



# UTAH INFORMED

---

V I S U A L   I N T E L L E C T I O N   F O R   2 0 1 7



**Kem C. Gardner**  
**POLICY INSTITUTE**  
THE UNIVERSITY OF UTAH

**In Partnership with the Salt Lake Chamber**



**N***ew York Times* columnist and Pulitzer Prize winner Thomas Friedman says if you want to be optimistic about the future, stand on your head and see the world from the bottom up. Your perspective will start with communities, extend to states, and progress to the nation and the world. The closer you are to the bottom of this progression, the more positive will be your outlook. He says the entrepreneurship and innovation happening at the community level propels his bright outlook.

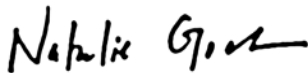
In this, the second edition of *Utah Informed*, we share his optimism. The tables, charts, ideas, and schematics shared in this book present a microcosm of the many challenges and opportunities we face. The great reason for optimism is that Utah community leaders rely on sound data to make decisions. Pair this data-driven orientation with the extraordinary innovation and entrepreneurship that occurs in Utah, and you have a winning combination.

Philanthropist Kem C. Gardner and other community leaders have endowed the Kem C. Gardner Policy Institute at the David Eccles School of Business. Their vision is for the Institute to be the place where Utah comes together

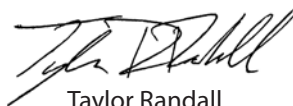
to clarify facts, discuss ideas, prevent and solve problems, and, ultimately, thrive. The partnership with the Salt Lake Chamber helps us fulfill this mission.

In this booklet, we present what we call “visual intellection.” Each page forces the viewer to consider a compelling trend, a new idea, or an aspirational thought. The information may help you connect a few dots. It may also leave you wanting, not knowing exactly what to think. That is intentional. We want this booklet to make you think.

We hope this 2017 edition of *Utah Informed* will help you make informed decisions in 2017.



Natalie Gochnour  
Director, Kem C. Gardner Policy Institute



Taylor Randall  
Dean, David Eccles School of Business



Jane Beatty  
President & CEO, Salt Lake Chamber

# Contents

## Global and National Context

2016 Discoveries . . . . .	4
Words and phrases to know in 2017 . . . . .	5
Duration of US economic expansions . . . . .	6
Odds of US recession in next 12 months . . . . .	7
Consumer Confidence Index . . . . .	8
Partisan Conflict Index . . . . .	9
Hollow Trees . . . . .	10
Effective federal funds rate . . . . .	11
Share of world manufacturing output . . . . .	12
Core inflation . . . . .	13
Federal budget deficits and surpluses. . . . .	14
Net interest overlays vs. federal debt. . . . .	15
US International trade balance . . . . .	16
US economic competitiveness. . . . .	17
Production and jobs in manufacturing sector . . . . .	18
Nonfarm productivity . . . . .	19
News use across social media platforms. . . . .	20

## People

Utah population growth, 2015 - 2016. . . . .	21
Utah population age 5 to 17. . . . .	22
Dependency ratios in Utah and the United States . . . . .	23
Living arrangements of Utah adults in 2015. . . . .	24
Selected age groups as a percent of Utah's total population. . . . .	25
Total fertility rates for Utah and the United States . . . . .	26
8-year olds identified with Autism Spectrum Disorder . . . . .	27
Primary languages spoken at home in Utah. . . . .	28
Minorities' share of Utah population . . . . .	29
Utah population pyramid . . . . .	30

Top 10 sources of migrants to Utah . . . . .	31
Percent of population without health insurance in 2015. . . . .	32
Health care expenditures as a share of GDP: 2015 . . . . .	33
Percent of population with income below poverty level, 2015 . . . . .	34

## Jobs

Employment change, Q1 2008 – Q1 2016 . . . . .	35
Employers with 4,000 or more average annual jobs in 2015. . . . .	36
Employment as a percent of 2007 peak . . . . .	37
Utah employment by industry. . . . .	38
Utah Headline and U-6 unemployment rates. . . . .	39
Job index for Utah private and public sectors . . . . .	40

## Education

4-year graduation rates by school district, 2016 . . . . .	41
Retention of new Utah teachers . . . . .	42
Percent of population 25 years and over with graduate or professional degree . . . . .	43
Educational attainment for persons 25 Years and over, 2015 . . . . .	44
Average undergraduate tuition and fees . . . . .	45
Top five undergraduate degrees for Utah men and women. . . . .	46
Top male and female dominated degrees in Utah . . . . .	47

## Income and Debt

Share of households in the middle class . . . . .	48
Gini Index of Income Equality . . . . .	49
Utah real private average hourly earnings index. . . . .	50
Utah components of Personal Income . . . . .	51
Consumer bankruptcy cases, Utah and US . . . . .	52
Real Salt Lake vs. Los Angeles Galaxy pay . . . . .	53
Utah per capita debt by loan type . . . . .	54

## Sales and Prices

Regional Price Parities, 2014	55
Average retail price of electricity to residential sector	56
Composition of Utah retail sales	57
Utah nexus for largest US e-retailers	58
Millennial expenditure growth	59

## Real Estate and Construction

Growth in housing units and households in Utah	60
Construction jobs as a percent of all jobs	61
Real Change in FHFA Home Price Index, 1980 - 2015	62
Utah residential construction	63
Value of permit-authorized construction in Utah	64
Index of for-sale inventory	65
Median existing home prices	66

## Travel and Tourism

Direct Utah traveler spending	67
Utah tourism-generated jobs	68
International visitor Visa card	69
Utah skier days vs. total annual snowfall	70
Utah national park and place visitation	71

## Resources

Highest internet connection speeds in the US	72
States with most solar electric capacity installed in 2015	73
States' share of total US energy production	74
Energy consumption per capita	75
Salt Lake City temperature records	76
Share of Utah land area in drought conditions	77

## Fiscal

States with triple-triple rating	78
State of Utah sales and use tax collections	79
State of Utah budget reserve accounts	80
Budget of the State of Utah	81

## International Trade

Utah merchandise exports	82
Top ten Utah export purchasing countries: 2015	83
Top ten Utah export industries: 2015	84
The age of acceleration	85
Church of Jesus Christ of Latter-day Saints membership	86

## Economic Strength and Diversity

County shares defense contracts and grants	87
Utah Defense Sector total economic impacts	88
Hachman Index of GDP diversity	89
Delta Air Lines US and Canada routes	90
Union Pacific Rail Network	91
US and Utah GDP by industry	92

## Shedding Light

Leadership truisms	93
Progress	94
Human adaptability and technological acceleration	95
Informed decisions	96

## **2016 discoveries**

### **Gene-Editing Technique Used on Human Patient**

A lung cancer patient became the first human subject of the CRISPR gene-editing technique, with the goal of strengthening his cells against the cancer.

### **Gravitational Waves Detected**

100 years after Albert Einstein unveiled his theory of General Relativity, the first direct evidence of gravitational waves was detected.

### **Casper the friendly octopus**

An octopus found near Hawaii, nicknamed “Casper” for its pale, translucent appearance, is a newly discovered species.

### **NASA Spacecraft Reaches Jupiter**

After five years, NASA’s Juno spacecraft finally reached Jupiter, and is now orbiting the planet.

### **Dinosaurs Tail with Feathers Discovered**

A 99 million-year-old dinosaur tail was found in amber, with its bones, tissue, and feathers intact.

### **Another Planet in Our Solar System Found**

A group of astronomers found new evidence that there is a distant planet within our solar system.

### **Small Asteroid Orbiting Earth and the Sun**

A new companion to our planet, a small asteroid which appears to be orbiting the earth as well, has been found orbiting the sun.

### **Eyeless Cavefish Walks Up Cave Walls**

A blind cavefish has been found using its pelvis to scale cave walls, providing a modern look at evolutionary steps.

### **SpaceX Successfully Lands Rocket**

Private company SpaceX successfully landed its Falcon 9 rocket with the help of a drone ship.

### **Greenland Shark Declared Oldest Living Vertebrate**

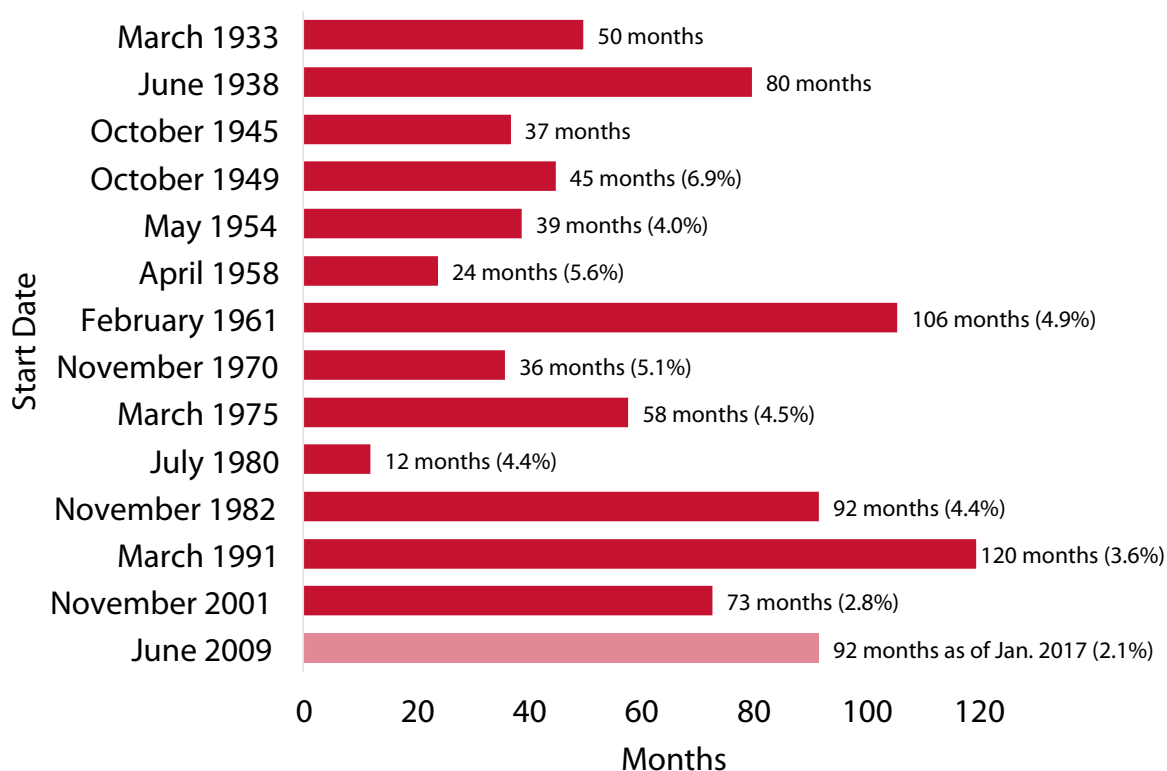
Through radiocarbon dating, scientists estimate a female Greenland shark to be around 400 years old.

## ***Words and phrases to know in 2017***

- 350**.....The number of persons in Utah at least 100 years old. The number of centenarians in Utah is projected to grow to 6,800 by 2065!
- Alt-right** .....A self-proclaimed tribe that unifies against multiculturalism, immigration, feminism and, above all, political correctness.
- A.I.** .....Artificial intelligence is all the rage. Prominent thinker Stephen Hawking reminds us that it will be, “either the best, or worst thing, ever to happen to humanity.”
- Beehive** .....What used to be thought of as Utah’s state symbol and a home for bees is now the symbol of Utah’s changing age structure.
- Bregret**.....The regret felt by those who voted to leave the EU, and now wish they had not done so.
- Drain the Swamp** .....A call to action to fix dysfunction in Washington, D.C.
- Entrepreneurial federalism** .....States competing with public money to lure business. Critics call it an arms race, picking winners, or corporate welfare. Supporters call it the new normal.
- Our Schools Now** .....A ballot initiative to invest \$750 million into Utah’s education system.
- Post-truth**.....A political culture that appeals to emotion instead of fact. Last year, Oxford Dictionaries selected “post-truth” international word of the year.
- Resilience**.....The ability to fall down nine times and get up ten.
- Solopreneur** .....A person developing their own personal brand, a niche for themselves in their own marketplace.
- STEMpathy** .....STEM jobs are all the rage, but those with STEM skills who can relate to others and show empathy will thrive.
- TEOTWAWKI** .....The End Of The World As We know It
- The new Utah County** .....Economic and political power shifts south. It’s not your grandfather’s county anymore.
- The new Point of the Mountain** ...One chance to get it right!
- TrumpCare**.....The coming evolution of the U.S. health system.

## Current US economic expansion among the longest, slowest on record

### Duration of US economic expansions



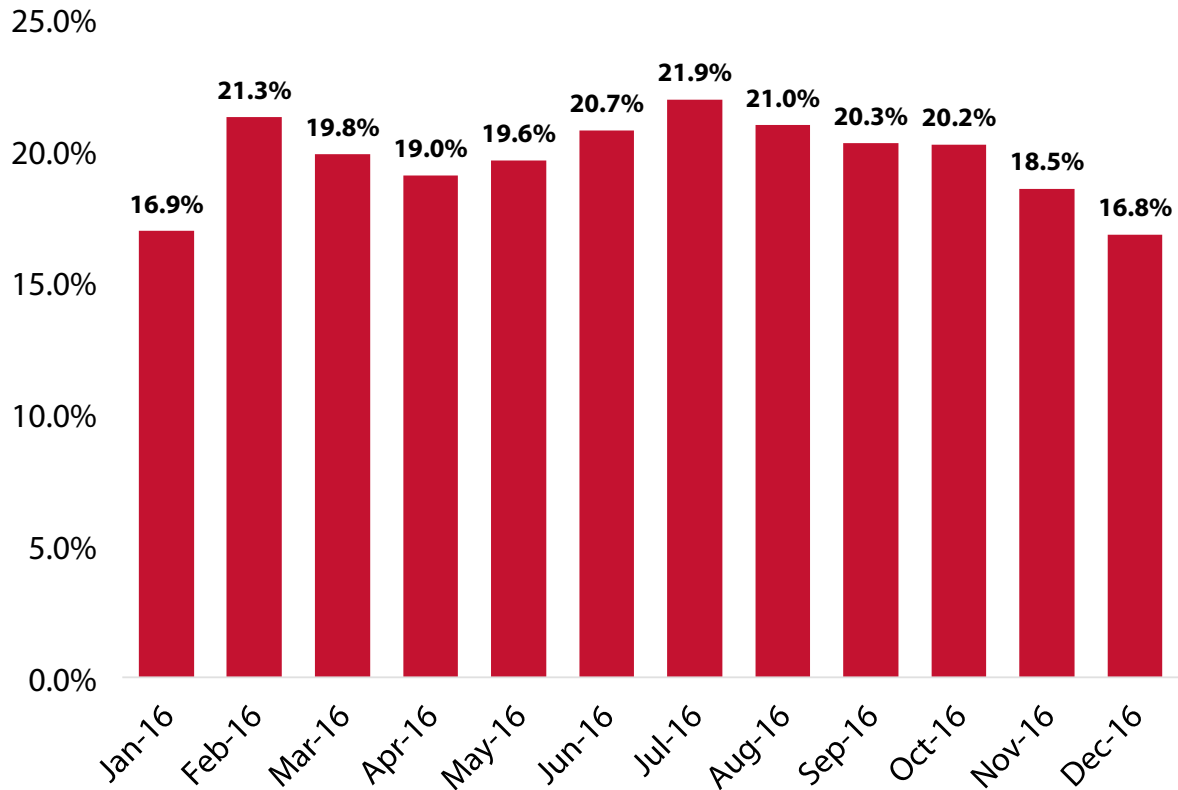
**Note:** Average annual GDP growth in parentheses; data unavailable prior to 1949.

**Sources:** Kem C. Gardner Policy Institute analysis of National Bureau of Research and Bureau of Economic Analysis data



## *Worries about a US recession fell during the last half of 2016*

### Odds of US recession in next 12 months

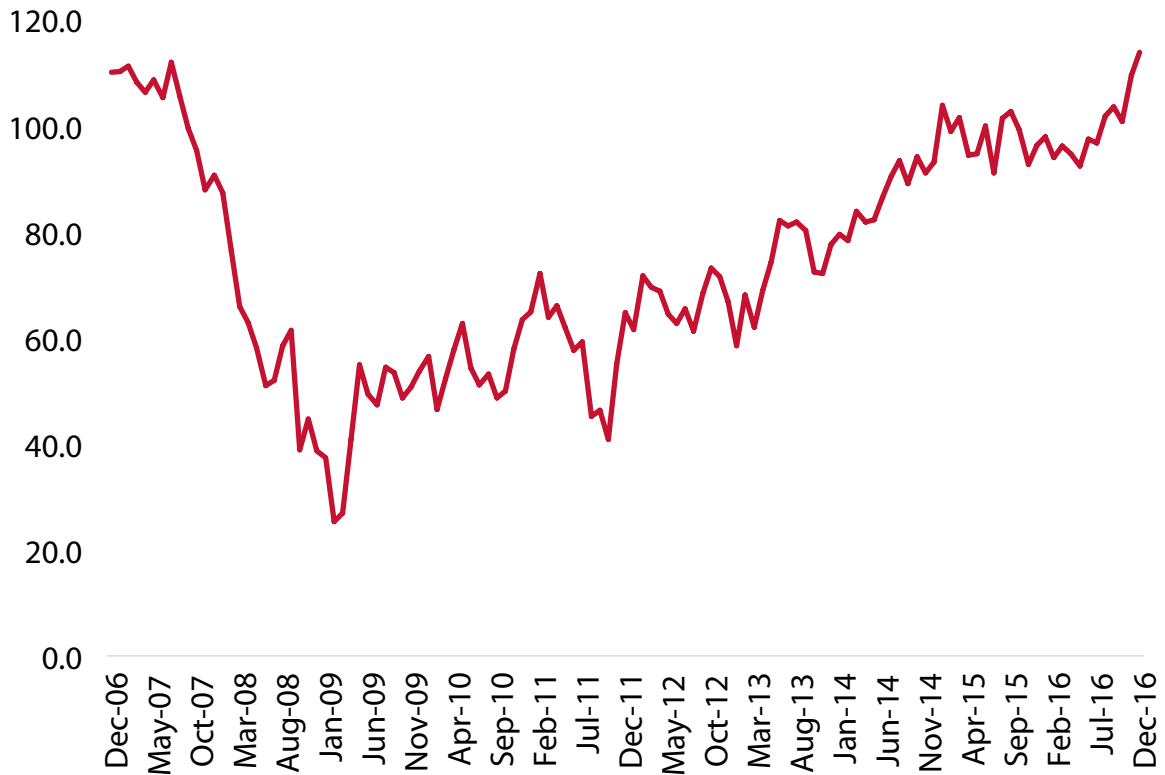


**Source:** Wall Street Journal Economic Forecasting Survey

## US consumer confidence reaches a 10-year high at end of 2016

### Consumer Confidence Index

Seasonally adjusted, 1985 = 100

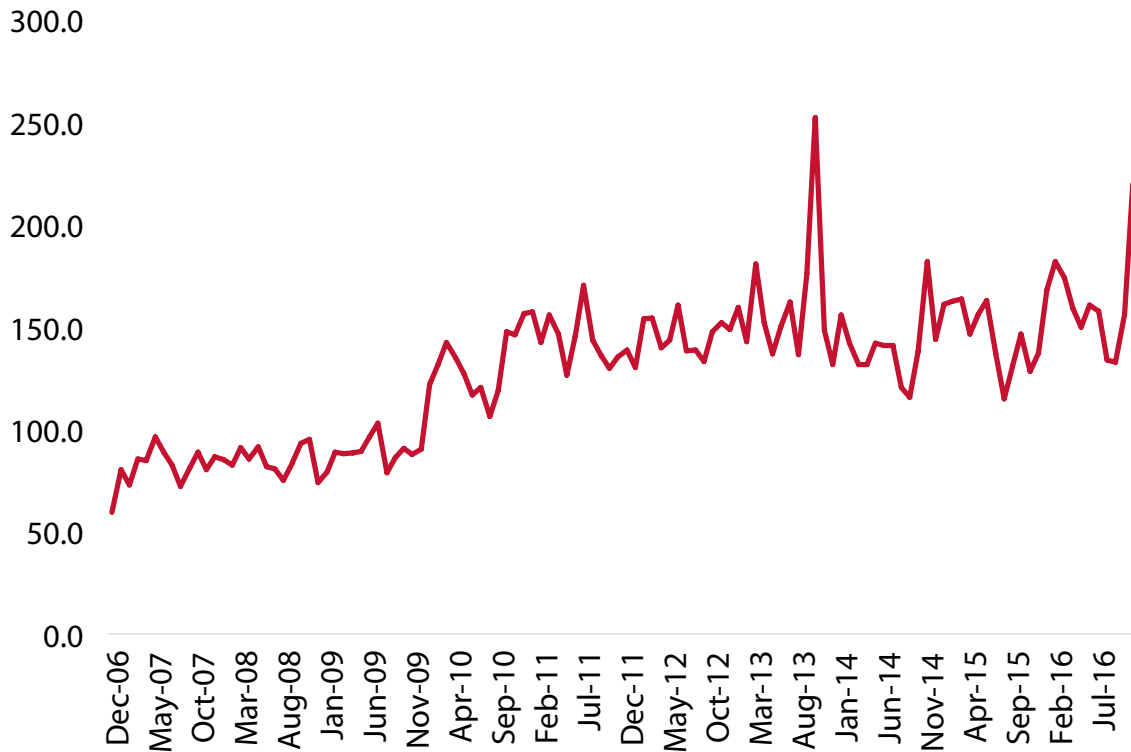


Source: The Conference Board

## Will partisan conflict increase uncertainty in 2017?

### Partisan Conflict Index

1990 average = 100



**Note:** The Partisan Conflict Index measures the frequency of articles in major U.S. newspapers reporting political disagreement.

**Source:** Federal Reserve Bank of Philadelphia

## *What do hollow trees have to do with the 2016 election?*



“You don’t know a tree is hollow until you push hard against it and it falls. The establishments of both parties did not know, a year ago, that they were hollow trees. They thought themselves strong because they always had been, and people think what has been true will continue. Then suddenly the tree is pushed and falls. To me that is the symbol, the image of 2016: the hollowed trees and how easily they fell.”

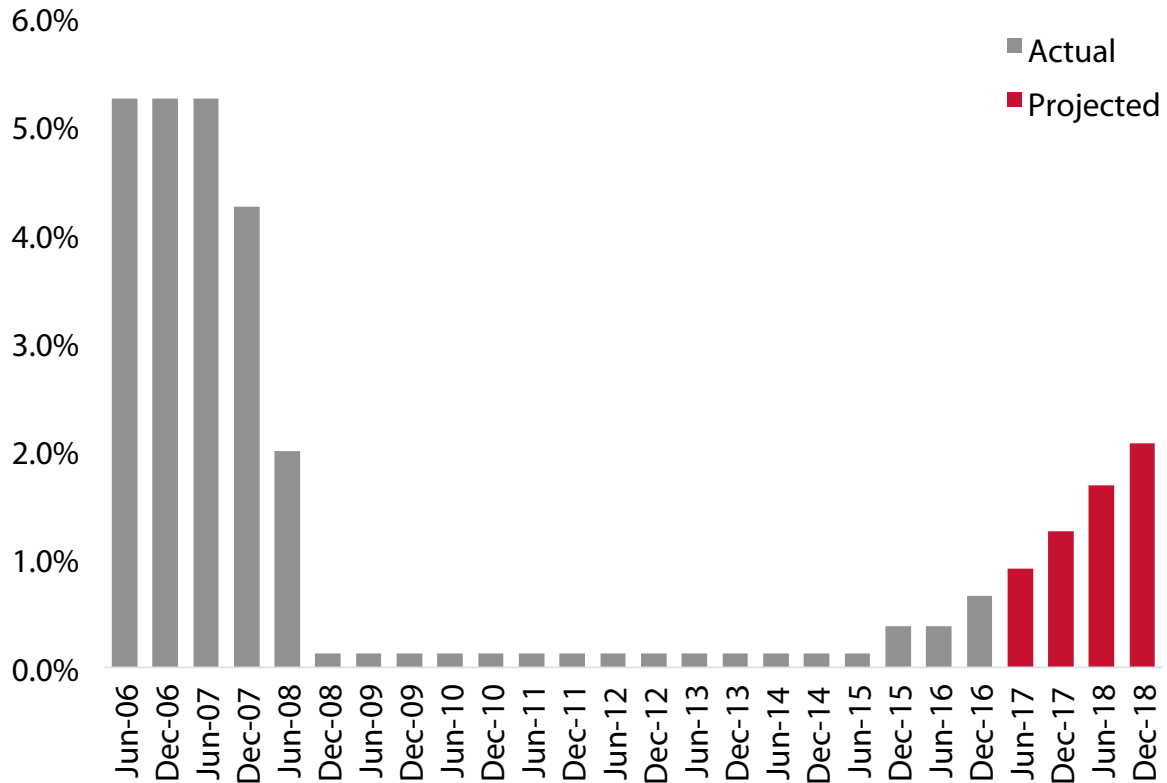
– Peggy Noonan

**Source:** Peggy Noonan, *Wall Street Journal*, November 25, 2016

## Fed funds rate back to 2008 level by end of 2018?

### Effective federal funds rate

Actual and projected

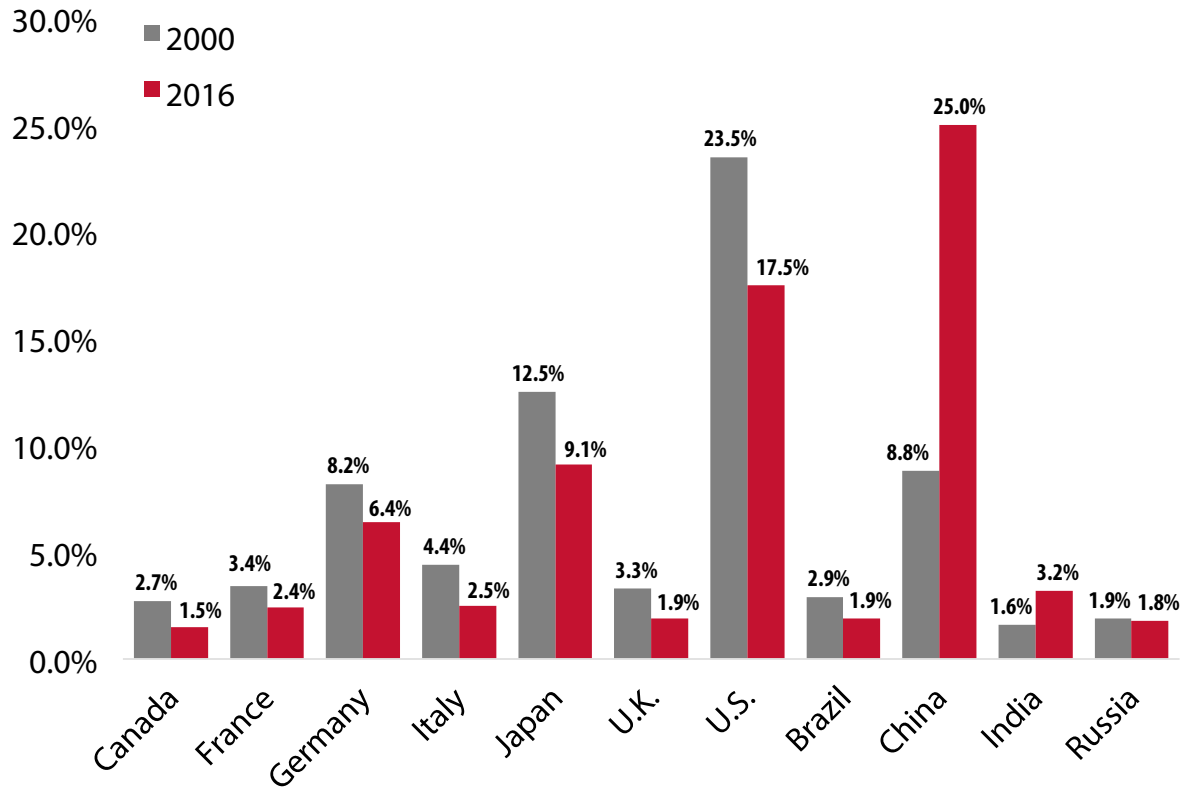


Source: Wall Street Journal Economic Forecasting Survey

## China now produces a quarter of the world's manufacturing output

### Share of world manufacturing output

2000 vs. 2016

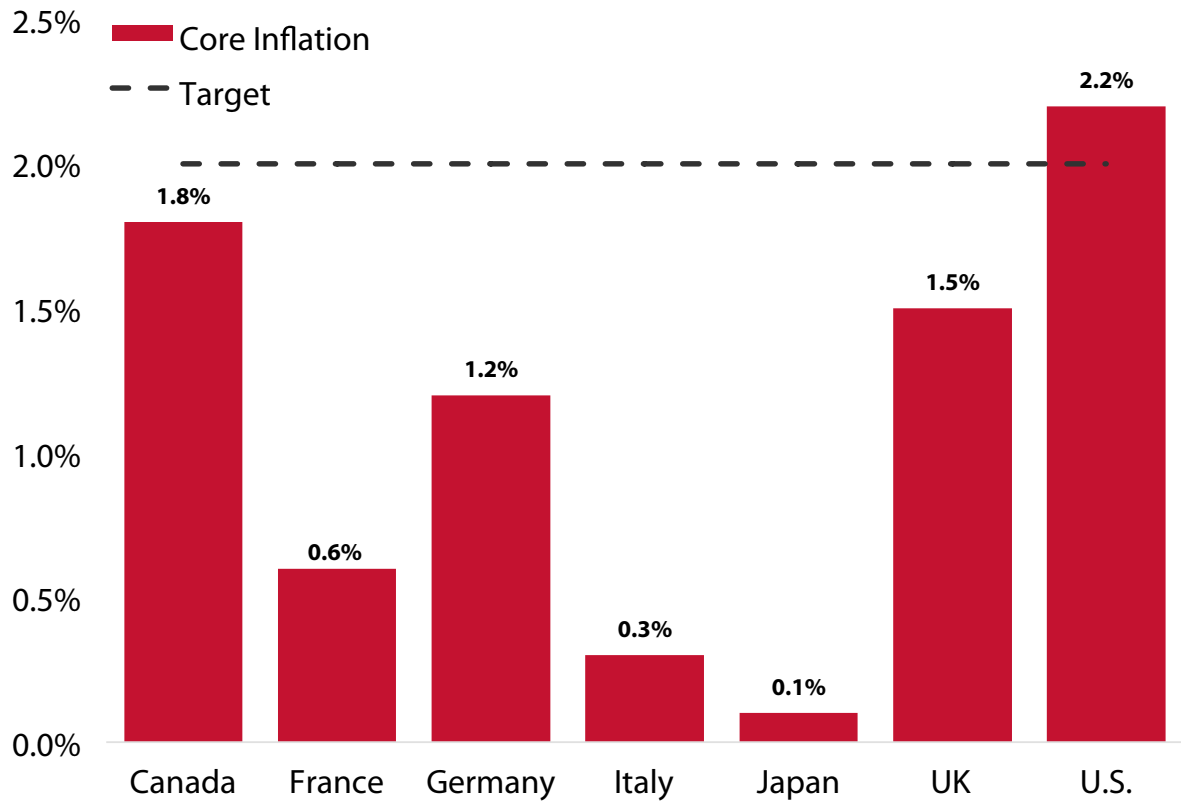


Source: Richard Barkham, CBRE

## *Precariously low inflation rates*

### Core Inflation

Q3 2016

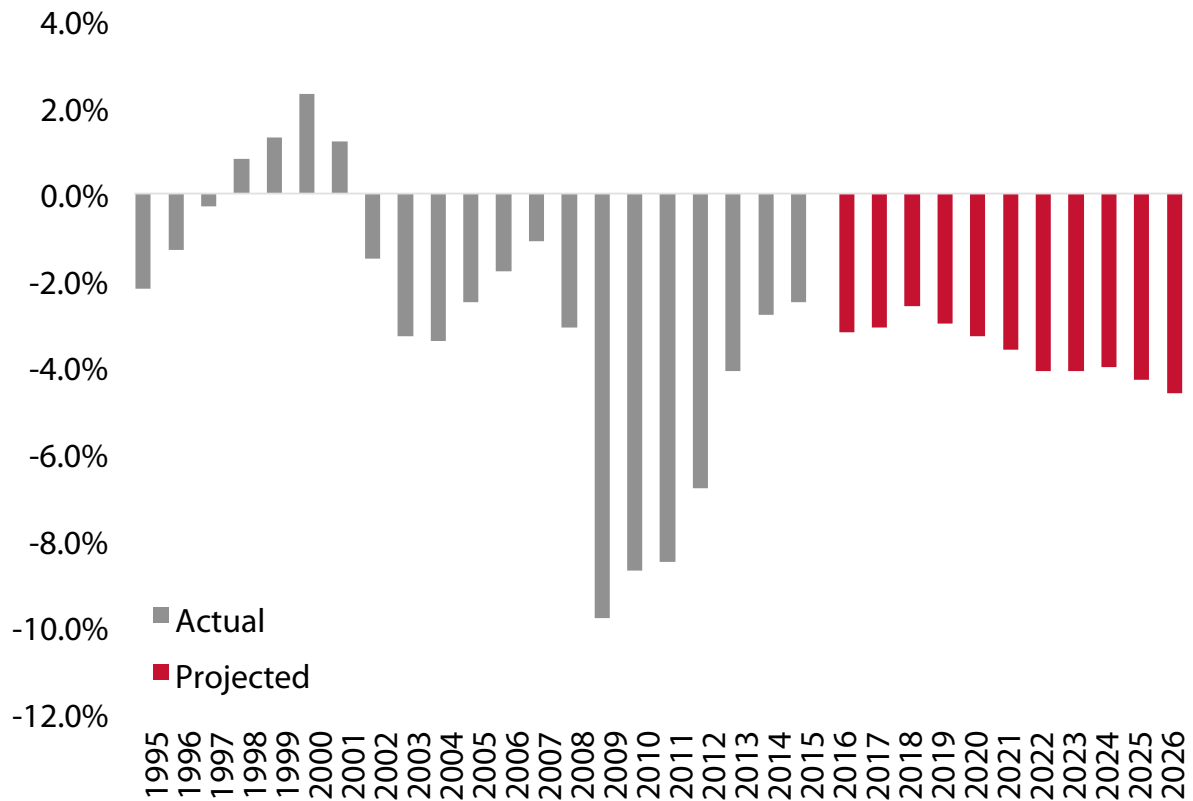


Source: Richard Barkham, CBRE

## Budget deficit expected to grow over the next decade

### Federal budget deficits and surpluses

Percent of Gross Domestic Product



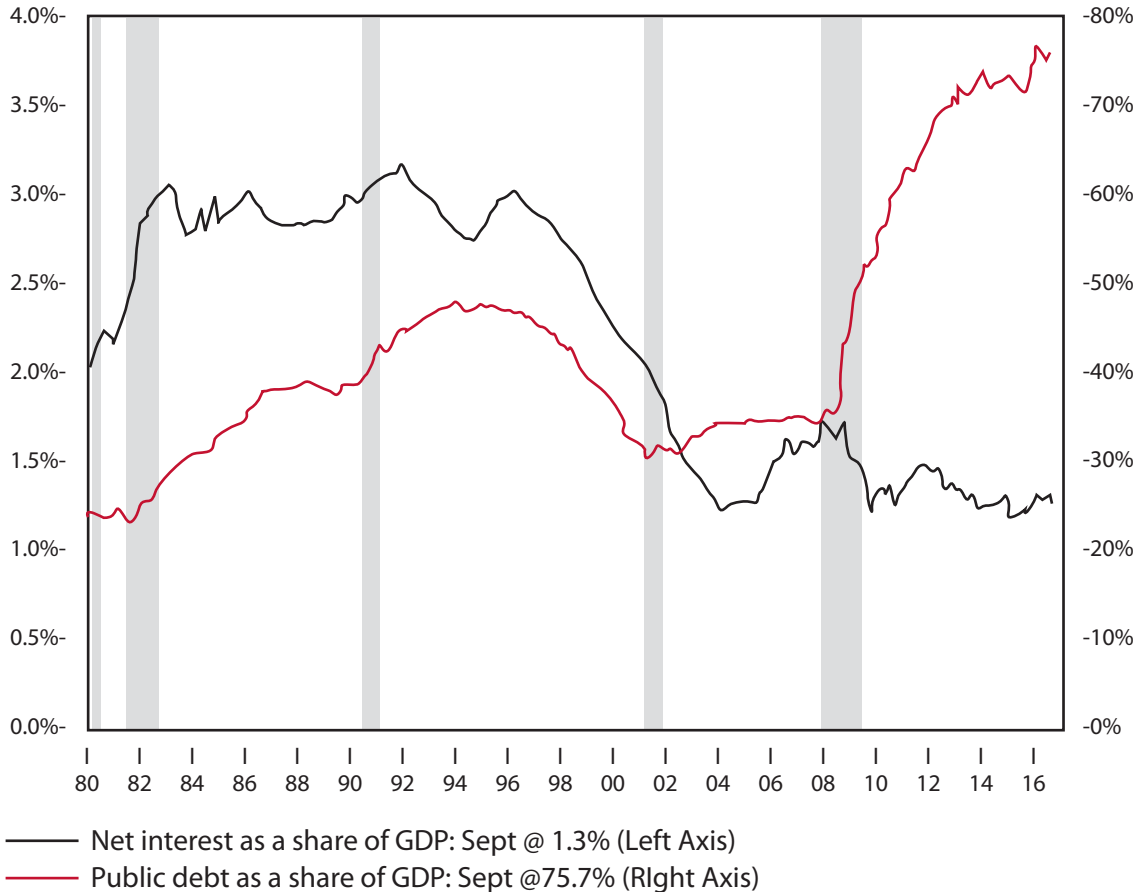
Source: Congressional Budget Office, August 2016 Budget and Economic Outlook



**Higher Interest rates will boost the share of resources required to service the federal debt**

**Net interest overlays vs. federal debt**

12-Month moving sum, total debt held by the public

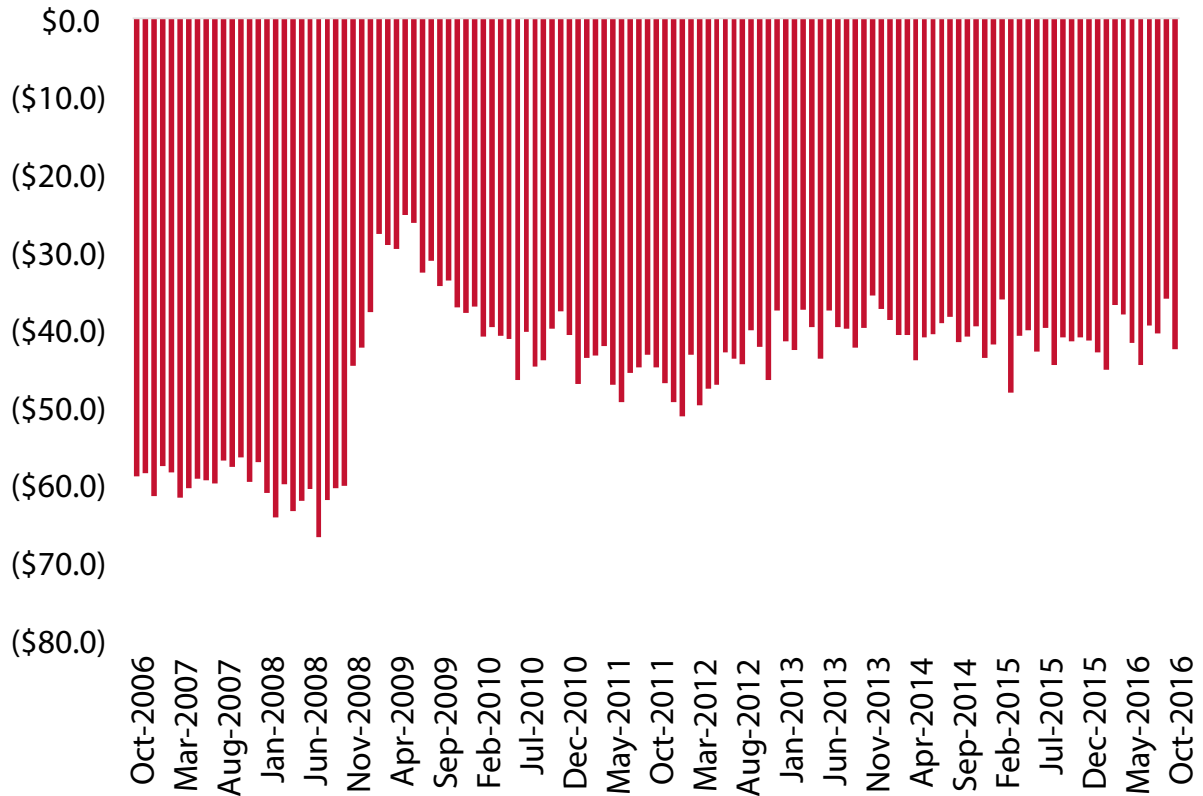


Source: U.S. Departments of the Treasury, U.S. Department of Commerce and Wells Fargo Securities

## What does the future hold for US trade balance?

### US International trade balance

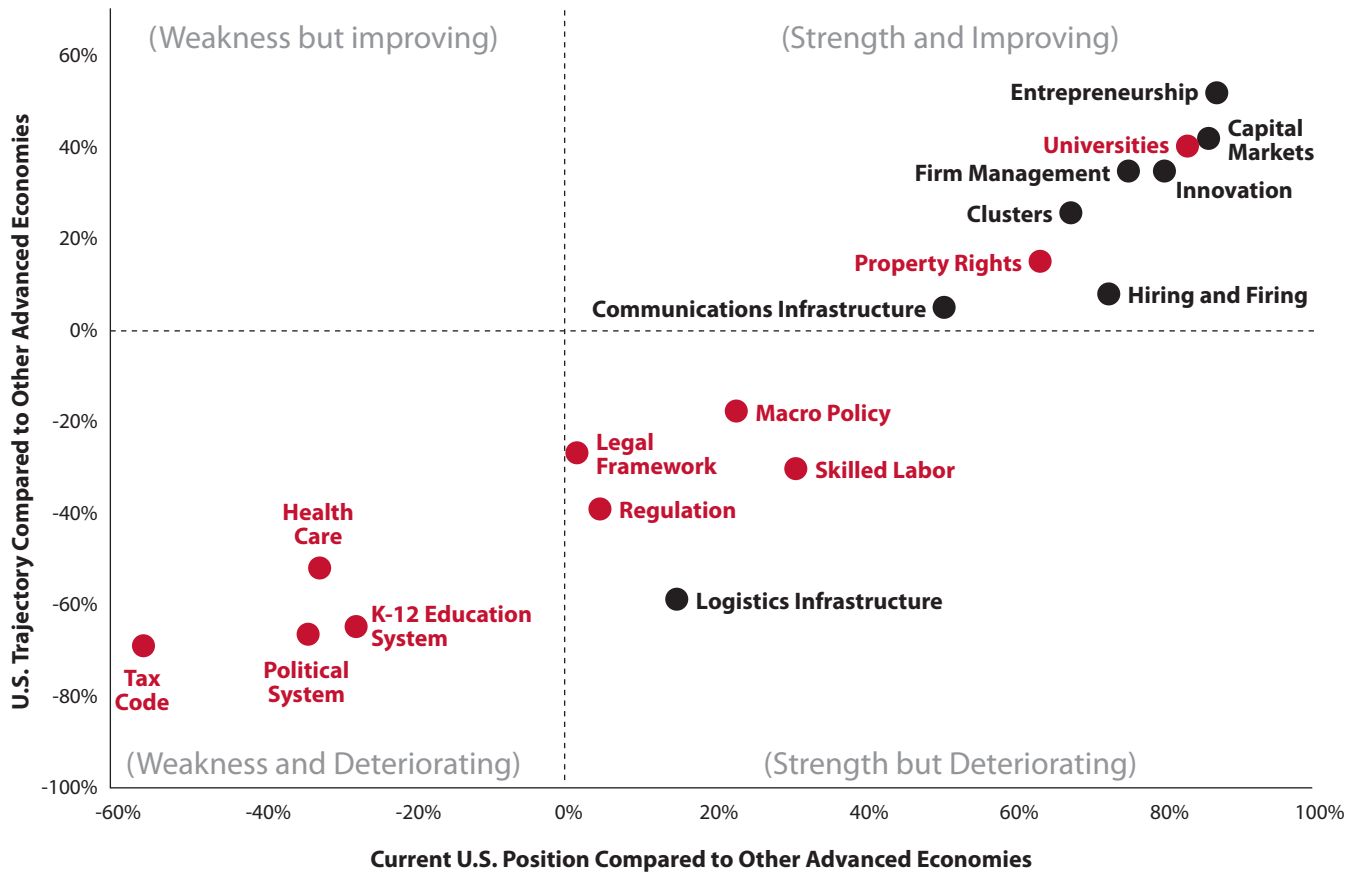
Billions, seasonally adjusted



Source: U.S. Census Bureau Foreign Trade Programs and Products

## US economic competitiveness

- = Activities largely controlled by public sector
- = Activities largely controlled by private sector

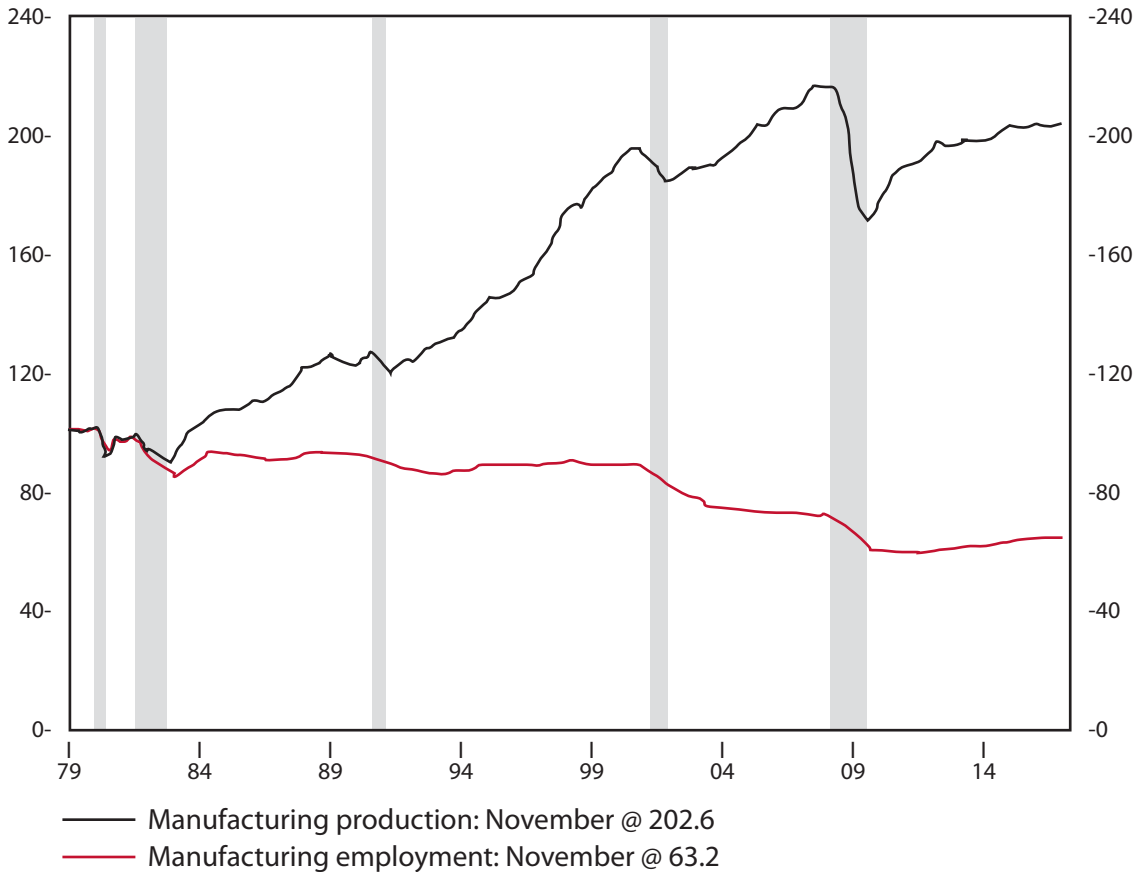


Source: Harvard Business School Survey on U.S. Competitiveness and Kem C. Gardner Policy Institute.

## Doing more with less

### Production & jobs in manufacturing sector

Index, Jan 1979 = 100

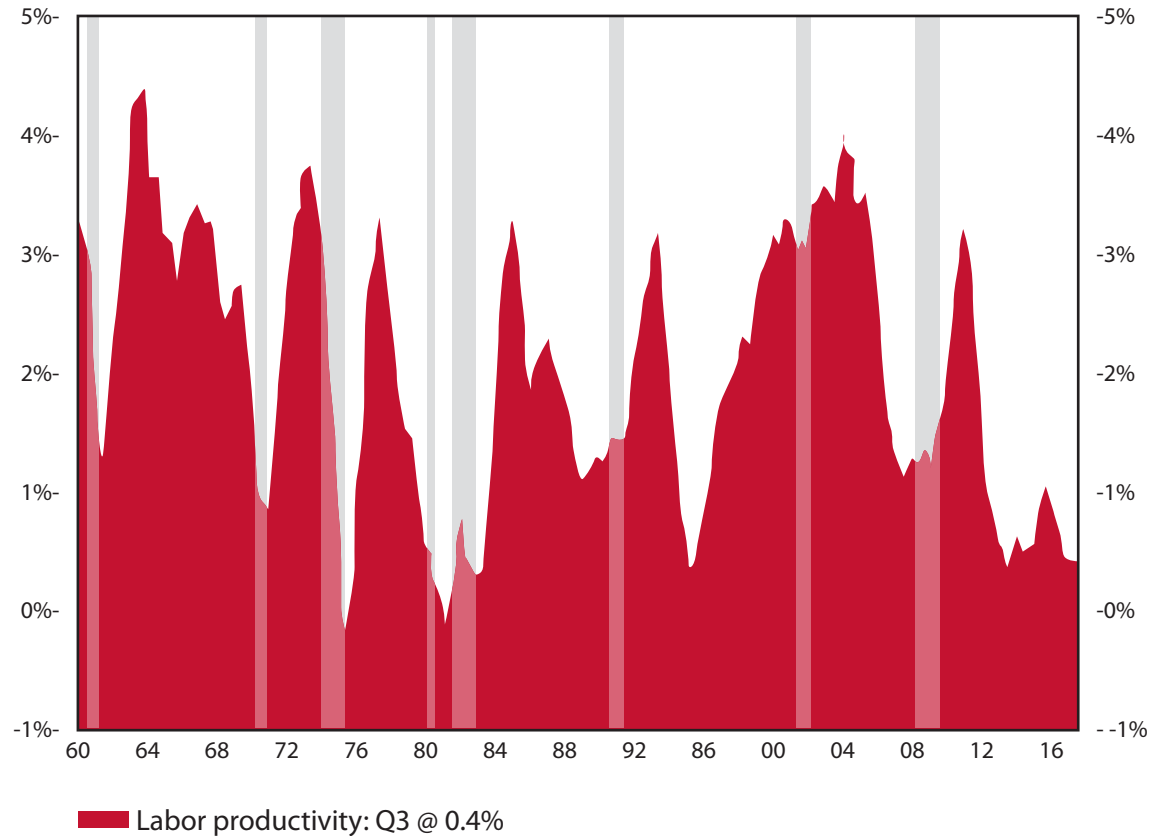


Source: U.S. Departments of Commerce & Labor and Wells Fargo Securities

## Sluggish productivity growth limits economic potential

### Nonfarm productivity

Two-year moving average, year-over-year percent change

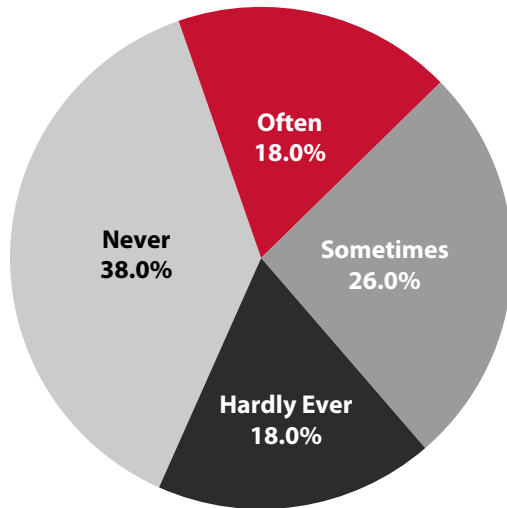


Source: U.S. Department of Labor and Wells Fargo Securities

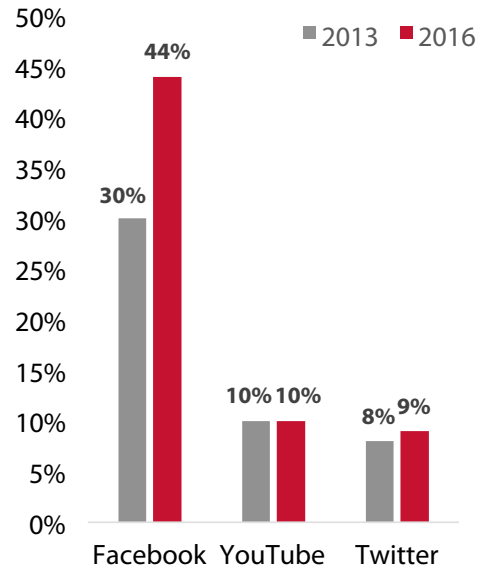
## Six in 10 Americans got news from social media in 2016

### News use across social media platforms

How often US adults get news on a social networking site, 2016



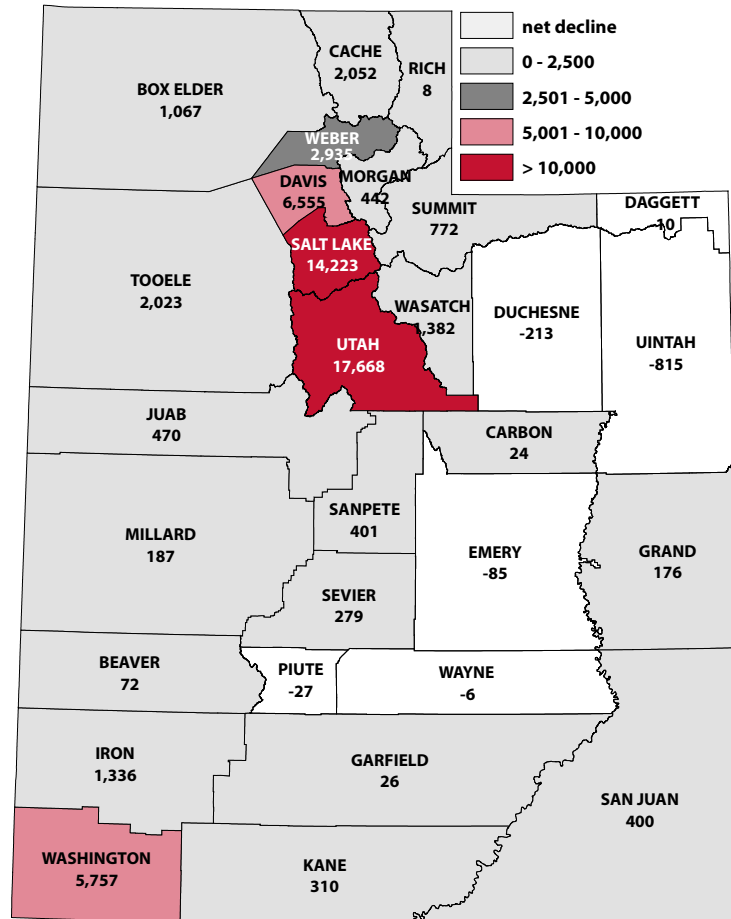
Portion of US adults who get news on popular social networking sites



Source: Pew Research Center

## Utah County leads in population growth

### Utah population growth, 2015-2016

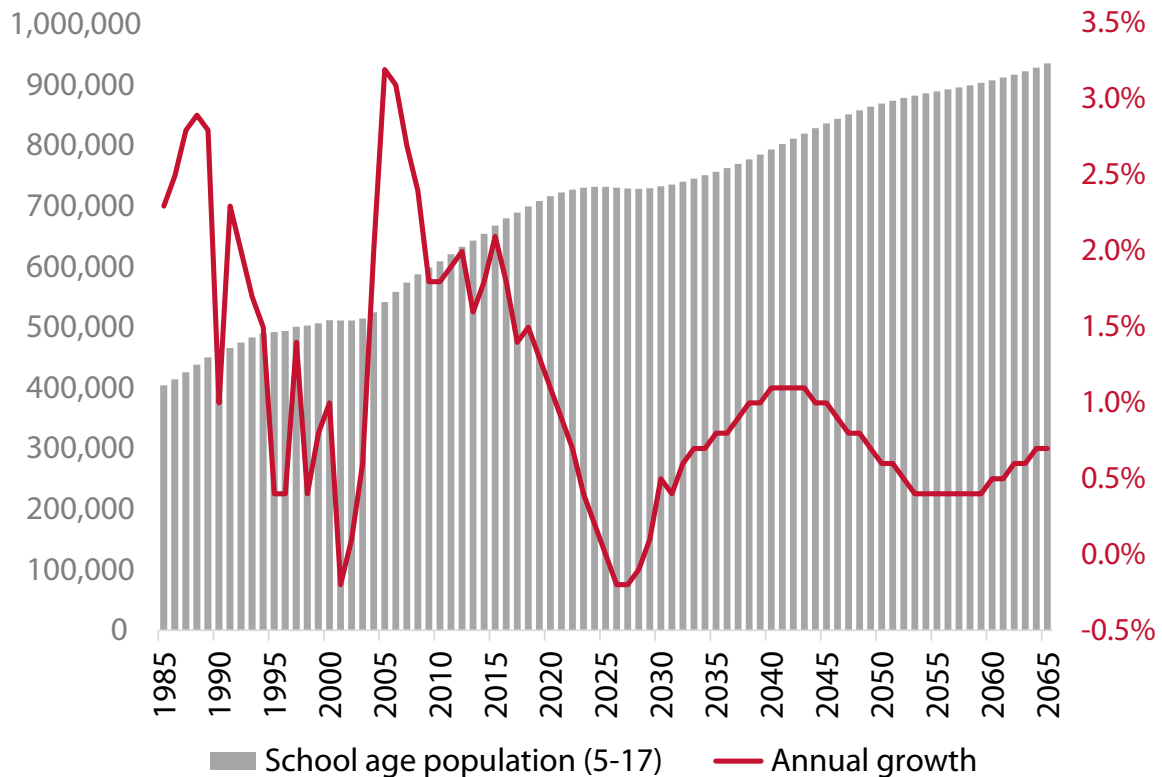


**Note:** Utah's population grew 57,401 people to 3,054,806 Utahns in 2016.

**Source:** Utah Population Committee

## *Growth in Utah's school-age population expected to slow over the next decade*

### Utah population age 5 to 17



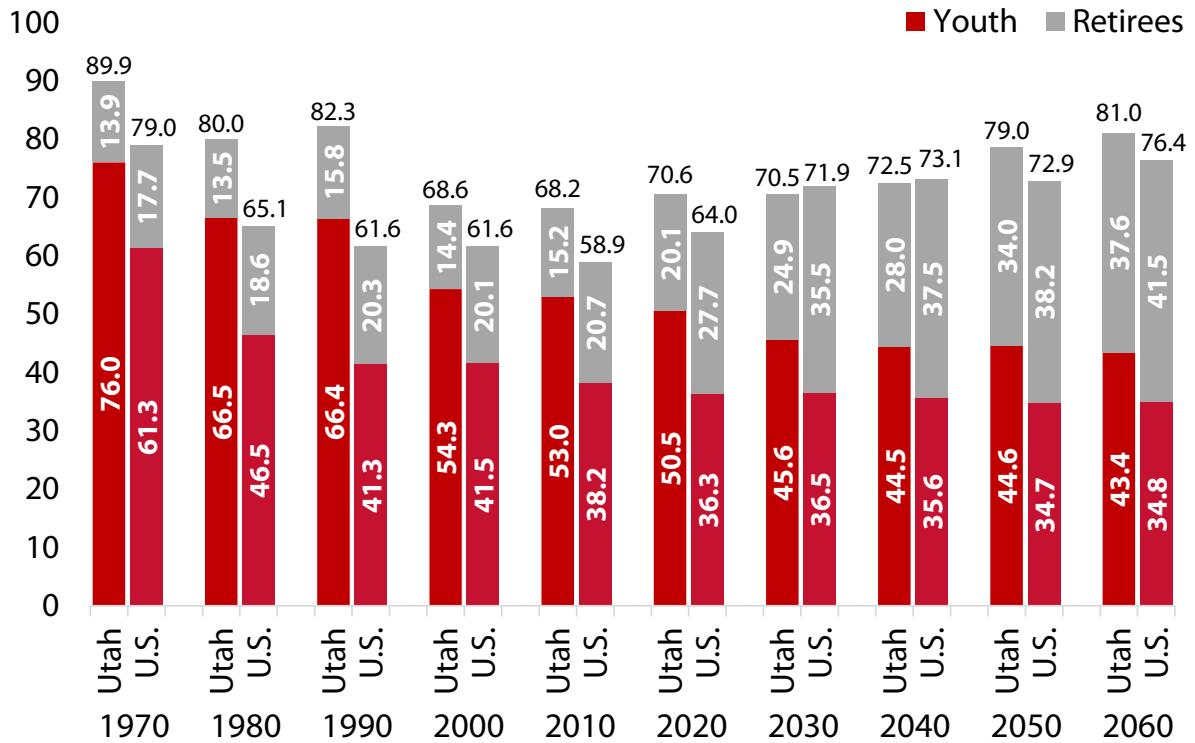
**Note:** Data prior to 2016 are estimates; data for 2016 and beyond are projections.

**Source:** Kem C. Gardner Policy Institute



## Aging baby boomers driving projected dependency ratio increase

### Dependency ratios in Utah and the United States

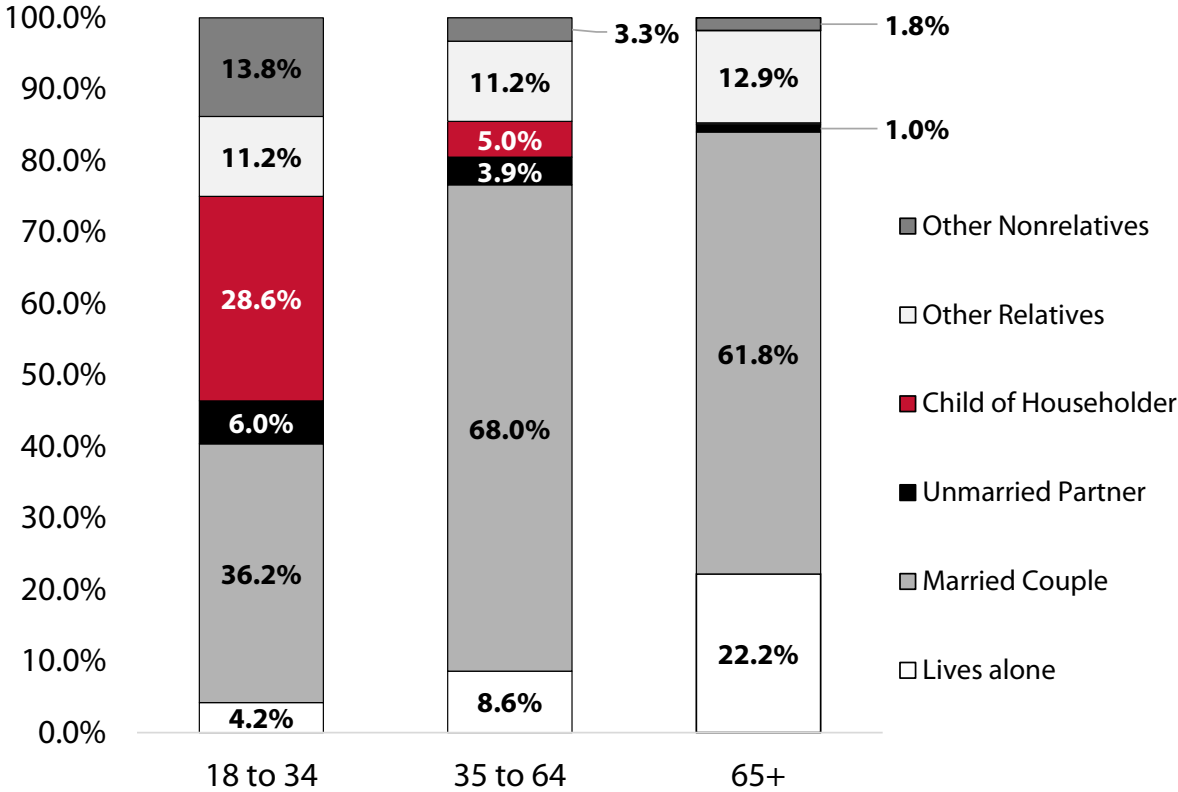


**Notes:** Dependency ratios are computed as the number of nonworking age persons per 100 working age (18-64 year old) persons in the population. Youth are less than 18 years old and retirement age is 65 years and older. 2020 – 2060 are projections.

**Source:** Kem C. Gardner Policy Institute analysis of U.S. Census Bureau data and Kem C. Gardner Policy Institute

**Are too many 18 to 34 year olds living with their parents?**

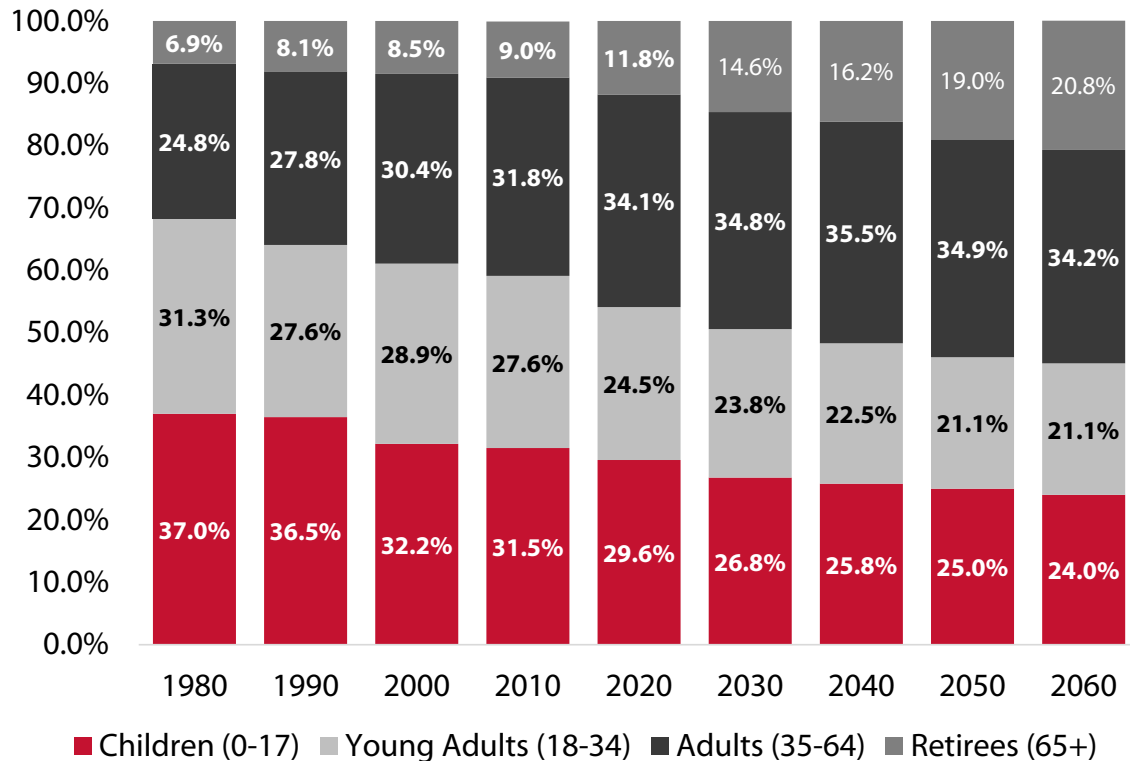
**Living arrangements of Utah adults in 2015**



Source: U.S. Census Bureau, 2015 American Community Survey 1-Year Estimates

## The graying of Utah

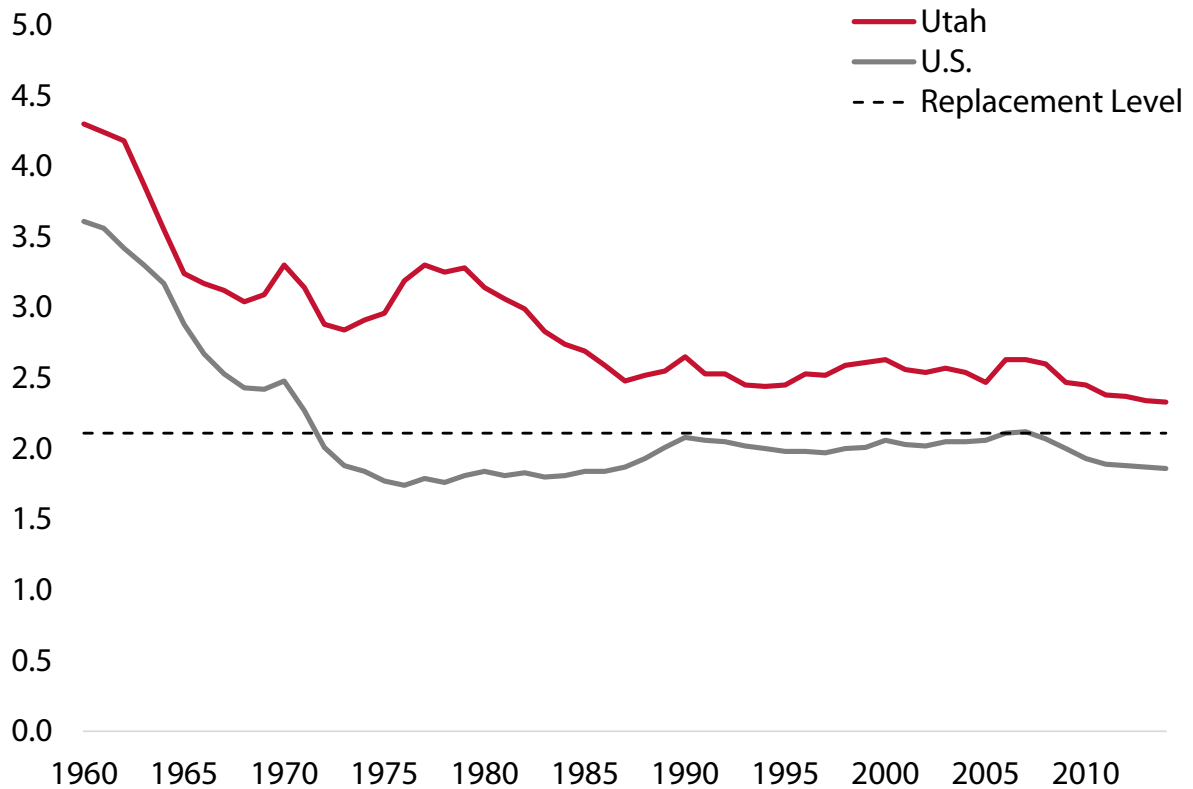
Selected age groups as a percent of Utah's total population



Sources: U.S. Census Bureau Decennial Census and Kem C. Gardner Policy Institute

## Utah's fertility rate is at a historic low

Total fertility rates for Utah and the United States



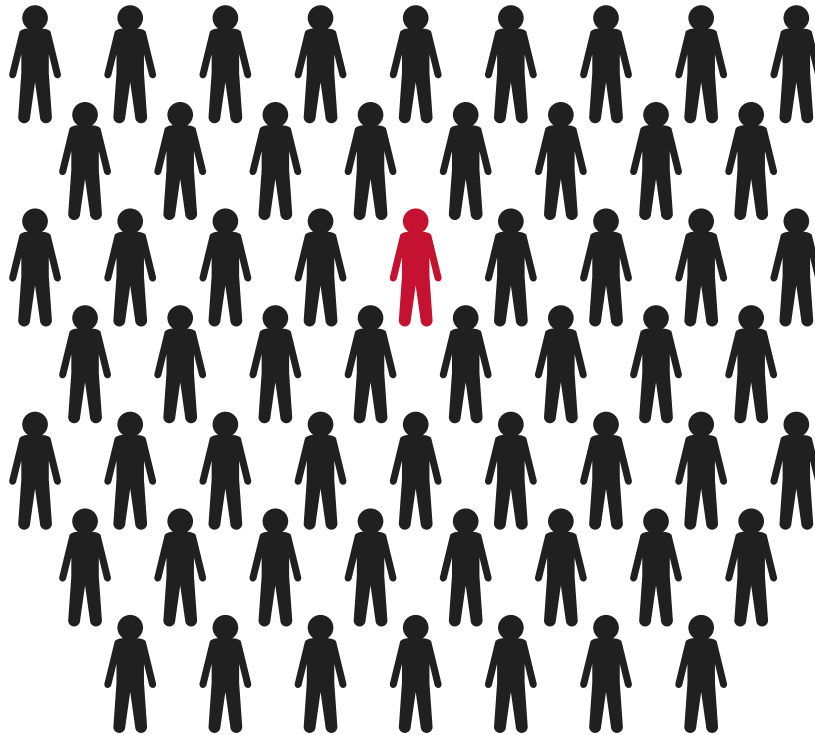
**Note:** The replacement level is the total fertility rate at which the current population is replaced.

**Source:** National Center for Health Statistics

## *Utah has more autism diagnoses than the national average*

### **8-year olds identified with Autism Spectrum Disorder**

1 in 58 in Utah, 1 in 68 in United States



**Notes:** Data are from the Autism and Developmental Disabilities Monitoring (ADDM) Network. The national average is the average of the 11 states participating in ADDM Network in 2012.

**Source:** Centers for Disease Control 2016 Community Report on Autism

## Multilingual Utah

### Primary languages spoken at home in Utah

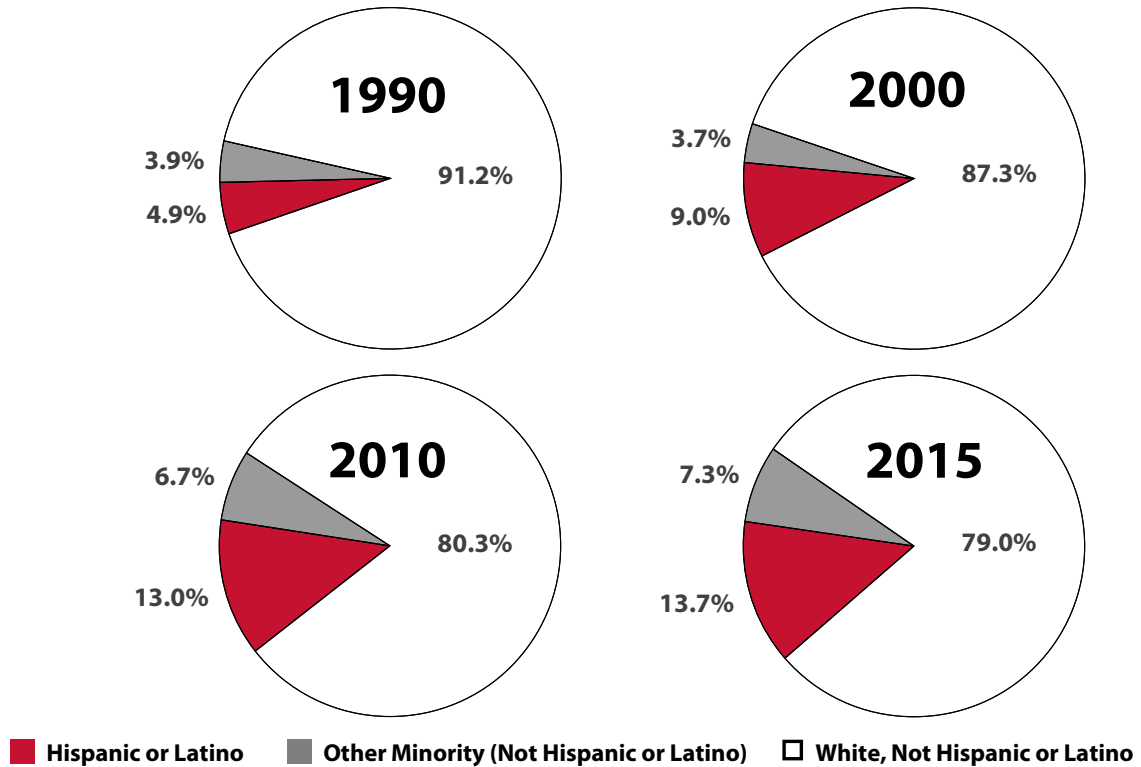


**Note:** Utahns speak 141 primary languages at home.

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

**Minorities' share of Utah population  
more than doubles in 25 years**

**Minorities' share of Utah population**

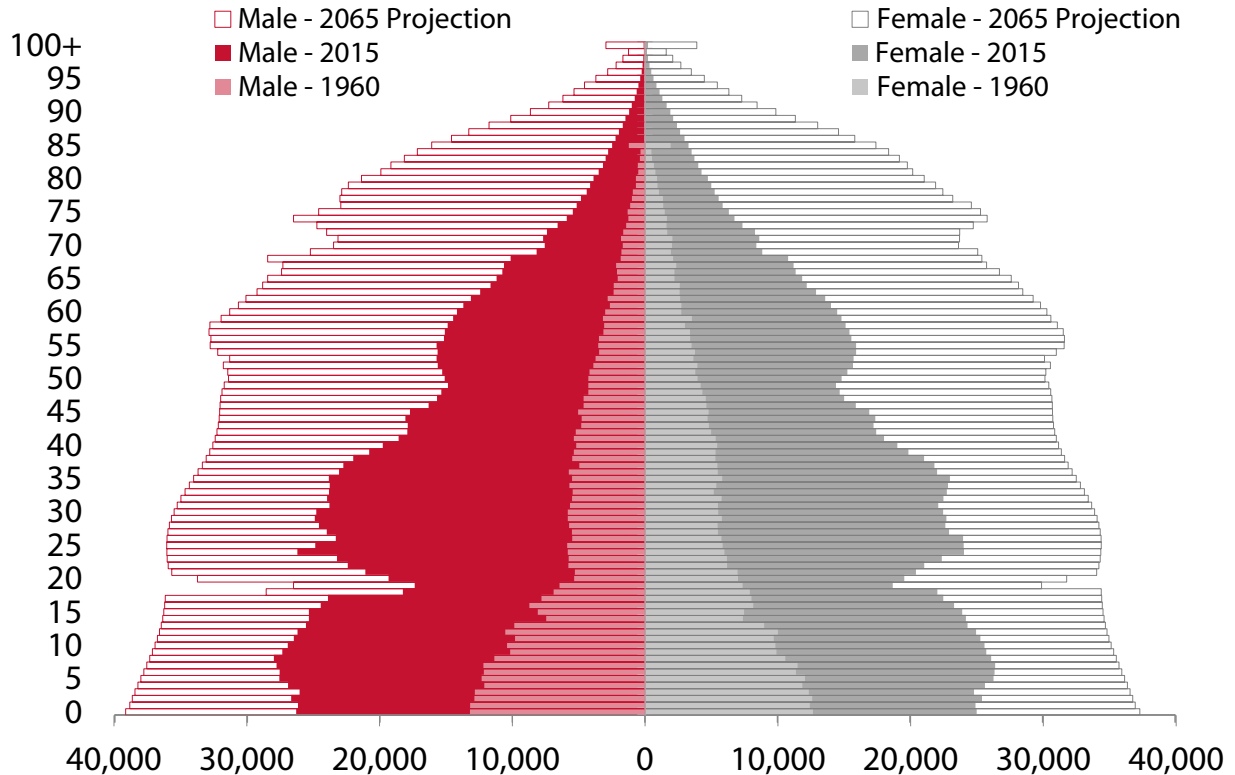


Sources: U.S. Census Bureau, Population Division and U.S. Census Bureau, Decennial Census

## The beehive—Utah's changing age structure

### Utah population pyramid

1960, 2015 and 2065



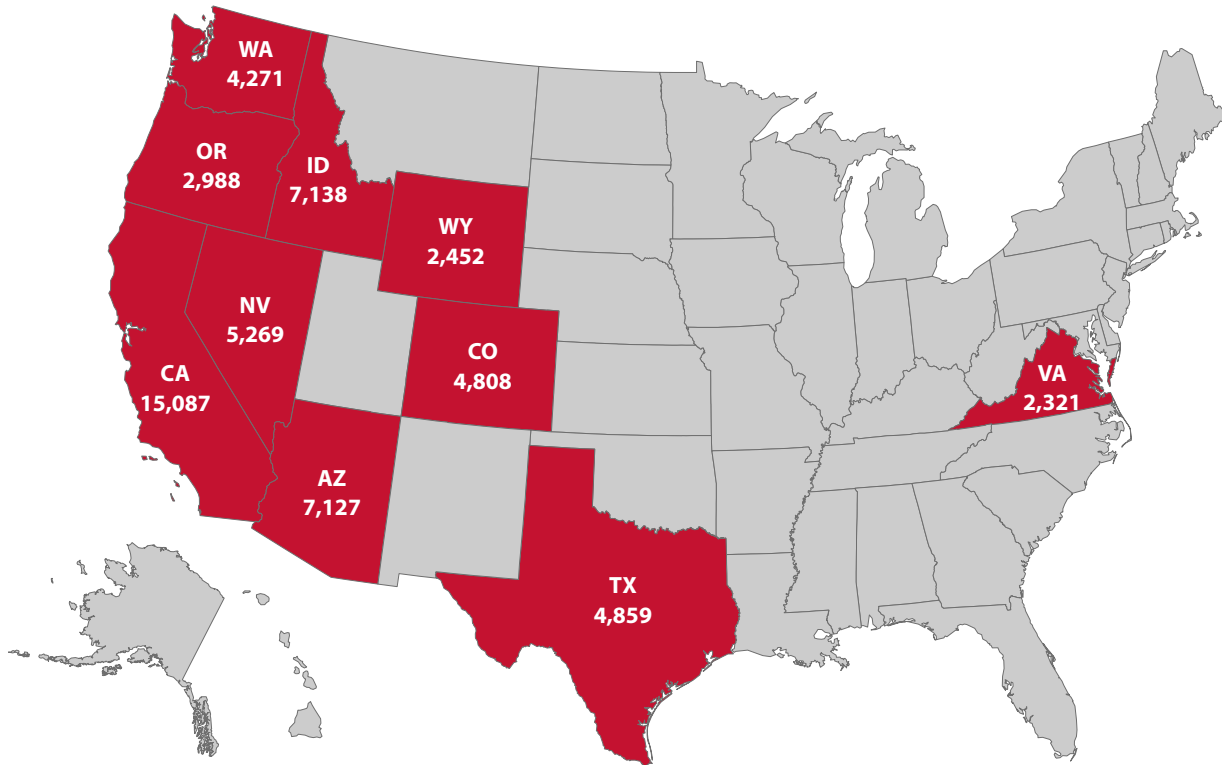
**Note:** The top age group for 1960 is 85+.

**Sources:** U.S. Census Bureau, Utah Population Committee, Kem C. Gardner Policy Institute



## Most of Utah's migrants come from the West

### Top 10 sources of migration to Utah



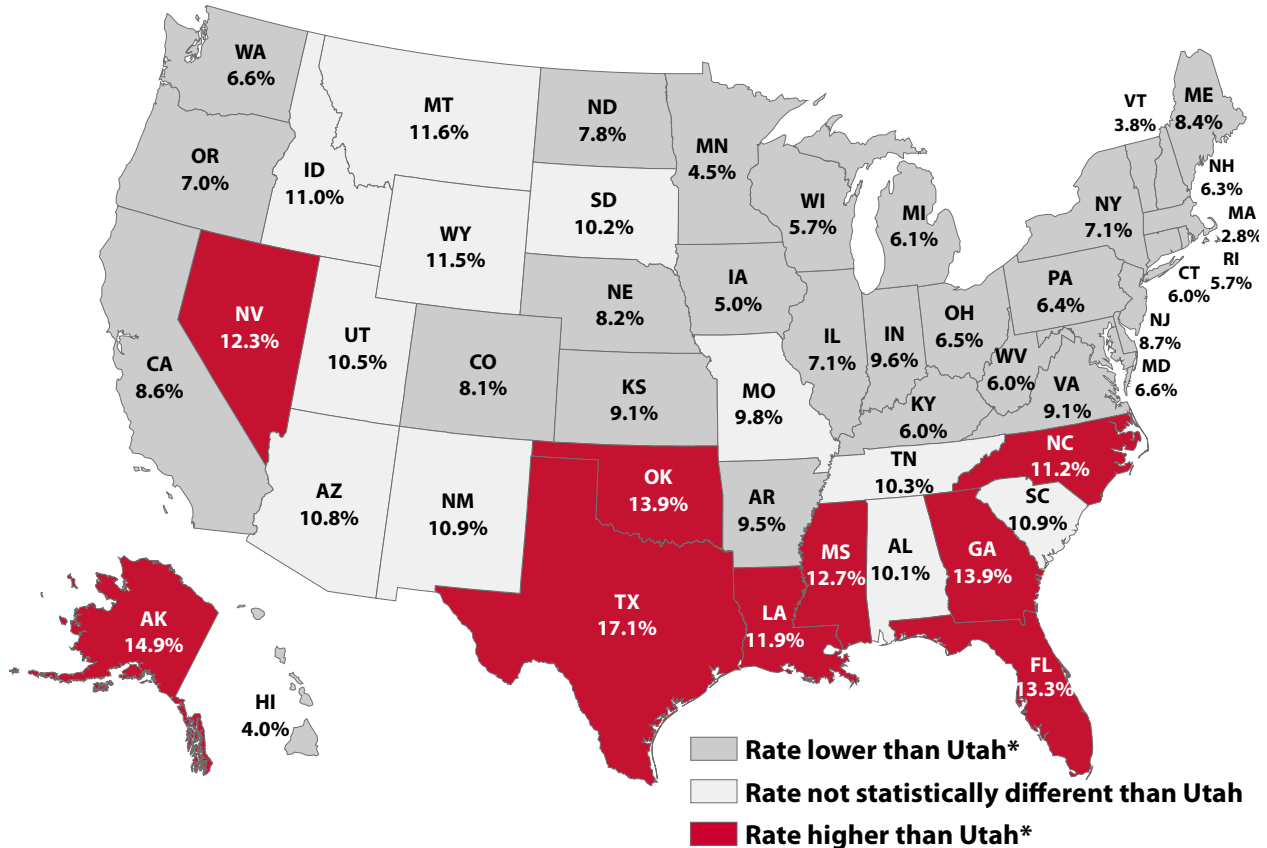
**Note:** Migrants from U.S. only. All estimates are subject to sampling error.

**Source:** U.S. Census Bureau, 2010-2014 American Community Survey (ACS)

***Nine states have a higher uninsured rate than Utah; thirty have lower rate***

**Percent of population without health insurance in 2015**

U.S. = 9.4%

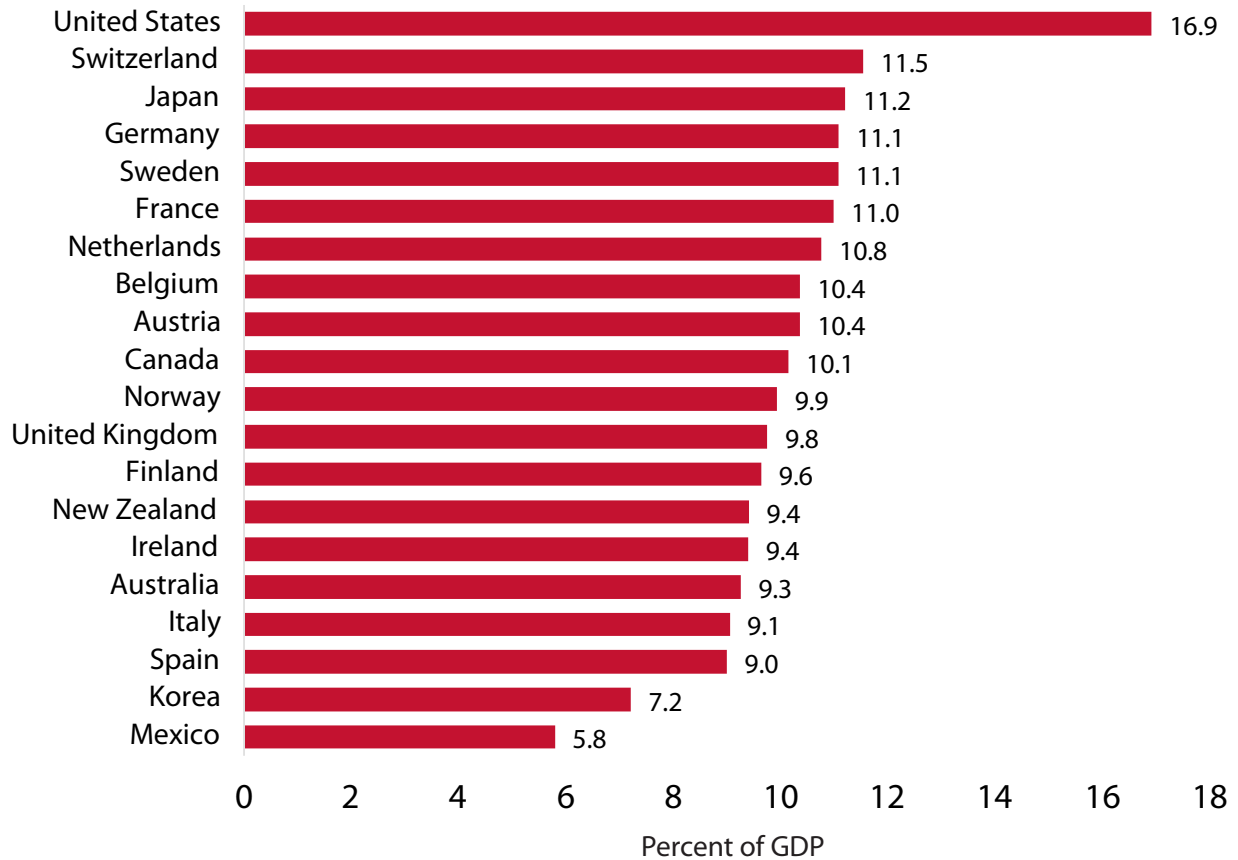


\*Difference is statistically different from zero with 90 percent confidence.  
**Sources:** U.S. Census Bureau American Community Survey, 2015 1-year estimates

## US health care costs impact global competitiveness

### Health care expenditures as a share of GDP: 2015

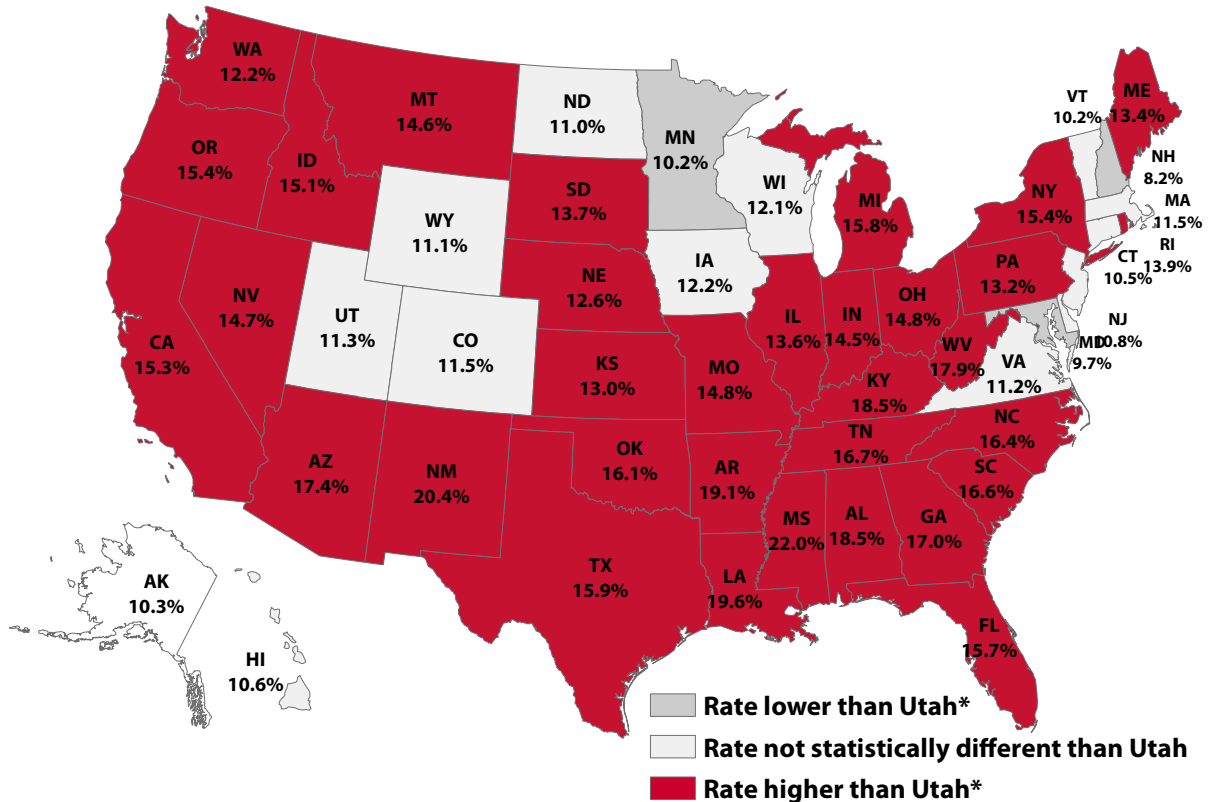
Select OECD Countries



**Source:** Organization for Economic Co-Operation and Development, OECD.stat

**Thirty-four states have a higher poverty rate than Utah; 3 have lower**

**Percent of population with income below poverty level, 2015**  
 U.S. = 14.7%

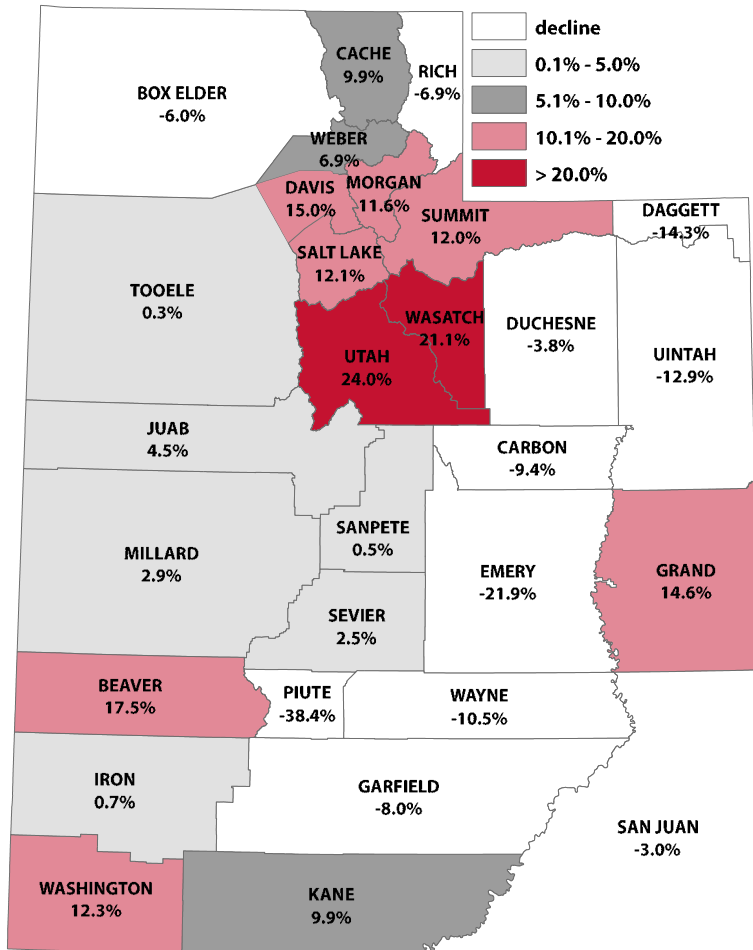


\*Difference is statistically different from zero with 90 percent confidence.

**Source:** U.S. Census Bureau American Community Survey, 2015 1-year estimates

## *Wasatch Front and Wasatch Back lead post recession job recovery*

**Employment change, Q1 2008 – Q1 2016**



Source: Utah Department of Workforce Services

## Utah's Largest Employers

### Employers with 4,000 or more average annual jobs in 2015

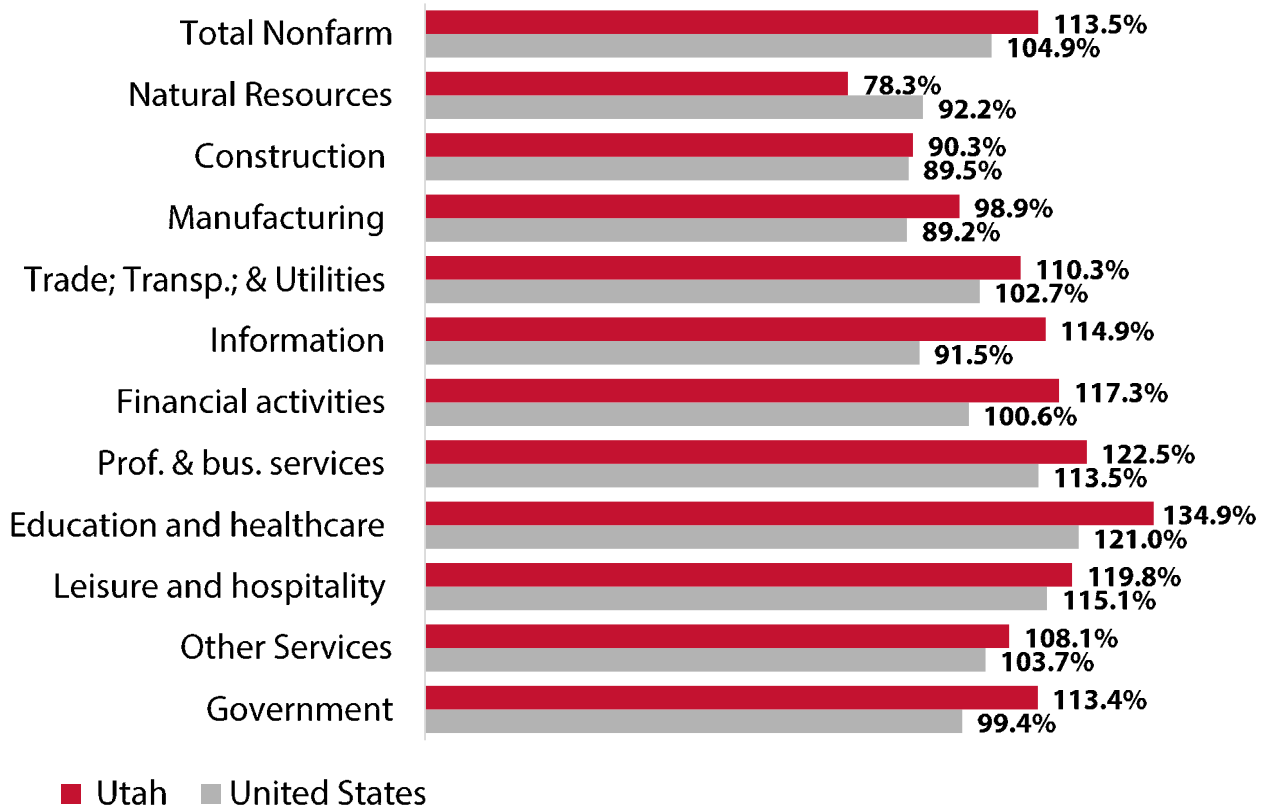
Company	Industry	Jobs
Intermountain Healthcare	Health Care	20,000 +
State of Utah	State Government	20,000 +
University of Utah (Including Hospital)	Higher Education	20,000 +
Brigham Young University	Higher Education	15,000-19,999
Wal-Mart Associates	Warehouse Clubs/Supercenters	15,000-19,999
Hill Air Force Base	Federal Government	10,000-14,999
Davis County School District	Public Education	7,000-9,999
Granite School District	Public Education	7,000-9,999
Utah State University	Higher Education	7,000-9,999
Smith's Food and Drug Centers	Grocery Stores	7,000-9,999
Alpine School District	Public Education	7,000-9,999
U.S. Department of Treasury	Federal Government	5,000-6,999
Jordan School District	Public Education	5,000-6,999
Salt Lake County	Local Government	5,000-6,999
Utah Valley University	Higher Education	5,000-6,999
U.S. Postal Service	Federal Government	4,000-4,999
Zions Bank Mangement Services	Banking	4,000-4,999
The Canyons School District	Public Education	4,000-4,999
The Home Depot	Home Centers	4,000-4,999

Source: Utah Department of Workforce Services

***Employment has surpassed 2007 peak  
in all but three sectors***

**Employment as a percent of 2007 peak**

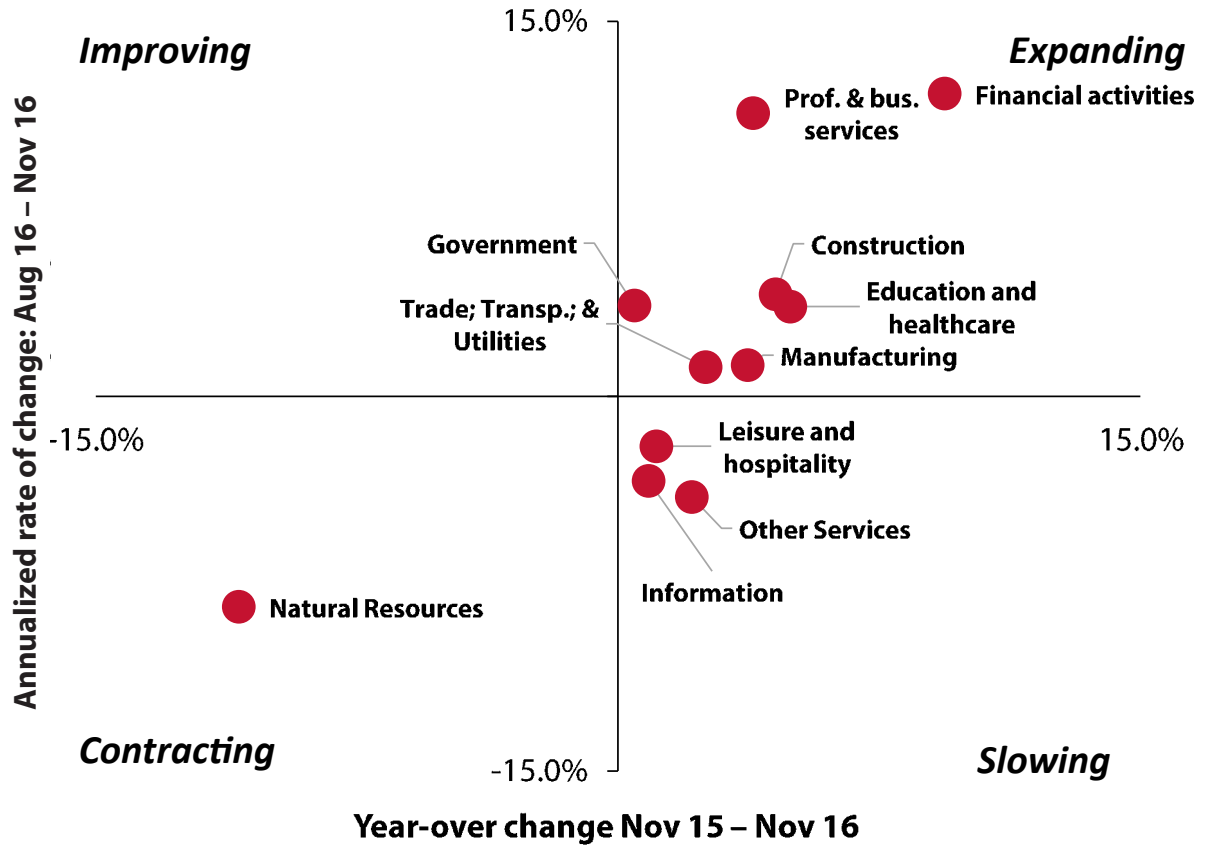
November, 2016



**Source:** Kem C. Gardner Policy Institute analysis of Bureau of Labor Statistics data

## Financial activities a particularly bright spot in Utah

Utah employment by industry



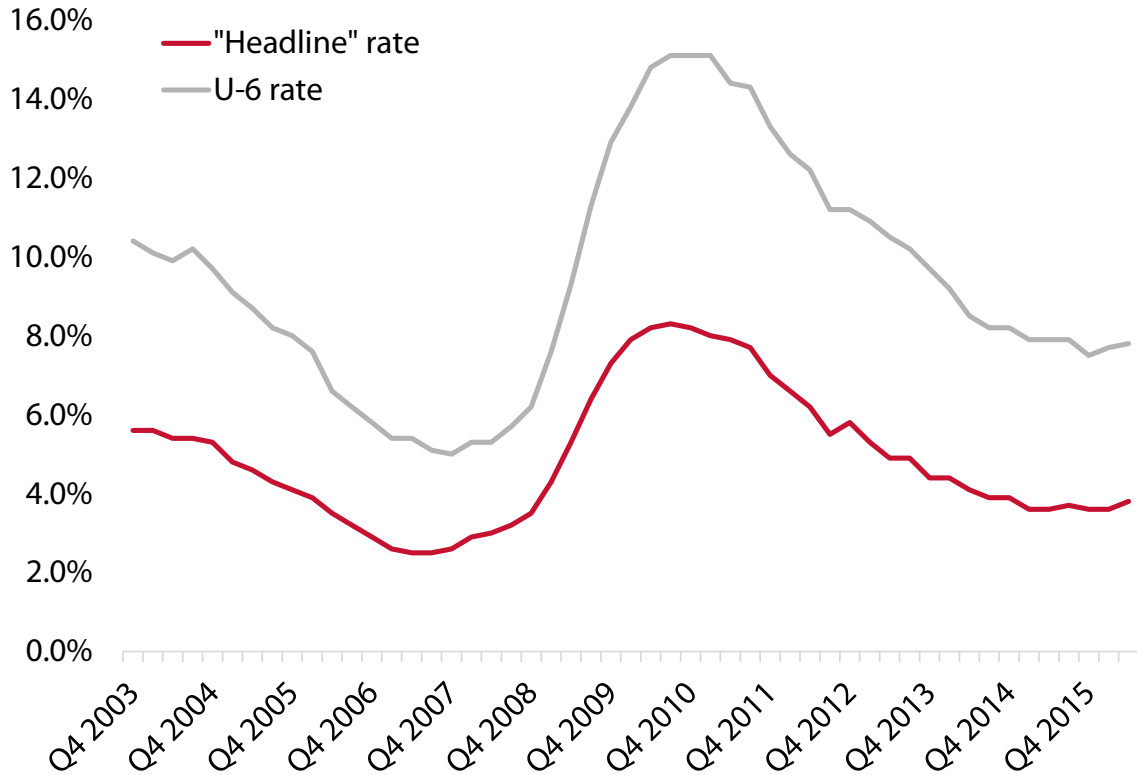
**Source:** Kem C. Gardner Policy Institute analysis of Bureau of Labor Statistics data



## Has unemployment bottomed out in Utah?

### Utah Headline and U-6 unemployment rates

U-6 rate includes marginally attached and part-time for economic reasons

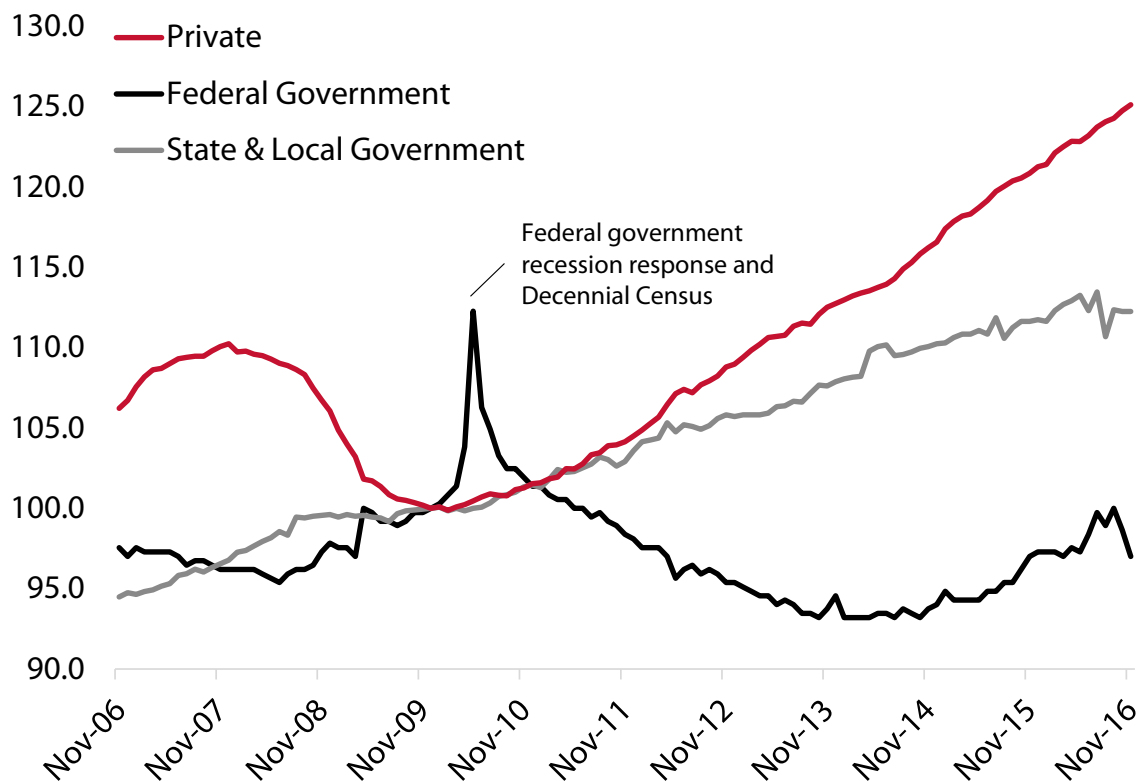


Source: Bureau of Labor Statistics

## Plateau in public sector job growth?

### Job index for Utah public and private sectors

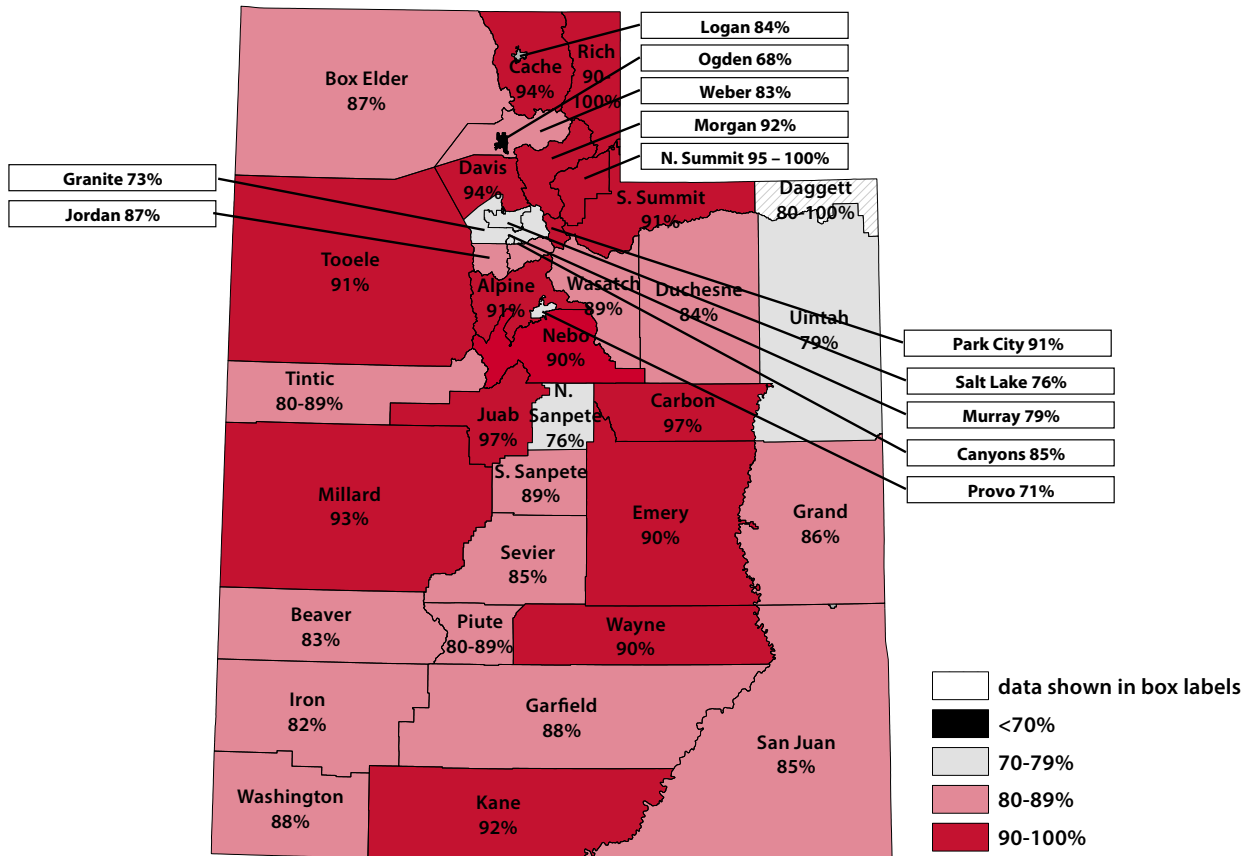
Seasonally adjusted, 100 = level at 2009 trough



Source: Kem C. Gardner Policy Institute analysis of Bureau of Labor Statistics

## *Utah school districts' graduation rates range from 68 percent to 98 percent*

### 4-year graduation rates by school district, 2016



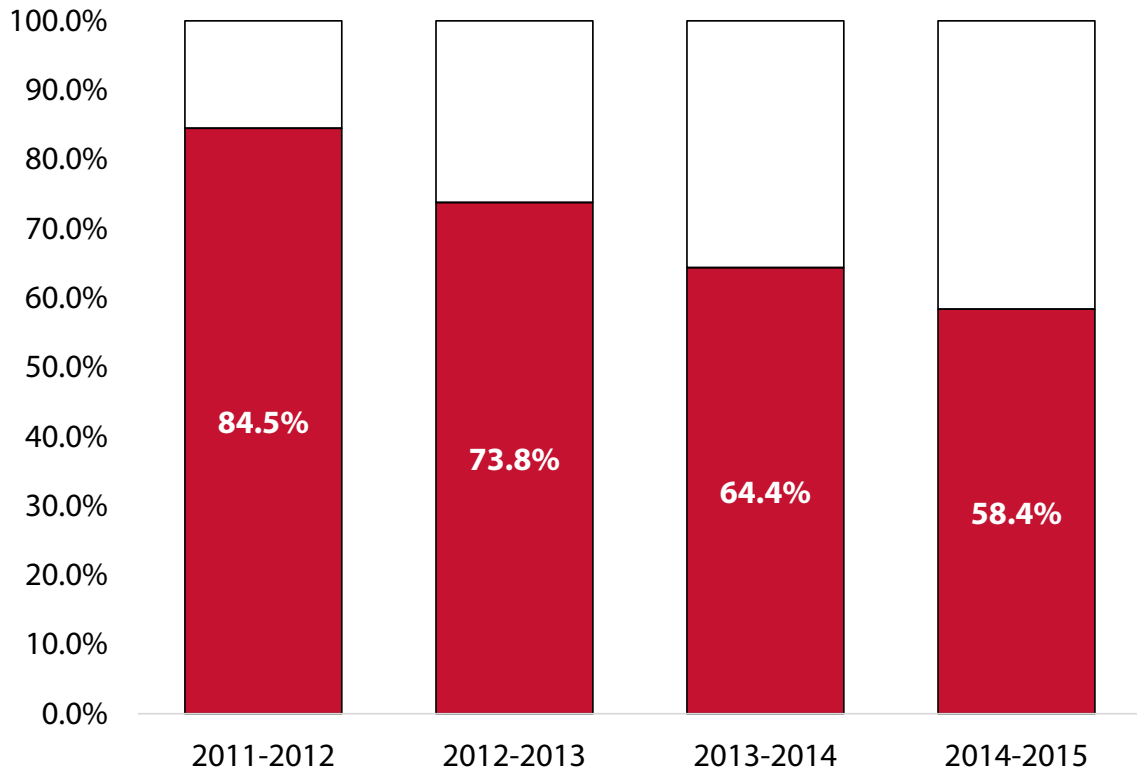
**Notes:** Statewide rate was 85% in 2016. Percentages for small groups of less than 40 students are obscured by showing the range in which the percentage falls.

**Source:** Utah State Office of Education

***Public schools lose over one-third of new teachers after four years***

**Retention of new Utah teachers**

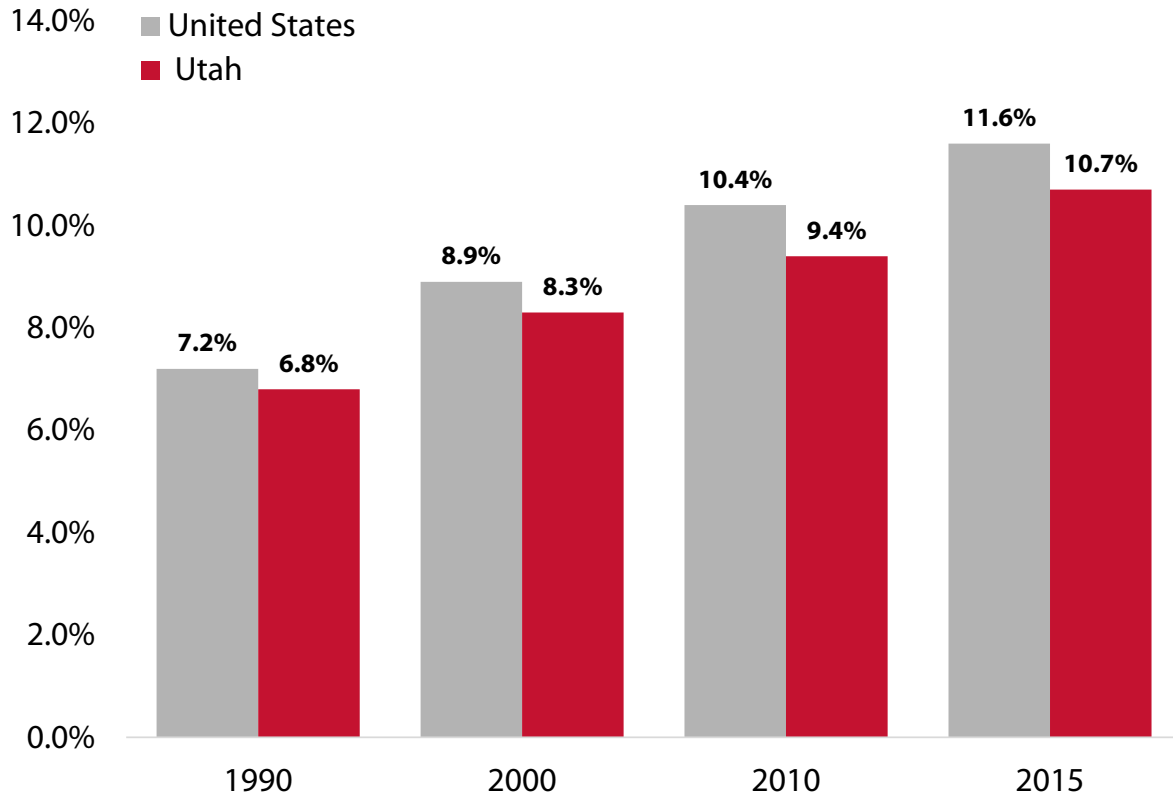
2010-2011 Cohort



**Source:** Utah State Board of Education

## *More than one in ten Utahns has a graduate degree*

Percent of population 25 years and over with a graduate or professional degree

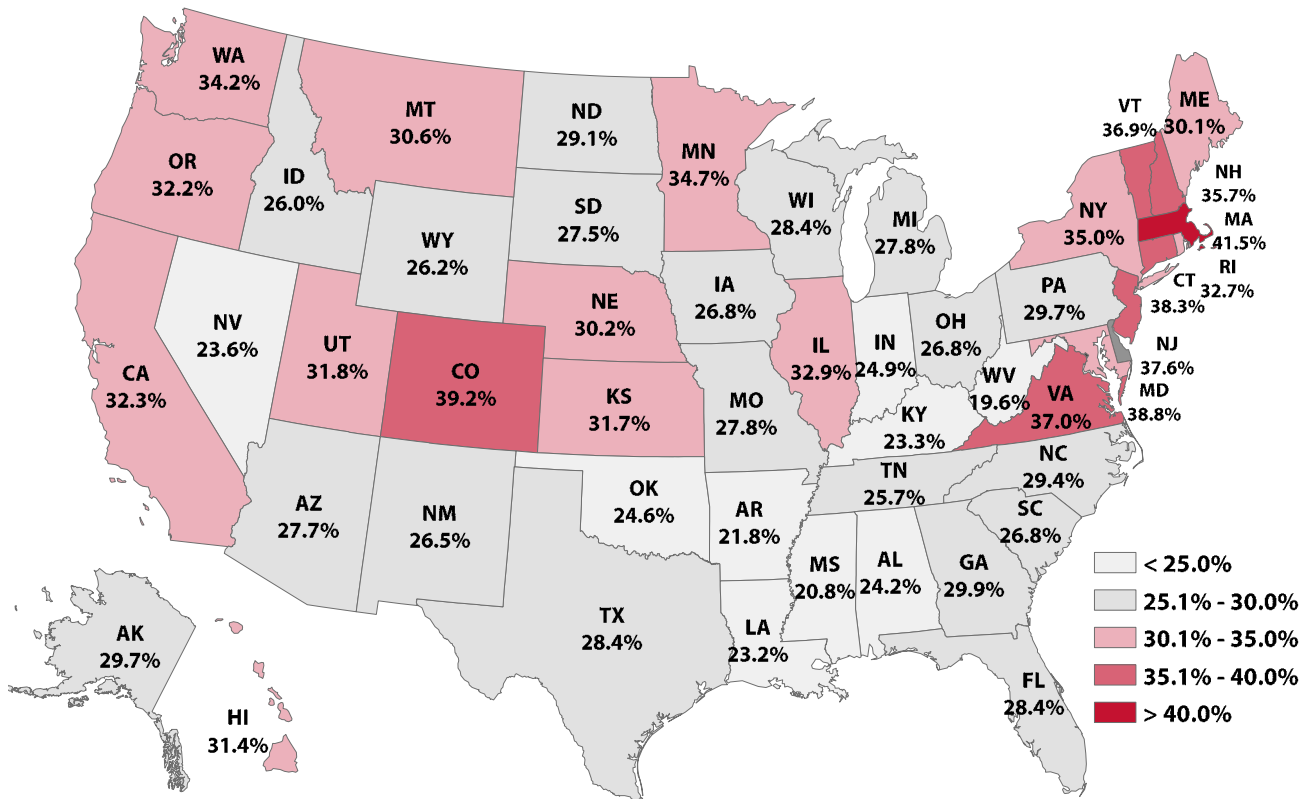


**Source:** U.S. Census Bureau American Community Survey and Decennial Census

## Utah educational attainment ranks 14th among states

### Educational attainment for persons 25 years and over, 2015

Bachelor's degrees or higher, U.S. = 30.6%

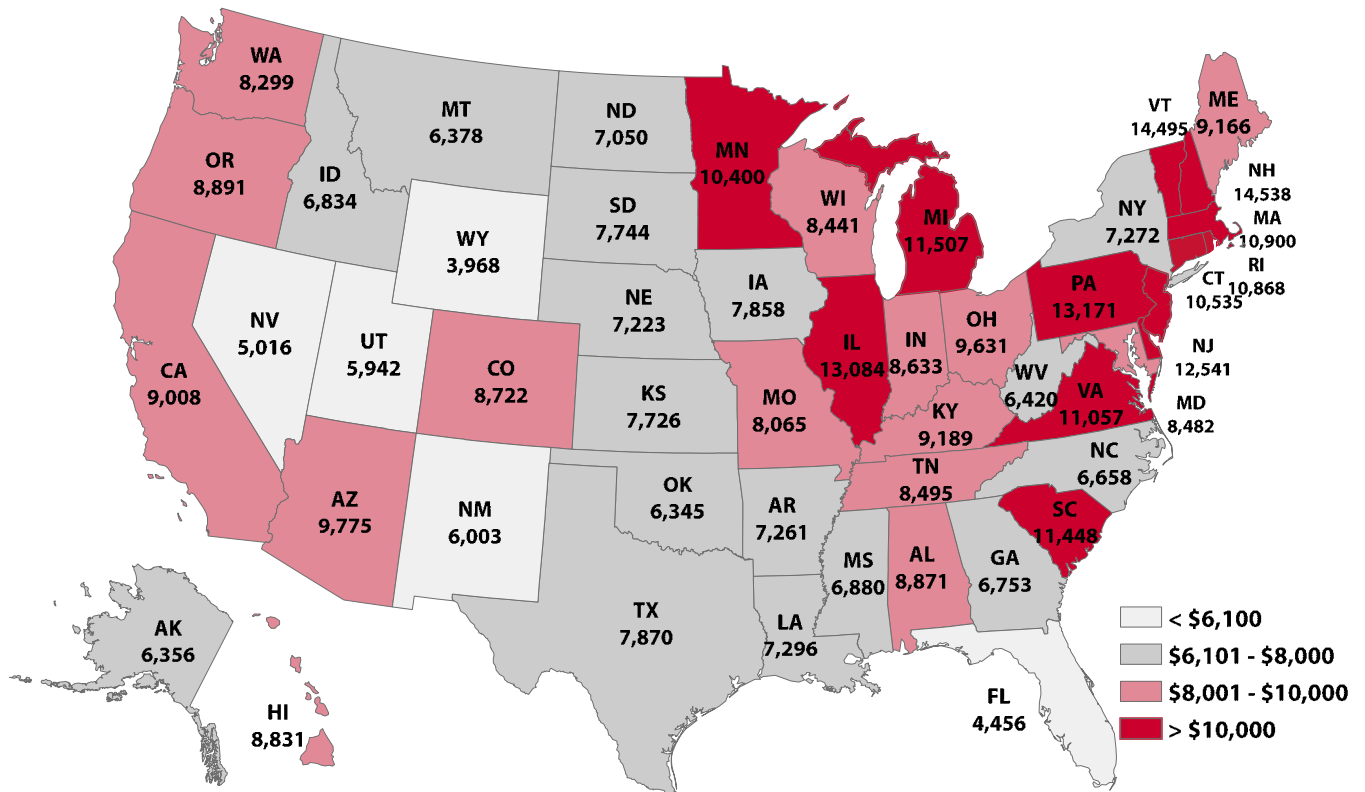


Sources: U.S. Census Bureau American Community Survey, 2015 1-year estimates

## Utah tuition and fees rank 4th lowest among states

### Average undergraduate tuition and fees

U.S. = \$8,543



Tuition and required fees at public 4-year institutions

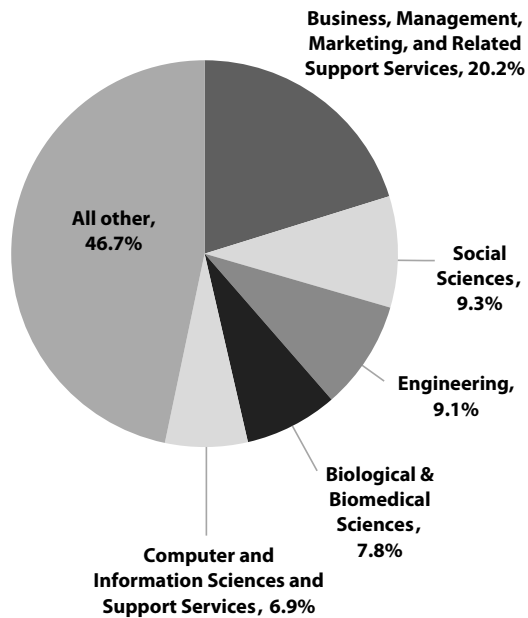
**Sources** U.S. Department of Education, National Center for Education Statistics, Integrated Postsecondary Education Data System (IPEDS)

**Despite some overlap, popular majors differ significantly by gender**

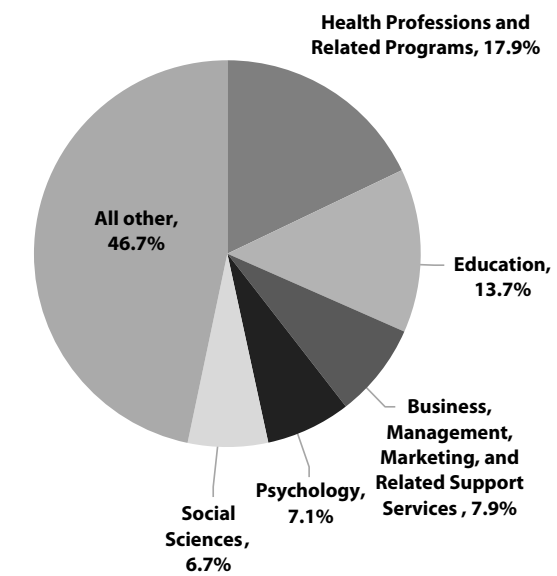
**Top five undergraduate degrees for Utah men and women**

Bachelor's degrees completed in 2015

**Utah Men**



**Utah Women**



**Note:** Degrees completed at USHE institutions, BYU, and Westminster

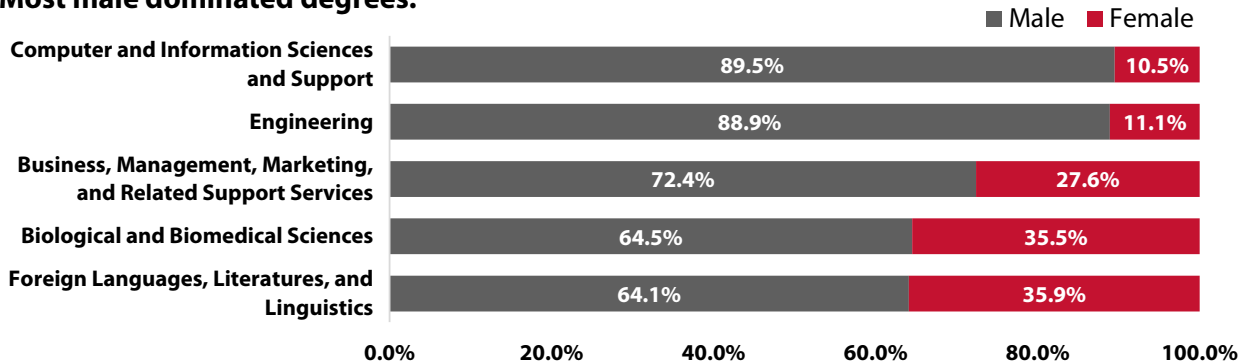
**Source:** Integrated Postsecondary Education Data System (IPEDS), 2014-2015 Provisional Release of Degree Completions



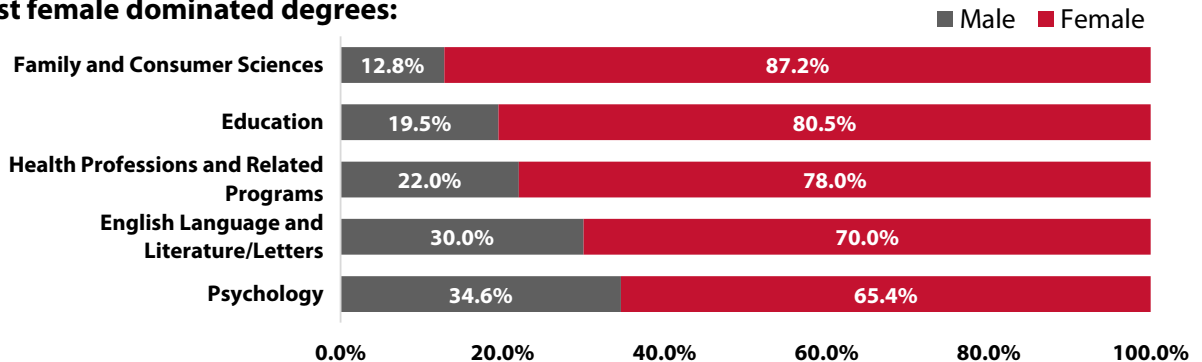
## *Many STEM majors dominated by men in Utah*

### Top male and female dominated degrees in Utah

#### Most male dominated degrees:



#### Most female dominated degrees:

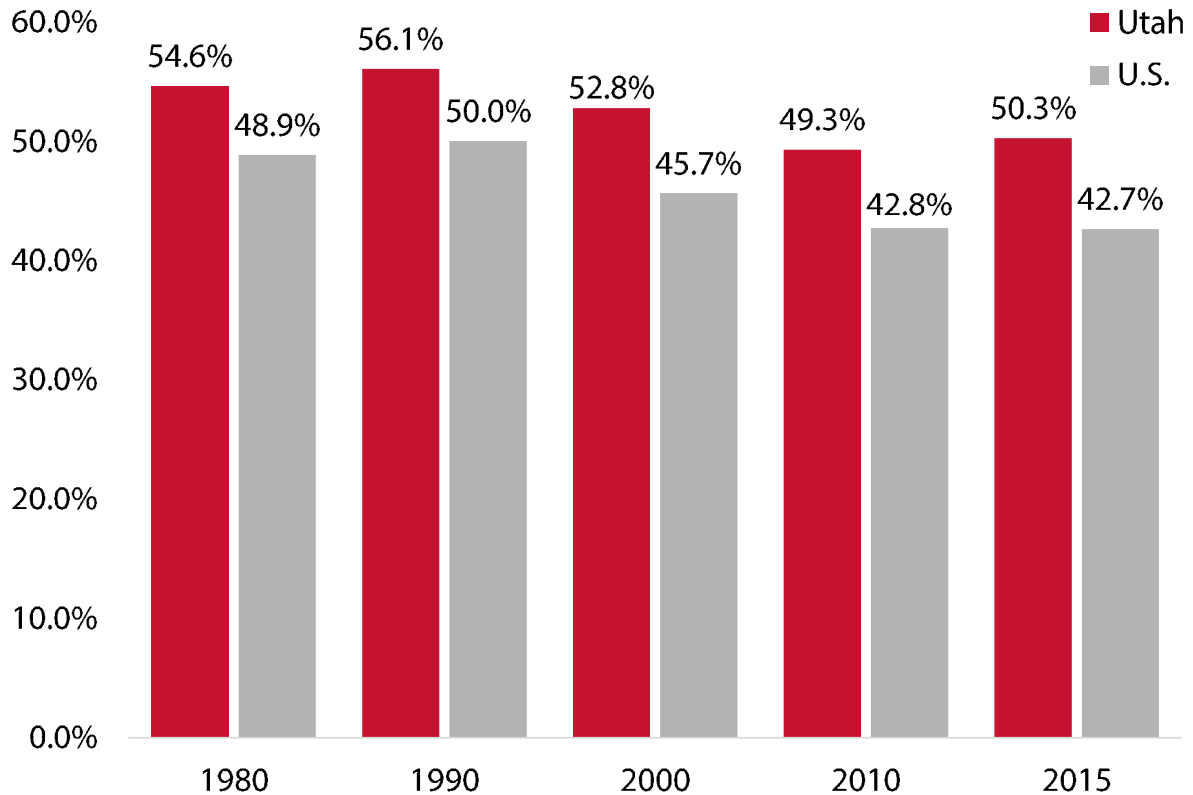


**Note:** Bachelors degrees completed at USHE institutions, BYU, and Westminster in 2015

**Source:** Integrated Postsecondary Education Data System (IPEDS), 2014-2015 Provisional Release of Degree Completions

## Utah's middle class has shrunk since the 1980s

### Share of households in the middle class



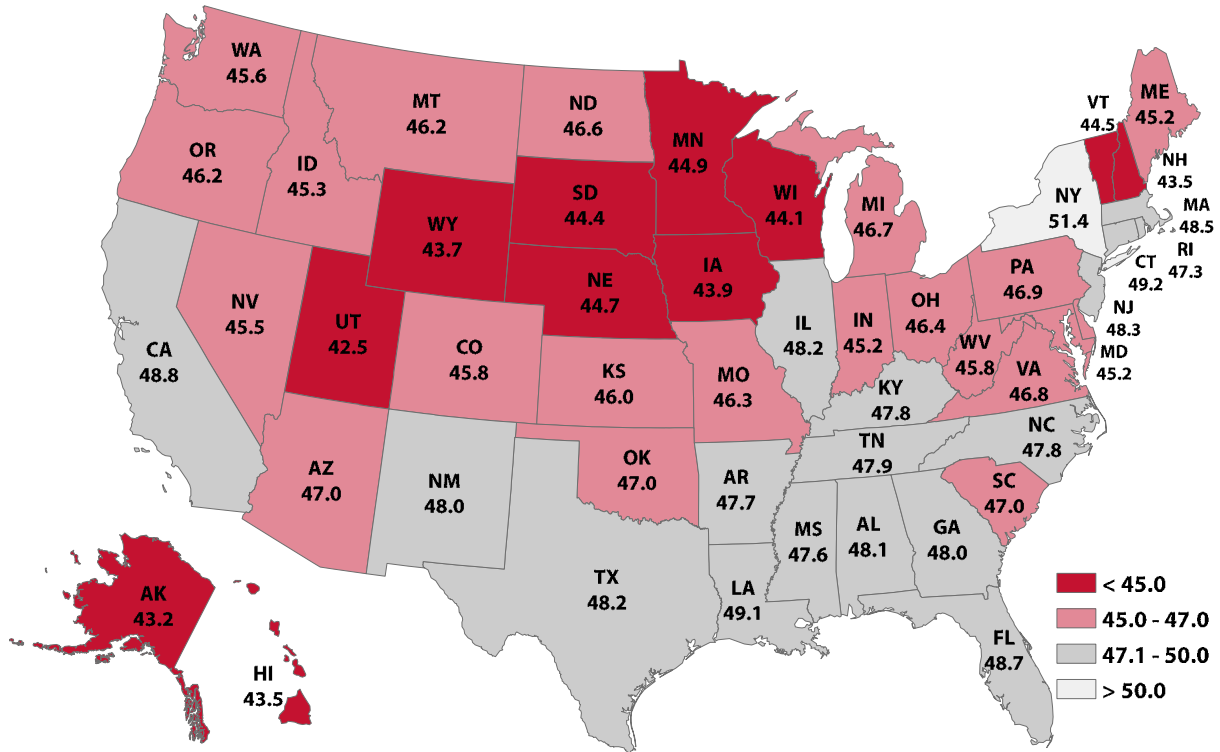
**Note:** Middle class households are defined as those with income from two-thirds to double U.S. median.

**Source:** Kem C. Gardner Policy Institute analysis of U.S. Census Bureau Decennial Census Long Form and American Community Survey data

## Utah's distribution of income is among the most equal in the US

### Gini Index of Income Equality

0 = complete equality; 1 = complete inequality

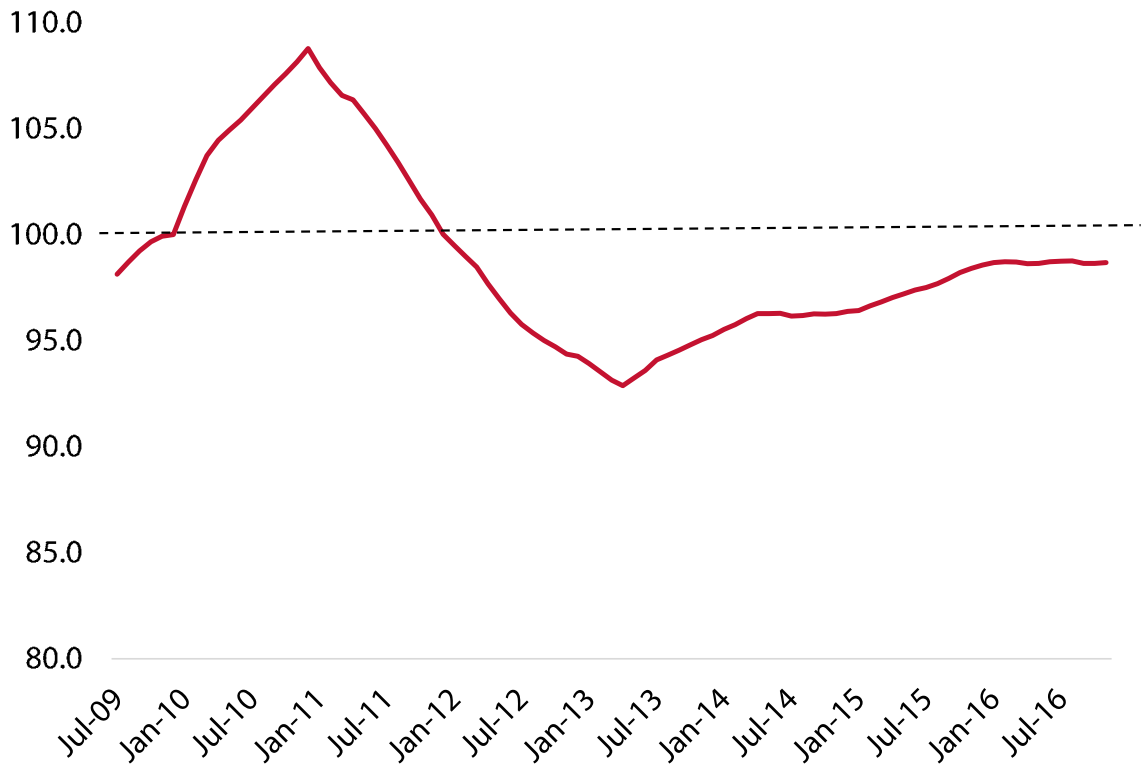


**Note:** Estimates for Alaska and Wyoming are not statistically different from Utah's estimate.

**Source:** U.S. Census Bureau, 2015 American Community Survey 1-Year Estimates

***Real average hourly wages have improved  
but remain below 2007 average***

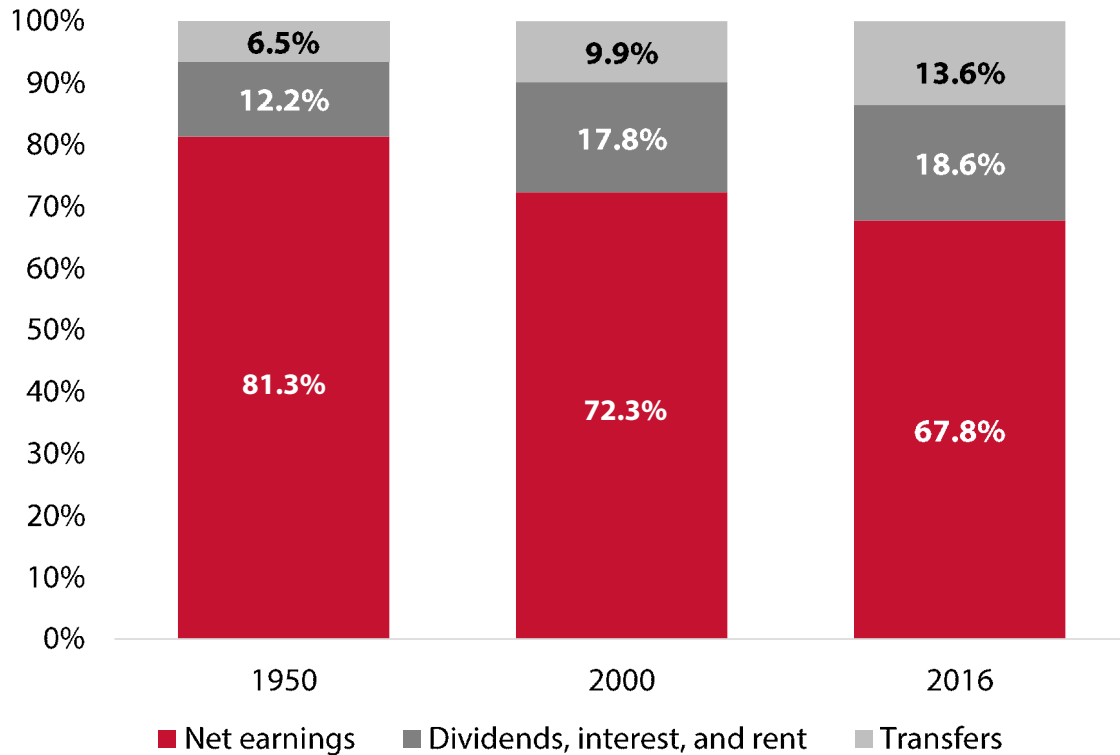
**Utah real private average hourly earnings index**  
Seasonally adjusted, 2007 average = 100



**Source:** Kem C. Gardner Policy Institute analysis of Bureau of Labor Statistics Current Employment Survey data

## Net earnings contribution to personal income shrinking

### Utah components of personal income



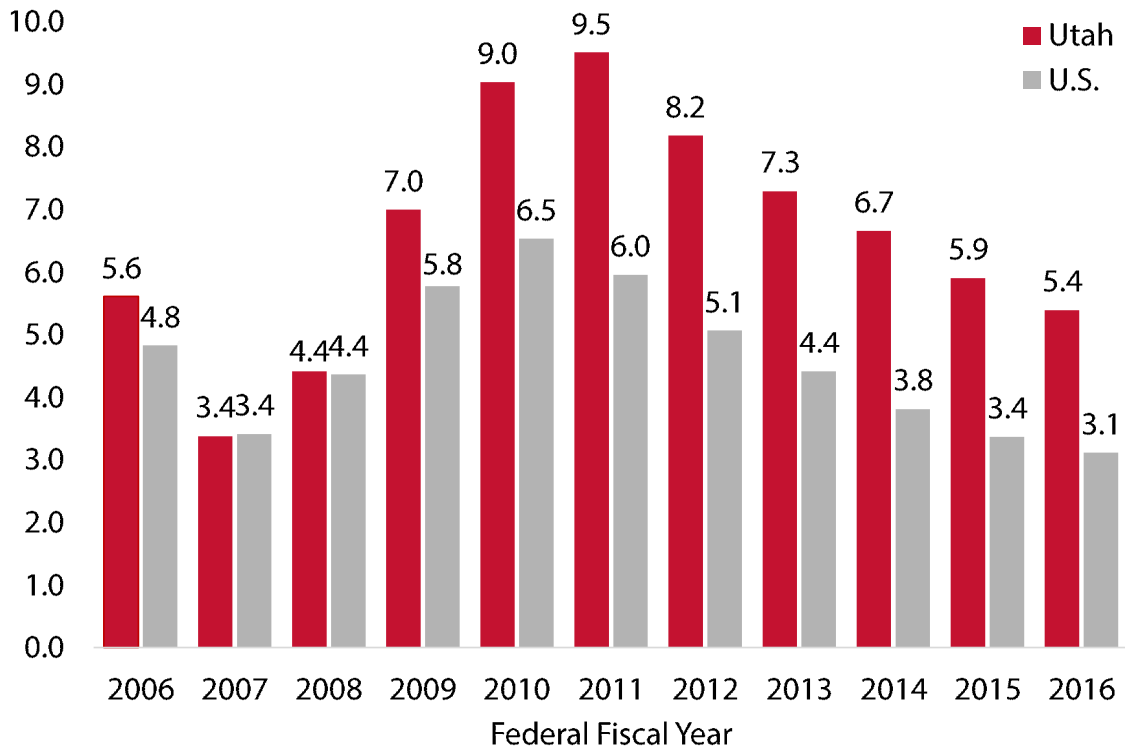
**Note:** Transfers are the sum of government social benefits and net current transfer receipts from business.

**Source:** Kem C. Gardner Policy Institute analysis of Bureau of Economic Analysis data

## Utah bankruptcy filing rate is declining in a strong economy, remains above US rate

### Consumer bankruptcy cases, Utah and US

Number of Chapter 7, 11, and 13 cases commenced per 1,000 adult population



**Note:** Federal fiscal years end September 30.

**Source:** Kem C. Gardner Policy Institute analysis of Administrative Office of the U.S. Courts and U.S. Census Bureau data

## *Real Salt Lake athletes play for the love of the game*

### **Real Salt Lake**

(Ten highest 2016 salaries)

<b>Player</b>	<b>Salary</b>
<b>Juan Manuel Martinez</b>	<b>\$1,060,000</b>
<b>Kyle Beckerman</b>	<b>\$675,000</b>
<b>Javier Morales</b>	<b>\$590,000</b>
<b>Nick Rimando</b>	<b>\$400,000</b>
<b>Chris Wingert</b>	<b>\$235,000</b>
<b>Stephen Sunday</b>	<b>\$220,000</b>
<b>Tony Beltran</b>	<b>\$210,000</b>
<b>Jamison Olave</b>	<b>\$215,000</b>
<b>Yura Movsisyan</b>	<b>\$200,000</b>
<b>Joao Plata</b>	<b>\$175,000</b>

### **Los Angeles Galaxy**

(Ten highest 2016 salaries)

<b>Player</b>	<b>Salary</b>
<b>Steven Gerrard</b>	<b>\$6,000,000</b>
<b>Robbie Keane</b>	<b>\$3,500,000</b>
<b>Giovani Dos Santos</b>	<b>\$2,500,000</b>
<b>Gyasi Zardes</b>	<b>\$472,500</b>
<b>Landon Donovan</b>	<b>\$456,000</b>
<b>Jelle Van Damme</b>	<b>\$425,000</b>
<b>Ashley Cole</b>	<b>\$300,000</b>
<b>Mike Magee</b>	<b>\$250,000</b>
<b>Robbie Rogers</b>	<b>\$220,000</b>
<b>A. J. DeLaGarxa</b>	<b>\$225,000</b>

**Source:** Spotrac

***Utah's per capita student loan debt has more than tripled since 2003, ranks low***

**Utah per capita debt by loan type**

Constant 2015 dollars

Loan Type	Q4 2003		Q4 2015		03 - 15 Change
	\$	Rank	\$	Rank	
Auto Loan	\$3,851	18	\$4,490	13	16.6%
Credit Card	\$3,336	43	\$2,640	29	-20.9%
Mortgage Loan	\$35,129	14	\$38,420	12	9.4%
Student Loan	\$1,005	45	\$3,870	46	285.1%
Other	\$3,358	-	\$2,730	-	-18.7%
Total	\$46,679	16	\$52,150	13	11.7%

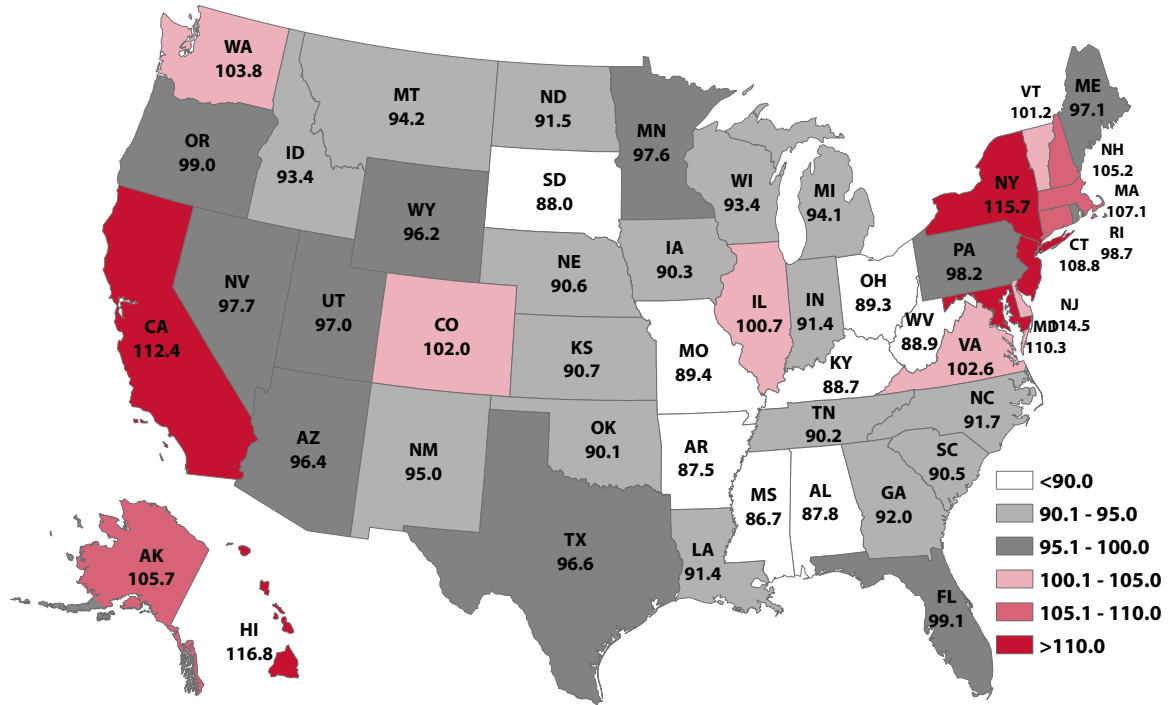
**Note:** Per capita figures are limited to individuals 18 years and over.

**Source:** Federal Reserve Bank of New York, State Level Household Debt Statistics 2003-2015



## *Utah goods and services are less expensive than in 23 other states*

### Regional Price Parities, 2014

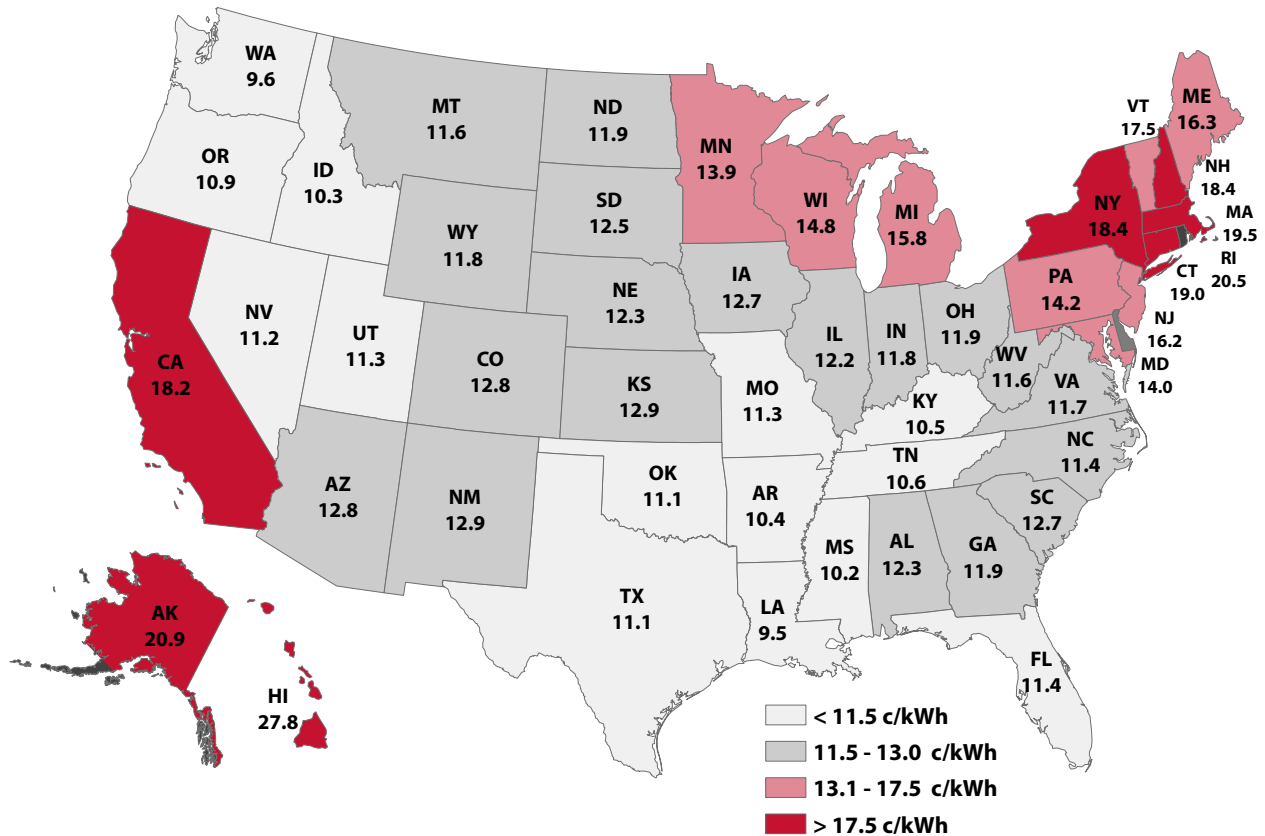


**Note:** Regional Price Parities measure the differences in price levels of goods and services across regions for a given year; they are expressed as a percentage of the overall national price level for each year.

**Source:** Bureau of Economic Analysis

## Utahns enjoy low-cost electricity

Average retail price of electricity to residential sector  
Cents/kWh, September 2016

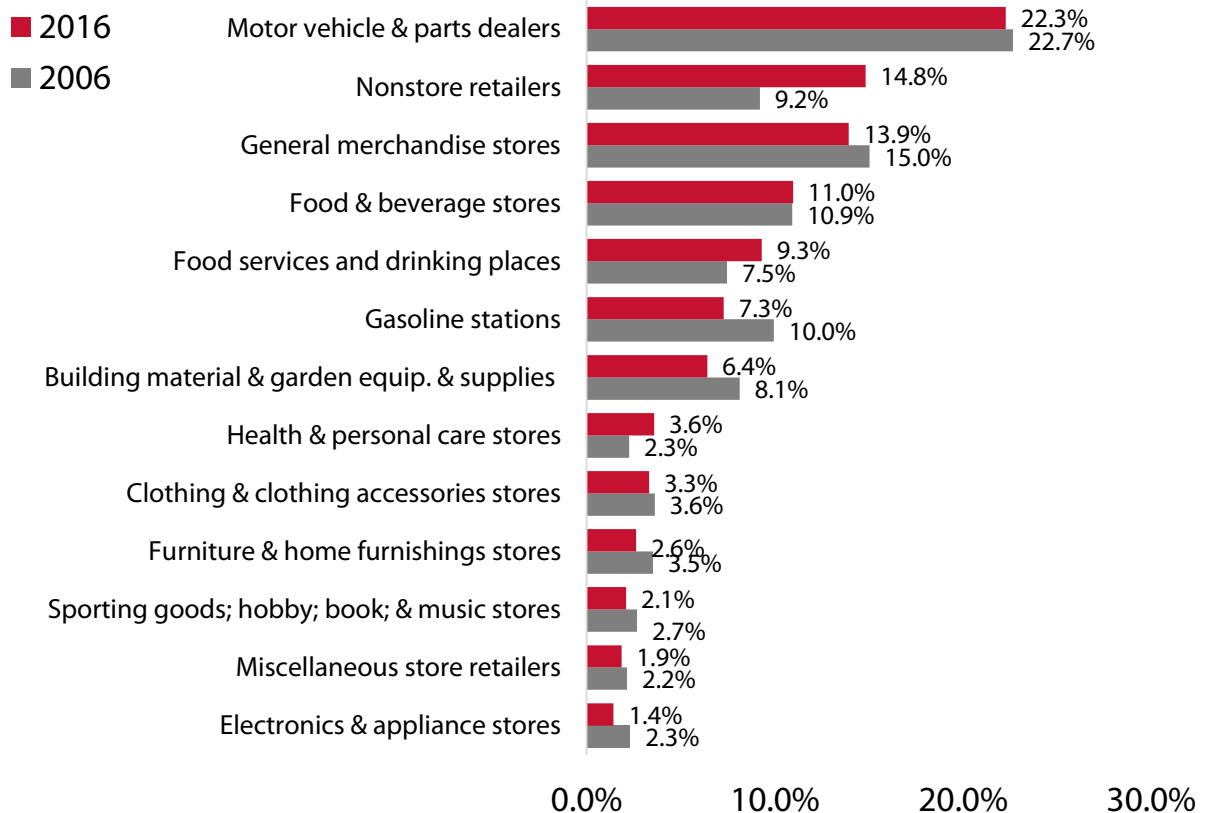


Source: U.S. Energy Information Administration

## Significant growth in nonstore retail activity

### Composition of Utah retail sales

2006 vs. 2016



**Note:** 2016 is estimated.

**Source:** Kem C. Gardner Policy Institute analysis of Moody's Analytics data

## *Most of the nation's largest e-retailers have nexus in Utah*

### Utah nexus for largest US e-retailers

E-Retailers with more than \$4 billion sales in 2015

E-Retailer	2015 Sales (\$ billions)	Utah Nexus
Amazon.com Inc.	\$92.5	No*
Apple Inc.	\$24.4	Yes
Dell Inc.	\$15.7	Yes
Walmart.com	\$13.7	Yes
Staples Inc.	\$10.7	Yes
Macy's Inc.	\$6.2	Yes
The Home Depot Inc.	\$4.7	Yes
Costco Wholesale Corp.	\$4.5	Yes
Office Depot Inc.	\$4.4	Yes
QVC Group	\$4.3	No
W.W. Grainger Inc.	\$4.1	Yes
Best Buy Co.	\$4.0	Yes

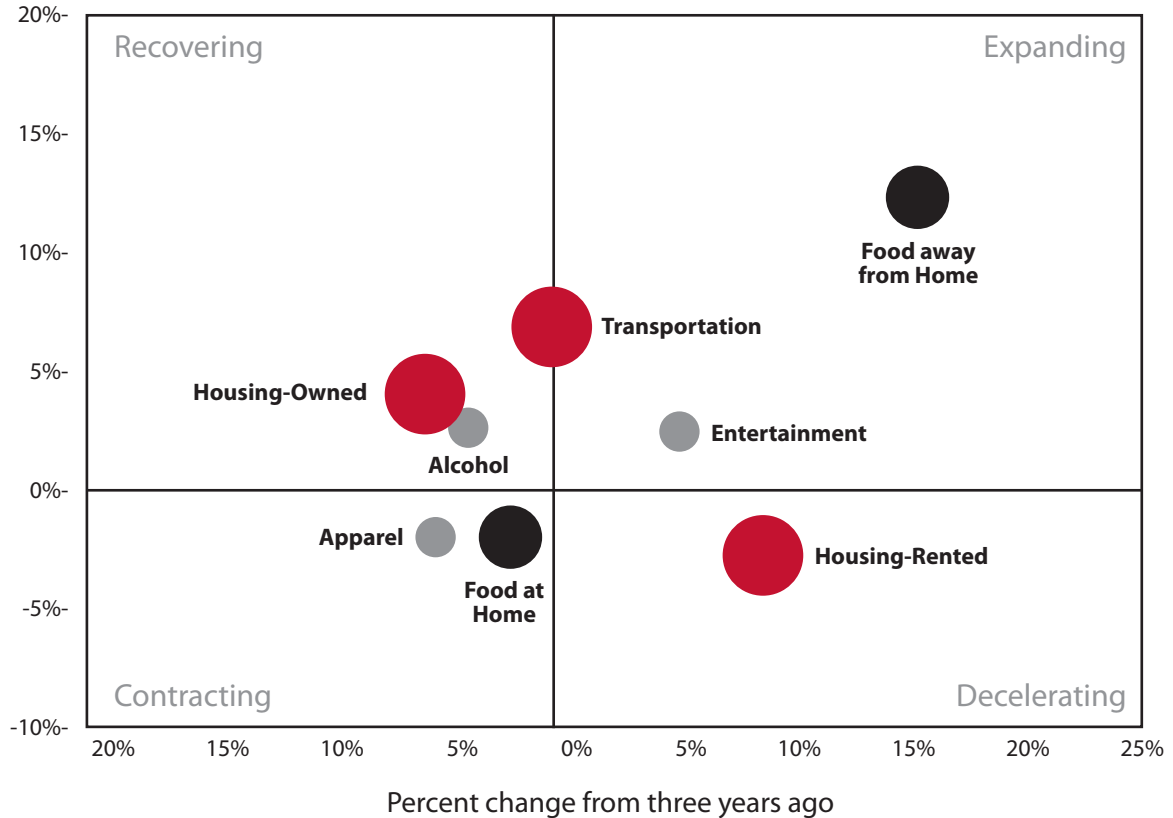
\*Affiliates with nexus in Utah must collect and remit sale tax for Utah purchases. Amazon began voluntarily collecting and remitting sales tax for Utah on January 1, 2017.

**Source:** Internet Retailer and Kem C. Gardner Policy Institute

## Structural changes in tastes and preferences

### Millennial expenditure growth

Year-over-year percent change & change from 2012 to 2015



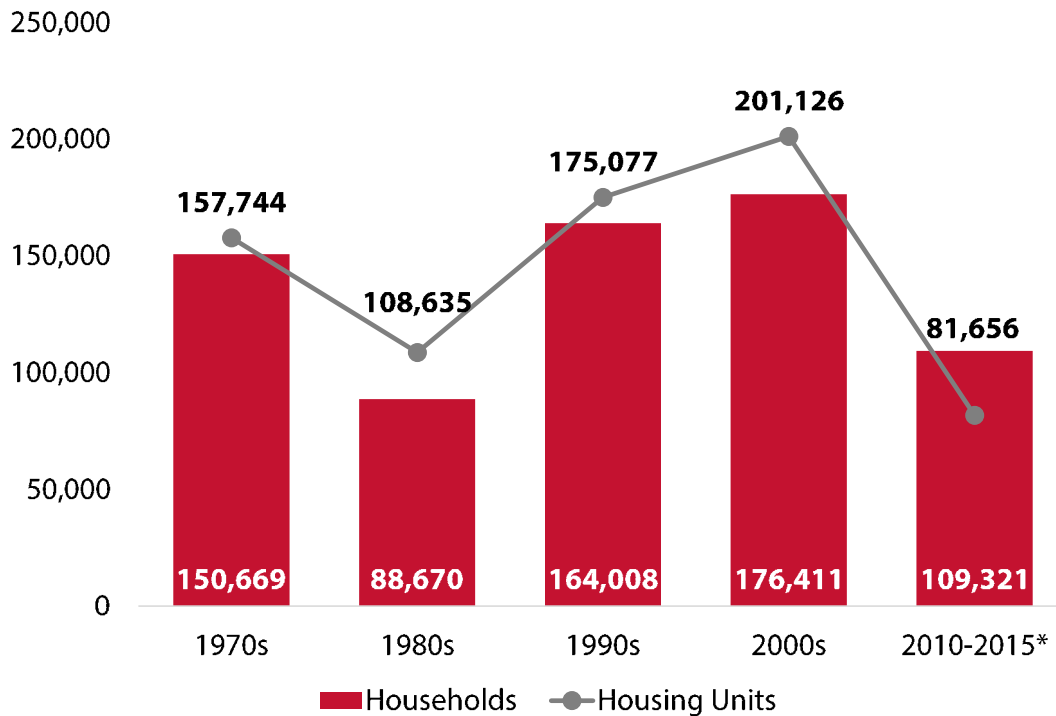
### Share of Average Total Expenditures

● <5.5%    ● 5.5% – 8.0%    ● >8.0%

Source: U.S. Department of Labor and Wells Fargo Securities

## *Does Utah have a housing shortage? Now more new households than new units*

### Growth in housing units and households in Utah

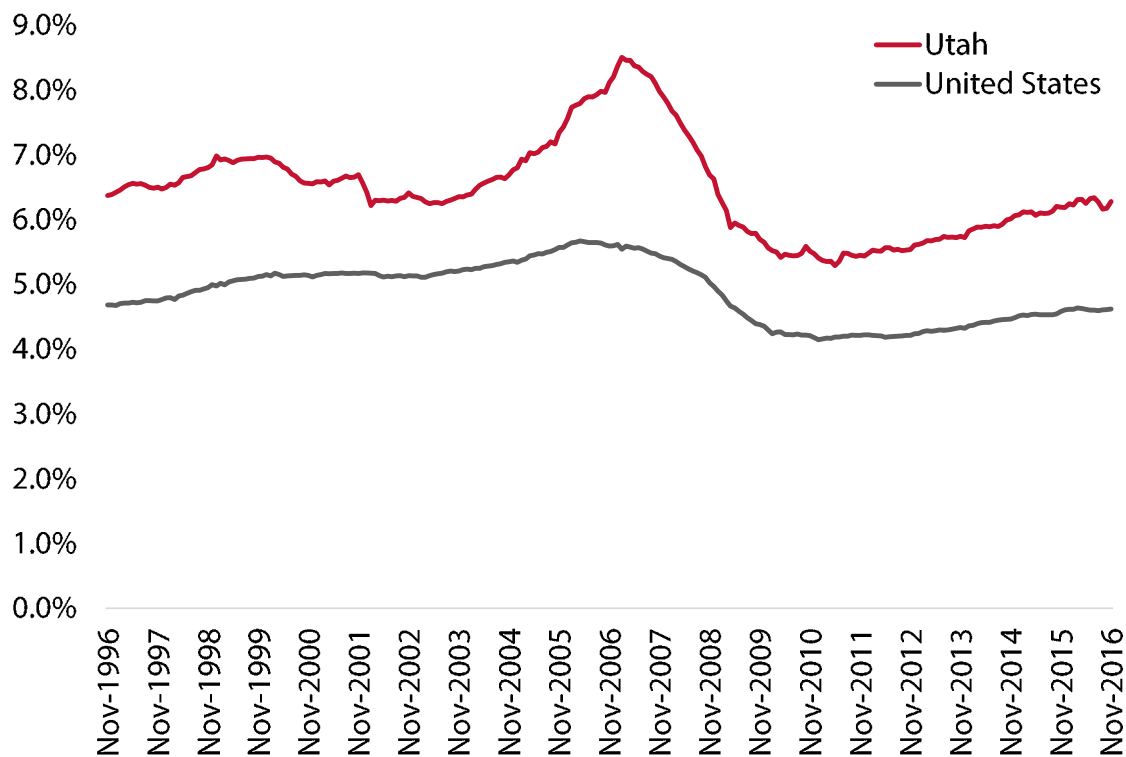


\*New units and households over five years; other figures are for 10-year increments

Sources: U.S. Census Bureau and Ivory-Boyer Construction Database

## Sustainable construction job levels?

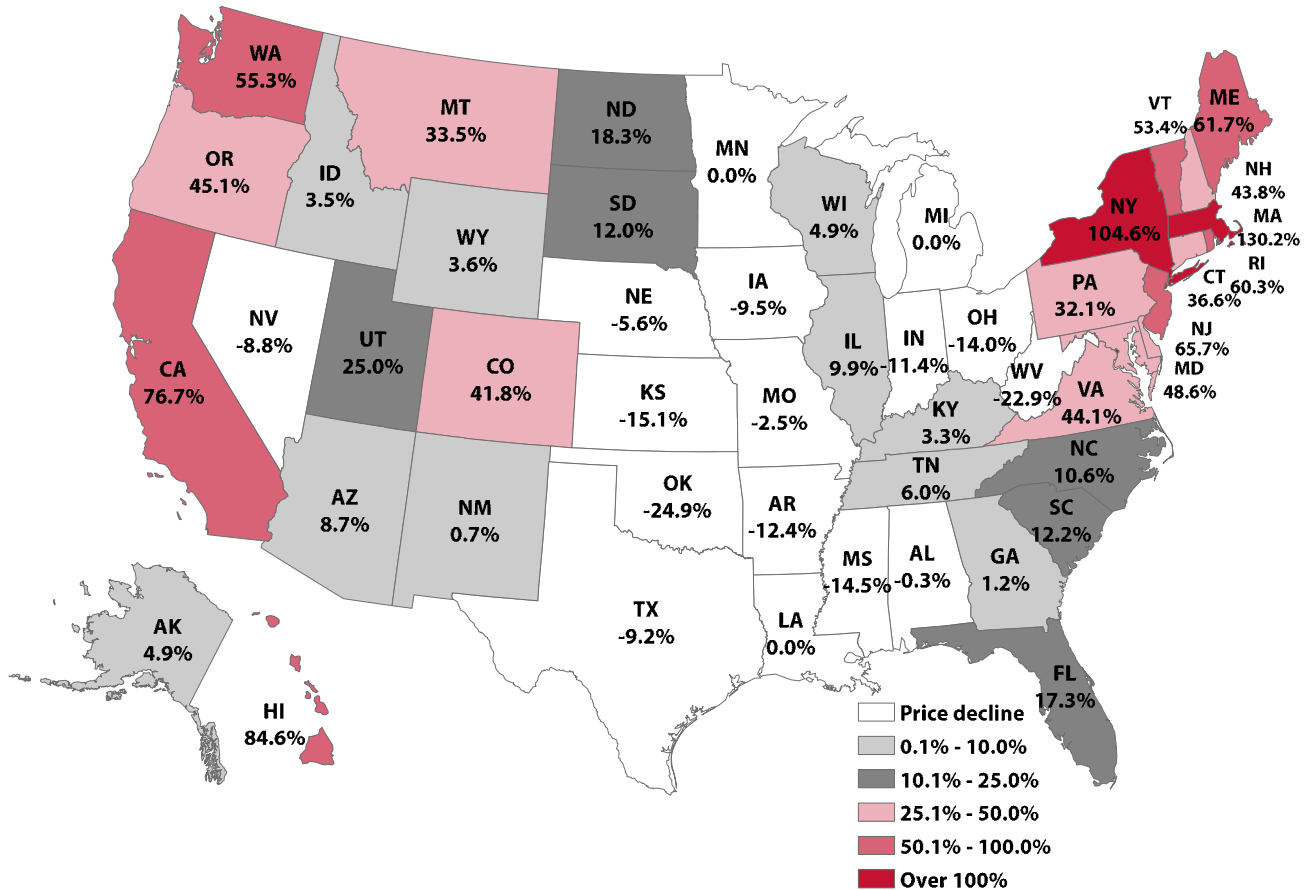
Construction jobs as a percent of all jobs



Sources: Kem C. Gardner Policy Institute analysis of Bureau of Labor Statistics data

## *Utah's long-running housing price increase nineteenth highest in nation*

**Real change in FHFA Home Price Index, 1980–2015**



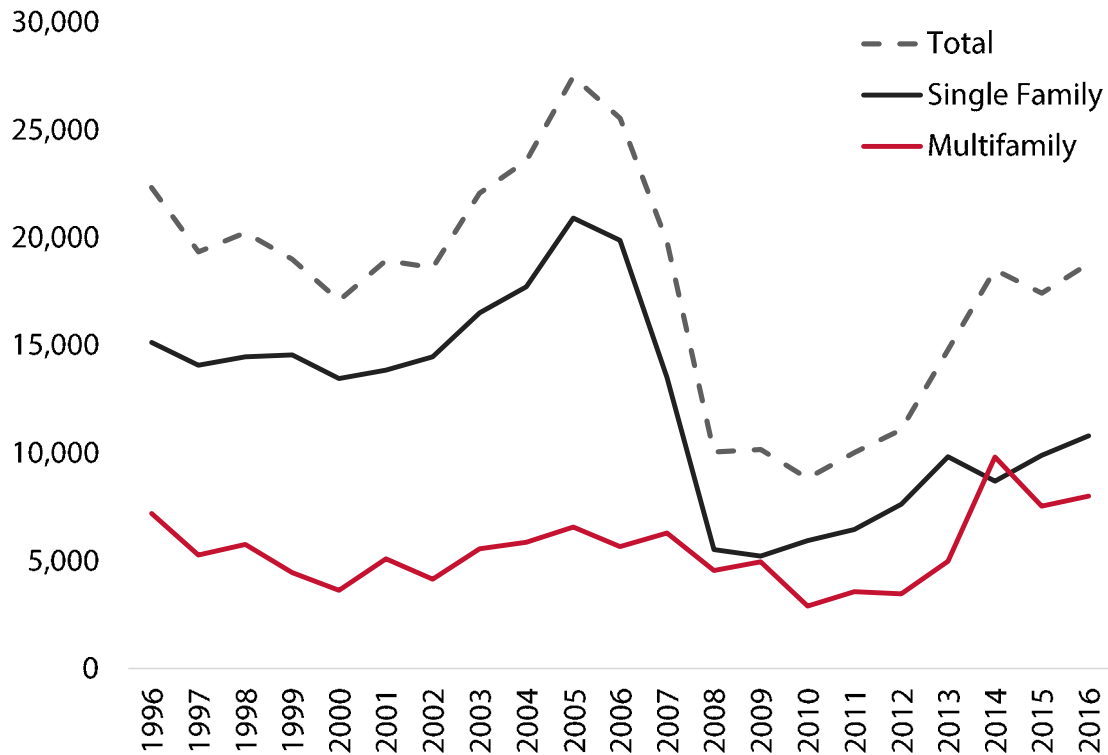
**Source:** Federal Housing Finance Agency



## Elevated multifamily construction activity

### Utah residential construction

Permitted units



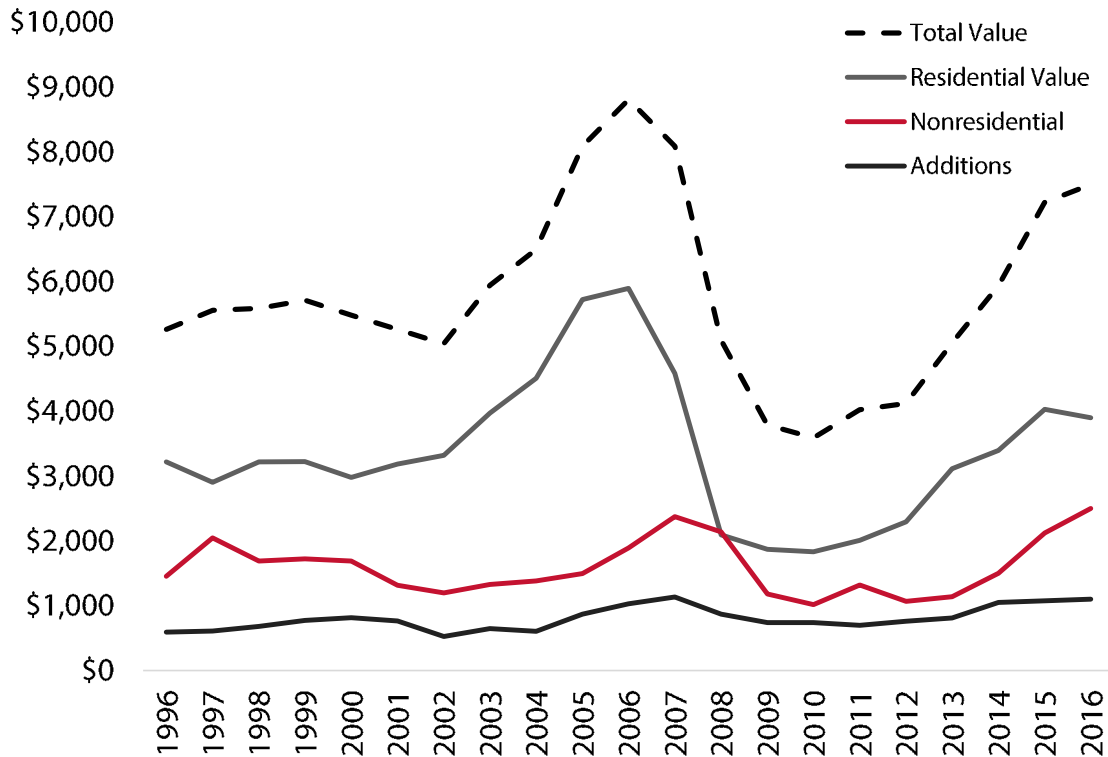
**Note:** 2016 is an estimate.

**Source:** Ivory-Boyer Construction Database, Kem C. Gardner Policy Institute

***Inflation-adjusted nonresidential construction value reached a record \$2.5 billion in 2016***

**Value of permit-authorized construction in Utah**

Millions of constant 2016 dollars



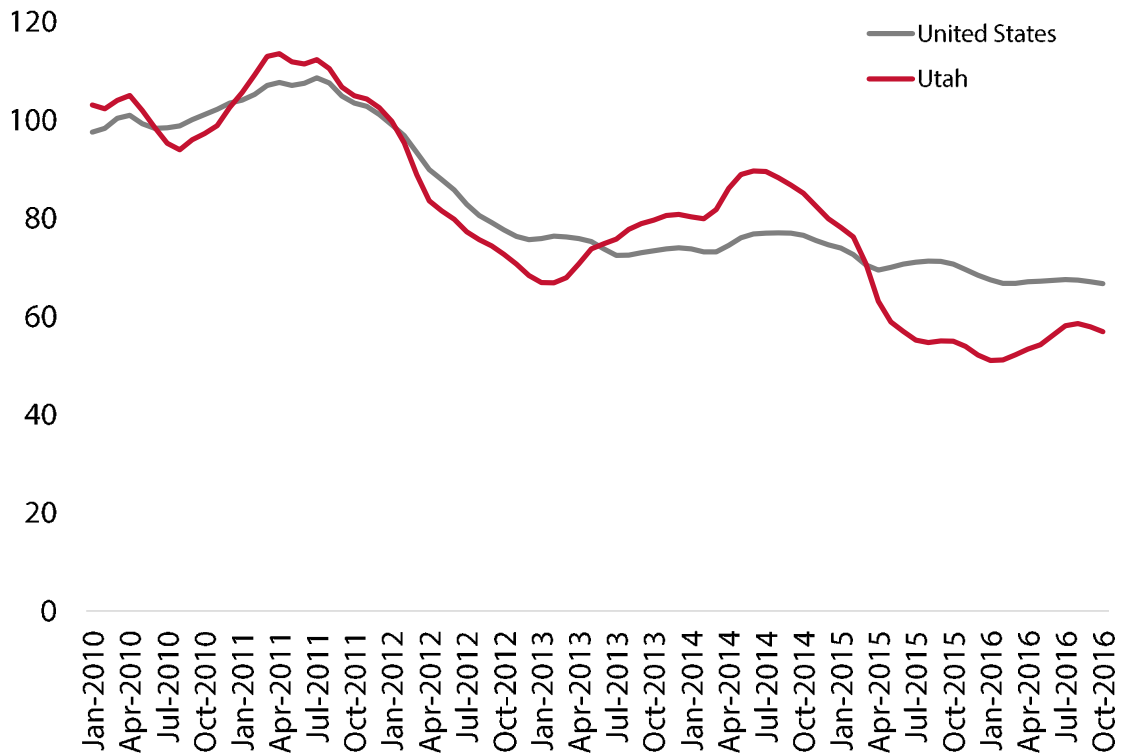
**Note:** 2016 is an estimate.

**Sources:** Ivory-Boyer Construction Database, Kem C. Gardner Policy Institute and Bureau of Labor Statistics

## Will low for-sale inventory continue to push prices upwards?

### Index of for-sale inventory

Seasonally adjusted, 2010 average = 100

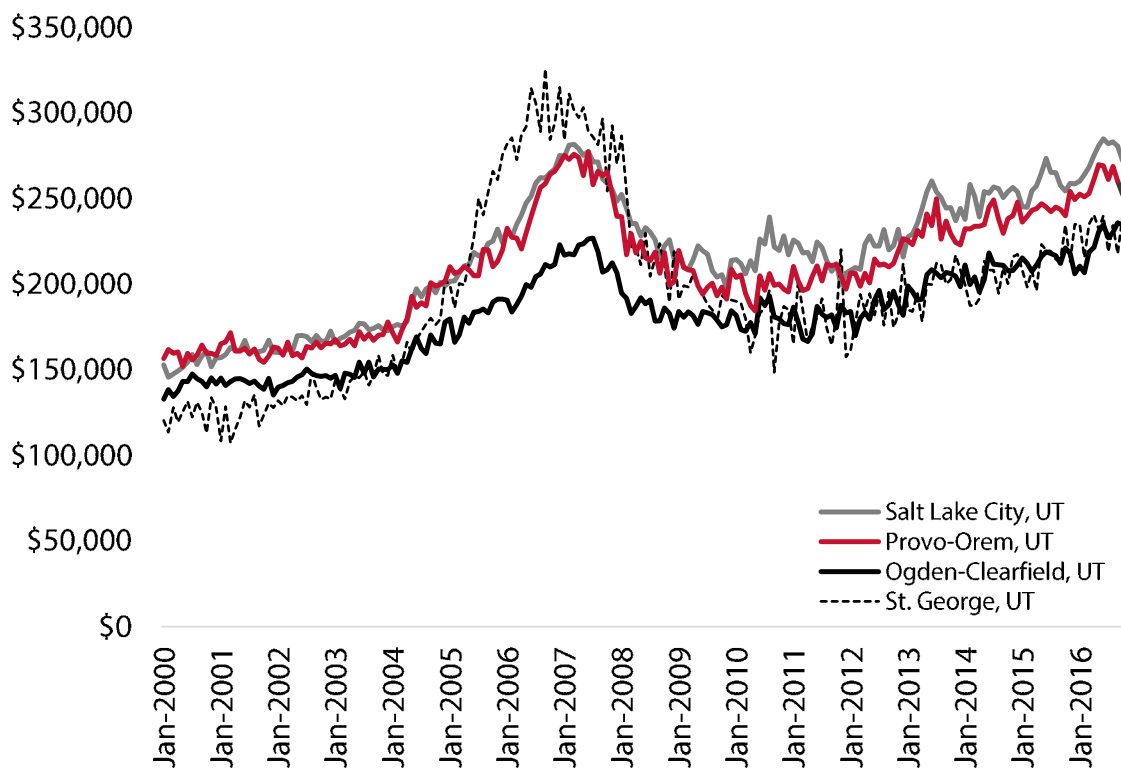


Sources: Ivory-Boyer Construction Database, Kem C. Gardner Policy Institute analysis of Zillow data

## Housing prices on the rise in Utah metros

### Median existing home prices

Utah metro areas

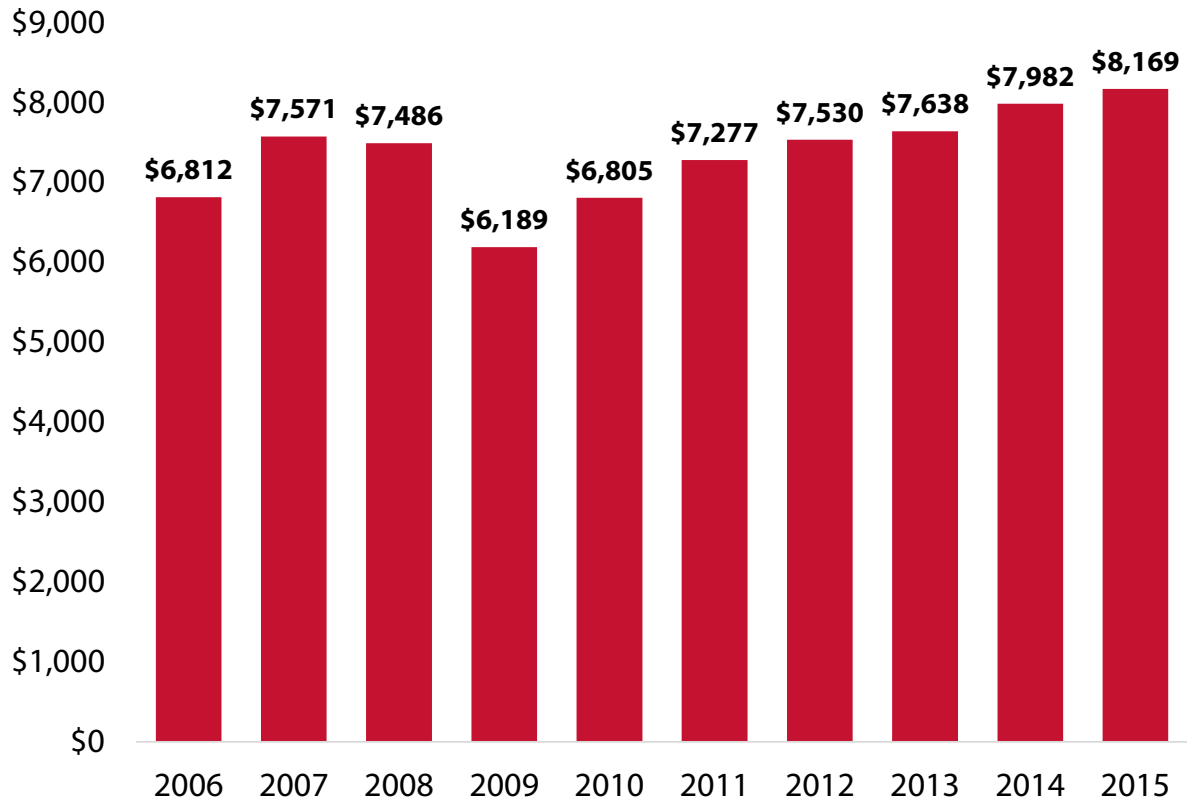


Sources: Core Logic and Moody's Analytics

## Utah travelers spending at a record high

### Direct Utah traveler spending

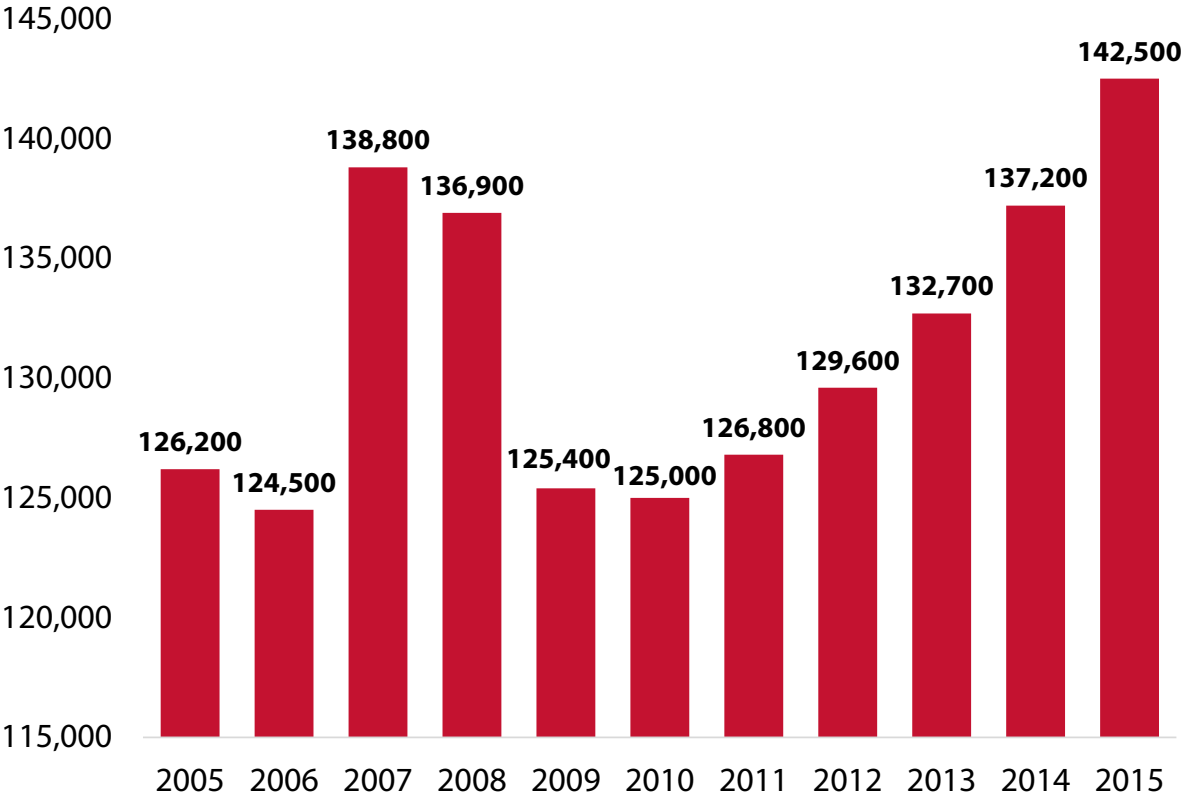
Millions of constant 2015 dollars



**Source:** Kem C. Gardner Policy Institute analysis of D.K. Shifflet and TNS Global data

*Travel and tourism activity in Utah bolsters significant jobs*

**Utah tourism-generated jobs**

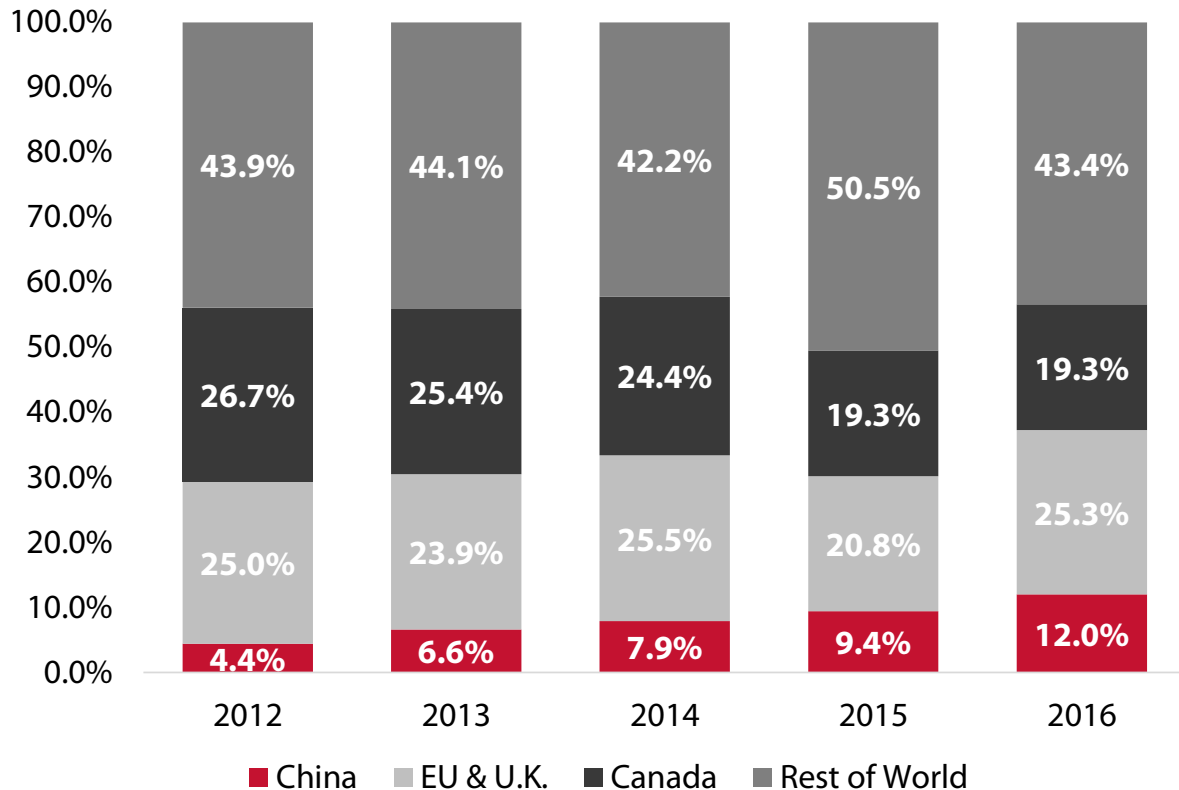


**Source:** Kem C. Gardner Policy Institute analysis of U.S. Bureau of Labor Statistics data

## Chinese visitors claiming larger and larger shares of all foreign visitor spending

### International visitor Visa card

Top markets and the rest of the world

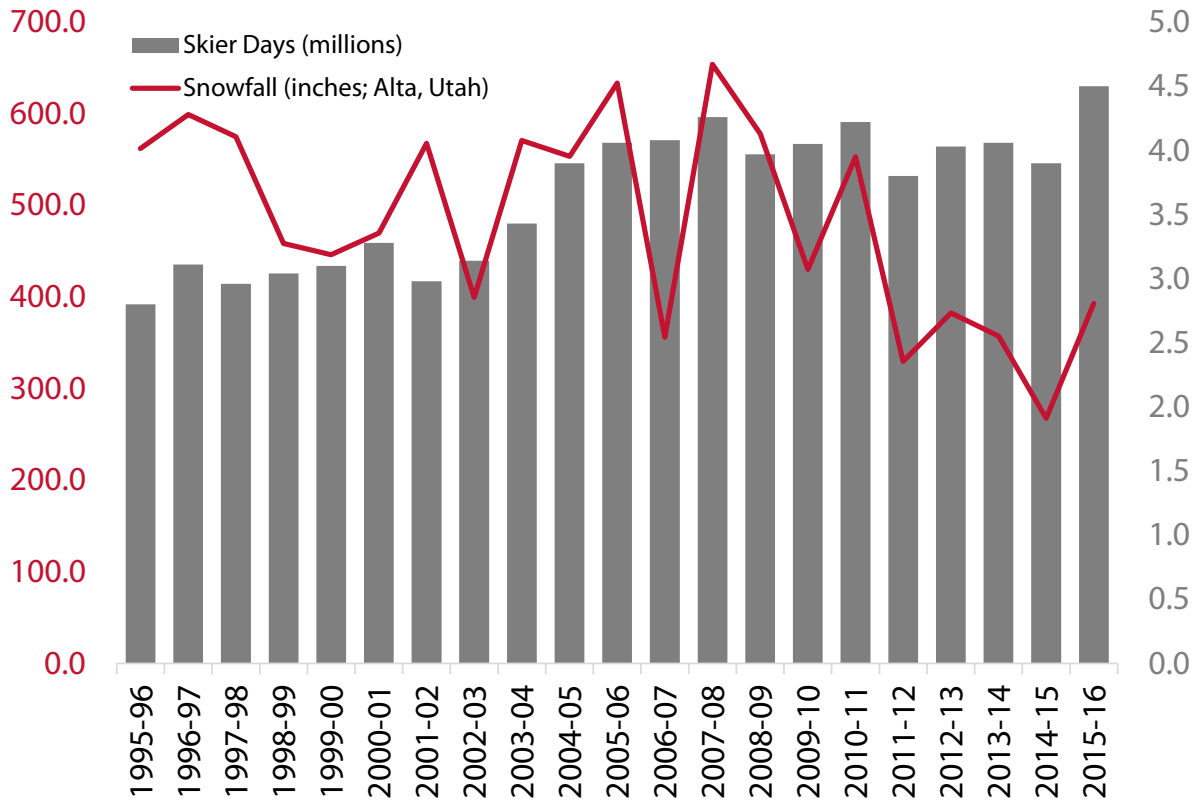


**Note:** Estimates are based on and extrapolated from aggregate depersonalized card usage data.

**Source:** Kem C. Gardner Policy Institute analysis of VisaVue® Travel data

## Total skier days up despite lower average annual snowfall

Utah skier days vs. total annual snowfall



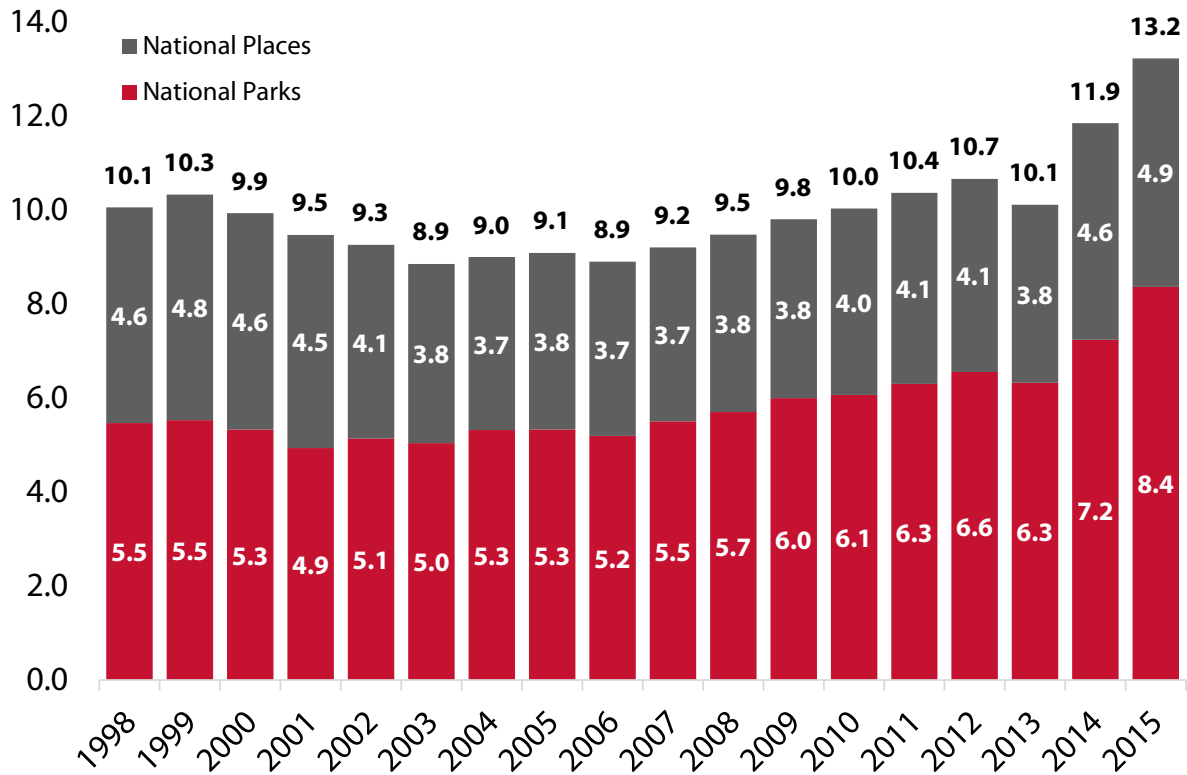
Sources: Ski Utah and Alta Avalanche Center



## Utah parks draw record visitation

### Utah national park and place visitation

Millions of visitors



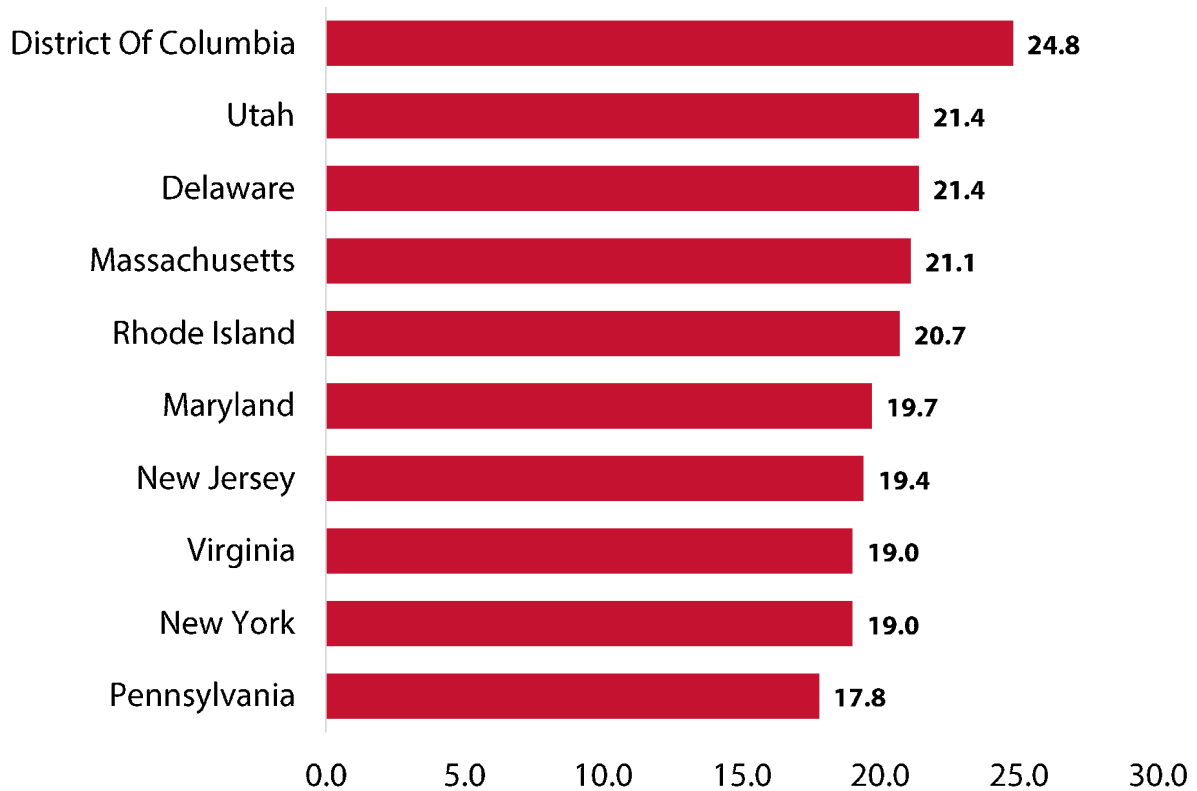
**Note:** National Places include national monuments, recreation areas, and historic sites; Flaming Gorge NRA data not included.

**Source:** Kem C. Gardner Policy Institute analysis of National Park Service data

## *Only DC has faster internet speeds than Utah*

### Highest internet connection speeds in the US

Average mbps, Q3 2016

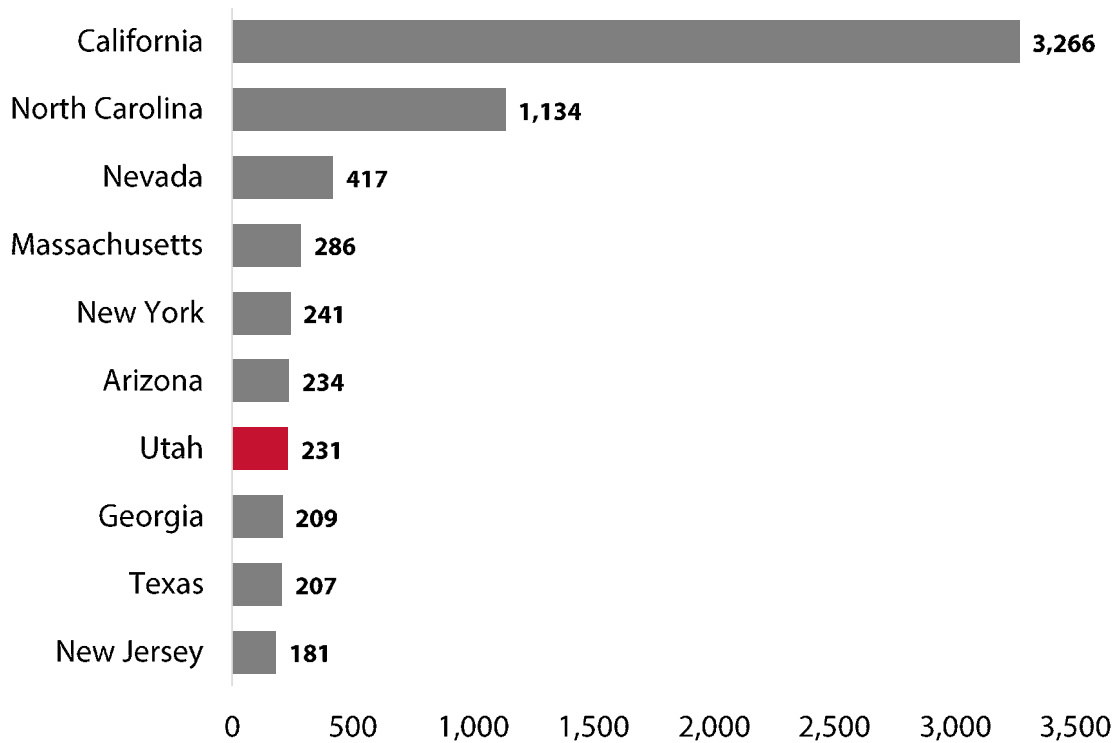


Source: Akamai State of the Internet Q3 2016 Report

## Utah a top state for solar

### States with most solar electric capacity installed in 2015

Megawatts installed

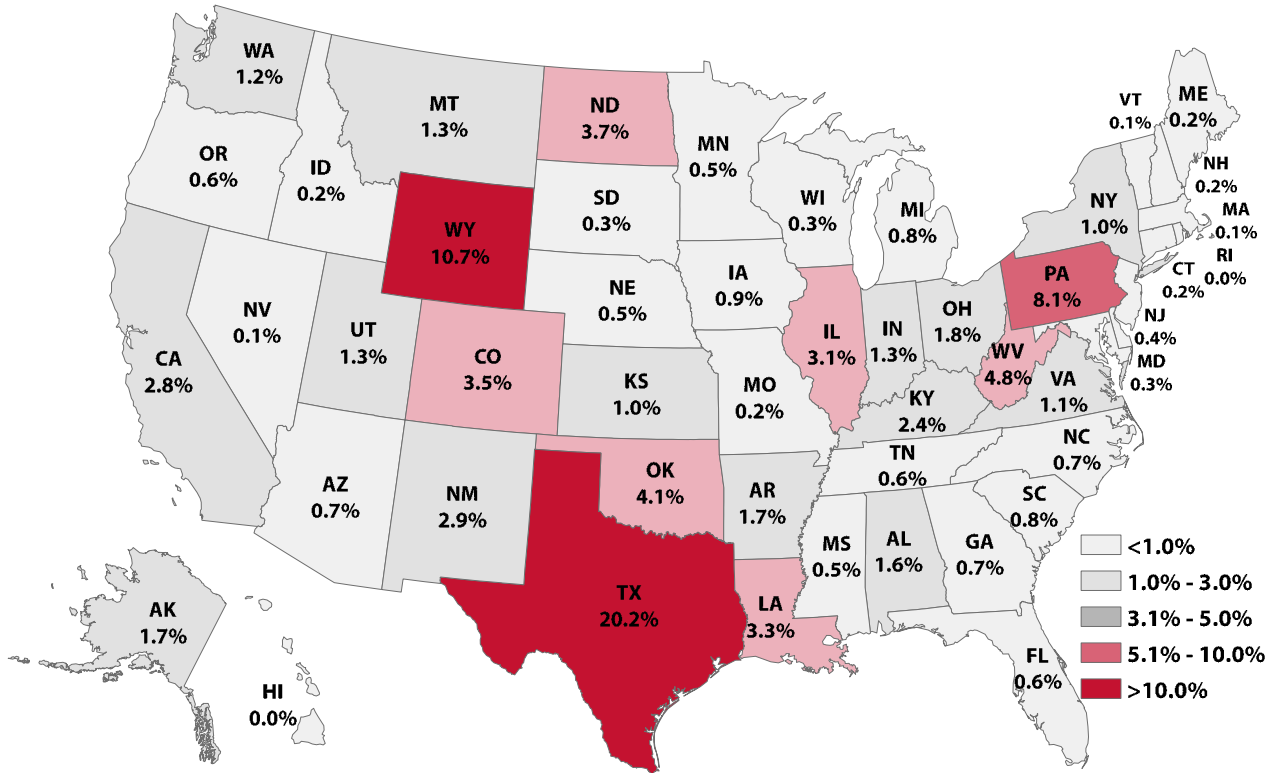


Source: Solar Energy Industries Association

**Utah contributes just over one percent to nation's energy production**

**States' share of total US energy production**

87,228 trillion Btu, 2014



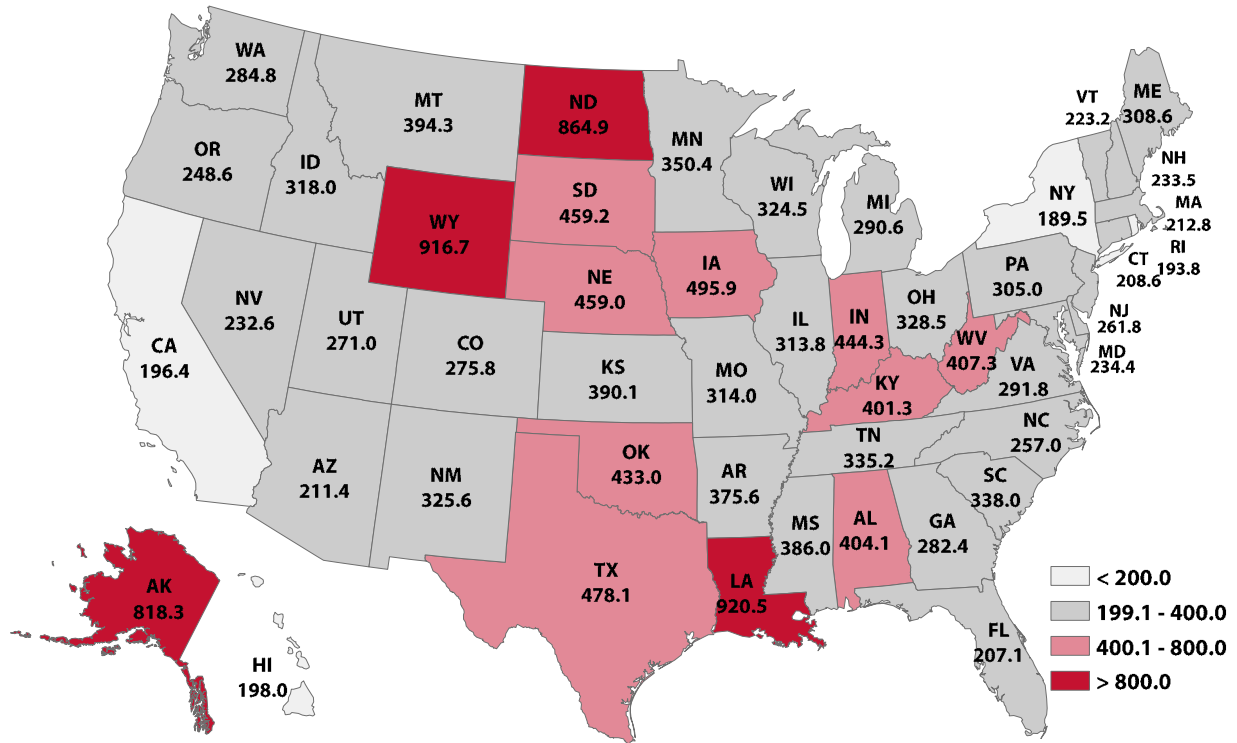
**Note:** Energy production of all sources – fossil fuels, nuclear electric power, and renewable energy.

**Source:** U.S. Energy Information Administration

## Utah consumes less energy per capita than national average

### Energy consumption per capita

Million Btu, 2014



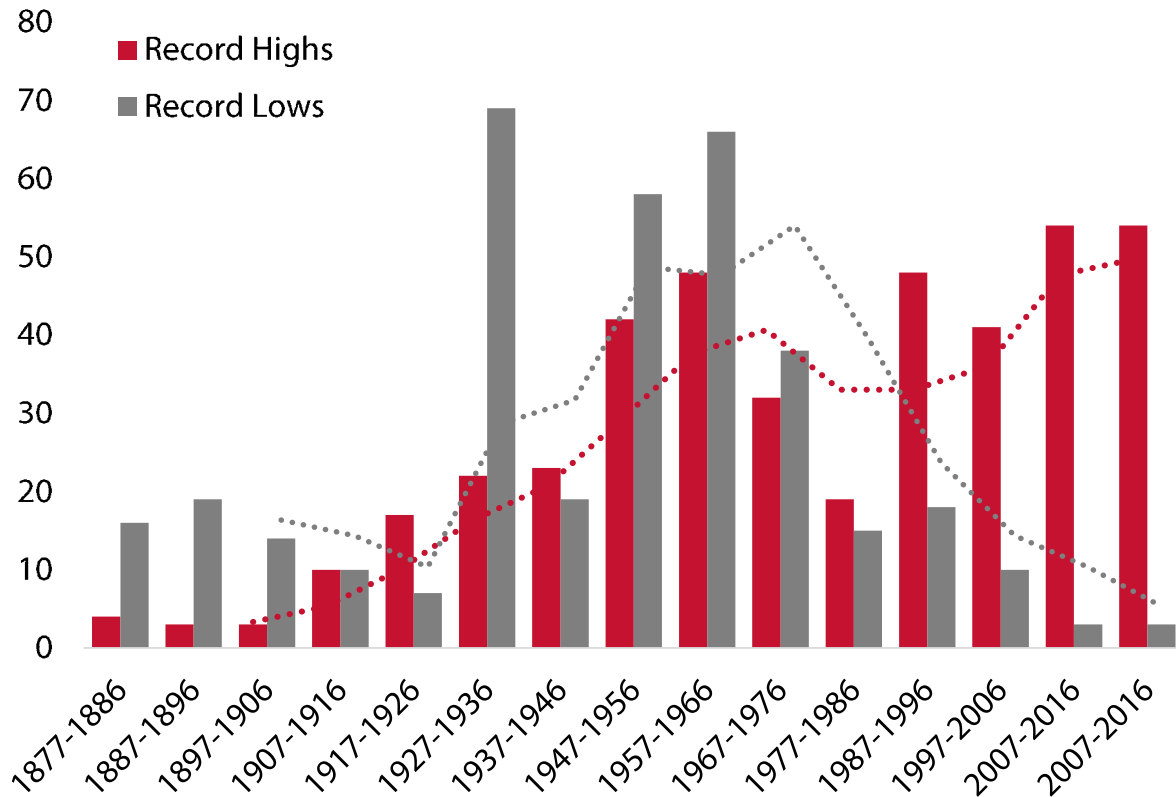
**Note:** Energy consumption by all sources – residential, commercial, industrial, and transportation.

**Source:** U.S. Energy Information Administration

## High record temperatures more common than low record in recent decade

### Salt Lake City temperature records

Number of daily high and low records set in each 10-year period



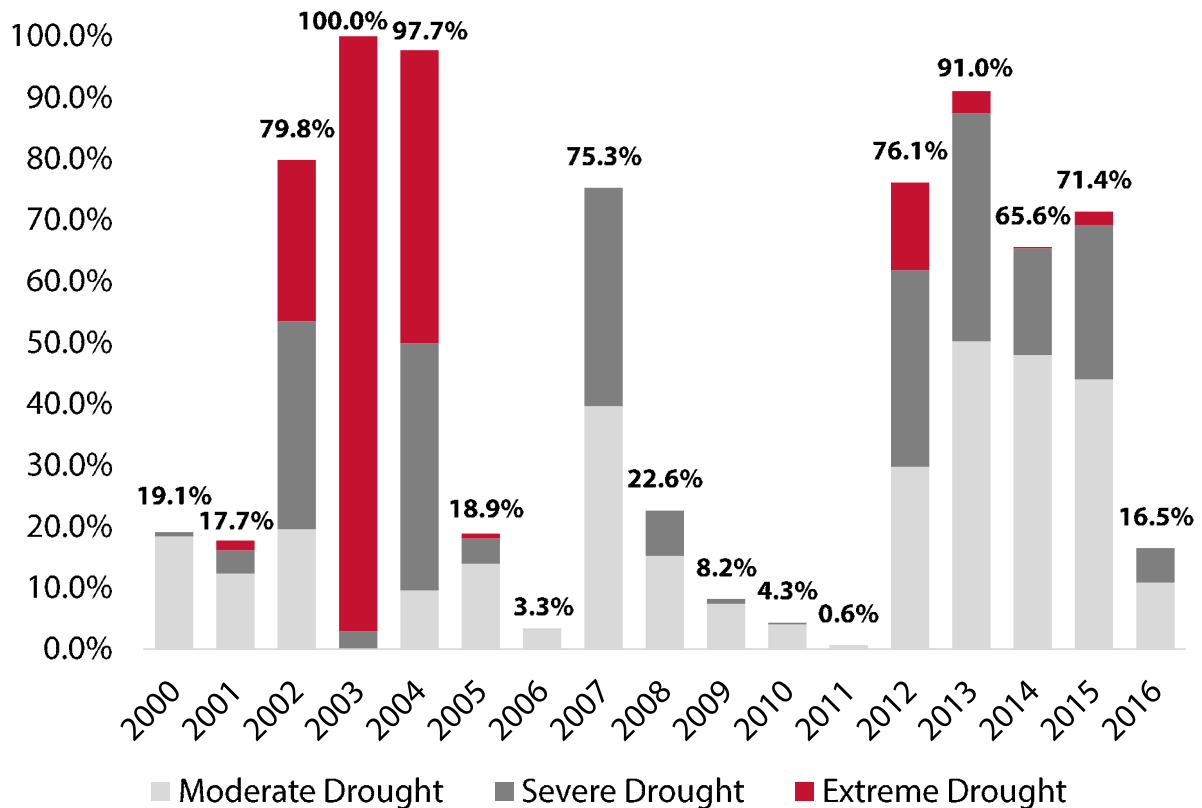
**Note:** Lines are 3-period moving averages

**Sources:** National Oceanic and Atmospheric Administration and Federal Aviation Administration

## Drought conditions improve

### Share of Utah land area in drought conditions

Average annual weekly drought percentages



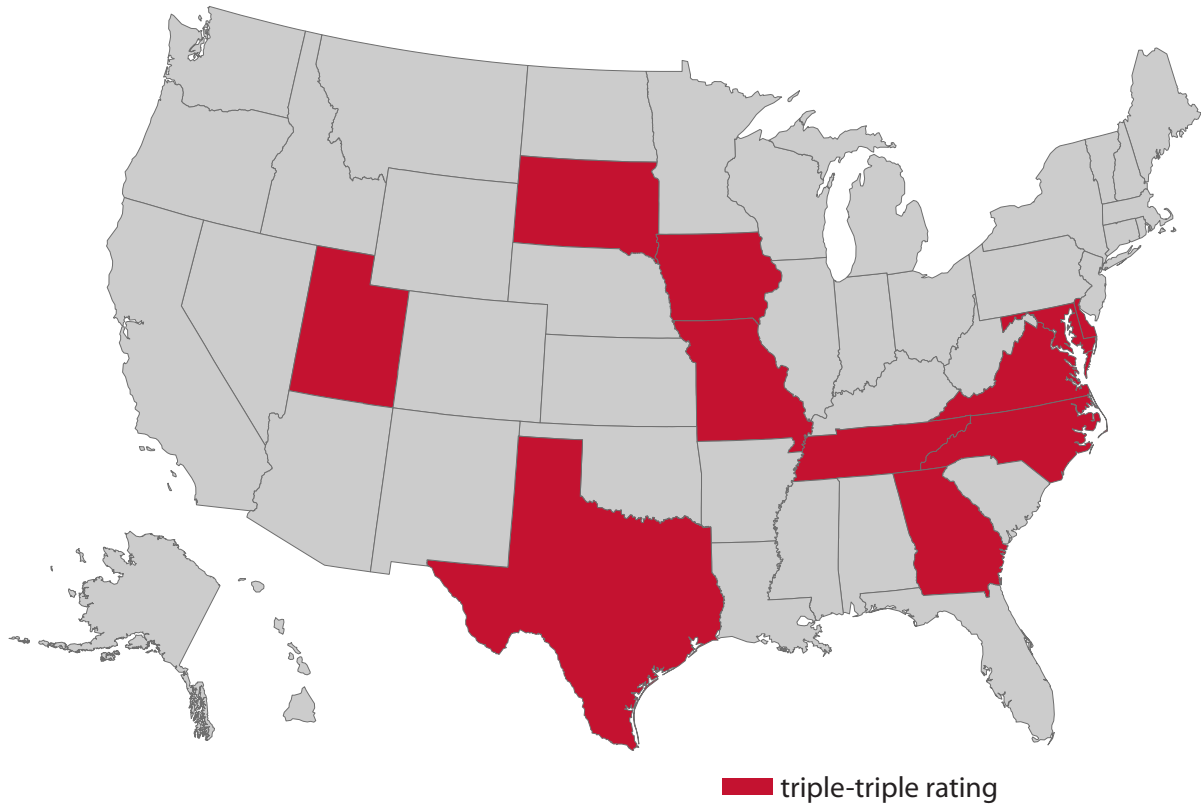
**Note:** 2016 is an estimate

**Source:** United States Drought Monitor

***Utah one of eleven states with  
triple-triple rating***

**States with triple-triple rating**

AAA rating from Fitch, Moody's, and S&P



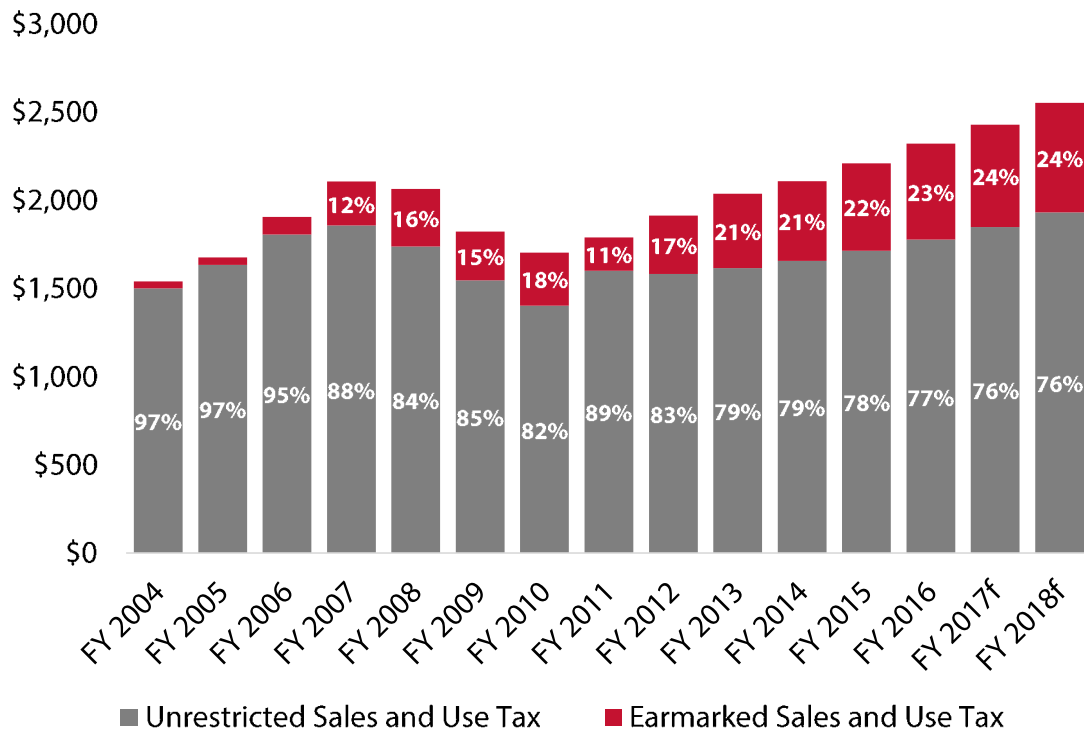
**Source:** The Bond Buyer, November 2016



***Almost a quarter of all state sales and use tax collections are earmarked***

**State of Utah sales and use tax collections**

Millions of current dollars



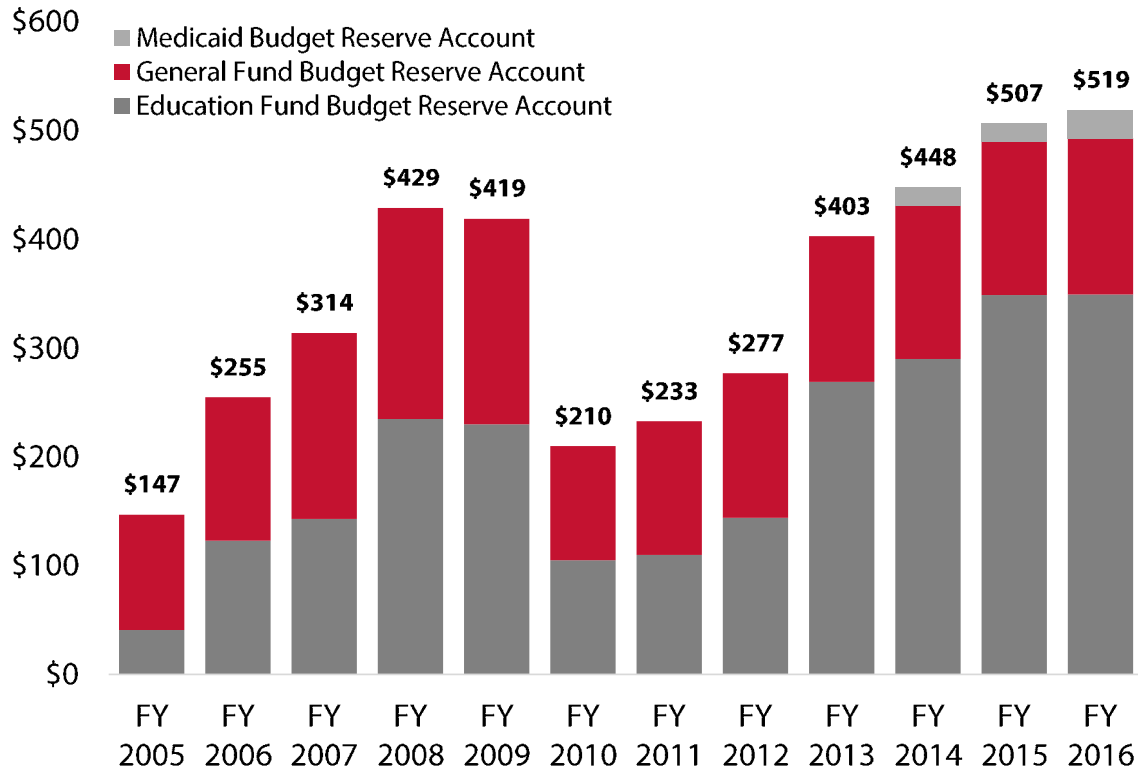
f = forecast

Source: Utah State Tax Commission

## Utah has a healthy rainy day fund

### State of Utah budget reserve accounts

Millions of current dollars



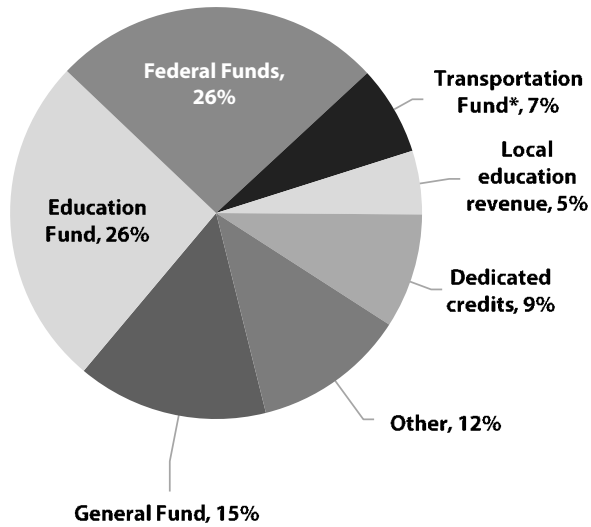
Source: Utah Office of the Legislative Fiscal Analyst

## Education, education, education

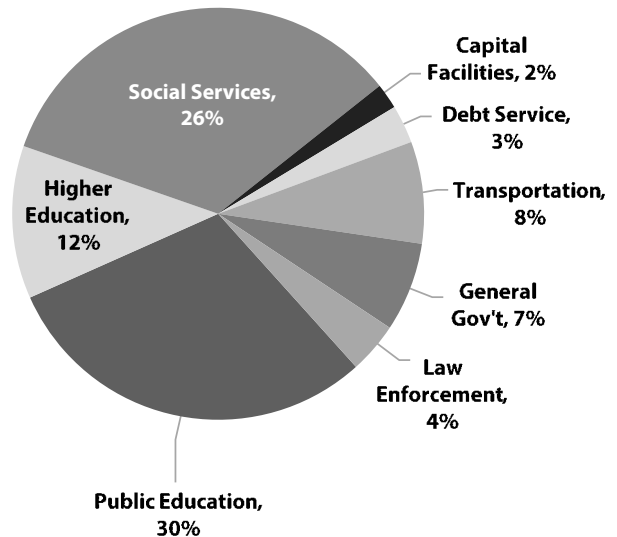
### Budget of the State of Utah

All funds, Fiscal Year 2017

#### Sources of funds:



#### Uses of funds:

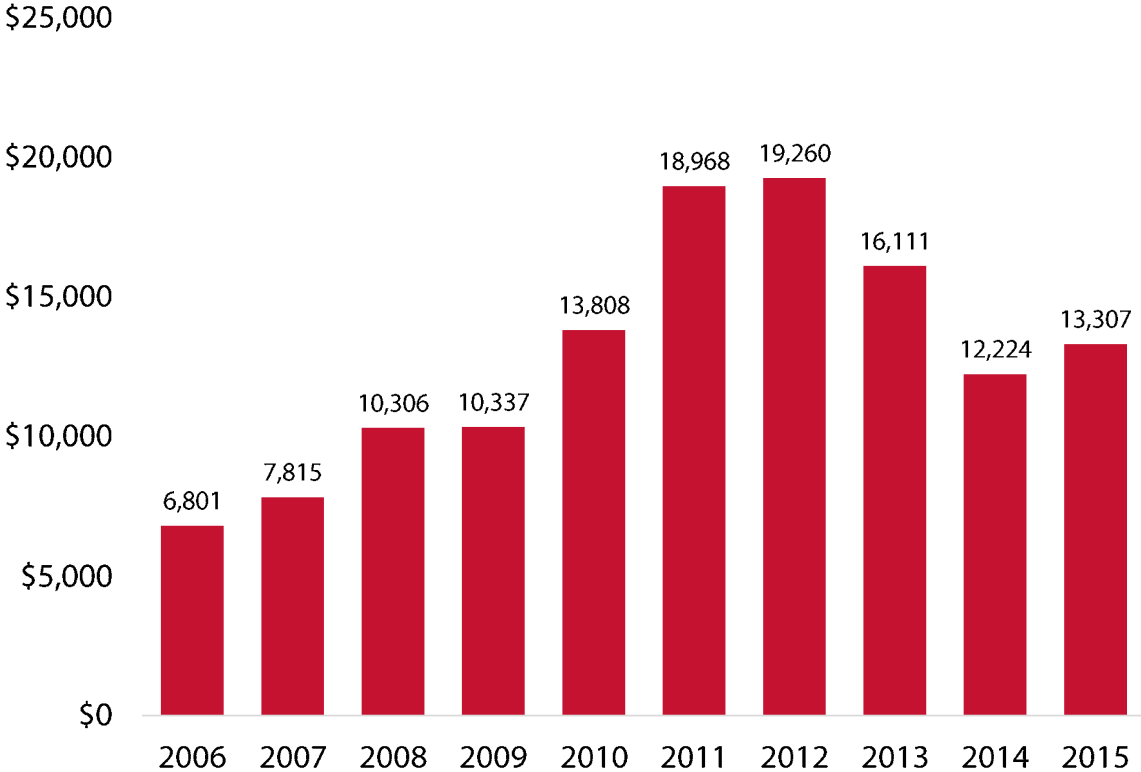


\*Includes Transportation Investment Fund

Source: Utah Office of the Legislative Fiscal Analyst

*Utah exports begin to recover*

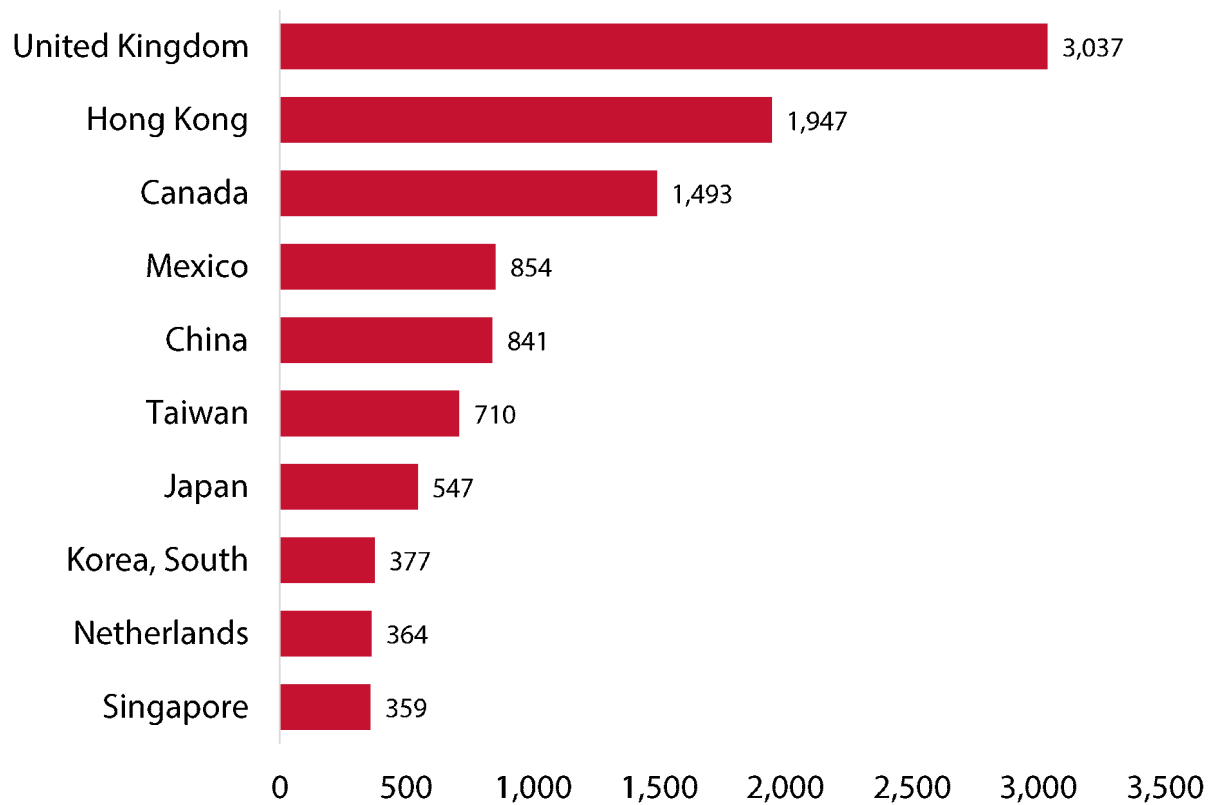
**Utah merchandise exports**  
(millions of dollars)



Source: U.S. Census Bureau, Foreign Trade

## *Utah is global*

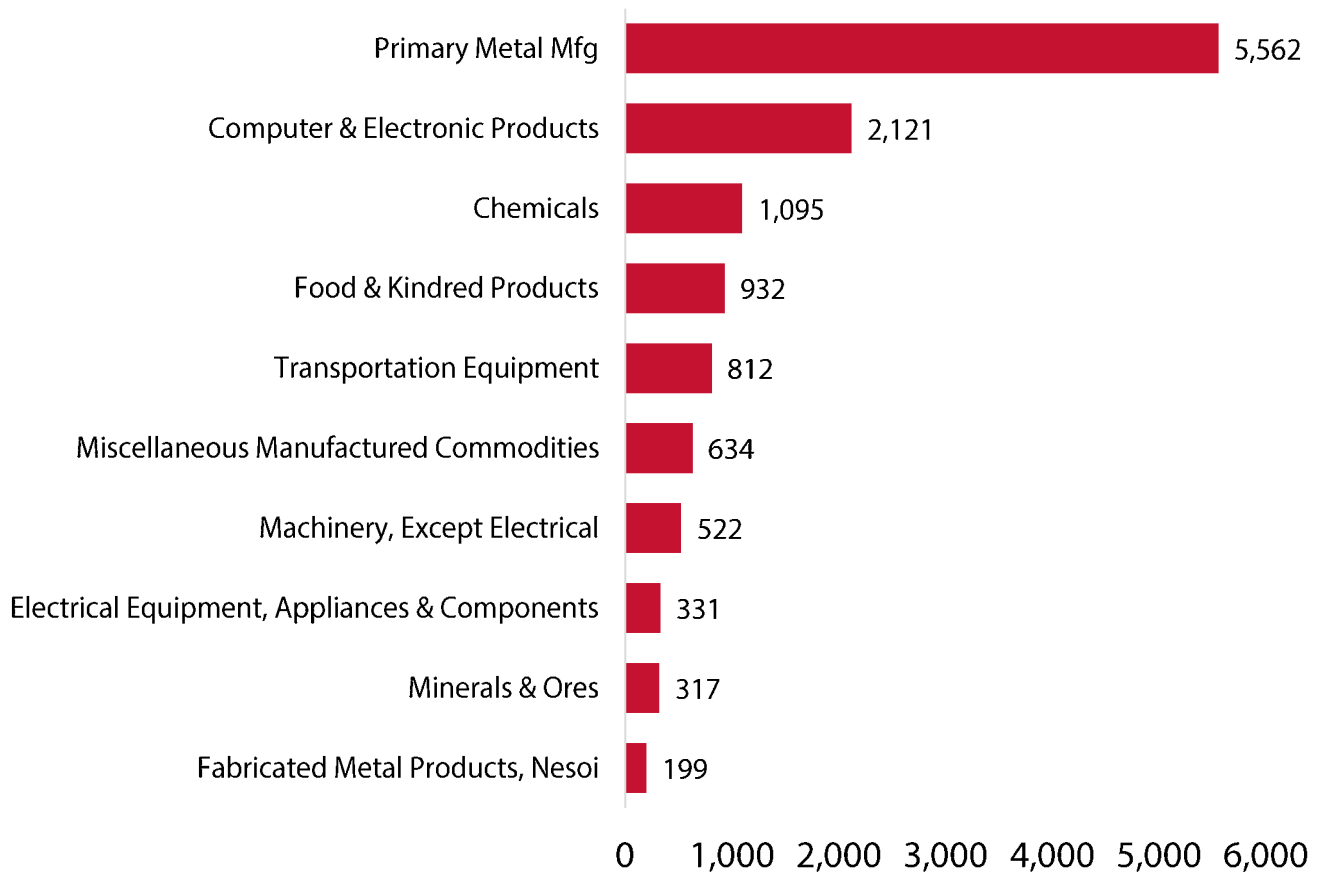
**Top ten Utah export purchasing countries: 2015**  
(millions of dollars)



**Source:** U.S. Census Bureau, Foreign Trade

## Thar's gold in them thar hills

**Top ten Utah export industries: 2015**  
(millions of dollars)



**Source:** U.S. Census Bureau, Foreign Trade

## *The age of acceleration*

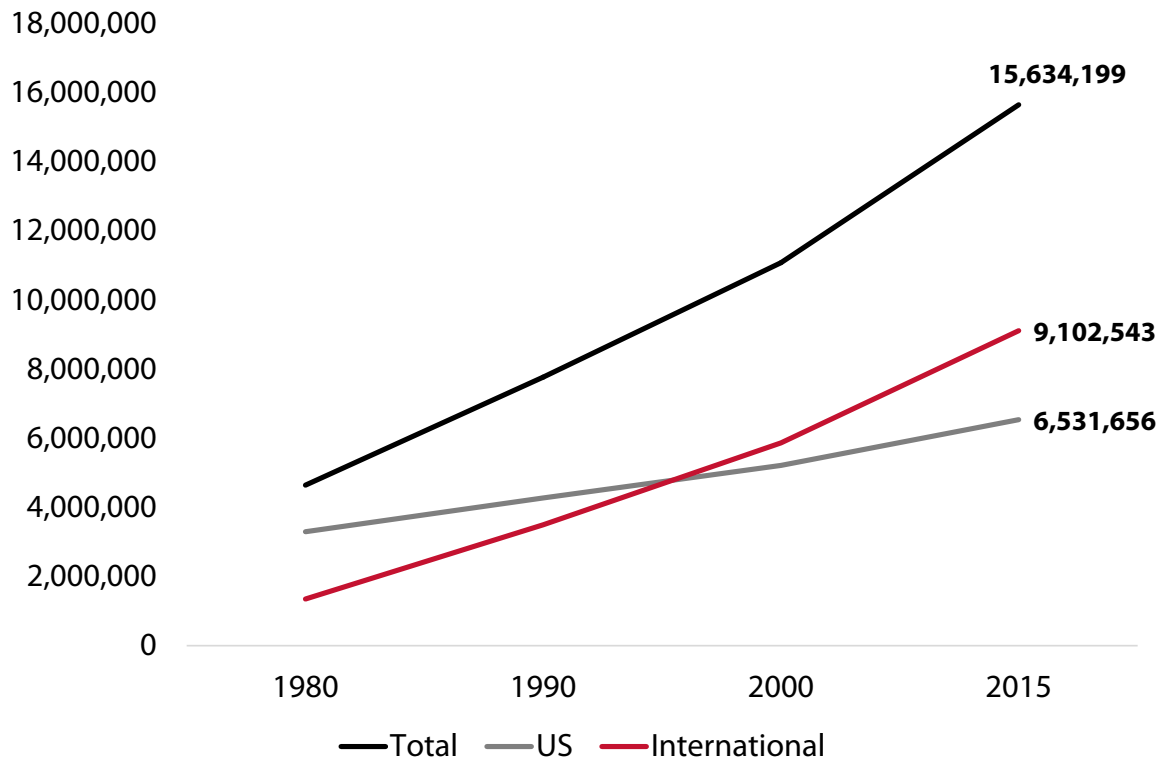
“When I wrote 'The World Is Flat,' I said the world is flat. Yeah, we're all connected. Facebook didn't exist; Twitter was a sound; the cloud was in the sky; 4G was a parking place; LinkedIn was a prison; applications were what you sent to college; and Skype, for most people, was a typo.”

- Thomas Friedman

**Source:** *Thank You for Being Late*, Thomas L. Friedman

***Utah is home to a global religion—now more international than US members***

**Church of Jesus Christ of Latter-day Saints membership**



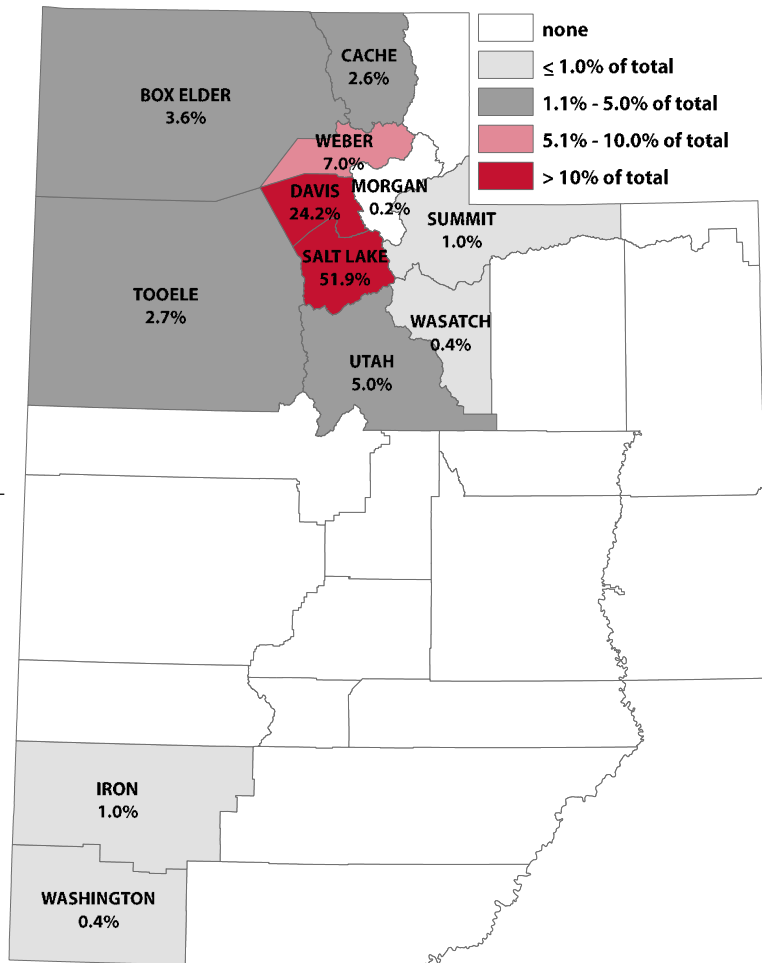
**Sources:** Church of Jesus Christ of Latter-day Saints



## **Over \$1.6 billion in defense contracts and grants obligated in Utah in FY 2015**

### County shares of \$1.6 B FY 15 defense contracts & grants

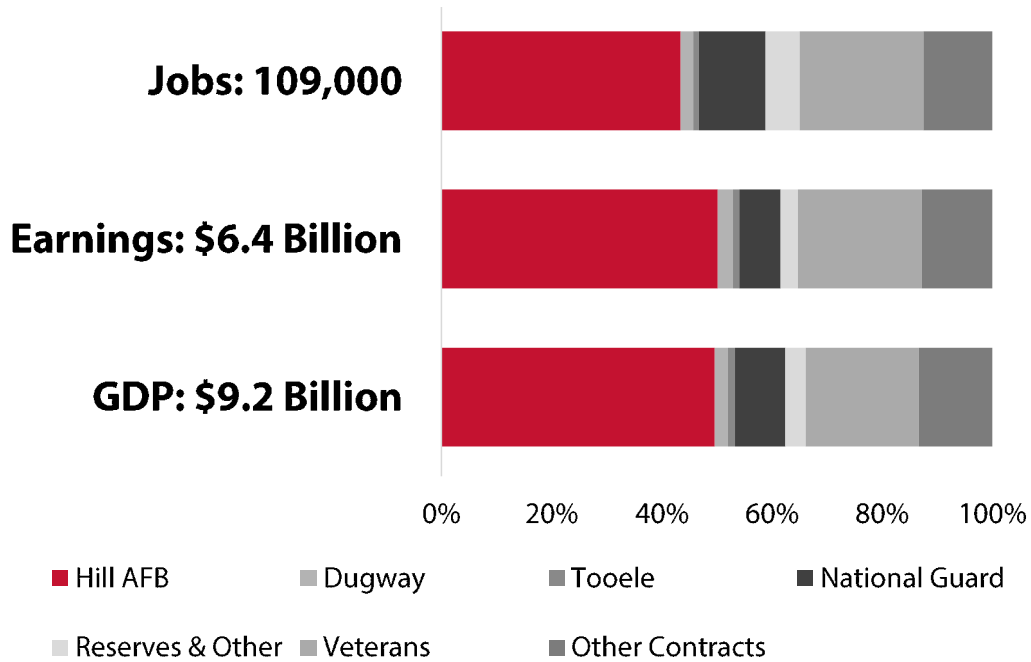
Department of Defense and Veterans affairs contracts and grants obligated in FY 2015. Consists of prime contracts performed by companies with a presence in Utah, plus subcontracts performed in Utah where the prime contract place of performance is not Utah, minus subcontracts to out-of-state companies from in-state prime contracts, plus grants to Utah recipients (including \$30 million to UT National Guard).



Source: Kem C. Gardner Policy Institute

## Utah's defense industry economic boot print

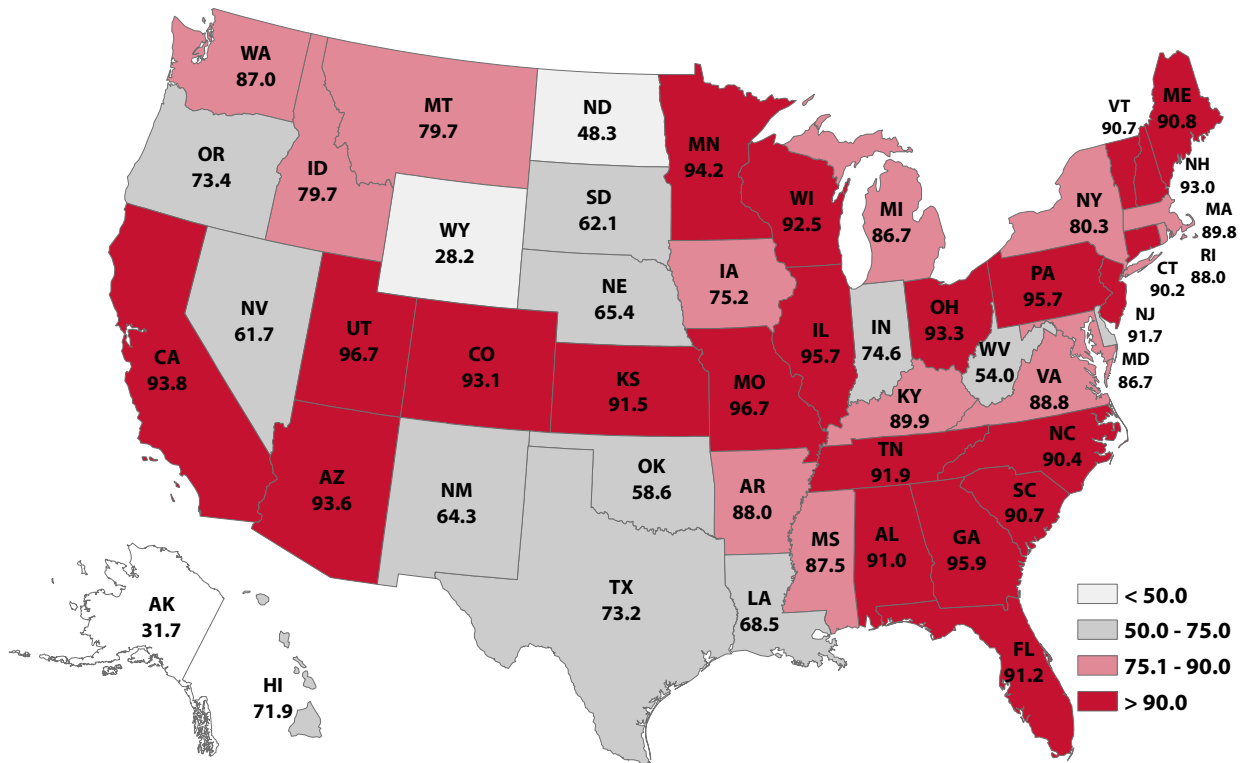
Share of Utah defense sector total economic impacts by component, 2015



Source: Kem C. Gardner Policy Institute

## Utah's economy among the most diverse in the nation

### Hachman Index of GDP diversity 2-digit NAICS, 2015

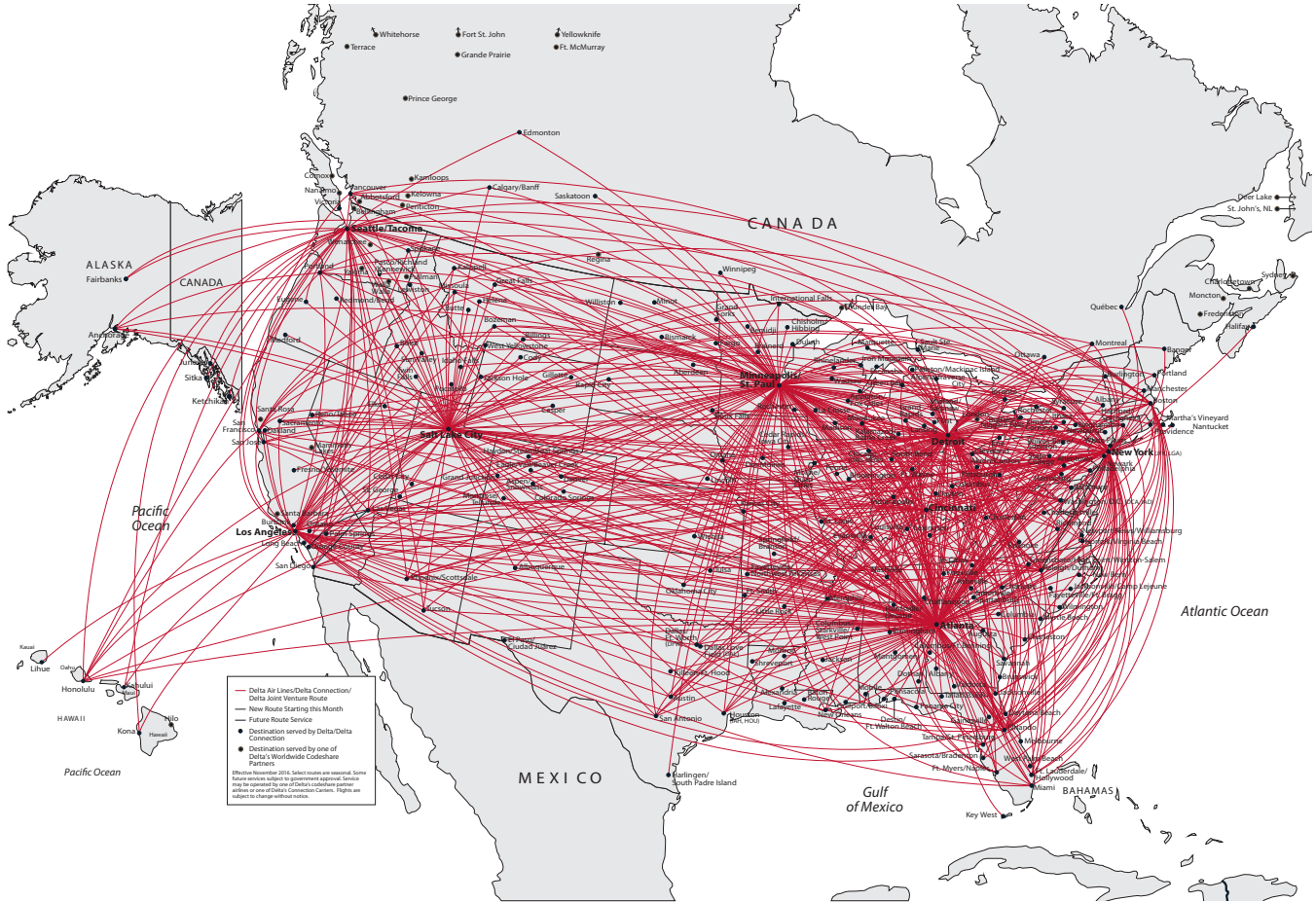


**Note:** An index value of 100 means that the distribution of state GDP among industries is exactly like that of the nation.

**Source:** Bureau of Economic Analysis

## Select Delta Air Lines routes

### Delta Air Lines U.S. and Canada Routes



Source: Delta Air Lines

## *Salt Lake City possesses outstanding rail connectivity*

### Union Pacific Rail Network

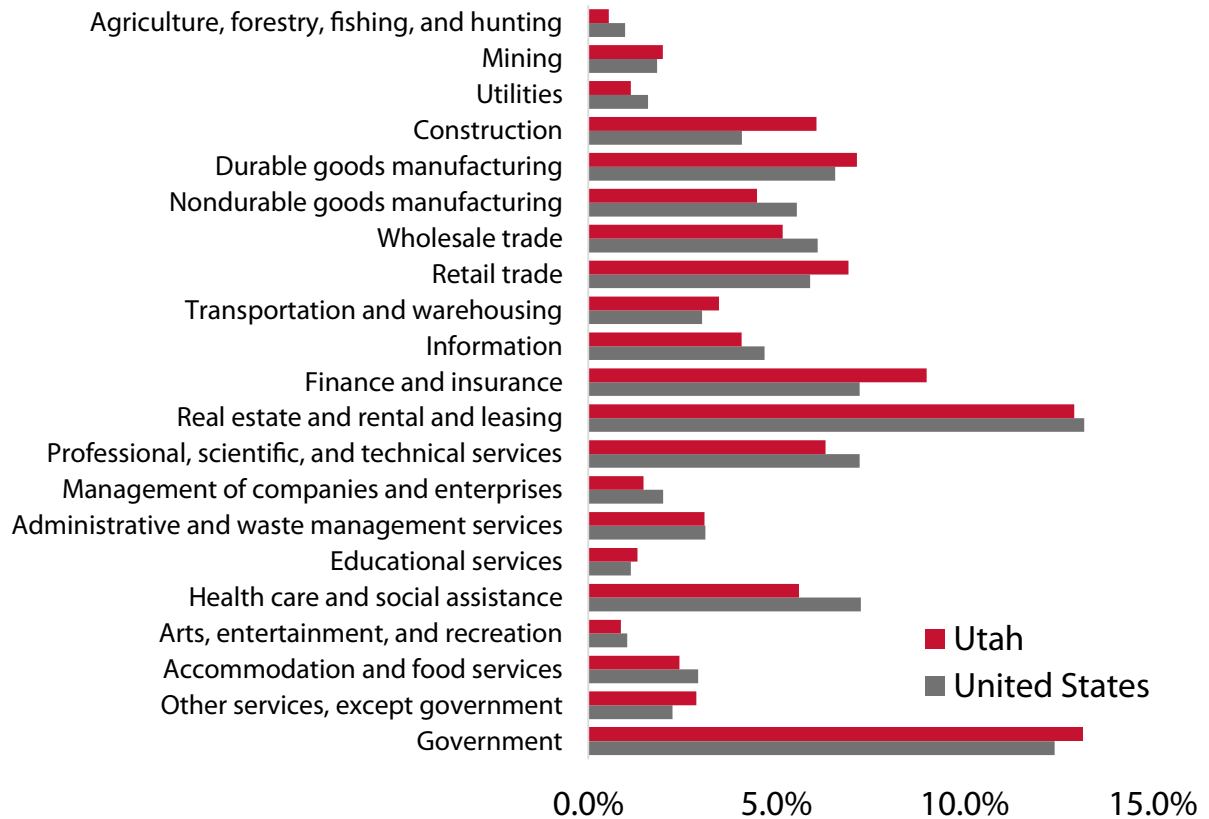


**Source:** Reproduced based on official route map of Union Pacific

## The Utah economy mirrors the nation's

### US and Utah GDP by industry

Percent of total GDP, 2015



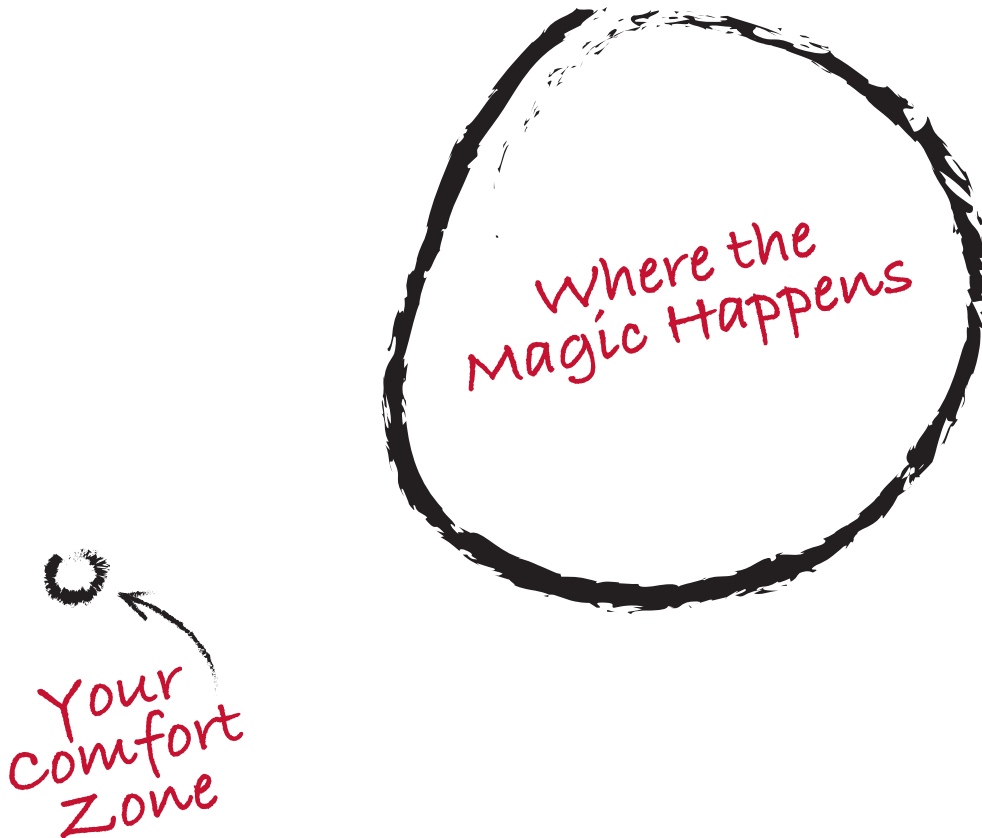
Source: Kem C. Gardner Policy Institute analysis of Moody's Analytics data

## *Leadership truisms*

- 1. Leadership is an activity, not a position.**
- 2. Anyone can lead, anytime, anywhere.**
- 3. It starts with you and must engage others.**
- 4. Your purpose must be clear.**
- 5. It's risky.**

**Source:** Kansas Leadership Center

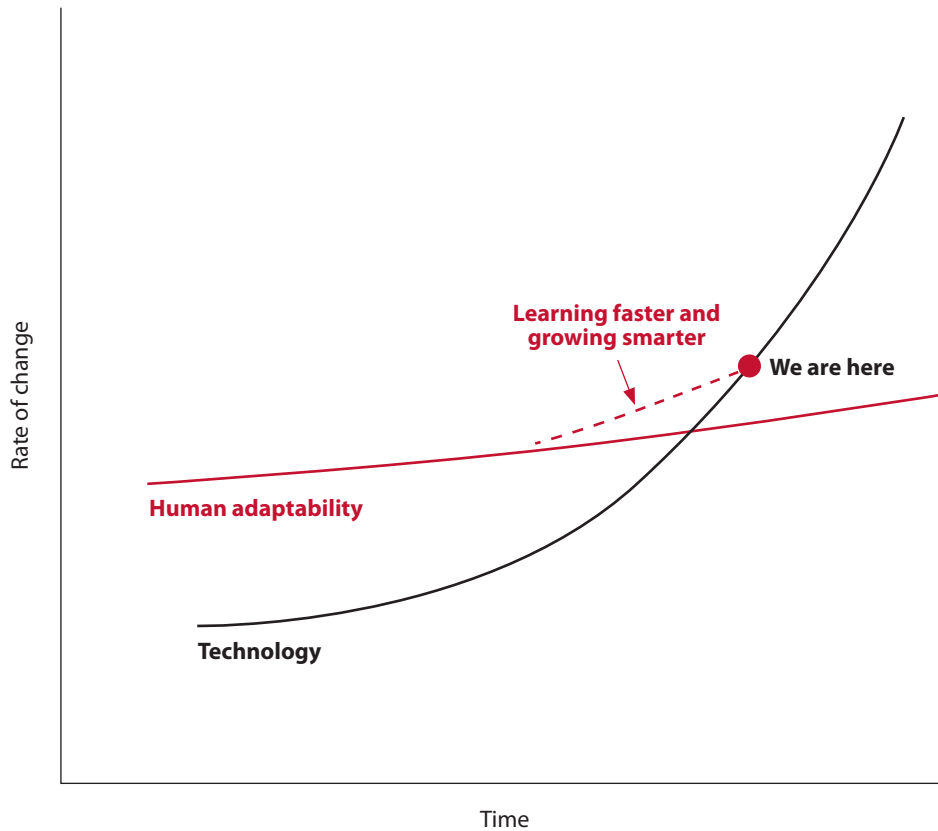
***Progress often requires a person to  
get out of their comfort zone***



Source: Herminia Ibarra

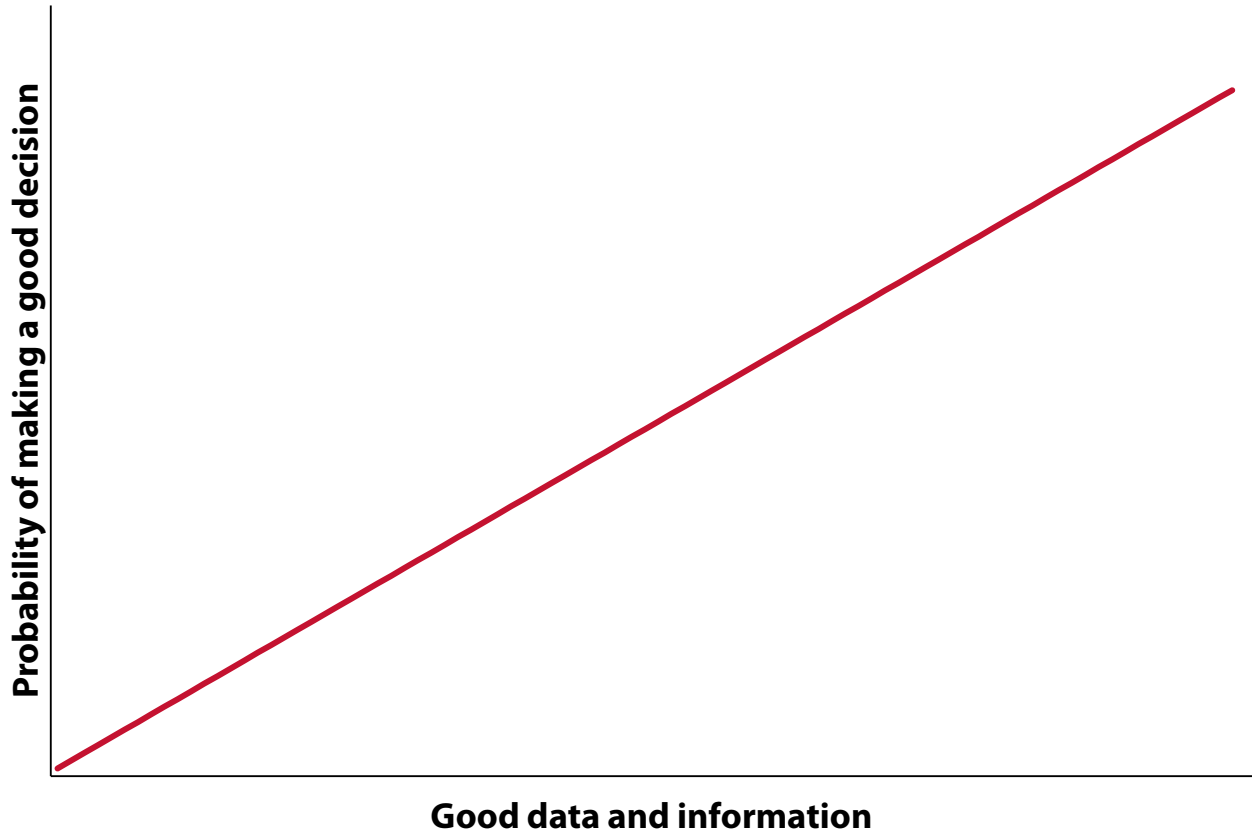


***If we enhance our ability to adapt even slightly  
it can make a significant difference***



**Source:** *Thank You For Being Late*, Thomas L. Friedman

*With good data and information come better decisions*



## Kem C. Gardner Policy Institute Staff and Advisors

---

### **Leadership Team**

Natalie Gochnour, Director  
Jennifer Robinson, Associate Director  
James A. Wood, Ivory-Boyer Senior Fellow  
Dianne Meppen, Director of Survey Research  
Pamela S. Perlich, Director of Demographic Research  
Juliette Tennert, Director of Economics and Public Policy

### **Faculty Advisors**

Matt Burbank, Political Science Department  
Adam Meiorowitz, Finance Department

### **Senior Advisors**

Jonathan Ball, Office of the Legislative Fiscal Analyst  
Gary Cornia, Marriott School of Business  
Dan Griffiths, Tanner LLC  
Roger Hendrix, Hendrix Consulting  
Joel Kotkin, Chapman University  
Darin Mellott, CBRE  
Derek Miller, World Trade Center Utah  
Bud Scruggs, Cynosure Group

### **Staff**

Samantha Ball, Research Associate  
DJ Benway, Research Analyst  
Anna Bergevin, Research Associate  
Cathy Chambless, Senior Research Associate  
John C. Downen, Senior Research Analyst  
Ken Embley, Senior Research Associate  
Emily Harris, Demographic Analyst  
Michael T. Hogue, Senior Research Statistician  
Mike Hollingshaus, Demographer  
Shelley Kruger, Accounting and Finance Manager  
Colleen Larson, Administrative Manager  
Jennifer Leaver, Research Analyst  
David LeBaron, Research Associate  
Sara McCormick, Senior Research Associate  
Levi Pace, Research Analyst  
Nicholas Thiriot, Communications Specialist  
Effie Johnson Van Noy, Utah State Data  
Center Coordinator  
Natalie Young, Research Analyst

## 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  
Lane Beattie  
Cynthia A. Berg  
Roger Boyer  
Ken Bullock  
Wilford Clyde  
Sophia M. DiCaro  
Lisa Eccles  
Spencer P. Eccles  
Matt Eyring  
Kem C. Gardner  
Christian Gardner  
Matthew S. Holland  
Clark Ivory  
Ron Jibson  
Mike S. Leavitt  
Vivian S. Lee

Kimberly Gardner Martin  
Ann Millner  
Cristina Ortega  
Jason Perry  
Taylor Randall  
Jill Remington Love  
Brad Rencher  
Josh Romney  
Charles W. Sorenson  
James Lee Sorenson  
Vicki Varela  
Ruth V. Watkins  
Ted Wilson  
Natalie Gochnour, *Director*

### Ex Officio

Senator Orrin Hatch  
Governor Gary Herbert  
Speaker Greg Hughes  
Senate President Wayne  
Niederhauser  
Representative Brian King  
Senator Gene Davis  
Mayor Ben McAdams  
Mayor Jackie Biskupski

## SALT LAKE CHAMBER EXECUTIVE BOARD

---

Keith McMullin, *Chair*  
Lane Beattie  
Bruce Bingham  
Jake Boyer  
Terry H. Buckner  
Gérald Caussé  
Lori Chillingworth  
Cindy Crane  
John Dahlstrom  
Spencer P. Eccles  
Chris Gamvroulas  
Natalie Gochnour  
David R. Golden  
Val Hale  
Kay Hall

Victor Ingalls  
Patricia W. Jones  
Brent Low  
Molly Mazzolini  
Derek Miller  
Jim Olson  
Scott Parson  
Ray D. Pickup  
Vasilios Priskos  
Steven Starks  
Nigel Steward  
Craig Wagstaff  
Linda Wardell  
Bert R. Zimmerli

## Kem C. Gardner Policy Institute

Thomas S. Monson Center | 411 E. South Temple Street  
Salt Lake City, UT 84111 | 801-585-5618 | [gardner.utah.edu](http://gardner.utah.edu)

AN INITIATIVE OF THE DAVID ECCLES SCHOOL OF BUSINESS