



UTAH INFORMED

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Kem C. Gardner

POLICY INSTITUTE

THE UNIVERSITY OF UTAH

DAVID ECCLES SCHOOL OF BUSINESS

In Partnership with the Salt Lake Chamber

KEM C. GARDNER POLICY INSTITUTE

We are an honest broker of
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RESEARCH

that guides
INFORMED
DISCUSSIONS

and leads to
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DECISIONS™

January 2018

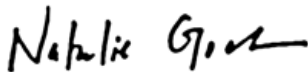
During a trade mission to Israel in September 2017, Utah Gov. Gary Herbert shared with Prime Minister Benjamin Netanyahu a striking bronze statue of the Mormon pioneers on their trek west. Netanyahu reportedly studied the statue with sincerity and interest and then said, “They must have been hardworking, tough people.”

The phrase captures so much of what it means to live and work in Utah. Utahns are industrious people who seize opportunities, face challenges and persevere. We don’t back away from trials and we always work hard.

In this, the third edition of *Utah Informed*, we show the fruits of this hard work and the challenges that remain. The tables, charts, ideas, and schematics force the viewer to consider a compelling trend, an innovative idea or an aspirational thought. We call it “visual intellection” because the information both inspires and causes discomfort. We want to make you think.

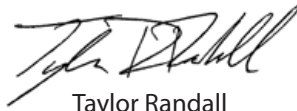
This year, many businesses and individuals have joined the Kem C. Gardner Policy Institute as “Partners in the Community.” These partners help fund the public purpose research of the institute so we can help Utah prosper. Our goal is to be honest brokers of informed research, that guides informed discussions, and leads to INFORMED DECISIONS™.

We hope this edition of *Utah Informed* will help you make wise decisions in 2018.



Natalie Gochnour

Associate Dean,
David Eccles School of Business
Director, Kem C. Gardner Policy Institute



Taylor Randall

Dean, David Eccles School of Business



Lane Beattie

President & CEO, Salt Lake Chamber

Contents

Introduction1

Table of Contents2

Current Affairs

2017 discoveries5

Words to know in 2018.....6

Potential 2026 and 2030 Olympic
Winter Games hosts7

Top Google searches in 20178

Death rates for firearm-related injuries
in the United States.....9

Pew poll on sexual harrassment and assault10

Evil empire11

Economy

National & Global

US business cycle status.....12

World business cycle status13

Duration of US economic expansions.....14

Odds of a US recession in next 12 months15

Federal Funds Target Rate and selected interest rates...16

Hutchin’s Center Fiscal Impact Measure.....17

Top corporate income tax rates.....18

Jobs & Income

Headwinds and tailwinds in 2018.....19

Index of Utah and United States employment.....20

Utah employment growth rate21

Index of Utah public and private sector employment .. 22

Labor force participation rates.....23

Change in Utah labor force participation rates24

The productive middle?.....25

Occupations with top location quotients26

Active female physicians as a percent
of all active physicians27

Unemployment and labor underutilization28

Labor force statistics for Utah’s population
with disabilities.....29

Proprietor jobs per 100 wage and salary jobs in Utah...30

The silent recession31

Job growth and decline in Utah’s counties32

The looming question33

Annual change in per capita personal income34

Editor-in-chief: Juliette Tennert

Real Estate & Construction

Annual change in Employment Cost Index.....	35
Median cumulative days on market.....	36
Median sales price existing single-family homes	37
New housing units and households in Utah.....	38

Energy and Natural Resources

Distribution of diverted water in Utah	39
States' contribution to nation's total solar power generation	40
Portion electric power generation from renewable sources.....	41

Competitiveness

Total economic impacts of the defense sector in Utah	42
Venture capital deals per \$1 million of state GDP.....	43
Ideal metro location for next Amazon headquarters.....	44
Workers' Compensation premium rates.....	45
Natural Gas Prices.....	46
Arts organizations and venues per 100,000 population	47
Freight shipments originating in Utah	48
Globalization and Utah.....	49

Utah's top export industries and trading partners	50
International visitor spending shares	51
State and local tax burdens.....	52
Hachman Index of GDP diversity	53

Demographics

Creating our destiny	54
Projected 50-year population growth.....	55
Current and projected dependency ratios for Utah's counties.....	56
Total fertility rates for Utah and the United States	57
Hayward and Mitchell rookie season statistics	58
Changes in Autism Spectrum Disorder prevalence ...	59
Opportunity index.....	60
Educational attainment of migrants	61

Education

Utah high school graduation rates by race and ethnicity	62
Average ACT scores.....	63
Growth and decline in Utah's school districts.....	64
Fall 2016 USHE enrollment	65

Contents *(continued)*

Health and Wellbeing

- Per capita health care expenditures66
- Health care expenditures as a share of GDP67
- Percent of population without health insurance68
- Active physicians per 100,000 population.....69
- Opioid overdose deaths per 100,000 population.....70
- Retail opioid prescriptions dispensed
per 100 persons71
- Firearm-related death rates by type.....72
- Number of days air quality index exceeded
100 across the Wasatch Front.....73

Fiscal Considerations

- State fiscal practices report card.....74
- Changes in Utah’s sales and income tax bases.....75
- Growth in Utah’s economy and major
revenue collections.....76
- US Personal Consumption Distribution77
- Status of state Medicaid expansion decisions78

Shedding Light

- Authentic engagement in public deliberation.....79
- Informed decisions80

2017 discoveries

- **Dinosaur** – The largest-known dinosaur footprint, which is over 130 million years old and five and three-quarters feet long, was found in western Australia.
- **Homo sapiens** – The oldest-known Homo sapiens bones were found in Morocco and are 300,000 years old, over 100,000 years older than the previous oldest.
- **USS Indianapolis** – The wreckage of the USS Indianapolis, a US Navy cruiser, was discovered after having been sunk in 1945.
- **Viking women** – DNA evidence was discovered which proved that Viking women had been warriors at least 1,000 years ago.
- **Icebergs** – A 2,240 square mile iceberg – roughly the size of Utah County – broke off the Larsen Ice Shelf, Antarctica.
- **Pistol shrimp** – A new type of pistol shrimp was discovered near Panama which uses a claw to make such loud noises that surrounding fish can be stunned or even killed. The discoverers named it Synalpheus pinkfloydi, after Pink Floyd, for its volume intensity and deafeningly loud pink claw.
- **Monster bird** – A penguin fossil belonging to a 6 foot and 220 pound bird was found in New Zealand. The extinct species was named Kumimanu bicaeae – “Monster Bird” in Maori.
- **Hospitable planet** – A nearly Earth-sized and possibly hospitable planet was discovered only 11 light-years away orbiting a red star.
- **Paralysis cure?** – A system which attaches to the brain and transmits intentions to parts of the body could counteract paralysis.
- **Pig-nosed frog** – A new mountain-dwelling purple pig-nosed frog was discovered in India. It spends most of its life underground, only surfacing to mate during rainstorms.
- **Egyptian tombs** – Two new Egyptian tombs were discovered and excavated which date around 3,400 years old.
- **Aztec sports** – A 500-year old Aztec ball court was uncovered by archaeologists and is complete with a game area and spectator seating.
- **Cosmic storm** – Jupiter’s Great Red Spot – a 350 year-old storm – has increased in size to one-and-a-half times the size of Earth this year after shrinking the past 15 years.
- **Faux wombs** – A faux womb has been invented which helps lambs develop after very premature birth and will likely be used on humans in the near future.
- **Hidden void** – Inside the Great Pyramid of Giza, a 100-foot long hidden void was discovered using muon radiography. It is unknown what it contains or how to access it.
- **Living planets** – A system of seven Earth-size planets orbiting an ultra-cool dwarf was discovered. NASA believes at least three but likely more contain water and possible life.
- **Ancient tools** – The ancient port of Corinth is being excavated to reveal a peek into the Corinthian trade, complete with 2,000-year-old pottery, wooden spoons, pulleys, and other tools.

Source: Compiled from public sources by the Kem C. Gardner Institute

Words and phrases to know in 2018

cat-a-lyze \ 'ka-tə-,liz \ to bring about, inspire:
The Utah State Prison relocation opens land that can be used to **catalyze** the growth of the entire area.

ci-vil-i-ty \ sə-'vi-lə-tē \ ability to disagree productively with others, respecting their sincerity and decency: Utahns value **civility** in the public square.

cour-age \ 'kər-ij \ mental or moral strength to venture, persevere, and withstand danger, fear, or difficulty: She had the **courage** to speak truth to power.

dil-i-gence \ 'di-lə-jən(t)s \ steady, earnest, and energetic effort: The Federal Reserve continues to demonstrate **diligence** in normalizing interest rates.

dis-ci-pline \ 'di-sə-plən \ orderly or prescribed conduct or pattern of behavior: Fiscal **discipline** remains an important priority to many congressmen and senators.

eight straight \ 'ät 'strät \ an 8-game rivalry winning streak: Most agree that **eight straight** is a 2018 inevitable in the Utah-BYU matchup.

grit \ 'grit \ firmness of mind or spirit; unyielding courage in the face of hardship or danger: The first responders showed their **grit** in rescuing concert goers on the Vegas strip.

in-teg-ri-ty \ in-'te-grə-tē \ the quality of being honest: Utahns value **integrity** in their elected officials.

light \ 'lit \ something that makes vision possible: The Kem C. Gardner Policy Institute sheds **light** for Utah decision makers, not heat.

pub-lic vir-tue \ 'pə-blik 'vər-(,)chü \ a desire to achieve the common good: Lt. Gov. Spencer Cox, Speaker Greg Hughes, Mayor McAdams and Mayor Biskupski applied **public virtue** in addressing homeless services.

re-sil-i-ence \ ri-'zil-yən(t)s \ an ability to recover from or adjust to misfortune or change: The eleven rural Utah counties that have lost jobs since 2007 continue to show economic **resilience** because of the hardworking people.

Who will host the 2026 and 2030 Olympic Winter Games?



Source: Utah Olympic Legacy Foundation

Signs of our times

Top US Google searches in 2017

Searches

- 1) Hurricane Irma
- 2) Matt Lauer
- 3) Tom Petty
- 4) Super Bowl
- 5) Las Vegas shooting
- 6) Mayweather vs McGregor fight
- 7) Solar eclipse
- 8) Hurricane Harvey
- 9) Aaron Hernandez
- 10) Fidget Spinner

What is...

- 1) What is DACA?
- 2) What is Bitcoin?
- 3) What is a solar eclipse?
- 4) What is ANTIFA?
- 5) What is net neutrality?
- 6) What is covfefe?
- 7) What is the antikythera mechanism?
- 8) What is a fidget spinner?
- 9) What is the Paris Climate Agreement?
- 10) What is a hurricane?

People

- 1) Matt Lauer
- 2) Meghan Markle
- 3) Harvey Weinstein
- 4) Michael Flynn
- 5) Kevin Spacey
- 6) Bill O'Reilly
- 7) Melania Trump
- 8) Kathy Griffin
- 9) Milo Yiannopoulos
- 10) Gal Gadot

News

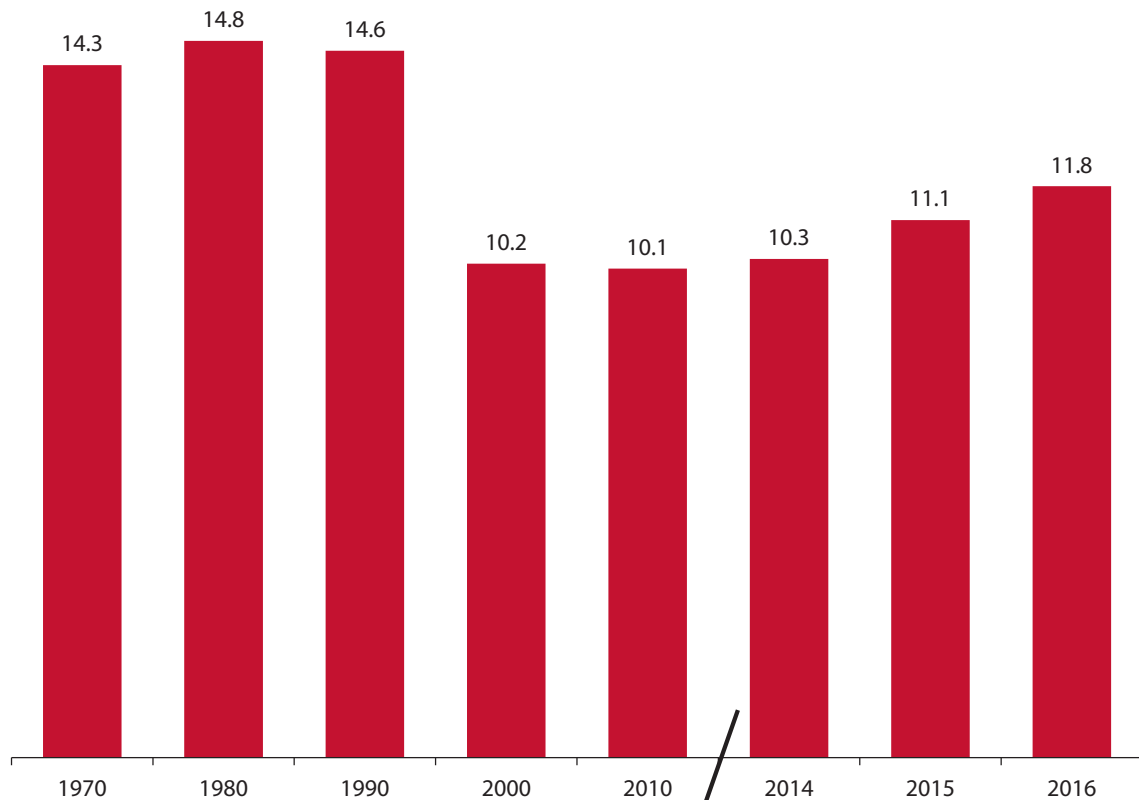
- 1) Hurricane Irma
- 2) Las Vegas shooting
- 3) Solar Eclipse
- 4) Hurricane Harvey
- 5) Bitcoin Price
- 6) North Korea
- 7) Hurricane Jose
- 8) Hurricane Maria
- 9) April the Giraffe
- 10) DACA

Source: Google

Firearm-related deaths on the rise

Death rates for firearm-related injuries in the United States

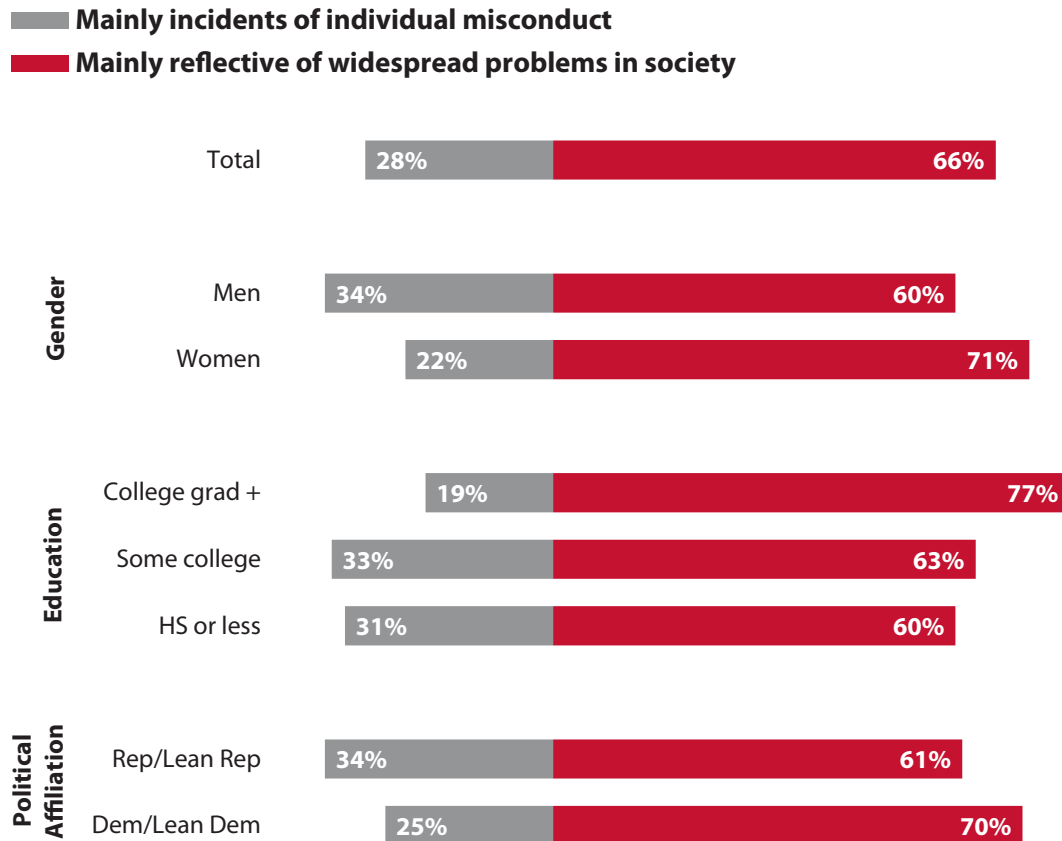
Deaths per 100,000 resident population, all ages, age-adjusted



Source: Centers for Disease Control and Prevention National Center for Health Statistics Health, United States, 2016 Report and Mortality Dashboard

Pew survey suggests many Americans believe reports of sexual misconduct reflect societal problems

Percent of Americans who say recent allegations of sexual harrassment and assault are:



Note: Don't know responses not shown.

Source: Pew Research Center Survey of U.S. adults conducted November 29 - December 4, 2017

Ronald Reagan Evil Empire Speech, March 8, 1983

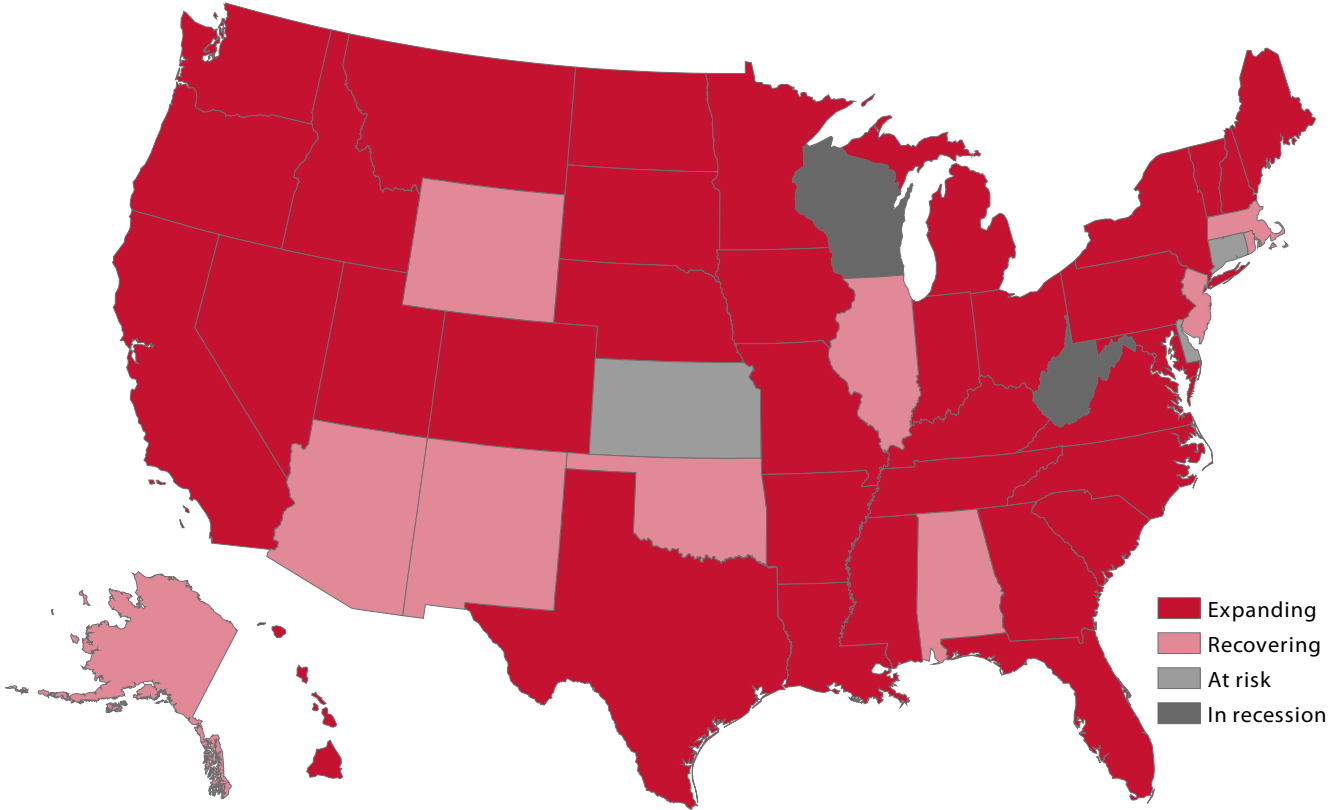
“While America’s military strength is important, let me add here that I’ve always maintained that the struggle now going on for the world will never be decided by bombs or rockets, by armies or military might. The real crisis we face today is a spiritual one; at root, it is a test of moral will and faith.”

Ronald Reagan

Source: Remarks at the Annual Convention of the National Association of Evangelicals in Orlando, Florida, March 8, 1983.

State economies continue to expand, mostly

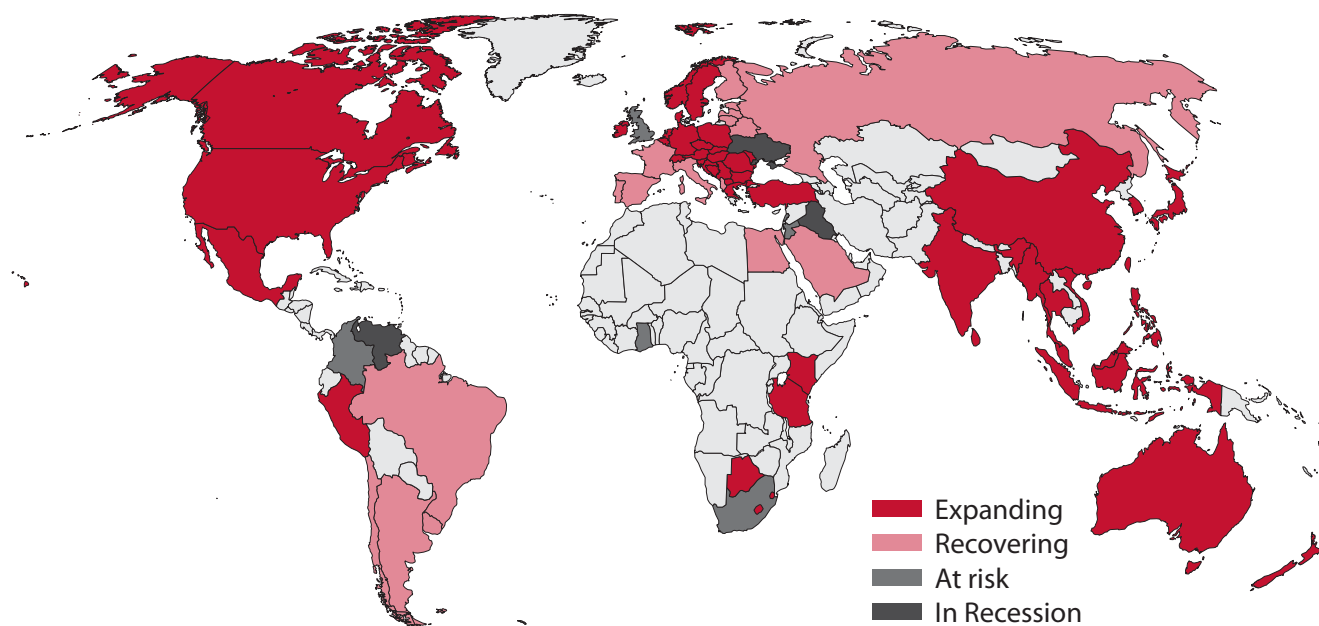
Business cycle status, end of 2017



Source: Moody's Analytics

Synchronized global expansion

Business cycle status, end of 2017

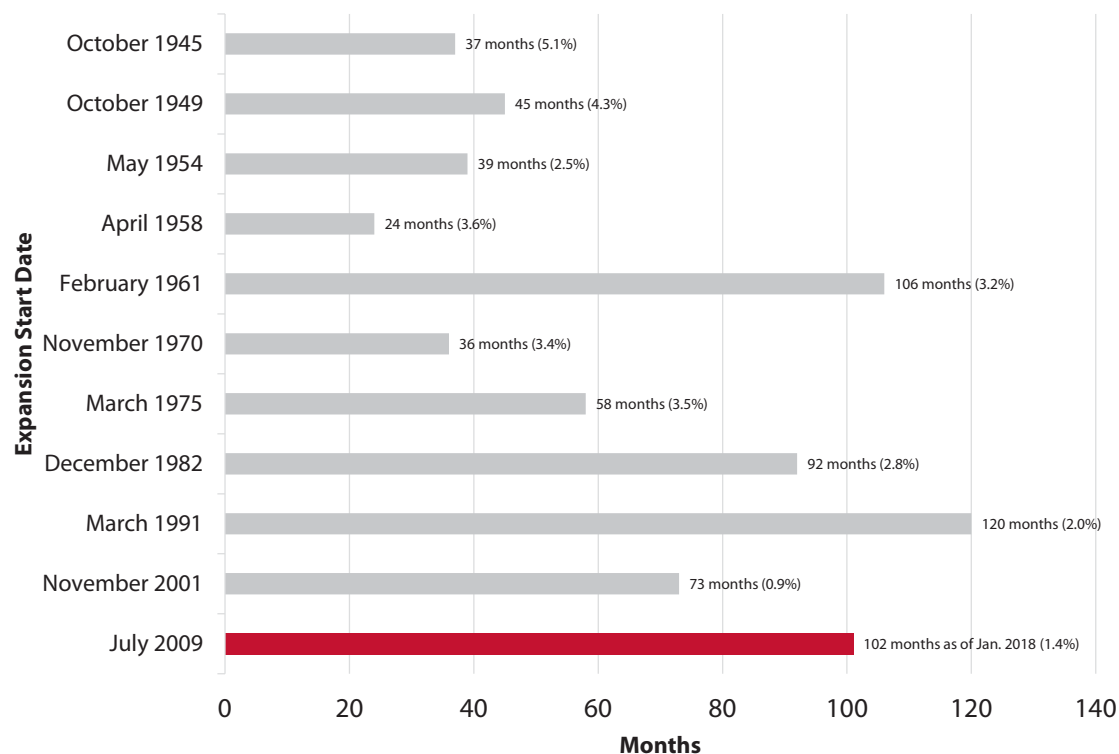


Source: Moody's Analytics

Come May, US economic expansion second longest ever

Duration of US economic expansions

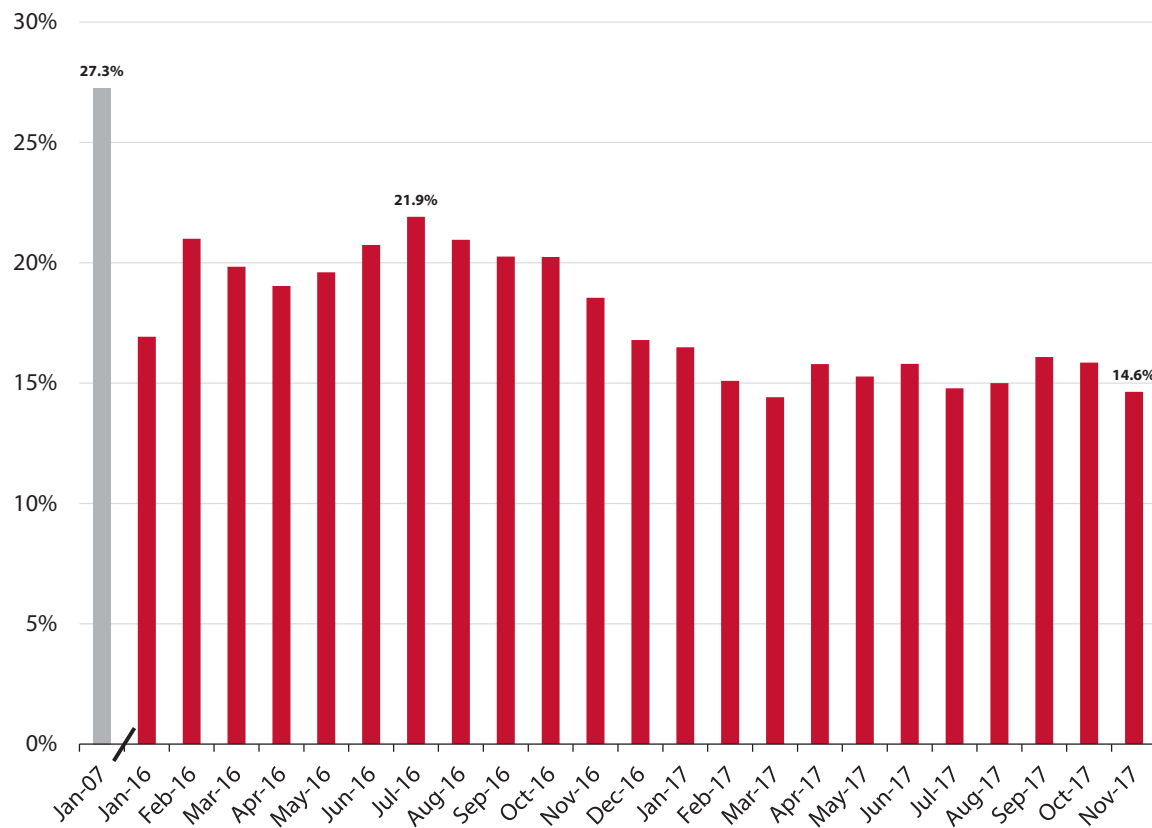
(Average annual job growth rate)



Source: Kem C. Gardner Policy Institute analysis of National Bureau of Economic Research and Bureau of Labor Statistics Current Employment Statistics data

Economists and their crystal balls...

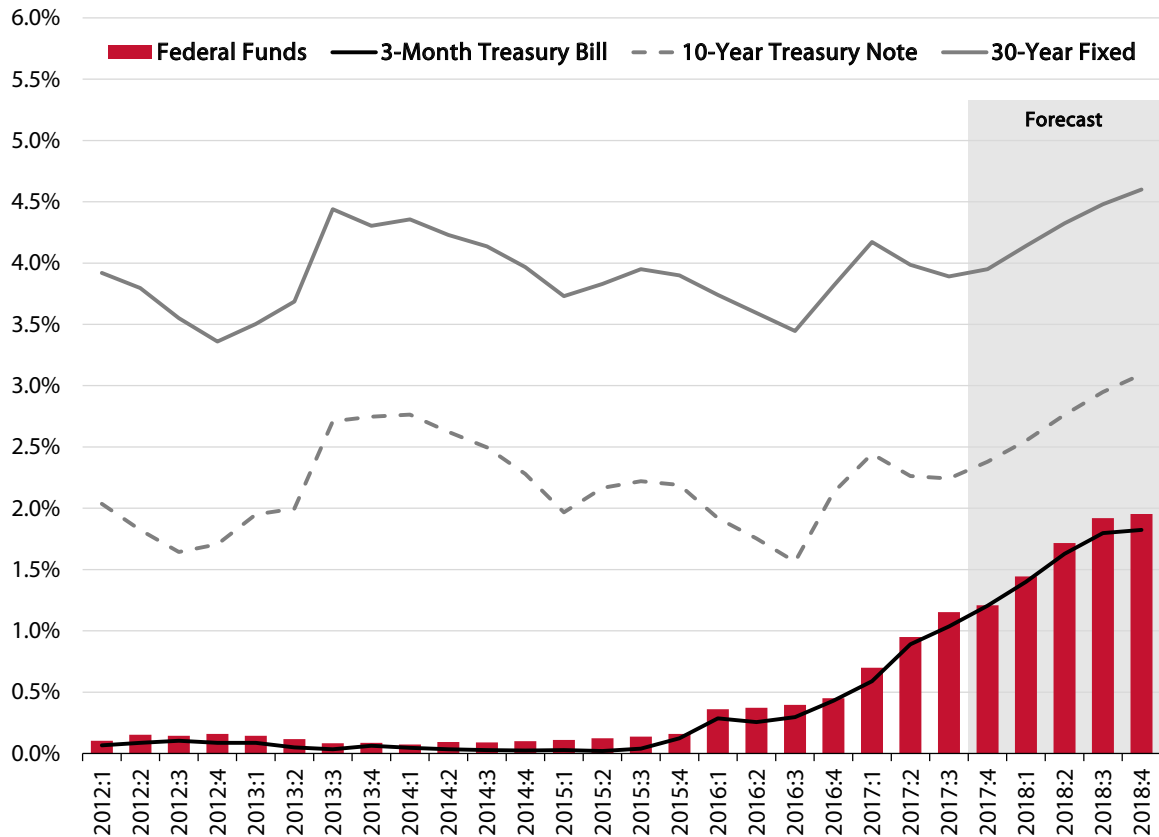
Odds of a US recession in next 12 months



Source: Wall Street Journal Economic Forecasting Survey

Normalizing monetary policy, finally

Federal funds target rate and selected interest rates

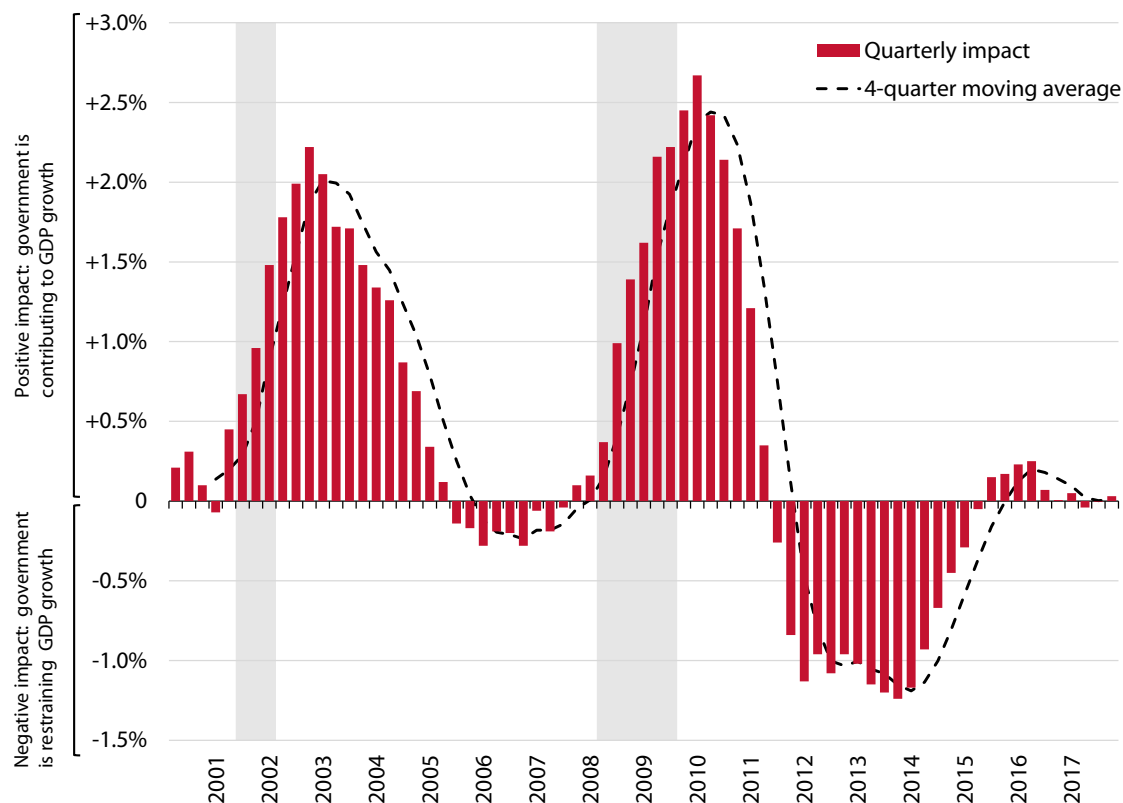


Source: IHS Global Insight

Government fiscal policy had minimal impacts on the US economy in 2017

Hutchin's Center Fiscal Impact Measure

Combined effect of federal, state and local spending and tax policies on US GDP growth

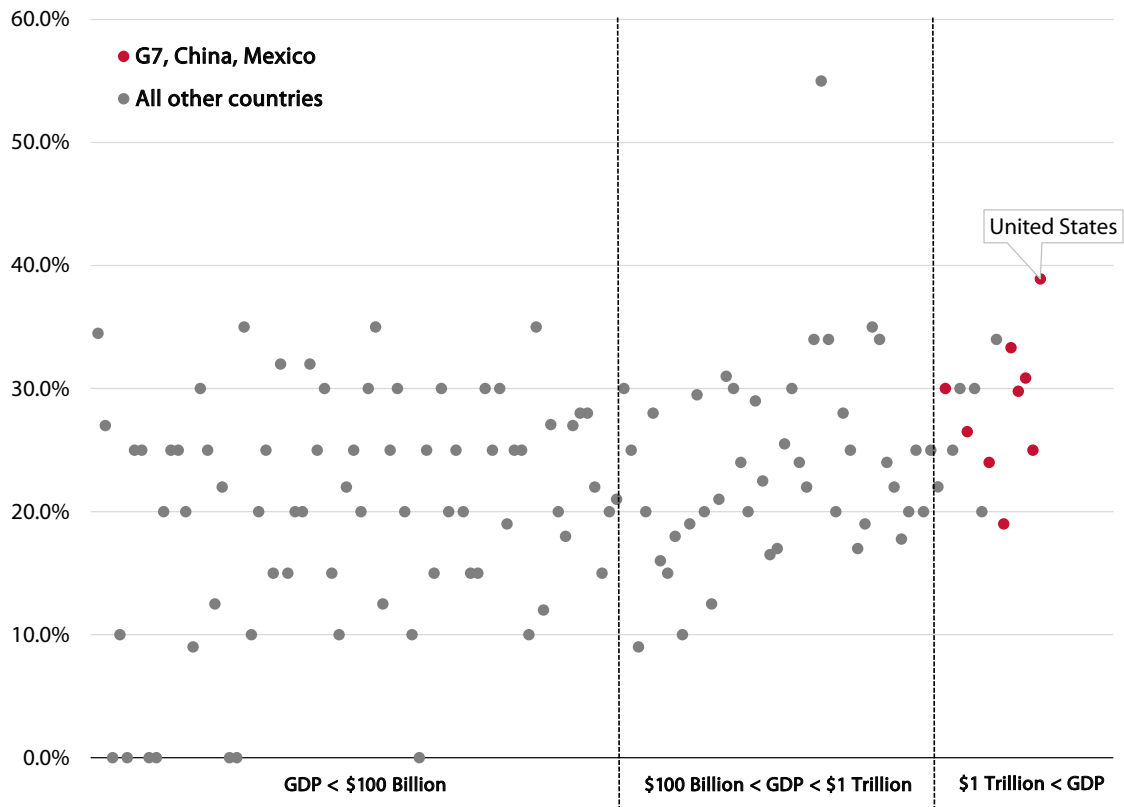


Source: Brookings Institution Hutchin's Center Fiscal Impact Measure Q3 2017 Update

US corporate tax rate an outlier

Top corporate income tax rates, 2017

Arranged by GDP



Note: Combined national and subnational rates.

Source: KPMG Corporate Tax Rate Table and Congressional Budget Office International Comparisons of Corporate Income Tax Rates report

Headwinds and tailwinds in 2018

“Despite positive trends in the economy, there are headwinds. Rising business costs, a tight labor supply, and a shortage of housing are creating growth challenges. The consensus forecast of state economists predicts moderating – but still healthy – job and wage growth, low unemployment, and continuing net in-migration.”

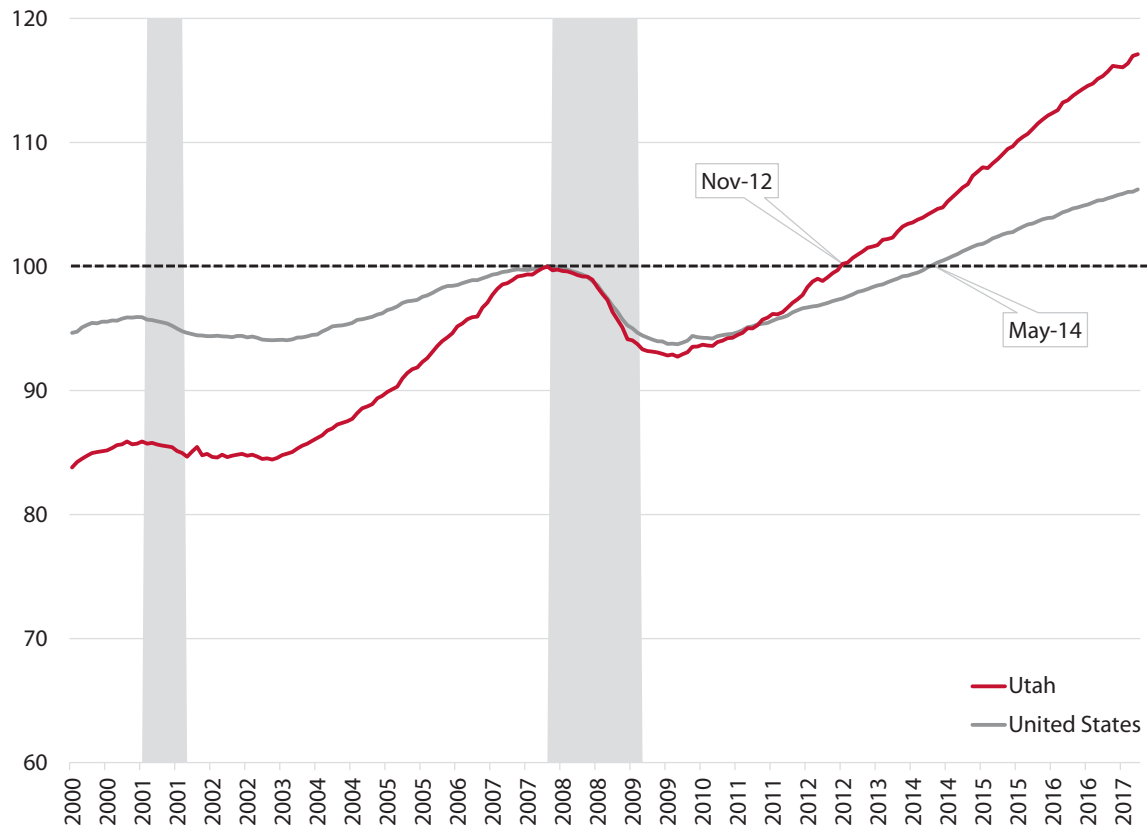
Natalie Gochmour

Source: Utah Business Magazine, October 26, 2017

Utah nearly two years ahead of nation in expansion

Index of Utah and United States employment

100 = December 2007 pre-recession peak employment

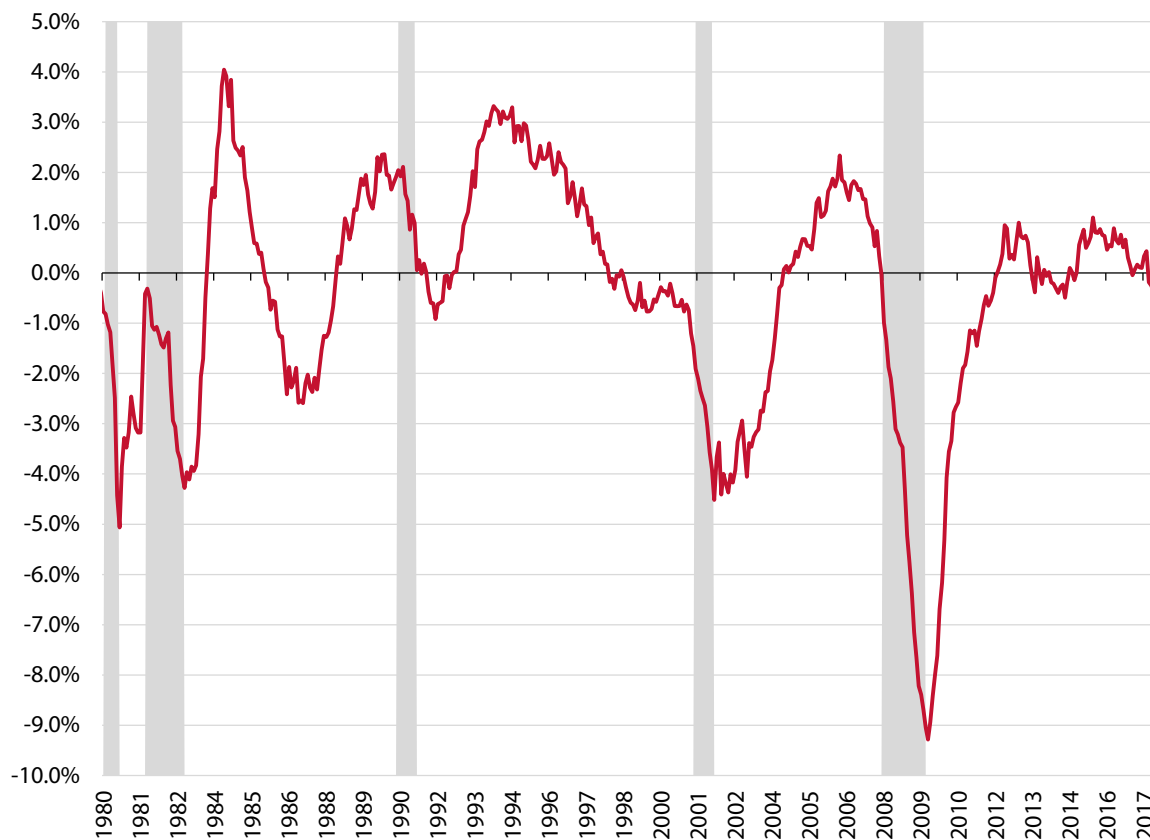


Note: Y-axis does not start at zero.

Source: Kem C. Gardner Policy Institute analysis of U.S. Bureau of Labor Statistics (BLS) Current Employer Survey data and National Bureau of Economic Research (NBER) U.S. Business Cycle Expansions and Contractions data

Recent job growth postings dip below historical average

Deviation of Utah employment growth rate from historical average



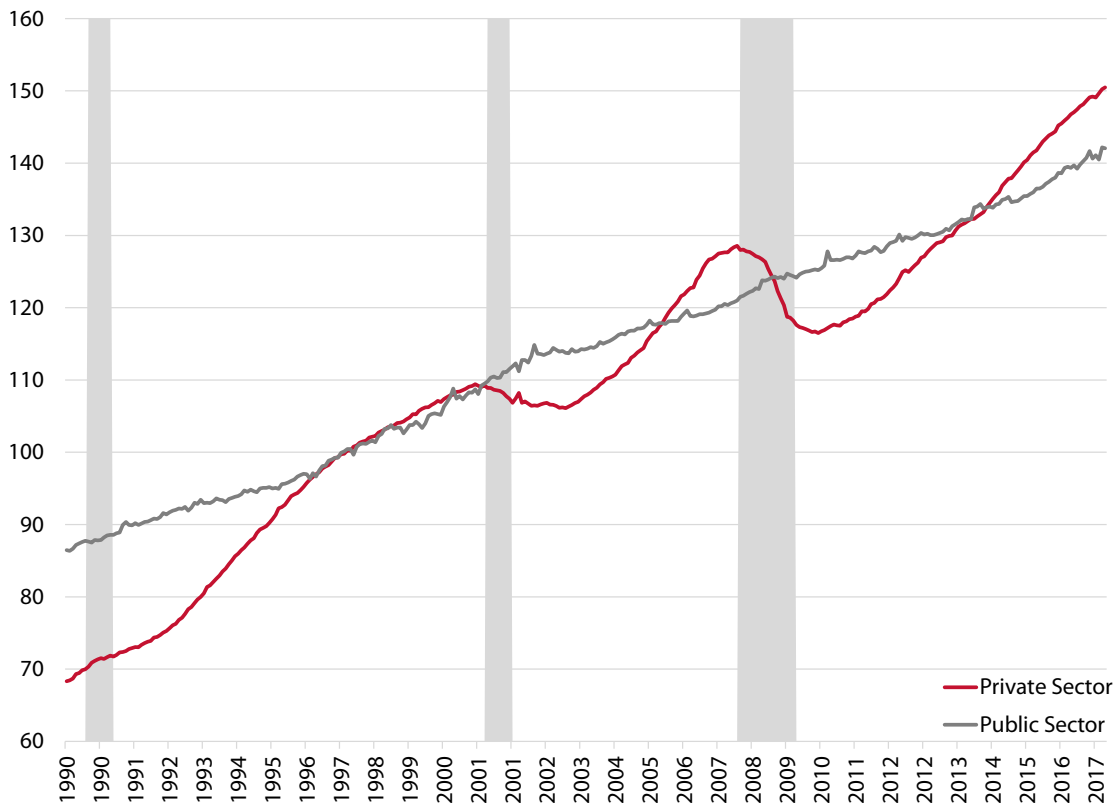
Note: The long-term average annual employment growth rate since 1960 is 3.1%.

Source: Kem C. Gardner Policy Institute analysis of U.S. Bureau of Labor Statistics (BLS) Current Employer Survey data and National Bureau of Economic Research (NBER) U.S. Business Cycle Expansions and Contractions data

As we'd expect...

Index of Utah public and private sector employment

100 = Average monthly employment in 1997



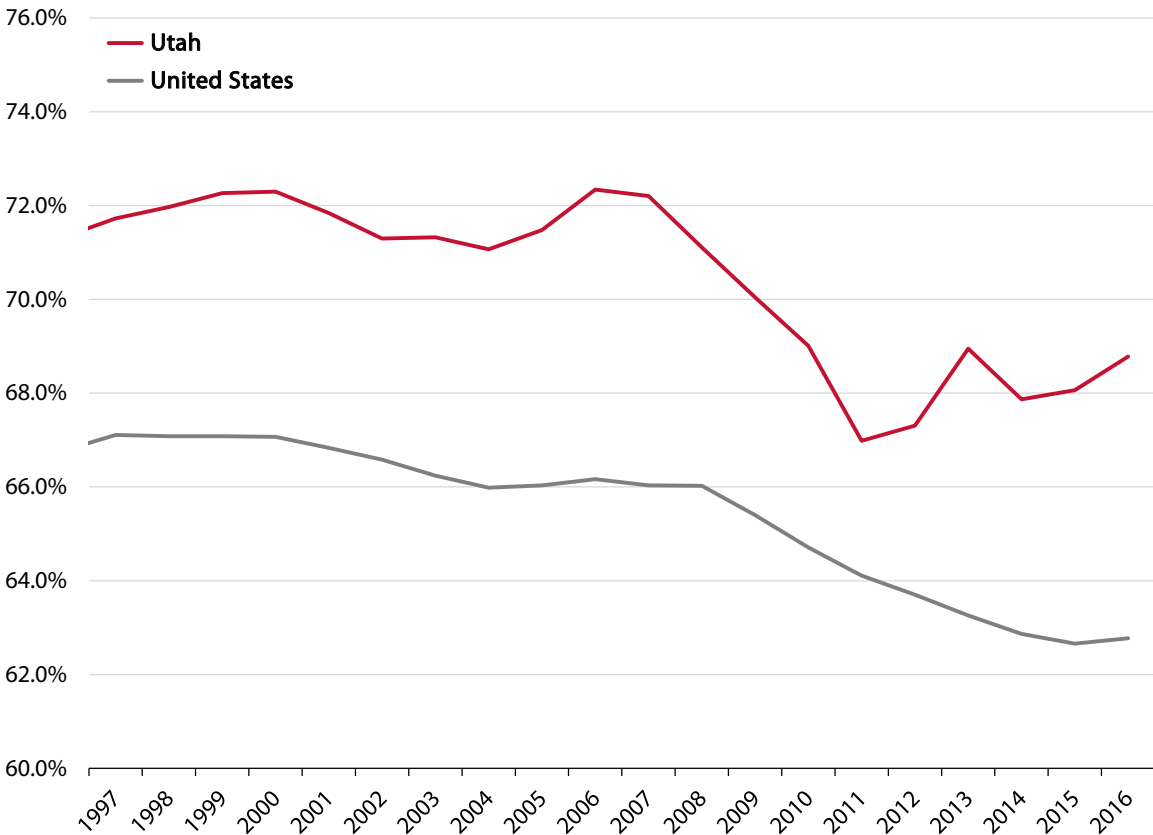
Note: Y-axis does not start at zero.

Source: Kem C. Gardner Policy Institute analysis of U.S. Bureau of Labor Statistics (BLS) Current Employer Survey data and National Bureau of Economic Research (NBER) U.S. Business Cycle Expansions and Contractions data

Demographics, economics, and changing labor force participation

Labor force participation rates

Percent of the population aged 16 and over in the labor force



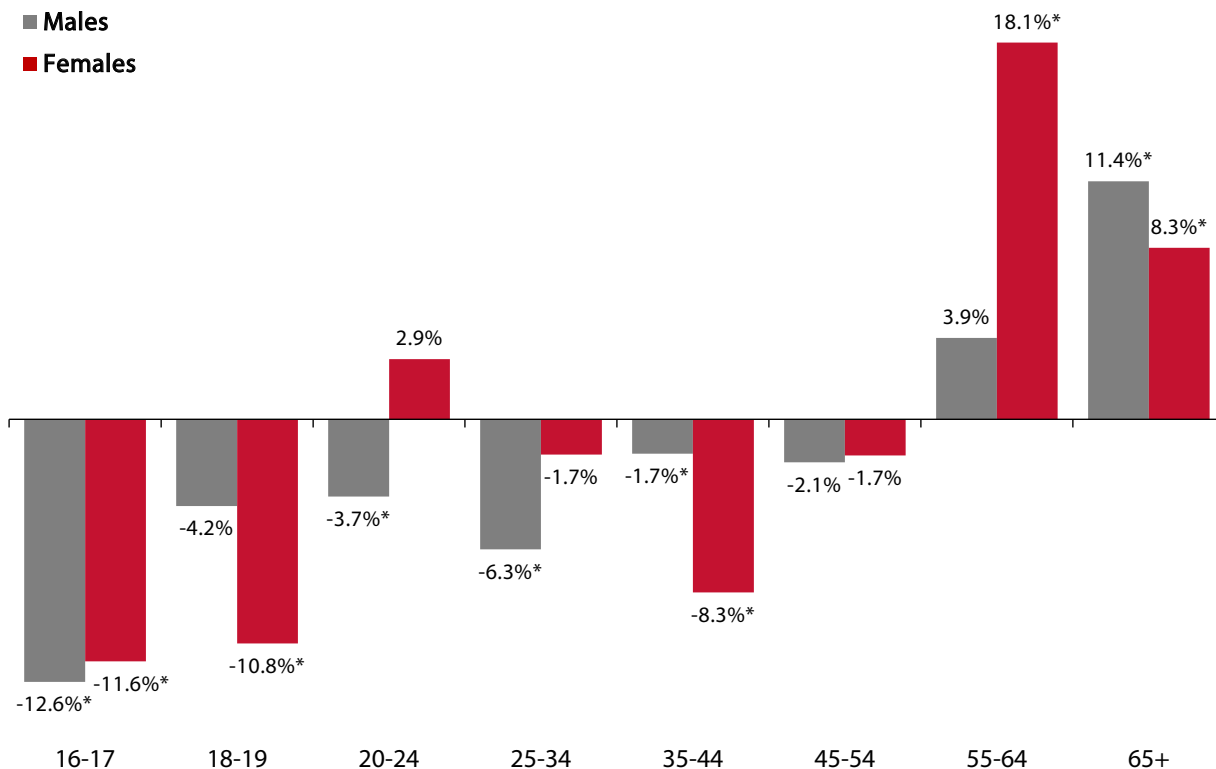
Note: Y-axis does not start at zero.

Source: U.S. Bureau of Labor Statistics (BLS) Geographic Profile of Employment and Unemployment

Shifting labor force participation dynamics

Change in Utah labor force participation rates, 1997-2017

By selected working-age groups



*Statistically different from zero.

Source: Kem C. Gardner Policy Institute Analysis of IPUMS Current Population Survey data (Steven Ruggles, Katie Genadek, Ronald Goeken, Josiah Grover, and Matthew Sobek. Integrated Public Use Microdata Series: Version 7.0 [dataset]. Minneapolis, MN: University of Minnesota, 2017)

The productive middle?

“... The future of this country is not going to be found in protecting jobs that are long gone or in catering to the fears of aging whites. There is a raging need for a movement that embraces economic dynamism, global engagement and social support — that is part Milton Friedman on economic policy, Ronald Reagan on foreign policy and Franklin Roosevelt on welfare policy.”

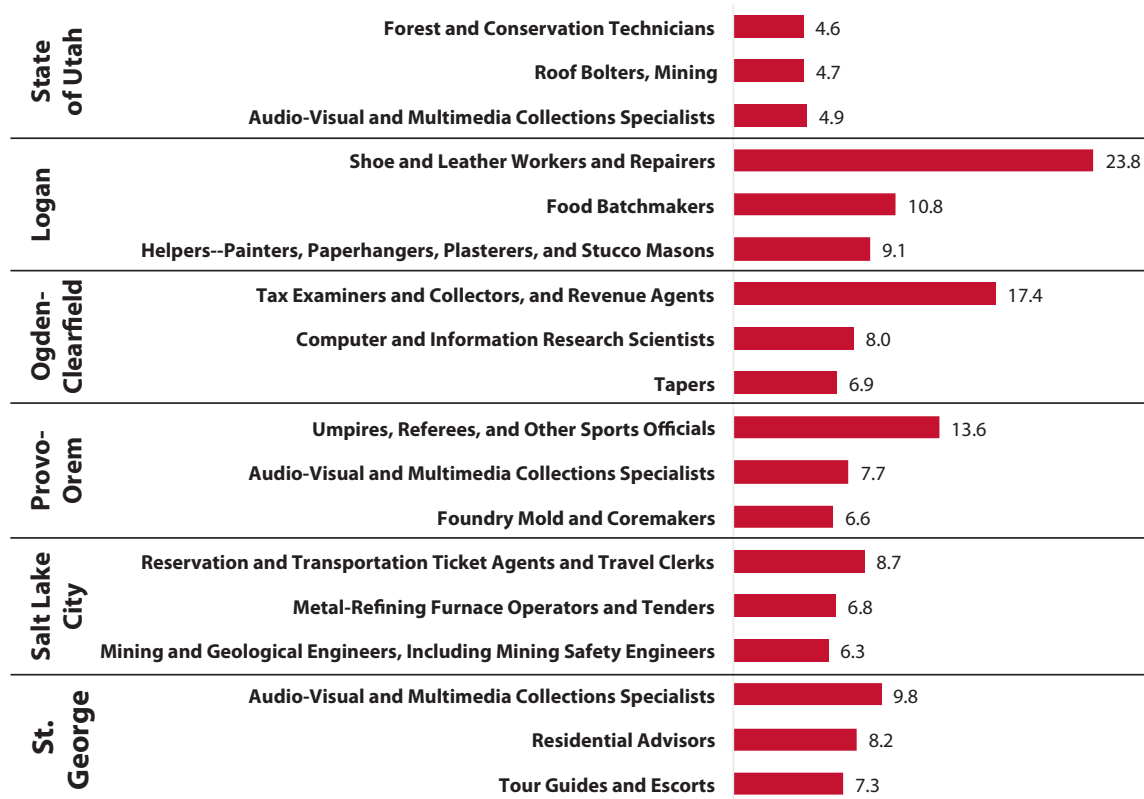
David Brookes

Source: “The Future of the American Center,” New York Times, Nov. 29, 2016

Concentration of occupations in Utah

Occupations with top location quotients

State of Utah and its metropolitan statistical areas



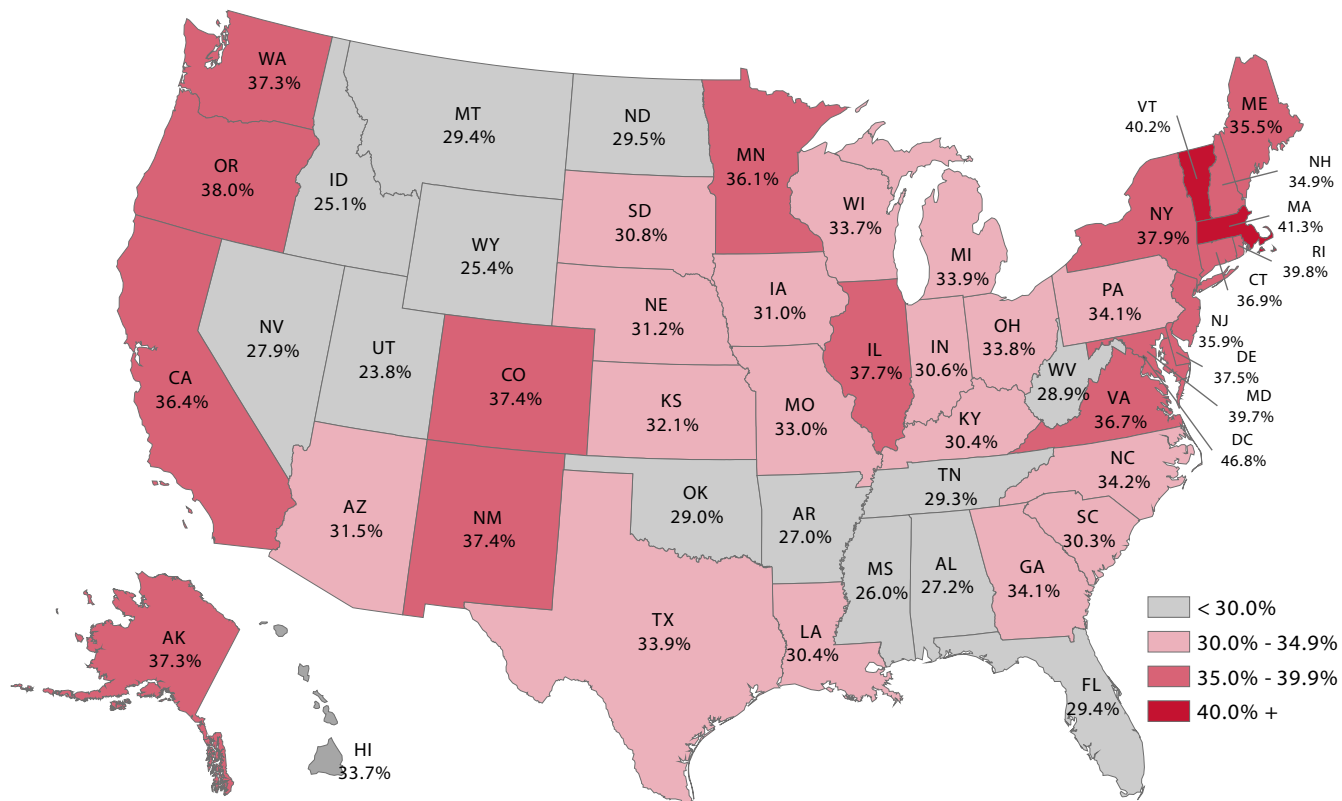
Note: Location quotients (LQs) measure a region's occupational concentration relative the nation. For example, with an LQ of 4.6, Forest and Conservation Technicians are more than 4 times more concentrated in Utah than nationally.

Source: U.S. Bureau of Labor Statistics (BLS) Occupational Employment Statistics May 2016 data

Less than a quarter of Utah's doctors are women

Active female physicians as a percent of all active physicians, 2016

United States = 34.6%

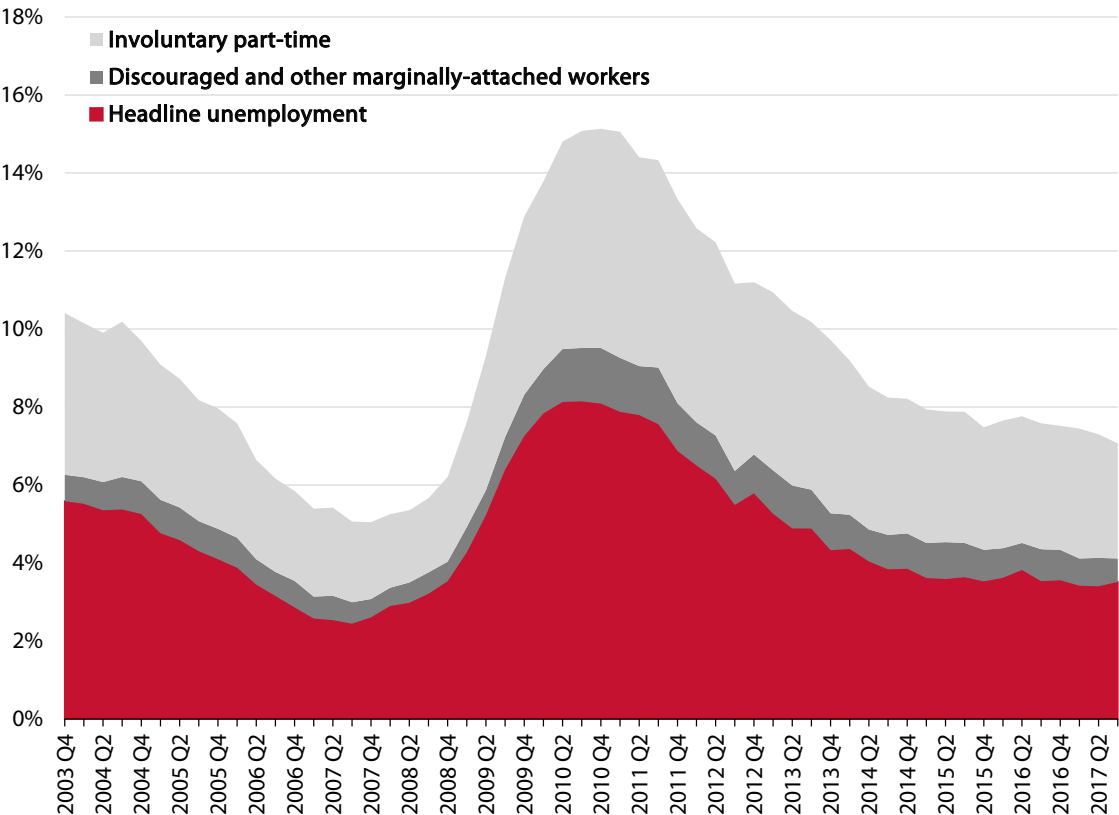


Source: American Medical Association 2017 State Physician Workforce Data Report

Unemployment and underemployment shrinking

Alternative measures of unemployment and labor underutilization

Percent of labor force, 4-quarter moving average



Source: U.S. Bureau of Labor Statistics (BLS) Local Area Unemployment Statistics

Utah's population with disabilities and the labor force

Labor force statistics for Utah's population with disabilities, 2016

Population with Disabilities: Ages 18-64

159,024

LABOR FORCE STATISTICS

$$\begin{array}{ccccc} 74,767 & + & 8,841 & = & 83,608 \\ \text{Employed} & & \text{Unemployed} & & \text{in Labor Force} \end{array}$$

10.6%

Jobless Rate

52.6%

Labor Force Participation Rate

75,416

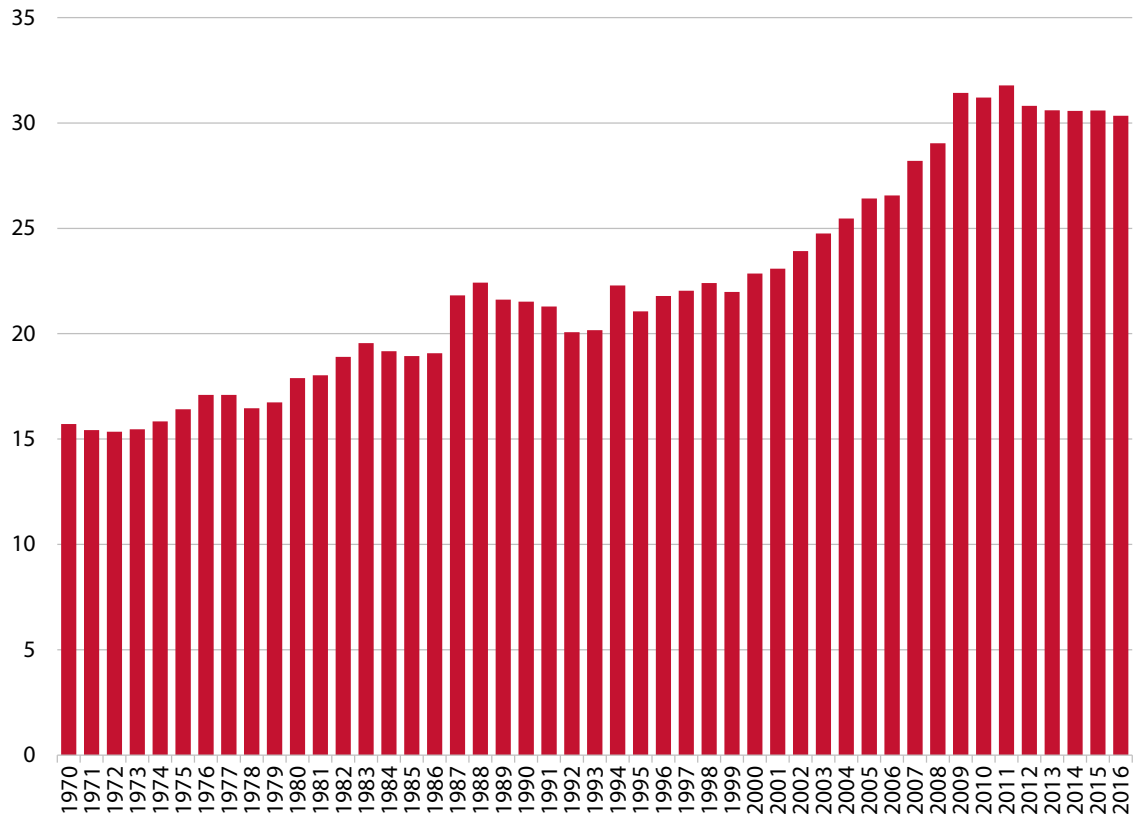
Not in Labor Force

Source: Utah Department of Workforce Services

The rise of the self-employed

Proprietor jobs per 100 wage and salary jobs in Utah

1970s average = 16.1, 2010 -2016 average = 30.8



Note: Proprietors include sole proprietorships, partnerships, and tax-exempt cooperatives.

Source: Kem C. Gardner Policy Institute analysis of U.S. Bureau of Economic Analysis (BEA) Annual Personal Income data

The silent recession

“This story of a tale of two Utahs has emerged, where economic growth in our state’s urban areas has caused our state economy to range among the very best economies in the nation, all while there are many rural economies in our state that are actually experiencing decline. Policies that can alleviate this trend include encouraging greater economic diversity and then also cultivating and leveraging existing comparative advantage in rural agriculture, energy, manufacturing, and tourism markets.”

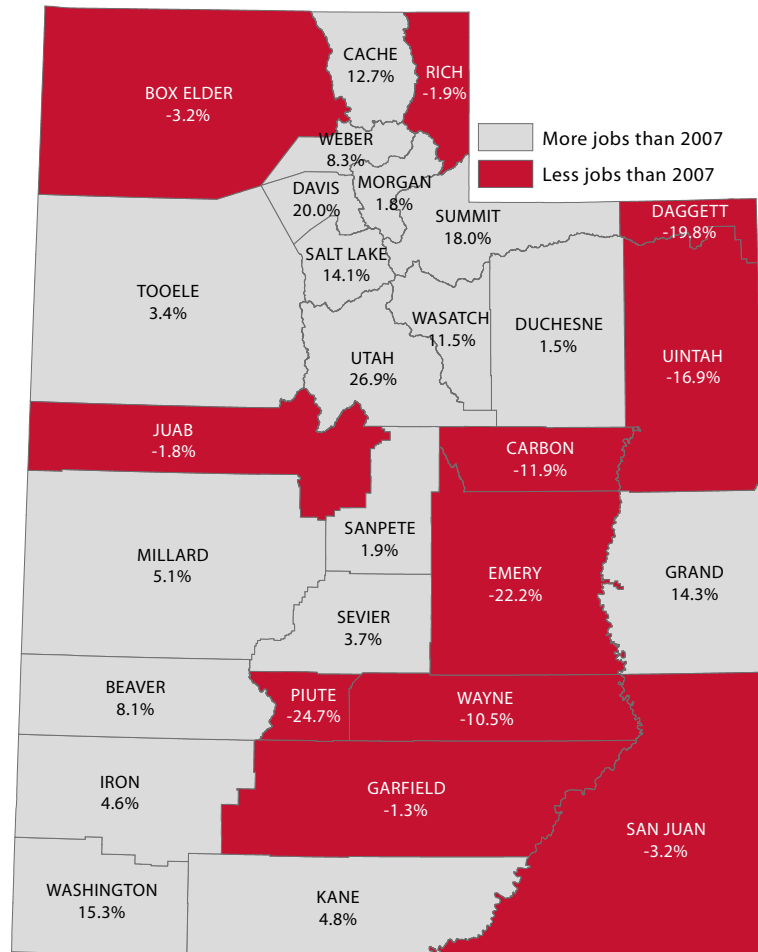
Juliette Tennert

Source: “Utah’s Long-Term Demographic and Economic Projections” Video, produced by the Kem C. Gardner Policy Institute, Nov. 16, 2017

The tale of two Utahs

Job growth and decline in Utah's counties

Change in employment since 2007 peak, Q4 2007 - Q4 2016



Source: Kem C. Gardner Policy Institute analysis of U.S. Bureau of Labor Statistics (BLS) Quarterly Census of Employment and Wages data

The looming question

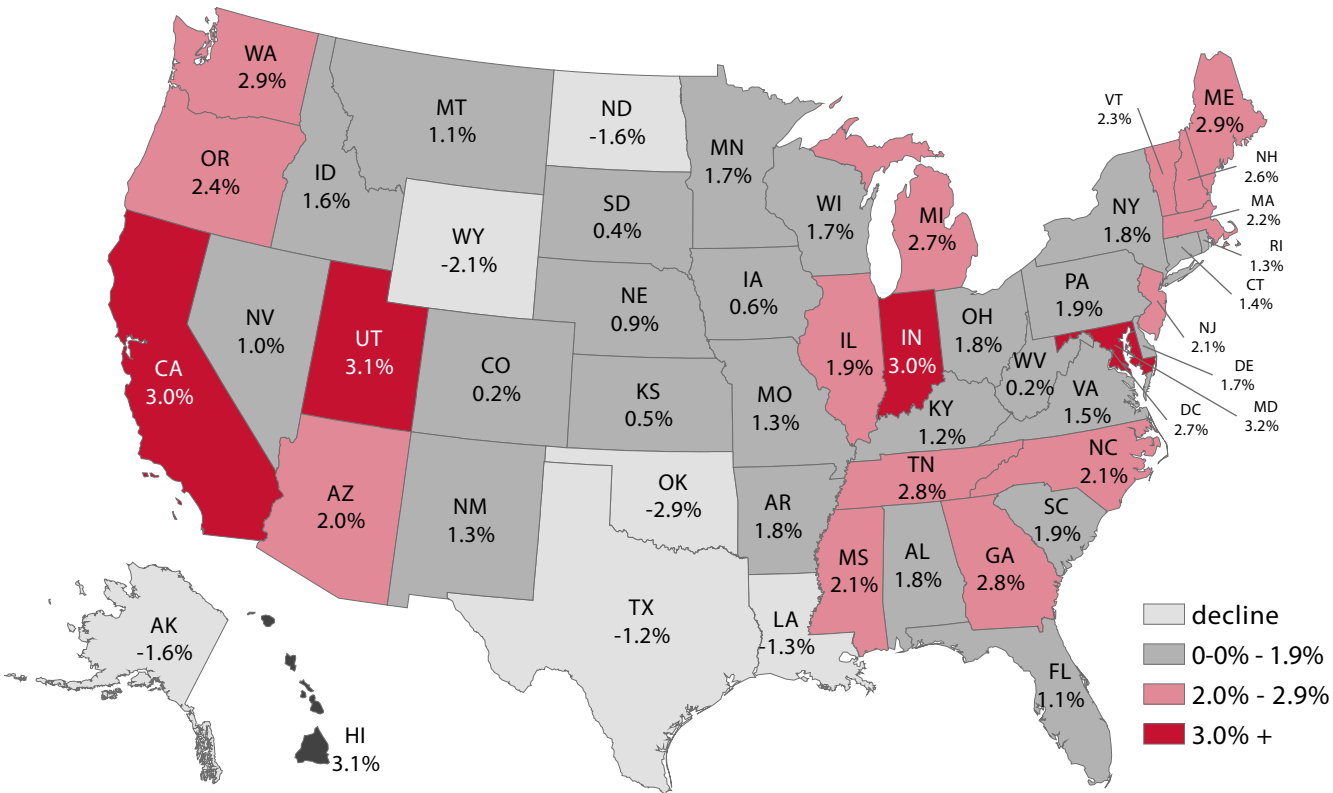
Handwritten note shared by a rural Utah legislator with the Gardner Policy Institute Director

Every year this question looms larger:
HOW DO WE EFFECTIVELY
SPREAD ECONOMIC GROWTH
AND DEVELOPMENT BE-
YOND THE WASATCH
FRONT?

Per capita income growth fastest in the nation

Annual change in per capita personal income

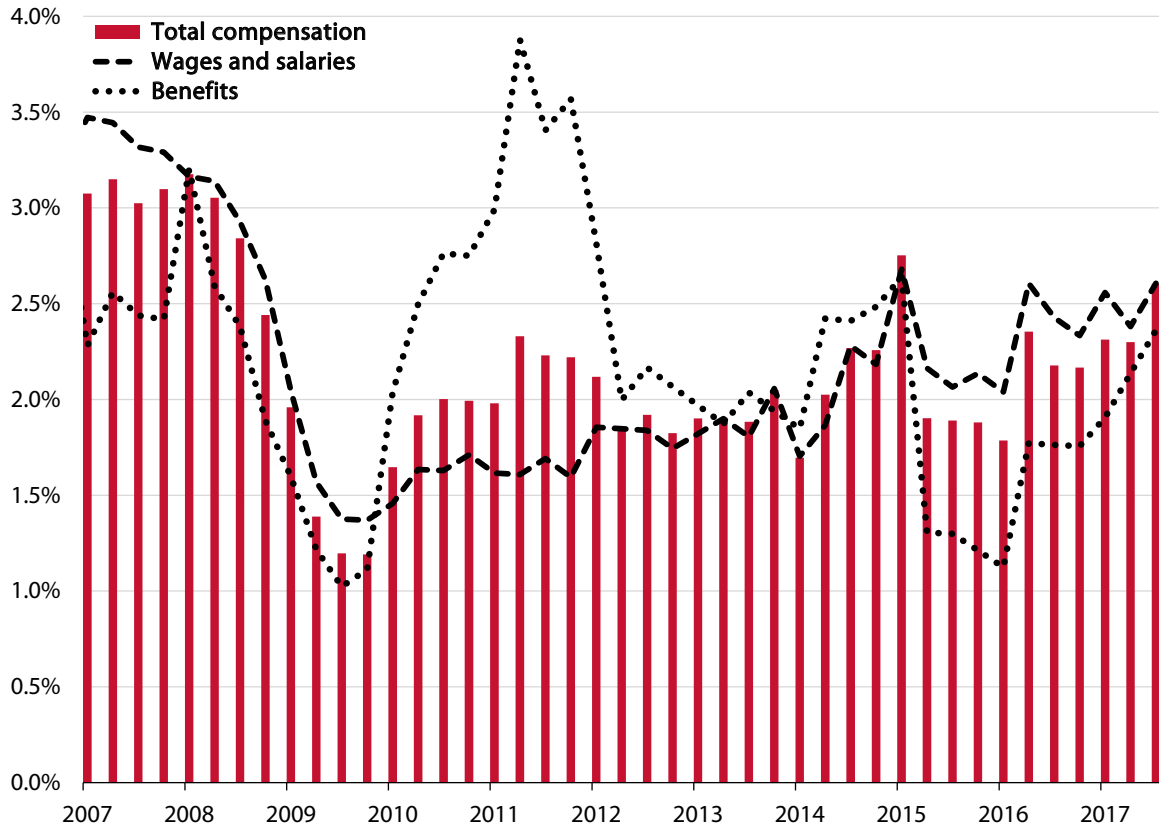
United States = 2.1%



Source: Kem C. Gardner Policy Institute analysis of U.S. Bureau of Economic Analysis (BEA) Annual Personal Income data

Benefit growth outpaced wage growth during
the first half of the current expansion

Annual change in US Employment Cost Index

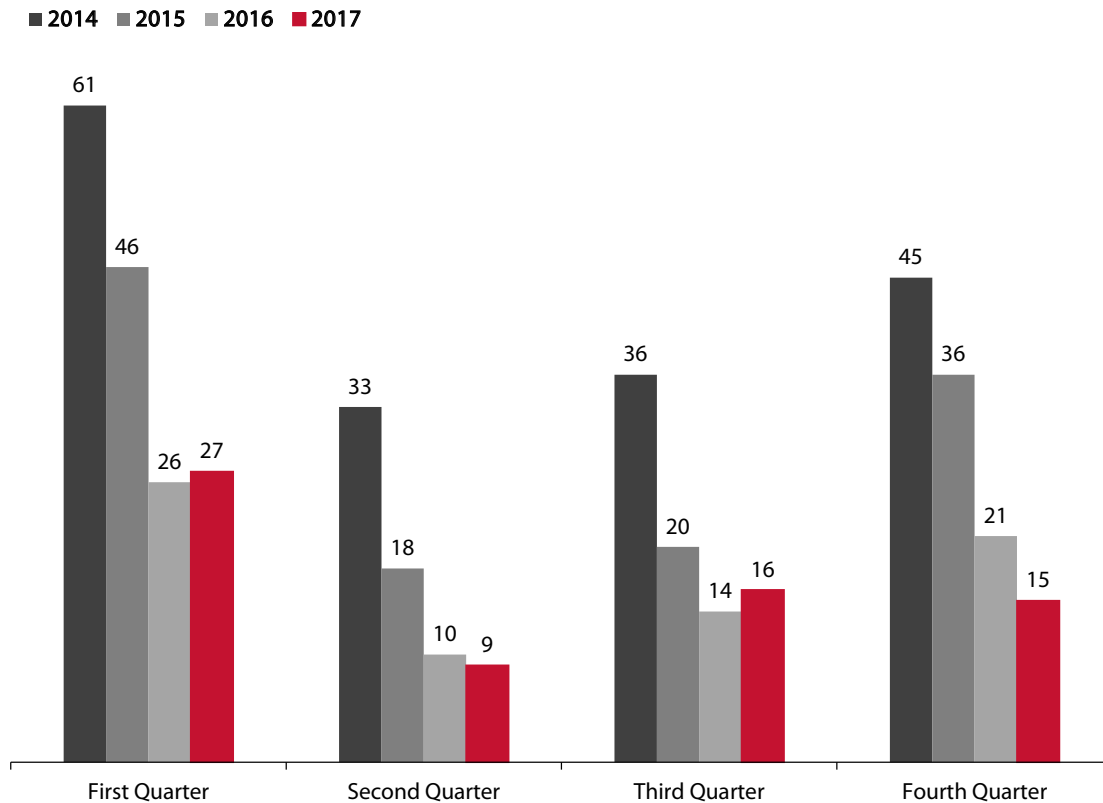


Source: U.S. Bureau of Labor Statistics (BLS) Employment Cost Index

A seller's market

Median cumulative days on market

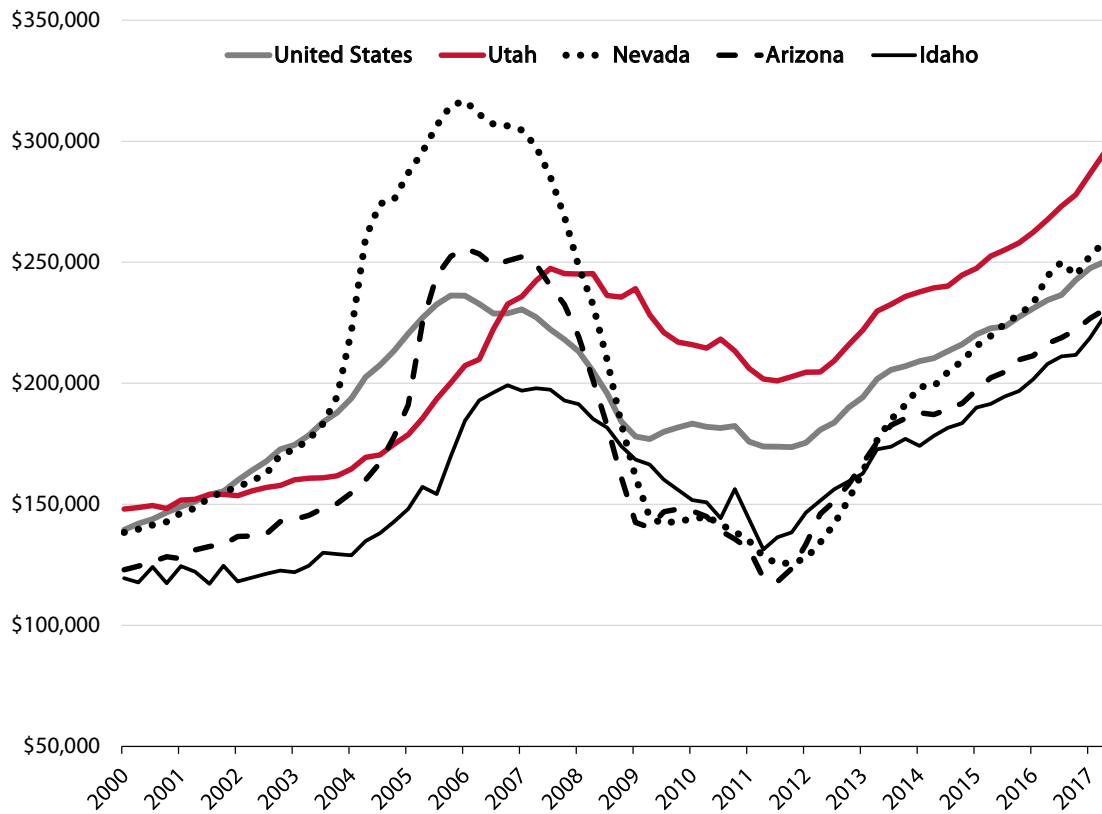
Single-family home listings in Wasatch Front counties



Source: UtahRealEstate.com

How high can they go?

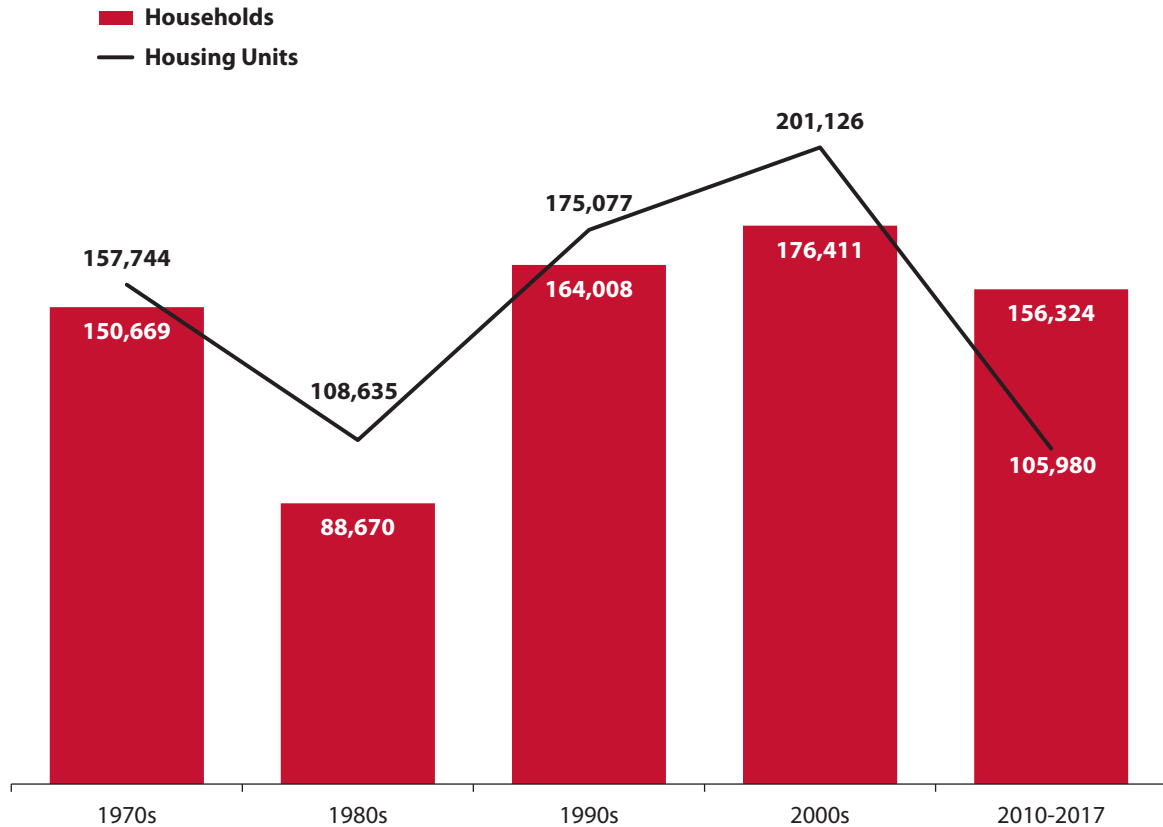
Median sales price for existing single-family homes



Source: Moody's Analytics

Does Utah have a housing shortage?

New housing units and households in Utah



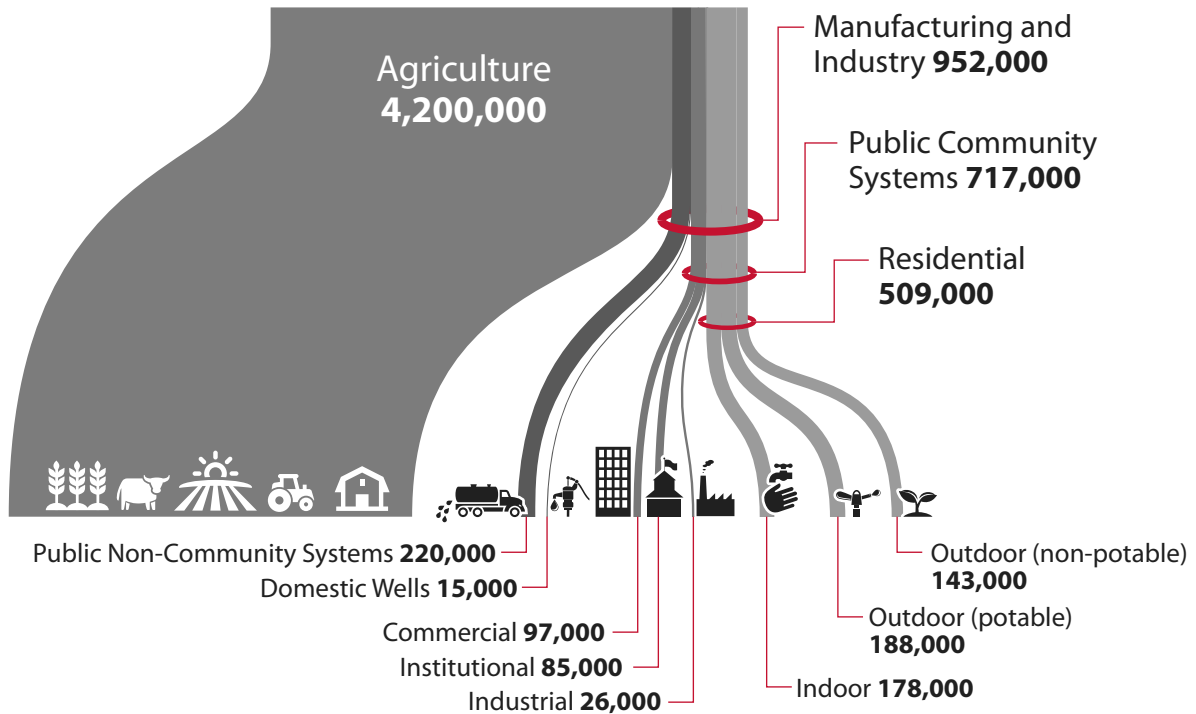
Note: 2017 data are estimated.

Source: Kem C. Gardner Policy Institute Population Projections and Ivory Boyer Construction Database

Agriculture is Utah's largest user of diverted water

Distribution of diverted water in Utah

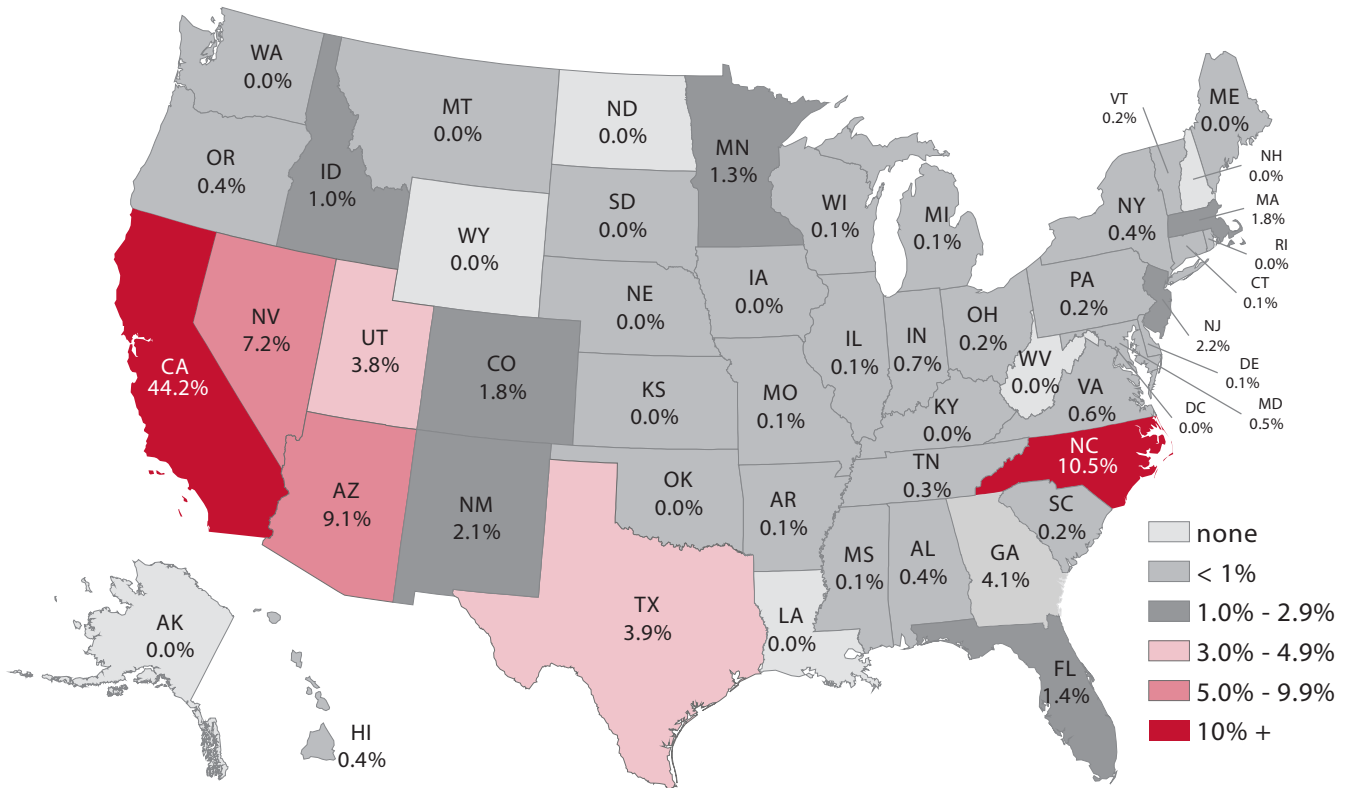
Acre feet per year



Source: Governor's Office of Management and Budget

Utah ranks 7th in solar energy generation

States' contribution to nation's total solar thermal and photovoltaic net electric power generation, 2017

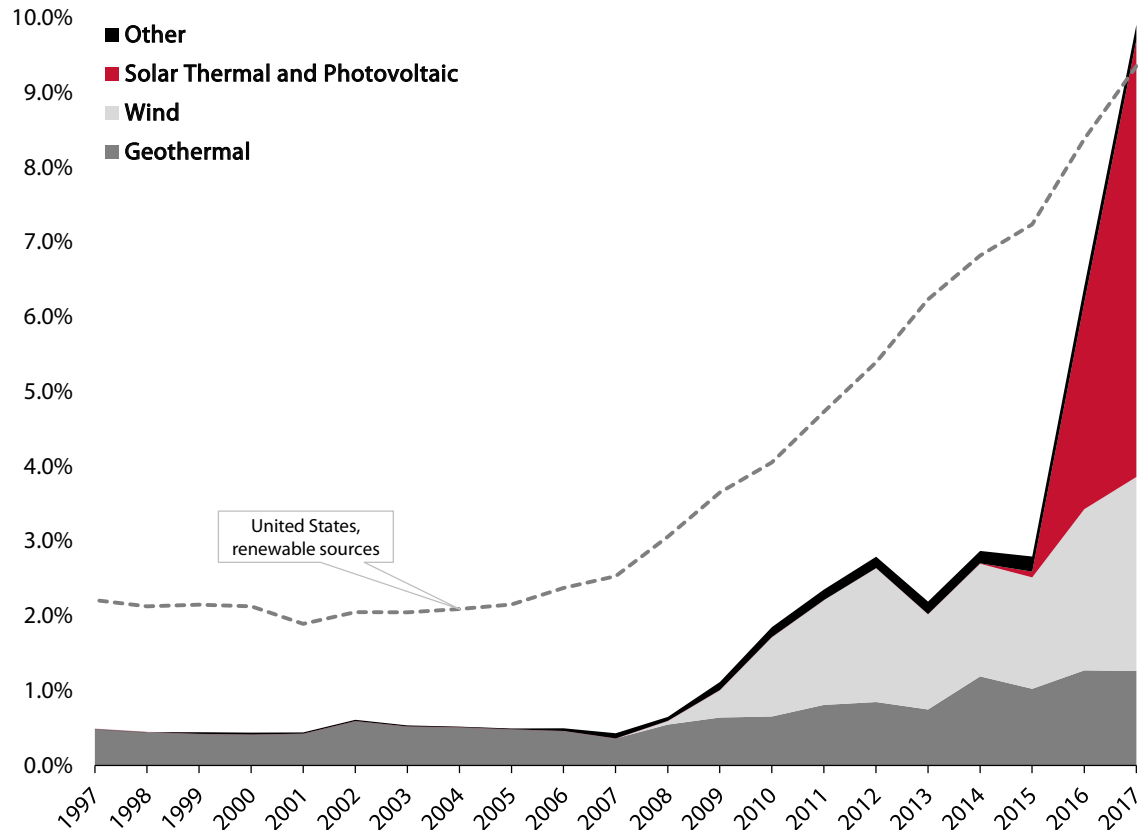


Note: 2017 data represents activity through September, 2017.

Source: Kem C. Gardner Policy Institute Analysis of U.S. Department of Energy, Energy Information Administration state electricity data

Utah closes in on US renewable average

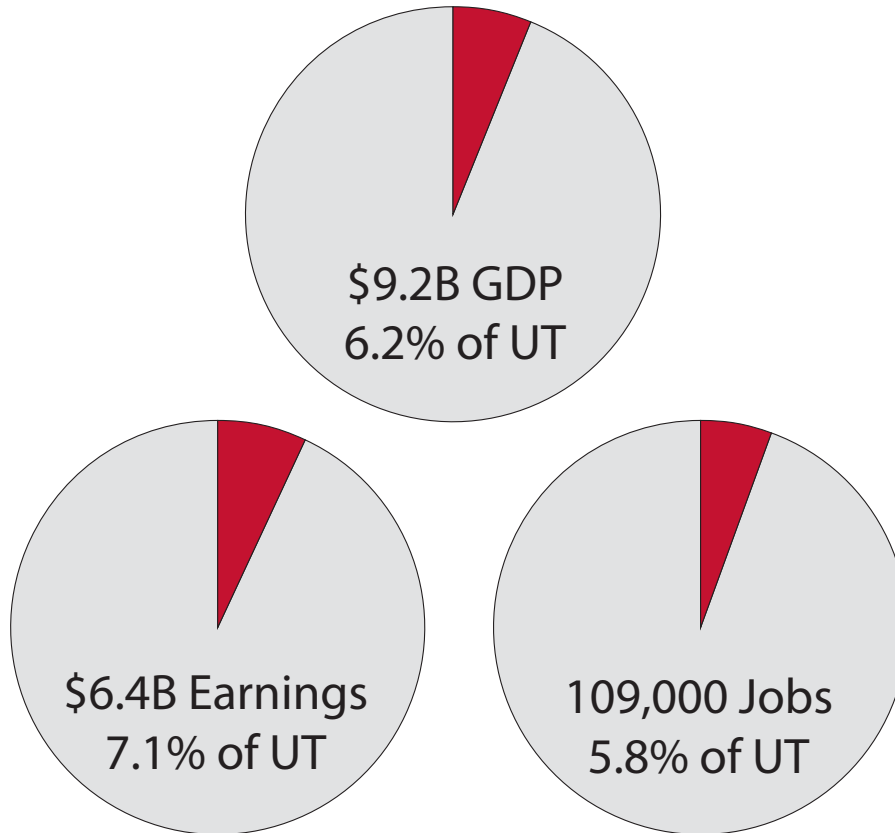
Portion of Utah net electric power generation that is from renewable sources, excluding conventional hydroelectric



Source: Kem C. Gardner Policy Institute Analysis of U.S. Department of Energy, Energy Information Administration state electricity data

The economic footprint of Utah's defense industry

Total economic impacts of the defense industry in Utah, 2015

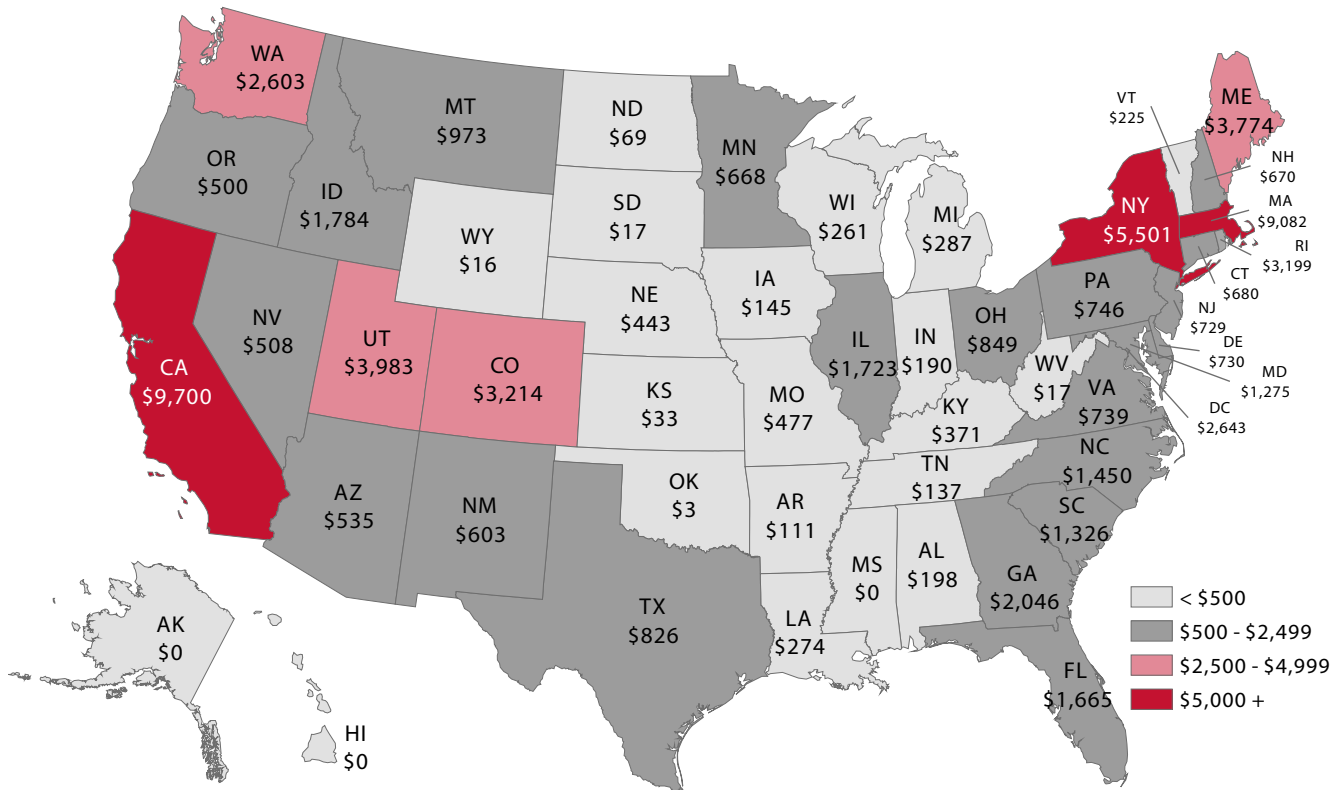


Source: Kem C. Gardner Policy Institute

Utah on the map for venture capital

Venture capital deals per \$1 million of state GDP

Year-to-date activity through Q3 2017



Source: Kem C. Gardner Policy Institute Analysis of PwC Moneytree Report and U.S. Bureau of Economic Analysis National Income and Product Accounts (NIPA) data

Salt Lake makes Moody's' Amazon HQ2 location top 10

Moody's scoring of ideal metro location for next Amazon headquarters

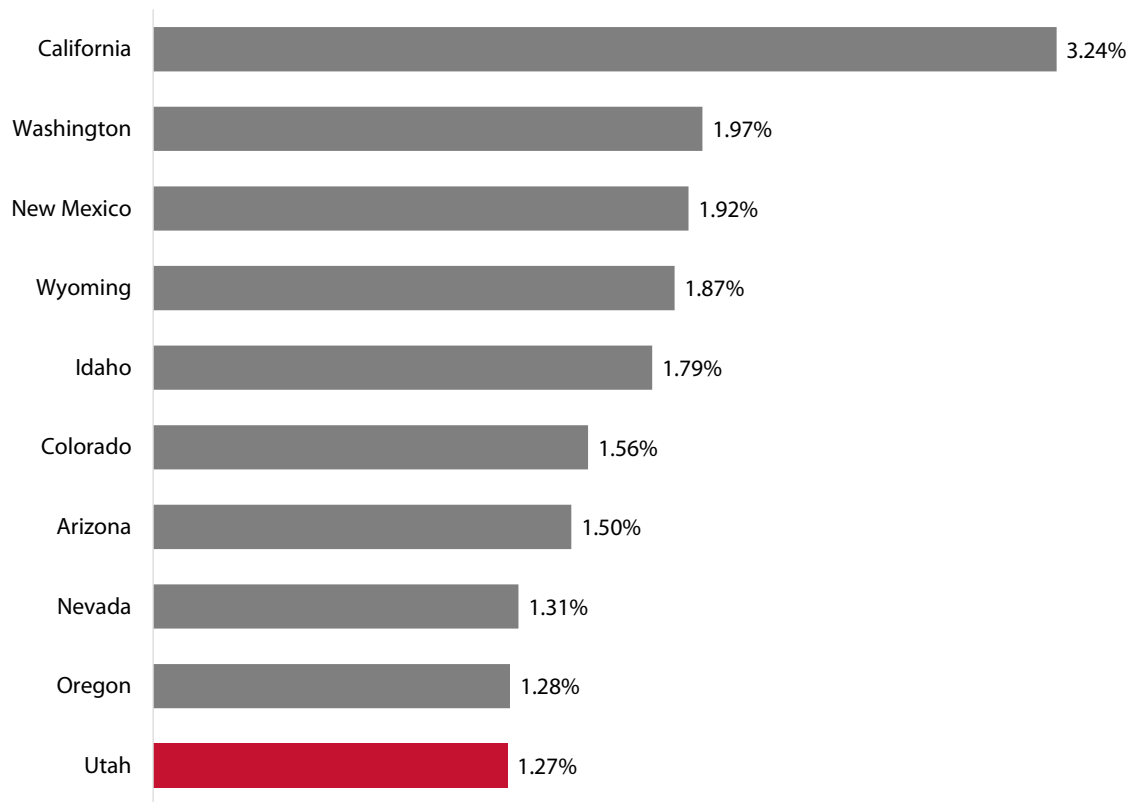
Metro	Average Score
Austin-Round Rock, TX	3.1
Atlanta-Sandy Springs-Roswell, GA	3.1
Philadelphia, PA	3.1
Rochester, NY	3.0
Pittsburgh, PA	3.0
New York-Jersey City-White Plains, NY-NJ	3.0
Miami-Miami Beach-Kendall, FL	2.9
Seattle-Bellevue-Everett, WA	2.9
Portland-Vancouver-Hillsboro, OR-WA	2.9
Boston, MA	2.9
Salt Lake City, UT	2.9
Cambridge-Newton-Framingham, MA	2.9

Note: Score is based on assessments of business environment, human capital, cost, quality of life, transportation, and geography.
A perfect score would be 5.
Source: Moody's Analytics

Utah has the lowest workers' compensation premium rates in the west

Workers' compensation premium rates, 2016

Percent of payroll

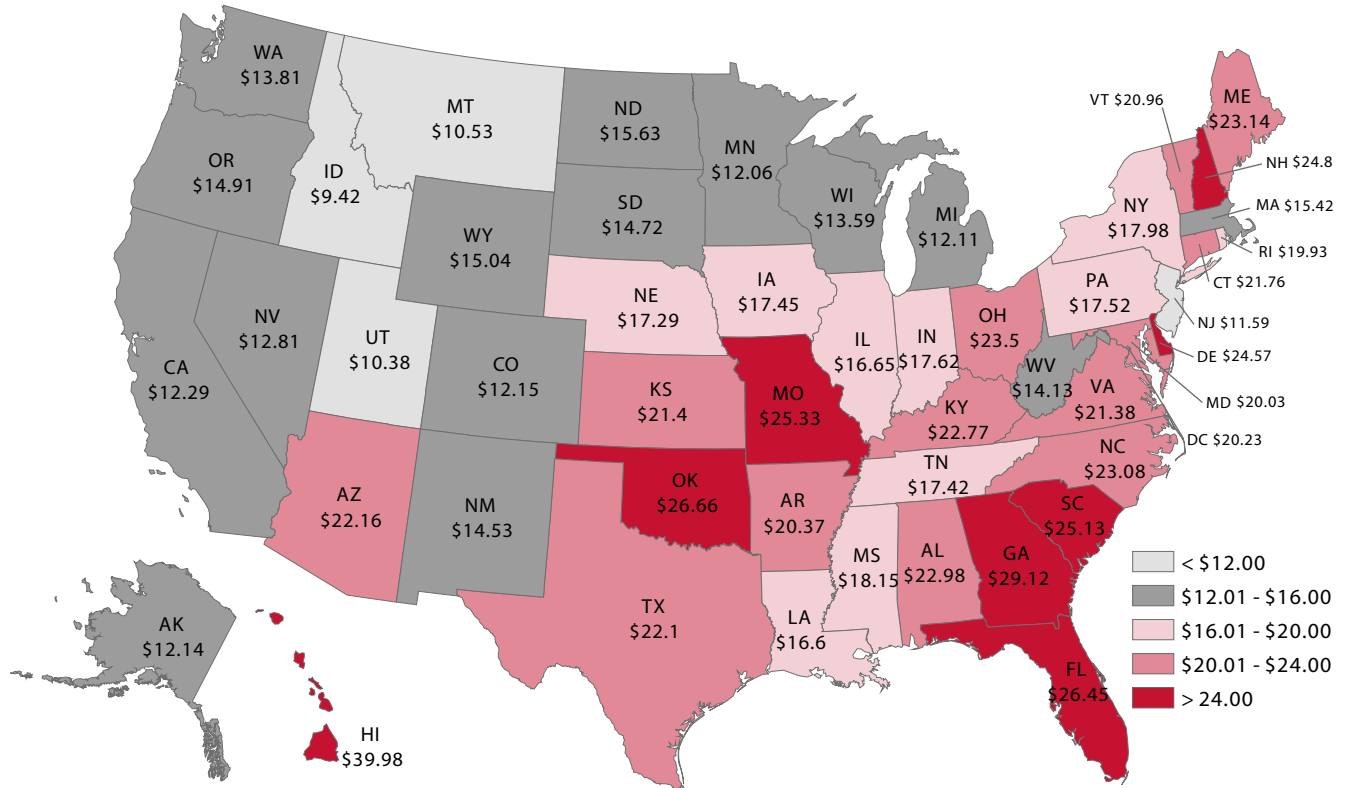


Source: Oregon Workers' Compensation Premium Rate Ranking Calendar Year 2016, December 2016

Utah natural gas prices among the lowest in the nation

Natural Gas Prices, September 2017

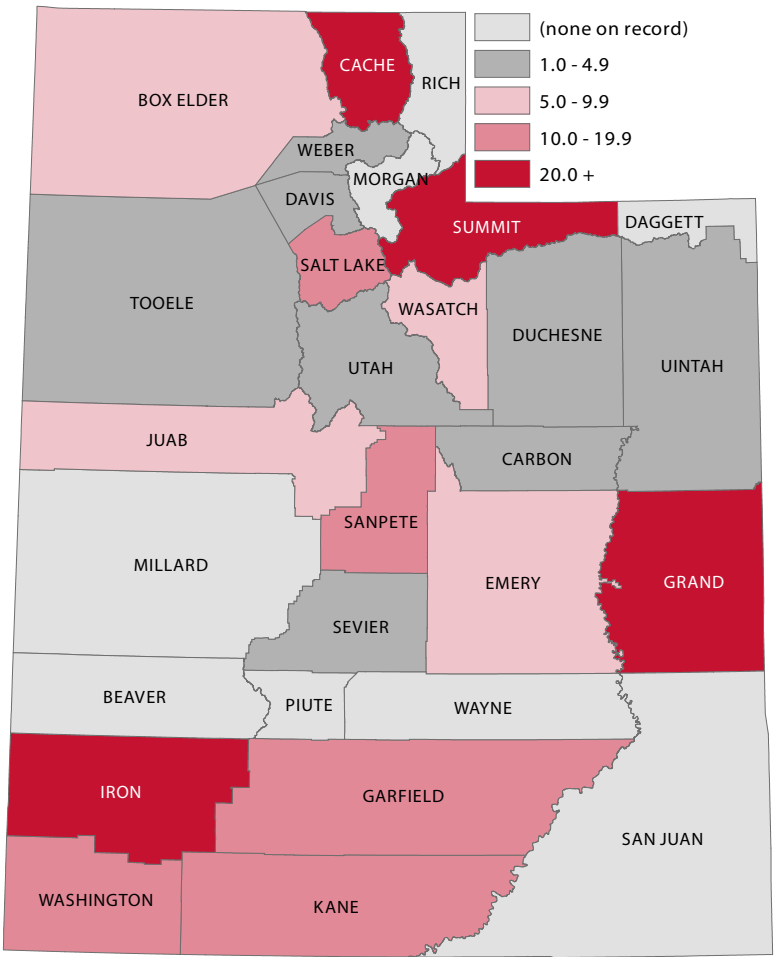
\$ per thousand cubic feet



Source: U.S. Department of Energy, Energy Information Administration natural gas data

Got art?

Arts organizations and venues per 100,000 population

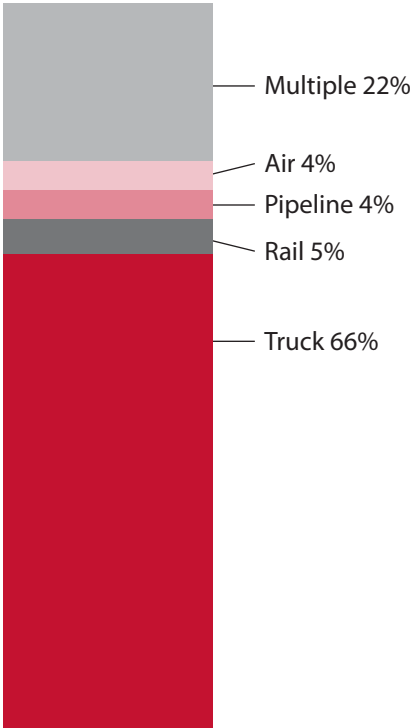


Source: Kem C. Policy Institute, Utah Division of Arts & Museums, Utah Cultural Alliance

Utah ships over \$100 billion in freight annually

Freight shipments originating from Utah (Value of freight)

Destination share by shipment value (includes all modes of transportation)	
In-State	37%
California	11%
Texas	5%
Idaho	4%
Nevada	4%
Montana	2%
All other states	38%
Total value (\$116 billion)	100%



Note: Pipeline shipments exclude crude petroleum. Multiple modes of transportation includes parcel, USPS, courier, truck-rail, truck-water, rail-water, and other. Air includes truck-air. For international exports from Utah, destinations are recorded as the state from which freight left the U.S. The total value of freight shipped from Utah is inflation-adjusted to 2017 dollars.
Source: U.S. Department of Transportation and U.S. Census Bureau, 2012 Commodity Flow Survey

Globalization and Utah

“While some may portray free trade and open borders as threatening, the data suggest such a negative view is not warranted for Utah. Overall, the state economy has seen positive effects from globalization.”

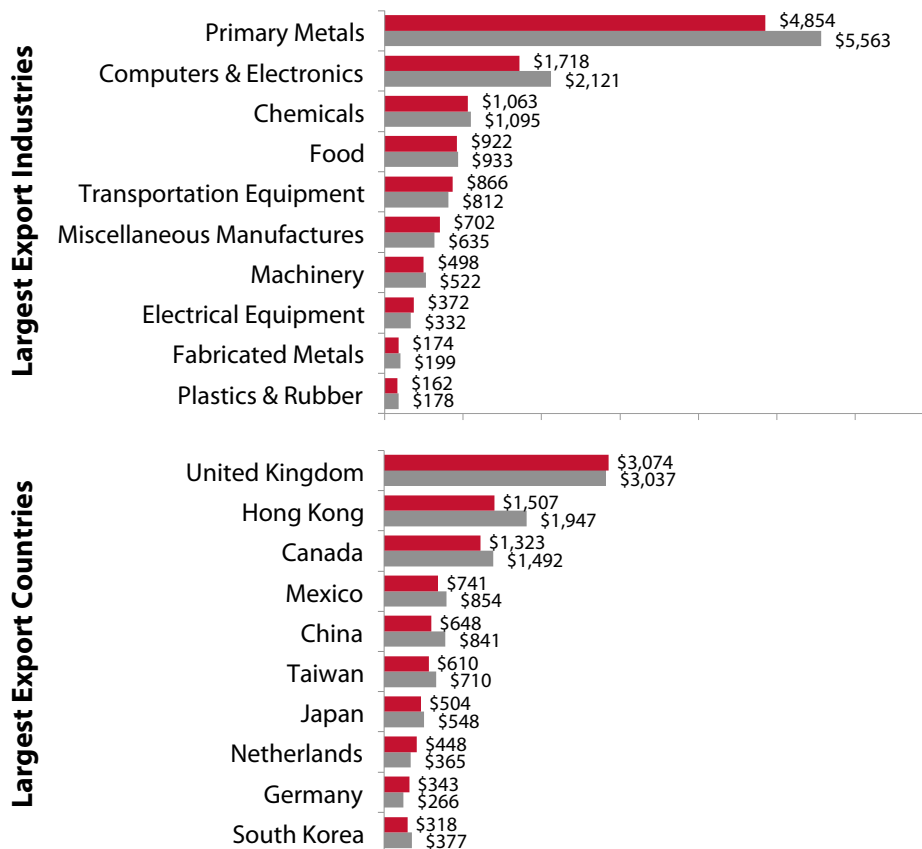
James Wood

Utah's global reach

Utah's top export industries and trading partners

Value of exports, \$ millions

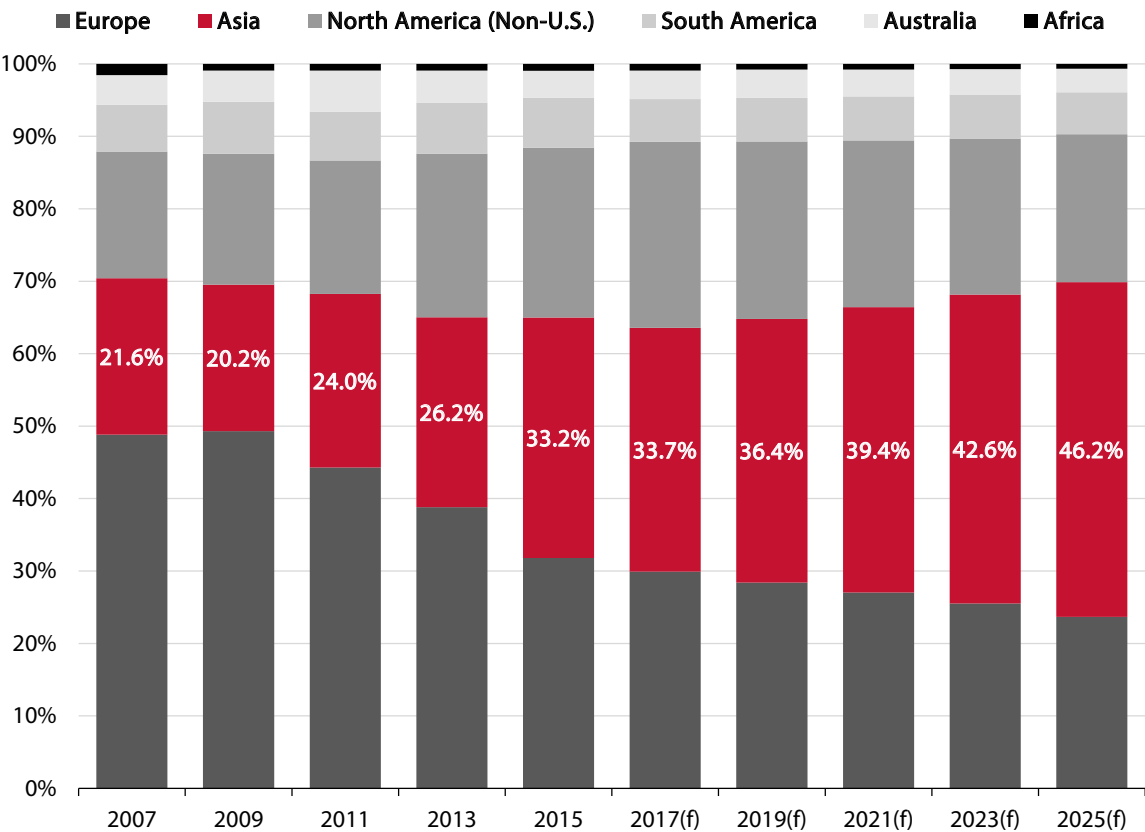
■ 2016 ■ 2015



Source: USA Trade Online

Asian visitors have replaced Europeans as the biggest spenders in Utah

International visitor spending shares

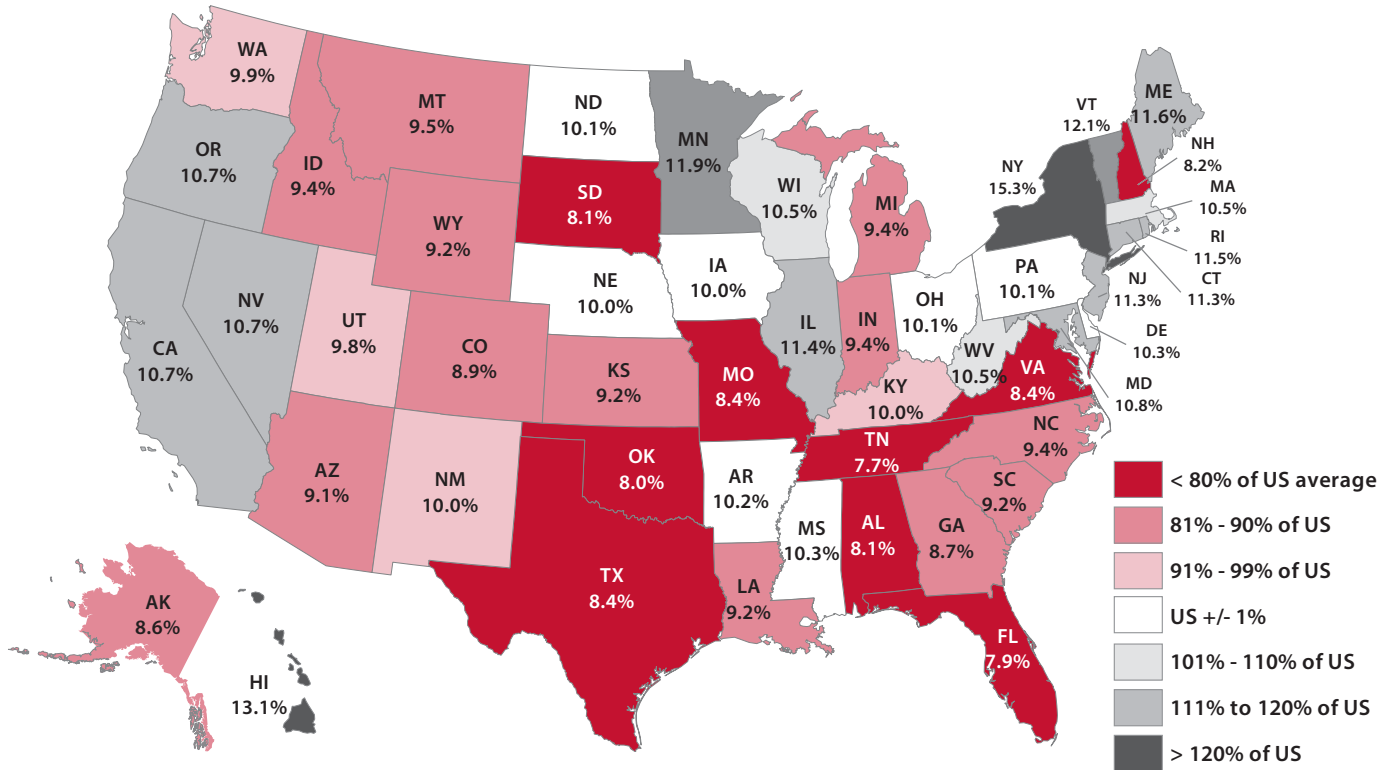


(f) = forecast
Source: Kem C. Gardner Policy Institute analysis of Tourism Economics data

Utah's tax burden better than US average, higher than 4 of 5 surrounding states

State and local tax collections as a percent of total personal income

United States average = 10.6%

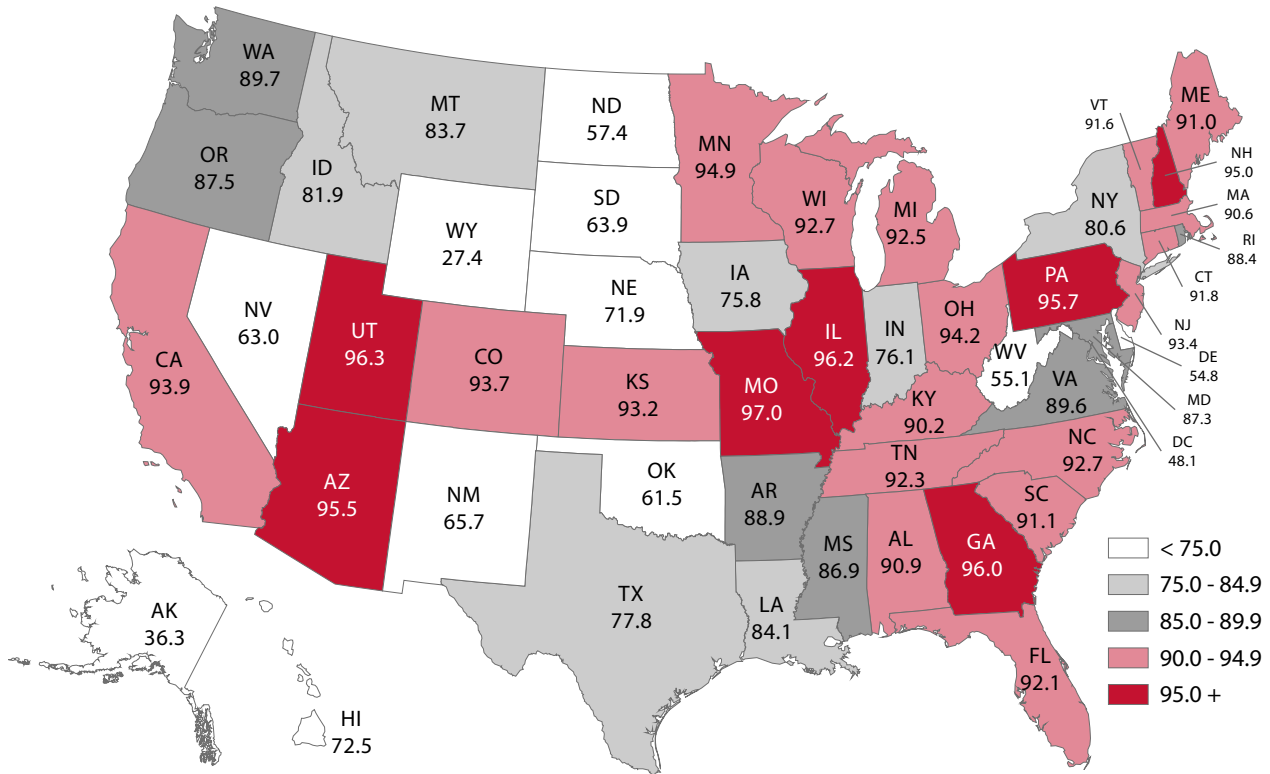


Notes: Collections for all state and local taxes, including payroll taxes, except for severance taxes. Data are for the most recent year available, 2014.

Sources: Gardner Policy Institute analysis of Census Bureau Survey of State and Local Finances data and Bureau of Economic Analysis data

Utah's economy among the most diverse in the nation

Hachman Index of GDP diversity, 2016



Note: An index value of 100 would mean that a state's distribution of GDP among 20 sectors perfectly mirrors the nation.

Source: Kem C. Gardner Policy Institute Analysis of U.S. Bureau of Economic Analysis National Income and Product Accounts (NIPA) data

Creating our destiny

“We’re living in times of tremendous growth and change. The dynamic for change will only become more intensified as time goes on. What we need to recognize is that our actions today will shape the future that we have tomorrow. You know, the future is not given. We are active participants in, not just witnesses to, the great changes that are going on, and the actions we take today very purposefully will impact our future.”

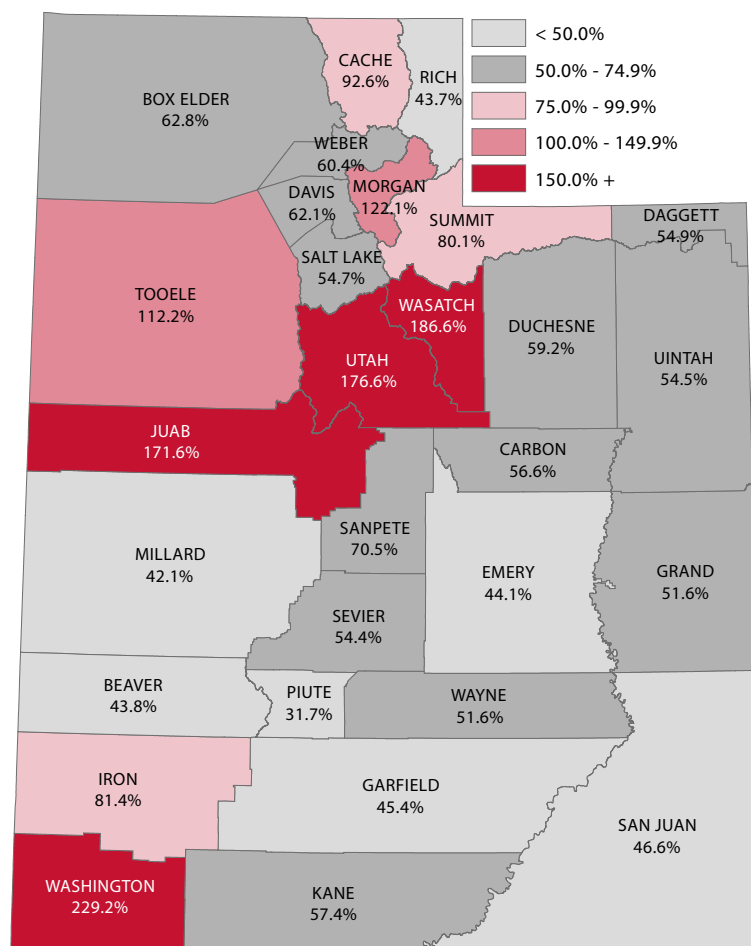
Pamela Perlich

Source: “Utah’s Long-Term Demographic and Economic Projections” Video, produced by the Kem C. Gardner Policy Institute, Nov. 16, 2017

Washington County's population expected to triple by 2065

Projected 50-year population growth, 2015-2065

State of Utah growth = 94.4%

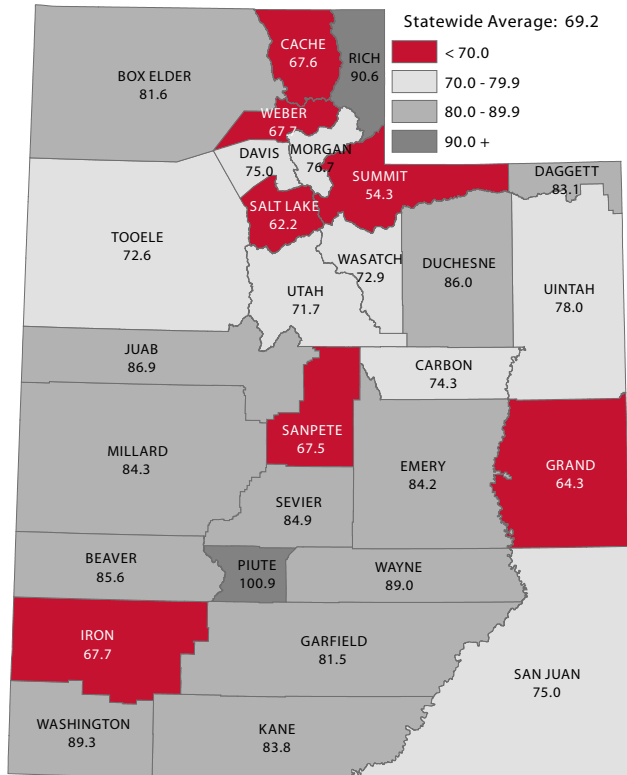


Source: Kem C. Gardner Policy Institute 2017 Long-Term Demographic and Economic Projections

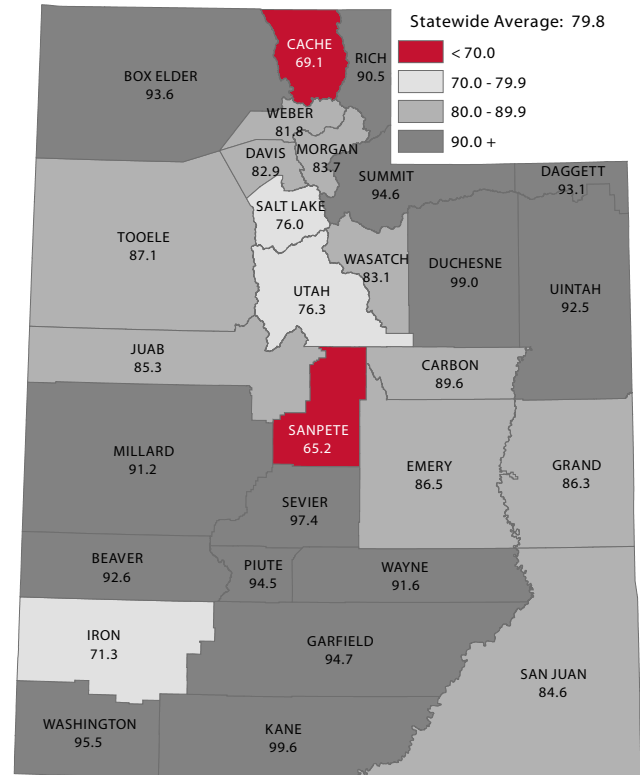
A grayer and grayer Utah

Current and projected dependency ratios for Utah's counties

2016



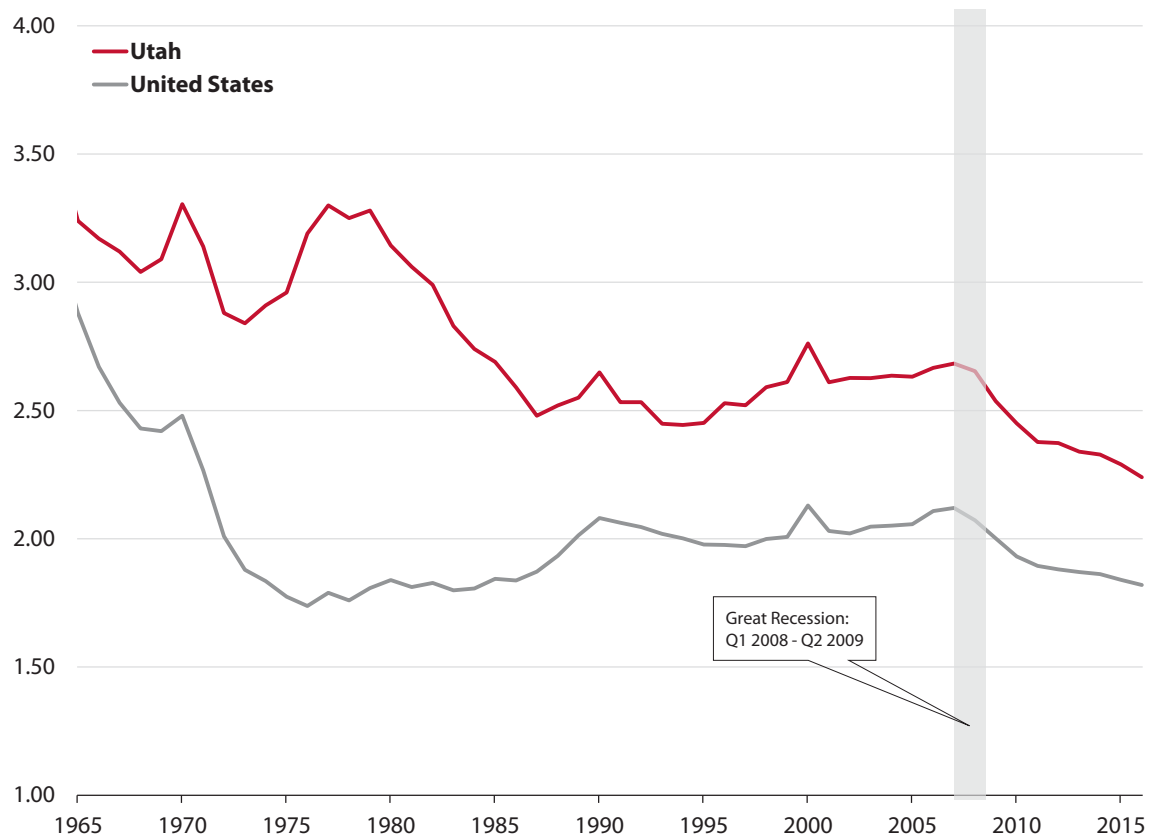
2065



Note: The dependency ratio shows the number of nonworking-age persons (aged less than 18 and over 64) per 100 working-age adults (aged 18-64).
Source: Kem C. Gardner Policy Institute 2015-2065 State and County Projections

Fertility since the Great Recession— a pregnant pause or birth of a new normal?

Total fertility rates for Utah and the United States

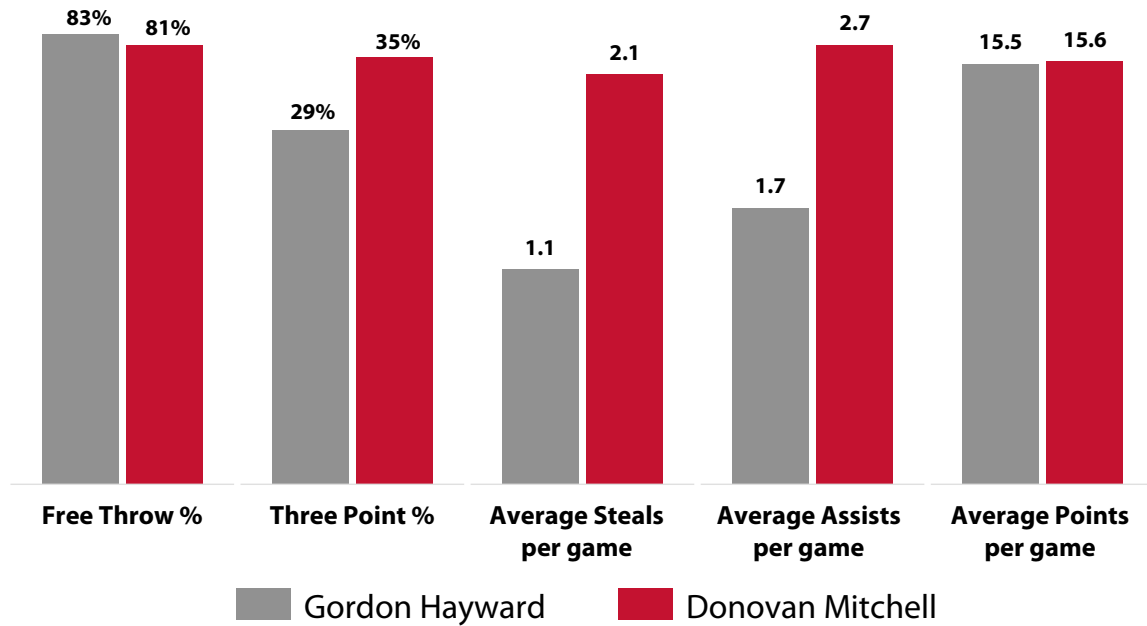


Source: Kem C. Gardner Policy Institute

Gordon who?

Gordon Hayward and Donovan Mitchell

Rookie season statistics



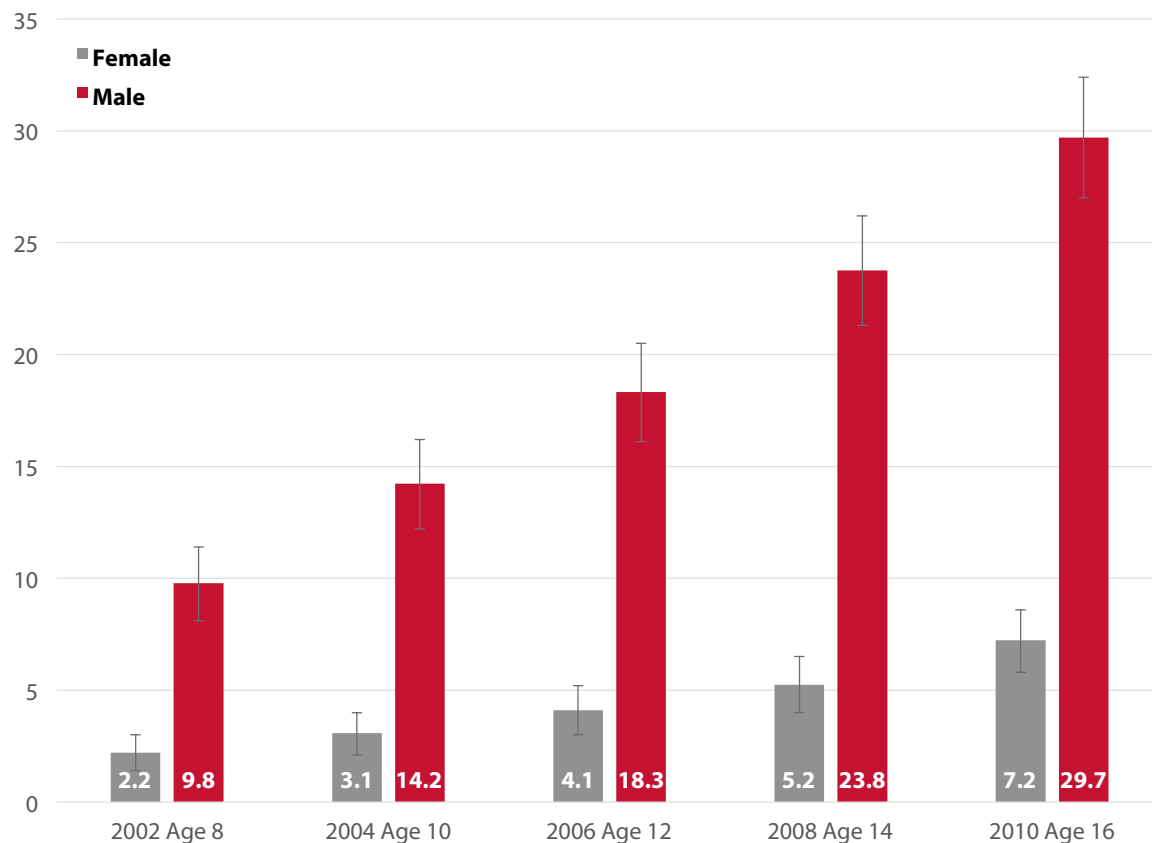
Note: Donovan Mitchell stats are through Dec. 12, 2017.

Source: RealGM.com

Autism prevalence rises throughout childhood and into adolescence

Changes in ASD prevalence in the 1994 birth cohort

Four-county surveillance area in Utah

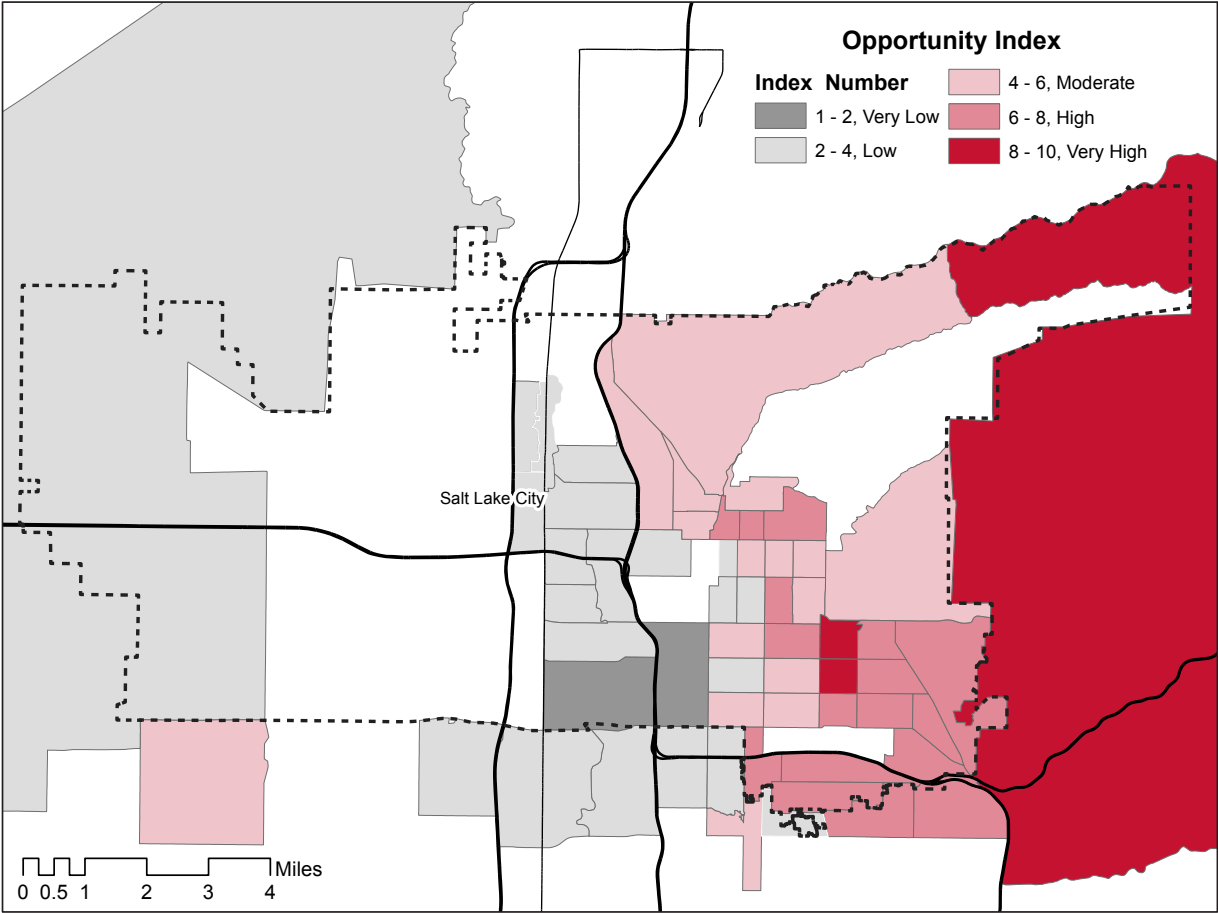


Notes: Bars represent 95% confidence intervals; the four-county surveillance area included Davis, Salt Lake, Utah, and Tooele counties.

Source: Utah Registry of Autism and Developmental Disabilities

SLC's Ballpark neighborhood lacks opportunity

Opportunity Index
Salt Lake City, 2015

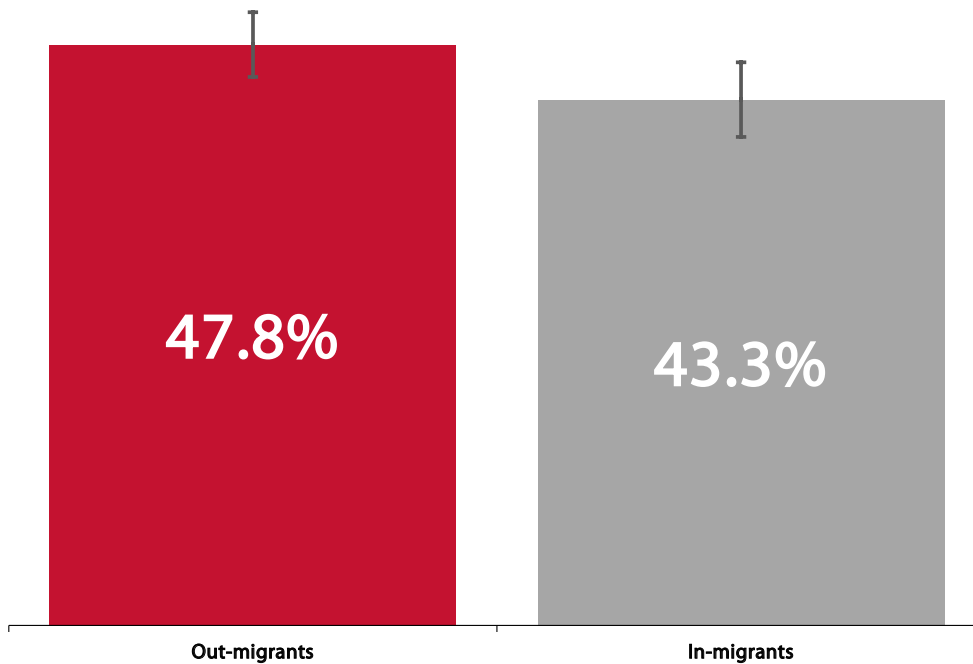


Note: The opportunity index is calculated using nine variables: poverty rate, labor force participation rate, unemployment rate, public assistance rate, educational attainment, percent eligible for free and reduced lunch, percent homeowners, percent of owner occupied households with severe housing cost burden, and percent of renter households with severe housing cost burden.

Source: Kem C. Gardner Policy Institute

Is Utah a net education exporter?

Portion of Utah's prime working age out- and in-migrants with a bachelor's degree or higher, 2011-2015

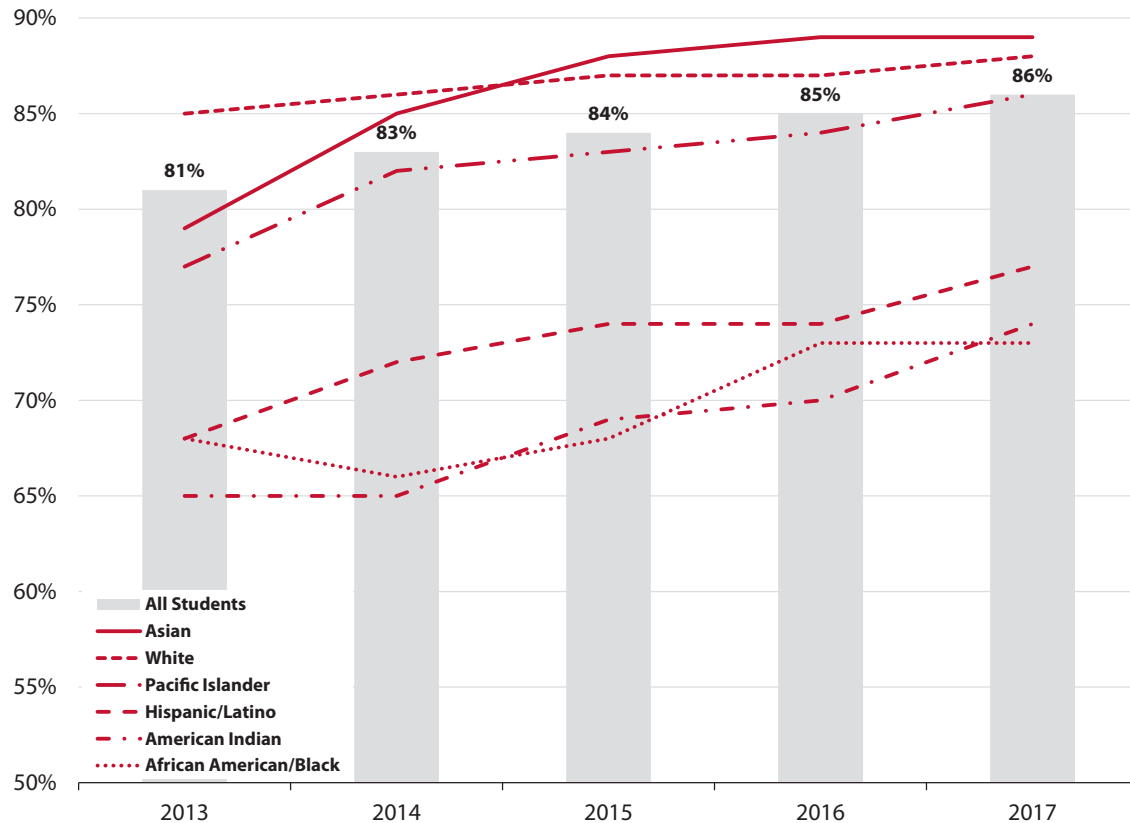


Notes: The population considered to be of prime working age is between the ages of 25 and 54. Error bars represent the 90% confidence interval of the mean estimates, which are statistically different for each migrant group.

Source: Kem C. Gardner Policy Institute analysis of U.S. Census Bureau 2015 5-Year American Community Survey data

Utah's achievement gap persists, but improving

Utah high school graduation rates by race and ethnicity



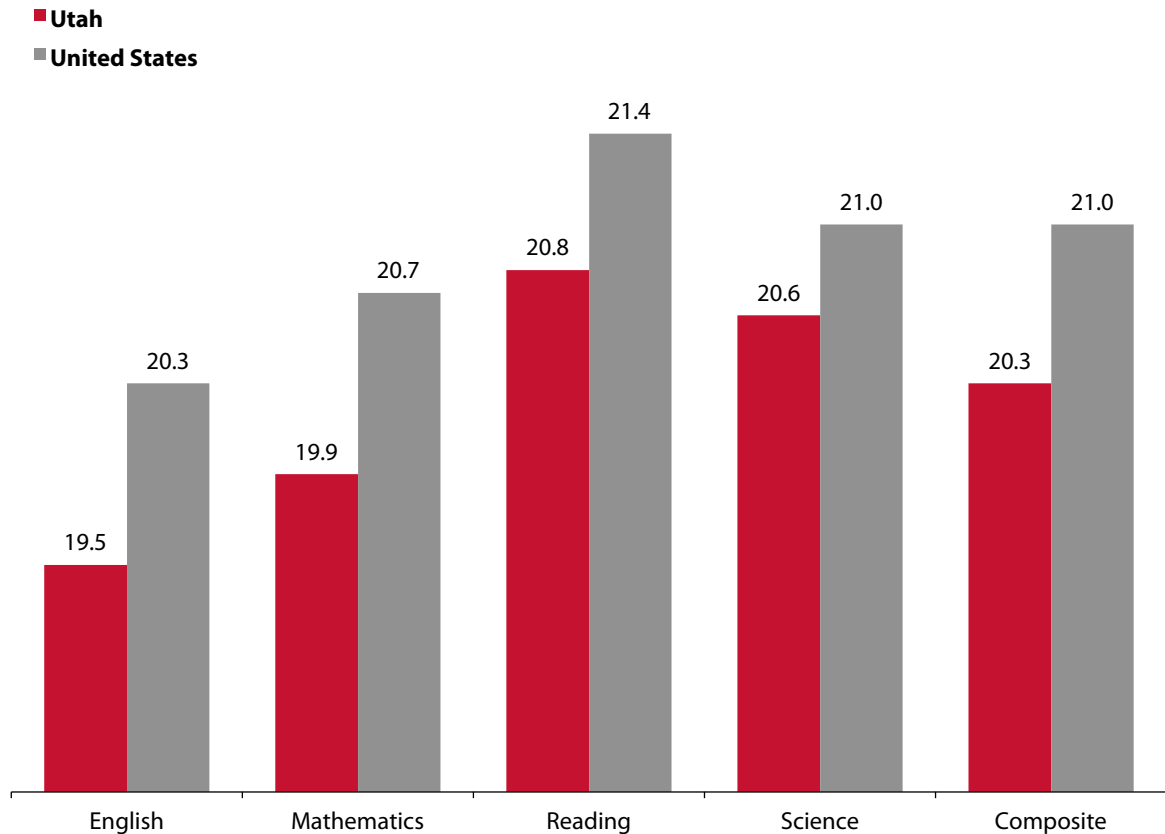
Note: Y-axis does not start at zero.

Source: Utah State Board of Education 2017 Graduation Rates Report

Utah's ACT scores are lower than the national average,
reflects 100% of students taking the test

Average ACT scores, 2017

100% of Utah students take test, national average is 60%

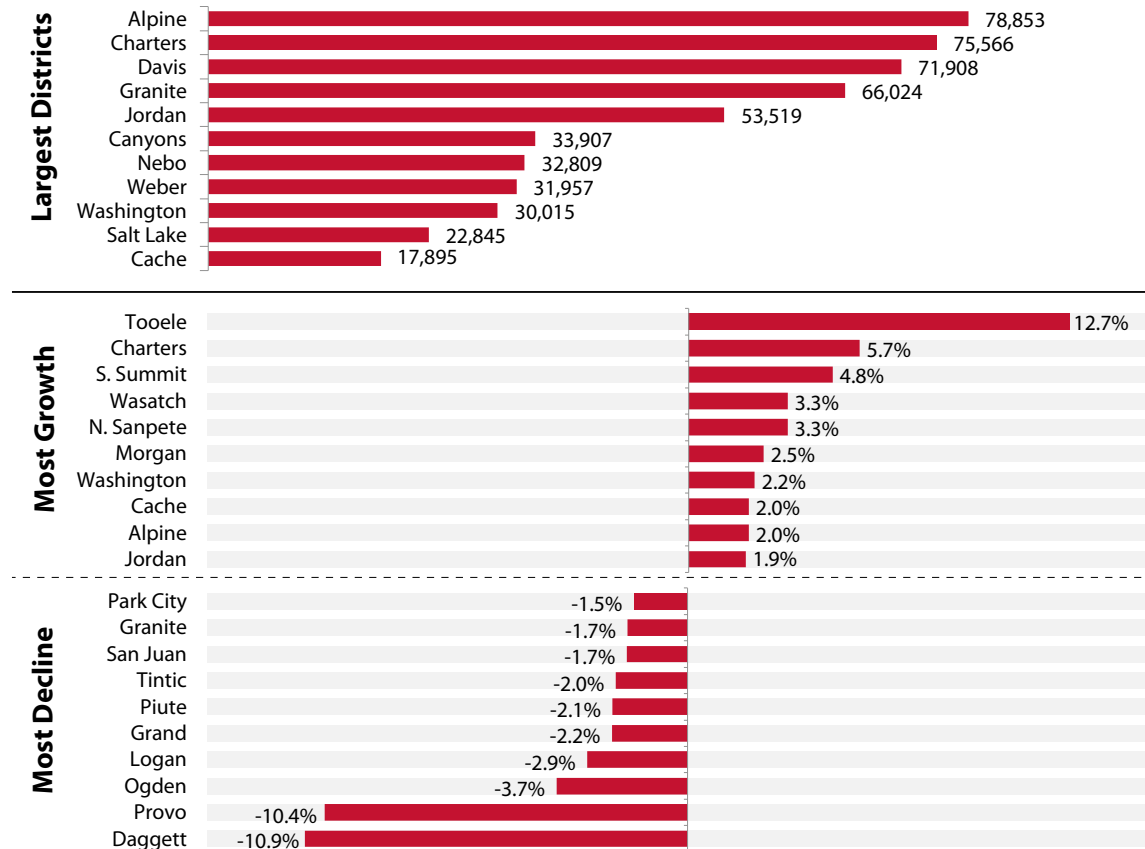


Source: ACT

Growth and decline in Utah school districts

Utah's largest school districts and those with the most growth and decline

Change between 2016–17 and 2017–18 school years

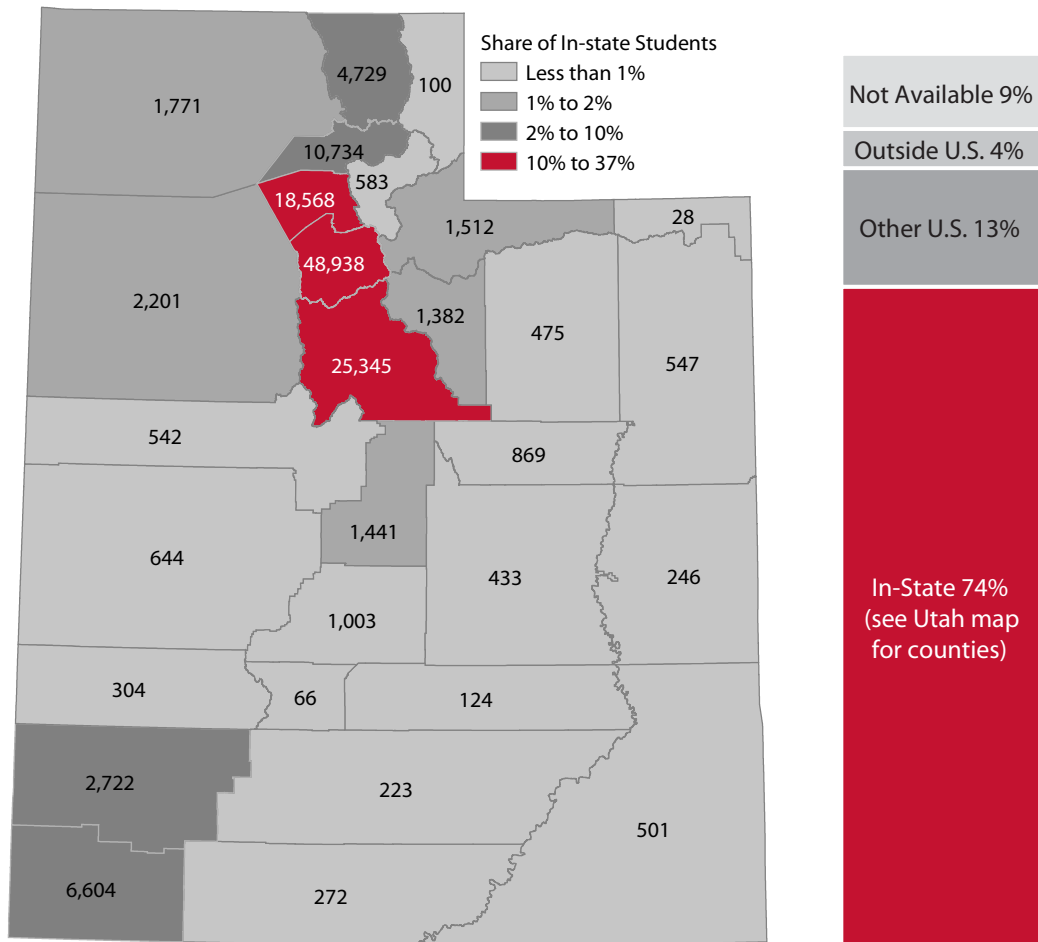


Source: Utah State Board of Education, Data and Statistics

About a quarter of public higher ed students come from out of state

Fall 2016 Enrollment

(End-of-Term Headcount)

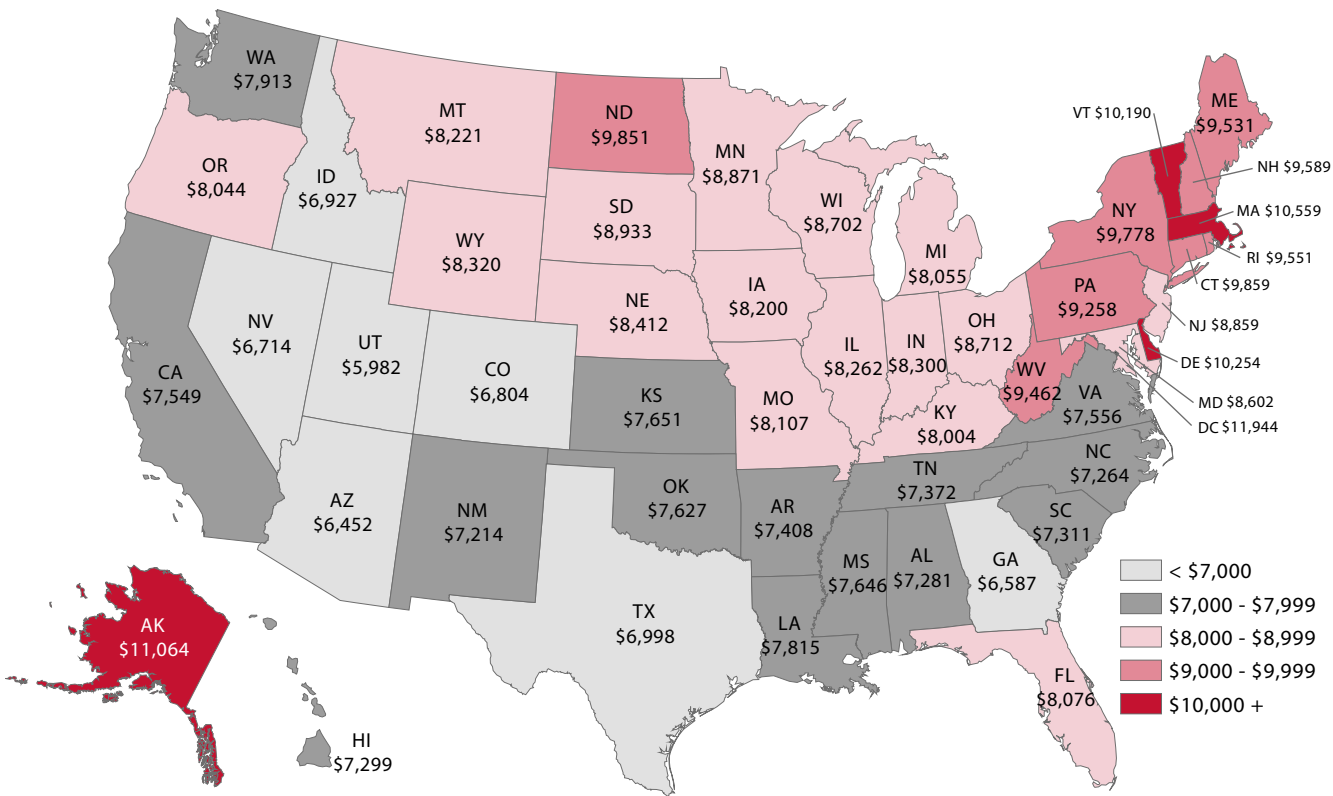


Note: While 74 percent of public higher education students are from Utah, 87 percent have resident status. Students at public technical colleges and at private colleges and universities in Utah are not included.
Source: Utah System of Higher Education, 2017 Data Book

Utah's relatively young and healthy population
spends less on health care than other states...

Per capita health care expenditures, 2014

United States = \$8,045

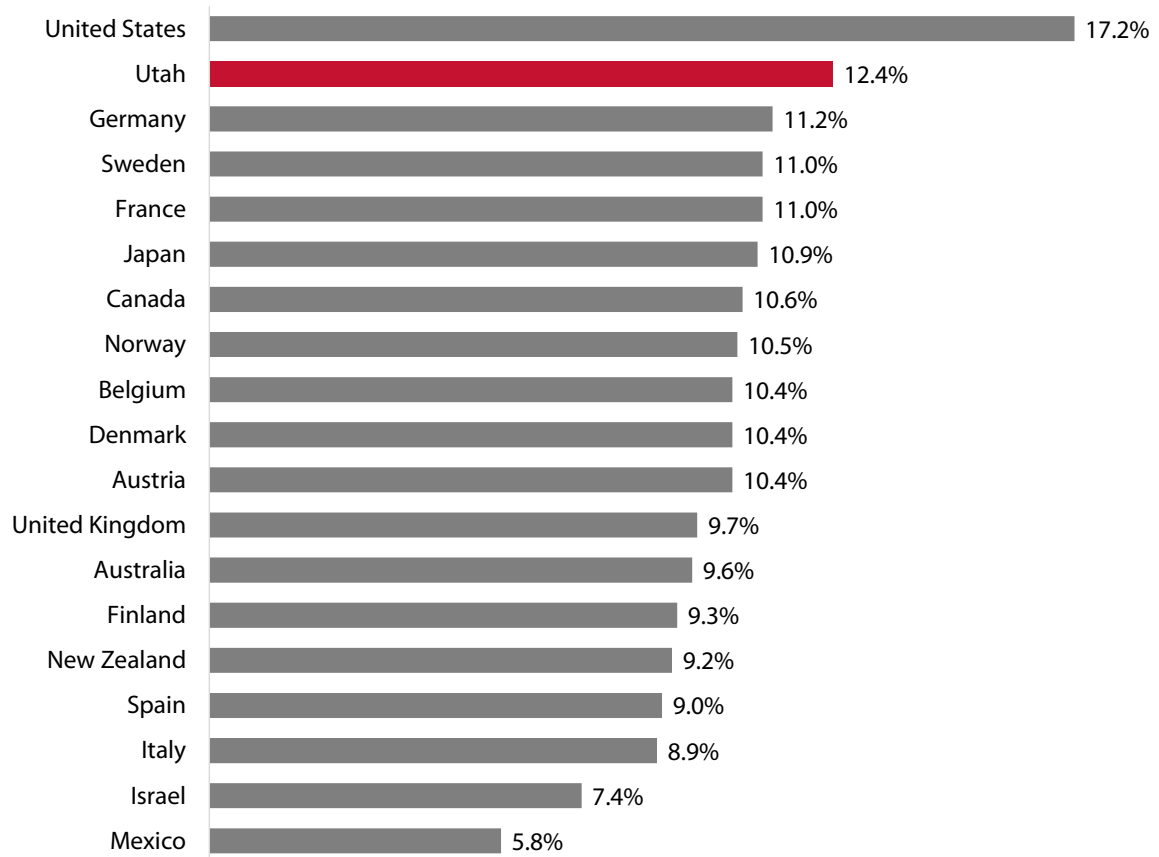


Source: The Henry J. Kaiser Family Foundation

...But more on health care than other countries,
with implications for global competitiveness

Health care expenditures as a share of GDP, 2016

Select OECD Countries and Utah



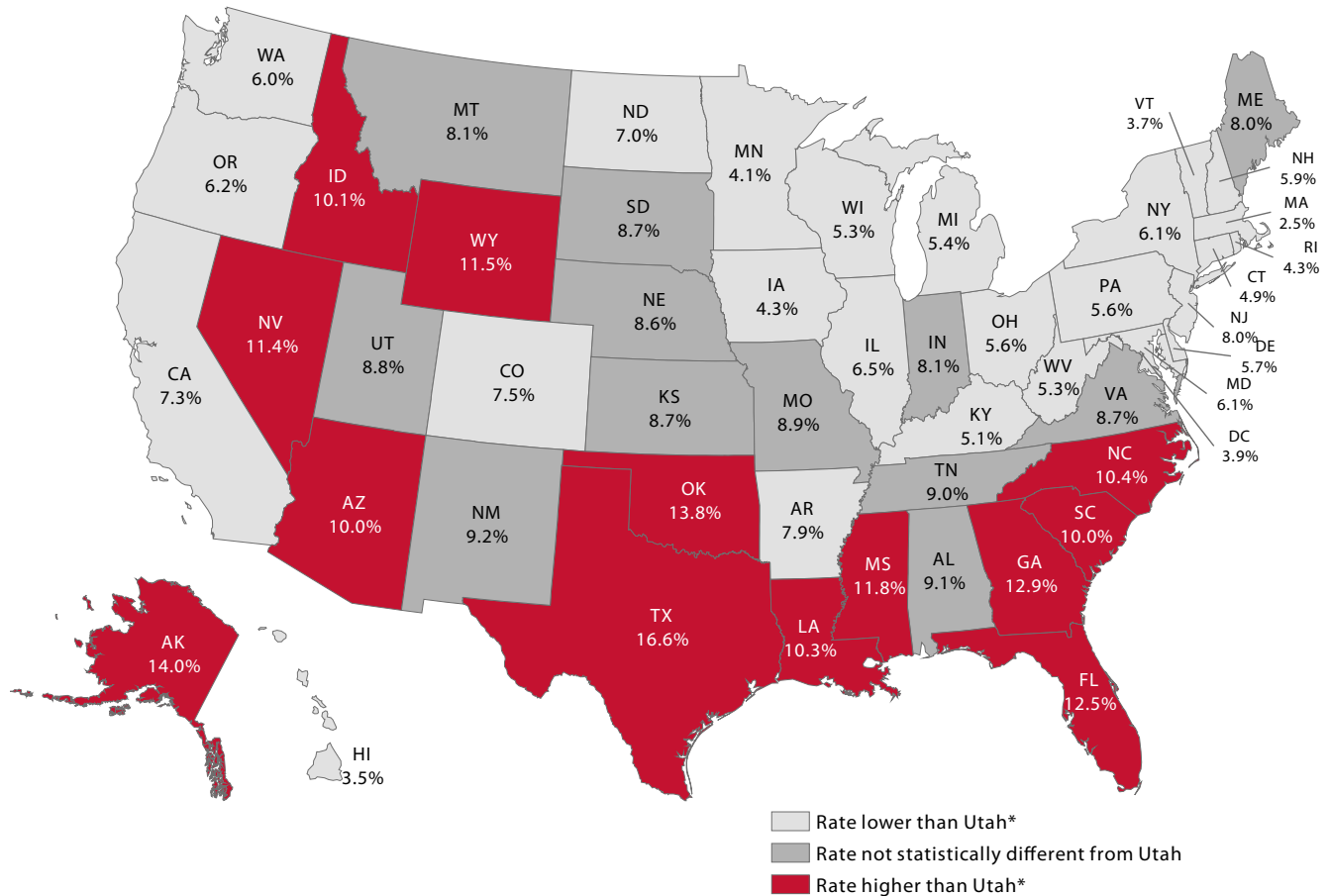
Note: Utah data is for 2014.

Sources: Organization for Economic Co-Operation and Development, US Bureau of Economic Analysis, and Centers for Medicare & Medicaid Services, Office of the Actuary, National Health Statistics Group

13 states have a higher uninsured rate than Utah; 26 have a lower rate

Percent of population without health insurance, 2016

United States = 8.6%

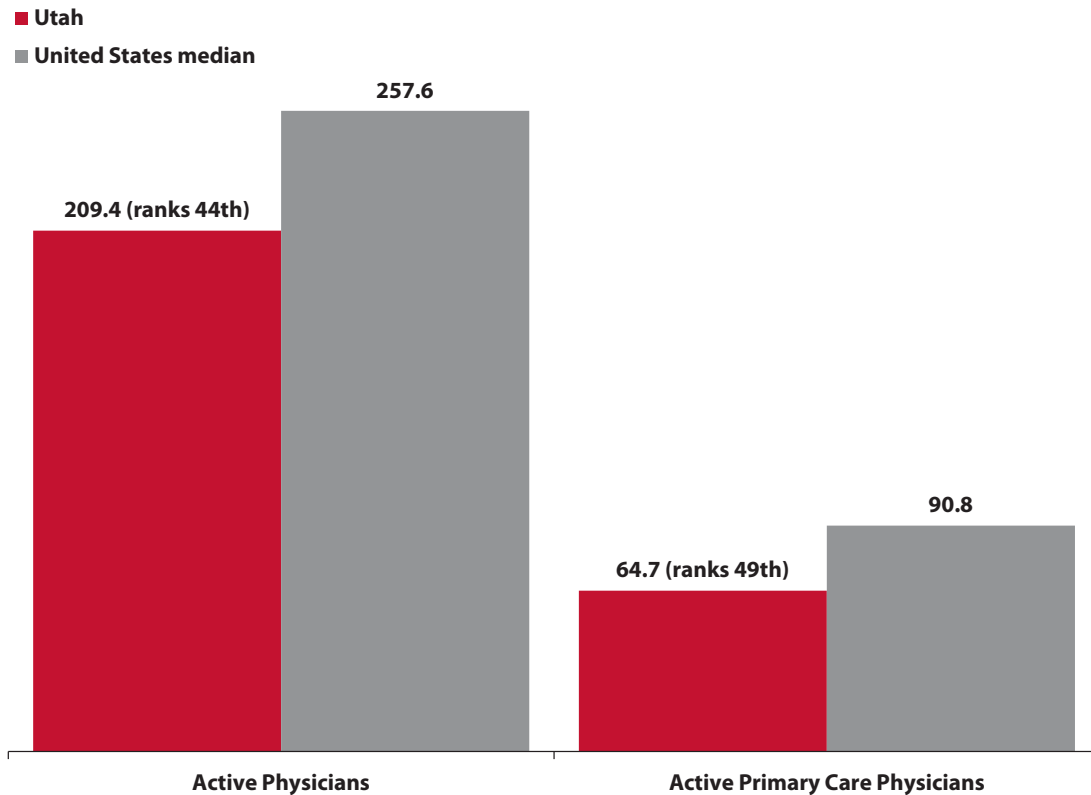


*Rate is statistically different from Utah with 90 percent confidence.

Source: U.S. Census Bureau American Community Survey, 2016 1-year estimates

Healthy population or physician shortage?

Active physicians per 100,000 population, 2016

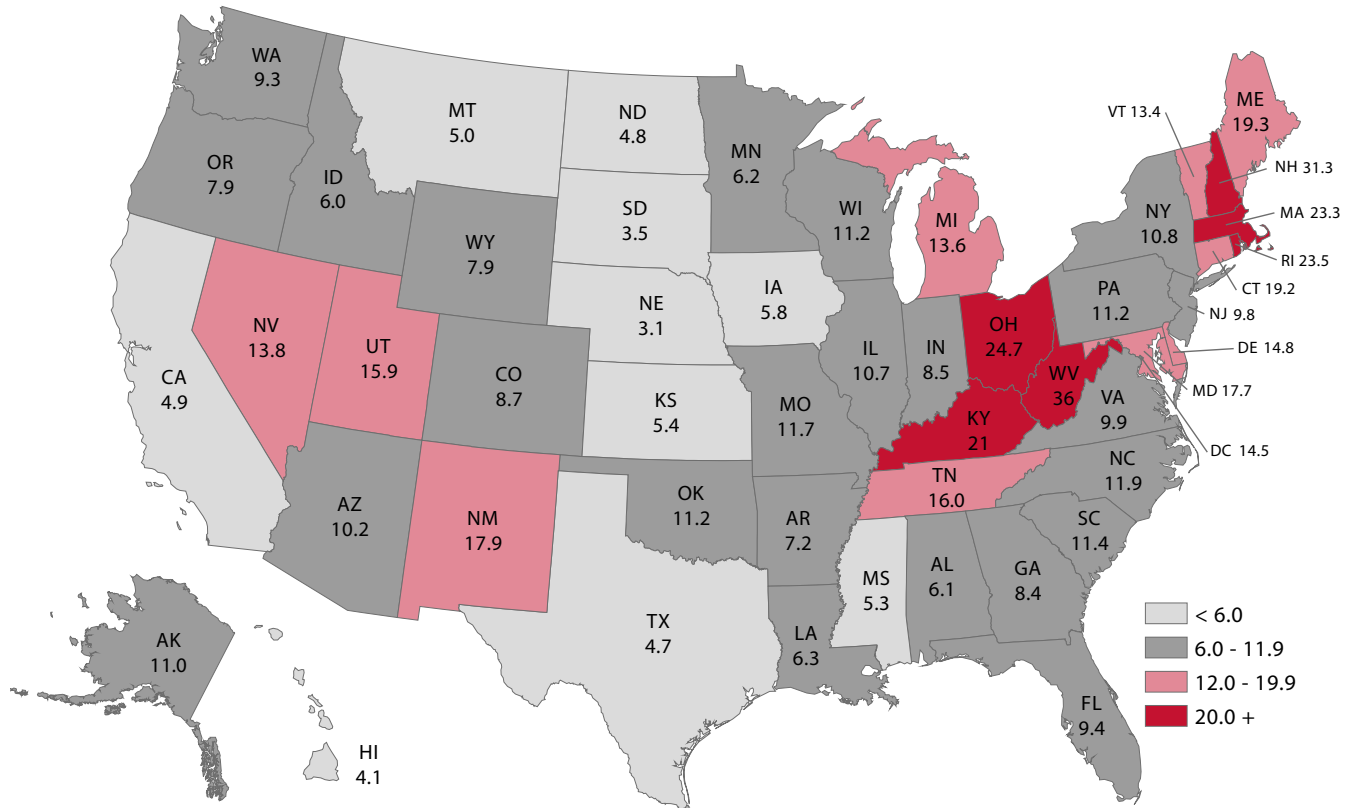


Source: American Medical Association 2017 State Physician Workforce Data Report

"Opidemic" in Utah

Opioid overdose deaths per 100,000 population

United States = 10.4



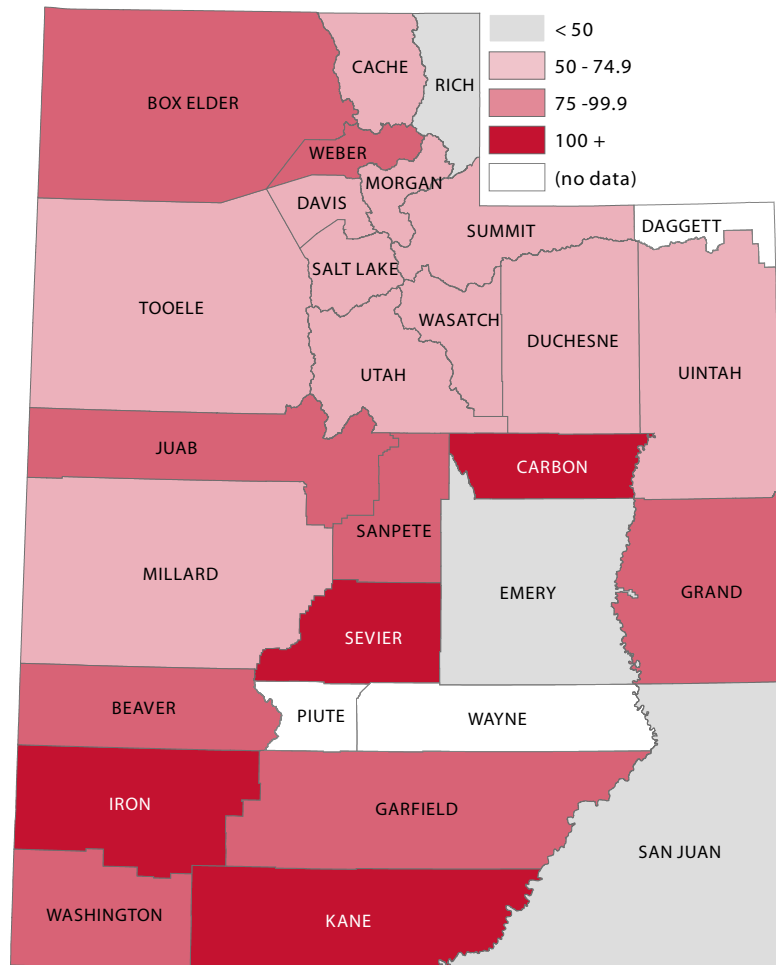
Note: Rates are age-adjusted.

Source: The Henry J. Kaiser Family Foundation State Health Facts

Four Utah counties with more opioid prescriptions than people

Retail opioid prescriptions dispensed per 100 persons, 2016

US rate 66.5; Utah rate 70.4

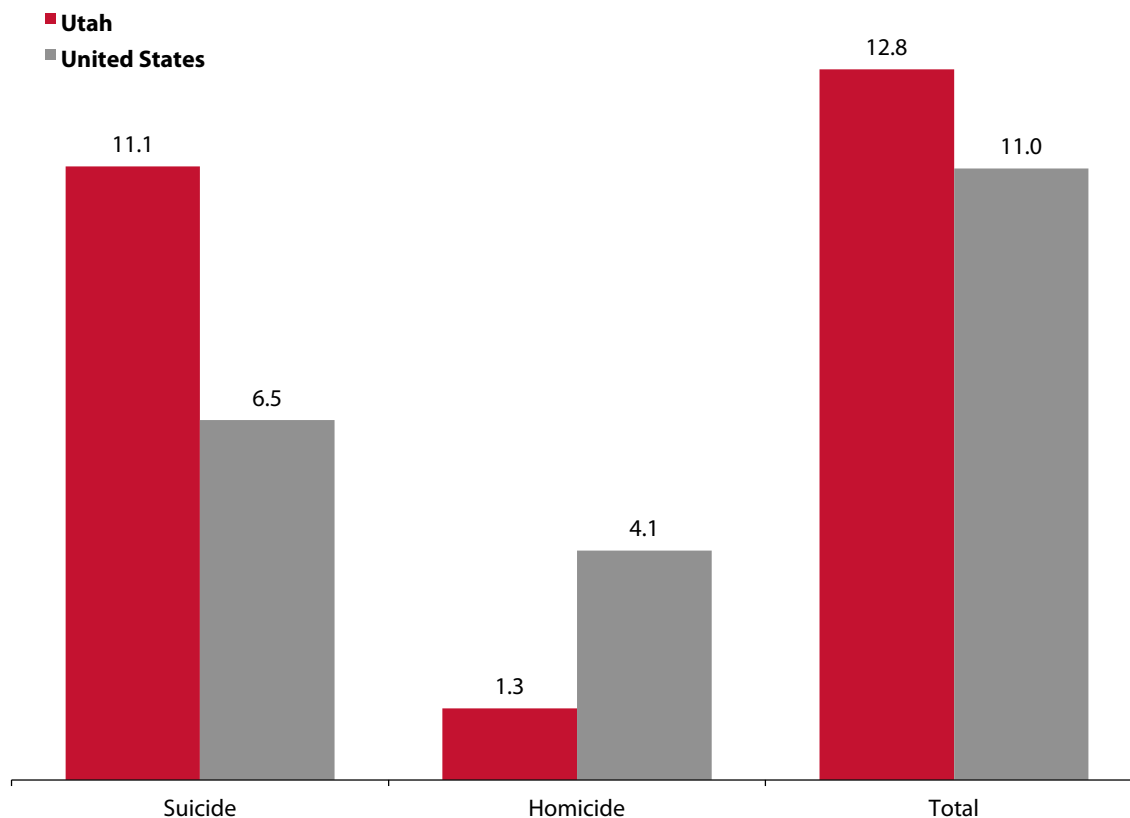


Source: Centers for Disease Control and Prevention, National Center for Injury Prevention and Control U.S. Prescribing Rate Maps

Gun-related deaths per capita in Utah: low for homicides, high for suicides

Firearm-related death rates by type, 2015

Deaths per 100,000 resident population, all ages, age-adjusted



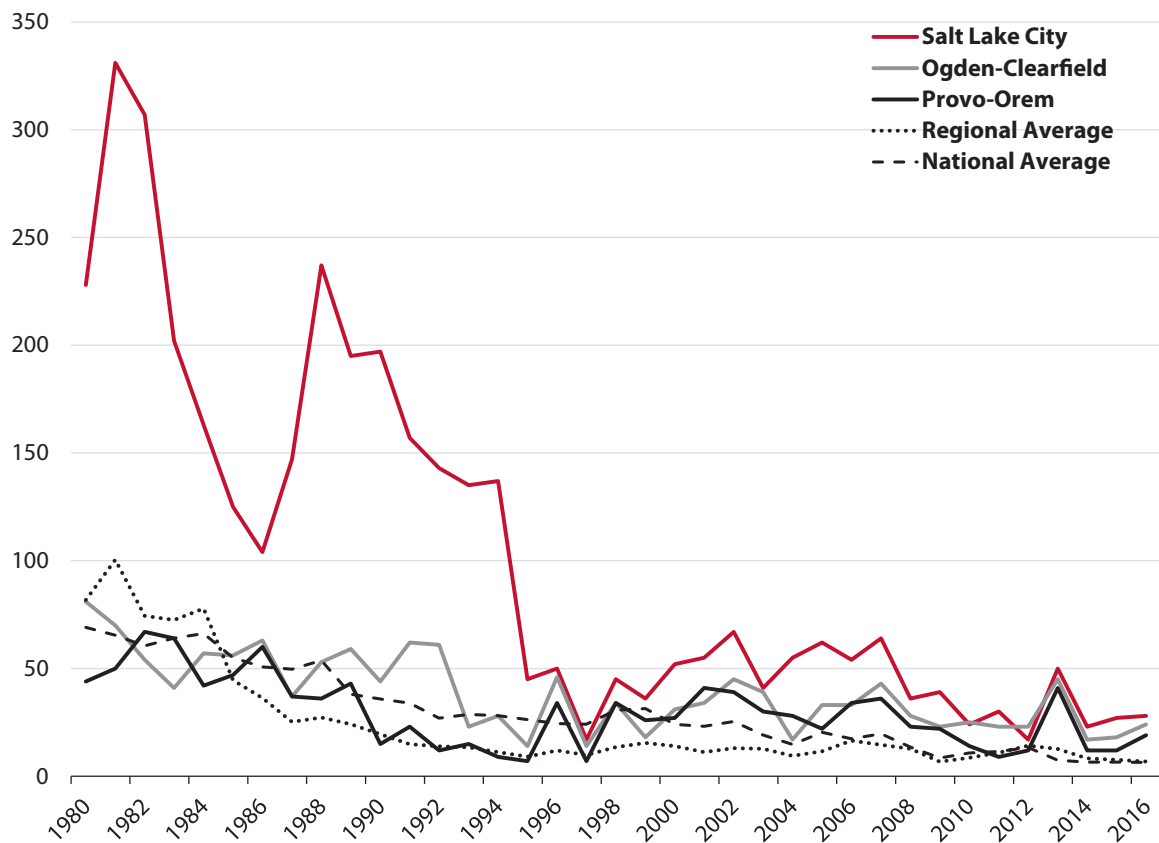
Note: Total includes less than 0.5 firearm deaths per 100,000 total population that were unintentional, related to legal intervention, or of undetermined intent.

Source: Centers for Disease Control and Prevention National Center for Health Statistics Web-based Injury Statistics Query and Reporting System

Utah air quality is getting better, still not acceptable

Number of days air quality index exceeded 100 across the Wasatch Front

Unhealthy for sensitive groups or worse



Source: U.S. Environmental Protection Agency Outdoor Air Quality data

No State gets an A

State Fiscal Practices Report Card

Cumulative GPA in budget forecasting, budget maneuvers, legacy costs, reserve funds, and transparency for fiscal years 2015-2017

Report Card

State	GPA	Grade
South Dakota	3.27	B
Idaho	3.20	B
Utah	3.20	B
California	3.18	B
Alaska	3.13	B
Minnesota	3.07	B
Nebraska	3.07	B
Oregon	3.07	B
Rhode Island	3.07	B
Tennessee	3.07	B
Hawaii	3.01	B
Arizona	3.00	B
Delaware	3.00	B
Florida	3.00	B
Indiana	2.93	B-
Iowa	2.87	B-
Michigan	2.87	B-

State	GPA	Grade
Oklahoma	2.87	B-
Washington	2.83	B-
Georgia	2.80	B-
South Carolina	2.80	B-
New York	2.78	B-
Maine	2.73	B-
Wisconsin	2.71	B-
Mississippi	2.67	C+
North Carolina	2.60	C+
Connecticut	2.47	C+
Texas	2.47	C+
Vermont	2.47	C+
West Virginia	2.47	C+
Nevada	2.45	C+
North Dakota	2.41	C+
New Hampshire	2.33	C+
Maryland	2.31	C+

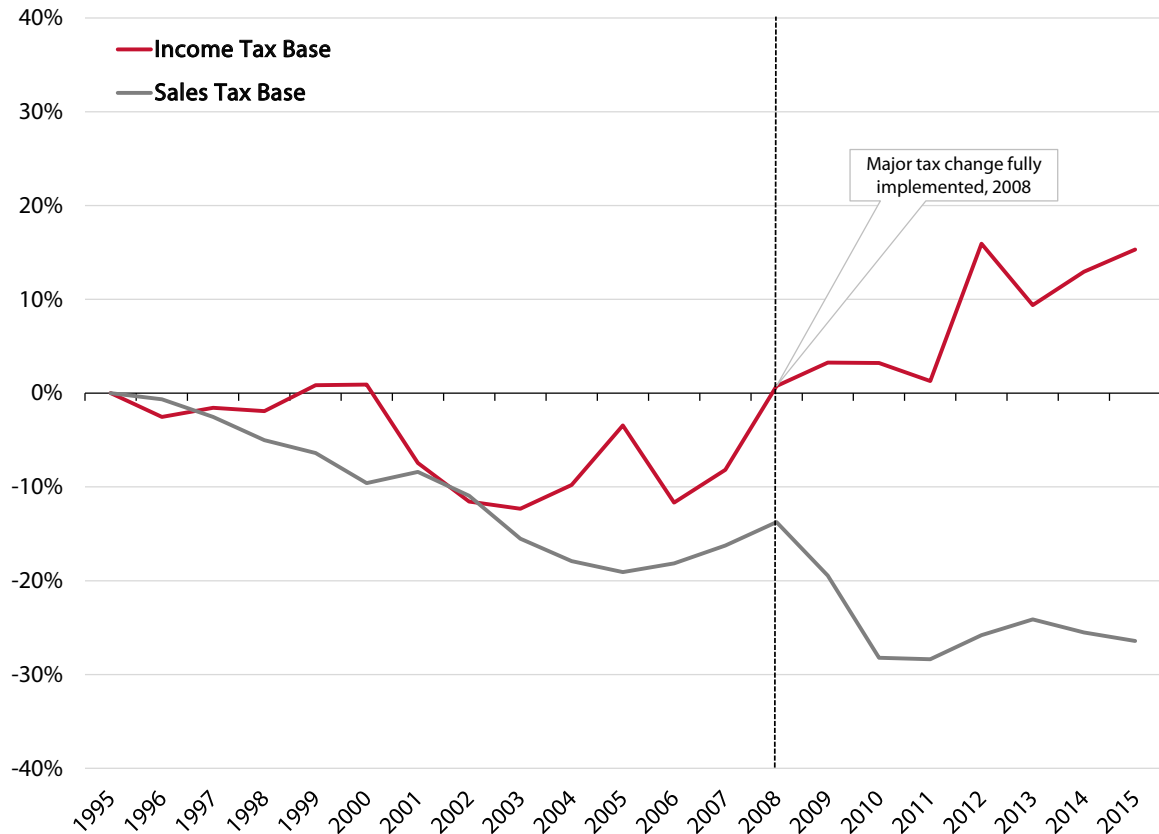
State	GPA	Grade
Missouri	2.29	C+
Virginia	2.25	C
Kentucky	2.20	C
Ohio	2.20	C
Wyoming	2.14	C
Massachusetts	2.12	C
Montana	2.11	C
Colorado	2.07	C
Louisiana	2.05	C
Pennsylvania	2.01	C
New Mexico	1.93	C-
Arkansas	1.80	C-
New Jersey	1.70	C-
Alabama	1.67	D+
Illinois	1.35	D+
Kansas	1.28	D

Source: Kem C. Gardner Policy Institute analysis of Volcker Alliance 2017 Truth and Integrity in State Budgeting Report

Last major tax change in Utah broadened the income tax base; did not address declining sales tax base

Changes in Utah's sales and income tax bases as a percent of the economy

Cumulative changes since 1995



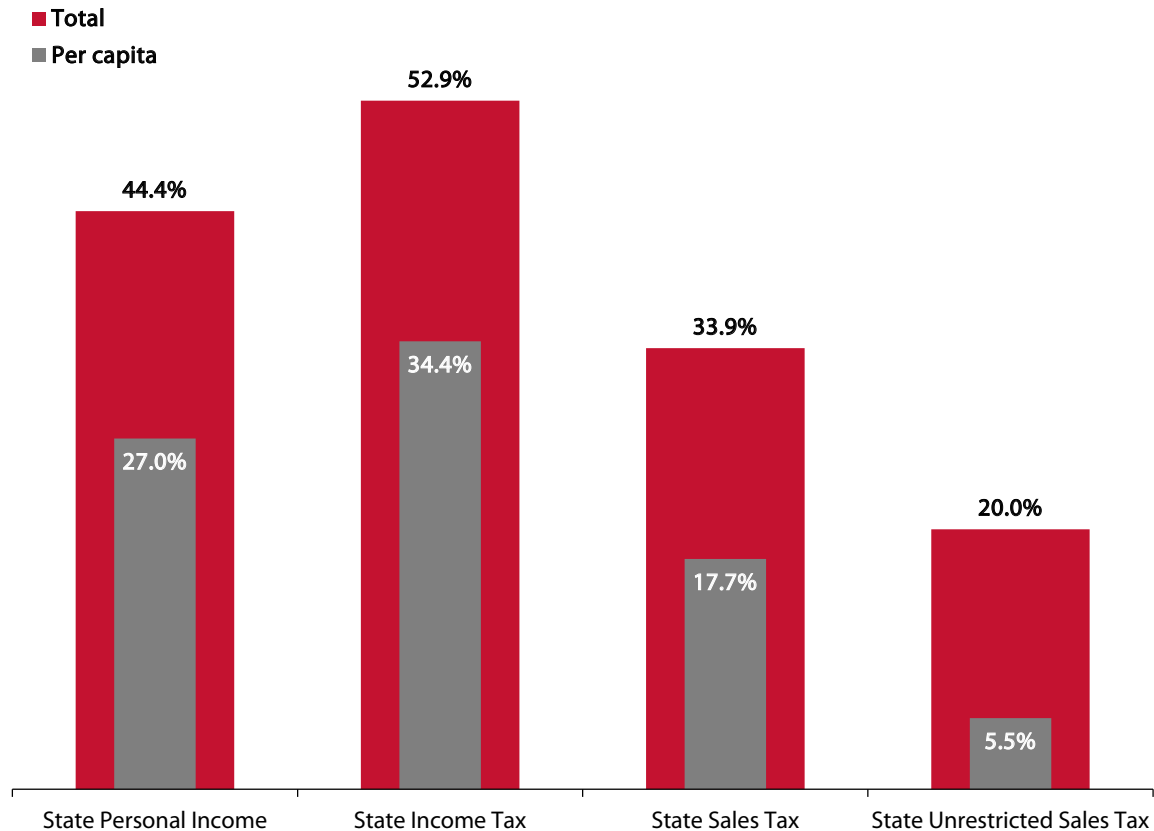
Note: Data shows the cumulative change in each base type as a percent of Utah Gross Domestic Product (GDP) since 1995.

Source: Kem C. Gardner Policy Institute analysis of Utah Office of Legislative Research and General Counsel data

Sales tax is not keeping pace

Growth in Utah's economy and major revenue collections

Since the end of the recession, 2009 - 2017

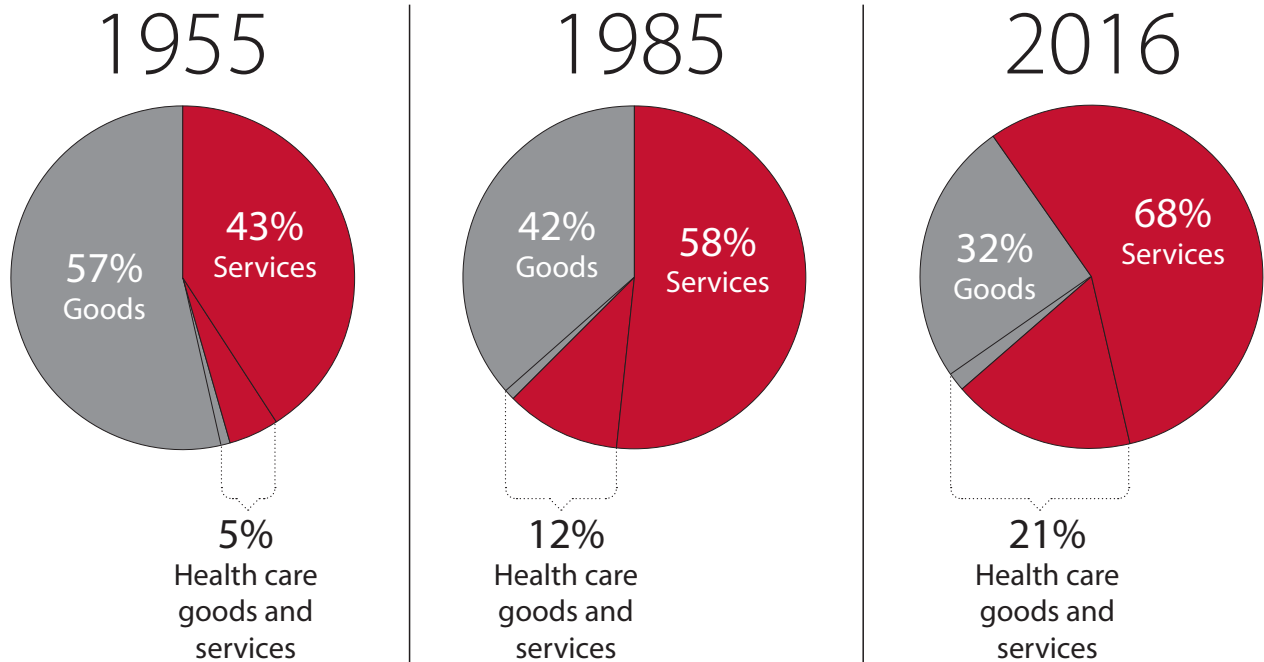


Source: Kem C. Gardner Policy Institute analysis of U.S. Bureau of Economic Analysis and Utah State Tax Commission data

A fundamentally different US (and Utah) economy

US Personal Consumption Distribution

Expenditures by product type

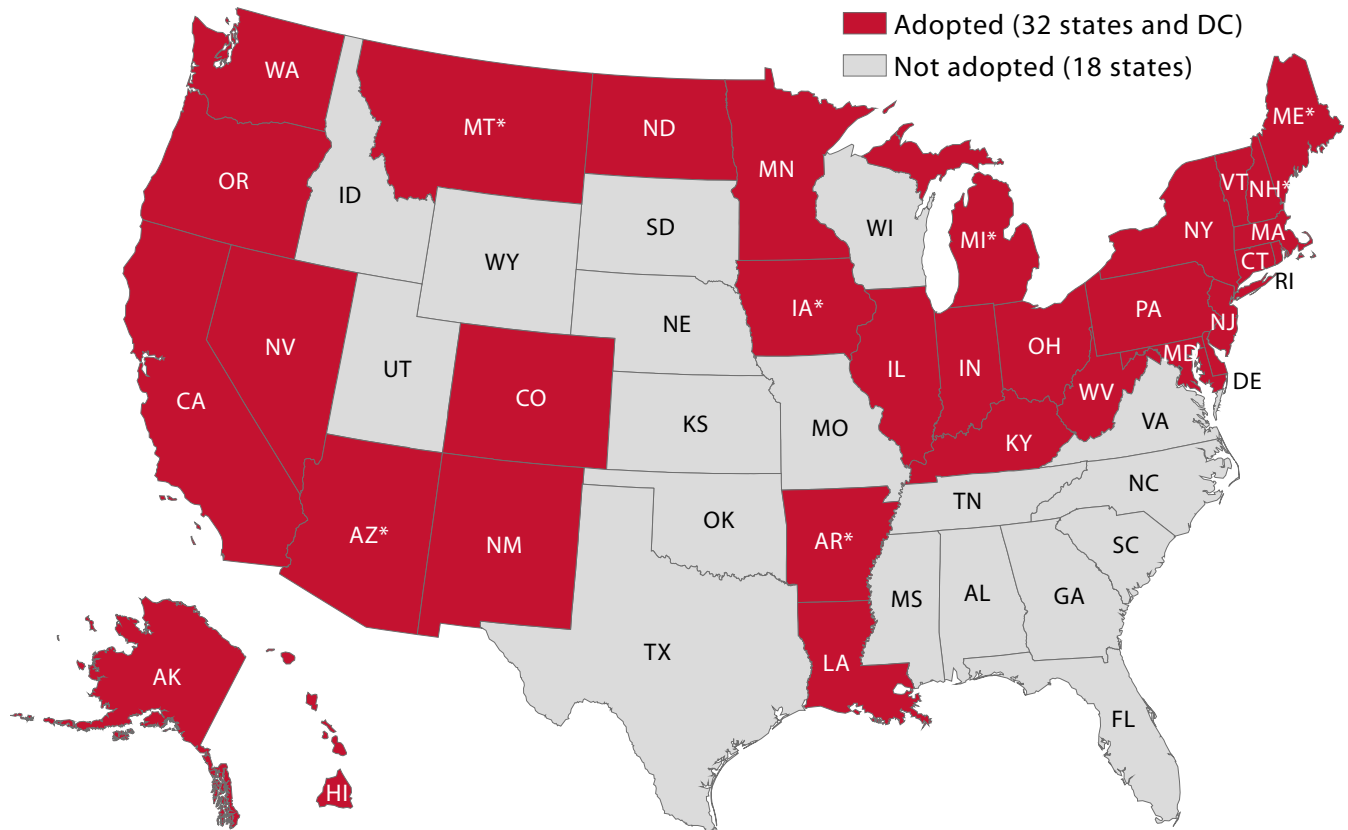


Source: Kem C. Gardner Policy Institute Analysis of U.S. Bureau of Economic Analysis National Income and Product Accounts (NIPA) data

Utah one of 18 states that have not expanded Medicaid

Status of state Medicaid expansion decisions

November 2017



*AR, AZ, IA, IN, MI, MT, and NH have approved Section 1115 waivers. ME adopted the Medicaid expansion through a ballot initiative in November 2017; the ballot measure requires submission of a state plan amendment within 90 days and implementation of expansion within 180 days of the measure's effective date. WI covers adults up to 100% Federal Poverty Level in Medicaid, but did not adopt the Affordable Care Act expansion.

Source: The Henry J. Kaiser Family Foundation Status of State Action on the Medicaid Expansion Decision as of November 8, 2017

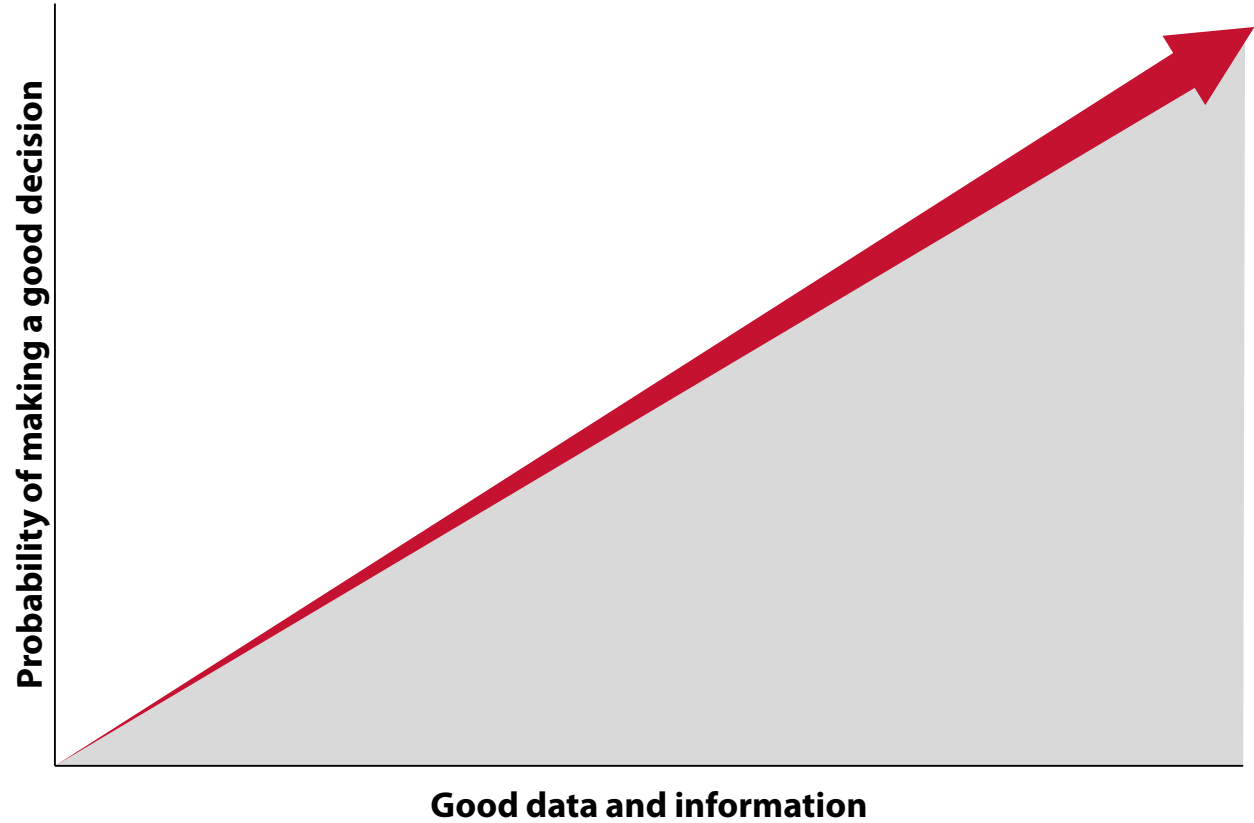
The magic is in the middle

Model for authentic engagement in public deliberation



Source: Martín Carcasson, Ph.D., Center for Public Deliberation at Colorado State University

With good data and information come better decisions



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