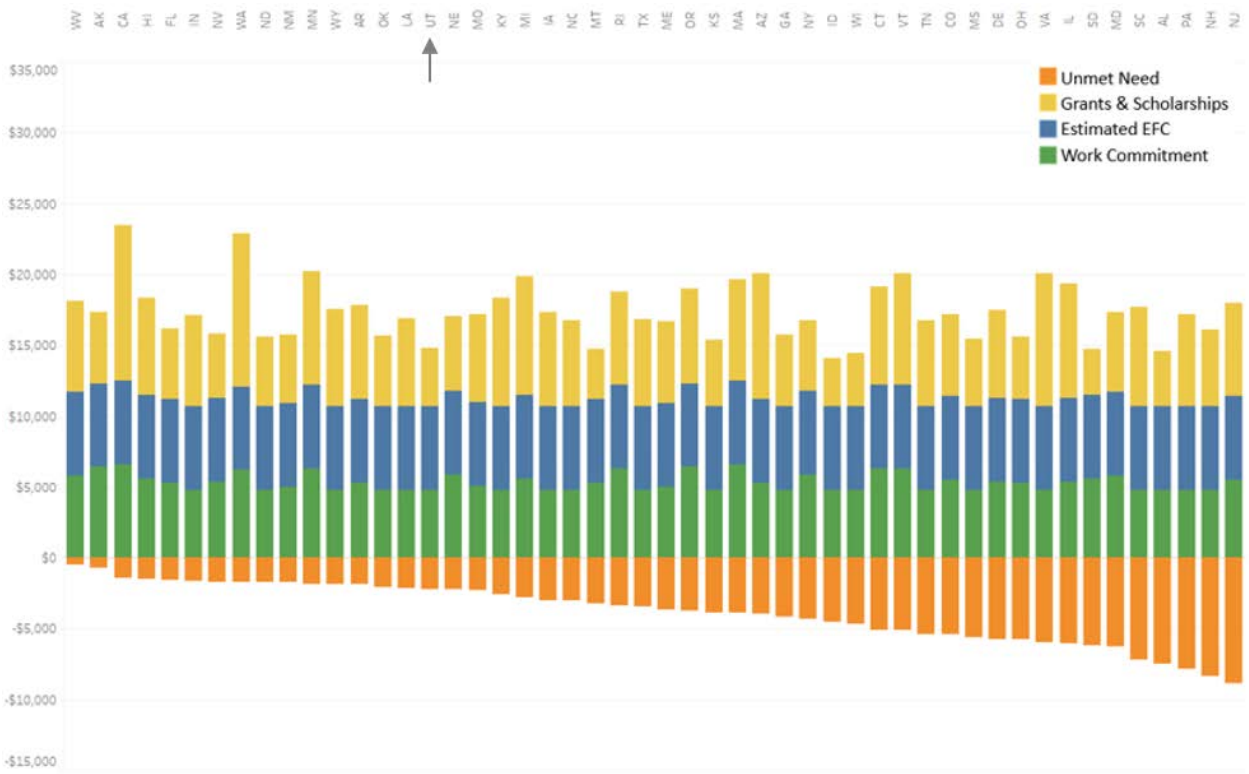
[7] Note that unmet need amounts (in orange) are depicted as negative in these graphs for clarity in display.

Figure 25. Components of Net Price for First-Time Full-Time Students With Incomes of Less than $30,000, in Public Four-Year Institutions, 2015-16



Notes: Work commitment assumes 15 hours/week for 48 weeks/year at minimum wage. EFC is the median within each income band from NPSAS:12; given that income bands are fixed in IPEDS, the age of this estimate is likely not problematic. Unmet need is calculated as the difference between on-campus cost of attendance and the sum of the work commitment, EFC estimate, and total grants and scholarships. Unmet need is expressed as a negative number in order to permit sorting in a way that clarifies its relative magnitude by state. Dollars are adjusted for inflation with the CPI.
Sources: IPEDS Student Financial Aid Survey; NPSAS

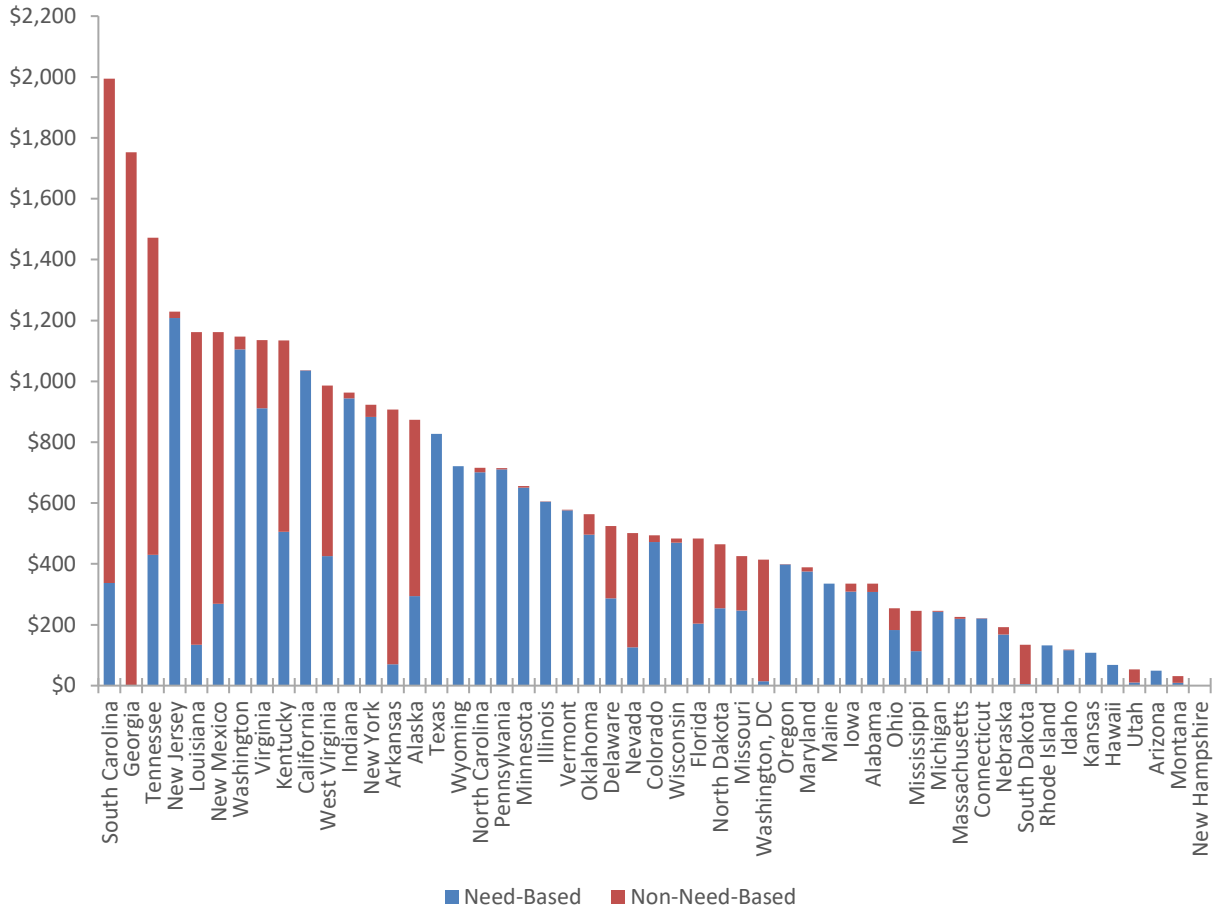
Figure 26. Components of Net Price for First-Time Full-Time Students with Incomes of $30,000-$48,000, in Public Four-Year Institutions, 2015-16



Notes: Work commitment assumes 15 hours/week for 48 weeks/year at minimum wage. EFC is the median within each income band from NPSAS:12; given that income bands are fixed in IPEDS, the age of this estimate is likely not problematic. Unmet need is calculated as the difference between on-campus cost of attendance and the sum of the work commitment, EFC estimate, and total grants and scholarships. Unmet need is expressed as a negative number in order to permit sorting in a way that clarifies its relative magnitude by state. Dollars are adjusted for inflation with the CPI.
Sources: IPEDS Student Financial Aid Survey; NPSAS

These data relate in part to the fact that Utah is among the least generous in making grant aid available to students of limited means. In 2016-17, Utah paid out just $54 per student in grant aid, of which all but $10 was awarded without regard to financial need (Figure 27). Only four other states awarded fewer dollars to students altogether and only one awarded less without factoring in any need-based criteria. More recently, however, Utah has followed the lead of other states in enacting a promise scholarship based on need. This program is also hopeful because it makes adult students and students attending the technical colleges in the state eligible, all of which are departures from past practices.

Figure 27. Need- and Merit-Based Grant Dollars per FTE by State, 2015-16



Source: NASSGAP 48th Annual Survey Report on State-Sponsored Student Financial Aid

Yet there remain important challenges concerning affordability in Utah, including:

- For all the fundamental change that the new promise scholarship program means for Utah, these awards will be restricted to students in their first two years of postsecondary education, which means that students seeking a bachelor's degree will confront a sizeable financial gap when they enter their third year.
- Additionally, while Utah has kept tuition prices relatively low for students enrolled in four-year programs, students enrolled in sub-baccalaureate programs in dual-mission institutions are paying high prices relative to students in other states enrolled in similar programs. The dual-mission institutions charge one rate for all their programs.
- Utah maintains a widely decentralized approach to providing financial aid. Nowhere is this more evident than in the substantial reliance on

tuition waivers that far outstrip the value of state grants. Waivers come in a dizzying array of varieties, for which a richly detailed policy provides guidelines for how institutions may employ them. But these guidelines are extremely loose, and how waivers are allocated to students remains firmly under institutional control. While information is collected on waiver allocations in broad sums, it is not linked to students' abilities to make ends meet while enrolled. In any event, neither the waiver policy nor Utah's non-promise grant policies provide any useful information to students considering whether to attend college about how much aid is likely available. Moreover, waivers and grants are mostly advertised on the institution's financial aid websites, which vary considerably about how clearly and comprehensively they communicate about college costs.

- Utah lacks a broad standard for judging and monitoring affordability that would better equip it to understand how the state and institutional investments are or are not performing well at keeping students' total costs of attendance within reach for the populations most critical to reaching state attainment goals—namely, low-income youth and adults, first-generation students, and student seeking credentials in preparation for high-demand workforce needs.
- Until recently, Utah's finance policy, especially its approaches to allocating grant aid, have focused on full-time students recently out of high school. It must address the affordability issues facing returning adults in particular.

Altogether these conditions suggest that a rethinking and restructuring of policies aimed at preserving and enhancing postsecondary affordability are in order.

j) **It is our observation that several key policy leadership functions have gone untended in Utah**. State-level policy leadership for higher education in Utah has historically been assumed by the legislature. Characteristic of policy driven by legislatures, it is created as one good idea at a time, resulting in disconnected policy and impact. While each initiative is well-intentioned, the net effect does not yield the collective benefits desired. We take as evidence for this observation the following:

- There has not been a statewide plan for higher education in the state, a plan that establishes a public agenda and clearly delineates the short list of priorities that reflect the most important needs of the state. There have been plans for both USHE and UTech, but these have had a decidedly institutional/system flavor. The Governor's Office promulgated the 66% postsecondary education attainment goal, but stating the goal has proved insufficient to get movement toward its achievement. It lacks specification of sub-goals that can be acted upon and create the basis for accountability

for the various components of the education system in the state. Examples of such actionable sub-goals are:

1) Specification of the share of the 66% goal that should be comprised of sub-baccalaureate degrees (and within this, certificates and associates separately) versus baccalaureate and higher degrees.
2) Levels of college participation rates of both recent high school graduates and adults required in order to attain the larger goal.
3) Improvements in completion rates of college attendees.

- There has also been a dearth of implementation plans—the identification of and strategies for pursuing sub-goals. For example, a strategy for enrolling a substantially larger number of adults and supporting programs designed to meet their academic interests and needs, which are very different than typical traditional-aged students. Or a strategy for removing financial barriers to enrollment and completion for those students who will have to succeed in higher education if Utah's larger goals are to be met.
- There has been no strategic finance plan to ensure that all available revenues are utilized in ways that are mutually reinforcing and create incentives for institutions to, in their own self-interest, pursue the high priority goals of the state. Such a strategic finance plan would:

1) Ensure that base funding for institutions is sufficient to maintain the capacity needed to achieve state goals and is distributed in a way that lets each institution fulfill its mission. The base funding for institutions has not been reexamined for many years. It almost certainly needs adjusting.
2) Include a performance funding component that encourages institutions to utilize their capacities in ways aligned with state goals. Utah has performance funding modules for each of the two public systems. However, these modules were developed in the absence of clear sub-goals so they reward "good" things, but not necessarily in a way that is coordinated and leads to cumulative results.
3) Treat the capital budget as an integral piece of the larger financial strategy rather than as a separate budget item unrelated to the operating budget. If it were an integral piece of the finance plan it would be utilized to create capacities of various kinds (programs, delivery modes as well as physical facilities) required to meet state goals. As it is, the focus is entirely on traditional capacity in "bricks and mortar" and the projects funded are driven more by institutional aspirations and desires than by clear links to state priorities.
4) As with the capital budget, a statewide strategic finance plan would make student financial aid funding a much more intentional part of

the strategy for pursuit of priority goals. For example, using student aid funds in ways that entice adults back into the higher education system and support them in ways compatible with their life situations. Or ensuring that grant funds are used in ways designed to ensure affordability for those individuals whose unmet needs are greatest.

5) Incorporate tuition policy into the larger financial strategy in a way that is aligned with state goals

- The program approval process has been used as a substitute for clear definitions of institutional missions. The result has been constant friction between USHE and institutional leadership and boards. The fact that the legislature felt it necessary to step in and establish new rules for program approval (removing most of the authority from USHE) is an indication of leadership failure. A much better solution would be to have a statewide leadership entity work with each institution to develop a clearly defined mission for the institution—one that establishes the broad parameters within which local boards can make program decisions without further approval "up the line." The statements of mission should clearly articulate:

  1) The level of programs which the institution is authorized to offer.

  2) Broad fields, especially professional programs that are within the institution's mission—engineering, health professions, etc. By exclusion this delineation indicates the fields that the institution is not authorized to offer.

  3) The characteristics of the students to be served by the institution—prior academic preparation, geographic origin, etc.

  4) Any special characteristics/institutional competencies or unique programs, for example, land grant status.

- The absence of such mission "guard rails" has meant that institutions have essentially pursued mission changes through the program approval process, one program at a time. The fact that program approval has largely become vested in institutional boards means that institutions have opted to create their own capacity to meet regional needs rather than seek partnerships with other institutions to provide the same service at lower overall cost to the state.

- A key role of statewide policy leadership organizations is facilitating solutions to issues that can best be described as being those that exist "among and between" institutions and sectors. There are a variety of such issues, among them being:

  1) Articulation and transfer done on a statewide basis rather than as a series of bilateral arrangements among the institutions. The major case for leadership in this arena is the fact that USHE and UTech

institutions are working out these arrangements on a case-by-case basis at the local level without a framework for a statewide solution to this issue which will only grow in importance over time. That their students can progress from sub-baccalaureate programs to baccalaureate programs without having to navigate a complex inter-institutional credit transfer process is touted as a major benefit for students at dual-mission institutions is indicative of the state's failure to address this need in a comprehensive manner, as much as it is a legitimate case for maintaining dual-mission institutions.

2) Collaborative delivery of educational programs. Again, there are instances of such arrangements but by far the most common solution to responding to regional needs is to develop regional capacity that duplicates capacity found elsewhere in the system. A major element in addressing this issue is creating a funding mechanism that rewards institutions for collaborative action rather than for reinventing the wheel locally.

3) Prior learning assessment that streamlines the awarding of credit for learning that may have occurred outside the institutional setting. This grows much more important in Utah as enrollment of adults becomes a larger priority and as bringing veterans back into the civilian workforce becomes a strategy for responding to workforce needs. At the moment the assessment of prior learning is done at the departmental level within each institution. The unevenness of judgments in this process will inevitably create problems for students when they try to transfer such credit from one institution to another.

4) The definition of what it means to be college ready. This is a topic that is not situated within institutions or sectors of postsecondary education but exists between secondary and postsecondary education. This is a topic that begs for state-level leadership; solutions hammered out at the regional level will not suffice.

None of the above should be treated as a critique of individuals who have occupied positions of leadership in either USHE or UTech. Rather the failure is in the absence of 1) clear assignment of leadership responsibilities to statewide education entities and clear statements of expectations concerning the roles of these entities and 2) clear delineation of responsibility between statewide entities and institutions.

4 Key Principles

In reflecting on the findings and through consultation with the Strategic Planning Commission, NCHEMS articulated and gathered feedback on a set of Key Principles intended to influence the development of recommendations and to guide the

strategic plan. These Key Principles were useful in clarifying that the strategic plan should be grounded in the following:

- There exists capable statewide coordination focused on aligning investments with the public's needs, which means that
    - Institutions are the means to the state's goals, not the ends.
    - An effective statewide strategic plan is one that works for all parts of the state.
    - Deliberate attention is paid to technical education as well as academic education.
- Form must follow function.
- A major requirement is that the plan enhances efficiency and preserves or improves affordability for students and taxpayers.
    - Silos are reduced or eliminated in favor of collaboration across institutions, educational sectors, and functions.
    - Necessary changes are not sacrificed to the status quo—programs adjust to meet needs, unproductive duplication is reduced, etc.
- The plan should leverage innovative delivery models by:
    - Flexibly addressing evolving education and training needs.
    - Being consistent with and enhancing Utah's growing reputation for innovation.
- Strategic use of incentives will complement state-level coordination, i.e., aligning individual and institutional incentives with the state goals will be as essential to success as any regulatory requirements that exist.

5 Recommendations/Options

The recommendations made in this report derive directly from the information (both quantitative and qualitative) compiled during the course of work on the project and are shaped by the Key Principles described above. In some cases, we do not make a single recommendation in favor of presenting a limited set of options, accompanied by a brief discussion of the important tradeoffs between them. Utah will need to choose from among these options in charting a path forward when the time is right. Collectively, these recommendations are designed to address the critical areas of need identified in the analyses we conducted and concurred in by the Strategic Planning Commission at their September 2019 meeting. By design and the Commission's expressed intention, they also reflect a set of changes intended to position Utah's postsecondary policy and structure for success over the next two to

three decades of changes, innovation, and rising demands and expectations for performance. The recommendations fall into the following major categories:

- State goals for higher education
- Policy leadership
- Workforce needs
    1) CTE
    2) Adults
- Competencies as the basis for credentialing and transfer
- Capacity
    1) Distance delivery and sharing of existing capacity
    2) New capacity—Utah County
- Strategic Finance
    1) Institutional funding
    2) Affordability and student financial aid

1. **Reassess and recommit to a set of statewide goals for postsecondary education attainment.** The goal and its components should be a significant driver of state and institutional policy and practice. In order for that to happen, it needs to be well articulated and widely championed by the state's political leadership. The broad goal currently in place, ensuring that 66 percent of Utahns have a postsecondary credential by 2020, has to be accompanied by a robust set of sub-goals. Such sub-goals are needed to break down the broad goal into meaningful, measurable, and achievable components that are actionable and that give direction to all relevant state agencies and institutions. In addition, it is important for the goal to permeate the policy development process around postsecondary education. That is most likely when the state's political leadership—not just the governor but the legislature and relevant appointed boards—are all on record as having accepted the goal. That can be done by memorializing the goal formerly in statute, through the passage of appropriate resolutions, or some other manner. Finally, the goal should be conveyed early and often to the general public. A modest but thoughtfully designed public relations campaign can help ensure that the goal is embedded in the state's consciousness and drives educational and workforce development policy. But there is no substitute for frequent references to the goal in public policy pronouncements.

   The following goals are provided as a starting point for discussion, as well as to signify the need for enough specifics to provide sufficient guidance for achieving the broad goal.

Goal 1. Reaffirm the goal that 66% of the working age population have a postsecondary credential of value by 2030.

Sub-goal 1. Of that 66%, 30% will have associate degrees or certificates and 36% will have baccalaureate degrees or higher.

Sub-goal 2. Double the number of certificates and degrees awarded to individuals 30 years of age and older.

Sub-goal 3. There is an educational attainment target for each region that contributes to the statewide goal, and which accounts for existing educational attainment levels and expected population changes.

Goal 2. Meet the workforce needs of employers.

Sub-goal 1. Reduce the gap between supply and demand for critical needs occupations (as defined by the Department of Workforce Services) by 50% by 2025 and eliminate the gaps by 2030.

i. For the baccalaureate and above level

ii. For associate's degrees and certificates of high value.

Sub-goal 2. Ensure that educational programs are aligned to meet the workforce needs anticipated in the state and regional economic development strategic plans/priorities. This sub-goal is intended to ensure coordination between these activities, and to address the fact that employment projections by industry and occupation are typically made based on past trends. This retrospective perspective will not fully reflect the strategic directions that the state and its regions are pursuing. Workforce preparation aligned with desired future directions is crucial.

Goal 3. Ensure that the postsecondary participation and completion rates of residents of rural counties are sufficient to meet the economic and workforce development needs established by those regions, and contribute to the achievement of the statewide goal at a level proportionate to their population.

Sub-goal 1. Each region achieves proportionate contributions toward the statewide goal, based on their existing educational attainment levels and expected population changes. This sub-goal acknowledges the reality that the statewide attainment goal cannot be constant across all regions—some regions will struggle to reach the statewide goal, while the state is unlikely to reach the goal without some

regions exceeding it. Table 2 offers suggested regional targets assuming a statewide goal of 66 percent by 2030.

Table 2. Suggested Regional Educational Attainment Targets

Region	Postsecondary Attainment, 2013-17	Projected Change in 25-64 Population	Educational Attainment Target, 2030
Bear River	41.4%	121%	59.7%
Castle Country	31.9%	110%	54.5%
Central Utah	30.7%	120%	50.4%
Mountainland	51.3%	137%	74.8%
Southeast	33.3%	113%	52.6%
Southwest	38.4%	142%	68.6%
Uintah Basin	22.7%	111%	44.3%
Wasatch Front North	42.3%	116%	64.5%
Wasatch Front South	42.7%	113%	64.6%
Utah (Statewide)	43.1%	121%	66.0%

Sub-goal 2. Achieve cost-effectiveness in meeting this goal through innovative use of alternative delivery models.

Goal 4. Maintain affordability of postsecondary education in Utah by adopting a clear and measurable standard of what in-state students must pay to attend college based on their full costs of attendance, with the standard applied to students from low- and medium-income backgrounds (not just an average for all students).

Sub-goal 1. Lower-division students will have no unmet need after accounting for the expected financial contribution from their families; federal, state, and institutional grants; and income from a reasonable level of paid work (the calculation that comprises an affordability standard known as the Shared Responsibility Model—SRM[8]).

Sub-goal 2. Bachelor's graduates will not have accumulated debt tied to a reasonable amount for a graduate who becomes employed as a teacher or social worker (or similarly compensated occupation that is critical to the functioning of society) can pay off under normal repayment policies (e.g., $12,000 total

[8] The Shared Responsibility Model is described in *States in the Driver's Seat: Leveraging State Aid to Align Policies and Promote Access, Success, and Affordability* (https://www.wiche.edu/info/publications/States_in_the_Drivers_Seat.pdf).

debt). Utah should monitor unmet need on an annual basis using the SRM calculations.

Goal 5. Universities will increase their contributions to the expansion and diversification of the state's economy.

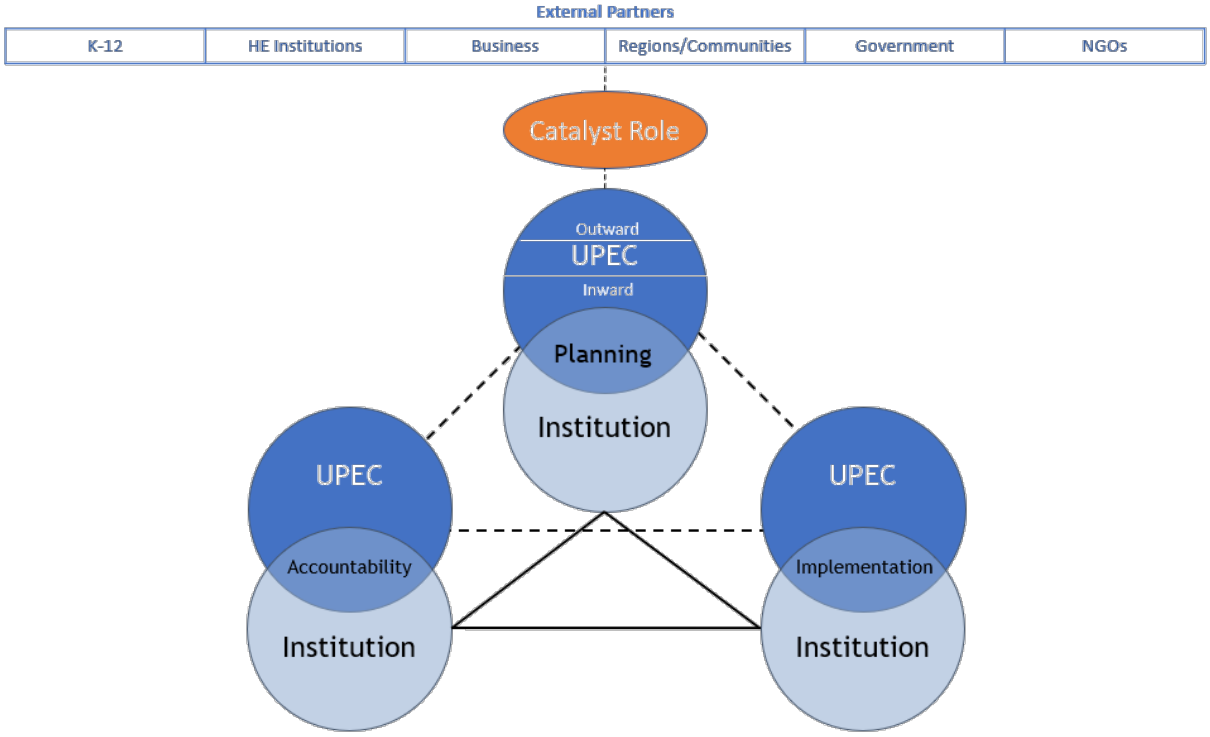
Sub-goal 1. The University of Utah and Utah State University will increase their sponsored research funding by 30 percent by 2030.

Sub-goal 2. Universities will increase their licensure revenue and employment in spin-off companies by 50% by 2030.

2. **Reform statewide postsecondary governance.** Utah's success and prosperity in a knowledge-driven economic future will depend on having strong coordination of public postsecondary institutions, with expert leadership focused on aligning investments and institutional activities with the needs of the public (students, taxpayers, and employers), now and in the future. Effective state-level coordination is increasingly key to the effectiveness of postsecondary education as it has become as essential to individual success as to the healthy functioning of the macroeconomy in a globalized marketplace (Figure 28). It recognizes that the sum of institutional interests are not completely congruent with the state's interest. Rather, the institutional functions of planning, implementation, and accountability all exist under the purview of state leadership, and each of these functions is an inward-facing one for the state's role. That is, the oversight job for the state is to help steer institutional planning efforts so that they fulfill state goals; assist with the implementation of those plans, especially where efficiencies and improved student experiences can be enhanced through multi-institutional lens and solutions; and provide effective accountability and feedback so that institutions recognize and respond to the state's expectations and incentives.

   These functions are all recognizable—and perhaps even familiar—to key stakeholders including postsecondary leaders and policymakers, and they tend to comprise an "inward-facing" role in which the state's interest is in focusing on institutional activities. Less obvious but growing in importance is an outward-facing role for state-level coordination to actively embrace. It seeks to proactively identify state and regional needs and then marshal the resources needed to best address those needs. It is not necessarily the case that solutions must originate from within postsecondary education, but rather that the system actively seeks to play a role in catalyzing innovation and strategic investment in service to the state and its industries, regions/communities, and the public.

Figure 28. State Postsecondary Education Coordination Roles



To fulfill this expanded role, an appropriately led and staffed state postsecondary education agency must be in place. In particular, the agency will need to serve as an effective intermediary between Utah's political leadership and its public institutions. NCHEMS further recommends that the agency be given a name worthy of the assignment and of the demanding, proactive role it will play in steering postsecondary policy. Such a name should send a clear signal that the agency's role and responsibilities will differ in material ways from the existing systems, USHE and UTech. This agency will be named the "Utah Postsecondary Education Commission" (UPEC) throughout the remainder of this document, and its board members will be addressed as "Commissioners."

Such an entity must be led by a board comprised of highly qualified and influential state leaders who are willing to devote the necessary time to this demanding role. In selecting the members of this body, NCHEMS recommends that Utah utilize a process expressly intended to enhance and protect the independence and impartiality of the Commissioners individually and collectively. The use of a Nominating Committee can insulate the process from undue political influence and enhance the quality and fitness of appointees. The Nominating Committee, which would be separate and independent of UPEC, should be charged to identify candidates for UPEC Commissioners based on role expertise needs, geographic representation, demographic characteristics and

other important qualifications and perspectives, perhaps using a matrix of criteria such as that illustrated in Figure 29.

Figure 29. Matrix of Perspectives and Qualifications for UPEC Commissioners

Perspectives / Specific Knowledge and Experience	Region/Rural Communities	Business & Industry	Technical Education	General Education	Advanced Education and Research	Students	Underrepresented Populations (including adults)
Finance							
Accounting/Auditing							
Law (including Intellectual Property)							
Facilities and Real Estate							
Educational Delivery Models							
Workforce Development							
Economic Development							
Alignment/Coordination with K-12							
Educational Quality Assessment							

Candidates for appointment identified by the Nominating Committee should have no entangling connections to Utah's postsecondary institutions (e.g., no current employees, contractors, institutional board members), or individuals with any other disqualifying conflicts. The possible exception could be the appointment of a current student. The Nominating Committee would forward the resulting candidates to the governor for appointment. Gubernatorial appointments would be subject to confirmation by the Utah Senate.

The Nominating Committee itself would be composed of a mix of appointees designed to ensure that the state's political and postsecondary education leadership have a balanced voice in the process of assembling the slate of potential candidates for Commissioners. For example, the Nominating Committee might be composed of appointments by:

- Speaker of the House, 2 appointments
- Senate President, 2 appointments
- Governor, 3 appointments, to include at least one board member of:
    - Current USHE institution

- Current UTech institution

Finally, UPEC Commissioners should receive a rigorous orientation to their roles, annual training, and the board's collective performance should be periodically reviewed by a qualified external entity.

Once established, NCHEMS recommends that the UPEC be given a variety of necessary authorities, among which are:

a. Creating a consensus around a set of state-level goals and identifying and promoting aligned policies and practices.

b. Exercise of institutional authorization and ongoing quality review responsibilities for public and private (non-profit and for-profit) institutions.

c. Approval of the missions of public institutions and any related changes.

   i. Institutional missions are defined by populations to be served, programs to be offered (level and broad fields), special designations (i.e., Land Grant), expectations regarding research and public service.

   ii. Academic programs may be subject to an institutional board's discretion, but only so long as they fall within an institution's clearly defined mission and address workforce development needs. UPEC should mandate that institutions use a consistent process for the approval of new programs.

   iii. It remains within the authority of the state postsecondary education agency to review any institutional program.

d. Review of institutional performance against their missions.

e. Delegation of institutional management and related responsibilities to institutional boards.

f. Participation in the selection of institutional presidents, including:

   i. Final approval of institutional trustees' preferred presidential candidate.

   ii. Require institutional boards to use a consistent process for recruitment and selection.

   iii. Active engagement in the presidential selection and evaluation processes, including through the provision of back-office support to those processes.

   The reason for UPEC involvement in presidential selection and evaluation processes is to ensure that presidents understand their role as members of a postsecondary leadership team as well as leaders of their specific campus.

g. Responsibility for creating a strategic finance plan for postsecondary education statewide.

i. Allocation of statewide resources to institutions.

ii. Setting tuition levels (or delegating this authority to institutional boards–within affordability guidelines).

iii. Administration of state financial aid programs.

iv. Development of strategic capital plan and prioritization process.

h. Develop, enforce, and where appropriate, implement policies that address academic matters spanning multiple institutions.

i. Provide statewide Prior Learning Assessments that are required to be accepted by all public institutions, including a process for granting appropriate credit to all matriculating students.

ii. Promote efforts to establish and maintain clear pathways for articulation and transfer, including between current USHE and UTech institutions.

iii. Coordinate (and incentivize) delivery of programs on a collaborative basis.

iv. Coordinate distance delivery.

v. Coordinate work-based learning activities.

i. Authority to manage shared administrative services in order to achieve greater efficiency and reduce costs, e.g., legal affairs, procurement, etc.

j. Collect data and prepare research and analytic reports on behalf of the state, in particular to:

i. Guide goal setting and policy development and to coordinate data collection and analyses across institutions.

ii. Serve as the representative of postsecondary education in data collection and research activities across departments of state government (e.g., Utah's statewide longitudinal data system, Department of Education, Department of Workforce Services, GOED, etc.).

iii. Identify metrics and monitor performance, prepare annual progress reports, and work with institutions to establish performance goals.

k. Manage and facilitate processes for initiating, prioritizing, and implementing educational reform initiatives, for example initiatives that result in:

i. All technical programs becoming competency based (and subsequently extend this effort to general education programs).

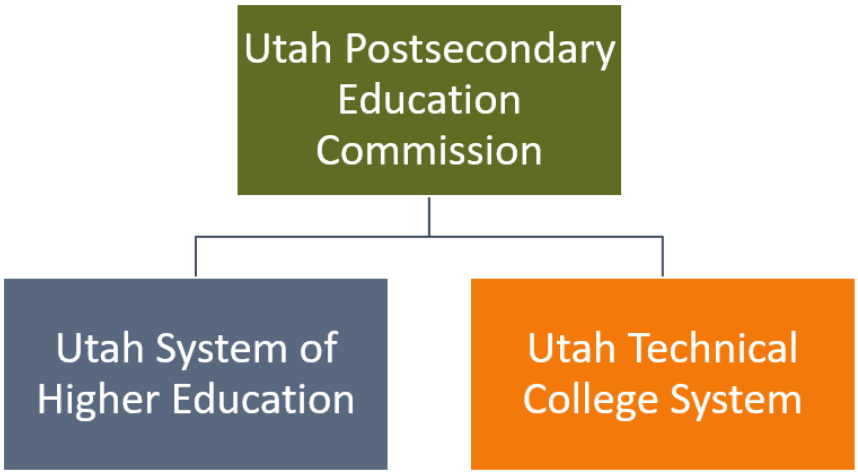
ii. All students requiring academic remediation acquire that remediation through co-requisite developmental education.

iii. Students receiving guidance regarding an efficient path to program completion through the development of guided pathways, etc.

There are multiple ways in which Utah might adjust its postsecondary education governance structure to better position its education enterprise to achieve state goals. NCHEMS offers three such possibilities for the Commission's consideration, along with pros and cons associated with each in order to help inform the decision. NCHEMS considers the above enumerated authorities as essential to the effective functioning of any of the options outlined below.

Option 1. Create the Utah Postsecondary Education Commission to coordinate the activities of the Utah System of Higher Education and the Utah Technical College System, depicted in Figure 30. Let the UPEC assume authorities as defined above and allow them to delegate them as appropriate to USHE or UTech. The UPEC would require a small staff sufficient to provide the Commissioners with trustworthy and independent analysis and advice. That staff would be authorized to acquire support from USHE and UTech staff as necessary to fulfill its role.

Figure 30. State Postsecondary Structure Option #1



Pros

- Straightforward means of providing coordination at the state level
- Makes clear the division of responsibility between those focused on state priorities and those focused on institutional management.
- Less disruptive to ongoing system management/institutional oversight

Cons

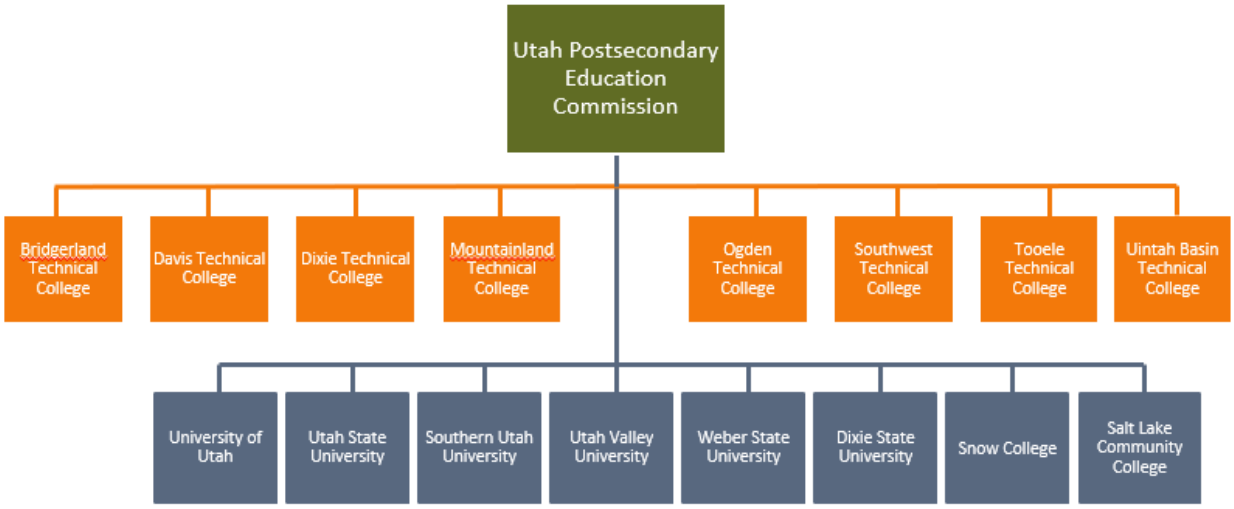
- Requires a new layer of state bureaucracy, which will be dependent on the cooperation of the existing systems in order to acquire data and resources to be fully operational (or otherwise may be compelled to grow its own capacity)
- Potentially confusing to sort out where existing systems' functions and

- Less sweeping statutory changes to current code that applies to the existing systems and institutions; correspondingly less risk that the needed changes will be subjected to political compromise that erodes the intent of the changes
- Preserves the focus of the UTech system on vocational education/technical training

authorities intersect/interact with the new UPEC. Will require clear legislative directives regarding assignment of authorities to UPEC.

Option 2. All of Utah's public postsecondary institutions individually report to a UPEC, a governing body to replace both the existing USHE and UTech systems (Figure 31). Institutions operating under this structure retain their own institutional boards and separate accreditation, but many of the current powers and authorities of those boards would be surrendered to the UPEC (e.g., program approval, presidential appointment) in order for the structure to be consistent with the essential authorities outlined above. UPEC submits a consolidated budget request to the state on behalf of all member institutions and allocates resources among institutions, sets tuition directly, directly leads the process for selecting and evaluating institutional presidents, etc. Institutional boards exercise authorities as delegated by UPEC and those which are not otherwise reserved to UPEC. This model would mirror the arrangement in place in North Carolina, although in that state there are separate systems governing the two- and four-year institutions.

Figure 31. State Postsecondary Structure Option #2



Pros

- A more streamlined governance arrangement
- Postsecondary education has a single, centralized voice in policymaking and in communicating with the public at large
- Potential improvements in creating multi-campus collaborations

Cons

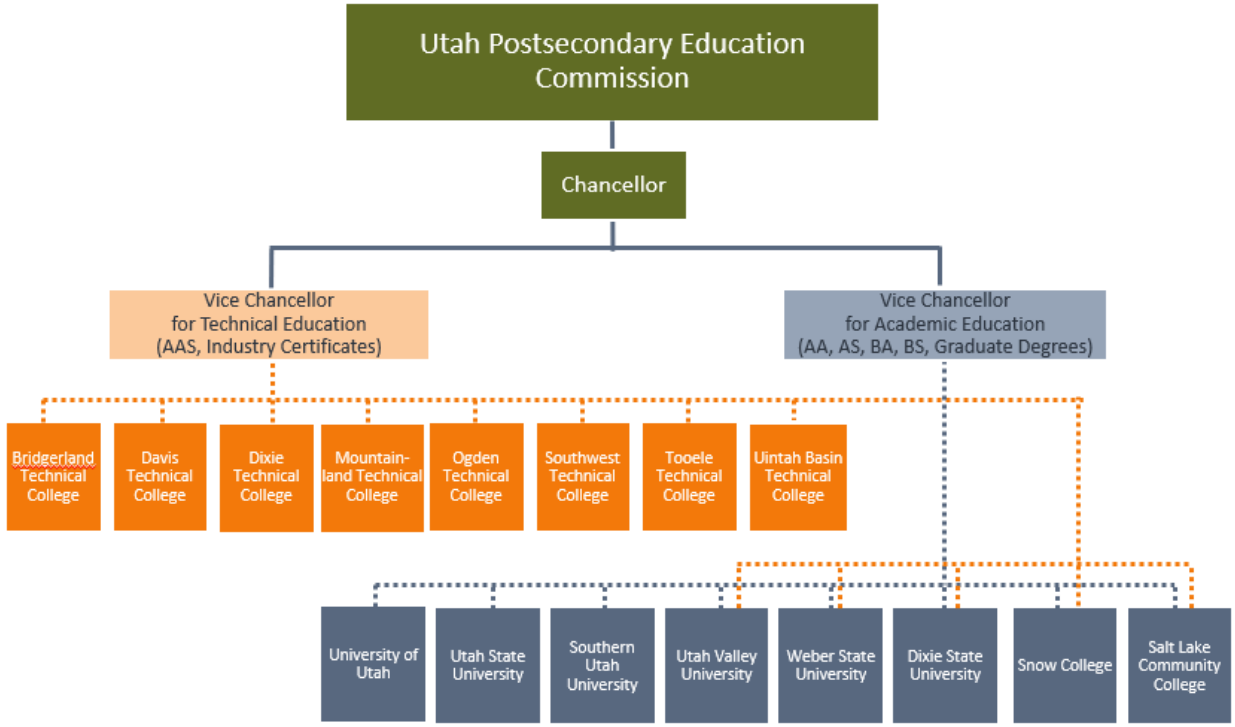
- Past experience in Utah and elsewhere suggests that current UTech institutions will be assigned reduced priority under a single governance system, a significant flaw given the need for technical training identified as a clear and consistent workforce need
- Aligning policy and practice across current USHE and UTech institutions, with quite different instructional models and corresponding accreditation, is unlikely to be straightforward
- Recent experience suggests that the barriers to multi-campus collaboration may be greater within existing systems than across them
- No obvious means for deliberate and focused planning and oversight of the dual-mission institutions' role in providing effective community college services throughout the state.

Option 3: This option puts a greater emphasis on the UPEC playing a coordination role rather than a governance role, as well as clarifies roles related to traditional academic versus technical education. In particular, it specifies that the UPEC leadership and functions are to be explicitly bifurcated and linked to the institutions where those different missions are manifest (Figure 32). Thus, a vice chancellor will have a specific portfolio for coordinating the state's technical education needs and programs and a second vice chancellor will focus on the traditional academic programs leading to transfer-oriented associate's degrees, bachelor's degrees, and graduate degrees. Working under the leadership of the chancellor, each vice chancellor staffs separate standing committees of UPEC Commissioners, each with responsibility for developing and monitoring statewide agendas for academic programs and for technical education and guiding their implementation. Dual-mission institutions (and possibly Utah State given its delivery of sub-baccalaureate programs) will work with both vice chancellors since they have activities, programs, etc. that correspond to the areas that each respective vice chancellor coordinates. To be clear, the vice chancellors and the separate committees they staff are not intended to serve in a governing role with respect to the institutions, but rather will set a broad agenda that the institutions will implement under their own authority. The

UPEC committees will also monitor how well the state's postsecondary institutions collectively are achieving the aims of that agenda.

In this model, UPEC serves a broad array of coordinating functions, with more limited governing functions but for those related primarily to institutional mission and leadership. Each institution retains its own governing board, exercising all authorities not explicitly reserved to UPEC. In particular, institutions have free rein to make internal resource allocations, develop and approve programs of study within their approved missions, and, while UPEC will be engaged in the presidential selection process (including setting broad guidelines for the execution of the process) and approve the institutional choice of candidates, institutional boards will take on a larger role in leading the process and in staffing it and serving on its committees.

Figure 32. State Postsecondary Structure Option #3



Pros

- This arrangement more clearly focuses on technical education regardless of providing institution.
- It provides a unified governance structure for all of higher education yielding the possibility of fostering collaboration.
- It ensures that dual mission institutions will not lose their focus on technical education.

Cons

- This option represents a significant departure from current policy and practice for the central body, and its success will depend on an allocation of authorities that best serve the state's interest.
- It complicates governance for dual mission institutions—they have separate agendas, set by multiple groups of state-level leaders, to which they will need to be responsive. They will have to navigate any tension or inconsistencies that may emerge over those agenda's relative priorities.
- It codifies enhanced independence to institutions that have widely variable capabilities in terms of size and resources.

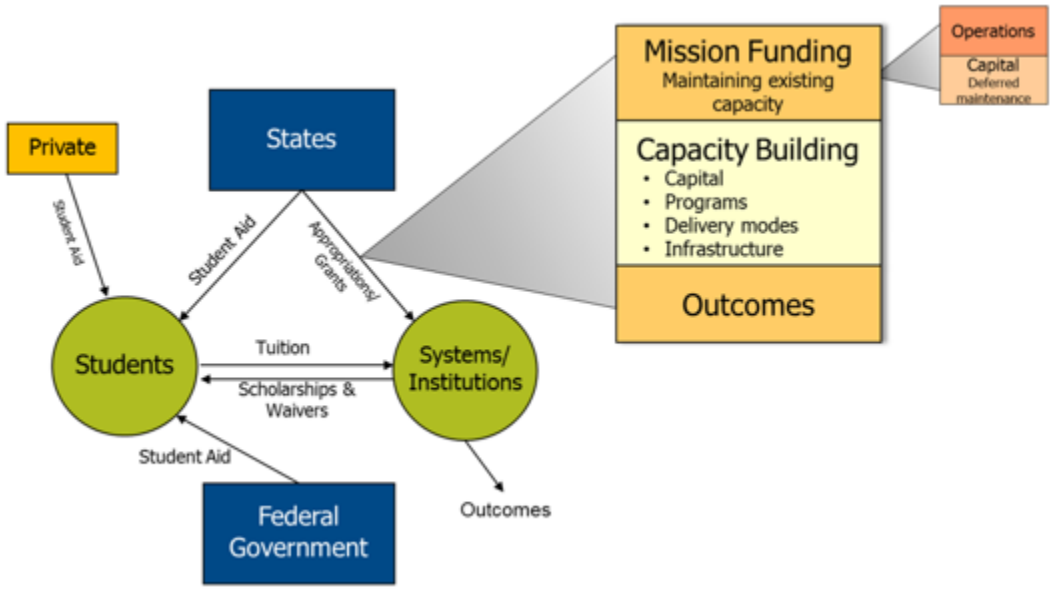
3. **Develop a funding (resource allocation) model** for adoption by the legislature that:
   a. Places institutional funding into the context of a larger strategic finance model that incorporates tuition revenue and student financial aid.
   b. Provides for equitable allocation of base funds to institutions, such that:
      i. Basic costs of operating the institution are addressed ("opening the doors").
      ii. Funding levels recognize those differences in program mix and student body characteristics that are known to drive variation in actual costs.
      iii. This base is expressly not intended to be a measure of "base budget adequacy" sufficient to operate the institution, but rather that it gets all institutions to a fair starting line from which more intentional incentive funding, e.g., performance-funding, takes over.
   c. Creates incentives for inter-institutional collaboration (Example: SUU/SW Tech partnership).
   d. Rewards institutions for contributions to state priorities (e.g., performance funding).

e. Incorporates a mechanism for ensuring that needed programs are delivered in rural parts of the state (e.g., distance delivery, residency programs for faculty or students, etc.).

f. Aligns capital planning and related expenditures strategically with statewide goals and collaborative activities (real estate transactions or development projects go forward only after a careful analysis of need and market), and ensures that all capital projects involving physical spaces have ongoing operational and maintenance (including renewal and replacement) budgets fully paid out of institutional operating funds.

Figure 33 shows the key elements of the flow of revenue to institutions that sets the role and impact of state funding streams into context alongside other sources—most notably tuition, federal grants and contracts, and charitable contributions. While conceptually illustrating the challenge that states must grapple with in order to ensure that their own funding produces clear incentives to steer institutional behavior, it also calls out how state funding has to balance the need to provide support for annual operational costs with the need to build capacity—including physical facilities, innovative delivery modes, and program development—in order to produce desired outcomes.

Figure 33. The Flow of Funds



4. **Address capacity issues in Utah County.** Each of the possible solutions described below is designed to address these common, essential elements:

   a. Utah Valley University remains a teaching-focused comprehensive institution and prioritizes programs at the undergraduate level over any

graduate programs; any ambitions to become a research university are checked.

b. Graduate programs offered by UVU are narrowly targeted to meet specific workforce demands.

c. Utah County's rising demand for high-quality technical education and training is met through the combined efforts of UVU and Mountainland Technical College and other public institutions with unique capabilities (UU, USU).

d. Broad access to postsecondary education at the baccalaureate and sub-baccalaureate levels is maintained (i.e., admissions policies do not become selective).

e. Student mobility from sub-baccalaureate programs to baccalaureate programs is seamless, including for students transferring from Mountainland Technical College to UVU and other four-year institutions.

f. Institutions in Utah County prioritize and effectively serve low-income students, first-generation students, students of color, and adults.

g. Institutions in Utah County consult employers in the business, non-profit, and government sectors to ensure that their needs are being met by their programs' graduates.

h. Expansion of postsecondary education offerings in Utah County to meet anticipated growth is pursued as efficiently as possible by taking advantage of inter-institutional collaboration and alternative delivery models such as distance learning or CBE, which get priority consideration above long-term capital obligations (which may be necessary after careful analysis of need, pedagogy, etc.).

Option 1: Continue Utah Valley University in its current dual mission status, but establish UVU as a demonstration site for how to effectively employ technology and innovative academic programming models to bend the cost curve, especially for sub-baccalaureate awards. With assistance and coordination support from the state postsecondary education agency, UVU prioritizes the use of alternative delivery models to serve the needs of Utah County, which substantially reduces the need for UVU to develop capacity at multiple locations that may be duplicative and come with expansive demands for space and staff. Ensure that UVU's sub-baccalaureate programming effectively complements Mountainland's program array, and that students experience a seamless transition between the two institutions.

Pros

- This arrangement makes the existing institutions located in Utah Country responsible for serving the needs of that county.
- It creates the expectation that UVU will create deep expertise in alternative modes of delivery, a needed capacity in the state.
- It will require collaboration between UVU and Mountainland.
- It keeps intact the relationships between institutions that currently serve the county and employers in the county.

Cons

- This option puts much of the responsibility for delivering technical education in the county in the hands of an institution that will likely place priority on baccalaureate and graduate education.
- This solution depends heavily on UVU's willingness to accept the role as an alternative education demonstration site. This would mean reducing current expectations for substantial expansion of physical campuses.

Option 2: Create a new Community College to serve Utah County, which would assume the sub-baccalaureate part of UVU's mission. This college might be created by separating Mountainland Technical College from the UTech System and authorizing it to award degrees via programs operated on the credit hour, but also expecting it to maintain competency-based contact hour programs. This option would need to be accompanied by a durable prohibition (perhaps in the State Constitution) that UVU may not engage in basic research, education at the doctoral level, or establish graduate schools of professional practice in medicine, law, pharmacy, etc.

Pros

- This arrangement would divide the dual mission of UVU in a way that places each part of that mission in an institution with full commitment to each component.
- It would clarify the mission of UVU.
- It would concentrate responsibility for technical education in an institution for which such education was a priority.

Cons

- It would create considerable additional expense associated with establishing a new institution.
- It would require reestablishing a long list of relationships that UVU has created with the employers in the county.
- It would require replicating programs and facilities already in place.

Option 3: Require that Utah Valley University separate its sub-baccalaureate programming from its baccalaureate programs on multiple campus sites, effectively establishing a single community college campus or "mini-system" of community college campus sites with a differentiated mission, differentiated

faculty and staff and associated personnel policies, close collaboration with Mountainland Technical College, etc.

Pros

- This would keep the services currently being provided by UVU essentially intact.
- It would provide greater emphasis on technical education.
- It would take advantage of the ties UVU has to employers in the county.

Cons

- It will likely increase costs for UVU to provide the same services currently being provided.
- It will reduce the rationale for UVU to develop expertise in alternative models of delivery.
- It puts the state/legislature in the position of telling an institution how to organize to fulfill its mission.

5. **Address capacity needs in rural Utah.** Rural areas must have access to programs that are tuned to their workforce and economic development needs, but meeting those needs will require new and innovative models that link capacity and funding to effective and efficient delivery mechanisms, as well as student support services that are positioned to ensure that student populations in remote locations thrive. Such requirements may be met by one of the options below (which are not necessarily mutually exclusive). Each of the possible solutions is designed to address these common, essential elements:

   a. Funding is available to ensure that adequate capacity can be assured to provide needed programs, either at an existing campus site or through collaborative programming (including distance delivery).

   b. Attention is given to the need to develop viable workplaces, not just workforces.

   c. Programs should strike an appropriate balance between the specific and the general, reflecting the fact that occupations in remote locations are likely to demand a broader range of skills, knowledge, or expertise from fewer workers, as opposed to highly specialized occupations in more populated areas.

   d. Recognizing that meeting a rural area's need for some academic programs may be fulfilled by a periodic single cohort rather than a steady supply. Program cohorts may need to be built collaboratively among prospective students across the state.

   e. Considerable voice and input should be given to rural communities in any policy solution and funding decisions affecting them; where possible, rural communities should be granted state funds to buy programs and services they identify as most critical if institutions don't take the initiative to offer them

f. Programs should be stackable and credits transferrable.

g. A systemic solution to the needs of rural communities must be found so that attention to the needs of these communities is not dependent on the priorities of current System or political leadership. This solution must be attuned to the (very different) needs of different regions and draw on the combined educational assets of the state's postsecondary institutions to respond to those needs.

h. Adjust the mission of Snow College to be a comprehensive community college serving the needs of the local community, with an emphasis on programs that meet workforce development needs that is at least equal to its historic concentration on transfer degree programming. Such an adjustment would likely require a closer integration of its two campuses in Ephraim and Richfield, such that the Ephraim campus will be better positioned to provide for the talent needs of industries that are migrating south from the Wasatch Front, as well as to further leverage their location on the outskirts of the population explosion in Utah County to contribute to economic development in Sanpete, Juab, and Sevier Counties.

Option 1: USHE assigns responsibility for identifying and responding to rural communities needs to Utah State University's extension programs, and monitors USU's performance.

Pros

- Through its Extension arm, USU has an existing infrastructure that reaches into all parts of the state.
- USU is the largest provider of distance education in the state. It has the largest "installed base" that can be drawn upon to respond to needs in rural parts of the state.
- As the Land-Grant institution for the state, USU understands the culture and needs of rural Utah in ways that most of the other institutions are not in touch with in the normal course of events.

Cons

- While USU has the broadest array of offerings, these offering by no means cover the full array of programmatic needs that will be found in the various rural parts of the state.
- USU's delivery model is primarily based on synchronous two-way video technology. This model severely restricts the options that are needed to meet the educational needs of contemporary students.
- USU's commitment to sub-baccalaureate programs is relatively recent.

Option 2: USU Extension identifies rural communities' needs and is available to provide appropriate services, but USHE is responsible for coordinating the response to those needs and providing resources for that purpose, in the form of incentive funding.

Pros

- This option can maximize the extent to which the unique capacities of all the public institutions in the state can be tapped to meet different regional needs, by combining the outreach capacities of USU with the academic program capacities of all other institutions.
- It provides a central clearinghouse function so that needs can be efficiently tied to capacity.
- It provides fiscal incentives for institutions to utilize their capacities in response to the needs of rural regions of the state. It provides an avenue by which institutions can opt in or opt out.

Cons

- This option puts the responsibility for needs assessment in the hands of a single institution, USU. It may be difficult to persuade this institution to actively engage in needs assessments activities on behalf of other institutions. This may require an allocation of funds to USU specifically to perform this function.
- Not all institutions that have programmatic capacities needed in rural communities or have the ability to deliver education using technology in an effective way. This option would require significant investment in institutional capacity to function effectively.
- This option assumes a state agency can independently carry out the responsibility for knowing which institutions are best positioned to provide any specific program needed in a region.
- The requirement is for the delivery of programs, not just courses. A mechanism must be found to pay institutions for delivery even when number of enrollments drops (over time) to less than break-even levels

Option 3: Establish a fund for rural communities (local Workforce Investment Boards working in partnership with county government, regional Workforce Services staff, and regional GOED staff in some combination) to use for investing in programming needs they identify as priorities, with a corresponding fund for USHE to use in matching the local commitments when their priorities align well with state needs.

Pros

- This option places responsibility for identifying local needs in the hands of local entities. This is a plus in that local entities are best positioned to identify local needs.
- It allows for the educational program capacities of all public institutions to be tapped to respond to regional needs.
- It creates a funding mechanism that specifically aligns with the strategy to respond to the needs of rural communities.

Cons

- It presumes that regional entities are well equipped to conduct needs assessments.
- It requires UPEC to develop the capacity to play the intermediary role of linking supply and demand.
- It requires an on-going revenue stream, something that can never be assured absent a dedicated source of revenue.
- It will require considerable capacity development to put institutions in the position of being able to effectively utilize technology-based modalities to deliver education to rural areas.

6. **Address workforce and career readiness directly and intentionally through more purposeful policy and coordination with related state agencies**. Among the steps that could be taken in fulfillment of this objective are:
    a. Develop workforce readiness certifications available to high school students in CTE and other curricular tracks. This will require facilitation of a complicated process by UPEC.
    b. Ensure a focus on the needs of incumbent and under- or unemployed adults. This audience will require access to short-term certification programs with clear economic benefits. They will also require programs that start on much more frequent cycles than the semester start cycles common for USHE institutions. This amounts to a necessary change in culture in order to adequately serve this population.
    c. Establish, as criteria for certifications, that they lead to integrated skills and stackable credentials.
    d. Charge UTech (the system and its campuses) to conduct an outreach campaign to raise awareness about CTE, its value in the workforce, and related financial support programs (e.g., "earn-to-learn" programs, apprenticeships).

7. **Commit to making competencies the essential "currency" of learning.** Align all sub-baccalaureate educational programming offered at USHE and UTech institutions around competencies, starting with CTE programs and eventually including general education courses.

a. UPEC will manage the process by which campus faculties and employers develop competencies. Systems and institutions will manage implementation of competency-based education. This has multiple benefits including easing transfer, recognizing the learning that adults have accumulated through work and other life experiences making return to college less onerous and costly, and making clear to employers what skills graduates of programs bring to the workplace. The work to develop program competencies creates a mechanism to involve employers with institutions in a meaningful way.

b. Ensure that transfer from across all public postsecondary institutions is seamless. Use of competencies as the medium of exchange will greatly simplify this process.

c. Create and administer a centralized statewide center for Prior Learning Assessment. Require all institutions to accept the judgments/decisions of experts tasked by the System for that task. Require the development of a process to ensure that all matriculating students are awarded credit for prior learning as appropriate. This mandate must also be accompanied by a feature of the funding model that ensures that institutions are rewarded for credits earned in this way at the same levels as they are for credits earned through classroom instruction at the institution.

8. **Develop coordinated capacity to deliver distance education programming and increase usage in response to state needs**. In order to provide the level and types of services anticipated by this report and to do so in a cost-effective way, Utah's postsecondary institutions will have to substantially increase their capacity—and utilization—of technology-based delivery modalities. Doing so will require investment in developing that capacity, and to do so in the most efficient and student-centered manner possible. Investment will be required in the following areas:

   a. Identification of an entity to prioritize/identify needs from the perspective of the state, which will reflect variation in regional needs. Staff development will be required for employees of this entity.

   b. Accelerating adoption of high-quality distance delivery courses/programs by:

      i. Standardizing technology platforms.

      ii. Enhancing course development capacity by identifying and deploying appropriate content experts, instructional designers, and other personnel key to effective delivery.

   c. Maintaining, and publishing electronically, a clearinghouse/catalogue of programs and courses available via distance education offered by public institutions.

d. Creating a process for "buying" delivery of high-priority programs that meet locally defined specifications. These specifications can be expressed in terms of:

   i. Program(s) identified as a priority at the local level.

   ii. Modality of delivery.

   iii. Frequency of offering/periodicity of start times.

   iv. Assurance that appropriate instructional and student support resources are provided by some combination of institutional providers.

9. **Take steps to address affordability now and its preservation into the future.** Utah's attention to issues of affordability has historically focused on keeping tuition prices low. But that narrow focus leaves key elements of the financing picture obscured to policymakers and the public, and it will be increasingly inadequate as the postsecondary market grows more competitive. Utah should consider developing strategies for ensuring affordability in postsecondary education that preserve access for low-income youth and adults, promote student success, and align with the state's future economic and workforce requirements. There are a number of important elements to these strategies, including:

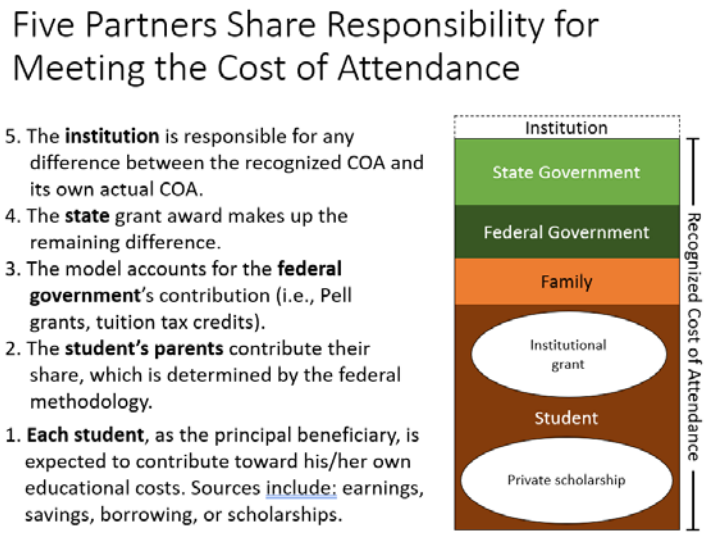
   a. Develop an affordability standard for resident undergraduate students that accounts for all costs of attendance. An affordability standard is a clear, measurable target of what constitutes a reasonable amount of expenses a student must pay for college. Essential characteristics of such a standard are that it:

      - Focuses on full costs of attendance, not just tuition.
      - Is assessed/monitored separately for students from low-, middle-, and high-income backgrounds.
      - Measures any year-to-year changes in terms of dollars, not percents.
      - Is sensitive to differences in student costs across institutional sectors. (In Utah, this also applies to lower-division/upper-division cost differences in dual-mission institutions, which are recommended for adoption below.)
      - Recognizes that the value of the standard is as a conceptual framework for measuring affordability independent of the projected costs of achieving it. Key to this distinction is to understand that the standard is not the same thing as a strategy, e.g., tuition price controls, "free" or debt-free college, which are rather policies to address affordability.

   Utah can build its own standard by reviewing the few other states that have one. NCHEMS prefers the "Shared Responsibility Model" (SRM), such as

those in effect in Minnesota, Oregon, and Idaho.[9] The UPEC should use this standard for assessing the extent to which Utah residents from different income levels have the financial means to attend college. Such a standard is critical for developing consensus around how to define affordability—and for whom—in a manner that is appropriate to the increasingly complex pricing approaches in use at colleges and universities, including in the public sector. Without a standard, Utah is likely to continue to focus narrowly on tuition pricing without appreciating how the non-tuition expenses—housing, food, books and supplies, transportation, even childcare—may be putting college out of financial reach or substantially impeding students' ability to focus on their own academic success. Affordability is a particularly important issue for populations of students whose success will be crucial to the achievement of state goals. This recommendation to adopt an affordability standard mirrors the Goal 4 recommendation above.

[9] A fuller description of the SRM design is provided in a policy brief entitled *States in the Driver's Seat* and available at https://www.wiche.edu/info/publications/States_in_the_Drivers_Seat.pdf. But its basic design starts with costs of attendance and subtracts an amount equivalent to earnings from a reasonable work commitment (e.g., not one that is so onerous as to interfere with students' academic progress, e.g., about 15 hours/week during the full year), the family contribution, state and federal grants, and tuition tax credits (see figure below). Institutional and private grants in this formulation are considered as offsetting to what a student's own contribution should be. In the states where it is in use, the student contribution at four-year or private institutions is set higher than for those at two-year institutions; Oregon uses a reasonable annual borrowing level to determine how much higher it should be. None of the states that use SRM fund its full achievement, but they use it to identify and adjust policies to communicate with policymakers about the affordability challenge, to guide investments, and to ration scarce resources.



Other states with affordability standards include Virginia, which is striving to have half of low- and middle-income students' costs of attendance covered by their student and family contributions plus federal and state grants, and Texas, which is trying to ensure graduates' cumulative debt does not exceed 60 percent of first-year wages at the median. (Texas is linking debt data and earnings data at the individual level for this assessment.)

b. Require that students complete FAFSAs in order to be eligible for any state or institutional financial aid, including tuition waivers. Not only are Utah students insufficiently aware of the availability of grant aid to help them pay for college costs, Utah and its institutions are likely leaving federal dollars behind by not taking steps to ensure that students receive all the grant aid for which they are eligible. Moreover, completing a FAFSA is related to increased college-going rates.[10] Utah can impose this requirement through legislation, although UPEC could also establish the requirement through policy for all forms of aid not otherwise restricted by donors.

c. Make improvements in state grant programs to provide better and more consistent information earlier to eligible recipients and to better account for students' real costs of attendance. These adjustments would include:

   i. Fully phase out the Regents and New Century scholarships in order to better utilize that funding to enhance the Utah Promise Scholarship.

   ii. Raise award limits for state grants to include (at least some portion) of full costs of attendance, such as by including books and academic supplies, adopting a "frugal" level of living expenses,[11] or by counting Pell grant amounts toward living expenses rather than tuition payments.

   iii. Insist that all eligible institutions use a consistent methodology for determining award levels and publish that methodology publicly. Institutions currently have widespread discretion in using state grant funds in ways that may or may not serve the state's interests first and foremost—for instance by using state grants to free up institutional aid, which are then used to support students who are not representative of the state's highest priorities, like non-residents. Moreover, potential students cannot easily determine how much money they can count on from state or institutional sources by looking at related publications or websites. Such information for state-supported aid funds should be readily accessible, even if institutions may legitimately claim that they should be able to maintain discretion over their own (and their donors') resources. The federally required net

[10] Bettinger, E.P., B. T. Long, P. Oreopoulos, & L. Sanbonmatsu. The role of application assistance and information in college decisions: Results from the H&R Block FAFSA experiment. *The Quarterly Journal of Economics*, 127(3), 2012.

[11] "Frugal" is a partially subjective term that serves two purposes. 1) Most importantly, it reflects the reality that non-tuition costs of attendance as reported by institutions to the federal government as estimated student budgets are highly variable, even within the same geographic area. These differences arise from the lack of a standard methodology for assessing these costs across institutions. This lack of consistency leaves room for a state to impose a consistent approach or amount that best reflects the minimum reasonable amount necessary to support their own lives during their college attendance. 2) As a practical matter, when states utilize the SRM affordability standard to award state aid, as Oregon and Minnesota do, defining a "frugal" cost of attendance gives them a tool to incentivize institutions to keep costs in check, and also to ration aid awards.

price disclosures are insufficient for providing this information as they only offer an average amount that aggregates all aid sources for a subset of students, but individual students' experiences may differ dramatically from that average amount.

iv. Adopt a common statewide application for state grant programs. Consistent with the prior discussion, Utah could substantially streamline the application process for and distribution of state aid dollars. It could even collect all necessary information in a single place for the distribution of all aid funds, including institutional aid. Such a resource could substantially ease the process of learning about and acquiring critical financial supports for students at all income levels, especially if such an application were closely linked to the FAFSA.

v. Adopt statewide rationing and prioritization principles to best ensure that awards reach target populations. When unmet need among enrolled students outstrips the financial aid funds available, Utah should have an established set of principles in place that ensure that the inevitable rationing is managed to best achieve statewide goals. Such principles are almost as important as the original policy design because they can make a significant difference in how well the intent of the policy is faithfully executed. Important principles to consider include:

- Establishing the priority and sequence in which rationing tools will be implemented to stretch state dollars as far as possible.
- Identifying how rationing guidelines will be determined—who is assigned the task of setting the guidelines and enforcing their use?
- Avoiding rationing strategies that are administratively simple, but which tend to exclude the very populations the state intends for the policy to serve most. Perhaps the most common of these is the imposition of application deadlines (or to distribute funds on a first-come first-served basis). These approaches tend to give advantage to students who have access to counseling and who have made more concrete plans about postsecondary education; these favor traditional-age students seeking at four-year institutions over adults who are likelier to enroll at a two-year institution. Another is to limit awards to students attending full-time, which disproportionately limits aid to adults—although it is worth considering how to appropriately incentivize full-time enrollment among students who can take another class or two.

vi. Replace time-based eligibility limits with credit-based limits, in order to ensure that the programs better meet the needs of adult learners.

Require that all credits for which state grant dollars are utilized are fully transferrable to other Utah public institutions. Further require that credits awarded based on demonstrations of competency are not subject to this credit limitation.

vii. Ensure that recipients may use grants to achieve a bachelor's degree, in order to reduce the potential for a resource cliff impacting students' progress. This recommendation targets a need that Utah will need to address as it implements and commits funding to the new Utah Promise Scholarship, which only covers a student's first two years of college.

viii. Require institutions to match state grant funds for each recipient with institutional funds or tuition waivers at a level appropriate to the institutional mission. Given Utah's substantial decentralization of financial aid programs, it is sensible for the state to expect that its own funding support is not simply serving to substitute for institutional aid budgets. A matching requirement on a student-by-student basis ensures that the state's own funding and the institution's are working together to boost the success of students in categories the state has prioritized as deserving of support in order to meet state needs.

d. Create a state work-study program. A thoughtfully designed work-study program is one of the most promising options for Utah to consider because it potentially taps new, private money for student financial assistance in a way that could marry students' academic endeavors to real-world workforce demands experienced by the state's employers. In effect, the proposed work-study program is envisioned to be a highly effective form of financial aid, and should be amenable to various forms, including co-ops, internships, part-time employment concurrent with schooling, and apprenticeships. It would have the following design features:

i. Funded half by the state and half by employers or associations of employers. Key to the success of the program would be ensuring that employers overcome their natural inclination not to pay into a program when they have no certainty that they will benefit directly in the form of increased productivity from student workers or a full-time employee recruited from the program. A state match (or tax relief in some form) is needed to help with this.

ii. Support for students in high-need technical fields through paid internships/co-operative education or apprenticeship-type programs.

iii. Students receive college credit for their work experience.

iv. Student eligibility is limited to those with unmet need determined according to the SRM standard (That is, employers would not receive the state match for students with means, but the infrastructure would be in place to manage/oversee all students' experiences). Eligible

students must be hired on by an employer through an application and hiring process developed and facilitated by UPEC.

e. Require that data on tuition waivers are included in the calculations of the affordability standard. Utah's widespread reliance on waivers is its primary means of directing large amounts of financial aid, even if it does so in a decentralized fashion. How these waiver commitments affect the affordability profile of students at different income groups is critical for the state to understand in order to make informed strategic investments of its own.

f. Adopt differentiated pricing at dual mission institutions for lower-division and upper-division courses by providing grants/waivers to students enrolled in lower-division courses, perhaps based on financial need. Such pricing should be transparent to students so that published prices for students enrolling in lower-division coursework is not a barrier to entry.