

The Benefits of Higher Education to Utah

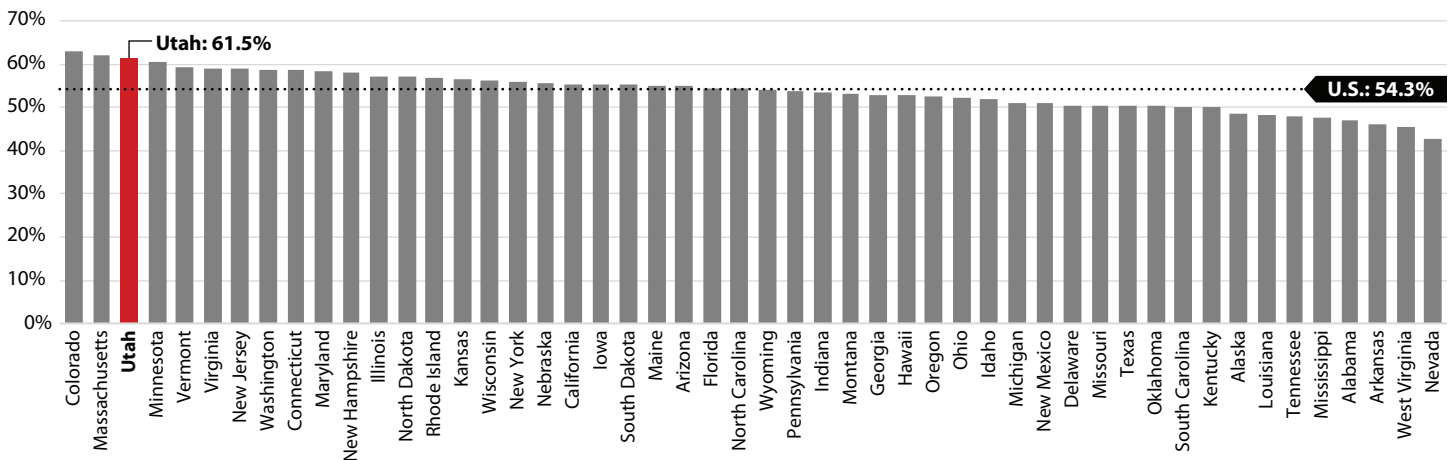
By: Andrea Thomas Brandley, Senior Education Analyst

Three years after the pioneers surveyed the Salt Lake Valley and 46 years before Utah became a state, community leaders founded a university with the mandate to create a “perpetual increase in knowledge, science, and intelligence.”¹ Today, Utah reaps the benefits of sixteen public colleges and universities that train Utah’s workforce for gainful employment, educate its citizenry to support civil society, generate new discoveries that advance the human condition, and create jobs in local communities.²

Utah now features the third most well-trained and educated workforce in the nation.³ This emphasis on higher education reflects Utah’s ongoing vision of preparing individuals for personal growth, economic opportunity, and civic engagement. Education and training help Utahns earn more income, secure more stable employment, achieve greater upward mobility, participate less in public assistance programs, and garner other positive individual and societal benefits.

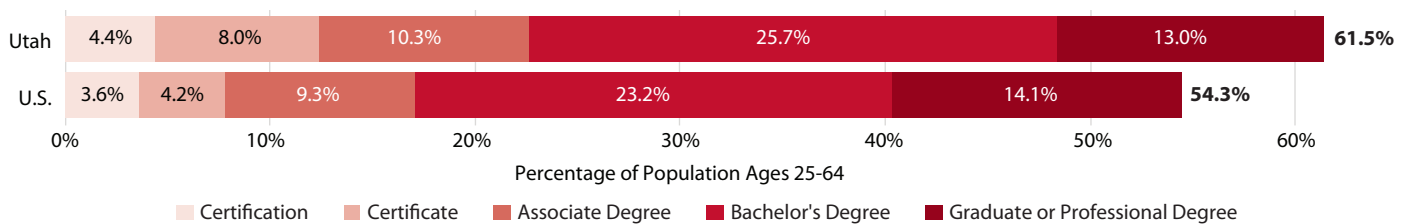
Figure 1: Postsecondary Educational Attainment by State, 2022

Percentage of Population Ages 25 to 64 with a Postsecondary Certification, Certificate, or Degree



Note: United States total includes the District of Columbia and Puerto Rico, but rankings only include states.
Source: Lumina Foundation

Figure 2: Educational Attainment by Type of Credential and Degree, 2022



Note: Degrees include associate, bachelor’s, and graduate or professional degrees. Short-term credentials include college-level certificates and industry-recognized certifications that meet high-value criteria in terms of employment, pay, and learning.
Source: Lumina Foundation

1

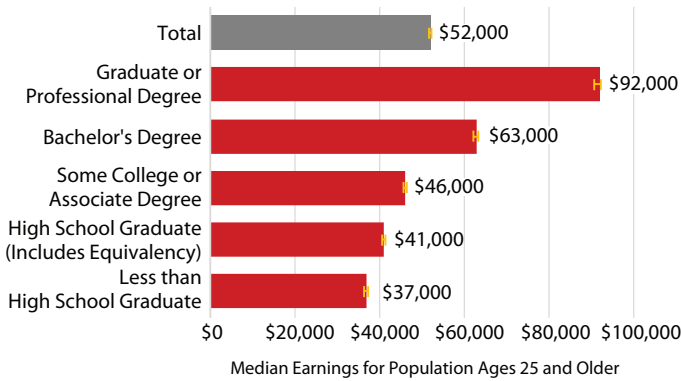
Individuals with higher educational attainment enjoy greater incomes, economic stability, and life quality.

- **Increased earnings** – Median earnings rise with years of education while poverty rates and unemployment rates decline (Figures 3-5). The difference in earnings across educational attainment levels has grown over time (Figure 6). Five years after completion, the typical Utah System of Higher Education (USHE) graduate earns 10% to 64% higher wages than the comparison group who do not receive a degree or award.⁴
- **Reduced disparities and higher economic mobility** – Students with a family member with a postgraduate degree are far more likely to complete postsecondary

education (Figure 7). The share of individuals with family income higher than their parents is greater among those with a college degree (Figure 8).

- **Better health outcomes** – Utahns with more years of education report higher rates of excellent, very good, or good health, and higher rates of health care coverage (Figures 9 and 10).
- **Improved outlook** – Individuals with a degree or certificate report being happier, healthier, and more confident in their future (Figure 11).

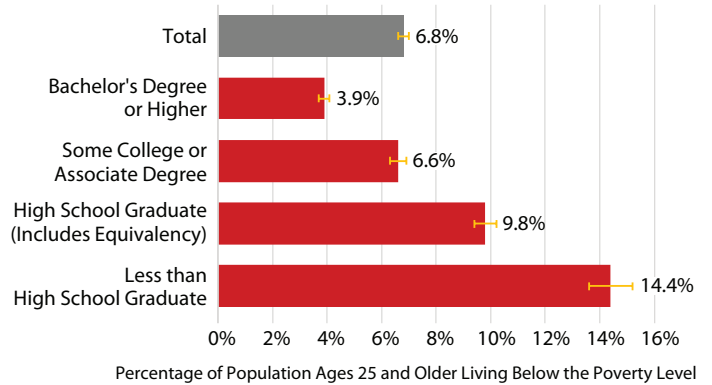
Figure 3: Utah Median Earnings by Educational Attainment, 2023



Note: Rounded to the nearest \$1,000. Earnings are wages or salary from a job, or income from being self-employed. These are survey-based estimates subject to sample variation. Each estimate is shown with its 90% confidence interval. This interval represents a range of population values that are plausible in light of information in the sample, with a 90% degree of confidence. Reported values for groups with non-overlapping error bars are statistically different to the same degree of confidence.

Source: U.S. Census Bureau, 2023 5-Year American Community Survey estimates

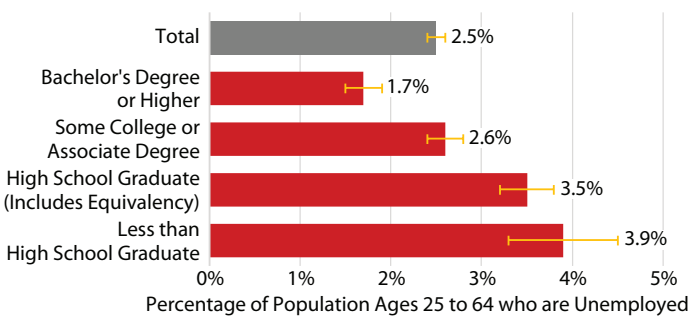
Figure 4: Utah Poverty Rate by Educational Attainment, 2023



Note: These are survey-based estimates subject to sample variation. Each estimate is shown with its 90% confidence interval. This interval represents a range of population values that are plausible in light of information in the sample, with a 90% degree of confidence. Reported values for groups with nonoverlapping error bars are statistically different to the same degree of confidence.

Source: U.S. Census Bureau, 2023 5-Year American Community Survey estimates

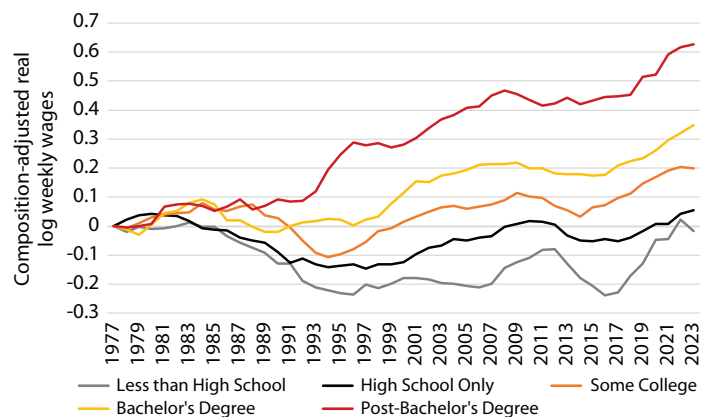
Figure 5: Utah Unemployment Rate by Educational Attainment, 2023



Note: These are survey-based estimates subject to sample variation. Each estimate is shown with its 90% confidence interval. This interval represents a range of population values that are plausible in light of information in the sample, with a 90% degree of confidence. Reported values for groups with nonoverlapping error bars are statistically different to the same degree of confidence.

Source: U.S. Census Bureau, 2023 5-Year American Community Survey estimates

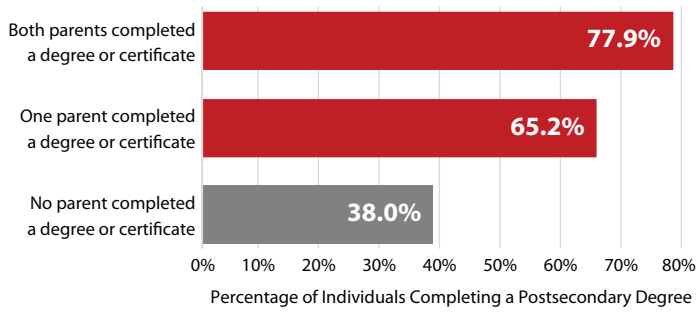
Figure 6: Wages for Full-Time, Full-Year Utah Male Workers, 1977-2023 (5-year Moving Average)



Note: This graph uses male full-time workers for simplicity but illustrates the widening of the wage gap between higher and lower educational levels over time.

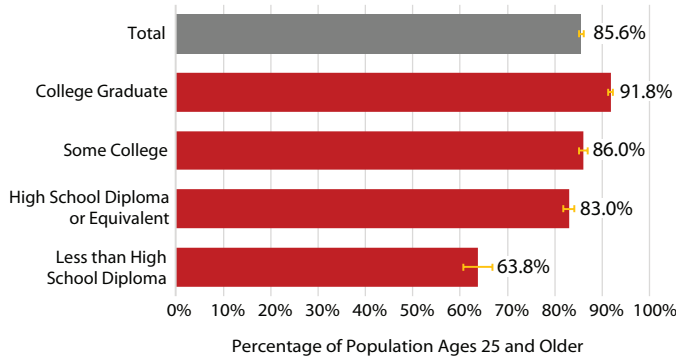
Source: Kem C. Gardner Policy Institute analysis of data from the U.S. Census Bureau Current Population Survey; based on Acemoglu and Autor (2010)

Figure 7: Utah Postgraduate Degree Completion by Family Educational Attainment, 2023



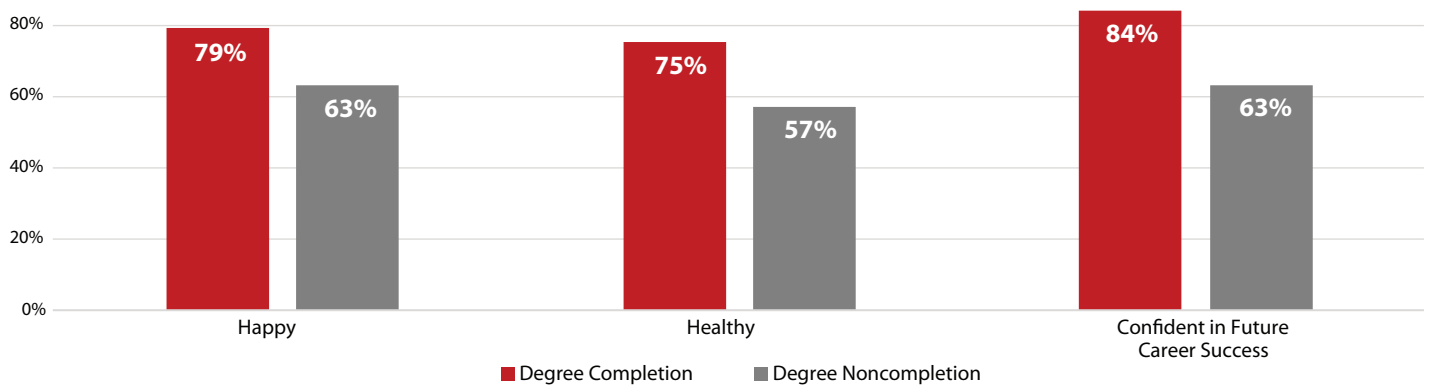
Note: Degree completion includes those who have received a certificate or associate, bachelor's, or postgraduate degree. Degree noncompletion includes those who discontinued high school, earned a high school diploma/GED, or attended some college. Source: Cicero Higher Ed. (July 2023). Utah System of Higher Education Qualitative Benchmark Findings.

Figure 9: Share of Utah Adults Who Report Excellent, Very Good, or Good General Health by Educational Attainment, 2023



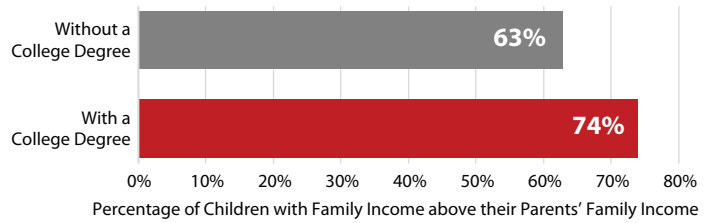
Note: Age-adjusted. Estimates based on data from 2021-2023 combined. Respondents asked if they would say that their health is excellent, very good, good, fair or poor? These are estimates subject to variation. Each estimate is shown with its 95% confidence interval. This interval represents a range of population values that are plausible in light of information in the sample or population, with a 95% degree of confidence. Reported values for groups with non-overlapping error bars are statistically different to the same degree of confidence. Source: Behavioral Risk Factor Surveillance System, Office of Public Health Assessment, Center for Health Data and Informatics, Utah Department of Health and Human Services. Retrieved 27 January 2025 from the Utah Department of Health and Human Services, Indicator-Based Information System for Public Health website: <http://ibis.health.utah.gov>

Figure 11: Life Quality Metrics for Utah Adults by Educational Attainment, 2023



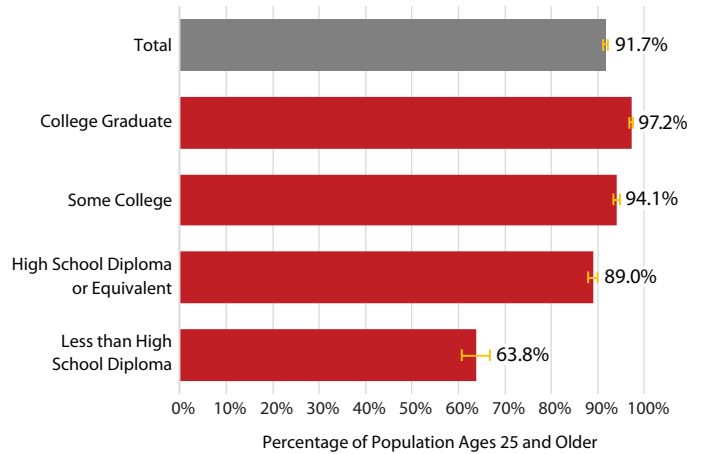
Note: Degree completion includes those who have received a certificate or associate, bachelor's or postgraduate degree. Degree noncompletion includes those who discontinued high school, earned a high school diploma/GED, or attended some college. Source: Cicero Higher Ed. (July 2023). Utah System of Higher Education Qualitative Benchmark Findings.

Figure 8: U.S. Economic Mobility by Child's Education Level



Note: Parental generation of the 1960s and 1970s and their adult children. Source: Haskins, R. (2016). Education and Economic Mobility. Brookings Institute.

Figure 10: Share of Utah Adults with Health Care Coverage by Educational Attainment, 2023



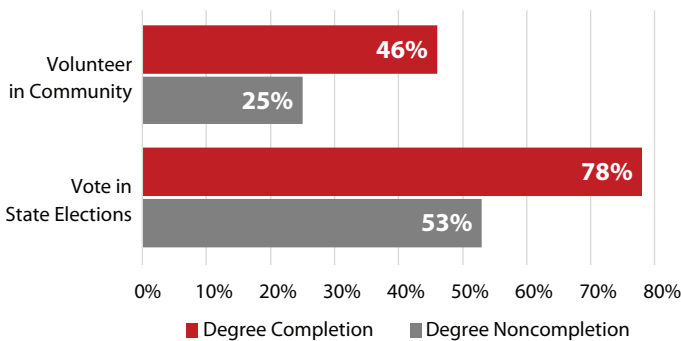
Note: Age-adjusted. Estimates based on data from 2021-2023 combined. Respondents asked if they have any kind of health care coverage, including health insurance, prepaid plans such as HMOs, or government plans such as Medicare? These are estimates subject to variation. Each estimate is shown with its 95% confidence interval. This interval represents a range of population values that are plausible in light of information in the sample or population, with a 95% degree of confidence. Reported values for groups with non-overlapping error bars are statistically different to the same degree of confidence. Source: Behavioral Risk Factor Surveillance System, Office of Public Health Assessment, Center for Health Data and Informatics, Utah Department of Health and Human Services. Retrieved 13 January 2025 from the Utah Department of Health and Human Services, Indicator-Based Information System for Public Health website: <http://ibis.utah.gov>

2

Society derives valuable benefits from an educated citizenry.

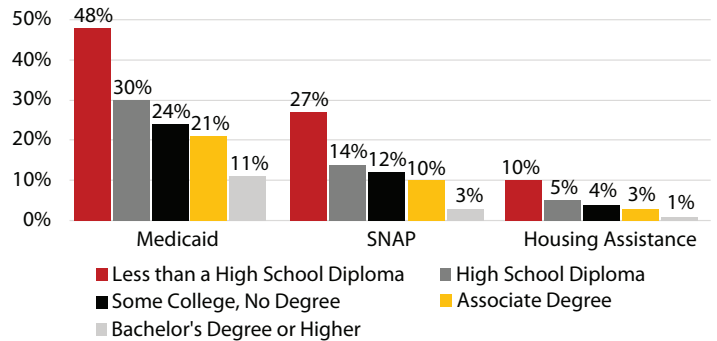
- **More civic engagement** – Individuals with more education are more involved in their community with higher volunteer rates and voter participation (Figure 12).⁵
- **Decreased reliance on public assistance** – As individuals receive more education, they rely less on public assistance (Figure 13). Several studies show postsecondary degree attainment significantly reduces the use of public assistance among Utahns, including one study that found nearly half of graduates with bachelor’s degrees that previously used SNAP never participated in SNAP again.^{6,7}
- **Return on investment** – Estimates indicate that every \$1 the state invests in public higher education returns \$3 in tax revenues from increased wages of Utah college and university graduates.⁸
- **Increased tax revenue** – Workers with a bachelor’s degree or higher pay 1.8 to 3.4 times more in taxes than high school graduates (Figure 14).

Figure 12: Utah Rates of Civic Engagement by Educational Attainment, 2023



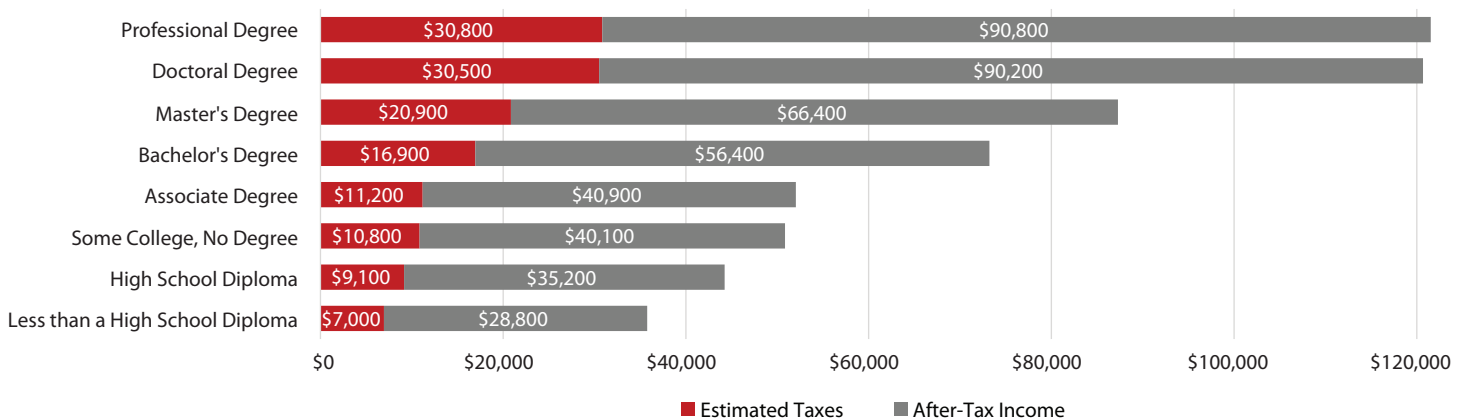
Note: Degree completion includes those who have received a certificate or associate, bachelor’s, or postgraduate degree. Degree noncompletion includes those who discontinued high school, earned a high school diploma/GED, or attended some college. Source: Cicero Higher Ed. (July 2023). Utah System of Higher Education Qualitative Benchmark Findings.

Figure 13: U.S. Public Assistance Participation by Educational Attainment, 2021



Note: Includes adults ages 25 and older living in households participating in various public assistance programs. Supplemental Nutrition Assistance Program (SNAP), also referred to as food stamps, provides food benefits to low-income families. Source: U.S. Census Bureau, Current Population Survey, Annual Social and Economic Supplement, 2022; Retrieved from the CollegeBoard, Education Pays 2023, The Benefits of Higher Education for Individuals and Society.

Figure 14: U.S. Median Earnings and Tax Payments of Full-Time Year-Round Workers by Educational Attainment, 2021



Note: The bars show median earnings at each education level. The red segments represent the estimated average federal income, Social Security, Medicare, state and local income, sales, and property taxes paid at these income levels. The grey segments show after-tax earnings. Source: U.S. Census Bureau, Income, Poverty, and Health Insurance in the United States, 2021, Table PINC-03; Internal Revenue Service, 2020; Wiehe et al., 2018; calculations by the authors. Retrieved from The CollegeBoard, Education Pays 2023, The Benefits of Higher Education for Individuals and Society.

3

Higher education benefits Utah's economy through workforce development, job and business creation, and research and innovation.

- Workforce development** – More than 240,000 students enrolled at a USHE institution in the 2024-25 school year, gaining knowledge and skills to prepare them to contribute to Utah's workforce.⁹ These graduates will generate increased earnings, economic activity, and tax revenue.
- Skilled workforce** – Utah's employers consistently report skilled labor as one of their greatest needs. An estimated 72.2% of USHE graduates received high-yield degrees in 2024, filling critical Utah workforce needs (Figure 15).
- Major employer** – Utah's public higher education system supported an estimated 132,000 jobs in 2024, representing 5.5% of jobs statewide (Table 1).
- Substantial economic contribution** – Public higher education contributes \$12.1 billion in GDP to Utah's economy. Utah's R1 research universities (the University of Utah and Utah State University) generate 82.7% of this economic contribution (Table 2).
- Education multiplier** – Education services in Utah have a relatively high economic multiplier of 2.1. That means every direct contribution related to education services multiplies within the economy over two times (Table 3).
- Research and innovation** – Utah's research universities bring in outside research funding, fueling innovation and leading to the creation of new companies, high-impact innovation, and field-changing discoveries (Figure 16). Utah's innovation index ranks highest among states (Figure 17).

Table 1: Public Higher Education's Estimated Economic Contributions to Utah's Economy, 2024

Economic Indicator	Direct Contribution	Total Contribution
Jobs	~73,000	~132,000
GDP	~\$5.8 billion	~\$12.1 billion
Output	~\$10.6 billion	~\$22.0 billion

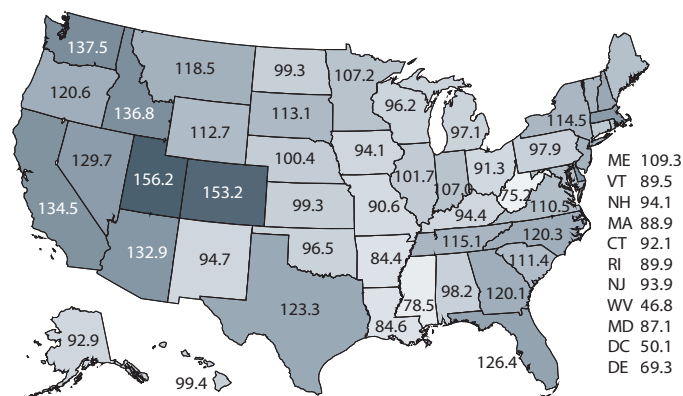
Note: Conservative estimates based on operating expenses.
Source: Kem C. Gardner Policy Institute using IMPLAN

Table 2: Public Higher Education Institutions' Estimated Economic Contributions to Utah's Economy, 2024

Institution Type	Direct Value Added (GDP)	Total Value Added (GDP)	% Total Value Added (GDP)
Research	~\$4.7 billion	~\$10.0 billion	82.7%
Regional	~\$0.8 billion	~\$1.5 billion	12.0%
Community College	~\$0.2 billion	~\$0.4 billion	3.3%
Technical College	~\$0.1 billion	~\$0.2 billion	2.0%
USHE Total	~\$5.8 billion	~\$12.1 billion	100.0%

Note: Conservative estimates based on operating expenses.
Source: Kem C. Gardner Policy Institute using IMPLAN

Figure 17: Innovation Index, 2023



Note: The headline innovation intelligence index measures innovation inputs and outputs using five core indexes: human capital and knowledge creation, business dynamics, business profile, employment and productivity, and economic well-being.
Source: Indiana Business Research Center, 2024

Table 3: Education Multiplier Compared to Other Selected Industries in Utah, 2022

Industry	Multiplier
Construction	2.2
Hospitals	2.2
Professional and technical services	2.1
Educational services	2.1
Motor vehicle manufacturing	2.0
Air transportation	1.9
Oil and gas extraction	1.8
Motion picture and sound recording	1.7
Real estate	1.7

Source: RIMS Type II Output Multiplier

Figure 15: Share of High-yield Degrees Awarded to USHE Graduates, 2024



Note: High-yield degrees are degrees or awards that map to high-wage/high-demand jobs as defined by the Utah Department of Workforce Services' biennial four-and-five-star jobs publication. By formula, increases in high-yield graduates will be captured as the count of high-yield graduates relative to all graduates in the 2022 base year plus new high-yield graduates.
Source: Utah System of Higher Education

Figure 16: Research Expenditures for Utah Public Higher Education Institutions by Source of Funding, FY 2023



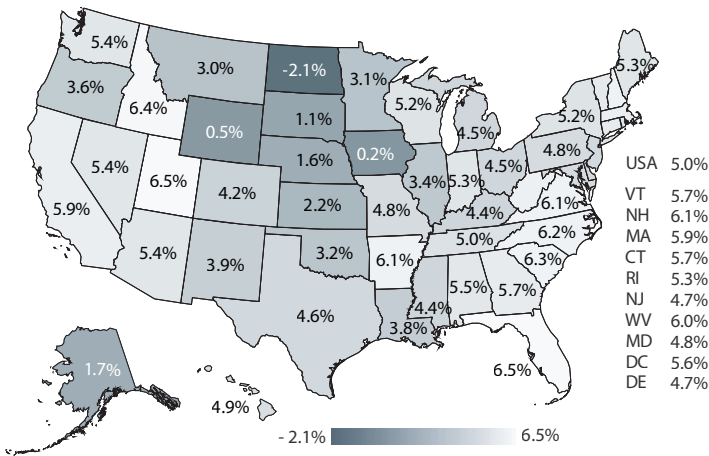
Note: Federal government includes agencies such as the Department of Health and Human Services (under which the National Institutes of Health funding is counted), the Department of Defense, the National Aeronautics and Space Administration, the Department of Energy, the National Science Foundation, and the Department of Agriculture. Other includes business, nonprofit organizations, and all other sources. Utah institutions include the University of Utah, Utah State University, and Utah Valley University.
Source: National Center for Science and Engineering Statistics, Higher Education Research and Development Survey Table 69

4

Higher education helps generate many of Utah's most differentiating and acclaimed characteristics.

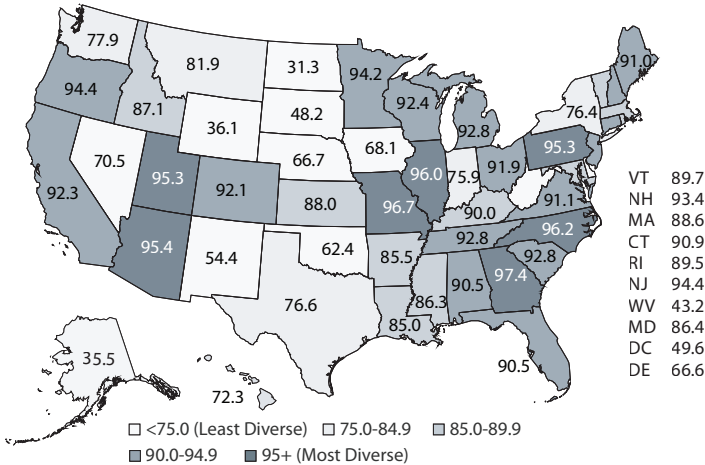
- **Economic performance** – Utah's economic performance generally ranks among the nation's best. Utah's gross domestic product growth ranked first in the nation on a year-over basis in third quarter 2024 (Figure 18).
- **Economic diversity** – Utah benefits from a diversity of industries that contribute to Utah's economic stability. In 2023 Utah ranked as the sixth most economically diverse state in the nation (Figure 19).
- **Upward mobility** – Utah exhibits exceptional upward mobility. In nearly every Utah county, children born to parents who earned in the 25th income percentile earn more than their parents as adults (Figure 20).
- **Social capital** – Utah's networks of trust and collaboration set a high bar for other states to follow. Utah's social capital index ranks highest in the nation (Figure 21).
- **Middle class** – Utah ranks second among states in the share of households in the middle class (defined as the percent of households that make between two-thirds or double the median household income) (Figure 22).
- **Income equality** – Utah possesses the most equal distribution of income of any state. Utah's Gini coefficient of 0.426 is the lowest in the nation (Figure 23).
- **Volunteerism** – Utah maintains a strong volunteerism culture, ranking first for both formal volunteerism and informal helping among all fifty states (Figure 24).

Figure 18: Year-over GDP Growth, Third Quarter 2024



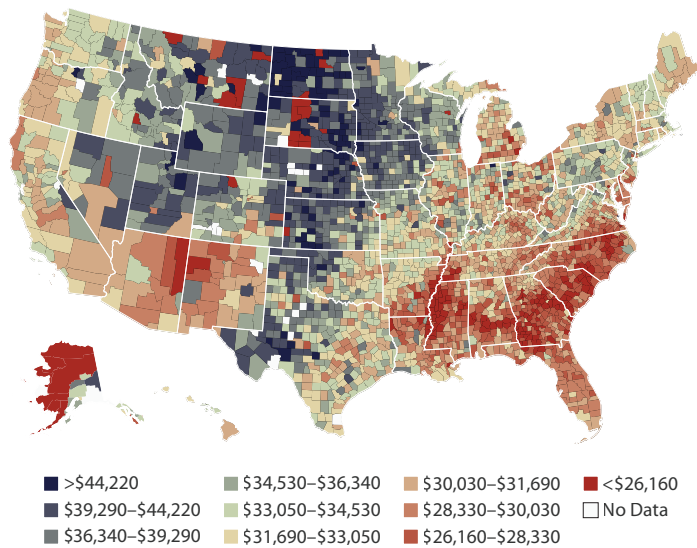
Source: U.S. Bureau of Economic Analysis

Figure 19: Hachman Index Scores for States, 2023



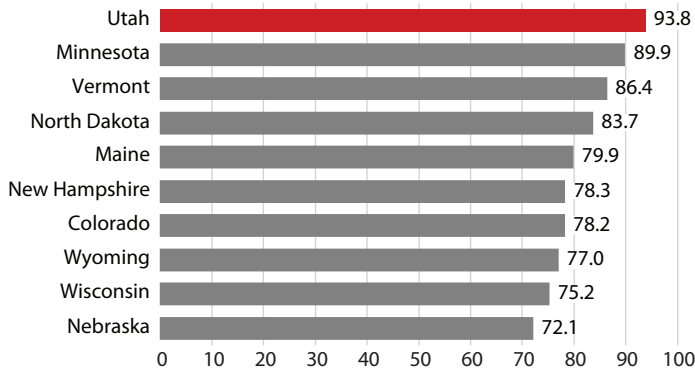
Source: Kem C. Gardner Policy Institute analysis of U.S. Bureau of Economic Analysis GDP data

Figure 20: Upward Mobility



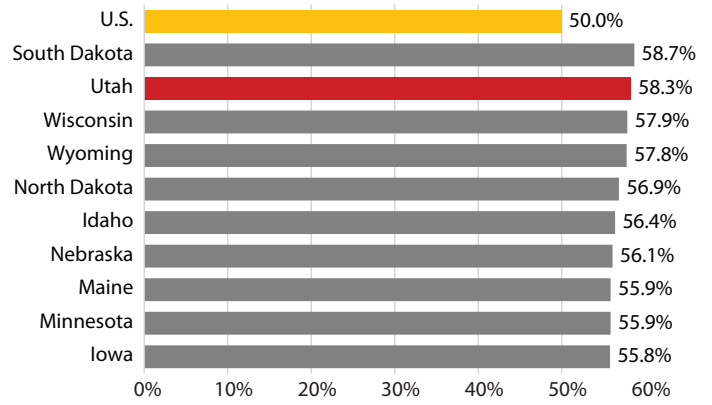
Note: Average income for children born from 1978 to 1992 to parents earning in the 25th income percentile (~\$33,000 in 2023 dollars).
Source: Kem C. Gardner Policy Institute analysis of Opportunity Insights data (Chetty, Hendren, Jones, Porter)

Figure 21: Ten States with Highest Social Capital Index, 2021



Source: Utah Foundation

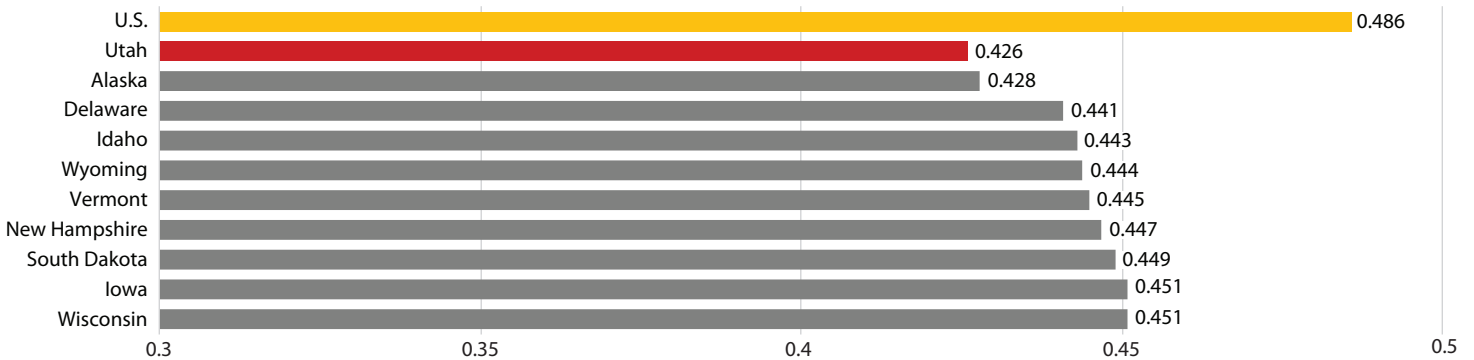
Figure 22: Ten States with the Largest Middle Class, 2019



Note: Measures the share of households that make between two-thirds and double the median household income adjusted for household size.

Source: U.S. Census Bureau American Community Survey 1-year Estimates

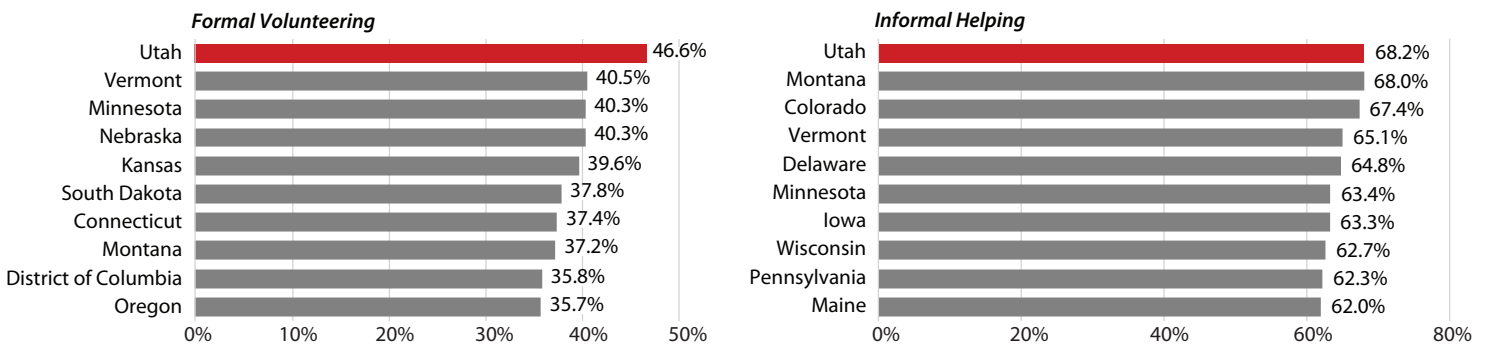
Figure 23: Ten States with Lowest Gini Coefficient (Income Inequality), 2022



Note: A higher Gini coefficient indicates greater income inequality. Axis starts at 0.3 to show differences.

Source: U.S. Census Bureau American Community Survey

Figure 24: Ten States with Highest Rates of Formal Volunteering and Informal Helping, 2023



Note: Formal volunteering is defined as the estimated share of residents who spent any time volunteering for any organization or association in the past year. Informal helping is defined as the estimated share of residents who exchanged favors with neighbors such as house sitting, watching each other's children, lending tools, and other things to help each other at least once in the past year.

Source: AmeriCorps

Endnotes

- Chamberlin, Ralph V., The University of Utah, University of Utah Press, 1960, p. 72.
- Educators distinguish between training and education. Training refers to specific and applied knowledge and skills used in the workplace. Training is task-oriented and skill-based and can be thought of as a subset of education. Education includes a much broader umbrella of intellectual and personal development deemed essential to support civil society.
- Defined as percent of population ages 25 to 64 with a postsecondary certification, certificate, or degree. Calculations made by Lumina Foundation, 2022.
- Fenn, A. (2024). ROI of USHE Awards. Utah Data Research Center.
- Cicero Higher Ed. (July 2023). Utah System of Higher Education Qualitative Benchmark Findings.
- Johnston, B. (2020). The Relationship between Educational Attainment and Reliance on Government Assistance Among Utahns. Utah Data Research Center.
- Fenn, A. (2022). Public Assistance Usage and Higher Education. Utah Data Research Center.
- Curtin, J. & Palica, M. (2018). Return on Investment of USHE Graduates: Individual and State Benefits of Post-Secondary Education.
- Utah System of Higher Education. Headcount Dashboard. <https://ushe.edu/institutional-data-resources-headcount/>



Partners in the Community

The following individuals and entities help support the research mission of the Kem C. Gardner Policy Institute.

Legacy Partners

The Gardner Company
 Christian and Marie Gardner Family
 Intermountain Health
 Clark and Christine Ivory Foundation
 KSL and Deseret News
 Larry H. & Gail Miller Family Foundation
 Mountain America Credit Union
 Salt Lake City Corporation
 Salt Lake County
 University of Utah Health
 Utah Governor's Office of Economic Opportunity
 WCF Insurance
 Zions Bank

Executive Partners

The Boyer Company
 Clyde Companies

Sustaining Partners

Dominion Energy
 Salt Lake Chamber
 Staker Parson Materials and Construction
 Wells Fargo

Kem C. Gardner Policy Institute Advisory Board

Conveners

Michael O. Leavitt
 Mitt Romney

Board

Scott Anderson, Co-Chair
 Gail Miller, Co-Chair
 Doug Anderson
 Deborah Bayle
 Roger Boyer
 Michelle Camacho
 Sophia M. DiCaro
 Cameron Diehl

Kurt Dirks
 Lisa Eccles
 Spencer P. Eccles
 Christian Gardner
 Kem C. Gardner
 Kimberly Gardner
 Natalie Gochnour
 Brandy Grace
 Jeremy Hafen
 Clark Ivory
 Mike S. Leavitt
 Derek Miller
 Ann Millner

Sterling Nielsen
 Jason Perry
 Ray Pickup
 Gary B. Porter
 Taylor Randall
 Jill Remington Love
 Brad Rencher
 Josh Romney
 Charles W. Sorenson
 James Lee Sorenson
 Vicki Varela

Ex Officio (invited)

Governor Spencer Cox
 Speaker Mike Schultz
 Senate President
 Stuart Adams
 Representative
 Angela Romero
 Senator Luz Escamilla
 Mayor Jenny Wilson
 Mayor Erin Mendenhall

Kem C. Gardner Policy Institute Staff and Advisors

Leadership Team

Natalie Gochnour, Associate Dean and Director
 Jennifer Robinson, Chief of Staff
 Mallory Bateman, Director of Demographic Research
 Phil Dean, Chief Economist and Senior Research Fellow
 Shelley Kruger, Director of Accounting and Finance
 Colleen Larson, Associate Director of Administration
 Nate Lloyd, Director of Economic Research
 Dianne Meppen, Director of Community Research
 Laura Summers, Director of Industry Research
 Nicholas Thiriot, Communications Director
 James A. Wood, Ivory-Boyer Senior Fellow

Staff

Eric Albers, Senior Natural Resources Policy Analyst
 Samantha Ball, Dignity Index Research Director
 Parker Banta, Public Policy Analyst
 Melanie Beagley, Public Policy Analyst
 Kristina Bishop, Research Economist
 Preston Brightwell, Dignity Index Field Director
 Andrea Thomas Brandley, Senior Education Analyst
 Kara Ann Byrne, Senior Health and Human Services Analyst
 Nate Christensen, Research Economist
 Moira Dillow, Housing, Construction, and Real Estate Analyst
 John C. Downen, Senior Research Fellow
 Dejan Eskic, Senior Research Fellow and Scholar
 Kate Farr, Monson Center Maintenance Specialist
 Chance Hansen, Communications Specialist
 Emily Harris, Senior Demographer

Michael T. Hogue, Senior Research Statistician
 Mike Hollingshaus, Senior Demographer
 Madeleine Jones, Dignity Index Field Director
 Jennifer Leaver, Senior Tourism Analyst
 Maddy Oritt, Senior Public Finance Economist
 Levi Pace, Senior Research Economist
 Praopan Pratoomchat, Senior Research Economist
 Heidi Prior, Public Policy Analyst
 Natalie Roney, Research Economist
 Shannon Simonsen, Research Coordinator
 Paul Springer, Senior Graphic Designer
 Gaby Velasquez, Monson Center Special Events Coordinator
 Cayley Wintch, Monson Center Building Manager

Faculty Advisors

Matt Burbank, College of Social and Behavioral Science
 Elena Patel, David Eccles School of Business
 Nathan Seegert, David Eccles School of Business

Senior Advisors

Jonathan Ball, Office of the Legislative Fiscal Analyst
 Silvia Castro, Suazo Business Center
 Gary Cornia, Marriott School of Business
 Beth Jarosz, Population Reference Bureau
 Darin Mellott, CBRE
 Pamela S. Perlich, University of Utah
 Chris Redgrave, Community-at-Large
 Juliette Tennert, Community-at-Large

INFORMED DECISIONS™